
September 12, 2018

Mathew Sam
Detroit Public Schools
1601 Farnsworth
Detroit, Michigan 48202

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

**SUBJECT: Drinking Water Screening Report
 Mason Elementary/Middle School
 19955 Fenelon Street
 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.



ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

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 two (2) 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 (September 6, 2018)

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-Hall@Office-B-3	Hall across from the office	Bubbler - Right	<1.0 ug/L	9.8 ug/L
1-Hall@Door19-B-4	Hall across from door 19 (west side of the building)	Bubbler - Left	1.7 ug/L	28.8 ug/L
1-Hall@Door19-B-5	Hall across from door 19 (west side of the building)	Bubbler - Right	5.8 ug/L	30.0 ug/L
1-Hall@135-B-7	Hall across from room 135 (gym)	Bubbler - Left	8.8 ug/L	29.7 ug/L
1-Kitchen-KF-11	Kitchen - west wall	Kitchen Faucet	1.6 ug/L	27.4 ug/L
1-Kitchen-KF-12	Kitchen - center	Kitchen Faucet - Left (dish washing)	1.7 ug/L	89.3 ug/L
1-Kitchen-KF-13	Kitchen - center	Kitchen Faucet - Center (dish washing)	4.5 ug/L	193 ug/L
1-Kitchen-KF-14	Kitchen - center	Kitchen Faucet - Right (dish washing)	6.4 ug/L	43.2 ug/L
1-Kitchen-KF-15	Kitchen - east center	Kitchen Faucet - Left (dish washing)	813 ug/L	56.5 ug/L



ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-Kitchen-KF-16	Kitchen - east center	Kitchen Faucet - Right (dish washing)	3.5 ug/L	77.8 ug/L
1-Hall@Door9-B-18	Hall near door 9 (south side of the building)	Bubbler - Left	6.2 ug/L	20.7 ug/L
1-Hall@Door9-B-19	Hall near door 9 (south side of the building)	Bubbler - Right	33.2 ug/L	170 ug/L
1-Dining-KF-20	Dining hall serving room	Kitchen Faucet	5.8 ug/L	87.2 ug/L
1-Dining-KF-22	Dining area (serving room)	Kitchen Faucet	43 ug/L	237 ug/L
1-Staff-KF-23	Staff Dining Room	Kitchen Faucet	10.8 ug/L	118 ug/L
1-128-CF-25	Room 128 (Pre K)	Classroom Faucet w/Bubbler	9.3 ug/L	249 ug/L
1-127-CF-26	Room 127 (Pre K)	Classroom Faucet w/Bubbler	5.5 ug/L	90 ug/L

Key: NA - Not Analyzed

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

Analysis of samples of the kitchen (center east left sink), right bubbler near door 9 and the kitchen faucet in the dining area serving room 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.



ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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

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 plumbing 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

A handwritten signature in black ink, reading 'Martin K. Gamble'.

Martin K. Gamble
Senior Project Manager

A handwritten signature in black ink, reading 'Robert C. Smith'.

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:

Mason Elementary/Middle School

Address

19955 Fenelon Street, Detroit, MI 48234

Fixture Identification	Fixture Location	Fixture Description	Photo #
1-Nurse-NF-1	Nurse's room in office area	Nurse's Faucet	1
1-Hall@Office-B-2	Hall across from the office	Bubbler - Left- Not Working	2
1-Hall@Office-B-3	Hall across from the office	Bubbler - Right	3
1-Hall@Door19-B-4	Hall across from door 19 (west side of the building)	Bubbler - Left	4
1-Hall@Door19-B-5	Hall across from door 19 (west side of the building)	Bubbler - Right	5
1-Staff-KF-6	Staff/PT room across from room 125	Kitchen Faucet- Not Working	6
1-Hall@135-B-7	Hall across from room 135 (gym)	Bubbler - Left	7
1-Hall@135-B-8	Hall across from room 135 (gym)	Bubbler - Right	8
1-Gym-B-9	Gym - west	Bubbler- Not Working	9
1-Gym-B-10	Gym - east	Bubbler- Not Working	10
1-Kitchen-KF-11	Kitchen - west wall	Kitchen Faucet	11

School Name:

Mason Elementary/Middle School

Address

19955 Fenelon Street, Detroit, MI 48234

Fixture Identification	Fixture Location	Fixture Description	Photo #
1-Kitchen-KF-12	Kitchen - center	Kitchen Faucet - Left (dish washing)	12
1-Kitchen-KF-13	Kitchen - center	Kitchen Faucet - Center (dish washing)	13
1-Kitchen-KF-14	Kitchen - center	Kitchen Faucet - Right (dish washing)	14
1-Kitchen-KF-15	Kitchen - east center	Kitchen Faucet - Left (dish washing)	15
1-Kitchen-KF-16	Kitchen - east center	Kitchen Faucet - Right (dish washing)	16
1-Kitchen-KF-17	Kitchen - south	Kitchen Faucet (hand washing)	17
1-Hall@Door9-B-18	Hall near door 9 (south side of the building)	Bubbler - Left	18
1-Hall@Door9-B-19	Hall near door 9 (south side of the building)	Bubbler - Right	19
1-Dining-KF-20	Dining hall serving room	Kitchen Faucet	20
1-Dining-B-21	Dining area (near north door)	Bubbler - Not Working	21
1-Dining-KF-22	Dining area (serving room)	Kitchen Faucet	22

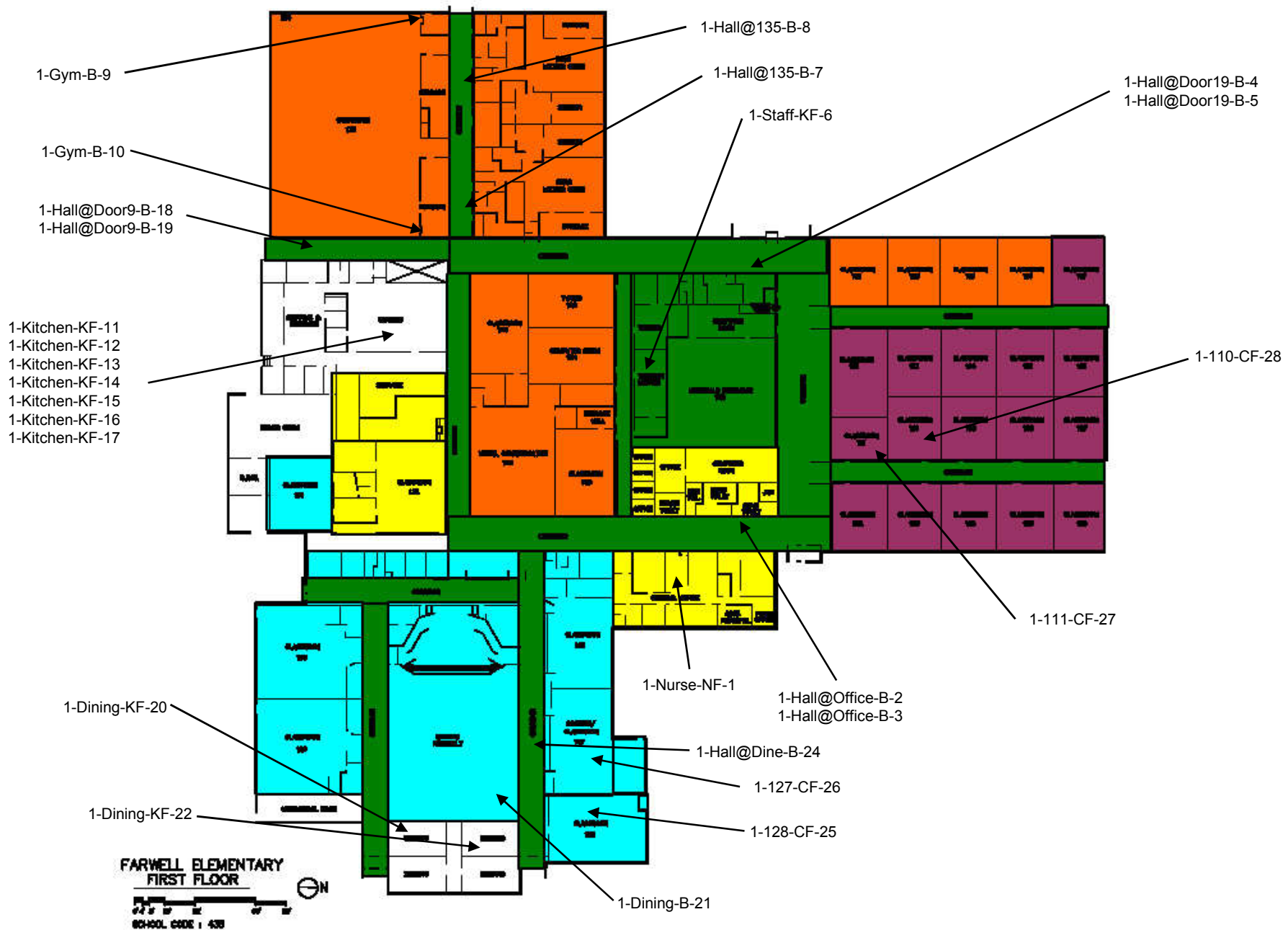
School Name:

Mason Elementary/Middle School

Address

19955 Fenelon Street, Detroit, MI 48234

Fixture Identification	Fixture Location	Fixture Description	Photo #
1-Staff-KF-23	Staff Dining Room	Kitchen Faucet	23
1-Hall@Dine-B-24	Hall across from dining room	Bubbler - Not Working	24
1-128-CF-25	Room 128 (Pre K)	Classroom Faucet w/Bubbler	25
1-127-CF-26	Room 127 (Pre K)	Classroom Faucet w/Bubbler	26
1-111-CF-27	Room 111 (K)	Classroom Faucet	27
1-110-CF-28	Room 110	Classroom Faucet	28



ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

Mason Elementary/Middle School
19955 Fenelon Street, Detroit, MI 48234

Fixture Inventory Diagram

Floor #1

PROJECT NUMBER: 188BS18437
DRAWN BY: KJ

FIGURE: 1
REVIEWED BY:
DATE: 7/10/2018



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

FIXTURE INVENTORY PHOTOLOG
Mason Elementary/Middle School
Detroit, Michigan



Photo 1: Nurse's faucet, located on the 1st floor, in the nurse's room in the main office area.



Photo 2: Bubbler, located in a 1st floor hall, across from the office – left fixture.



Photo 3: Bubbler, located in a 1st floor hall, across from the office – right fixture.



Photo 4: Bubbler, located in a 1st floor hall, across from door 19 (west side of building) – left fixture.



Photo 5: Bubbler, located in a 1st floor hall, across from door 19 (west side of building) – right fixture.



Photo 6: Kitchen faucet, located on the 1st floor, in the staff/PT room (across from room 125).

FIXTURE INVENTORY PHOTOLOG
Mason Elementary/Middle School
Detroit, Michigan



Photo 7: Bubbler, located in a 1st floor hall, outside of room 135 (gym), right of the girl's locker room.



Photo 8: Bubbler, located in a 1st floor hall, outside of room 135 (gym), left of the boy's locker room.



Photo 9: Bubbler, located on the 1st floor, in the gym – west fixture.



Photo 10: Bubbler, located on the 1st floor, in the gym – east fixture.



Photo 11: Kitchen faucet, located on the 1st floor, in the kitchen, on the west wall.



Photo 12: Kitchen faucet, located on the 1st floor, in the center of the kitchen – left fixture (dish washing).

FIXTURE INVENTORY PHOTOLOG
Mason Elementary/Middle School
Detroit, Michigan

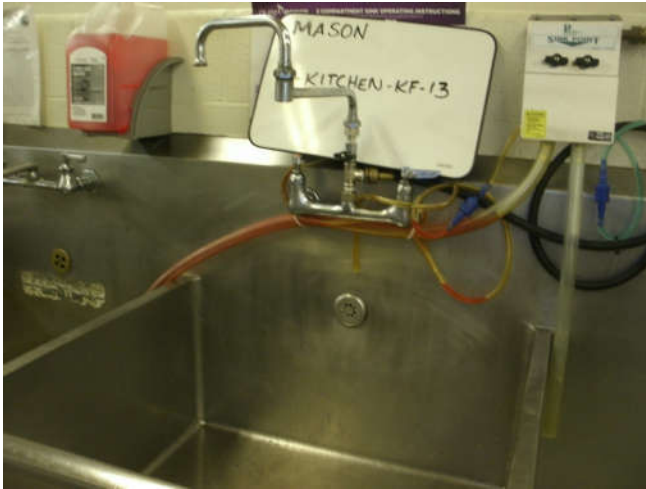


Photo 13: Kitchen faucet, located on the 1st floor, in the center of the kitchen – center fixture (dish washing).



Photo 14: Kitchen faucet, located on the 1st floor, in the center of the kitchen – right fixture (dish washing).

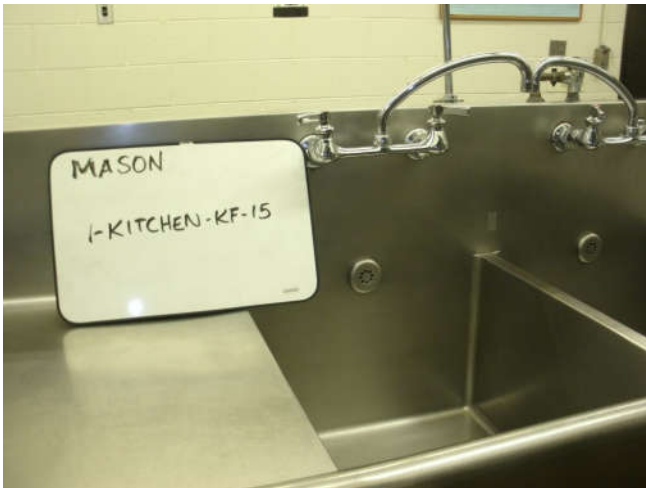


Photo 15: Kitchen faucet, located on the 1st floor, in the center of the kitchen – left fixture.



Photo 16: Kitchen faucet, located on the 1st floor, in the center of the kitchen – right fixture.



Photo 17: Kitchen faucet, located on the 1st floor, along the south wall of the kitchen (hand washing).



Photo 18: Bubbler, located in a 1st floor hall, across from Door 9, on the south side of the building – left fixture.

FIXTURE INVENTORY PHOTOLOG
Mason Elementary/Middle School
Detroit, Michigan



Photo 19: Bubbler, located in a 1st floor hall, across from Door 9, on the south side of the building – right fixture.



Photo 20: Kitchen faucet, located on the 1st floor, in the dining hall serving area.



Photo 21: Bubbler, located on the 1st floor in the dining hall, near the north door.



Photo 22: Kitchen faucet, located on the 1st floor, in the dining hall storage room.



Photo 23: kitchen faucet, located on the 1st floor, in the staff dining room.



Photo 24: Bubbler, located in a 1st floor hall, across from the dining hall.

FIXTURE INVENTORY PHOTOLOG
Mason Elementary/Middle School
Detroit, Michigan



Photo 25: Classroom faucet w/bubbler, located on the 1st floor in room 128 (Pre K).



Photo 26: Classroom faucet w/bubbler, located on the 1st floor in room 127 (Pre K).

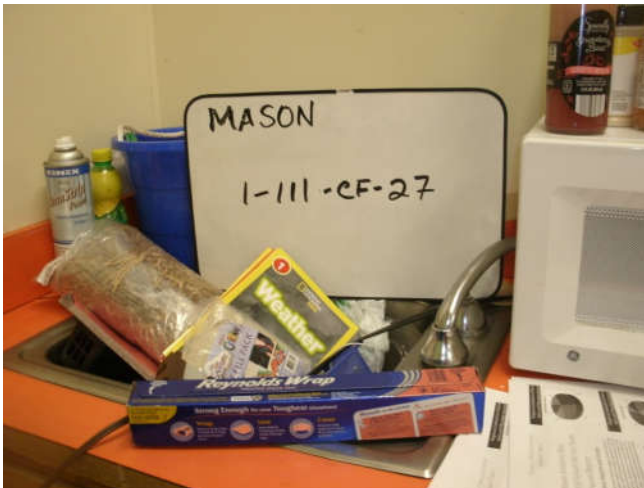


Photo 27: Classroom faucet, located on the 1st floor in room 111 (Kindergarten).



Photo 28: Classroom faucet, located on the 1st floor in room 110.

September 06, 2018

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

RE: Project: DW-Mason ES/MS
Pace Project No.: 4616822

Dear Robert Smith:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4616822001	1-Hall@Office-B-3	Drinking Water	08/17/18 10:13	08/23/18 19:45
4616822002	1-Hall@Door19-B-4	Drinking Water	08/17/18 10:15	08/23/18 19:45
4616822003	1-Hall@Door19-B-5	Drinking Water	08/17/18 10:16	08/23/18 19:45
4616822004	1-Hall@135-B-7	Drinking Water	08/17/18 10:20	08/23/18 19:45
4616822005	1-Kitchen-KF-11	Drinking Water	08/17/18 10:23	08/23/18 19:45
4616822006	1-Kitchen-KF-12	Drinking Water	08/17/18 10:24	08/23/18 19:45
4616822007	1-Kitchen-KF-13	Drinking Water	08/17/18 10:25	08/23/18 19:45
4616822008	1-Kitchen-KF-14	Drinking Water	08/17/18 10:26	08/23/18 19:45
4616822009	1-Kitchen-KF-15	Drinking Water	08/17/18 10:27	08/23/18 19:45
4616822010	1-Kitchen-KF-16	Drinking Water	08/17/18 10:28	08/23/18 19:45
4616822011	1-Hall@Door9-B-18	Drinking Water	08/17/18 10:32	08/23/18 19:45
4616822012	1-Hall@Door9-B-19	Drinking Water	08/17/18 10:33	08/23/18 19:45
4616822013	1-Dining-KF-20	Drinking Water	08/17/18 10:35	08/23/18 19:45
4616822014	1-Dining-KF-22	Drinking Water	08/17/18 10:37	08/23/18 19:45
4616822015	1-Staff-KF-23	Drinking Water	08/17/18 10:38	08/23/18 19:45
4616822016	1-128-CF-25	Drinking Water	08/17/18 10:42	08/23/18 19:45
4616822017	1-127-CF-26	Drinking Water	08/17/18 10:44	08/23/18 19:45

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4616822001	1-Hall@Office-B-3	EPA 200.8	NHAM	2
4616822002	1-Hall@Door19-B-4	EPA 200.8	NHAM	2
4616822003	1-Hall@Door19-B-5	EPA 200.8	NHAM	2
4616822004	1-Hall@135-B-7	EPA 200.8	NHAM	2
4616822005	1-Kitchen-KF-11	EPA 200.8	NHAM	2
4616822006	1-Kitchen-KF-12	EPA 200.8	NHAM	2
4616822007	1-Kitchen-KF-13	EPA 200.8	NHAM	2
4616822008	1-Kitchen-KF-14	EPA 200.8	NHAM	2
4616822009	1-Kitchen-KF-15	EPA 200.8	NHAM	2
4616822010	1-Kitchen-KF-16	EPA 200.8	NHAM	2
4616822011	1-Hall@Door9-B-18	EPA 200.8	NHAM	2
4616822012	1-Hall@Door9-B-19	EPA 200.8	NHAM	2
4616822013	1-Dining-KF-20	EPA 200.8	NHAM	2
4616822014	1-Dining-KF-22	EPA 200.8	NHAM	2
4616822015	1-Staff-KF-23	EPA 200.8	NHAM	2
4616822016	1-128-CF-25	EPA 200.8	NHAM	2
4616822017	1-127-CF-26	EPA 200.8	NHAM	2

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Hall@Office-B-3		Lab ID: 4616822001		Collected: 08/17/18 10:13		Received: 08/23/18 19:45		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	9.8	ug/L	1.0	1300	1		09/05/18 13:11	7440-50-8	
Lead	<1.0	ug/L	1.0	15	1		09/05/18 13:11	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Hall@Door19-B-4		Lab ID: 4616822002		Collected: 08/17/18 10:15		Received: 08/23/18 19:45		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	28.8	ug/L	1.0	1300	1		09/05/18 13:12	7440-50-8	
Lead	1.7	ug/L	1.0	15	1		09/05/18 13:12	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Hall@Door19-B-5		Lab ID: 4616822003		Collected: 08/17/18 10:16		Received: 08/23/18 19:45		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	30.0	ug/L	1.0	1300	1		09/05/18 13:16	7440-50-8	
Lead	5.8	ug/L	1.0	15	1		09/05/18 13:16	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Hall@135-B-7		Lab ID: 4616822004		Collected: 08/17/18 10:20		Received: 08/23/18 19:45		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	29.7	ug/L	1.0	1300	1		09/05/18 13:17	7440-50-8	
Lead	8.8	ug/L	1.0	15	1		09/05/18 13:17	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Kitchen-KF-11		Lab ID: 4616822005		Collected: 08/17/18 10:23		Received: 08/23/18 19:45		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	27.4	ug/L	1.0	1300	1		09/05/18 13:18	7440-50-8	
Lead	1.6	ug/L	1.0	15	1		09/05/18 13:18	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Kitchen-KF-12		Lab ID: 4616822006		Collected: 08/17/18 10:24		Received: 08/23/18 19:45		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	89.3	ug/L	1.0	1300	1		09/05/18 13:22	7440-50-8	
Lead	1.7	ug/L	1.0	15	1		09/05/18 13:22	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Kitchen-KF-13		Lab ID: 4616822007		Collected: 08/17/18 10:25		Received: 08/23/18 19:45		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	193	ug/L	1.0	1300	1		09/05/18 13:23	7440-50-8	
Lead	4.5	ug/L	1.0	15	1		09/05/18 13:23	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Kitchen-KF-14		Lab ID: 4616822008		Collected: 08/17/18 10:26		Received: 08/23/18 19:45		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	43.2	ug/L	1.0	1300	1		09/05/18 13:24	7440-50-8	
Lead	6.4	ug/L	1.0	15	1		09/05/18 13:24	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Kitchen-KF-15		Lab ID: 4616822009	Collected: 08/17/18 10:27		Received: 08/23/18 19:45		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	56.5	ug/L	1.0	1300	1		09/05/18 13:25	7440-50-8	
Lead	813	ug/L	10.0	15	10		09/05/18 15:14	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Kitchen-KF-16		Lab ID: 4616822010		Collected: 08/17/18 10:28		Received: 08/23/18 19:45		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	77.8	ug/L	1.0	1300	1		09/05/18 13:26	7440-50-8	
Lead	3.5	ug/L	1.0	15	1		09/05/18 13:26	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Hall@Door9-B-18		Lab ID: 4616822011	Collected: 08/17/18 10:32		Received: 08/23/18 19:45		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	20.7	ug/L	1.0	1300	1		09/05/18 13:27	7440-50-8	
Lead	6.2	ug/L	1.0	15	1		09/05/18 13:27	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Hall@Door9-B-19		Lab ID: 4616822012	Collected: 08/17/18 10:33	Received: 08/23/18 19:45	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		09/05/18 16:05	7440-50-8	
Lead	33.2	ug/L	1.0	15	1		09/05/18 13:30	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Dining-KF-20		Lab ID: 4616822013		Collected: 08/17/18 10:35		Received: 08/23/18 19:45		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	87.2	ug/L	1.0	1300	1		09/05/18 13:37	7440-50-8	
Lead	5.8	ug/L	1.0	15	1		09/05/18 13:37	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Dining-KF-22		Lab ID: 4616822014		Collected: 08/17/18 10:37		Received: 08/23/18 19:45		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		09/05/18 13:38	7440-50-8	
Lead	43.0	ug/L	1.0	15	1		09/05/18 13:38	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-Staff-KF-23		Lab ID: 4616822015		Collected: 08/17/18 10:38		Received: 08/23/18 19:45		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	118	ug/L	1.0	1300	1		09/05/18 13:39	7440-50-8	
Lead	10.8	ug/L	1.0	15	1		09/05/18 13:39	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-128-CF-25		Lab ID: 4616822016		Collected: 08/17/18 10:42		Received: 08/23/18 19:45		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	249	ug/L	1.0	1300	1		09/05/18 13:40	7440-50-8	
Lead	9.3	ug/L	1.0	15	1		09/05/18 13:40	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Sample: 1-127-CF-26		Lab ID: 4616822017		Collected: 08/17/18 10:44		Received: 08/23/18 19:45		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		09/05/18 13:41	7440-50-8	
Lead	5.5	ug/L	1.0	15	1		09/05/18 13:41	7439-92-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: DW-Mason ES/MS
Pace Project No.: 4616822

QC Batch: 32426 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, No Prep
Associated Lab Samples: 4616822001, 4616822002, 4616822003, 4616822004, 4616822005, 4616822006, 4616822007, 4616822008, 4616822009, 4616822010, 4616822011

METHOD BLANK: 130826 Matrix: Water
Associated Lab Samples: 4616822001, 4616822002, 4616822003, 4616822004, 4616822005, 4616822006, 4616822007, 4616822008, 4616822009, 4616822010, 4616822011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	09/05/18 12:50	
Lead	ug/L	<1.0	1.0	09/05/18 12:50	

LABORATORY CONTROL SAMPLE: 130827

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	20	22.0	110	85-115	
Lead	ug/L	20	21.7	109	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 130828 130829

Parameter	Units	4616820028 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	1560	1000	1000	2670	2530	111	97	70-130	5	20	
Lead	ug/L	147	100	100	254	255	107	108	70-130	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 130831 130832

Parameter	Units	4616822002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	28.8	20	20	49.5	52.0	104	116	70-130	5	20	
Lead	ug/L	1.7	20	20	23.8	23.3	110	108	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: DW-Mason ES/MS
Pace Project No.: 4616822

QC Batch: 32427 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, No Prep
Associated Lab Samples: 4616822012, 4616822013, 4616822014, 4616822015, 4616822016, 4616822017

METHOD BLANK: 130834 Matrix: Water
Associated Lab Samples: 4616822012, 4616822013, 4616822014, 4616822015, 4616822016, 4616822017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Copper	ug/L	<1.0	1.0	09/05/18 13:28	
Lead	ug/L	<1.0	1.0	09/05/18 13:28	

LABORATORY CONTROL SAMPLE: 130835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	20	21.7	108	85-115	
Lead	ug/L	20	22.0	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 130836 130837

Parameter	Units	4616822012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	170	20	20	192	192	107	106	70-130	0	20	
Lead	ug/L	33.2	20	20	54.5	55.1	107	109	70-130	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 130839 130840

Parameter	Units	4616830005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Copper	ug/L	206	100	100	324	324	119	118	70-130	0	20	
Lead	ug/L	96.0	100	100	204	207	108	111	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: DW-Mason ES/MS

Pace Project No.: 4616822

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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: DW-Mason ES/MS

Pace Project No.: 4616822

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4616822001	1-Hall@Office-B-3	EPA 200.8	32426		
4616822002	1-Hall@Door19-B-4	EPA 200.8	32426		
4616822003	1-Hall@Door19-B-5	EPA 200.8	32426		
4616822004	1-Hall@135-B-7	EPA 200.8	32426		
4616822005	1-Kitchen-KF-11	EPA 200.8	32426		
4616822006	1-Kitchen-KF-12	EPA 200.8	32426		
4616822007	1-Kitchen-KF-13	EPA 200.8	32426		
4616822008	1-Kitchen-KF-14	EPA 200.8	32426		
4616822009	1-Kitchen-KF-15	EPA 200.8	32426		
4616822010	1-Kitchen-KF-16	EPA 200.8	32426		
4616822011	1-Hall@Door9-B-18	EPA 200.8	32426		
4616822012	1-Hall@Door9-B-19	EPA 200.8	32427		
4616822013	1-Dining-KF-20	EPA 200.8	32427		
4616822014	1-Dining-KF-22	EPA 200.8	32427		
4616822015	1-Staff-KF-23	EPA 200.8	32427		
4616822016	1-128-CF-25	EPA 200.8	32427		
4616822017	1-127-CF-26	EPA 200.8	32427		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE RECEIVING / LOG-IN CHECKLIST

<div style="clear: both;"></div>	Client: <u>ATC</u> Receipt Record Page/Line #: <u>19-3</u>	Work Order #: <u>4616822</u> <u>001-017</u>
Recorded by (initials/date): <u>SN 8-24-18AM</u>	<input checked="" type="checkbox"/> Cooler <input type="checkbox"/> Box <input type="checkbox"/> Other _____	Qty Received: <u>1</u> Thermometer Used: <u>8-24-18</u> <input type="checkbox"/> IR Gun (#202) <input type="checkbox"/> Digital Thermometer (#54) <input checked="" type="checkbox"/> IR Gun (#402)

Cooler #	Time	Cooler #	Time	Cooler #	Time	Cooler #	Time
<u>000471</u>	<u>12:26</u>						
Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact	
Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input checked="" type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None	
Coolant Location: Dispersed / Top / Middle / Bottom Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		Coolant Location: Dispersed / Top / Middle / Bottom Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		Coolant Location: Dispersed / Top / Middle / Bottom Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		Coolant Location: Dispersed / Top / Middle / Bottom Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative	
Observed °C	Correction Factor °C	Actual °C		Observed °C	Correction Factor °C	Actual °C	
Temp Blank:				Temp Blank:			
Sample 1:		<u>0 24.6</u>		Sample 1:			
Sample 2:		<u>0 24.4</u>		Sample 2:			
Sample 3:		<u>0 24.6</u>		Sample 3:			
When above 6 °C take a 3 Sample Average °C: <u>24.5</u>				When above 6 °C take a 3 Sample Average °C: _____			
<input type="checkbox"/> VOC Trip Blank received?				<input type="checkbox"/> VOC Trip Blank received?			

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

Paperwork Received Yes No <input checked="" type="checkbox"/> <input type="checkbox"/> Chain of Custody record(s)? If No, Initiated By _____ <input checked="" type="checkbox"/> Received for Lab Signed/Date/Time? <input type="checkbox"/> <input checked="" type="checkbox"/> USDA Soil Documents? <input type="checkbox"/> <input checked="" type="checkbox"/> Sampling / Field Forms? <input type="checkbox"/> <input checked="" type="checkbox"/> Other _____ COC Information <input type="checkbox"/> Pace COC <input type="checkbox"/> Other _____ COC ID Numbers: <u>19880, 19881</u>	Check Sample Preservation N/A Yes No <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Temperature Blank OR average sample temperature, ≥6° C? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> If "Yes" was thermal preservation required? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> If "Yes" were ALL samples collected the same day as receipt? <input type="checkbox"/> <input checked="" type="checkbox"/> Completed Sample Preservation Verification Form? <input checked="" type="checkbox"/> <input type="checkbox"/> Samples chemically preserved correctly? <input checked="" type="checkbox"/> <input type="checkbox"/> If "No", add wire tag and fill out Non-Conformance Form? <input checked="" type="checkbox"/> <input type="checkbox"/> Received unpreserved Terracore kit? <input type="checkbox"/> <input type="checkbox"/> If "Yes" unpreserved vials must be frozen
Check COC for Accuracy Yes No <input checked="" type="checkbox"/> <input type="checkbox"/> Analysis Requested? <input checked="" type="checkbox"/> <input type="checkbox"/> Sample ID matches COC? <input checked="" type="checkbox"/> <input type="checkbox"/> Sample Date and Time matches COC? <input checked="" type="checkbox"/> <input type="checkbox"/> All containers indicated are received?	Work Order Not Logged In with Short Hold / Rush <input type="checkbox"/> Copies of COC To Lab Areas
Sample Condition Summary N/A Yes No <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Broken containers/lids? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Missing or incomplete labels? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Illegible information on labels? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Low volume received? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Inappropriate or non-Pace containers received? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> VOC vials have headspace? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Extra sample locations? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Containers not listed on COC?	Notes Yes No <input checked="" type="checkbox"/> <input type="checkbox"/> Were all samples logged into Epic? <input checked="" type="checkbox"/> <input type="checkbox"/> Were all samples labelled? <input checked="" type="checkbox"/> <input type="checkbox"/> Were samples placed on scan locations?

Initial / Date: IB 8/24/18

AQUEOUS SAMPLE PRESERVATION VERIFICATION

Client QTC	Work Order # 4616822
Receipt Log # 19-3	Completed By (initials/date) DN 8-24-18am

COC ID # 19880								Adjusted by: _____				
								Date: _____				
Container Type	BP3C or AG3O		BP1-4S		AG2S		BP1-4N Total		BP1-4N Dissolved			
Preservative	NaOH >12		H ₂ SO ₄ <2		H ₂ SO 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 #
<input checked="" type="checkbox"/> HC739245
<input type="checkbox"/> 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 # 19881								Adjusted by: _____				
								Date: _____				
Container Type	BP3C or AG3O		BP1-4S		AG2S		BP1-4N Total		BP1-4N Dissolved			
Preservative	NaOH >12		H ₂ SO ₄ <2		H ₂ SO 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 ₂ SO ₄
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H ₂ SO ₄
500	2.5
Container Types 6 / 15	HNO ₃
125	0.7
250	1.25
500	2.5
1000	5.0