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BUILDING SCIENCES • MATERIALS TESTING

46555 Humboldt Drive
Novi, Michigan 48377
Telephone 248-669-5140
www.atcgroupservices.com

September 11, 2018

Mathew Sam
Detroit Public Schools
1601 Farnsworth
Detroit, Michigan 48202

SUBMITTED VIA EMAIL TO: mathew.sam@detroitk12.org

SUBJECT: **Drinking Water Screening Report**
Wright, Charles Lower Academy
19299 Berg Road
Detroit, Michigan

Dear Mr. Sam:

ATC Group Services, LLC (ATC) is pleased to submit this Drinking Water Screening Report for the subject school. The drinking water samples collected from the school were submitted to Pace Analytical Services, LLC, for Michigan Department of Environmental Quality (MDEQ) Drinking Water Certified lead and copper analysis.

SCOPE OF WORK

At the request of the Detroit Public Schools (DPS), ATC collected drinking water samples as a general screening for copper and lead at the subject school. The water sampling conducted included the sampling of fixtures within teacher's lounges, kitchens, water fountains and pre-k classrooms. One (1) sample was collected at each outlet: a first draw (Primary) sample. The Primary samples were collected from outlets that had been inactive for a minimum of eight to eighteen hours. The fixture inventory locations including the sample locations are shown on the Fixture Inventory Locations Map included under Attachment A and fixture inventory photos including the sample location photos are included in a Fixture Inventory Photo Log under Attachment B.

The drinking water samples were collected in 125 milliliter, wide-mouth sample containers, containing nitric acid (preservative). Each sample container was labeled utilizing a unique coding system that identified: the type of drinking outlet sampled as well as the location.

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The samples were transported under chain of custody to Pace Analytical Services, LLC, located at 5560 Corporate Exchange Ct. SE Grand Rapids, MI for MDEQ drinking water certified lead and copper analysis, using analytical method EPA 200.8 rev 5.4.

FINDINGS

Analytical results indicate that one (1) of the samples analyzed were above the EPA recommended limits of 15 micrograms per liter (ug/L) for lead. None of the samples analyzed were above the EPA recommended limits of 1300 micrograms per liter (ug/L) for copper. The table below summarizes the analytical results for the samples submitted. The laboratory analytical reports and chain of custody are provided in Attachment C.

Table 1 – Water Testing Results (August 30, 2018)

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-Gym-DWF-1	Gym	Drinking Water Fountain - Left	<1.0 ug/L	259 ug/L
1-Gym-DWF-2	Gym	Drinking Water Fountain - Right	<1.0 ug/L	185 ug/L
1-Hall@122-DWF-3	Hall across from room 122	Drinking Water Fountain - Left	<1.0 ug/L	524 ug/L
1-Hall@122-DWF-4	Hall across from room 122	Drinking Water Fountain - Center	<1.0 ug/L	170 ug/L
1-Hall@122-DWF-5	Hall across from room 122	Drinking Water Fountain - Right	<1.0 ug/L	67.9 ug/L
1-Kitchen-KF-6	Kitchen (against wall)	Kitchen Faucet - Left (dish washing)	2.3 ug/L	243 ug/L
1-Kitchen-KF-7	Kitchen (against wall)	Kitchen Faucet - Center (dish washing)	<1.0 ug/L	453 ug/L
1-Kitchen-KF-8	Kitchen (against wall)	Kitchen Faucet - Right (dish washing)	<1.0 ug/L	496 ug/L
1-Kitchen-KF-10	Kitchen (center)	Kitchen Faucet	8.0 ug/L	248 ug/L

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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-119-CF-13	Room 119	Classroom Faucet w/Bubbler	<1.0 ug/L	430 ug/L
1-127-KF-14	Room 127 (teacher's lounge)	Kitchen Faucet	**35.0 ug/L**	618 ug/L
1-116-CF-17	Room 116	Classroom Faucet w/Bubbler	1.2 ug/L	352 ug/L
1-Hall@100E-KF-18	Hall across from room 100E (main office)	Kitchen Faucet	1.9 ug/L	276 ug/L
1-100I-KF-19	Room 100I (in main office area)	Kitchen Faucet	3.6 ug/L	198 ug/L
1-100L-KF-20	Room 100L (in main office area)	Kitchen Faucet	2.4 ug/L	279 ug/L
1-Hall@105-DWF-21	Hall to the right of room 105	Drinking Water Fountain - Left	1.1 ug/L	427ug/L
1-Hall@105-DWF-22	Hall to the right of room 105	Drinking Water Fountain - Right	1.3 ug/L	423ug/L
1-113-CF-23	Room 113	Classroom Faucet w/Bubbler	8.2 ug/L	937 ug/L
1-108-CF-27	Room 108	Classroom Faucet w/Bubbler	<1.0 ug/L	301 ug/L
1-109-CF-29	Room 109	Classroom Faucet w/Bubbler	<1.0 ug/L	506 ug/L
1-110-CF-31	Room 110	Classroom Faucet w/Bubbler	3.0 ug/L	466 ug/L
1-112-CF-35	Room 112	Classroom Faucet w/Bubbler	1.8 ug/L	359 ug/L
2-200-CF-37	Room 200	Classroom Faucet w/Bubbler	<1.0 ug/L	300 ug/L
2-Hall@200-DWF-38	Hall across from room 200	Drinking Water Fountain - Left	1.2 ug/L	316 ug/L
2-Hall@200-DWF-39	Hall across from room 200	Drinking Water Fountain - Right	<1.0 ug/L	297 ug/L

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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
2-201-CF-40	Room 201	Classroom Faucet w/Bubbler	1.6 ug/L	237 ug/L
2-202-CF-41	Room 202	Classroom Faucet w/Bubbler	1.7 ug/L	262 ug/L
2-224-CF-42	Room 224	Classroom Faucet w/Bubbler	2.5 ug/L	296 ug/L
2-218-CF-43	Room 218 (currently used as storage room)	Classroom Faucet w/Bubbler	3.8 ug/L	272 ug/L
2-223-CF-44	Room 223	Classroom Faucet w/Bubbler	1.2 ug/L	286 ug/L
2-222-CF-45	Room 222	Classroom Faucet w/Bubbler	<1.0 ug/L	350 ug/L
2-221-CF-46	Room 221	Classroom Faucet w/Bubbler	1.2 ug/L	287 ug/L
2-219-CF-47	Room 219	Classroom Faucet w/Bubbler	1.7 ug/L	280 ug/L
2-220-CF-48	Room 220	Classroom Faucet w/Bubbler	2.1 ug/L	279 ug/L
2-203-CF-49	Room 203	Classroom Faucet w/Bubbler	<1.0 ug/L	294 ug/L
2-204-CF-50	Room 204	Classroom Faucet w/Bubbler	3.5 ug/L	422 ug/L
2-215-CF-51	Room 215	Classroom Faucet w/Bubbler	<1.0 ug/L	289 ug/L
2-213-CF-53	Room 213	Classroom Faucet w/Bubbler	<1.0 ug/L	320 ug/L
2-205-CF-56	Room 205	Classroom Faucet w/Bubbler	<1.0 ug/L	316 ug/L
2-207-CF-57	Room 207	Classroom Faucet w/Bubbler	<1.0 ug/L	313 ug/L
2-208-CF-58	Room 208	Classroom Faucet w/Bubbler	<1.0 ug/L	375 ug/L

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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
2-211-CF-59	Room 211	Classroom Faucet w/Bubbler	2.0 ug/L	366 ug/L
2-Hall@209-60	Hall near room 209	Drinking Water Fountain - Left	<1.0 ug/L	267 ug/L
2-Hall@209-61	Hall near room 209	Drinking Water Fountain - Right	<1.0 ug/L	199 ug/L

Key: NA - Not Analyzed

ug/L- micrograms per liter /parts per billion (ppb)

Analysis of samples of the kitchen faucet indicate that lead levels were above the MCL. No samples indicate that copper levels were above the MCL. See recommendations below.

RECOMMENDATIONS

For drinking water fixtures that exceed the MCL after the initial sampling, ATC recommends the following:

1. Implement a plan in accordance with MDEQ Guidance on Drinking Water Sampling for Lead and Copper, April, 2016 Version2; OR
2. Remove fixture from service.
3. Implement a flush plan for fixtures that exceed the MCL of the initial sample according to MDEQ Guidance and the EPA's 3T's for Reducing Lead in Drinking Water in Schools.

LIMITATIONS

The sampling and analysis completed was: a preliminary screening for lead and copper only, to assess lead and copper concentrations (ug/L) at drinking water outlets in the school designated as high use by DPS, and may not be representative of all drinking water outlets within the school. If lead or copper concentrations were identified above their respective MCL's at any of the drinking water outlets tested, further review of the plumping system, fixtures affected, and testing may be completed to assess the source of the elevated levels of lead and/or copper, as well as, any other response actions deemed necessary by DPS.

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Future drinking water evaluation and sampling in accordance with the recommendations may be predicated on applicable guidelines by the MDEQ or EPA and will be determined prior to developing a sampling plan for the school.

Sincerely,

ATC Group Services, LLC

Martin K. Gamble
Senior Project Manager

Robert C. Smith
Building Science Department Manager

Attachments

Attachment A: Fixture Inventory Locations Map/Form
Attachment B: Fixture Inventory Photo Log
Attachment C: Laboratory Analytical Report

School Name: Wright, Charles Lower Academy

Address 19299 Berg Road, Detroit, MI 48219

Fixture Identification	Fixture Location	Fixture Description	Photo #
1-Gym-DWF-1	Gym	Drinking Water Fountain - Left	1
1-Gym-DWF-2	Gym	Drinking Water Fountain - Right	2
1-Hall@122-DWF-3	Hall across from room 122	Drinking Water Fountain - Left	3
1-Hall@122-DWF-4	Hall across from room 122	Drinking Water Fountain - Center	4
1-Hall@122-DWF-5	Hall across from room 122	Drinking Water Fountain - Right	5
1-Kitchen-KF-6	Kitchen (against wall)	Kitchen Faucet - Left (dish washing)	6
1-Kitchen-KF-7	Kitchen (against wall)	Kitchen Faucet - Center (dish washing)	7
1-Kitchen-KF-8	Kitchen (against wall)	Kitchen Faucet - Right (dish washing)	8
1-Kitchen-KF-9	Kitchen (against wall)	Kitchen Faucet (hand washing)	9
1-Kitchen-KF-10	Kitchen (center)	Kitchen Faucet	10
1-Kitchen-KF-11	Kitchen (across from KF-10)	Kitchen Faucet (hand washing)	11

School Name: Wright, Charles Lower Academy

Address 19299 Berg Road, Detroit, MI 48219

Fixture Identification	Fixture Location	Fixture Description	Photo #
1-Kitchen-KF-12	Kitchen serving area	Kitchen Faucet (hand washing)	12
1-119-CF-13	Room 119	Classroom Faucet w/Bubbler	13
1-127-KF-14	Room 127 (teacher's lounge)	Kitchen Faucet	14
1-118-CF-15	Room 118	Classroom Faucet w/Bubbler- Not Working	15
1-117-CF-16	Room 117	Classroom Faucet w/Bubbler- Not Working	16
1-116-CF-17	Room 116	Classroom Faucet w/Bubbler	17
1-Hall@100E-KF-18	Hall across from room 100E (main office)	Kitchen Faucet	18
1-100I-KF-19	Room 100I (in main office area)	Kitchen Faucet	19
1-100L-KF-20	Room 100L (in main office area)	Kitchen Faucet	20
1-Hall@105-DWF-21	Hall to the right of room 105	Drinking Water Fountain - Left	21
1-Hall@105-DWF-22	Hall to the right of room 105	Drinking Water Fountain - Right	22

School Name: Wright, Charles Lower Academy

Address 19299 Berg Road, Detroit, MI 48219

Fixture Identification	Fixture Location	Fixture Description	Photo #
1-113-CF-23	Room 113	Classroom Faucet w/Bubbler	23
1-113-CF-24	Room 113	Classroom Faucet	24
1-107-CF-25	Room 107	Classroom Faucet w/Bubbler- Not Working	25
1-107-CF-26	Room 107	Classroom Faucet	26
1-108-CF-27	Room 108	Classroom Faucet w/Bubbler	27
1-108-CF-28	Room 108	Classroom Faucet	28
1-109-CF-29	Room 109	Classroom Faucet w/Bubbler	29
1-109-CF-30	Room 109	Classroom Faucet	30
1-110-CF-31	Room 110	Classroom Faucet w/Bubbler	31
1-110-CF-32	Room 110	Classroom Faucet	32
1-111-CF-33	Room 111	Classroom Faucet w/Bubbler- Not Working	33

School Name: Wright, Charles Lower Academy

Address 19299 Berg Road, Detroit, MI 48219

Fixture Identification	Fixture Location	Fixture Description	Photo #
1-111-CF-34	Room 111	Classroom Faucet	34
1-112-CF-35	Room 112	Classroom Faucet w/Bubbler	35
1-112-CF-36	Room 112	Classroom Faucet	36
2-200-CF-37	Room 200	Classroom Faucet w/Bubbler	37
2-Hall@200-DWF-38	Hall across from room 200	Drinking Water Fountain - Left	38
2-Hall@200-DWF-39	Hall across from room 200	Drinking Water Fountain - Right	39
2-201-CF-40	Room 201	Classroom Faucet w/Bubbler	40
2-202-CF-41	Room 202	Classroom Faucet w/Bubbler	41
2-224-CF-42	Room 224	Classroom Faucet w/Bubbler	42
2-218-CF-43	Room 218 (currently used as storage room)	Classroom Faucet w/Bubbler	43
2-223-CF-44	Room 223	Classroom Faucet w/Bubbler	44

School Name: Wright, Charles Lower Academy

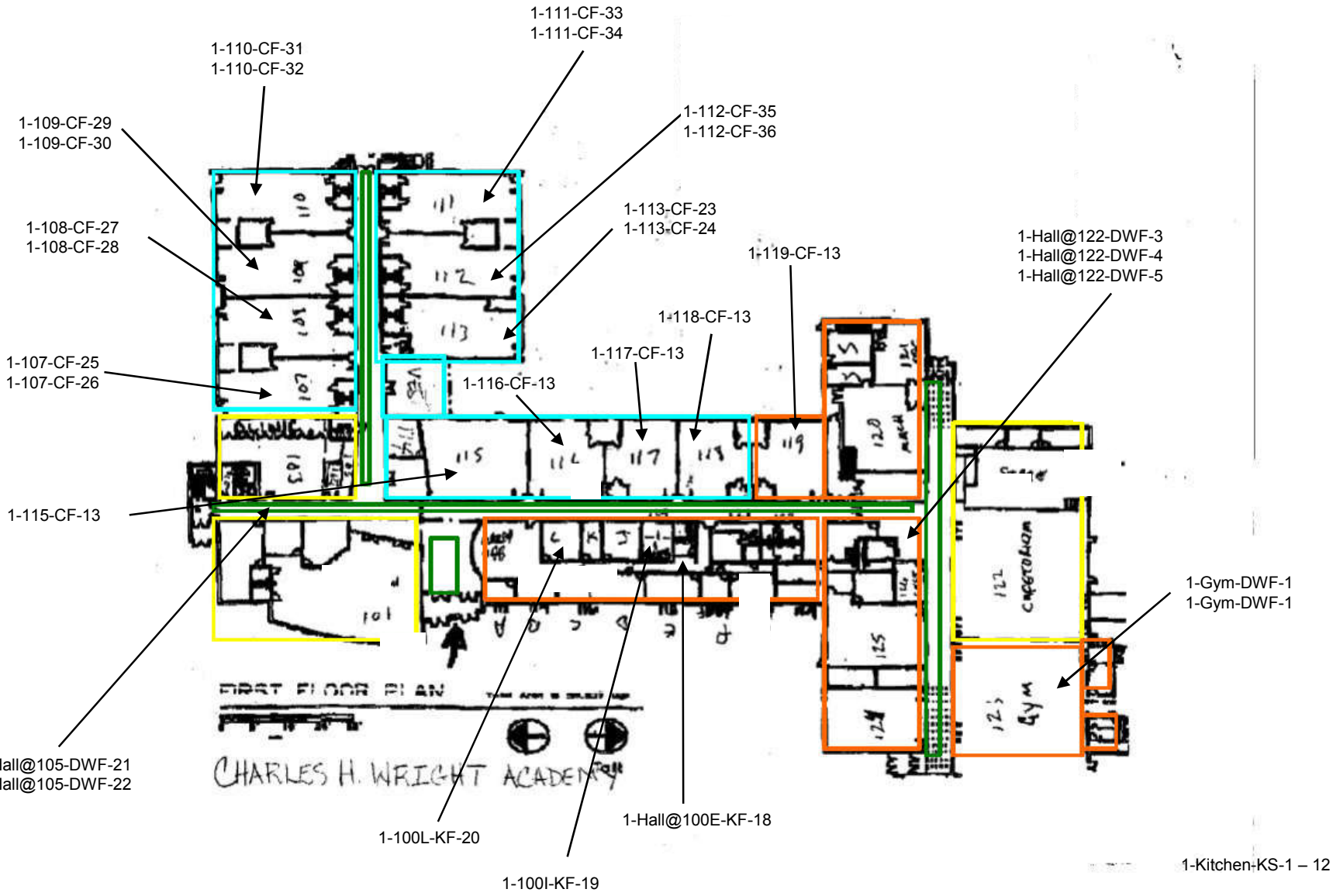
Address 19299 Berg Road, Detroit, MI 48219

Fixture Identification	Fixture Location	Fixture Description	Photo #
2-222-CF-45	Room 222	Classroom Faucet w/Bubbler	45
2-221-CF-46	Room 221	Classroom Faucet w/Bubbler	46
2-219-CF-47	Room 219	Classroom Faucet w/Bubbler	47
2-220-CF-48	Room 220	Classroom Faucet w/Bubbler	48
2-203-CF-49	Room 203	Classroom Faucet w/Bubbler	49
2-204-CF-50	Room 204	Classroom Faucet w/Bubbler	50
2-215-CF-51	Room 215	Classroom Faucet w/Bubbler	51
2-214-CF-52	Room 214	Classroom Faucet w/Bubbler- Not Working	52
2-213-CF-53	Room 213	Classroom Faucet w/Bubbler	53
2-212-CF-54	Room 212	Classroom Faucet w/Bubbler	54
2-206-CF-55	Room 206	Classroom Faucet w/Bubbler- Not Working	55

School Name: Wright, Charles Lower Academy

Address 19299 Berg Road, Detroit, MI 48219

Fixture Identification	Fixture Location	Fixture Description	Photo #
2-205-CF-56	Room 205	Classroom Faucet w/Bubbler	55
2-207-CF-57	Room 207	Classroom Faucet w/Bubbler	56
2-208-CF-58	Room 208	Classroom Faucet w/Bubbler	57
2-211-CF-59	Room 211	Classroom Faucet w/Bubbler	58
2-Hall@209-60	Hall near room 209	Drinking Water Fountain - Left	59
2-Hall@209-61	Hall near room 209	Drinking Water Fountain - Right	60
2-227-B-62	Room 227	Bubbler- Not working	61



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Charles Wright Academy
19299 Berg Road, Detroit, MI 48219

Fixture Inventory Diagram

Floor #1

PROJECT NUMBER: 188BS18437	FIGURE: 1
DRAWN BY: KJ	REVIEWED BY
	DATE: 6/28/2018

ATC
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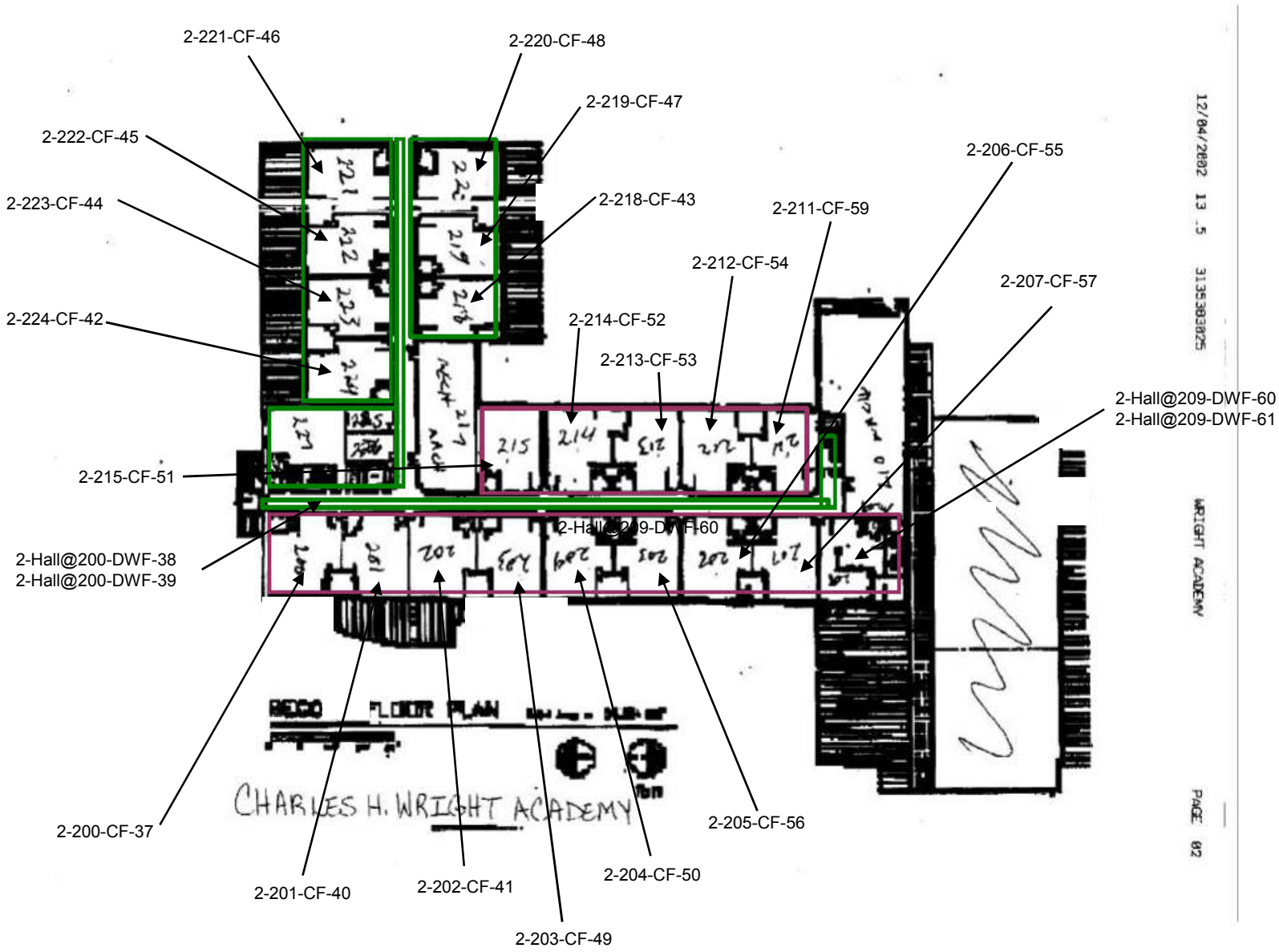

ATC ENVIRONMENTAL • GEOTECHNICAL BUILDING SCIENCES • MATERIALS TESTING	Charles Wright Academy 19299 Berg Road, Detroit, MI 48219	**Fixture Inventory Diagram** Floor #2	PROJECT NUMBER: 188BS18437 / FIGURE: 2 DRAWN BY: KJ / REVIEWED BY DATE: 6/28/2018

ATC 46555 Humboldt Drive, Suite 100
Novi, Michigan 48377
Ph: (248) 669-5140 ~ Fax: (248) 669-5147

Photo 1: Drinking water fountain, located on the 1st floor in the gym – left fixture.

Photo 2: Drinking water fountain, located on the 1st floor in the gym – right fixture.

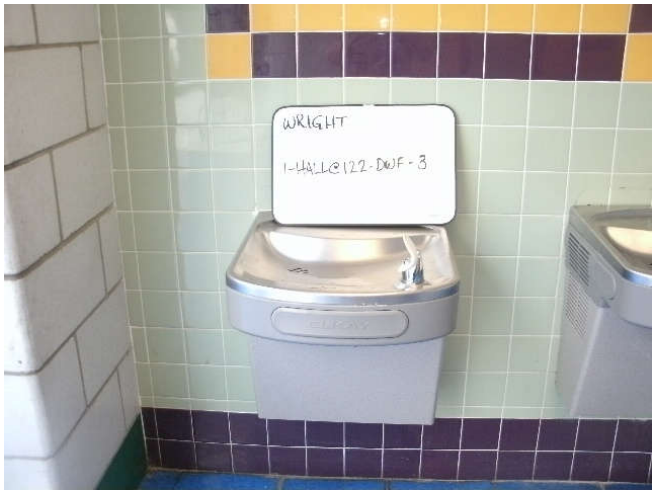

Photo 3: Drinking water fountain, located in a 1st floor hall, across from room 122 – left fixture.

Photo 4: Drinking water fountain, located in a 1st floor hall, across from room 122 – center fixture.

Photo 5: Drinking water fountain, located in a 1st floor hall, across from room 122 – right fixture.

Photo 6: Kitchen faucet, located on the 1st floor in the kitchen against the wall – left fixture (dish washing).

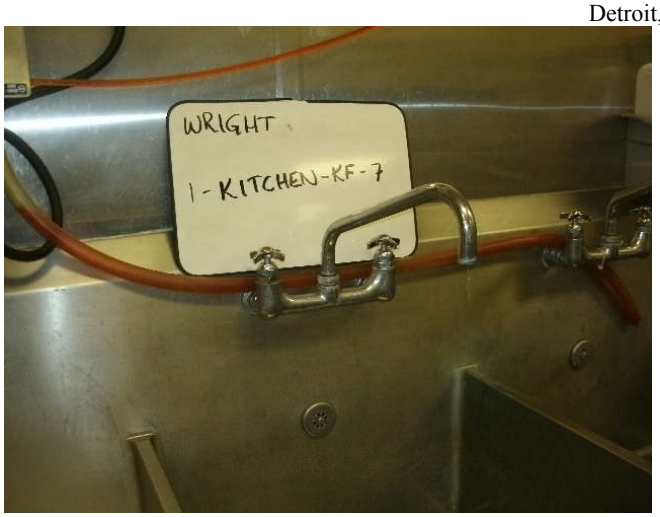

Photo 7: Kitchen faucet, located on the 1st floor in the kitchen against the wall – center fixture (dish washing).

Photo 8: Kitchen faucet, located on the 1st floor in the kitchen against the wall – right fixture (dish washing).

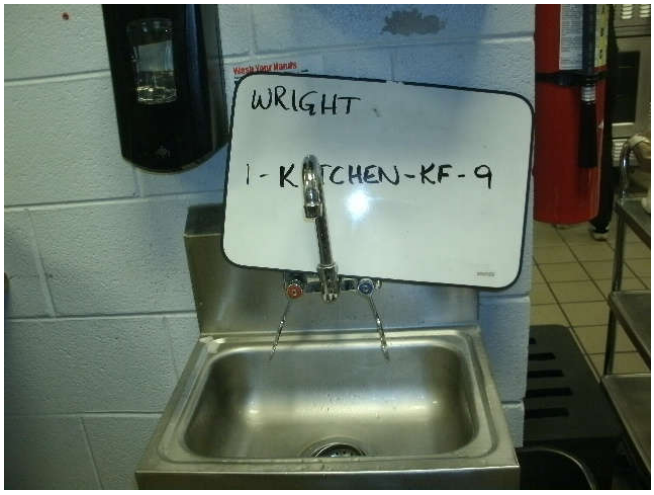

Photo 9: Kitchen faucet, located on the 1st floor in the kitchen (hand washing).

Photo 10: Kitchen faucet, located on the 1st floor in the kitchen, in the center.

Photo 11: Kitchen faucet, located on the 1st floor in the kitchen, across from KF-10 (hand washing).

Photo 12: Kitchen faucet, located on the 1st floor in the kitchen serving area (hand washing).

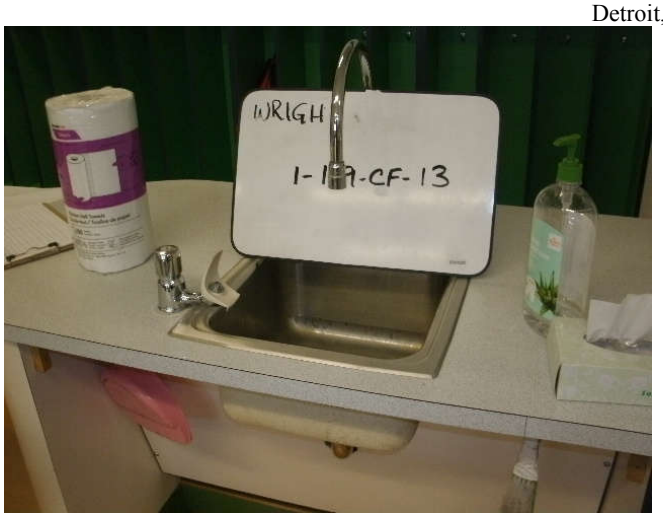

Photo 13: Classroom faucet w/bubbler, located on the 1st floor, in room 109.

Photo 14: Kitchen faucet, located on the 1st floor, in room 127 (teacher's lounge).

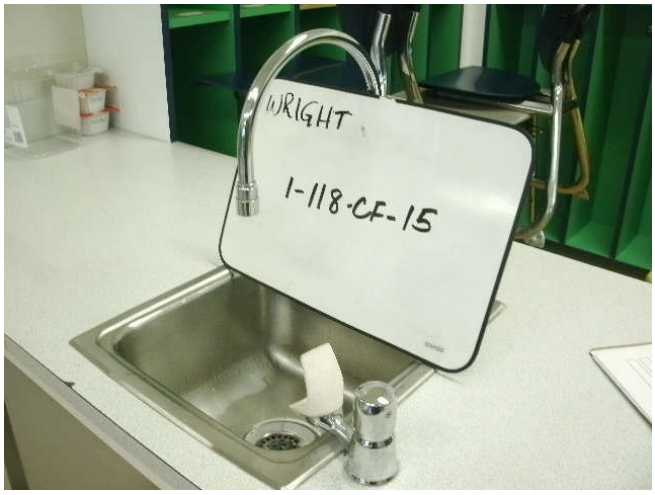

Photo 15: Classroom faucet w/bubbler, located on the 1st floor, in room 118.

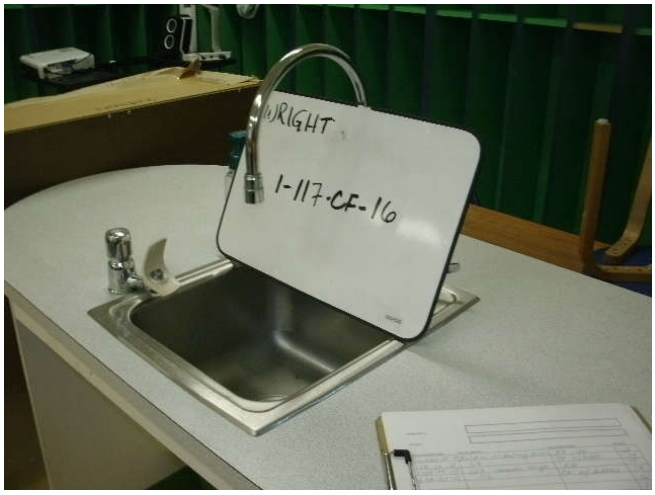

Photo 16: Classroom faucet w/bubbler, located on the 1st floor, in room 117.

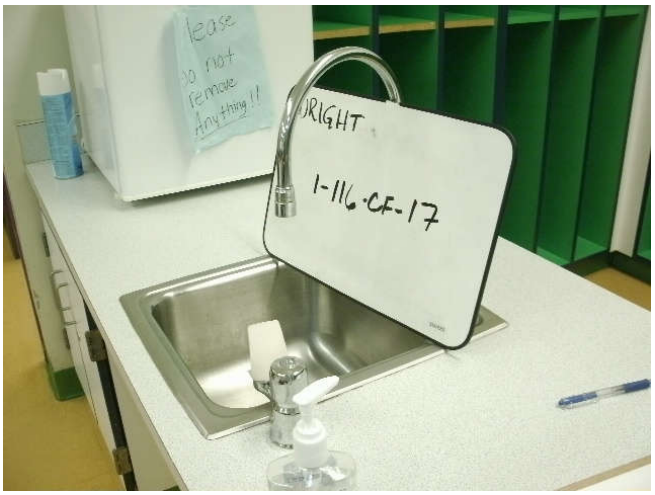

Photo 17: Classroom faucet w/bubbler, located on the 1st floor, in room 116.

Photo 18: Kitchen faucet, located in a 1st floor hall in the main office area, across from room 100E.

Photo 19: Kitchen faucet, located on the 1st floor, in room 100I, in the main office area.

Photo 20: Kitchen faucet, located on the 1st floor, in room 100L, in the main office area.

Photo 21: Drinking water fountain, located in a 1st floor hallway, to the right of room 105 – left fixture.

Photo 22: Drinking water fountain, located in a 1st floor hallway, to the right of room 105 – right fixture.

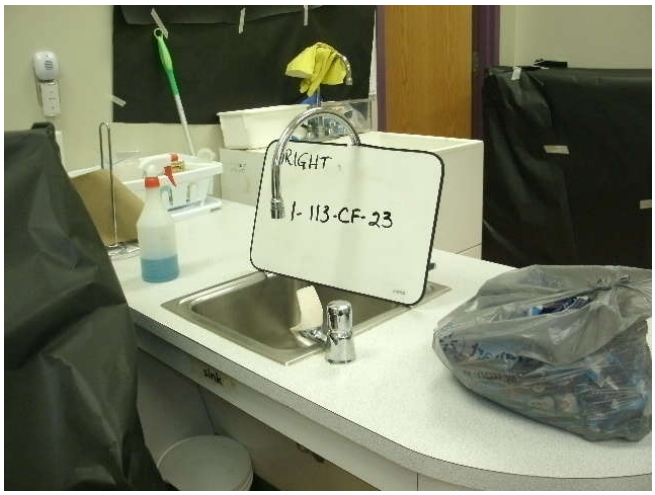

Photo 23: Classroom faucet w/bubbler, located on the 1st floor, in room 113.

Photo 24: Classroom faucet, located on the 1st floor, in room 113.

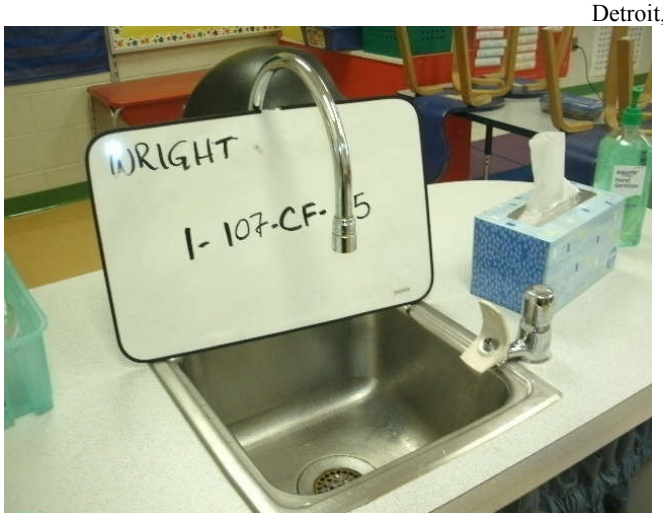

Photo 25: Classroom faucet w/bubbler, located on the 1st floor, in room 107.

Photo 26: Classroom faucet, located on the 1st floor, in room 107.

Photo 27: Classroom faucet w/bubbler, located on the 1st floor, in room 108.

Photo 28: Classroom faucet, located on the 1st floor, in room 108.

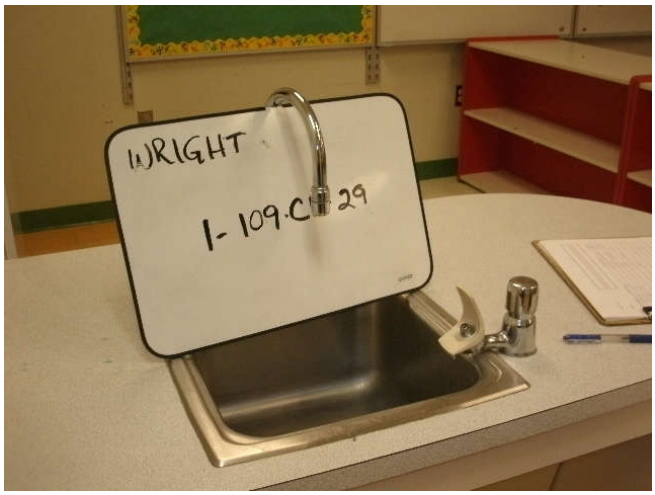

Photo 29: Classroom faucet w/bubbler, located on the 1st floor, in room 109.

Photo 30: Classroom faucet, located on the 1st floor, in room 109.

Photo 31: Classroom faucet w/bubbler, located on the 1st floor, in room 110.

Photo 32: Classroom faucet, located on the 1st floor, in room 110.

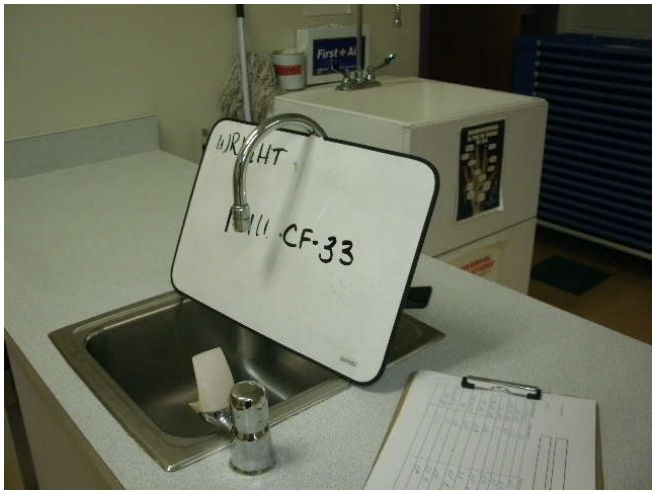

Photo 33: Classroom faucet w/bubbler, located on the 1st floor, in room 111.

Photo 34: Classroom faucet, located on the 1st floor, in room 111.

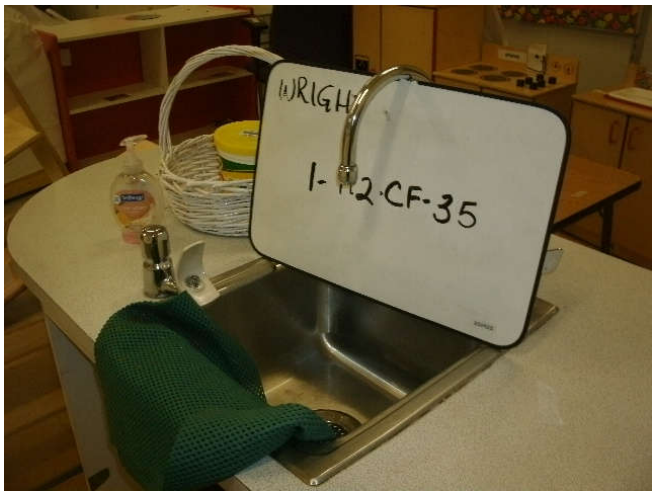

Photo 35: Classroom faucet w/bubbler, located on the 1st floor, in room 112.

Photo 36: Classroom faucet, located on the 1st floor, in room 112.

Photo 37: Classroom faucet w/bubbler, located on the 2nd floor, in room 200.

Photo 38: Drinking water fountain, located in a 2nd floor hallway, across from room 200 - left fixture.

Photo 39: Drinking water fountain, located in a 2nd floor hallway, across from room 200 - right fixture.

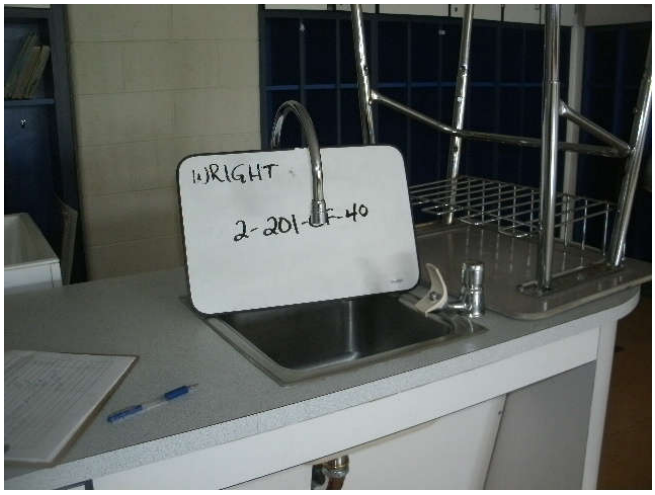

Photo 40: Classroom faucet w/bubbler, located on the 2nd floor, in room 201.

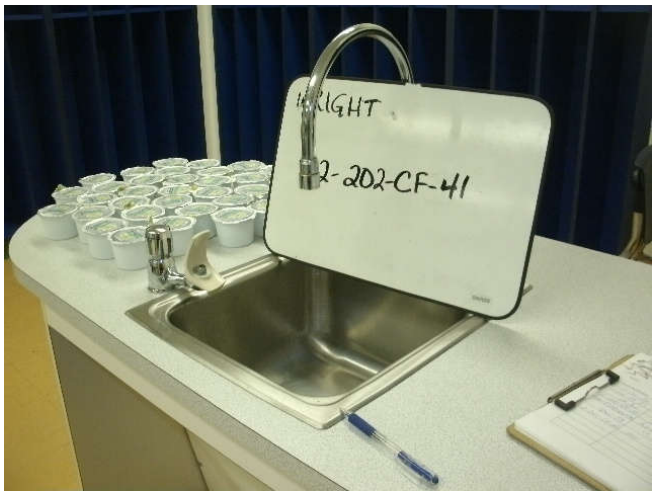

Photo 41: Classroom faucet w/bubbler, located on the 2nd floor, in room 202.

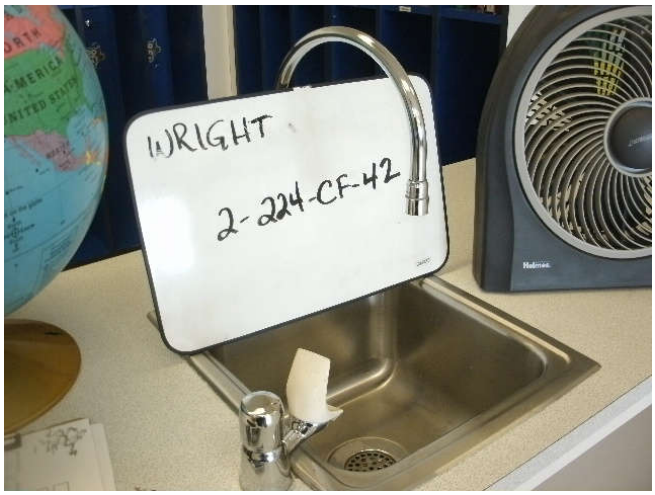

Photo 42: Classroom faucet w/bubbler, located on the 2nd floor, in room 224.

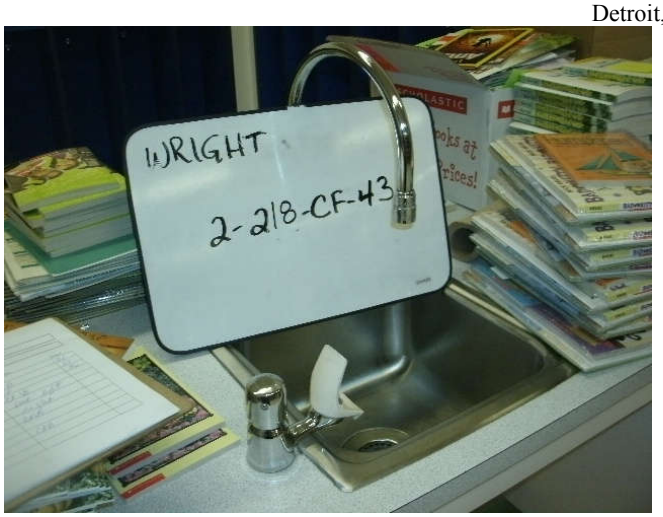

Photo 43: Classroom faucet w/bubbler, located on the 2nd floor, in room 218.

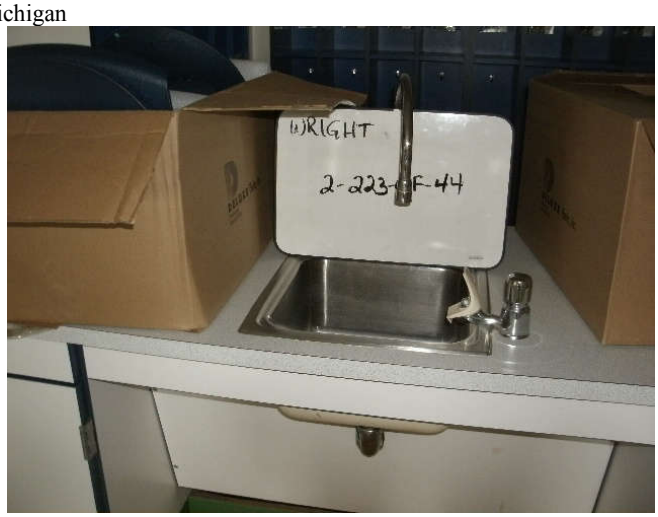

Photo 44: Classroom faucet w/bubbler, located on the 2nd floor, in room 223.

Photo 45: Classroom faucet w/bubbler, located on the 2nd floor, in room 222.

Photo 46: Classroom faucet w/bubbler, located on the 2nd floor, in room 221.

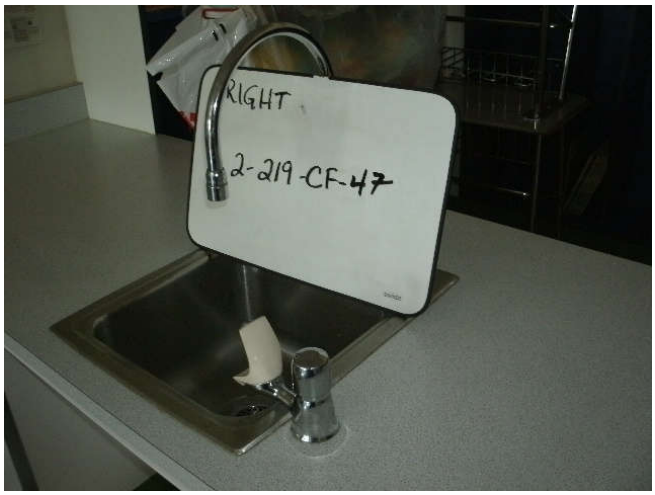

Photo 47: Classroom faucet w/bubbler, located on the 2nd floor, in room 219.

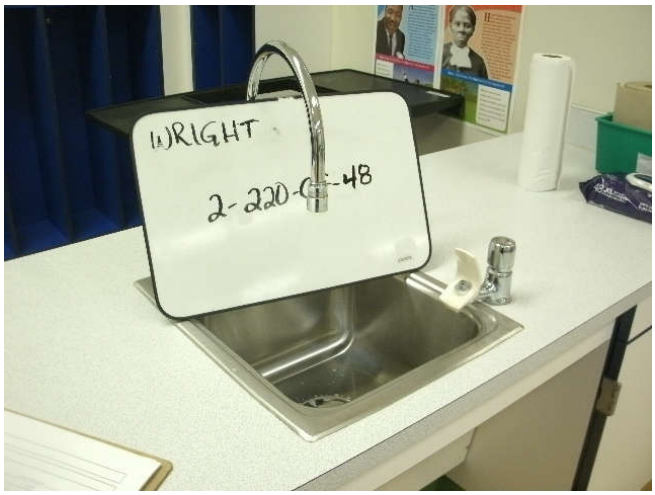

Photo 48: Classroom faucet w/bubbler, located on the 2nd floor, in room 220.

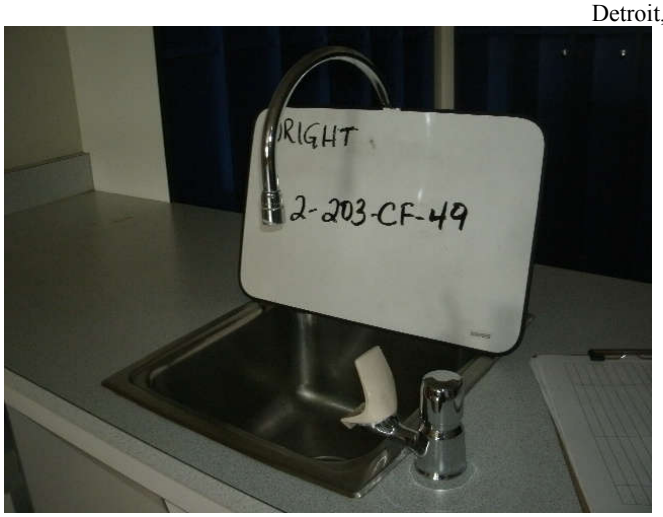

Photo 49: Classroom faucet w/bubbler, located on the 2nd floor, in room 203.

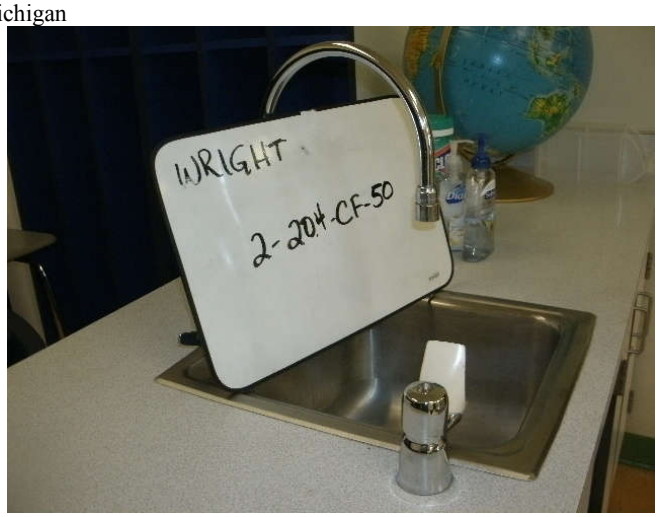

Photo 50: Classroom faucet w/bubbler, located on the 2nd floor, in room 204.

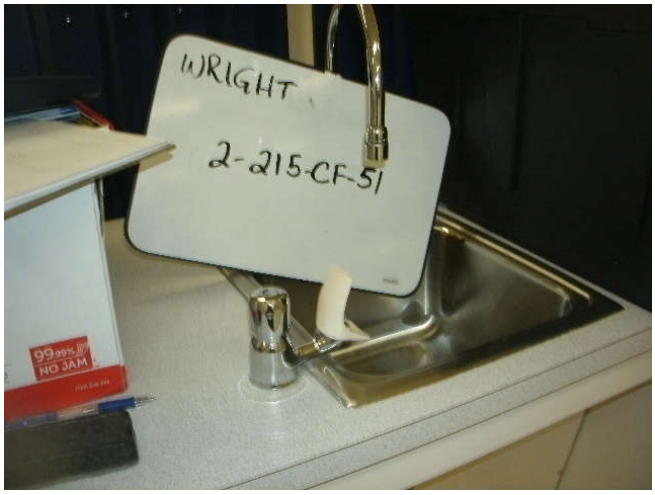

Photo 51: Classroom faucet w/bubbler, located on the 2nd floor, in room 215.

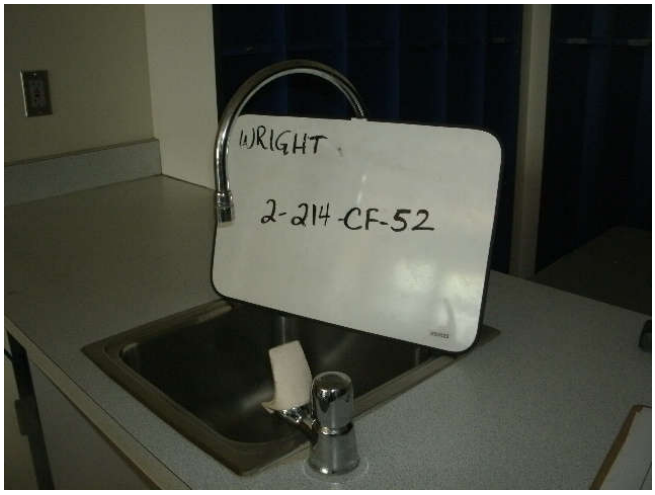

Photo 52: Classroom faucet w/bubbler, located on the 2nd floor, in room 214.

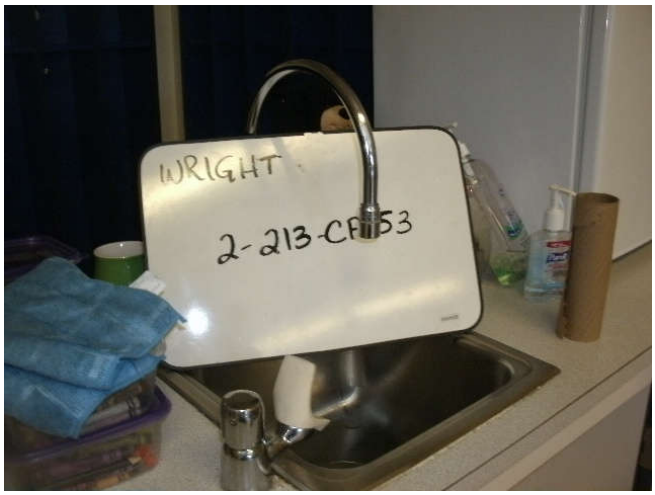

Photo 53: Classroom faucet w/bubbler, located on the 2nd floor, in room 213.

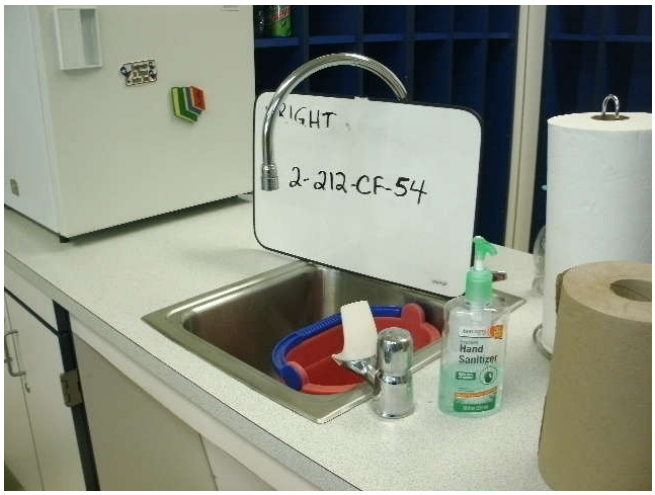

Photo 54: Classroom faucet w/bubbler, located on the 2nd floor, in room 212.

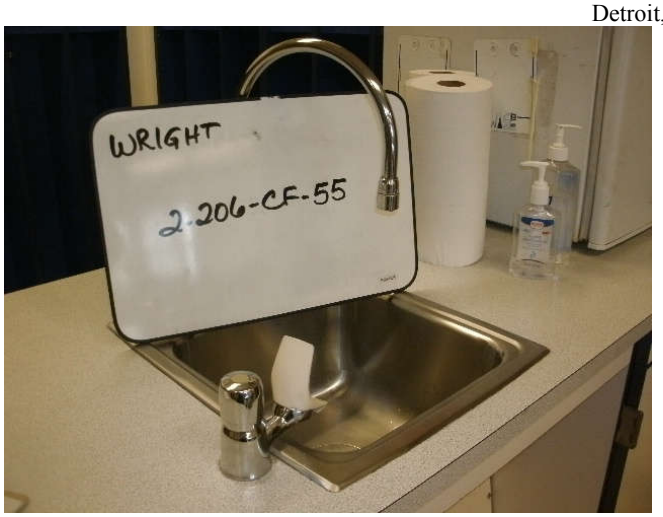

Photo 55: Classroom faucet w/bubbler, located on the 2nd floor, in room 206.

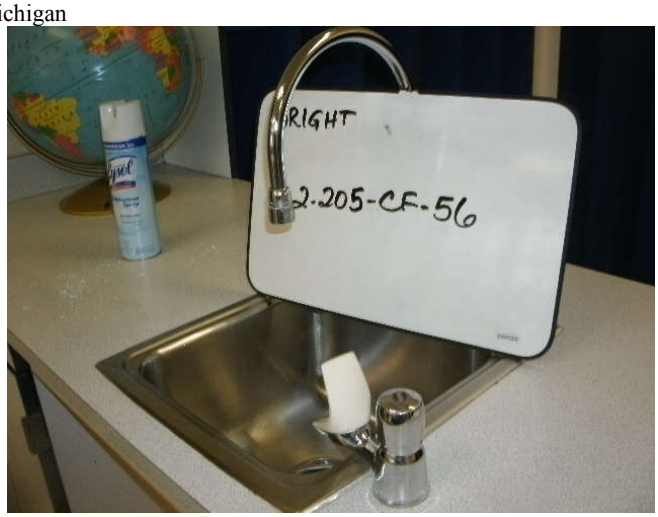

Photo 56: Classroom faucet w/bubbler, located on the 2nd floor, in room 205.

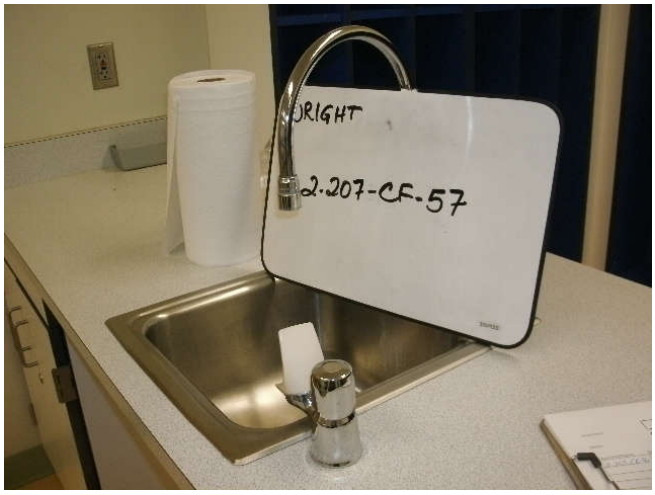

Photo 57: Classroom faucet w/bubbler, located on the 2nd floor, in room 207.

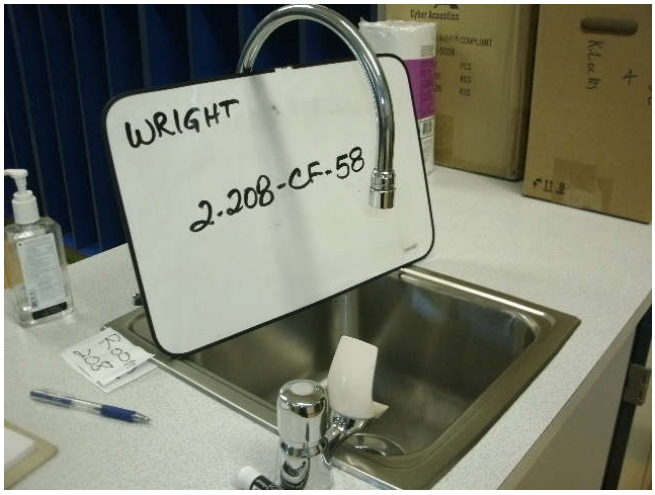

Photo 58: Classroom faucet w/bubbler, located on the 2nd floor, in room 208.

Photo 59: Classroom faucet w/bubbler, located on the 2nd floor, in room 211.

Photo 60: Drinking water fountain, located in a 2nd floor hallway, near room 209 - left fixture.

Photo 61: Drinking water fountain, located in a 2nd floor hallway, near room 209 - right fixture.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

August 30, 2018

Robert Smith
ATC Group Services
46555 Humboldt
Suite 100
Novi, MI 48377

RE: Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Dear Robert Smith:
Enclosed are the analytical results for sample(s) received by the laboratory on August 17, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Cole
will.cole@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardine, ATC Group Services
Michael Hauswirth, ATC Group Services

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

CERTIFICATIONS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Grand Rapids Certification ID's

5560 Corporate Exchange Ct SE, Grand Rapids, MI 49512
Minnesota Department of Health, Certificate #1385941
Arkansas Department of Environmental Quality, Certificate #18-046-0
Georgia Environmental Protection Division, Stipulation
Illinois Environmental Protection Agency, Certificate #004325
Michigan Department of Environmental Quality, Laboratory #0034
New York State Department of Health, Serial #57971 and 57972
North Carolina Division of Water Resources, Certificate #659
Virginia Department of General Services, Certificate #9780
Wisconsin Department of Natural Resources, Laboratory #999472650
U.S. Department of Agriculture Permit to Receive Soil, Permit #P330-17-00278

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4616520001	**1-Gym-DWF-1**	Drinking Water	08/16/18 09:16	08/17/18 18:00
4616520002	**1-Gym-DWF-2**	Drinking Water	08/16/18 09:17	08/17/18 18:00
4616520003	**1-Hall@122-DWF-3**	Drinking Water	08/16/18 09:20	08/17/18 18:00
4616520004	**1-Hall@122-DWF-4**	Drinking Water	08/16/18 09:21	08/17/18 18:00
4616520005	**1-Hall@122-DWF-5**	Drinking Water	08/16/18 09:22	08/17/18 18:00
4616520006	**1-Kitchen-KF-6**	Drinking Water	08/16/18 09:27	08/17/18 18:00
4616520007	**1-Kitchen-KF-7**	Drinking Water	08/16/18 09:28	08/17/18 18:00
4616520008	**1-Kitchen-KF-8**	Drinking Water	08/16/18 09:29	08/17/18 18:00
4616520009	**1-Kitchen-KF-10**	Drinking Water	08/16/18 09:30	08/17/18 18:00
4616520010	**1-119-CF-13**	Drinking Water	08/16/18 09:33	08/17/18 18:00
4616520011	**1-127-KF-14**	Drinking Water	08/16/18 09:35	08/17/18 18:00
4616520012	**1-116-CF-17**	Drinking Water	08/16/18 09:42	08/17/18 18:00
4616520013	**1-Hall@100E-KF-18**	Drinking Water	08/16/18 09:44	08/17/18 18:00
4616520014	**1-100I-KF-19**	Drinking Water	08/16/18 09:46	08/17/18 18:00
4616520015	**1-100L-KF-20**	Drinking Water	08/16/18 09:50	08/17/18 18:00
4616520016	**1-Hall@105-DWF-21**	Drinking Water	08/16/18 09:52	08/17/18 18:00
4616520017	**1-Hall@105-DWF-22**	Drinking Water	08/16/18 09:54	08/17/18 18:00
4616520018	**1-113-CF-23**	Drinking Water	08/16/18 09:59	08/17/18 18:00
4616520019	**1-108-CF-27**	Drinking Water	08/16/18 10:04	08/17/18 18:00
4616520020	**1-109-CF-29**	Drinking Water	08/16/18 10:06	08/17/18 18:00
4616520021	**1-110-CF-31**	Drinking Water	08/16/18 10:08	08/17/18 18:00
4616520022	**1-112-CF-35**	Drinking Water	08/16/18 10:11	08/17/18 18:00
4616520023	**2-200-CF-37**	Drinking Water	08/16/18 10:14	08/17/18 18:00
4616520024	**2-Hall@200-DWF-38**	Drinking Water	08/16/18 10:17	08/17/18 18:00
4616520025	**2-Hall@200-DWF-39**	Drinking Water	08/16/18 10:21	08/17/18 18:00
4616520026	**2-201-CF-40**	Drinking Water	08/16/18 10:23	08/17/18 18:00
4616520027	**2-202-CF-41**	Drinking Water	08/16/18 10:24	08/17/18 18:00
4616520028	**2-224-CF-42**	Drinking Water	08/16/18 10:26	08/17/18 18:00
4616520029	**2-218-CF-43**	Drinking Water	08/16/18 10:28	08/17/18 18:00
4616520030	**2-223-CF-44**	Drinking Water	08/16/18 10:30	08/17/18 18:00
4616520031	**2-222-CF-45**	Drinking Water	08/16/18 10:31	08/17/18 18:00
4616520032	**2-221-CF-46**	Drinking Water	08/16/18 10:33	08/17/18 18:00
4616520033	**2-219-CF-47**	Drinking Water	08/16/18 10:35	08/17/18 18:00
4616520034	**2-220-CF-48**	Drinking Water	08/16/18 10:40	08/17/18 18:00
4616520035	**2-203-CF-49**	Drinking Water	08/16/18 10:41	08/17/18 18:00
4616520036	**2-204-CF-50**	Drinking Water	08/16/18 10:44	08/17/18 18:00
4616520037	**2-215-CF-51**	Drinking Water	08/16/18 10:47	08/17/18 18:00

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4616520038	**2-213-CF-53**	Drinking Water	08/16/18 10:51	08/17/18 18:00
4616520039	**2-205-CF-56**	Drinking Water	08/16/18 10:57	08/17/18 18:00
4616520040	**2-207-CF-57**	Drinking Water	08/16/18 10:58	08/17/18 18:00
4616520041	**2-208-CF-58**	Drinking Water	08/16/18 11:01	08/17/18 18:00
4616520042	**2-211-CF-59**	Drinking Water	08/16/18 11:03	08/17/18 18:00
4616520043	**2-Hall@209-60**	Drinking Water	08/16/18 11:05	08/17/18 18:00
4616520044	**2-Hall@209-61**	Drinking Water	08/16/18 11:07	08/17/18 18:00

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4616520001	1-Gym-DWF-1	EPA 200.8	NHAM	2
4616520002	1-Gym-DWF-2	EPA 200.8	NHAM	2
4616520003	1-Hall@122-DWF-3	EPA 200.8	NHAM	2
4616520004	1-Hall@122-DWF-4	EPA 200.8	NHAM	2
4616520005	1-Hall@122-DWF-5	EPA 200.8	NHAM	2
4616520006	1-Kitchen-KF-6	EPA 200.8	NHAM	2
4616520007	1-Kitchen-KF-7	EPA 200.8	NHAM	2
4616520008	1-Kitchen-KF-8	EPA 200.8	NHAM	2
4616520009	1-Kitchen-KF-10	EPA 200.8	NHAM	2
4616520010	1-119-CF-13	EPA 200.8	NHAM	2
4616520011	1-127-KF-14	EPA 200.8	NHAM	2
4616520012	1-116-CF-17	EPA 200.8	NHAM	2
4616520013	1-Hall@100E-KF-18	EPA 200.8	NHAM	2
4616520014	1-100I-KF-19	EPA 200.8	NHAM	2
4616520015	1-100L-KF-20	EPA 200.8	NHAM	2
4616520016	1-Hall@105-DWF-21	EPA 200.8	NHAM	2
4616520017	1-Hall@105-DWF-22	EPA 200.8	NHAM	2
4616520018	1-113-CF-23	EPA 200.8	NHAM	2
4616520019	1-108-CF-27	EPA 200.8	NHAM	2
4616520020	1-109-CF-29	EPA 200.8	NHAM	2
4616520021	1-110-CF-31	EPA 200.8	NHAM	2
4616520022	1-112-CF-35	EPA 200.8	NHAM	2
4616520023	2-200-CF-37	EPA 200.8	NHAM	2
4616520024	2-Hall@200-DWF-38	EPA 200.8	NHAM	2
4616520025	2-Hall@200-DWF-39	EPA 200.8	NHAM	2
4616520026	2-201-CF-40	EPA 200.8	NHAM	2
4616520027	2-202-CF-41	EPA 200.8	NHAM	2
4616520028	2-224-CF-42	EPA 200.8	NHAM	2
4616520029	2-218-CF-43	EPA 200.8	NHAM	2
4616520030	2-223-CF-44	EPA 200.8	NHAM	2
4616520031	2-222-CF-45	EPA 200.8	NHAM	2
4616520032	2-221-CF-46	EPA 200.8	NHAM	2
4616520033	2-219-CF-47	EPA 200.8	NHAM	2
4616520034	2-220-CF-48	EPA 200.8	NHAM	2
4616520035	2-203-CF-49	EPA 200.8	NHAM	2
4616520036	2-204-CF-50	EPA 200.8	NHAM	2
4616520037	2-215-CF-51	EPA 200.8	NHAM	2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
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SAMPLE ANALYTE COUNT

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4616520038	**2-213-CF-53**	EPA 200.8	NHAM	2
4616520039	**2-205-CF-56**	EPA 200.8	NHAM	2
4616520040	**2-207-CF-57**	EPA 200.8	NHAM	2
4616520041	**2-208-CF-58**	EPA 200.8	NHAM	2
4616520042	**2-211-CF-59**	EPA 200.8	NHAM	2
4616520043	**2-Hall@209-60**	EPA 200.8	NHAM	2
4616520044	**2-Hall@209-61**	EPA 200.8	NHAM	2

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Gym-DWF-1 **Lab ID: 4616520001** Collected: 08/16/18 09:16 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**259**	ug/L	1.0	1300	1		08/29/18 10:34	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 10:34	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Gym-DWF-2 **Lab ID: 4616520002** Collected: 08/16/18 09:17 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**185**	ug/L	1.0	1300	1		08/29/18 10:38	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 10:38	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Hall@122-DWF-3 **Lab ID: 4616520003** Collected: 08/16/18 09:20 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**524**	ug/L	5.0	1300	5		08/29/18 13:16	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 10:39	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Hall@122-DWF-4 **Lab ID: 4616520004** Collected: 08/16/18 09:21 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**170**	ug/L	1.0	1300	1		08/29/18 10:40	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 10:40	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Hall@122-DWF-5 **Lab ID: 4616520005** Collected: 08/16/18 09:22 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**67.9**	ug/L	1.0	1300	1		08/29/18 10:41	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 10:41	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Kitchen-KF-6 **Lab ID: 4616520006** Collected: 08/16/18 09:27 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**243**	ug/L	1.0	1300	1		08/29/18 10:42	7440-50-8	
Lead	**2.3**	ug/L	1.0	15	1		08/29/18 10:42	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Kitchen-KF-7 **Lab ID: 4616520007** Collected: 08/16/18 09:28 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**453**	ug/L	5.0	1300	5		08/29/18 13:17	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 10:43	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Kitchen-KF-8 **Lab ID: 4616520008** Collected: 08/16/18 09:29 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**496**	ug/L	5.0	1300	5		08/29/18 13:18	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 10:46	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Kitchen-KF-10 **Lab ID: 4616520009** Collected: 08/16/18 09:30 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**248**	ug/L	1.0	1300	1		08/29/18 10:53	7440-50-8	
Lead	**8.0**	ug/L	1.0	15	1		08/29/18 10:53	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-119-CF-13 **Lab ID: 4616520010** Collected: 08/16/18 09:33 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**430**	ug/L	5.0	1300	5		08/29/18 13:22	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 10:54	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-127-KF-14 **Lab ID: 4616520011** Collected: 08/16/18 09:35 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ICPMS Metals, Total	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Copper	**618**	ug/L	10.0	1300	10	08/21/18 07:02	08/29/18 13:43	7440-50-8	
Lead	**35.0**	ug/L	1.0	15	1	08/21/18 07:02	08/29/18 11:23	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-116-CF-17 **Lab ID: 4616520012** Collected: 08/16/18 09:42 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**352**	ug/L	5.0	1300	5		08/29/18 13:26	7440-50-8	
Lead	**1.2**	ug/L	1.0	15	1		08/29/18 10:55	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Hall@100E-KF-18 **Lab ID: 4616520013** Collected: 08/16/18 09:44 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**276**	ug/L	1.0	1300	1		08/29/18 10:56	7440-50-8	
Lead	**1.9**	ug/L	1.0	15	1		08/29/18 10:56	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-100I-KF-19 **Lab ID: 4616520014** Collected: 08/16/18 09:46 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**198**	ug/L	1.0	1300	1		08/29/18 10:57	7440-50-8	
Lead	**3.6**	ug/L	1.0	15	1		08/29/18 10:57	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-100L-KF-20 **Lab ID: 4616520015** Collected: 08/16/18 09:50 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**279**	ug/L	5.0	1300	5		08/29/18 13:27	7440-50-8	
Lead	**2.4**	ug/L	1.0	15	1		08/29/18 10:59	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Hall@105-DWF-21 **Lab ID: 4616520016** Collected: 08/16/18 09:52 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**427**	ug/L	5.0	1300	5		08/29/18 13:28	7440-50-8	
Lead	**1.1**	ug/L	1.0	15	1		08/29/18 11:00	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-Hall@105-DWF-22 **Lab ID: 4616520017** Collected: 08/16/18 09:54 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**423**	ug/L	5.0	1300	5		08/29/18 13:29	7440-50-8	
Lead	**1.3**	ug/L	1.0	15	1		08/29/18 11:01	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-113-CF-23 **Lab ID: 4616520018** Collected: 08/16/18 09:59 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**937**	ug/L	50.0	1300	50		08/29/18 13:30	7440-50-8	
Lead	**8.2**	ug/L	1.0	15	1		08/29/18 11:05	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-108-CF-27 **Lab ID: 4616520019** Collected: 08/16/18 10:04 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**301**	ug/L	5.0	1300	5		08/29/18 13:31	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:06	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-109-CF-29 **Lab ID: 4616520020** Collected: 08/16/18 10:06 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**506**	ug/L	5.0	1300	5		08/29/18 13:35	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:10	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-110-CF-31 **Lab ID: 4616520021** Collected: 08/16/18 10:08 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**466**	ug/L	5.0	1300	5		08/29/18 13:40	7440-50-8	
Lead	**3.0**	ug/L	1.0	15	1		08/29/18 11:11	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 1-112-CF-35 **Lab ID: 4616520022** Collected: 08/16/18 10:11 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**359**	ug/L	5.0	1300	5		08/29/18 13:41	7440-50-8	
Lead	**1.8**	ug/L	1.0	15	1		08/29/18 11:12	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-200-CF-37 **Lab ID: 4616520023** Collected: 08/16/18 10:14 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**300**	ug/L	1.0	1300	1		08/29/18 11:13	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:13	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-Hall@200-DWF-38 **Lab ID: 4616520024** Collected: 08/16/18 10:17 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**316**	ug/L	5.0	1300	5		08/29/18 13:42	7440-50-8	
Lead	**1.2**	ug/L	1.0	15	1		08/29/18 11:14	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-Hall@200-DWF-39 **Lab ID: 4616520025** Collected: 08/16/18 10:21 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**297**	ug/L	1.0	1300	1		08/29/18 11:18	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:18	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-201-CF-40 **Lab ID: 4616520026** Collected: 08/16/18 10:23 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**237**	ug/L	1.0	1300	1		08/29/18 11:19	7440-50-8	
Lead	**1.6**	ug/L	1.0	15	1		08/29/18 11:19	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-202-CF-41 **Lab ID: 4616520027** Collected: 08/16/18 10:24 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**262**	ug/L	1.0	1300	1		08/29/18 11:20	7440-50-8	
Lead	**1.7**	ug/L	1.0	15	1		08/29/18 11:20	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-224-CF-42 **Lab ID: 4616520028** Collected: 08/16/18 10:26 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**296**	ug/L	5.0	1300	5		08/29/18 13:46	7440-50-8	
Lead	**2.5**	ug/L	1.0	15	1		08/29/18 11:31	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-218-CF-43 **Lab ID: 4616520029** Collected: 08/16/18 10:28 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**272**	ug/L	1.0	1300	1		08/29/18 11:35	7440-50-8	
Lead	**3.8**	ug/L	1.0	15	1		08/29/18 11:35	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-223-CF-44 **Lab ID: 4616520030** Collected: 08/16/18 10:30 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**286**	ug/L	1.0	1300	1		08/29/18 11:36	7440-50-8	
Lead	**1.2**	ug/L	1.0	15	1		08/29/18 11:36	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-222-CF-45 **Lab ID: 4616520031** Collected: 08/16/18 10:31 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**350**	ug/L	5.0	1300	5		08/29/18 13:59	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:37	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-221-CF-46 **Lab ID: 4616520032** Collected: 08/16/18 10:33 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**287**	ug/L	5.0	1300	5		08/29/18 14:00	7440-50-8	
Lead	**1.2**	ug/L	1.0	15	1		08/29/18 11:38	7439-92-1	

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-219-CF-47 **Lab ID: 4616520033** Collected: 08/16/18 10:35 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**280**	ug/L	5.0	1300	5		08/29/18 14:01	7440-50-8	
Lead	**1.7**	ug/L	1.0	15	1		08/29/18 11:39	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-220-CF-48 **Lab ID: 4616520034** Collected: 08/16/18 10:40 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**279**	ug/L	5.0	1300	5		08/29/18 14:02	7440-50-8	
Lead	**2.1**	ug/L	1.0	15	1		08/29/18 11:40	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-203-CF-49 **Lab ID: 4616520035** Collected: 08/16/18 10:41 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**294**	ug/L	5.0	1300	5		08/29/18 14:03	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:44	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-204-CF-50 **Lab ID: 4616520036** Collected: 08/16/18 10:44 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**422**	ug/L	5.0	1300	5		08/29/18 14:04	7440-50-8	
Lead	**3.5**	ug/L	1.0	15	1		08/29/18 11:45	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-215-CF-51 **Lab ID: 4616520037** Collected: 08/16/18 10:47 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**289**	ug/L	5.0	1300	5		08/29/18 14:05	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:46	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-213-CF-53 **Lab ID: 4616520038** Collected: 08/16/18 10:51 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**320**	ug/L	5.0	1300	5		08/29/18 14:06	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:47	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-205-CF-56 **Lab ID: 4616520039** Collected: 08/16/18 10:57 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**316**	ug/L	5.0	1300	5		08/29/18 14:13	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:51	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-207-CF-57 **Lab ID: 4616520040** Collected: 08/16/18 10:58 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**313**	ug/L	5.0	1300	5		08/29/18 14:14	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:52	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-208-CF-58 **Lab ID: 4616520041** Collected: 08/16/18 11:01 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**375**	ug/L	5.0	1300	5		08/29/18 14:15	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:53	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-211-CF-59 **Lab ID: 4616520042** Collected: 08/16/18 11:03 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**366**	ug/L	5.0	1300	5		08/29/18 14:16	7440-50-8	
Lead	**2.0**	ug/L	1.0	15	1		08/29/18 11:57	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-Hall@209-60 **Lab ID: 4616520043** Collected: 08/16/18 11:05 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**267**	ug/L	1.0	1300	1		08/29/18 11:58	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:58	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Sample: 2-Hall@209-61 **Lab ID: 4616520044** Collected: 08/16/18 11:07 Received: 08/17/18 18:00 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Method: EPA 200.8								
Copper	**199**	ug/L	1.0	1300	1		08/29/18 11:59	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/29/18 11:59	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

QC Batch: 31963 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, No Prep
Associated Lab Samples: 4616520001, 4616520002, 4616520003, 4616520004, 4616520005, 4616520006, 4616520007

METHOD BLANK: 128972 Matrix: Water
Associated Lab Samples: 4616520001, 4616520002, 4616520003, 4616520004, 4616520005, 4616520006, 4616520007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	08/29/18 10:07	
Lead	ug/L	<1.0	1.0	08/29/18 10:07	

LABORATORY CONTROL SAMPLE: 128973

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	20	20.0	100	85-115	
Lead	ug/L	20	20.4	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 128974 128975

Parameter	Units	4616519021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	447	100	100	538	526	92	79	70-130	2	20	
Lead	ug/L	<1.0	20	20	21.2	21.2	104	104	70-130	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 128977 128978

Parameter	Units	4616519031 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	204	100	100	305	297	102	93	70-130	3	20	
Lead	ug/L	<1.0	20	20	21.0	21.3	105	106	70-130	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

QC Batch: 31964 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, No Prep
Associated Lab Samples: 4616520008, 4616520009, 4616520010, 4616520012, 4616520013, 4616520014, 4616520015, 4616520016, 4616520017, 4616520018, 4616520019, 4616520020, 4616520021, 4616520022, 4616520023, 4616520024, 4616520025, 4616520026, 4616520027

METHOD BLANK: 128980 Matrix: Water
Associated Lab Samples: 4616520008, 4616520009, 4616520010, 4616520012, 4616520013, 4616520014, 4616520015, 4616520016, 4616520017, 4616520018, 4616520019, 4616520020, 4616520021, 4616520022, 4616520023, 4616520024, 4616520025, 4616520026, 4616520027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	08/29/18 10:44	
Lead	ug/L	<1.0	1.0	08/29/18 10:44	

LABORATORY CONTROL SAMPLE: 128981

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	20	19.9	100	85-115	
Lead	ug/L	20	20.6	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 128982 128983

Parameter	Units	4616520008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	496	100	100	586	574	90	78	70-130	2	20	
Lead	ug/L	<1.0	20	20	21.6	21.5	106	105	70-130	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 128985 128986

Parameter	Units	4616520019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	301	100	100	398	406	97	104	70-130	2	20	
Lead	ug/L	<1.0	20	20	21.5	21.3	106	105	70-130	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

QC Batch: 31966 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, No Prep
Associated Lab Samples: 4616520028, 4616520029, 4616520030, 4616520031, 4616520032, 4616520033, 4616520034, 4616520035, 4616520036, 4616520037, 4616520038, 4616520039, 4616520040, 4616520041, 4616520042, 4616520043, 4616520044

METHOD BLANK: 128990 Matrix: Water
Associated Lab Samples: 4616520028, 4616520029, 4616520030, 4616520031, 4616520032, 4616520033, 4616520034, 4616520035, 4616520036, 4616520037, 4616520038, 4616520039, 4616520040, 4616520041, 4616520042, 4616520043, 4616520044

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	08/29/18 11:26	
Lead	ug/L	<1.0	1.0	08/29/18 11:26	

LABORATORY CONTROL SAMPLE: 128991

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	20	20.6	103	85-115	
Lead	ug/L	20	21.7	108	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 128992 128993

Parameter	Units	4616520028 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	296	100	100	386	379	91	83	70-130	2	20	
Lead	ug/L	2.5	20	20	23.6	24.0	106	108	70-130	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 128995 128996

Parameter	Units	4616520038 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	320	100	100	414	411	94	91	70-130	1	20	
Lead	ug/L	<1.0	20	20	21.2	21.1	104	104	70-130	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

QC Batch: 31172 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET
Associated Lab Samples: 4616520011

METHOD BLANK: 125641 Matrix: Water
Associated Lab Samples: 4616520011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	08/29/18 11:21	
Lead	ug/L	<1.0	1.0	08/29/18 11:21	

LABORATORY CONTROL SAMPLE: 125642

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	49.9	100	85-115	
Lead	ug/L	50	51.9	104	85-115	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Wright, Charles Lower Academy
Pace Project No.: 4616520

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4616520001	**1-Gym-DWF-1**	EPA 200.8	31963		
4616520002	**1-Gym-DWF-2**	EPA 200.8	31963		
4616520003	**1-Hall@122-DWF-3**	EPA 200.8	31963		
4616520004	**1-Hall@122-DWF-4**	EPA 200.8	31963		
4616520005	**1-Hall@122-DWF-5**	EPA 200.8	31963		
4616520006	**1-Kitchen-KF-6**	EPA 200.8	31963		
4616520007	**1-Kitchen-KF-7**	EPA 200.8	31963		
4616520008	**1-Kitchen-KF-8**	EPA 200.8	31964		
4616520009	**1-Kitchen-KF-10**	EPA 200.8	31964		
4616520010	**1-119-CF-13**	EPA 200.8	31964		
4616520012	**1-116-CF-17**	EPA 200.8	31964		
4616520013	**1-Hall@100E-KF-18**	EPA 200.8	31964		
4616520014	**1-100I-KF-19**	EPA 200.8	31964		
4616520015	**1-100L-KF-20**	EPA 200.8	31964		
4616520016	**1-Hall@105-DWF-21**	EPA 200.8	31964		
4616520017	**1-Hall@105-DWF-22**	EPA 200.8	31964		
4616520018	**1-113-CF-23**	EPA 200.8	31964		
4616520019	**1-108-CF-27**	EPA 200.8	31964		
4616520020	**1-109-CF-29**	EPA 200.8	31964		
4616520021	**1-110-CF-31**	EPA 200.8	31964		
4616520022	**1-112-CF-35**	EPA 200.8	31964		
4616520023	**2-200-CF-37**	EPA 200.8	31964		
4616520024	**2-Hall@200-DWF-38**	EPA 200.8	31964		
4616520025	**2-Hall@200-DWF-39**	EPA 200.8	31964		
4616520026	**2-201-CF-40**	EPA 200.8	31964		
4616520027	**2-202-CF-41**	EPA 200.8	31964		
4616520028	**2-224-CF-42**	EPA 200.8	31966		
4616520029	**2-218-CF-43**	EPA 200.8	31966		
4616520030	**2-223-CF-44**	EPA 200.8	31966		
4616520031	**2-222-CF-45**	EPA 200.8	31966		
4616520032	**2-221-CF-46**	EPA 200.8	31966		
4616520033	**2-219-CF-47**	EPA 200.8	31966		
4616520034	**2-220-CF-48**	EPA 200.8	31966		
4616520035	**2-203-CF-49**	EPA 200.8	31966		
4616520036	**2-204-CF-50**	EPA 200.8	31966		
4616520037	**2-215-CF-51**	EPA 200.8	31966		
4616520038	**2-213-CF-53**	EPA 200.8	31966		
4616520039	**2-205-CF-56**	EPA 200.8	31966		
4616520040	**2-207-CF-57**	EPA 200.8	31966		
4616520041	**2-208-CF-58**	EPA 200.8	31966		
4616520042	**2-211-CF-59**	EPA 200.8	31966		
4616520043	**2-Hall@209-60**	EPA 200.8	31966		
4616520044	**2-Hall@209-61**	EPA 200.8	31966		
4616520011	**1-127-KF-14**	EPA 200.8	31172	EPA 200.8	31965

REPORT OF LABORATORY ANALYSIS

WO# : 4616520

4616520

CHAIN-OF-CUSTODY / Analytical Request Document # 19854

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Required Client Information:		Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services LLC	Report To:	Robert Smith	Attention:	
Address:	46555 Humboldt Drive, Suite 100	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	robert.smith@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	248-669-5140 Fax: 248-669-5147	Project Name:	Lead & Copper Testing	Pace Project Manager:	Will Cole
Requested Due Date:		Project #:	Wright, Charles Lower Academy	Pace Profile #:	Profile 236 - Line 2

Regulatory Agency

State / Location: MI

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Lead & Copper	Residual Chlorine (Y/N)	(8-33) dART ID
1	1-Gym-DWF-1	DW	G	8/16/18	9:16				1			X							X		
2	1-Gym-DWF-2	DW	G	8/16/18	9:17				1			X							X		
3	1-Hall@122-DWF-3	DW	G	8/16/18	9:20				1			X							X		
4	1-Hall@122-DWF-4	DW	G	8/16/18	9:21				1			X							X		
5	1-Hall@122-DWF-5	DW	G	8/16/18	9:22				1			X							X		
6	1-Kitchen-KF-6	DW	G	8/16/18	9:27				1			X							X		
7	1-Kitchen-KF-7	DW	G	8/16/18	9:28				1			X							X		
8	1-Kitchen-KF-8	DW	G	8/16/18	9:29				1			X							X		
9	1-Kitchen-KF-10	DW	G	8/16/18	9:30				1			X							X		
10	1-119-CF-13	DW	G	8/16/18	9:33				1			X							X		
11	1-127-KF-14	DW	G	8/16/18	9:35				1			X							X		
12	ITEM #12 Not Used																				

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
					8/17/18	1242	
		8/17/18	1800	D. Riordin	8/17/18	1800	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dominique Greer

SIGNATURE of SAMPLER: DATE Signed: 8/16/2018

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document # 19855

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services LLC	Report To:	Robert Smith	Attention:	
Address:	46555 Humboldt Drive, Suite 100	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	robert.smith@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	248-669-5140 Fax: 248-669-5147	Project Name:	Lead & Copper Testing	Pace Project Manager:	Will Cole
Requested Due Date:		Project #:	Wright, Charles Lower Academy	Pace Profile #:	Profile 236 - Line 2

Regulatory Agency	State / Location
	MI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: Lead & Copper	Residual Chlorine (Y/N)	(8.33)
13	1-116-CF-17	DW	G	8/16/18	9:42				1			X							X		
14	1-Hall@100E-KF-18	DW	G	8/16/18	9:44				1			X							X		
15	1-100I-KF-19	DW	G	8/16/18	9:46				1			X							X		
16	1-100L-KF-20	DW	G	8/16/18	9:50				1			X							X		
17	1-Hall@105-DWF-21	DW	G	8/16/18	9:52				1			X							X		
18	1-Hall@105-DWF-22	DW	G	8/16/18	9:54				1			X							X		
19	1-113-CF-23	DW	G	8/16/18	9:59				1			X							X		
20	Item #20 Not Used																				
21	1-108-CF-27	DW	G	8/16/18	10:04				1			X							X		
22	1-109-CF-29	DW	G	8/16/18	10:06				1			X							X		
23	1-110-CF-31	DW	G	8/16/18	10:08				1			X							X		
24	Item #24 Not Used																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		8/17/18	1800		8/17/18	1242	
					8/17/18	1800	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dominique Greer

SIGNATURE of SAMPLER:

DATE Signed: 8/16/2018

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document 4 19856

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services LLC	Report To:	Robert Smith	Attention:	
Address:	46555 Humboldt Drive, Suite 100	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	robert.smith@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	248-669-5140 Fax: 248-669-5147	Project Name:	Lead & Copper Testing	Pace Project Manager:	Will Cole
Requested Due Date:		Project #:	Wright, Charles Lower Academy	Pace Profile #:	Profile 236 - Line 2

Regulatory Agency	
State / Location	
	MI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: Lead & Copper	Residual Chlorine (Y/N)	(8.33)
25	1-112-CF-35	DW	G	8/16/18	10:11				1			X							X		
26	2-200-CF-37	DW	G	8/16/18	10:14				1			X							X		
27	2-Hall@200-DWF-38	DW	G	8/16/18	10:17				1			X							X		
28	2-Hall@200-DWF-39	DW	G	8/16/18	10:21				1			X							X		
29	2-201-CF-40	DW	G	8/16/18	10:23				1			X							X		
30	2-202-CF-41	DW	G	8/16/18	10:24				1			X							X		
31	2-224-CF-42	DW	G	8/16/18	10:26				1			X							X		
32	2-218-CF-43	DW	G	8/16/18	10:28				1			X							X		
33	2-223-CF-44	DW	G	8/16/18	10:30				1			X							X		
34	2-222-CF-45	DW	G	8/16/18	10:31				1			X							X		
35	2-221-CF-46	DW	G	8/16/18	10:33				1			X							X		
36	2-219-CF-47	DW	G	8/16/18	10:35				1			X							X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	8/17/18	1800		8/17/18	1242		
					8/17/18	1800	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dominique Greer

SIGNATURE of SAMPLER:

DATE Signed: 8/16/2018

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document # 19857

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services LLC	Report To:	Robert Smith	Attention:	
Address:	46555 Humboldt Drive, Suite 100	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	robert.smith@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	248-669-5140 Fax: 248-669-5147	Project Name:	Lead & Copper Testing	Pace Project Manager:	Will Cole
Requested Due Date:		Project #:	Wright, Charles Lower Academy	Pace Profile #:	Profile 236 - Line 2

Regulatory Agency	
State / Location	MI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Analyses Test: Lead & Copper	Residual Chlorine (Y/N)	
37	2-220-CF-48	DW	G	8/16/18	10:40				1			X							X		
38	2-203-CF-49	DW	G	8/16/18	10:41				1			X							X		
39	2-204-CF-50	DW	G	8/16/18	10:44				1			X							X		
40	2-215-CF-51	DW	G	8/16/18	10:47				1			X							X		
41	2-213-CF-53	DW	G	8/16/18	10:51				1			X							X		
42	2-212-CF-54	DW	G	8/16/18	10:53				1			X							X		
43	2-205-CF-56	DW	G	8/16/18	10:57				1			X							X		
44	2-207-CF-57	DW	G	8/16/18	10;58				1			X							X		
45	2-208-CF-58	DW	G	8/16/18	11:01				1			X							X		
46	2-211-CF-59	DW	G	8/16/18	11:03				1			X							X		
47	2-Hall@209-60	DW	G	8/16/18	11;05				1			X							X		
48	2-Hall@209-61	DW	G	8/16/18	11:07				1			X							X		

Requested Analysis Filtered (Y/N)

8:33

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		8/17/18	1805		8/17/18	1242	
					8/17/18	1800	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dominique Greer

SIGNATURE of SAMPLER:

DATE Signed: 8/16/2018

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLE RECEIVING / LOG-IN CHECKLIST

Pace Analytical®

Client: AJC	Work Order #: 4616820	
Receipt Record Page/Line #: 8-33		
Recorded by (initials/date): JW 8-17-18	☒ Cooler ☐ Box ☐ Other______ — Qty Received: 1	Thermometer Used: ☒ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ IR Gun (#402)

	Cooler 1	Cooler 2	Cooler 3	Cooler 4
Cooler # / Time	E3 / 2213			
Custody Seals: None	☒	☐	☐	☐
Present / Intact	☐	☐	☐	☐
Present / Not Intact	☐	☐	☐	☐
Coolant Type: Loose Ice	☐	☐	☐	☐
Bagged Ice	☐	☐	☐	☐
Blue Ice	☐	☐	☐	☐
None	☒	☐	☐	☐
Coolant Location: Dispersed / Top / Middle / Bottom				
Temp Blank Present: ☐ Yes ☐ No				
If Present, Temperature Blank Location is: ☐ Representative ☐ Not Representative				

Cooler E3:

	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			
Sample 1:		0	24.7
Sample 2:		0	24.2
Sample 3:		0	25.1

When above 6 °C take a 3 Sample Average °C: 24.7

☐ VOC Trip Blank received?

(Coolers 2–4: Observed °C / Correction Factor °C / Actual °C for Temp Blank, Sample 1, Sample 2, Sample 3 — blank; When above 6 °C take a 3 Sample Average °C: ______; ☐ VOC Trip Blank received?)

If any shaded areas checked, complete Sample Receiving Non-Conformance

Paperwork Received

Yes	No	
☒	☐	Chain of Custody record(s)? If No, Initiated By ______
☒		Received for Lab Signed/Date/Time?
☐	☒	USDA Soil Documents?
☐	☒	Sampling / Field Forms?
☐	☒	Other ______

COC Information

☒ Pace COC ☐ Other ______

COC ID Numbers: 19854, 19855, 19856, 19858

Check COC for Accuracy

Yes	No	
☒	☐	Analysis Requested?
☒	☐	Sample ID matches COC?
☒	☐	Sample Date and Time matches COC?
☐	☒	All containers indicated are received?

Sample Condition Summary

N/A	Yes	No	
	☐	☒	Broken containers/lids?
	☐	☒	Missing or incomplete labels?
	☐	☒	Illegible information on labels?
	☐	☒	Low volume received?
	☐	☒	Inappropriate or non-Pace containers received?
☒	☐	☐	VOC vials have headspace?
	☐	☒	Extra sample locations?
	☐	☒	Containers not listed on COC?

Check Sample Preservation

N/A	Yes	No	
	☒	☐	Temperature Blank **OR** average sample temperature, ≥6° C?
☐	☐	☒	If "Yes" was thermal preservation required?
☒	☐	☐	If "Yes" were ALL samples collected the same day as receipt?
☐	☒		Completed Sample Preservation Verification Form?
☐	☒	☐	Samples chemically preserved correctly?
☒	☐		If "No", add wire tag and fill out Non-Conformance Form?
☒	☐		Received unpreserved Terracore kit? If "Yes" unpreserved vials must be frozen

Work Order Not Logged In with Short Hold / Rush

☐ Copies of COC To Lab Areas

Notes

Yes	No	
☒	☐	Were all samples logged into Epic?
☒	☐	Were all samples labelled?
☒	☐	Were samples placed on scan locations?

Initial / Date : PS 8/18/18

Pace Analytical®

AQUEOUS SAMPLE PRESERVATION VERIFICATION

Client: QTC

Work Order #: 461520

Receipt Log #: 2-33

Completed By (initials/date): DW 8-17-18

COC ID #: 19854

Adjusted by: _____

Date: _____

Container Type	BP3C or AG3O		BP1-4S		AG2S		BP1-4N Total		BP1-4N Dissolved			
Preservative	NaOH >12		H_2SO_4 <2		H_2SO_4 <2		HNO_3 <2		HNO_3 <2			
pH	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted
COC Line #1							✓					
COC Line #2							✓					
COC Line #3							✓					
COC Line #4							✓					
COC Line #5							✓					
COC Line #6							✓					
COC Line #7							✓					
COC Line #8							✓					
COC Line #9							✓					
COC Line #10							✓					
COC Line #11							✓					
COC Line #12												

Comments:

pH Strip Reagent or Lot #

☑ HC739245

☐ Other _____

Place a check mark in the Received box if pH is acceptable. If pH is not acceptable, document the Received and Adjusted pH values in the appropriate columns (project manager will review all adjustments at work order release). Never add more than 2x the default preservation volume (see table below for default volumes). Complete and attach a wire tag to all adjusted samples. A Sample Receiving Non-Conformance Report must be completed if a pH adjustment was required.

COC ID #: 19855

Adjusted by: _____

Date: _____

Container Type	BP3C or AG3O		BP1-4S		AG2S		BP1-4N Total		BP1-4N Dissolved			
Preservative	NaOH >12		H_2SO_4 <2		H_2SO_4 <2		HNO_3 <2		HNO_3 <2			
pH	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted
COC Line #1							✓					
COC Line #2							✓					
COC Line #3							✓					
COC Line #4							✓					
COC Line #5							✓					
COC Line #6							✓					
COC Line #7							✓					
COC Line #8												
COC Line #9							✓					
COC Line #10							✓					
COC Line #11							✓					
COC Line #12							✓ DW 8-17-18					

Comments:

Container Size (mL)	Default Preservative Volume (mL)
Container Types 5 / 23	NaOH
250	1.3
Container Type 4	H_2SO_4
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H_2SO_4
500	2.5
Container Types 6 / 15	HNO_3
125	0.7
250	1.25
500	2.5
1000	5.0

Pace Analytical® AQUEOUS SAMPLE PRESERVATION VERIFICATION

Client: QTC | Work Order #: 461652

Receipt Log #: 8-33 | Completed By (initials/date): DN 8-17-18

COC ID #: 19856 | Adjusted by: _____ | Date: _____

pH Strip Reagent or Lot #: ☑ HC739245 | ☐ Other _____

Container Type	BP3C or AG3O		BP1-4S		AG2S		BP1-4N Total		BP1-4N Dissolved			
Preservative	NaOH >12		H_2SO_4 <2		H_2SO_4 <2		HNO_3 <2		HNO_3 <2			
pH	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted
COC Line #1							✓					
COC Line #2							✓					
COC Line #3							✓					
COC Line #4							✓					
COC Line #5							✓					
COC Line #6							✓					
COC Line #7							✓					
COC Line #8							✓					
COC Line #9							✓					
COC Line #10							✓					
COC Line #11							✓					
COC Line #12							✓					

Comments:

Place a check mark in the Received box if pH is acceptable. If pH is not acceptable, document the Received and Adjusted pH values in the appropriate columns (project manager will review all adjustments at work order release). Never add more than 2x the default preservation volume (see table below for default volumes). Complete and attach a wire tag to all adjusted samples. A Sample Receiving Non-Conformance Report must be completed if a pH adjustment was required.

COC ID #: 19857 | Adjusted by: _____ | Date: _____

Container Type	BP3C or AG3O		BP1-4S		AG2S		BP1-4N Total		BP1-4N Dissolved			
Preservative	NaOH >12		H_2SO_4 <2		H_2SO_4 <2		HNO_3 <2		HNO_3 <2			
pH	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted	Received	Adjusted
COC Line #1							✓					
COC Line #2							✓					
COC Line #3							✓					
COC Line #4							✓					
COC Line #5							✓					
COC Line #6							(NO SAMPLE)					
COC Line #7							✓					
COC Line #8							✓					
COC Line #9							✓					
COC Line #10							✓					
COC Line #11							✓					
COC Line #12							✓					

Comments:

Container Size (mL)	Default Preservative Volume (mL)
Container Types 5 / 23	NaOH
250	1.3
Container Type 4	H_2SO_4
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H_2SO_4
500	2.5
Container Types 6 / 15	HNO_3
125	0.7
250	1.25
500	2.5
1000	5.0

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SAMPLE RECEIVING NON-CONFORMANCE REPORT

Client	Work Order #
AJC	461650
Receipt Log #	Completed By (initials/date)
8-33	8-17-18
	Project Chemist

List non-conformance issues associated with this work order in the chart below/left. Identify discrepancies between the COC and sample tags in the chart below/right. Add comments as needed.

COC ID #	Line #	Type of Problem										COC					Sample Tag					Line Item Comments
		Discrepancy	Missing Container	Broken Container	Label Missing / Incomplete	Label Illegible	Low Volume	Inappropriate Container	Headspace	Not Listed on COC	Preservation	Sample Field ID	Date Sampled	Time Sampled	Container Type	Qty	Sample Field ID	Date Sampled	Time Sampled	Container Type	Qty	
19857	42		✓									2-212-CF-54				1					0	Did NOT RECEIVE

General Comments:

Project Chemist (initials/date)