ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

August 30, 2018

Mathew Sam
Detroit Public Schools
1601 Farnsworth
Detroit, Michigan 48202

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

SUBJECT: **Drinking Water Screening Report**
Douglass Academy
2001 West Warren
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 eleven (11) of the samples analyzed were above the EPA recommended limits of 15 micrograms per liter (ug/L) for lead. Two 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 17, 2018)

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-Hall-B-1	Near room 150	left	6.2 ug/L	102 ug/L
1-Hall-B-2	Near room 150	right	3.4 ug/L	47.4 ug/L
1-MO-SRF-3	Main Office	Staff sink	6.0 ug/L	177 ug/L
1-Hall-B-4	Between rooms 124 & 126	left	7.2 ug/L	61.2 ug/L
1-Hall-B-5	Between rooms 124 & 126	right	12.1 ug/L	478 ug/L
2-Hall-B-6	Between rooms 224 & 226	left	**15.8 ug/L**	65.6 ug/L
2-Hall-B-7	Between rooms 224 & 226	right	5.0 ug/L	109 ug/L
2-Hall-DWF-8	Between rooms 234 & 236	left	7.8 ug/L	81.2 ug/L

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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
2-Hall-DWF-9	Between rooms 234 & 236	right	3.5 ug/L	110 ug/L
2-Hall-DWF-10	Near room 212	left	2.7 ug/L	129 ug/L
2-Hall-DWF-11	Near room 212	right	2.7 ug/L	175 ug/L
2-Hall-DWF-12	Between rooms 235 & 237	left	5.8 ug/L	486 ug/L
2-Hall-B-13	Between rooms 235 & 237	right	**28.0 ug/L**	255 ug/L
2-Hall-B-14	Between rooms 225 & 227	left	**16.0 ug/L**	247 ug/L
2-Hall-B-16	Between rooms 125 & 127	left	10.8 ug/L	322 ug/L
2-Hall-B-17	Between rooms 125 & 127	right	11.5 ug/L	205 ug/L
2-Hall-B-18	Between rooms 133 & 137	left	**41.5 ug/L**	785 ug/L
2-Hall-B-19	Between rooms 133 & 137	right	**26.4 ug/L**	401 ug/L
1-143-SRF-20	Room 143	Staff sink	1.1 ug/L	209 ug/L
1-Hall-DWF-21	Across from room 100A	left	4.4 ug/L	213 ug/L
1-Hall-B-22	Across from room 100A	right	**20.4 ug/L**	245 ug/L

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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-GC-SRF-23	Inside guidance center break room	Staff sink	1.8 ug/L	198 ug/L
1-100A-SRF-24	Room 100A	Staff sink	4.0 ug/L	99.7 ug/L
1-LO-SRF-25	Library Office	Staff sink	**38.9 ug/L**	269 ug/L
1-Gym-B-26	Gym	Bubbler	2.4 ug/L	247 ug/L
1-Gym-B-27	Gym	Bubbler	3.9 ug/L	302 ug/L
1-BLR-B-28	Boys Locker Room	Bubbler	**35.6 ug/L**	633 ug/L
1-GLR-B-29	Girls Locker Room	Bubbler	2.1 ug/L	107 ug/L
1-Hall-B-30	Next to auditorium	left	**45.6 ug/L**	**1340 ug/L**
1-Hall-B-31	Next to auditorium	right	**52.4 ug/L**	**1670 ug/L**
1-Hall-B-32	Inside auditorium	left	9.5 ug/L	458 ug/L
1-Hall-B-33	Inside auditorium	right	11.3 ug/L	245 ug/L
1-Hall-B-34	Next to room 163	left	8.7 ug/L	656 ug/L
1-Hall-B-35	Next to room 163	Bubbler	5.9 ug/l	602 ug/L
1-168-B-36	In room 168	Bubbler	1.2 ug/L	414 ug/L
1-Hall-B-37	Near room 169	left	**15.5 ug/L**	520 ug/L

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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-Hall-B-38	Near room 169	right	3.4 ug/L	625 ug/L
1-Hall-B-39	Across from door 9	Bubbler	1.3 ug/L	158 ug/L
1-K-KS-41	Kitchen	hand sink	3.2 ug/L	166 ug/L
1-K-KS-42	Kitchen	hand sink	2.7 ug/L	107 ug/L
1-K-KS-43	Kitchen	hand sink	4.7 ug/L	53.8 ug/L
1-K-KS-44	Kitchen	3 camber sink	<1.0 ug/l	54.9 ug/L
1-K-KS-45	Kitchen	dishwasher	<1.0 ug/l	166 ug/L
1-K-KS-46	Kitchen	dishwasher	<1.0 ug/l	750 ug/L
1-K-KS-47	Kitchen	Single sink	<1.0 ug/l	90 ug/L
1-K-KS-48	Kitchen	Single sink	<1.0 ug/l	76.2 ug/L
1-K-KS-49	Kitchen	3 chamber sink	2.2 ug/L	91.5 ug/L
1-K-KS-50	Kitchen	3 chamber sink	<1.0 ug/l	27.7 ug/L
1-K-KS-51	Kitchen	3 chamber sink	<1.0 ug/l	81.4 ug/L
1-K-KS-52	Kitchen	hand sink	<1.0 ug/l	84.3 ug/L

Key: NA - Not Analyzed

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

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Analysis of samples in between rooms 224 and 226, between rooms 235 and 237, between rooms 225 and 227, between rooms 133 and 137 indicate that lead levels were above the MCL. Analysis of samples in the bubblers next to the auditorium indicates 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.

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

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Attachments

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

School Name: Douglass Academy for Young Men

Address 2001 West Warren

Fixture Identification	Fixture Location	Fixture Description	Photo #
1-Hall- B- 1	Near room 150	left	1
1-Hall- B- 2	Near room 150	right	2
1-MO-SRF- 3	Main Office		3
1-Hall- B- 4	Between rooms 124 & 126	left	4
1-Hall- B- 5	Between rooms 124 & 126	right	5
2-Hall- B- 6	Between rooms 224 & 226	left	6
2-Hall- B- 7	Between rooms 224 & 226	right	7
2-Hall- DWF- 8	Between rooms 234 & 236	left	8
2-Hall- DWF- 9	Between rooms 234 & 236	right	9
2-Hall- DWF- 10	Near room 212	left	10
2-Hall- DWF-11	Near room 212	right	11
2-Hall- DWF- 12	Between rooms 235 & 237	left	12

2-Hall- B- 13	Between rooms 235 & 237	right	13
2-Hall- B- 14	Between rooms 225 & 227	left	14
2-Hall- B- 15	Between rooms 225 & 227	right	15
1-Hall- B- 16	Between rooms 125 & 127	left	16
1-Hall- B- 17	Between rooms 125 & 127	right	17
1-Hall- B- 18	Between rooms 133 & 137	left	18
1-Hall- B- 19	Between rooms 133 & 137	right	19
1-143-SRF-20	Room 143	Staff sink	20
1-Hall- DWF-21	Across from room 100A	left	21
1-Hall- B- 22	Across from room 100A	right	22
1-GC-SRF-23	Inside guidence center break room	Staff sink	23
1-100A-SRF-24	Room 100A	Staff sink	24
1-LO-SRF-25	Library Office	Staff sink	25
1-Gym-B-26	Gym	Bubbler	26
1-Gym-B-27	Gym	Bubbler	27
1-BLR-B-28	Boys Locker Room	Bubbler	28
1-GLR-B-29	Girls Locker Room	Bubbler	29
1-Hall-B-30	Next to auditorium	left	30
1-Hall-B-31	Next to auditorium	right	31
1-Hall-B-32	Inside auditorium	left	32
1-Hall-B-33	Inside auditorium	right	33
1-Hall-B-34	Next to room 163	left	34
1-Hall-B-35	Next to room 163	Bubbler	35
1-168-B-36	In room 168	Bubbler	36
1-Hall-B-37	Near room 169	left	37
1-Hall-B-38	Near room 169	right	38
1-Hall-B-39	Across from door 9		39
1-NO-NS-40	Nurses Office		40
1-K-KS-41	Kitchen	hand sink	41
1-K-KS-42	Kitchen	hand sink	42
1-K-KS-43	Kitchen	hand sink	43
1-K-KS-44	Kitchen	3 camber sink	44
1-K-KS-45	Kitchen	dishwasher	45
1-K-KS-46	Kitchen	dishwasher	46

1-K-KS-47	Kitchen	Single sink	47
1-K-KS-48	Kitchen	Single sink	48
1-K-KS-49	Kitchen	3 chamber sink	49
1-K-KS- 50	Kitchen	3 chamber sink	50
1-K-KS- 51	Kitchen	3 chamber sink	51
1-K-KS-52	Kitchen	hand sink	52

Photo 1: Bubbler, located on the 1st floor hallway.

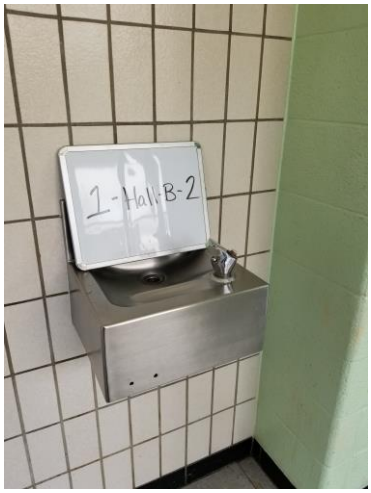

Photo 2: Bubbler, located on the 1st floor hallway.

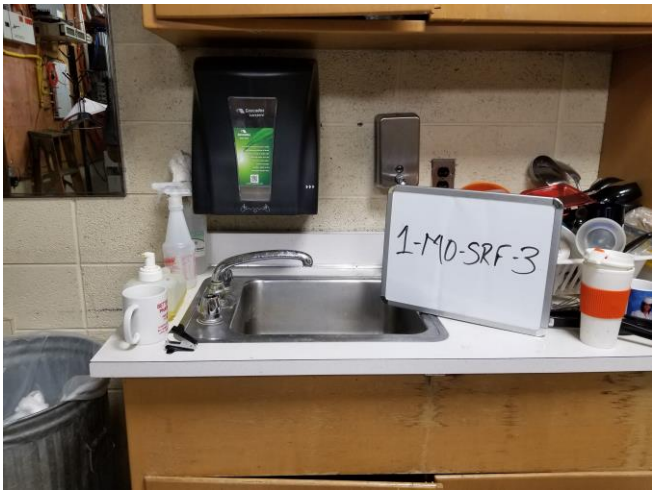

Photo 3: Staff room faucet, located on the 1st floor in the main office.

Photo 4: Bubbler, located on the 1st floor hallway. .

Photo 5: Bubbler, located on the 1st floor hallway.

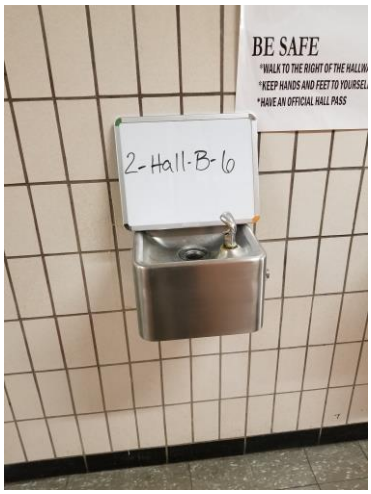

Photo 6: Bubbler, located on the 2nd t floor hallway.

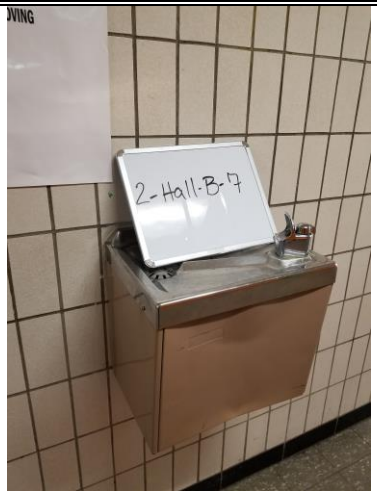

Photo 7: Drinking water fountain, located on the 2nd t floor hallway.

Photo 8: Drinking water fountain, located on the 2nd t floor hallway.

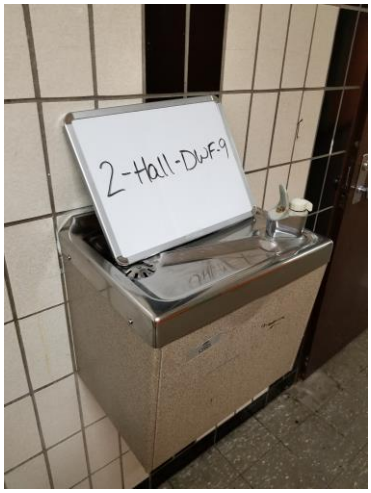

Photo 9: Drinking water fountain, located on the 2nd t floor hallway.

Photo 10: Drinking water fountain, located on the 2nd t floor hallway.

Photo 11: Drinking water fountain, located on the 2nd t floor hallway.

Photo 12: Drinking water fountain, located on the 2nd t floor hallway.

Photo 13: Bubbler, located on the 2nd t floor hallway.

Photo 14: Bubbler, located on the 2nd t floor hallway.

Photo 15: Bubbler, located on the 2nd t floor hallway.

Photo 16: Bubbler, located on the 1st t floor hallway.

Photo 17: Bubbler, located on the 1st t floor hallway.

Photo 18: Bubbler, located on the 1st t floor hallway.

Photo 19: Bubbler, located on the 1st[t] floor hallway.

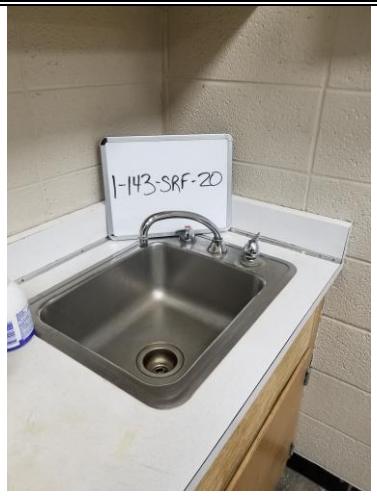

Photo 20: Staff room faucet, located on the 1st floor in room 143.

Photo 21: Drinking water fountain, located on the 1st[t] floor hallway.

Photo 22: Bubbler, located on the 1st[t] floor hallway.

Photo 23: Staff room faucet, located on the 1st floor in the guidance center.

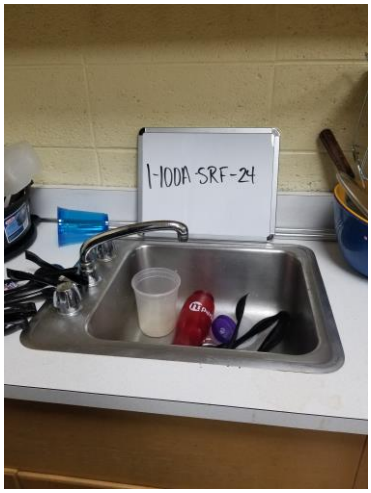

Photo 24: Staff room faucet, located on the 1st floor in room 100A.

Photo 25: Staff room faucet, located on the 1st floor in the library office.

Photo 26: Bubbler, located on the 1st floor in the gym.

Photo 27: Bubbler, located on the 1st floor in the gym.

Photo 28: Bubbler, located on the 1st floor in the boys locker room.

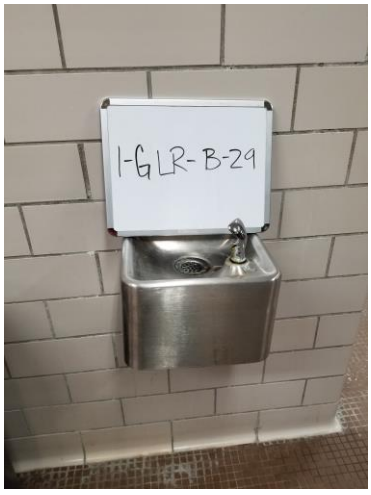

Photo 29: Bubbler, located on the 1st floor in the girls locker room.

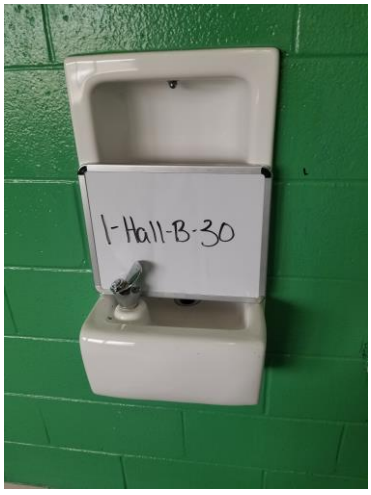

Photo 30: Bubbler, located on the 1st floor in the hallway.

Photo 31: Bubbler, located on the 1st floor in the hallway.

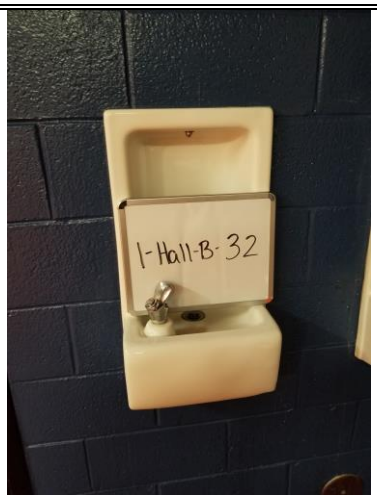

Photo 32: Bubbler, located on the 1st floor in the hallway.

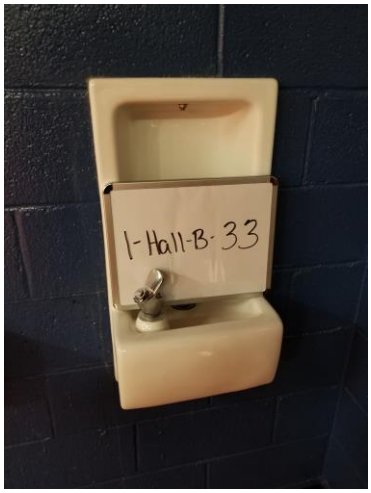

Photo 33: Bubbler, located on the 1st floor in the hallway.A.

Photo 34: Bubbler, located on the 1st floor in the hallway.

Photo 35: Bubbler, located on the 1st floor in the hallway.

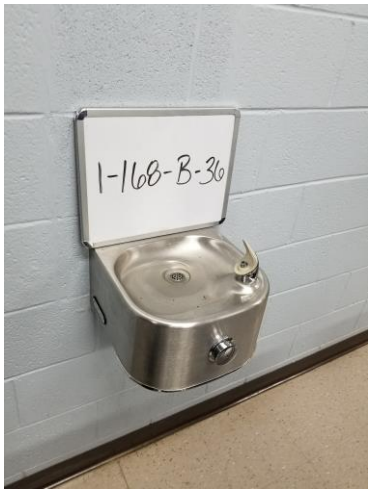

Photo 36: Bubbler, located on the 1st floor in room 168.

Photo 37: Bubbler, located on the 1st floor in the hallway.

Photo 38: Bubbler, located on the 1st floor in the hallway.

Photo 39: Bubbler, located on the 1st floor in the hallway.

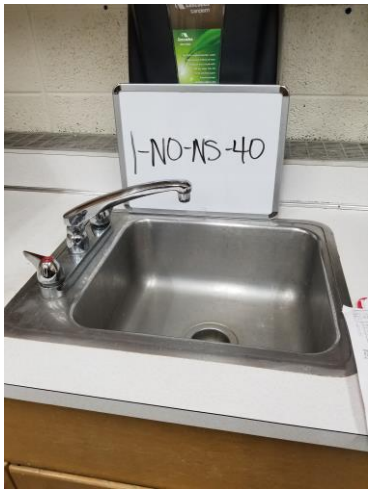

Photo 40: Nurses sink, located on the 1st floor in the nurse's odffice.

Photo 41: Kitchen sink, located on the 1st floor in the kitchen.

Photo 42: Kitchen sink, located on the 1st floor in the kitchen.

Photo 43: Kitchen sink, located on the 1st floor in the kitchen.

Photo 44: Kitchen sink, located on the 1st floor in the kitchen.

Photo 45: Kitchen sink, located on the 1st floor in the kitchen.

Photo 46: Kitchen sink, located on the 1st floor in the kitchen.

Photo 47: Kitchen sink, located on the 1st floor in the kitchen.

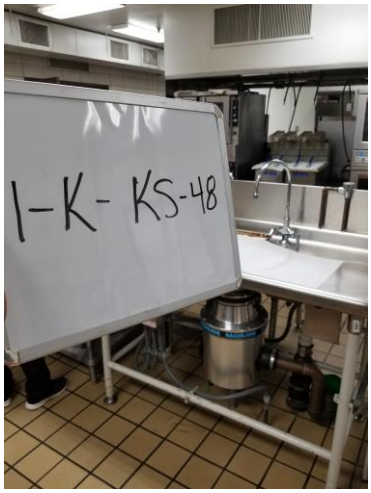

Photo 48: Kitchen sink, located on the 1st floor in the kitchen.

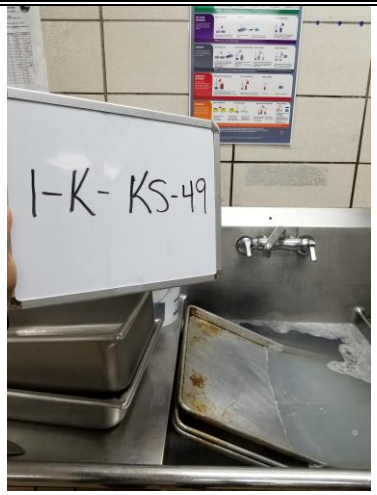

Photo 49: Kitchen sink, located on the 1st floor in the kitchen.

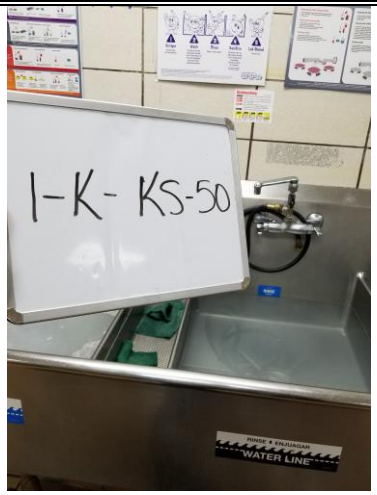

Photo 50: Kitchen sink, located on the 1st floor in the kitchen.

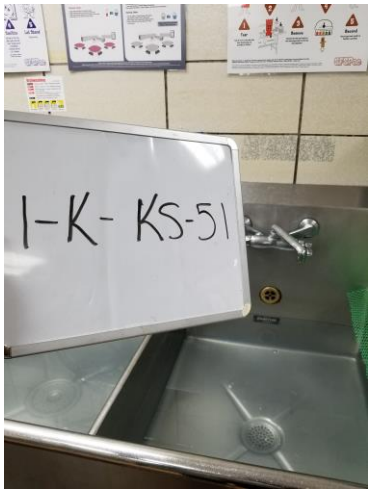

Photo 51: Kitchen sink, located on the 1st floor in the kitchen.

Photo 52: Kitchen sink, located on the 1st floor in the kitchen.

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

August 17, 2018

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

RE: Project: DW-Douglass Academy
Pace Project No.: 4615833

Dear Robert Smith:
Enclosed are the analytical results for sample(s) received by the laboratory on August 03, 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

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

CERTIFICATIONS

Project: DW-Douglass Academy
Pace Project No.: 4615833

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

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

SAMPLE SUMMARY

Project: DW-Douglass Academy
Pace Project No.: 4615833

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4615833001	**1-Hall-B-1**	Drinking Water	07/27/18 09:41	08/03/18 18:00
4615833002	**1-Hall-B-2**	Drinking Water	07/27/18 09:42	08/03/18 18:00
4615833003	**1-MO-SRF-3**	Drinking Water	07/27/18 09:44	08/03/18 18:00
4615833004	**1-Hall-B-4**	Drinking Water	07/27/18 09:48	08/03/18 18:00
4615833005	**1-Hall-B-5**	Drinking Water	07/27/18 09:49	08/03/18 18:00
4615833006	**2-Hall-B-6**	Drinking Water	07/27/18 09:51	08/03/18 18:00
4615833007	**2-Hall-B-7**	Drinking Water	07/27/18 09:52	08/03/18 18:00
4615833008	**2-Hall-DWF-8**	Drinking Water	07/27/18 09:54	08/03/18 18:00
4615833009	**2-Hall-DWF-9**	Drinking Water	07/27/18 09:55	08/03/18 18:00
4615833010	**2-Hall-DWF-10**	Drinking Water	07/27/18 09:57	08/03/18 18:00
4615833011	**2-Hall-DWF-11**	Drinking Water	07/27/18 09:58	08/03/18 18:00
4615833012	**2-Hall-DWF-12**	Drinking Water	07/27/18 10:00	08/03/18 18:00
4615833013	**2-Hall-B-13**	Drinking Water	07/27/18 10:01	08/03/18 18:00
4615833014	**2-Hall-B-14**	Drinking Water	07/27/18 10:02	08/03/18 18:00
4615833015	**2-Hall-B-16**	Drinking Water	07/27/18 10:06	08/03/18 18:00
4615833016	**2-Hall-B-17**	Drinking Water	07/27/18 10:07	08/03/18 18:00
4615833017	**2-Hall-B-18**	Drinking Water	07/27/18 10:09	08/03/18 18:00
4615833018	**2-Hall-B-19**	Drinking Water	07/27/18 10:10	08/03/18 18:00
4615833019	**1-143-SRF-20**	Drinking Water	07/27/18 11:44	08/03/18 18:00
4615833020	**1-Hall-DWF-21**	Drinking Water	07/27/18 10:13	08/03/18 18:00
4615833021	**1-Hall-B-22**	Drinking Water	07/27/18 10:14	08/03/18 18:00
4615833022	**1-GC-SRF-23**	Drinking Water	07/27/18 10:16	08/03/18 18:00
4615833023	**1-100A-SRF-24**	Drinking Water	07/27/18 11:41	08/03/18 18:00
4615833024	**1-LO-SRF-25**	Drinking Water	07/27/18 11:35	08/03/18 18:00
4615833025	**1-Gym-B-26**	Drinking Water	07/27/18 10:43	08/03/18 18:00
4615833026	**1-Gym-B-27**	Drinking Water	07/27/18 10:45	08/03/18 18:00
4615833027	**1-BLR-B-28**	Drinking Water	07/27/18 10:56	08/03/18 18:00
4615833028	**1-GLR-B-29**	Drinking Water	07/27/18 10:58	08/03/18 18:00
4615833029	**1-Hall-B-30**	Drinking Water	07/27/18 10:35	08/03/18 18:00
4615833030	**1-Hall-B-31**	Drinking Water	07/27/18 10:36	08/03/18 18:00
4615833031	**1-Hall-B-32**	Drinking Water	07/27/18 10:38	08/03/18 18:00
4615833032	**1-Hall-B-33**	Drinking Water	07/27/18 10:39	08/03/18 18:00
4615833033	**1-Hall-B-34**	Drinking Water	07/27/18 10:31	08/03/18 18:00
4615833034	**1-Hall-B-35**	Drinking Water	07/27/18 10:32	08/03/18 18:00
4615833035	**1-168-B-36**	Drinking Water	07/27/18 10:24	08/03/18 18:00
4615833036	**1-Hall-B-37**	Drinking Water	07/27/18 10:27	08/03/18 18:00
4615833037	**1-Hall-B-38**	Drinking Water	07/27/18 10:28	08/03/18 18:00

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
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SAMPLE SUMMARY

Project: DW-Douglass Academy
Pace Project No.: 4615833

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4615833038	**1-Hall-B-39**	Drinking Water	07/27/18 11:06	08/03/18 18:00
4615833039	**1-K-KS-41**	Drinking Water	07/27/18 11:12	08/03/18 18:00
4615833040	**1-K-KS-42**	Drinking Water	07/27/18 11:13	08/03/18 18:00
4615833041	**1-K-KS-43**	Drinking Water	07/27/18 11:14	08/03/18 18:00
4615833042	**1-K-KS-44**	Drinking Water	07/27/18 11:16	08/03/18 18:00
4615833043	**1-K-KS-45**	Drinking Water	07/27/18 11:17	08/03/18 18:00
4615833044	**1-K-KS-46**	Drinking Water	07/27/18 11:18	08/03/18 18:00
4615833045	**1-K-KS-47**	Drinking Water	07/27/18 11:22	08/03/18 18:00
4615833046	**1-K-KS-48**	Drinking Water	07/27/18 11:24	08/03/18 18:00
4615833047	**1-K-KS-49**	Drinking Water	07/27/18 11:25	08/03/18 18:00
4615833048	**1-K-KS-50**	Drinking Water	07/27/18 11:25	08/03/18 18:00
4615833049	**1-K-KS-51**	Drinking Water	07/27/18 11:26	08/03/18 18:00
4615833050	**1-K-KS-52**	Drinking Water	07/27/18 11:27	08/03/18 18:00

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SAMPLE ANALYTE COUNT

Project: DW-Douglass Academy
Pace Project No.: 4615833

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4615833001	1-Hall-B-1	EPA 200.8	DSC	2
4615833002	1-Hall-B-2	EPA 200.8	DSC	2
4615833003	1-MO-SRF-3	EPA 200.8	DSC	2
4615833004	1-Hall-B-4	EPA 200.8	DSC	2
4615833005	1-Hall-B-5	EPA 200.8	DSC	2
4615833006	2-Hall-B-6	EPA 200.8	DSC	2
4615833007	2-Hall-B-7	EPA 200.8	DSC	2
4615833008	2-Hall-DWF-8	EPA 200.8	DSC	2
4615833009	2-Hall-DWF-9	EPA 200.8	DSC	2
4615833010	2-Hall-DWF-10	EPA 200.8	DSC	2
4615833011	2-Hall-DWF-11	EPA 200.8	DSC	2
4615833012	2-Hall-DWF-12	EPA 200.8	DSC	2
4615833013	2-Hall-B-13	EPA 200.8	DSC	2
4615833014	2-Hall-B-14	EPA 200.8	DSC	2
4615833015	2-Hall-B-16	EPA 200.8	DWJ	2
4615833016	2-Hall-B-17	EPA 200.8	DWJ	2
4615833017	2-Hall-B-18	EPA 200.8	DWJ	2
4615833018	2-Hall-B-19	EPA 200.8	DWJ	2
4615833019	1-143-SRF-20	EPA 200.8	DWJ	2
4615833020	1-Hall-DWF-21	EPA 200.8	DWJ	2
4615833021	1-Hall-B-22	EPA 200.8	DWJ	2
4615833022	1-GC-SRF-23	EPA 200.8	DWJ	2
4615833023	1-100A-SRF-24	EPA 200.8	DWJ	2
4615833024	1-LO-SRF-25	EPA 200.8	DWJ	2
4615833025	1-Gym-B-26	EPA 200.8	DWJ	2
4615833026	1-Gym-B-27	EPA 200.8	DWJ	2
4615833027	1-BLR-B-28	EPA 200.8	DWJ	2
4615833028	1-GLR-B-29	EPA 200.8	DWJ	2
4615833029	1-Hall-B-30	EPA 200.8	DWJ	2
4615833030	1-Hall-B-31	EPA 200.8	DWJ	2
4615833031	1-Hall-B-32	EPA 200.8	DWJ	2
4615833032	1-Hall-B-33	EPA 200.8	DWJ	2
4615833033	1-Hall-B-34	EPA 200.8	DWJ	2
4615833034	1-Hall-B-35	EPA 200.8	DWJ	2
4615833035	1-168-B-36	EPA 200.8	DWJ	2
4615833036	1-Hall-B-37	EPA 200.8	DWJ	2
4615833037	1-Hall-B-38	EPA 200.8	DWJ	2

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SAMPLE ANALYTE COUNT

Project: DW-Douglass Academy
Pace Project No.: 4615833

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4615833038	**1-Hall-B-39**	EPA 200.8	DWJ	2
4615833039	**1-K-KS-41**	EPA 200.8	DWJ	2
4615833040	**1-K-KS-42**	EPA 200.8	DWJ	2
4615833041	**1-K-KS-43**	EPA 200.8	DWJ	2
4615833042	**1-K-KS-44**	EPA 200.8	DWJ	2
4615833043	**1-K-KS-45**	EPA 200.8	DWJ	2
4615833044	**1-K-KS-46**	EPA 200.8	DWJ	2
4615833045	**1-K-KS-47**	EPA 200.8	DWJ	2
4615833046	**1-K-KS-48**	EPA 200.8	DWJ	2
4615833047	**1-K-KS-49**	EPA 200.8	DWJ	2
4615833048	**1-K-KS-50**	EPA 200.8	DWJ	2
4615833049	**1-K-KS-51**	EPA 200.8	DWJ	2
4615833050	**1-K-KS-52**	EPA 200.8	DWJ	2

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-1 **Lab ID: 4615833001** Collected: 07/27/18 09:41 Received: 08/03/18 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	**102**	ug/L	5.0	1300	5		08/10/18 11:38	7440-50-8	
Lead	**6.2**	ug/L	1.0	15	1		08/09/18 16:57	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-2 **Lab ID: 4615833002** Collected: 07/27/18 09:42 Received: 08/03/18 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	**47.4**	ug/L	1.0	1300	1		08/09/18 17:02	7440-50-8	
Lead	**3.4**	ug/L	1.0	15	1		08/09/18 17:02	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-MO-SRF-3 **Lab ID: 4615833003** Collected: 07/27/18 09:44 Received: 08/03/18 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	**177**	ug/L	5.0	1300	5		08/10/18 11:44	7440-50-8	
Lead	**6.0**	ug/L	1.0	15	1		08/09/18 17:06	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-4 **Lab ID: 4615833004** Collected: 07/27/18 09:48 Received: 08/03/18 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	**61.2**	ug/L	1.0	1300	1		08/09/18 17:08	7440-50-8	
Lead	**7.2**	ug/L	1.0	15	1		08/09/18 17:08	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-5 **Lab ID: 4615833005** Collected: 07/27/18 09:49 Received: 08/03/18 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	**478**	ug/L	10.0	1300	10		08/10/18 11:45	7440-50-8	
Lead	**12.1**	ug/L	1.0	15	1		08/09/18 17:09	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-B-6 **Lab ID: 4615833006** Collected: 07/27/18 09:51 Received: 08/03/18 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	**65.6**	ug/L	1.0	1300	1		08/09/18 17:11	7440-50-8	
Lead	**15.8**	ug/L	1.0	15	1		08/09/18 17:11	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-B-7 **Lab ID: 4615833007** Collected: 07/27/18 09:52 Received: 08/03/18 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	**109**	ug/L	5.0	1300	5		08/10/18 11:47	7440-50-8	
Lead	**5.0**	ug/L	1.0	15	1		08/09/18 17:12	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-DWF-8 **Lab ID: 4615833008** Collected: 07/27/18 09:54 Received: 08/03/18 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	**81.2**	ug/L	1.0	1300	1		08/09/18 17:13	7440-50-8	
Lead	**7.8**	ug/L	1.0	15	1		08/09/18 17:13	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-DWF-9 **Lab ID: 4615833009** Collected: 07/27/18 09:55 Received: 08/03/18 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	**110**	ug/L	5.0	1300	5		08/10/18 11:51	7440-50-8	
Lead	**3.5**	ug/L	1.0	15	1		08/09/18 17:15	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-DWF-10 **Lab ID: 4615833010** Collected: 07/27/18 09:57 Received: 08/03/18 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	**129**	ug/L	5.0	1300	5		08/10/18 11:53	7440-50-8	
Lead	**2.7**	ug/L	1.0	15	1		08/09/18 17:16	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-DWF-11 **Lab ID: 4615833011** Collected: 07/27/18 09:58 Received: 08/03/18 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	**175**	ug/L	5.0	1300	5		08/10/18 11:54	7440-50-8	
Lead	**2.7**	ug/L	1.0	15	1		08/09/18 17:17	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-DWF-12 **Lab ID: 4615833012** Collected: 07/27/18 10:00 Received: 08/03/18 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	**486**	ug/L	10.0	1300	10		08/10/18 11:56	7440-50-8	
Lead	**5.8**	ug/L	1.0	15	1		08/09/18 17:19	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-B-13 **Lab ID: 4615833013** Collected: 07/27/18 10:01 Received: 08/03/18 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	**255**	ug/L	5.0	1300	5		08/10/18 11:57	7440-50-8	
Lead	**28.0**	ug/L	1.0	15	1		08/09/18 17:23	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-B-14 **Lab ID: 4615833014** Collected: 07/27/18 10:02 Received: 08/03/18 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	**247**	ug/L	5.0	1300	5		08/10/18 11:58	7440-50-8	
Lead	**16.0**	ug/L	1.0	15	1		08/09/18 17:24	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-B-16 **Lab ID: 4615833015** Collected: 07/27/18 10:06 Received: 08/03/18 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	**322**	ug/L	10.0	1300	10		08/15/18 12:30	7440-50-8	
Lead	**10.8**	ug/L	1.0	15	1		08/13/18 10:44	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-B-17 **Lab ID: 4615833016** Collected: 07/27/18 10:07 Received: 08/03/18 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	**205**	ug/L	5.0	1300	5		08/15/18 12:35	7440-50-8	
Lead	**11.5**	ug/L	1.0	15	1		08/13/18 10:50	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-B-18 **Lab ID: 4615833017** Collected: 07/27/18 10:09 Received: 08/03/18 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	**785**	ug/L	10.0	1300	10		08/15/18 12:36	7440-50-8	
Lead	**41.5**	ug/L	1.0	15	1		08/13/18 10:51	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 2-Hall-B-19 **Lab ID: 4615833018** Collected: 07/27/18 10:10 Received: 08/03/18 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	**401**	ug/L	10.0	1300	10		08/15/18 12:38	7440-50-8	
Lead	**26.4**	ug/L	1.0	15	1		08/13/18 10:52	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-143-SRF-20 **Lab ID: 4615833019** Collected: 07/27/18 11:44 Received: 08/03/18 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	**209**	ug/L	5.0	1300	5		08/15/18 12:39	7440-50-8	
Lead	**1.1**	ug/L	1.0	15	1		08/13/18 10:53	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-DWF-21 **Lab ID: 4615833020** Collected: 07/27/18 10:13 Received: 08/03/18 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	**213**	ug/L	5.0	1300	5		08/15/18 12:41	7440-50-8	
Lead	**4.4**	ug/L	1.0	15	1		08/13/18 10:54	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: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-22 **Lab ID: 4615833021** Collected: 07/27/18 10:14 Received: 08/03/18 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	**245**	ug/L	5.0	1300	5		08/15/18 12:42	7440-50-8	
Lead	**20.4**	ug/L	1.0	15	1		08/13/18 10:55	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: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-GC-SRF-23 **Lab ID: 4615833022** Collected: 07/27/18 10:16 Received: 08/03/18 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	5.0	1300	5		08/15/18 12:47	7440-50-8	
Lead	**1.8**	ug/L	1.0	15	1		08/13/18 10:56	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: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-100A-SRF-24 **Lab ID: 4615833023** Collected: 07/27/18 11:41 Received: 08/03/18 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	**99.7**	ug/L	1.0	1300	1		08/13/18 10:57	7440-50-8	
Lead	**4.0**	ug/L	1.0	15	1		08/13/18 10:57	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-LO-SRF-25 **Lab ID: 4615833024** Collected: 07/27/18 11:35 Received: 08/03/18 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	**269**	ug/L	5.0	1300	5		08/15/18 12:48	7440-50-8	
Lead	**38.9**	ug/L	1.0	15	1		08/13/18 11:00	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Gym-B-26 **Lab ID: 4615833025** Collected: 07/27/18 10:43 Received: 08/03/18 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	**247**	ug/L	5.0	1300	5		08/15/18 12:49	7440-50-8	
Lead	**2.4**	ug/L	1.0	15	1		08/13/18 14:45	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Gym-B-27 **Lab ID: 4615833026** Collected: 07/27/18 10:45 Received: 08/03/18 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	**302**	ug/L	10.0	1300	10		08/15/18 12:51	7440-50-8	
Lead	**3.9**	ug/L	1.0	15	1		08/13/18 11:02	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-BLR-B-28 **Lab ID: 4615833027** Collected: 07/27/18 10:56 Received: 08/03/18 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	**633**	ug/L	10.0	1300	10		08/15/18 12:52	7440-50-8	
Lead	**35.6**	ug/L	1.0	15	1		08/13/18 11:04	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-GLR-B-29 **Lab ID: 4615833028** Collected: 07/27/18 10:58 Received: 08/03/18 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	**107**	ug/L	5.0	1300	5	08/09/18 07:20	08/14/18 09:21	7440-50-8	
Lead	**2.1**	ug/L	1.0	15	1	08/09/18 07:20	08/14/18 08:21	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-30 **Lab ID: 4615833029** Collected: 07/27/18 10:35 Received: 08/03/18 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	**1340**	ug/L	50.0	1300	50		08/15/18 12:53	7440-50-8	
Lead	**45.6**	ug/L	1.0	15	1		08/13/18 11:05	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-31 **Lab ID: 4615833030** Collected: 07/27/18 10:36 Received: 08/03/18 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	**1670**	ug/L	50.0	1300	50		08/15/18 12:55	7440-50-8	
Lead	**52.4**	ug/L	1.0	15	1		08/13/18 11:06	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-32 **Lab ID: 4615833031** Collected: 07/27/18 10:38 Received: 08/03/18 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	**458**	ug/L	10.0	1300	10		08/15/18 12:56	7440-50-8	
Lead	**9.5**	ug/L	1.0	15	1		08/13/18 11:07	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-33 **Lab ID: 4615833032** Collected: 07/27/18 10:39 Received: 08/03/18 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	**245**	ug/L	5.0	1300	5		08/15/18 12:58	7440-50-8	
Lead	**11.3**	ug/L	1.0	15	1		08/13/18 11:08	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-34 **Lab ID: 4615833033** Collected: 07/27/18 10:31 Received: 08/03/18 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	**656**	ug/L	10.0	1300	10		08/15/18 12:59	7440-50-8	
Lead	**8.7**	ug/L	1.0	15	1		08/13/18 11:09	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-35 **Lab ID: 4615833034** Collected: 07/27/18 10:32 Received: 08/03/18 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	**602**	ug/L	10.0	1300	10		08/15/18 13:03	7440-50-8	
Lead	**5.9**	ug/L	1.0	15	1		08/13/18 11:10	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-168-B-36 **Lab ID: 4615833035** Collected: 07/27/18 10:24 Received: 08/03/18 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	**414**	ug/L	10.0	1300	10		08/15/18 13:09	7440-50-8	
Lead	**1.2**	ug/L	1.0	15	1		08/13/18 11:18	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-37 **Lab ID: 4615833036** Collected: 07/27/18 10:27 Received: 08/03/18 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	**520**	ug/L	10.0	1300	10		08/15/18 13:10	7440-50-8	
Lead	**15.5**	ug/L	1.0	15	1		08/13/18 11:19	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-38 **Lab ID: 4615833037** Collected: 07/27/18 10:28 Received: 08/03/18 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	**625**	ug/L	10.0	1300	10		08/15/18 13:11	7440-50-8	
Lead	**3.4**	ug/L	1.0	15	1		08/13/18 11:20	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-Hall-B-39 **Lab ID: 4615833038** Collected: 07/27/18 11:06 Received: 08/03/18 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	**158**	ug/L	10.0	1300	10		08/15/18 13:13	7440-50-8	
Lead	**1.3**	ug/L	1.0	15	1		08/13/18 11:21	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-41 **Lab ID: 4615833039** Collected: 07/27/18 11:12 Received: 08/03/18 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	**166**	ug/L	10.0	1300	10		08/15/18 13:14	7440-50-8	
Lead	**3.2**	ug/L	1.0	15	1		08/13/18 11:22	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: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-42 **Lab ID: 4615833040** Collected: 07/27/18 11:13 Received: 08/03/18 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	**107**	ug/L	5.0	1300	5		08/15/18 13:16	7440-50-8	
Lead	**2.7**	ug/L	1.0	15	1		08/13/18 11:25	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-43 **Lab ID: 4615833041** Collected: 07/27/18 11:14 Received: 08/03/18 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	**53.8**	ug/L	1.0	1300	1		08/13/18 11:29	7440-50-8	
Lead	**4.7**	ug/L	1.0	15	1		08/13/18 11:29	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-44 **Lab ID: 4615833042** Collected: 07/27/18 11:16 Received: 08/03/18 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	**54.9**	ug/L	1.0	1300	1		08/13/18 11:30	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/13/18 11:30	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-45 **Lab ID: 4615833043** Collected: 07/27/18 11:17 Received: 08/03/18 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	**166**	ug/L	5.0	1300	5		08/15/18 13:25	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/13/18 11:31	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-46 **Lab ID: 4615833044** Collected: 07/27/18 11:18 Received: 08/03/18 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	**750**	ug/L	10.0	1300	10		08/15/18 13:26	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/13/18 11:32	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-47 **Lab ID: 4615833045** Collected: 07/27/18 11:22 Received: 08/03/18 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	**90.0**	ug/L	1.0	1300	1		08/13/18 11:33	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/13/18 11:33	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-48 **Lab ID: 4615833046** Collected: 07/27/18 11:24 Received: 08/03/18 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	**76.2**	ug/L	1.0	1300	1		08/13/18 11:34	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/13/18 11:34	7439-92-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-49 **Lab ID: 4615833047** Collected: 07/27/18 11:25 Received: 08/03/18 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	**91.5**	ug/L	1.0	1300	1		08/13/18 11:37	7440-50-8	
Lead	**2.2**	ug/L	1.0	15	1		08/13/18 11:37	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-50 **Lab ID: 4615833048** Collected: 07/27/18 11:25 Received: 08/03/18 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	**27.7**	ug/L	1.0	1300	1		08/13/18 11:38	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/13/18 11:38	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-51 **Lab ID: 4615833049** Collected: 07/27/18 11:26 Received: 08/03/18 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	**81.4**	ug/L	1.0	1300	1		08/13/18 11:40	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/13/18 11:40	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: DW-Douglass Academy
Pace Project No.: 4615833

Sample: 1-K-KS-52 **Lab ID: 4615833050** Collected: 07/27/18 11:27 Received: 08/03/18 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	**84.3**	ug/L	1.0	1300	1		08/13/18 11:41	7440-50-8	
Lead	**<1.0**	ug/L	1.0	15	1		08/13/18 11:41	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

QUALITY CONTROL DATA

Project: DW-Douglass Academy
Pace Project No.: 4615833

QC Batch: 30336 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, No Prep
Associated Lab Samples: 4615833001, 4615833002, 4615833003, 4615833004, 4615833005, 4615833006, 4615833007, 4615833008, 4615833009, 4615833010, 4615833011, 4615833012, 4615833013, 4615833014

METHOD BLANK: 122060 Matrix: Water
Associated Lab Samples: 4615833001, 4615833002, 4615833003, 4615833004, 4615833005, 4615833006, 4615833007, 4615833008, 4615833009, 4615833010, 4615833011, 4615833012, 4615833013, 4615833014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	08/09/18 16:39	
Lead	ug/L	<1.0	1.0	08/09/18 16:39	

LABORATORY CONTROL SAMPLE: 122061

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	20	20.3	101	85-115	
Lead	ug/L	20	20.1	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 122062 122063

Parameter	Units	4615705045 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	342	200	200	540	532	99	95	70-130	1	20	
Lead	ug/L	1.2	20	20	21.0	20.5	99	97	70-130	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 122065 122066

Parameter	Units	4615833001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	102	100	100	194	197	92	95	70-130	2	20	
Lead	ug/L	6.2	20	20	26.5	26.1	102	100	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: DW-Douglass Academy
Pace Project No.: 4615833

QC Batch: 30425 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, No Prep
Associated Lab Samples: 4615833015, 4615833016, 4615833017, 4615833018, 4615833019, 4615833020, 4615833021, 4615833022, 4615833023, 4615833024, 4615833025, 4615833026, 4615833027, 4615833029, 4615833030, 4615833031, 4615833032, 4615833033, 4615833034

METHOD BLANK: 122492 Matrix: Water
Associated Lab Samples: 4615833015, 4615833016, 4615833017, 4615833018, 4615833019, 4615833020, 4615833021, 4615833022, 4615833023, 4615833024, 4615833025, 4615833026, 4615833027, 4615833029, 4615833030, 4615833031, 4615833032, 4615833033, 4615833034

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	08/13/18 10:42	
Lead	ug/L	<1.0	1.0	08/13/18 10:42	

LABORATORY CONTROL SAMPLE: 122493

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	20	19.7	99	85-115	
Lead	ug/L	20	19.5	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 122494 122495

Parameter	Units	4615833015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	322	200	200	522	531	100	105	70-130	2	20	
Lead	ug/L	10.8	20	20	30.9	31.0	101	101	70-130	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 122497 122498

Parameter	Units	4615833034 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	602	200	200	751	800	75	99	70-130	6	20	
Lead	ug/L	5.9	20	20	25.6	25.5	98	98	70-130	0	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: DW-Douglass Academy
Pace Project No.: 4615833

QC Batch: 30426 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, No Prep
Associated Lab Samples: 4615833035, 4615833036, 4615833037, 4615833038, 4615833039, 4615833040, 4615833041, 4615833042, 4615833043, 4615833044, 4615833045, 4615833046, 4615833047, 4615833048, 4615833049, 4615833050

METHOD BLANK: 122500 Matrix: Water
Associated Lab Samples: 4615833035, 4615833036, 4615833037, 4615833038, 4615833039, 4615833040, 4615833041, 4615833042, 4615833043, 4615833044, 4615833045, 4615833046, 4615833047, 4615833048, 4615833049, 4615833050

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	08/13/18 11:16	
Lead	ug/L	<1.0	1.0	08/13/18 11:16	

LABORATORY CONTROL SAMPLE: 122501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	20	20.2	101	85-115	
Lead	ug/L	20	19.6	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 122502 122503

Parameter	Units	4615833040 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	107	100	100	197	197	90	90	70-130	0	20	
Lead	ug/L	2.7	20	20	22.8	22.4	100	98	70-130	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 122505 122506

Parameter	Units	4615834004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	44.8	20	20	65.3	62.9	103	91	70-130	4	20	
Lead	ug/L	2.4	20	20	23.1	22.2	103	99	70-130	4	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: DW-Douglass Academy
Pace Project No.: 4615833

QC Batch: 30168
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Associated Lab Samples: 4615833028

METHOD BLANK: 121068
Matrix: Water
Associated Lab Samples: 4615833028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	08/14/18 08:18	
Lead	ug/L	<1.0	1.0	08/14/18 08:18	

LABORATORY CONTROL SAMPLE: 121069

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	50	50.9	102	85-115	
Lead	ug/L	50	51.1	102	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: DW-Douglass Academy
Pace Project No.: 4615833

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: DW-Douglass Academy
Pace Project No.: 4615833

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4615833001	**1-Hall-B-1**	EPA 200.8	30336		
4615833002	**1-Hall-B-2**	EPA 200.8	30336		
4615833003	**1-MO-SRF-3**	EPA 200.8	30336		
4615833004	**1-Hall-B-4**	EPA 200.8	30336		
4615833005	**1-Hall-B-5**	EPA 200.8	30336		
4615833006	**2-Hall-B-6**	EPA 200.8	30336		
4615833007	**2-Hall-B-7**	EPA 200.8	30336		
4615833008	**2-Hall-DWF-8**	EPA 200.8	30336		
4615833009	**2-Hall-DWF-9**	EPA 200.8	30336		
4615833010	**2-Hall-DWF-10**	EPA 200.8	30336		
4615833011	**2-Hall-DWF-11**	EPA 200.8	30336		
4615833012	**2-Hall-DWF-12**	EPA 200.8	30336		
4615833013	**2-Hall-B-13**	EPA 200.8	30336		
4615833014	**2-Hall-B-14**	EPA 200.8	30336		
4615833015	**2-Hall-B-16**	EPA 200.8	30425		
4615833016	**2-Hall-B-17**	EPA 200.8	30425		
4615833017	**2-Hall-B-18**	EPA 200.8	30425		
4615833018	**2-Hall-B-19**	EPA 200.8	30425		
4615833019	**1-143-SRF-20**	EPA 200.8	30425		
4615833020	**1-Hall-DWF-21**	EPA 200.8	30425		
4615833021	**1-Hall-B-22**	EPA 200.8	30425		
4615833022	**1-GC-SRF-23**	EPA 200.8	30425		
4615833023	**1-100A-SRF-24**	EPA 200.8	30425		
4615833024	**1-LO-SRF-25**	EPA 200.8	30425		
4615833025	**1-Gym-B-26**	EPA 200.8	30425		
4615833026	**1-Gym-B-27**	EPA 200.8	30425		
4615833027	**1-BLR-B-28**	EPA 200.8	30425		
4615833029	**1-Hall-B-30**	EPA 200.8	30425		
4615833030	**1-Hall-B-31**	EPA 200.8	30425		
4615833031	**1-Hall-B-32**	EPA 200.8	30425		
4615833032	**1-Hall-B-33**	EPA 200.8	30425		
4615833033	**1-Hall-B-34**	EPA 200.8	30425		
4615833034	**1-Hall-B-35**	EPA 200.8	30425		
4615833035	**1-168-B-36**	EPA 200.8	30426		
4615833036	**1-Hall-B-37**	EPA 200.8	30426		
4615833037	**1-Hall-B-38**	EPA 200.8	30426		
4615833038	**1-Hall-B-39**	EPA 200.8	30426		
4615833039	**1-K-KS-41**	EPA 200.8	30426		
4615833040	**1-K-KS-42**	EPA 200.8	30426		
4615833041	**1-K-KS-43**	EPA 200.8	30426		
4615833042	**1-K-KS-44**	EPA 200.8	30426		
4615833043	**1-K-KS-45**	EPA 200.8	30426		
4615833044	**1-K-KS-46**	EPA 200.8	30426		
4615833045	**1-K-KS-47**	EPA 200.8	30426		
4615833046	**1-K-KS-48**	EPA 200.8	30426		
4615833047	**1-K-KS-49**	EPA 200.8	30426		
4615833048	**1-K-KS-50**	EPA 200.8	30426		
4615833049	**1-K-KS-51**	EPA 200.8	30426		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: DW-Douglass Academy
Pace Project No.: 4615833

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4615833050	**1-K-KS-52**	EPA 200.8	30426		
4615833028	**1-GLR-B-29**	EPA 200.8	30168	EPA 200.8	30602

WO# : 4615833

4615833

20208

OF-CUSTODY / Analytical Request Document

Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 5

Section A — Required Client Information:

Company:	ATC Group Services LLC
Address:	46555 Humboldt Drive, Suite 100
	Novi, MI 48377
Email:	robert.smith@atcgs.com
Phone:	248-669-5140 Fax: 248-669-5147
Requested Due Date:	

Section B — Required Project Information:

Report To:	Robert Smith
Copy To:	
Purchase Order #:	
Project Name:	Lead & Copper Testing
Project #:	Douglass Academy

Section C — Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Will Cole
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)	(30-35)
1	1-Hall- B- 1	DW	G			7/27/2018	941		1			X							X		
2	1-Hall- B- 2	DW	G			7/27/2018	942		1			X							X		
3	1-MO-SRF- 3	DW	G			7/27/2018	944		1			X							X		
4	1-Hall- B- 4	DW	G			7/27/2018	948		1			X							X		
5	1-Hall- B- 5	DW	G			7/27/2018	949		1			X							X		
6	2-Hall- B- 6	DW	G			7/27/2018	951		1			X							X		
7	2-Hall- B- 7	DW	G			7/27/2018	952		1			X							X		
8	2-Hall- DWF- 8	DW	G			7/27/2018	954		1			X							X		
9	2-Hall- DWF- 9	DW	G			7/27/2018	955		1			X							X		
10	2-Hall- DWF- 10	DW	G			7/27/2018	957		1			X							X		
11	2-Hall- DWF-11	DW	G			7/27/2018	958		1			X							X		
12	2-Hall- DWF- 12	DW	G			7/27/2018	1000		1			X							X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	ATC	7/27/2018	1541		8/3/18	1400	
		8/3/18	1800	Watts/Pace	08/03/18	1800	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew D. Ketchum

SIGNATURE of SAMPLER: DATE Signed: 7/27/2018

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

WO#46015833

#20209

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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 #:	Douglass 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)
13	2-Hall- B- 13	DW	G			7/27/2018	1001		1			X							X	
14	2-Hall- B- 14	DW	G			7/27/2018	1002		1			X							X	
15	1-Hall- B- 16	DW	G			7/27/2018	1006		1			X							X	
16	1-Hall- B- 17	DW	G			7/27/2018	1007		1			X							X	
17	1-Hall- B- 18	DW	G			7/27/2018	1009		1			X							X	
18	1-Hall- B- 19	DW	G			7/27/2018	1010		1			X							X	
19	1-143-SRF-20	DW	G			7/27/2018	1144		1			X							X	
20	1-Hall- DWF-21	DW	G			7/27/2018	1013		1			X							X	
21	1-Hall- B- 22	DW	G			7/27/2018	1014		1			X							X	
22	1-GC-SRF-23	DW	G			7/27/2018	1016		1			X							X	
23	1-100A-SRF-24	DW	G			7/27/2018	1141		1			X							X	
24	1-LO-SRF-25	DW	G			7/27/2018	1135		1			X							X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	ATC	7/27/2018	1541		8/3/18	1400	
		8/3/18	1800	Watts/Pace	8/03/18	1800	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew D. Ketchum

SIGNATURE of SAMPLER:

DATE Signed: 7/27/2018

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

WO#46155833

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

#20210

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 #:	Douglass 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: Lead & Copper	Residual Chlorine (Y/N)
																		Y/N	
25	1-Gym-B-26	DW	G			7/27/2018	1043		1			X						X	
26	1-Gym-B-27	DW	G			7/27/2018	1045		1			X						X	
27	1-BLR-B-28	DW	G			7/27/2018	1056		1			X						X	
28	1-GLR-B-29	DW	G			7/27/2018	1058		1			X						X	
29	1-Hall-B-30	DW	G			7/27/2018	1035		1			X						X	
30	1-Hall-B-31	DW	G			7/27/2018	1036		1			X						X	
31	1-Hall-B-32	DW	G			7/27/2018	1038		1			X						X	
32	1-Hall-B-33	DW	G			7/27/2018	1039		1			X						X	
33	1-Hall-B-34	DW	G			7/27/2018	1031		1			X						X	
34	1-Hall-B-35	DW	G			7/27/2018	1032		1			X						X	
35	1-168-B-36	DW	G			7/27/2018	1024		1			X						X	
36	1-Hall-B-37	DW	G			7/27/2018	1027		1			X						X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	ATC	7/27/2018	1541		8/3/18	1400	
		8/27/18	1800	Watts/Pace	08/03/18	1800	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew D. Ketchum

SIGNATURE of SAMPLER: [signature] DATE Signed: 7/27/2018

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

WO# 46115833

#20211

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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:	Regulatory Agency
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	State / Location
Requested Due Date:	Project #: Douglass Academy	Pace Profile #: Profile 236 - Line 2	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)
37	1-Hall-B-38	DW	G			7/27/2018	1028		1			X							X	
38	1-Hall-B-39	DW	G			7/27/2018	1106		1			X							X	
39	1-K-KS-41	DW	G			7/27/2018	1112		1			X							X	
40	1-K-KS-42	DW	G			7/27/2018	1113		1			X							X	
41	1-K-KS-43	DW	G			7/27/2018	1114		1			X							X	
42	1-K-KS-44	DW	G			7/27/2018	1116		1			X							X	
43	1-K-KS-45	DW	G			7/27/2018	1117		1			X							X	
44	1-K-KS-46	DW	G			7/27/2018	1118		1			X							X	
45	1-K-KS-47	DW	G			7/27/2018	1122		1			X							X	
46	1-K-KS-48	DW	G			7/27/2018	1124		1			X							X	
47	1-K-KS-49	DW	G			7/27/2018	1125		1			X							X	
48	1-K-KS- 50	DW	G			7/27/2018	1125		1			X							X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	ATC	7/27/2018	1541		8/3/18	1400	
		8/3/18	1800	Watts/Pace	08/03/18	1800	

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Andrew D. Ketchum		TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
SIGNATURE of SAMPLER:	DATE Signed: 7/27/2018					

WO#46158833

#20212

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 5 Of 5

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 #:	Douglass 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	Lead & Copper	Residual Chlorine (Y/N)
49	1-K-KS- 51	DW	G			7/27/2018	1126		1			X							X	
50	1-K-KS-52	DW	G			7/27/2018	1127		1			X							X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	ATC	7/27/2018	1544		8/3/18	1400	
		8/3/18	1800	ATC/Pace	08/03/18	1800	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew D. Ketchum

SIGNATURE of SAMPLER:

DATE Signed: 7/27/2018

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: ATC- Douglass Acad	Work Order #: 4615833
Receipt Record Page/Line #: (30-35)	

Recorded by (initials/date): AW 08/03/18

☑ Cooler ☐ Box ☐ Other ______ Qty Received: 1

Thermometer Used: ☑ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ IR Gun (#402)

Cooler #	Time	Cooler #	Time	Cooler #	Time	Cooler #	Time
Pace S10889	2011						

Cooler 1 (Pace S10889)

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

	Observed °C	Correction Factor °C	Actual °C
Temp Blank:			
Sample 1:	25.6		25.6
Sample 2:	25.4		25.4
Sample 3:	25.5		25.5

When above 6 °C take a 3 Sample Average °C: 25.5

☐ VOC Trip Blank received?

(Cooler columns 2–4 blank: 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; Temp Blank / Sample 1 / Sample 2 / Sample 3: Observed °C, Correction Factor °C, Actual °C; 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: 20208, 20209, 20210, 20211, 20212

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 : AW 08/03/18

Pace Analytical® AQUEOUS SAMPLE PRESERVATION VERIFICATION

Client: ATC - Douglass Academy (30-35)
Receipt Log #:
Completed By (initials/date): aw 08/03/18
Work Order #: 4615833

COC ID #: 20208
Adjusted by:
Date:

pH Strip Reagent or Lot #: ☑ HC739245 ☐ Other

Container Type	BP3C or AG3O		BP1-4S		AG2S		3 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 #: 20209
Adjusted by:
Date:

Container Type	BP3C or AG3O		BP1-4S		AG2S		3 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:

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: ATC - Douglass Academy (30-35)

Work Order #: 4615833

Receipt Log #:

Completed By (initials/date): dw 08/03/18

COC ID #: 20210

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 #:

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:

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: ATC - Douglass Academy (30-35)

Work Order # 4615833

Receipt Log #

Completed By (initials/date): aw 08/03/18

COC ID # 20212

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 #

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:

Container Size (mL)	Default Preservative Volume (mL)
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250	1.3
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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