UNITED ANALYTICAL SERVICES, INC.

1429 Centre Circle Drive
Downers Grove, IL 60515
Phone: (630) 691-8271
Fax: (630) 691-1819
E-Mail: uasinc@uas1.com

December 12, 2017

Board of Education
Glen Ellyn School District #41
793 N. Main Street
Glen Ellyn, Illinois 60137

UAS Project #1798587-01

Attn: Mr. Dave Scarmardo, Director of Buildings & Grounds
Re: Summary of Findings - Lead in Drinking Water Sampling & Lab Analysis
Glen Ellyn School District #41
Ben Franklin School
350 Bryant Avenue, Glen Ellyn, Illinois 60137
November 15, 2017

Dear Mr. Scarmardo:

United Analytical Services, Inc. (UAS) prepared this executive summary of findings for the drinking water sampling performed at Glen Ellyn School District #41's Franklin School located at 350 Bryant Avenue in Glen Ellyn, Illinois on November 15, 2017. The current testing involved collecting drinking water samples from twenty-four (24) of the drinking water sources/locations throughout the school facility that are accessible to the Students, Faculty and Staff, with subsequent laboratory analysis for the presence of Lead. Including 1st draw and 2nd draw samples at each of the drinking water sources, a total of forty-eight (48) water samples were collected during this current assessment.

It should be noted that the current sampling at this Glen Ellyn School District #41 school facility included the IDPH required drinking water sources within facility, as well as several non-required drinking water and/or potable water sources within the school building.

The laboratory results reveal that the reported concentrations for twenty-four (24) of the twenty-four (24) drinking water samples resulted in concentrations below the IDPH public notification/communication target level of 5 µg Lead/L. Zero (0) of the samples revealed a drinking water concentration above the IDPH public notification/communication target level of 5 µg Lead/L.

SAMPLING REQUIREMENTS AND METHODOLOGY -

The current sampling and reporting followed the Illinois Public Act 99-0922 requirements. Following the IDPH requirements and reporting, it should be noted that UAS performed and provided the services noted below, including, but not limited to, the following:

1. The current testing and analysis was limited only to those twenty-four (24) locations/sources noted.
2. UAS provided fixture/source identifiers for each of the sources/locations identified with alphanumeric identifiers for each fixture and sample.
3. UAS utilized sampling media (250 mL sample bottles) obtained from a State of Illinois Environmental Protection Agency (IEPA) accredited laboratory, labeled all sampling bottles with the alphanumeric identifiers and prepared a Chain of Custody form for samples.
4. The IEPA accredited laboratory that UAS utilized to perform the laboratory analysis for this project was Pace Analytical Services, LLC (Pace) of Minneapolis, MN. Pace is recognized by the IEPA as NELAP-Recognized Environmental Laboratory for Lead in Drinking Water. A copy of the SLI accreditation for the approved method is attached. UAS confirmed with SLI, that the IDPH required minimum reporting limit (MRL) and significant digits requested by IDPH could be utilized and documented. The MRL identified by IDPH, and utilized for this assessment was 2.00 µg Lead/L, or lower.
5. Following confirmation from Glen Ellyn School District #41 (S.D. #41) that each of the target drinking water sources/systems had been allowed a mandated stagnation period of eight (8) to eighteen (18) hours, UAS collected the required 1st Draw and 2nd Draw (30 second flush) drinking water samples from each drinking water fixture/source identified by S.D. #41. S.D. #41 reported that the last use of any of the sources/fixtures in the school was 8:00 p.m. on November 14, 2017, following a day of typical school occupancy and usage within the facility. The sample collection by UAS began at 5:30 a.m. on November 15, 2017 and was completed prior to any water use within the building.
6. UAS completed and compiled Chain of Custody forms for the school building samples.
7. UAS submitted the samples to Pace following strict Chain of Custody protocols.
8. UAS compiled this final summary report with results for this school using IDPH's guidance for reporting, data and information spreadsheet to ensure consistency and reliability.
10. All sampling, documentation and reporting was performed under the direct supervision of an Illinois Department of Public Health (IDPH) licensed Lead Inspector/Risk Assessor.

IDPH REPORTING & PUBLIC NOTIFICATION -

As required, IDPH Reporting and Public Notification requirements shall be the responsibility of Glen Ellyn School District #41. Please note the following: Illinois Public Act 099-0922: Within seven (7) days of receipt of these test results, the district/school must email all test results to IDPH. If any of the samples taken in the school exceed 5 parts per billion (µg/L), the school district or chief school administrator, or the designee of the school district or chief school administrator, shall promptly provide an individual notification of the sampling results, via written or electronic communication, to the parents or legal guardians of all enrolled students and include the following information: the corresponding sampling location within the school building and the United States Environmental Protection Agency's website for information about lead in drinking water. If any of the samples taken at the school are at or below 5 parts per billion (µg/L), notification may be made by posting on the schools website.

TEST RESULTS / SUMMARY OF FINDINGS-

The test results are noted in the attached Spreadsheet and Analytical Laboratory Reports. The current testing and analysis was limited only to those twenty-four (24) locations/sources noted. Review of the current testing laboratory data reveals the following:

The results from twenty-four (24) of the twenty-four (24) locations/sources reveled concentrations below both the IDPH mitigation strategies lower limit of 2 ppb, and below the IDPH public notification/communication target level of 5 µg Lead/L.

Zero (0) of the twenty-four (24) locations/sources reported a concentration at/above the IDPH mitigation strategies lower limit of 2 ppb, but below the IDPH public notification/communication target level of 5 µg Lead/L.

Zero (0) of the twenty-four (24) locations/sources revealed a drinking water concentration above the IDPH public notification/communication target level of 5 µg Lead/L.

Pursuant to Public Act 99-0922, the Illinois Plumbing Licensing Law (225 ILCS 320/35.5), the IDPH is required to provide guidance to schools concerning mitigation of hazards discovered by testing for lead in water. While Section 35.5 does not require mitigation, IDPH is requiring the mitigation strategies and requirements contained in their Guidance Document for Mitigating Lead in Schools (copy attached) to be followed for all plumbing fixtures identified with any level of lead. IDPH further notes that mitigation strategies should continue until subsequent testing indicates no lead is present in water.

RECOMMENDATIONS -

At this time, UAS recommends the following:

1. Along with their standard water programs, Glen Ellyn School District #41 should follow the IDPH reporting requirements, as well as the mitigation strategies and requirements contained in their Guidance Document for Mitigating Lead in Schools (copy attached) for the sources, locations and fixtures that were identified with lead greater than 2 parts per billion (µg/L). IDPH further notes that mitigation strategies should continue until subsequent testing indicates no lead (<2.00 ppb) is present in water. While none were revealed, it should be noted that any source, location and fixture that was identified with lead of 5 parts per billion (µg/L) or greater should be taken "off-line", either permanently, or until such time that mitigation and subsequent testing demonstrate that lead levels are within acceptable IDPH limits.

2. Glen Ellyn School District #41 should provide this report and results to IDPH in accordance with Illinois Public Act 099-0922.

3. Pursuant to Public Act 99-0922, the Illinois Plumbing Licensing Law (225 ILCS 320/35.5), the IDPH is required to provide guidance to schools concerning mitigation of hazards discovered by testing for lead in water. While Section 35.5 does not require mitigation, IDPH is requiring the mitigation strategies and requirements contained in their Guidance Document for Mitigating Lead in Schools (copy attached) to be followed for all plumbing fixtures identified with any level

of lead. IDPH further notes that mitigation strategies should continue until subsequent testing indicates no lead (i.e. <2.00 ppb) is present in water.

Thank you for the continued opportunity to be of service to Glen Ellyn School District #41. If you have any questions regarding this information, please do not hesitate to contact our office.

Sincerely,
UNITED ANALYTICAL SERVICES, INC.

Thad Daniels
Director of Field Services
Lead Risk Assessor (IL 001047)

attachments: IDPH Spreadsheet Summary of Lead in Drinking Water
12/07/17 Laboratory Report & COCs
IDPH Mitigation Strategies
UAS' Inspector/Sample Collector License & Accreditation
Pace Laboratory Accreditation

cc: Kevin E. Aikman, Ph.D., CIH, FAIHA (UAS)

S:\TD\IHReports\SD41.Franklin ES.1798587-01.Report

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

December 07, 2017

Thad Daniels
United Analytical Services, Inc.
1429 Centre Circle Drive
Downers Grove, IL 60515

RE: Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Dear Thad Daniels:
Enclosed are the analytical results for sample(s) received by the laboratory on November 20, 2017. 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,

Sylvia Hunter

Sylvia Hunter
sylvia.hunter@pacelabs.com
1(612)607-1700
Project Manager

Enclosures

cc: Mr. Thad Daniels, United Analytical Services,Inc

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #:MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C
West Virginia DEP Certification #: 382
Wisconsin Certification #: 999407970

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10411784001	FR-01a Nurse's Sink	Water	11/15/17 05:30	11/20/17 10:30
10411784002	FR-01b Nurse's Sink	Water	11/15/17 05:30	11/20/17 10:30
10411784003	FR-02a Drinking Fountain Right	Water	11/15/17 05:30	11/20/17 10:30
10411784004	FR-02b Drinking Fountain Right	Water	11/15/17 05:30	11/20/17 10:30
10411784005	FR-03a Drinking Fountain Left	Water	11/15/17 05:30	11/20/17 10:30
10411784006	FR-03b Drinking Fountain Left	Water	11/15/17 05:30	11/20/17 10:30
10411784007	FR-04a Jug Filler Left-Outside	Water	11/15/17 05:30	11/20/17 10:30
10411784008	FR-04b Jug Filler Left-Outside	Water	11/15/17 05:30	11/20/17 10:30
10411784009	FR-05a Drinking Fountain-Outsi	Water	11/15/17 05:30	11/20/17 10:30
10411784010	FR-05b Drinking Fountain-Outsi	Water	11/15/17 05:30	11/20/17 10:30
10411784011	FR-06a Jug Filler-Outside Room	Water	11/15/17 05:30	11/20/17 10:30
10411784012	FR-06b Jug Filler-Outside Room	Water	11/15/17 05:30	11/20/17 10:30
10411784013	FR-07a Drinking Fountain Right	Water	11/15/17 05:30	11/20/17 10:30
10411784014	FR-07b Drinking Fountain Right	Water	11/15/17 05:30	11/20/17 10:30
10411784015	FR-08a Drinking Fountain Left	Water	11/15/17 05:30	11/20/17 10:30
10411784016	FR-08b Drinking Fountain Left	Water	11/15/17 05:30	11/20/17 10:30
10411784017	FR-09a Jug Filler Left-Gym	Water	11/15/17 05:30	11/20/17 10:30
10411784018	FR-09b Jug Filler Left-Gym	Water	11/15/17 05:30	11/20/17 10:30
10411784019	FR-10a Kitchen Sink	Water	11/15/17 05:30	11/20/17 10:30
10411784020	FR-10b Kitchen Sink	Water	11/15/17 05:30	11/20/17 10:30
10411784021	FR-11a Drinking Fountain-Outsi	Water	11/15/17 05:30	11/20/17 10:30
10411784022	FR-11b Drinking Fountain-Outsi	Water	11/15/17 05:30	11/20/17 10:30
10411784023	FR-12a Room 121 Sink	Water	11/15/17 05:30	11/20/17 10:30
10411784024	FR-12b Room 121 Sink	Water	11/15/17 05:30	11/20/17 10:30
10411784025	FR-13a Drinking Fountain Left	Water	11/15/17 05:30	11/20/17 10:30
10411784026	FR-13b Drinking Fountain Left	Water	11/15/17 05:30	11/20/17 10:30
10411784027	FR-14a Drinking Fountain Right	Water	11/15/17 05:30	11/20/17 10:30
10411784028	FR-14b Drinking Fountain Right	Water	11/15/17 05:30	11/20/17 10:30
10411784029	FR-15a Room 134 Wash Basin	Water	11/15/17 05:30	11/20/17 10:30
10411784030	FR-15b Room 134 Wash Basin	Water	11/15/17 05:30	11/20/17 10:30
10411784031	FR-16a Room 135 Wash Basin	Water	11/15/17 05:30	11/20/17 10:30
10411784032	FR-16b Room 135 Wash Basin	Water	11/15/17 05:30	11/20/17 10:30
10411784033	FR-17a Room 136 Sink	Water	11/15/17 05:30	11/20/17 10:30
10411784034	FR-17b Room 136 Sink	Water	11/15/17 05:30	11/20/17 10:30
10411784035	FR-18a Drinking Fountain Right	Water	11/15/17 05:30	11/20/17 10:30
10411784036	FR-18b Drinking Fountain Right	Water	11/15/17 05:30	11/20/17 10:30
10411784037	FR-19a Drinking Fountain Left	Water	11/15/17 05:30	11/20/17 10:30

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10411784038	FR-19b Drinking Fountain Left	Water	11/15/17 05:30	11/20/17 10:30
10411784039	FR-20a Drinking Fountain-Outsi	Water	11/15/17 05:30	11/20/17 10:30
10411784040	FR-20b Drinking Fountain-Outsi	Water	11/15/17 05:30	11/20/17 10:30
10411784041	FR-21a Jug Filler-Outside Room	Water	11/15/17 05:30	11/20/17 10:30
10411784042	FR-21b Jug Filler-Outside Room	Water	11/15/17 05:30	11/20/17 10:30
10411784043	FR-22a Drinking Fountain-Outsi	Water	11/15/17 05:30	11/20/17 10:30
10411784044	FR-22b Drinking Fountain-Outsi	Water	11/15/17 05:30	11/20/17 10:30
10411784045	FR-23a Jug Filler-Outside Room	Water	11/15/17 05:30	11/20/17 10:30
10411784046	FR-23b Jug Filler-Outside Room	Water	11/15/17 05:30	11/20/17 10:30
10411784047	FR-24a Library Sink	Water	11/15/17 05:30	11/20/17 10:30
10411784048	FR-24b Library Sink	Water	11/15/17 05:30	11/20/17 10:30

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10411784001	FR-01a Nurse's Sink	EPA 200.8	WBS	1	PASI-M
10411784002	FR-01b Nurse's Sink	EPA 200.8	WBS	1	PASI-M
10411784003	FR-02a Drinking Fountain Right	EPA 200.8	WBS	1	PASI-M
10411784004	FR-02b Drinking Fountain Right	EPA 200.8	WBS	1	PASI-M
10411784005	FR-03a Drinking Fountain Left	EPA 200.8	WBS	1	PASI-M
10411784006	FR-03b Drinking Fountain Left	EPA 200.8	WBS	1	PASI-M
10411784007	FR-04a Jug Filler Left-Outside	EPA 200.8	WBS	1	PASI-M
10411784008	FR-04b Jug Filler Left-Outside	EPA 200.8	WBS	1	PASI-M
10411784009	FR-05a Drinking Fountain-Outsi	EPA 200.8	WBS	1	PASI-M
10411784010	FR-05b Drinking Fountain-Outsi	EPA 200.8	WBS	1	PASI-M
10411784011	FR-06a Jug Filler-Outside Room	EPA 200.8	WBS	1	PASI-M
10411784012	FR-06b Jug Filler-Outside Room	EPA 200.8	WBS	1	PASI-M
10411784013	FR-07a Drinking Fountain Right	EPA 200.8	WBS	1	PASI-M
10411784014	FR-07b Drinking Fountain Right	EPA 200.8	WBS	1	PASI-M
10411784015	FR-08a Drinking Fountain Left	EPA 200.8	WBS	1	PASI-M
10411784016	FR-08b Drinking Fountain Left	EPA 200.8	WBS	1	PASI-M
10411784017	FR-09a Jug Filler Left-Gym	EPA 200.8	WBS	1	PASI-M
10411784018	FR-09b Jug Filler Left-Gym	EPA 200.8	WBS	1	PASI-M
10411784019	FR-10a Kitchen Sink	EPA 200.8	WBS	1	PASI-M
10411784020	FR-10b Kitchen Sink	EPA 200.8	WBS	1	PASI-M
10411784021	FR-11a Drinking Fountain-Outsi	EPA 200.8	WBS	1	PASI-M
10411784022	FR-11b Drinking Fountain-Outsi	EPA 200.8	WBS	1	PASI-M
10411784023	FR-12a Room 121 Sink	EPA 200.8	WBS	1	PASI-M
10411784024	FR-12b Room 121 Sink	EPA 200.8	WBS	1	PASI-M
10411784025	FR-13a Drinking Fountain Left	EPA 200.8	WBS	1	PASI-M
10411784026	FR-13b Drinking Fountain Left	EPA 200.8	WBS	1	PASI-M
10411784027	FR-14a Drinking Fountain Right	EPA 200.8	WBS	1	PASI-M
10411784028	FR-14b Drinking Fountain Right	EPA 200.8	WBS	1	PASI-M
10411784029	FR-15a Room 134 Wash Basin	EPA 200.8	WBS	1	PASI-M
10411784030	FR-15b Room 134 Wash Basin	EPA 200.8	WBS	1	PASI-M
10411784031	FR-16a Room 135 Wash Basin	EPA 200.8	WBS	1	PASI-M
10411784032	FR-16b Room 135 Wash Basin	EPA 200.8	WBS	1	PASI-M
10411784033	FR-17a Room 136 Sink	EPA 200.8	WBS	1	PASI-M
10411784034	FR-17b Room 136 Sink	EPA 200.8	WBS	1	PASI-M
10411784035	FR-18a Drinking Fountain Right	EPA 200.8	WBS	1	PASI-M
10411784036	FR-18b Drinking Fountain Right	EPA 200.8	WBS	1	PASI-M
10411784037	FR-19a Drinking Fountain Left	EPA 200.8	WBS	1	PASI-M

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10411784038	FR-19b Drinking Fountain Left	EPA 200.8	WBS	1	PASI-M
10411784039	FR-20a Drinking Fountain-Outsi	EPA 200.8	WBS	1	PASI-M
10411784040	FR-20b Drinking Fountain-Outsi	EPA 200.8	WBS	1	PASI-M
10411784041	FR-21a Jug Filler-Outside Room	EPA 200.8	RJS	1	PASI-M
10411784042	FR-21b Jug Filler-Outside Room	EPA 200.8	RJS	1	PASI-M
10411784043	FR-22a Drinking Fountain-Outsi	EPA 200.8	RJS	1	PASI-M
10411784044	FR-22b Drinking Fountain-Outsi	EPA 200.8	RJS	1	PASI-M
10411784045	FR-23a Jug Filler-Outside Room	EPA 200.8	RJS	1	PASI-M
10411784046	FR-23b Jug Filler-Outside Room	EPA 200.8	RJS	1	PASI-M
10411784047	FR-24a Library Sink	EPA 200.8	RJS	1	PASI-M
10411784048	FR-24b Library Sink	EPA 200.8	RJS	1	PASI-M

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-01a Nurse's Sink **Lab ID: 10411784001** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	**0.15**	ug/L	0.10	0.010	1		11/30/17 22:31	7439-92-1	

Sample: FR-01b Nurse's Sink **Lab ID: 10411784002** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:25	7439-92-1	

Sample: FR-02a Drinking Fountain Right **Lab ID: 10411784003** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:26	7439-92-1	

Sample: FR-02b Drinking Fountain Right **Lab ID: 10411784004** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:36	7439-92-1	

Sample: FR-03a Drinking Fountain Left **Lab ID: 10411784005** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:37	7439-92-1	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-03b Drinking Fountain Left **Lab ID: 10411784006** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:39	7439-92-1	

Sample: FR-04a Jug Filler Left-Outside **Lab ID: 10411784007** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:40	7439-92-1	

Sample: FR-04b Jug Filler Left-Outside **Lab ID: 10411784008** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:41	7439-92-1	

Sample: FR-05a Drinking Fountain-Outsi **Lab ID: 10411784009** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:43	7439-92-1	

Sample: FR-05b Drinking Fountain-Outsi **Lab ID: 10411784010** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:47	7439-92-1	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-06a Jug Filler-Outside Room **Lab ID: 10411784011** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:48	7439-92-1	

Sample: FR-06b Jug Filler-Outside Room **Lab ID: 10411784012** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:50	7439-92-1	

Sample: FR-07a Drinking Fountain Right **Lab ID: 10411784013** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:52	7439-92-1	

Sample: FR-07b Drinking Fountain Right **Lab ID: 10411784014** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:53	7439-92-1	

Sample: FR-08a Drinking Fountain Left **Lab ID: 10411784015** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:54	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-08b Drinking Fountain Left **Lab ID: 10411784016** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:55	7439-92-1	

Sample: FR-09a Jug Filler Left-Gym **Lab ID: 10411784017** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:57	7439-92-1	

Sample: FR-09b Jug Filler Left-Gym **Lab ID: 10411784018** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 22:58	7439-92-1	

Sample: FR-10a Kitchen Sink **Lab ID: 10411784019** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	**0.12**	ug/L	0.10	0.010	1		11/30/17 23:08	7439-92-1	

Sample: FR-10b Kitchen Sink **Lab ID: 10411784020** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 23:10	7439-92-1	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-11a Drinking Fountain-Outsi **Lab ID: 10411784021** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/29/17 23:35	7439-92-1	

Sample: FR-11b Drinking Fountain-Outsi **Lab ID: 10411784022** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/29/17 23:50	7439-92-1	

Sample: FR-12a Room 121 Sink **Lab ID: 10411784023** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	**0.16**	ug/L	0.10	0.010	1		11/29/17 23:51	7439-92-1	

Sample: FR-12b Room 121 Sink **Lab ID: 10411784024** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	**0.10**	ug/L	0.10	0.010	1		11/29/17 23:52	7439-92-1	

Sample: FR-13a Drinking Fountain Left **Lab ID: 10411784025** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/29/17 23:53	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-13b Drinking Fountain Left **Lab ID: 10411784026** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/29/17 23:54	7439-92-1	

Sample: FR-14a Drinking Fountain Right **Lab ID: 10411784027** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/29/17 23:56	7439-92-1	

Sample: FR-14b Drinking Fountain Right **Lab ID: 10411784028** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/29/17 23:57	7439-92-1	

Sample: FR-15a Room 134 Wash Basin **Lab ID: 10411784029** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	**0.14**	ug/L	0.10	0.010	1		11/29/17 23:58	7439-92-1	

Sample: FR-15b Room 134 Wash Basin **Lab ID: 10411784030** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/29/17 23:59	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-16a Room 135 Wash Basin **Lab ID: 10411784031** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 00:05	7439-92-1	

Sample: FR-16b Room 135 Wash Basin **Lab ID: 10411784032** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 00:01	7439-92-1	

Sample: FR-17a Room 136 Sink **Lab ID: 10411784033** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	**0.44**	ug/L	0.10	0.010	1		11/30/17 00:07	7439-92-1	

Sample: FR-17b Room 136 Sink **Lab ID: 10411784034** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	**0.15**	ug/L	0.10	0.010	1		11/30/17 00:08	7439-92-1	

Sample: FR-18a Drinking Fountain Right **Lab ID: 10411784035** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 00:10	7439-92-1	

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-18b Drinking Fountain Right **Lab ID: 10411784036** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 00:11	7439-92-1	

Sample: FR-19a Drinking Fountain Left **Lab ID: 10411784037** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 00:12	7439-92-1	

Sample: FR-19b Drinking Fountain Left **Lab ID: 10411784038** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 00:13	7439-92-1	

Sample: FR-20a Drinking Fountain-Outsi **Lab ID: 10411784039** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 00:14	7439-92-1	

Sample: FR-20b Drinking Fountain-Outsi **Lab ID: 10411784040** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		11/30/17 00:16	7439-92-1	

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-21a Jug Filler-Outside Room **Lab ID: 10411784041** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		12/03/17 23:30	7439-92-1	

Sample: FR-21b Jug Filler-Outside Room **Lab ID: 10411784042** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		12/03/17 23:45	7439-92-1	

Sample: FR-22a Drinking Fountain-Outsi **Lab ID: 10411784043** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		12/03/17 23:49	7439-92-1	

Sample: FR-22b Drinking Fountain-Outsi **Lab ID: 10411784044** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		12/03/17 23:52	7439-92-1	

Sample: FR-23a Jug Filler-Outside Room **Lab ID: 10411784045** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		12/03/17 23:55	7439-92-1	

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Sample: FR-23b Jug Filler-Outside Room **Lab ID: 10411784046** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		12/03/17 23:58	7439-92-1	

Sample: FR-24a Library Sink **Lab ID: 10411784047** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	**0.27**	ug/L	0.10	0.010	1		12/04/17 00:01	7439-92-1	

Sample: FR-24b Library Sink **Lab ID: 10411784048** Collected: 11/15/17 05:30 Received: 11/20/17 10:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical Method: EPA 200.8								
Lead	ND	ug/L	0.10	0.010	1		12/04/17 00:04	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

QC Batch: 510208 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, Drinking Water
Associated Lab Samples: 10411784001, 10411784002, 10411784003, 10411784004, 10411784005, 10411784006, 10411784007, 10411784008, 10411784009, 10411784010, 10411784011, 10411784012, 10411784013, 10411784014, 10411784015, 10411784016, 10411784017, 10411784018, 10411784019, 10411784020

METHOD BLANK: 2775016 Matrix: Water
Associated Lab Samples: 10411784001, 10411784002, 10411784003, 10411784004, 10411784005, 10411784006, 10411784007, 10411784008, 10411784009, 10411784010, 10411784011, 10411784012, 10411784013, 10411784014, 10411784015, 10411784016, 10411784017, 10411784018, 10411784019, 10411784020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lead	ug/L	ND	0.10	0.010	11/30/17 22:16	

LABORATORY CONTROL SAMPLE: 2775017

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	100	97.2	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2780307 2780308

Parameter	Units	10411784001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	ug/L	0.15	100	100	92.5	93.4	92	93	70-130	1	20	

MATRIX SPIKE SAMPLE: 2780309

Parameter	Units	10411784011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	ND	100	96.9	97	70-130	

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
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

QC Batch: 510209 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, Drinking Water
Associated Lab Samples: 10411784021, 10411784022, 10411784023, 10411784024, 10411784025, 10411784026, 10411784027, 10411784028, 10411784029, 10411784030, 10411784031, 10411784032, 10411784033, 10411784034, 10411784035, 10411784036, 10411784037, 10411784038, 10411784039, 10411784040

METHOD BLANK: 2775019 Matrix: Water
Associated Lab Samples: 10411784021, 10411784022, 10411784023, 10411784024, 10411784025, 10411784026, 10411784027, 10411784028, 10411784029, 10411784030, 10411784031, 10411784032, 10411784033, 10411784034, 10411784035, 10411784036, 10411784037, 10411784038, 10411784039, 10411784040

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lead	ug/L	ND	0.10	0.010	11/29/17 23:34	

LABORATORY CONTROL SAMPLE: 2775020

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	100	100	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2778982 2778983

Parameter	Units	10411784021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	ug/L	ND	100	100	99.3	98.1	99	98	70-130	1	20	

MATRIX SPIKE SAMPLE: 2778984

Parameter	Units	10411784031 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	ND	100	98.8	99	70-130	

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
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

QC Batch: 510236 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: ICPMS Metals, Drinking Water
Associated Lab Samples: 10411784041, 10411784042, 10411784043, 10411784044, 10411784045, 10411784046, 10411784047, 10411784048

METHOD BLANK: 2775171 Matrix: Water
Associated Lab Samples: 10411784041, 10411784042, 10411784043, 10411784044, 10411784045, 10411784046, 10411784047, 10411784048

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lead	ug/L	ND	0.10	0.010	12/03/17 22:23	

LABORATORY CONTROL SAMPLE: 2775172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	100	108	108	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2779792 2779793

Parameter	Units	10411781041 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	ug/L	0.52	100	100	102	102	101	102	70-130	0	20	

MATRIX SPIKE SAMPLE: 2779794

Parameter	Units	10411784048 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	ND	100	103	103	70-130	

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
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

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.

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.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10411784001	FR-01a Nurse's Sink	EPA 200.8	510208		
10411784002	FR-01b Nurse's Sink	EPA 200.8	510208		
10411784003	FR-02a Drinking Fountain Right	EPA 200.8	510208		
10411784004	FR-02b Drinking Fountain Right	EPA 200.8	510208		
10411784005	FR-03a Drinking Fountain Left	EPA 200.8	510208		
10411784006	FR-03b Drinking Fountain Left	EPA 200.8	510208		
10411784007	FR-04a Jug Filler Left-Outside	EPA 200.8	510208		
10411784008	FR-04b Jug Filler Left-Outside	EPA 200.8	510208		
10411784009	FR-05a Drinking Fountain-Outsi	EPA 200.8	510208		
10411784010	FR-05b Drinking Fountain-Outsi	EPA 200.8	510208		
10411784011	FR-06a Jug Filler-Outside Room	EPA 200.8	510208		
10411784012	FR-06b Jug Filler-Outside Room	EPA 200.8	510208		
10411784013	FR-07a Drinking Fountain Right	EPA 200.8	510208		
10411784014	FR-07b Drinking Fountain Right	EPA 200.8	510208		
10411784015	FR-08a Drinking Fountain Left	EPA 200.8	510208		
10411784016	FR-08b Drinking Fountain Left	EPA 200.8	510208		
10411784017	FR-09a Jug Filler Left-Gym	EPA 200.8	510208		
10411784018	FR-09b Jug Filler Left-Gym	EPA 200.8	510208		
10411784019	FR-10a Kitchen Sink	EPA 200.8	510208		
10411784020	FR-10b Kitchen Sink	EPA 200.8	510208		
10411784021	FR-11a Drinking Fountain-Outsi	EPA 200.8	510209		
10411784022	FR-11b Drinking Fountain-Outsi	EPA 200.8	510209		
10411784023	FR-12a Room 121 Sink	EPA 200.8	510209		
10411784024	FR-12b Room 121 Sink	EPA 200.8	510209		
10411784025	FR-13a Drinking Fountain Left	EPA 200.8	510209		
10411784026	FR-13b Drinking Fountain Left	EPA 200.8	510209		
10411784027	FR-14a Drinking Fountain Right	EPA 200.8	510209		
10411784028	FR-14b Drinking Fountain Right	EPA 200.8	510209		
10411784029	FR-15a Room 134 Wash Basin	EPA 200.8	510209		
10411784030	FR-15b Room 134 Wash Basin	EPA 200.8	510209		
10411784031	FR-16a Room 135 Wash Basin	EPA 200.8	510209		
10411784032	FR-16b Room 135 Wash Basin	EPA 200.8	510209		
10411784033	FR-17a Room 136 Sink	EPA 200.8	510209		
10411784034	FR-17b Room 136 Sink	EPA 200.8	510209		
10411784035	FR-18a Drinking Fountain Right	EPA 200.8	510209		
10411784036	FR-18b Drinking Fountain Right	EPA 200.8	510209		
10411784037	FR-19a Drinking Fountain Left	EPA 200.8	510209		
10411784038	FR-19b Drinking Fountain Left	EPA 200.8	510209		
10411784039	FR-20a Drinking Fountain-Outsi	EPA 200.8	510209		
10411784040	FR-20b Drinking Fountain-Outsi	EPA 200.8	510209		
10411784041	FR-21a Jug Filler-Outside Room	EPA 200.8	510236		
10411784042	FR-21b Jug Filler-Outside Room	EPA 200.8	510236		
10411784043	FR-22a Drinking Fountain-Outsi	EPA 200.8	510236		
10411784044	FR-22b Drinking Fountain-Outsi	EPA 200.8	510236		
10411784045	FR-23a Jug Filler-Outside Room	EPA 200.8	510236		
10411784046	FR-23b Jug Filler-Outside Room	EPA 200.8	510236		
10411784047	FR-24a Library Sink	EPA 200.8	510236		
10411784048	FR-24b Library Sink	EPA 200.8	510236		

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1798587-01 SD#41 Ben Franklin
Pace Project No.: 10411784

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

10411784

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	United Analytical Services, Inc. (UAS)	Report To:	Thad Daniels	Attention:	Same
Address:	1429 Centre Circle Drive	Copy To:		Company Name:	Same
	Downers Grove, Illinois 60515			Address:	Same
Email:	tdaniels@uas1.com	Purchase Order #:		Pace Quote:	40981
Phone:	630-691-8271 Fax 630-691-1819	Project Name:	S.D. #41 -Ben Franklin Elementary School	Pace Project Manager:	Jeff Dunton
Requested Due Date:	Standard TAT	Project #:	1796587-01	Pace Profile #:	

Regulatory Agency: IDPH

State / Location: IL

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: None	Requested Analysis Filtered (Y/N): Y/N	Analyses Test: PB 200.8	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water CODE: DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS													
1	FR-01a Nurse's Sink	DW	G			11/15/2017	5:30a		1	X		X		001
2	FR-01b Nurse's Sink	DW	G			11/15/2017	5:30a		1	X		X		002
3	FR-02a Drinking Fountain Right - Outside Room 102	DW	G			11/15/2017	5:30a		1	X		X		003
4	FR-02b Drinking Fountain Right - Outside Room 102	DW	G			11/15/2017	5:30a		1	X		X		004
5	FR-03a Drinking Fountain Left- Outside Room 102	DW	G			11/15/2017	5:30a		1	X		X		005
6	FR-03b Drinking Fountain Left -Outside Room 102	DW	G			11/15/2017	5:30a		1	X		X		006
7	FR-04a Jug Filler Left -Outside Room 102	DW	G			11/15/2017	5:30a		1	X		X		007
8	FR-04b Jug Filler Left - Outside Room 102	DW	G			11/15/2017	5:30a		1	X		X		008
9	FR-05a Drinking Fountain - Outside Room 111	DW	G			11/15/2017	5:30a		1	X		X		009
10	FR-05b Drinking Fountain - Outside Room 111	DW	G			11/15/2017	5:30a		1	X		X		010
11	FR-06a Jug Filler - Outside Room 111	DW	G			11/15/2017	5:30a		1	X		X		011
12	FR-06b Jug Filler - Outside Room 111	DW	G			11/15/2017	5:30a		1	X		X		012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		11/15/17	1320	Kathryn Wendel	11/15/17	1320				
	Kathryn Wendel	11/16/17	1230	FedEx						
Water Last Used in School Building on: 11/14/2017 @ 8:00 p.m.					11/20/17	1035	16.5	N	N	Y
							17.7	17.4	15.4	15.4
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Keith Jarvis

SIGNATURE of SAMPLER:

DATE Signed: 11/15/2017

CHAIN-OF-CUSTODY / Analytical Request Document

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

10411784

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	United Analytical Services, Inc. (UAS)	Report To:	Thad Daniels	Attention:	Same
Address:	1429 Centre Circle Drive	Copy To:		Company Name:	Same
	Downers Grove, Illinois 60515			Address:	Same
Email:	tdaniels@uas1.com	Purchase Order #:		Pace Quote:	40981
Phone:	630-691-8271 Fax 630-691-1819	Project Name:	S.D. #41 -Ben Franklin Elementary School	Pace Project Manager:	Jeff Dunton
Requested Due Date:	Standard TAT	Project #:	1798587-01	Pace Profile #:	

Regulatory Agency: IDPH

State / Location: IL

Requested Analysis Filtered (Y/N)

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: None	Analyses Test Y/N: PB 200.8	Residual Chlorine (Y/N)	
1	FR-07a Drinking Fountain Right - Gym	DW	G			11/15/2017	5:30a		1	X	X		013
2	FR-07b Drinking Fountain Right - Gym	DW	G			11/15/2017	5:30a		1	X	X		014
3	FR-08a Drinking Fountain Left - Gym	DW	G			11/15/2017	5:30a		1	X	X		015
4	FR-08b Drinking Fountain Left - Gym	DW	G			11/15/2017	5:30a		1	X	X		016
5	FR-09a Jug Filler Left - Gym	DW	G			11/15/2017	5:30a		1	X	X		017
6	FR-09b Jug Filler Left- Gym	DW	G			11/15/2017	5:30a		1	X	X		018
7	FR-10a Kitchen Sink	DW	G			11/15/2017	5:30a		1	X	X		019
8	FR-10b Kitchen Sink	DW	G			11/15/2017	5:30a		1	X	X		020
9	FR-11a Drinking Fountain - Outside Room 121	DW	G			11/15/2017	5:30a		1	X	X		021
10	FR-11b Drinking Fountain - Outside Room 121	DW	G			11/15/2017	5:30a		1	X	X		022
11	FR-12a Room 121 Sink	DW	G			11/15/2017	5:30a		1	X	X		023
12	FR-12b Room 121 Sink	DW	G			11/15/2017	5:30a		1	X	X		024

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		11/15/17	1320	Kathryn Wendell	11/15/17	1320				
	Kathryn Wendell	11/16/17	1430	Fedex						
Water Last Used in School Building on: 11/14/2017 @ 8:00 p.m.					11/20/17	1050	16.8	N	N	Y
							17.7	17.4	15.4	15.4

SAMPLER NAME AND SIGNATURE		
PRINT Name of SAMPLER:	Keith Jarvis	
SIGNATURE of SAMPLER:	DATE Signed:	11/15/2017

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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

10411784

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	United Analytical Services, Inc. (UAS)	Report To:	Thad Daniels	Attention:	Same
Address:	1429 Centre Circle Drive	Copy To:		Company Name:	Same
	Doweners Grove, Illinois 60515			Address:	Same
Email:	tdaniels@uas1.com	Purchase Order #:		Pace Quote:	40981
Phone:	630-691-8271 Fax 630-691-1819	Project Name:	S.D. #41 -Ben Franklin Elementary School	Pace Project Manager:	Jeff Dunton
Requested Due Date:	Standard TAT	Project #:	1798587-01	Pace Profile #:	

Regulatory Agency: IDPH

State / Location: IL

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: None	Requested Analysis Filtered (Y/N): Analyses Test Y/N	PB 200.8	Residual Chlorine (Y/N)	
1	FR-13a Drinking Fountain Left - Outside Room 127	DW	G			11/15/2017	5:30a		1	X		X		025
2	FR-13b Drinking Fountain Left - Outside Room 127	DW	G			11/15/2017	5:30a		1	X		X		026
3	FR-14a Drinking Fountain Right - Outside Room 127	DW	G			11/15/2017	5:30a		1	X		X		027
4	FR-14b Drinking Fountain Right - Outside Room 127	DW	G			11/15/2017	5:30a		1	X		X		028
5	FR-15a Room 134 Wash Basin	DW	G			11/15/2017	5:30a		1	X		X		029
6	FR-15bRoom 134 Wash Basin	DW	G			11/15/2017	5:30a		1	X		X		030
7	FR-16a Room 135 Wash Basin	DW	G			11/15/2017	5:30a		1	X		X		031
8	FR-16b Room 135 Wash Basin	DW	G			11/15/2017	5:30a		1	X		X		032
9	FR-17a Room 136 Sink	DW	G			11/15/2017	5:30a		1	X		X		033
10	FR-17b Room 136 Sink	DW	G			11/15/2017	5:30a		1	X		X		034
11	FR-18a Drinking Fountain Right - 136 (Non Elkay)	DW	G			11/15/2017	5:30a		1	X		X		035
12	FR-18b Drinking Fountain Right - 136 (Non Elkay)	DW	G			11/15/2017	5:30a		1	X		X		036

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		11/15/17	1320	Kathryn Wendell	11/15/17	1320				
	Kathryn Wendell	11/16/17	1430	FedEx						
Water Last Used in School Building on: 11/14/2017 @ 8:00 p.m.					11/20/17	1030	16.8	N	N	Y
							17.7	17.4	15.4	15.4

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Keith Jarvis					
SIGNATURE of SAMPLER:		DATE Signed: 11/15/2017				

CHAIN-OF-CUSTODY / Analytical Request Document

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

10411784

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	United Analytical Services, Inc. (UAS)	Report To:	Thad Daniels	Attention:	Same
Address:	1429 Centre Circle Drive	Copy To:		Company Name:	Same
	Doweners Grove, Illinois 60515			Address:	Same
Email:	tdaniels@uas1.com	Purchase Order #:		Pace Quote:	40981
Phone:	630-691-8271 Fax 630-691-1819	Project Name:	S.D. #41 -Ben Franklin Elementary School	Pace Project Manager:	Jeff Dunton
Requested Due Date:	Standard TAT	Project #:	1798587-01	Pace Profile #:	

Regulatory Agency
IDPH
State / Location
IL

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 None	Analyses Test Y/N	Requested Analysis Filtered (Y/N) PB 200.8	Residual Chlorine (Y/N)	
	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													
1	FR-19a Drinking Fountain Left - 136 (Non Elkay)	DW	G			11/15/2017	5:30a		1	X		X		037
2	FR-19b Drinking Fountain Left- 136 (Non Elkay)	DW	G			11/15/2017	5:30a		1	X		X		038
3	FR-20a Drinking Fountain - Outside Room 216	DW	G			11/15/2017	5:30a		1	X		X		039
4	FR-20b Drinking Fountain - Outside Room 216	DW	G			11/15/2017	5:30a		1	X		X		040
5	FR-21a Jug Filler - Outside Room 216	DW	G			11/15/2017	5:30a		1	X		X		041
6	FR-21b Jug Filler- Outside Room 216	DW	G			11/15/2017	5:30a		1	X		X		042
7	FR-22a Drinking Fountain - Outside Room 206	DW	G			11/15/2017	5:30a		1	X		X		043
8	FR-22b Drinking Fountain - Outside Room 206	DW	G			11/15/2017	5:30a		1	X		X		044
9	FR-23a Jug Filler - Outside Room 206	DW	G			11/15/2017	5:30a		1	X		X		045
10	FR-23b Jug Filler - Outside Room 206	DW	G			11/15/2017	5:30a		1	X		X		046
11	FR-24a Library Sink	DW	G			11/15/2017	5:30a		1	X		X		047
12	FR-24b Library Sink	DW	G			11/15/2017	5:30a		1	X		X		048

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		11/15/17	1320	Kathryn Mcdonald	11/15/17	1320				
	Kathryn Mcdonald	11/16/17	1430	FedEx						
Water Last Used in School Building on: 11/14/2017 @ 8:00 p.m.					11/29/17	1030	16.8	N	N	Y
							17.7	17.4	15.4	15.9
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Keith Jarvis

SIGNATURE of SAMPLER: DATE Signed: 11/15/2017

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 30Aug2017 Page 1 of 2
	Document No.: F-MN-L-213-rev.21	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt **Client Name:** United Analytical **Project #:** WO#: 10411784

10411784

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ SpeeDee ☐ Other:

Tracking Number: 7212-5349-3965/3970/3989/4001

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☐ Yes ☒ No

Thermometer Used: ☐ 151401163 ☒ G87A9155100842 12/13-1/17.7 Factor

Type of Ice: ☐ Wet ☐ Blue ☒ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): **Cooler Temp Corrected (°C):** 15.4/15.4 12/13-1/17.4

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Correction Factor:** -0.04 **Date and Initials of Person Examining Contents:** 11/20/17 AD

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

		COMMENTS:
Chain of Custody Present?	☒ Yes ☐ No	1.
Chain of Custody Filled Out?	☒ Yes ☐ No	2.
Chain of Custody Relinquished?	☐ Yes ☒ No	3.
Sampler Name and/or Signature on COC?	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes ☐ No	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes ☒ No	6.
Rush Turn Around Time Requested?	☐ Yes ☒ No	7.
Sufficient Volume?	☒ Yes ☐ No	8.
Correct Containers Used?	☒ Yes ☐ No	9.
-Pace Containers Used?	☒ Yes ☐ No	
Containers Intact?	☒ Yes ☐ No	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes ☐ No ☒ N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	☒ Yes ☐ No	12. To be filtered by lab
-Includes Date/Time/ID/Analysis Matrix: WT		
All containers needing acid/base preservation have been checked?	☐ Yes ☐ No ☒ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH Positive for Res. Chlorine? Y N
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	☐ Yes ☐ No ☒ N/A	Sample #
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin.	☐ Yes ☐ No ☒ N/A	Initial when completed: Lot # of added preservative: WT0530
Headspace in VOA Vials (>6mm)?	☐ Yes ☐ No ☒ N/A	14.
Trip Blank Present?	☐ Yes ☐ No ☒ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes ☐ No ☒ N/A	
Pace Trip Blank Lot # (if purchased):		

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Lyssa Hunter Date: 11/22/17

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

SCUR Exceptions: **Workorder #:**

Issue	Sample ID	Container Type/#

pH Adjustment Log for Preserved Samples

Page 1 of 4

Sample ID	Type of Preservative	pH Upon Receipt	Date Preservation Adjusted	Time Preservation Adjusted	Amount of Additional Preservative Added	Lot # of Preservative Added	pH After Adjustment	Initials
FR-01a	H_2SO_4	<2	11/20/17	20:48	1 mL	111050	2	SD
" "01b	"	"	"	"	"	"	"	"
" "02a	"	"	"	"	"	"	"	"
" "02b	"	"	"	"	"	"	"	"
" "03a	"	"	"	"	"	"	"	"
" "03b	"	"	"	"	"	"	"	"
" "04a	"	"	"	"	"	"	"	"
" "04b	"	"	"	"	"	"	"	"
" "05a	"	"	"	"	"	"	"	"
" "05b	"	"	"	"	"	"	"	"
" "06a	"	"	"	"	"	"	"	"
" "06b	"	"	"	"	"	"	"	"

SCUR Exceptions: **Workorder #:**

Issue	Sample ID	Container Type/#

pH Adjustment Log for Preserved Samples

Page 2 of 4

Sample ID	Type of Preservative	pH Upon Receipt	Date Preservation Adjusted	Time Preservation Adjusted	Amount of Additional Preservative Added	Lot # of Preservative Added	pH After Adjustment	Initials
FR-07a	HNO3	1a+	11/20/17	20:48	1mL	111050	2	SP
" "07b	"	"	"	"	"	"	"	"
" "08a	"	"	"	"	"	"	"	"
" "08b	"	"	"	"	"	"	"	"
" "09a	"	"	"	"	"	"	"	"
" "09b	"	"	"	"	"	"	"	"
" "10a	"	"	"	"	"	"	"	"
" "10b	"	"	"	"	"	"	"	"
" "11a	"	"	"	"	"	"	"	"
" "11b	"	"	"	"	"	"	"	"
" "12a	"	"	"	"	"	"	"	"
" "12b	"	"	"	"	"	"	"	"

SCUR Exceptions: **Workorder #:**

Issue	Sample ID	Container Type/#

pH Adjustment Log for Preserved Samples

Page 3 of 4

Sample ID	Type of Preservative	pH Upon Receipt	Date Preservation Adjusted	Time Preservation Adjusted	Amount of Additional Preservative Added	Lot # of Preservative Added	pH After Adjustment	Initials
FR-13a	HNO3	1or2	11/20/17	20:48	1mL	1117050	2	JD
" "13b	"	"	"	"	"	"	"	"
" "14a	"	"	"	"	"	"	"	"
" "14b	"	"	"	"	"	"	"	"
" "15a	"	"	"	"	"	"	"	"
" "15b	"	"	"	"	"	"	"	"
" "16a	"	"	"	"	"	"	"	"
" "16b	"	"	"	"	"	"	"	"
" "17a	"	"	"	"	"	"	"	"
" "17b	"	"	"	"	"	"	"	"
" "18a	"	"	"	"	"	"	"	"
" "18b	"	"	"	"	"	"	"	"

SCUR Exceptions: **Workorder #:**

Issue	Sample ID	Container Type/#

pH Adjustment Log for Preserved Samples

Page 4 of 4

Sample ID	Type of Preservative	pH Upon Receipt	Date Preservation Adjusted	Time Preservation Adjusted	Amount of Additional Preservative Added	Lot # of Preservative Added	pH After Adjustment	Initials
FR-19a	HNO_3	1a+	11/20/17	20:48	1mL	11170150	2	
" 19b	"	"	"	"	"	"	"	"
" 20a	"	"	"	"	"	"	"	"
" 20b	"	"	"	"	"	"	"	"
" 21a	"	"	"	"	"	"	"	"
" 21b	"	"	"	"	"	"	"	"
" 22a	"	"	"	"	"	"	"	"
" 22b	"	"	"	"	"	"	"	"
" 23a	"	"	"	"	"	"	"	"
" 23b	"	"	"	"	"	"	"	"
" 24a	"	"	"	"	"	"	"	"
" 24b	"	"	"	"	"	"	"	"

IDPH
ILLINOIS DEPARTMENT OF PUBLIC HEALTH

525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • www.dph.illinois.gov

1/17/2017

LICENSE NUMBER: 001047
Thad Daniels
1335 Fagan Road
Batavia, IL 60510

LICENSE APPROVED

IDPH recently received and reviewed your application for lead licensure. Your qualifications have been reviewed and found that you meet the requirements set forth by the Lead Poisoning Prevention Code, Section 845.125. Therefore, your application for lead licensure is now complete. Enclosed please find your lead license card. Please have this identification card with you at all times while conducting lead abatement activities.

IDPH has updated its 7 – Day Notice of Commencement effective immediately. The revised document can be identified by its 9/16 revision date on the bottom left corner. Please discontinue using the old form and begin using the new form as soon as possible. The revised form is located in the same web address that the old form was located (http://www.dph.illinois.gov/sites/default/files/forms/7-day-notice-leadabatement-mitigation-project-091916.pdf).

IDPH

LEAD RISK ASSESSOR LICENSE

LEAD ID	ISSUED	EXPIRES
001047	1/17/2017	1/31/2018

Thad Daniels
1335 Fagan Road
Batavia, IL 60510

ILLINOIS LEAD PROGRAM
Environmental Health

Alteration of this license shall result in legal action
RISK ASSESSOR CERTIFICATE EXPIRES
3/8/2019
This license issued under authority of the State of Illinois -Department of Public Health
This license is valid only when accompanied by a valid training course certificate
If found return to 525 W. Jefferson St Springfield, IL 62761

2016

OCCUPATIONAL TRAINING & SUPPLY, INC.

7233 S. Adams Street ♦ Willowbrook, IL 60527 ♦ (630) 655-3900

Lead Risk Assessor Refresher

Occupational Training & Supply, Inc. certifies that

Thad Daniels

has successfully completed the Lead Risk Assessor Refresher course and has passed the competency exam with a minimum score of 70%. This course is accredited by the Illinois Department of Public Health in accordance with the Illinois Lead Poisoning Prevention Code.

Course Date: 3/8/2016

Exam Date: 3/8/2016

Expiration Date: 3/8/2019

Certificate Number: LRAR1603080977

Kathy DeSalvo

Kathy DeSalvo, Director

STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY
NELAP - RECOGNIZED
ENVIRONMENTAL LABORATORY ACCREDITATION

is hereby granted to

PACE ANALYTICAL SERVICES, LLC. - MN

1700 ELM STREET SE SUITE 200

MINNEAPOLIS, MN 55414-2485

NELAP ACCREDITED

ACCREDITATION NUMBER #200011

According to the Illinois Administrative Code, Title 35, Subtitle A, Chapter II, Part 186, ACCREDITATION OF LABORATORIES FOR DRINKING WATER, WASTEWATER AND HAZARDOUS WASTES ANALYSIS, the State of Illinois formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed below.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part 186 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part 186. Please contact the Illinois EPA Environmental Laboratory Accreditation Program (IL ELAP) to verify the laboratory's scope of accreditation and accreditation status. Accreditation by the State of Illinois is not an endorsement or a guarantee of validity of the data generated by the laboratory.

Primary Accrediting Authority: MN Department of Health, ELAP

Celeste M. Crowley
Supervisor
Environmental Laboratory Accreditation Program

John South
Accreditation Officer
Environmental Laboratory Accreditation Program

Certificate No.: 003998
Expiration Date: 12/11/2017
Issued On: 11/15/2016

Pace Analytical Services, LLC. - MN
1700 Elm Street SE Suite 200
Minneapolis, MN 55414-2485

FOT Name: Drinking Water, Inorganic

Matrix Type: Potable Water

Method: USEPA180.1

Matrix Type: Potable Water

Turbidity

Method: USEPA200.8R5.4

Matrix Type: Potable Water

Aluminum	Antimony
Arsenic	Barium
Beryllium	Cadmium
Chromium	Copper
Lead	Manganese
Mercury	Nickel
Selenium	Silver
Thallium	Zinc

Method: USEPA245.1R3.0

Matrix Type: Potable Water

Mercury

Method: USEPA300.0R2.1

Matrix Type: Potable Water

Bromide	Chloride
Fluoride	Nitrate
Nitrite	Sulfate

Method: USEPA353.2R2.0

Matrix Type: Potable Water

Nitrate	Nitrite

FOT Name: Drinking Water, Organic

Method: USEPA1613RB

Matrix Type: Potable Water

Dioxin (2,3,7,8 TCDD)

Method: USEPA524.2R4.1

Matrix Type: Potable Water

1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane
1,1-Dichloroethane	1,1-Dichloroethene

Method: SM4500P-E,20Ed

Orthophosphate

IDPH
Illinois Department of Public Health

Mitigation Strategies

Guidance Document for Mitigating Lead in Schools

New Guidance

Pursuant to the Illinois Plumbing Licensing Law (225 ICLS 320/35.5), the Illinois Department of Public Health (IDPH) is required to provide guidance to schools concerning mitigation of hazards discovered by testing for lead in water.

While Section 35.5 does not specifically require mitigation, IDPH is requiring the mitigation strategies and requirements contained in this guidance document to be followed for all plumbing fixtures identified with any level of lead. Mitigation should continue until subsequent testing indicates no lead is present in water.

Mitigation strategies depend on many variables and schools may need to implement various and multiple steps to mitigate lead-in-water hazards. This guidance provides the most common mitigations strategies, but is not intended to be all inclusive.

WQMP

Water Quality Management Plan

Steps to an Effective Water Quality Management Plan

Regardless of lead or any other potential plumbing issues within your facility, developing an effective Water Quality Management Plan (WQMP) is essential to ensuring that safe, potable drinking water is maintained at all times.

In many cases, the internal plumbing system in schools and other large facilities is extensive, often containing hundreds, if not thousands of feet of pipe. If left unused for extended periods of time (2-3 days), the water in this pipe can become stagnant and develop internal water quality issues such as high lead concentrations and harmful bacterial growth.

An effective WQMP can help mitigate the potential for these negative water quality issues.

The steps outlined in this section are not intended to be all inclusive, since every facility and administration is different, each with their own set of individual circumstances. However, it should help you understand the general concepts of a WQMP and how you can develop your unique team to address potential water quality conditions within your facility.

Step 1 Select Your Team

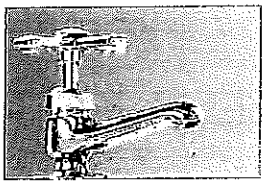
Your team could include:

- Administrators and Faculty
- Facilities and Maintenance Staff
- Parents
- Students
- Water Suppliers

These individuals will be key to implementing whatever program you develop.

Step 2 Understand Your Facility Layout

- Obtain building plans.
- Know where your drinking fountains and food service water fixtures are located.
- In general terms, familiarize yourself with the layout of your plumbing system. Look for long pipe runs with fixtures that may be used infrequently, even when the building is occupied.



Step 3 Understand Your Facility Schedule

Although this step will be intuitive for facility staff, you should familiarize your team with the schedule of the facility. Questions to ask include:

- When is the facility closed for more than just one day?
    - Weekends, holidays, extended spring or summer break periods.

- Are there any particular areas of the building that are unused even when the rest of the facility is operational? These may include:
    - Gymnasiums
    - Churches or rectories
    - Childcare areas
    - Particular classroom areas or wings of the building.

Step 4 Develop Your Plan

The principal goal of your plan will be to flush an adequate amount of water through your plumbing system in order to maintain fresh (safe) drinking water at all times, in all areas of your facility. In addition, you want to do this without unnecessarily wasting water.

Flushing is the easiest method whereby fresh water may be delivered from the water main. Because lead concentrations increase the longer the water is in contact with pipes or plumbing fixtures containing lead, reducing the water age (how long water sits in the pipe) will reduce the levels of lead in water.

Note: IDPH suggests the following program guidelines be considered as minimum steps:

1. *Locate the fixtures farthest from the entry point of the water service to the building and flush them for 10 minutes each morning.*
2. *Open all fixtures used for cooking and drinking and run until you feel the water temperature get colder.*

Additional information on flushing and other remedies is available in the U.S. Environmental Protection Agency's 3Ts for Reducing Lead in Drinking Water In Schools Technical Guidance.

Schools can request help from their supplier in identifying potential lead hazards and developing mitigation strategies. The water supplier can also educate the school on topics like corrosion control and water age.

Schools on well water or non-community water systems, can request help from the Illinois Section American Water Works Association (AWWA) or the Illinois Rural Water Association.

Your plan may likely include some if not all of these actions:

Mechanical Flushing requires the installation of devices such as valves or other similar equipment on the ends of long pipes that can be set to automatically flush at pre-determined intervals.

Licensed plumbers and engineers can help determine the type of device that should be installed and where to install the device.

Manual Flushing will likely require a variety of individuals to implement.

Faculty - Faculty members may be able to flush fixtures (sinks, drinking fountains, etc.) if they are nearby or in their classroom or work area.

Parents - Parent volunteers may be helpful in flushing fixtures in general areas or in organizing student volunteers to help with that job.

Students - Faculty and school administrators often are interested in providing students with additional responsibilities outside the classroom. Utilizing students to assist in the implementation of your WQMP can help teach them responsibility and better understand the importance of safe drinking water.

- **Develop a Student Water Patrol**

  Select a handful of students whom you believe are deserving of responsibility.

  If you have a public water utility, engage those professionals to explain the importance of safe drinking water and how the students can help protect their classmates by participating in a Student Water Patrol.

Step 5 Implement Your Plan

Remove the problem fixture(s) from service

Immediately upon learning that a fixture has tested positive for lead, it should be removed from service. *Install signs, remove handles or bag the device to prevent use until it can be addressed.*

Once the fixture has been addressed, validation testing is required and should be conducted in the same manner in which the initial testing was performed.

Persistent Problem Fixtures

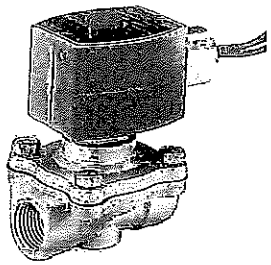
- For sources of water that are not corrected by the steps outlined previously, infrastructure mitigation strategies may be required.

- Source investigation involves sequential sampling of the problem fixture to determine the relative location of the source of lead. Sequential sampling consists of a series of samples taken at defined time intervals from a single fixture.

- A plumbing survey, including a determination of installed plumbing materials, fixtures and length of pipes, should be developed to identify known and possible sources.

- Permanent removal of fixtures and branch plumbing should only be undertaken with the advice of a professional engineer or licensed plumber. Identified sources of lead, such as lead pipes, leaded plumbing fixtures and lead solder, should be replaced by a registered plumbing contractor with materials that do not contain lead.

- Automatic flushing valves, installed by a licensed plumber, may be implemented to ensure adequate flushing of piping systems.



Working Together ... Administration, Faculty, Students, Parents and Water Professionals we can...

GET THE LEAD OUT !

* Illinois Section AWWA email: jdillon@isawwa.org

* Illinois Rural Water Association email: ilrwa@ilrwa.org

Questions regarding lead in schools should be directed to the:
Illinois Department of Public Health
Plumbing and Water Quality Program

Email: dph.leadh2o@illinois.gov