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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 #1798589-01

Attn: Mr. Dave Scarmardo, Director of Buildings & Grounds

Summary of Findings - Lead in Drinking Water Sampling & Lab Analysis Re:

Glen Ellyn School District #41

Lincoln School

380 Greenfield Avenue, Glen Ellyn, Illinois 60137

November 14, 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 Lincoln School located at 380 Greenfield Avenue in Glen Ellyn, Illinois on November 14, 2017. The current testing involved collecting drinking water samples from eighteen (18) 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 thirty-six (36) 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 eighteen (18) of the eighteen (18) 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:

Mr. Dave Scarmardo, Director of Buildings & Grounds Summary of Findings - Lead in Drinking Water Sampling & Lab Analysis Glen Ellyn School District #41 - Lincoln School 380 Greenfield Avenue, Glen Ellyn, Illinois 60137

- 1. The current testing and analysis was limited only to those eighteen (18) 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 13, 2017, following a day of typical school occupancy and usage within the facility. The sample collection by UAS began at 4:30 a.m. on November 14, 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 (μ g/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 (μ g/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 eighteen (18) locations/sources noted. Review of the current testing laboratory data reveals the following:

The results from eighteen (18) of the eighteen (18) 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 eighteen (18) 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 μ g Lead/L.

Zero (0) of the eighteen (18) 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

Mr. Dave Scarmardo, Director of Buildings & Grounds Summary of Findings - Lead in Drinking Water Sampling & Lab Analysis Glen Ellyn School District #41 - Lincoln School 380 Greenfield Avenue, Glen Ellyn, Illinois 60137

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.

A Dame

Thad Daniels

Director of Field Services

Lead Risk Assessor (IL 001047)

attachments: IDPH Spreadsheet Summary of Lead in Drinking Water

12/04/17 Laboratory Report & COCs

IDPH Mitigation Strategies

UAS' Inspector/Sample Collector License & Accreditation

Pace Laboratory Accreditation

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

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December 04, 2017

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

RE: Project: 178589-01 SD#41-Lincoln Elem

Pace Project No.: 10411780

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@pacelabs.com

Sylvia Horton

1(612)607-1700 Project Manager

Enclosures

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







CERTIFICATIONS

Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.:

10411780

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

Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louislana 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

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

West Virginia DEP Certification #: 382 Wisconsin Certification #: 999407970



SAMPLE SUMMARY

Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.: 10411780

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10411780001	LS-01a Eikay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780002	LS-01b Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780003	LS-02a Elkay Jug Filler Right	Water	11/14/17 04:30	11/20/17 10:30
10411780004	LS-02b Elkay Jug Filler Right	Water	11/14/17 04:30	11/20/17 10:30
10411780005	LS-03a Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780006	LS-03b Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780007	LS-04a Elkay Jug Filler Left	Water	11/14/17 04:30	11/20/17 10:30
10411780008	LS-04b Elkay Jug Filler Left	Water	11/14/17 04:30	11/20/17 10:30
10411780009	LS-05a Eikay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780010	LS-05b Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780011	LS-06a Elkay Jug Filler Right	Water	11/14/17 04:30	11/20/17 10:30
10411780012	LS-06b Elkay Jug Filler Right	Water	11/14/17 04:30	11/20/17 10:30
10411780013	LS-07a Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780014	LS-07b Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780015	LS-08a Nurse's Office Sink	Water	11/14/17 04:30	11/20/17 10:30
10411780016	LS-08b Nurse's Office Sink	Water	11/14/17 04:30	11/20/17 10:30
10411780017	LS-09a Lunch Serving Room Sink	Water	11/14/17 04:30	11/20/17 10:30
10411780018	LS-09b Lunch Serving Room Sink	Water	11/14/17 04:30	11/20/17 10:30
10411780019	LS-10a Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780020	LS-10b Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780021	LS-11a Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780022	LS-11b Elkay Drinking Fountain	Water	11/14/17 04:30	11/20/17 10:30
10411780023	LS-12a Room 104 Sink	Water	11/14/17 04:30	11/20/17 10:30
10411780024	LS-12b Room 104 Sink	Water	11/14/17 04:30	11/20/17 10:30
10411780025	LS-13a Room 104 Wash Basin Rig	Water	11/14/17 04:30	11/20/17 10:30
10411780026	LS-13b Room 104 Wash Basin Rig	Water	11/14/17 04:30	11/20/17 10:30
10411780027	LS-14a Room 104 Wash Basin Lef	Water	11/14/17 04:30	11/20/17 10:30
10411780028	LS-14b Room 104 Wash Basin Lef	Water	11/14/17 04:30	11/20/17 10:30
10411780029	LS-15a Room 105 Sink	Water	11/14/17 04:30	11/20/17 10:30
10411780030	LS-15b Room 105 Sink	Water	11/14/17 04:30	11/20/17 10:30
10411780031	LS-16a Room 105 Wash Basin Lef	Water	11/14/17 04:30	11/20/17 10:30
10411780032	LS-16b Room 105 Wash Basin Lef	Water	11/14/17 04:30	11/20/17 10:30
10411780033	LS-17a Room 105 Wash Basin Rig	Water	11/14/17 04:30	11/20/17 10:30
10411780034	LS-17b Room 105 Wash Basin Rig	Water	11/14/17 04:30	11/20/17 10:30
10411780035	LS-18a Faculty Lounge Sink-Roo	Water	11/14/17 04:30	11/20/17 10:30
10411780036	LS-18b Faculty Lounge Sink-Roo	Water	11/14/17 04:30	11/20/17 10:30



SAMPLE ANALYTE COUNT

Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.: 10411780

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10411780001	LS-01a Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780002	LS-01b Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780003	LS-02a Elkay Jug Filler Right	EPA 200.8	WBS	1	PASI-M
10411780004	LS-02b Elkay Jug Filler Right	EPA 200.8	WBS	1	PASI-M
10411780005	LS-03a Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780006	LS-03b Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780007	LS-04a Elkay Jug Filler Left	EPA 200.8	WBS	1	PASI-M
10411780008	LS-04b Elkay Jug Filler Left	EPA 200.8	WBS	1	PASI-M
10411780009	LS-05a Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780010	LS-05b Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780011	LS-06a Elkay Jug Filler Right	EPA 200.8	WBS	1	PASI-M
10411780012	LS-06b Elkay Jug Filler Right	EPA 200.8	WBS	1	PASI-M
10411780013	LS-07a Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780014	LS-07b Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780015	LS-08a Nurse's Office Sink	EPA 200.8	WBS	1	PASI-M
10411780016	LS-08b Nurse's Office Sink	EPA 200.8	WBS	1	PASI-M
10411780017	LS-09a Lunch Serving Room Sink	EPA 200.8	WBS	1	PASI-M
10411780018	LS-09b Lunch Serving Room Sink	EPA 200.8	WBS	1	PASI-M
10411780019	LS-10a Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780020	LS-10b Elkay Drinking Fountain	EPA 200.8	WBS	1	PASI-M
10411780021	LS-11a Elkay Drinking Fountain	EPA 200.8	RJS	1	PASI-M
10411780022	LS-11b Elkay Drinking Fountain	EPA 200.8	RJS	1	PASI-M
10411780023	LS-12a Room 104 Sink	EPA 200.8	RJS	1	PASI-M
10411780024	LS-12b Room 104 Sink	EPA 200.8	RJS	1	PASI-M
10411780025	LS-13a Room 104 Wash Basin Rig	EPA 200.8	RJS	1	PASI-M
10411780026	LS-13b Room 104 Wash Basin Rig	EPA 200.8	RJS	1	PASI-M
10411780027	LS-14a Room 104 Wash Basin Lef	EPA 200.8	RJS	1	PASI-M
10411780028	LS-14b Room 104 Wash Basin Lef	EPA 200.8	RJS	1	PASI-M
10411780029	LS-15a Room 105 Sink	EPA 200.8	RJS	1	PASI-M
10411780030	LS-15b Room 105 Sink	EPA 200.8	RJS	1	PASI-M
10411780031	LS-16a Room 105 Wash Basin Lef	EPA 200.8	RJS	1	PASI-M
10411780032	LS-16b Room 105 Wash Basin Lef	EPA 200.8	RJS	1	PASI-M
10411780033	LS-17a Room 105 Wash Basin Rig	EPA 200.8	RJS	1	PASI-M
10411780034	LS-17b Room 105 Wash Basin Rig	EPA 200.8	RJS	1	PASI-M
10411780035	LS-18a Faculty Lounge Sink-Roo	EPA 200.8	RJS	1	PASI-M
10411780036	LS-18b Faculty Lounge Sink-Roo	EPA 200.8	RJS	1	PASI-M



Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.:

Date: 12/04/2017 04:58 PM

10411780

Sample: LS-01a Elkay Drinking Fountain	Lab ID:	10411780001	Collecte	d: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	latrix: Water	
			Report						
Parameters	Results	Units	Limit ——————	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method; EPA	8.00						
Lead	ND	ug/L	0.10	0.010	1		11/29/17 21:14	7439-92-1	
Sample: LS-01b Elkay Drinking Fountain	Lab ID:	10411780002	Collected	d: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	latrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead	ND	ug/L	0.10	0.010	1		11/29/17 21:08	7439-92-1	
Sample: LS-02a Elkay Jug Filler Right		10411780003	Collected	d: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Comments: • This is a DW sample.			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS	Analytical	Method: EPA 2	200.8 Prepa	ration Meth	nod: EP/	A 200.8			
Lead	ND	ug/L	0.10	0.028	1	11/30/17 09:02	12/01/17 17:15	7439-92-1	
Sample: LS-02b Elkay Jug Filler Right	Lab ID:	10411780004	Collected	d: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead	ND	ug/L.	0.10	0.010	1		11/29/17 21:09	7439-92-1	
Sample: LS-03a Elkay Drinking Fountain	Lab ID:	10411780005	Collected	d: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2							
-	ND	ug/L	0.10	0.010	1		11/29/17 21:19		



Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.: 10411780

Date: 12/04/2017 04:58 PM

Sample:	LS-03b Elkay Drinking Fountain	Lab ID:	10411780006	Collected	11/14/1	7 04:30	Received: 11	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
	rajanjeleis	——————	OTALS.		IVIDE		repared			
200.8 ME	ET ICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead		ND	ug/L	0.10	0.010	1		11/29/17 21:	20 7439-92-1	
Sample:	LS-04a Elkay Jug Filler Left	Lab ID:	10411780007		: 11/14/1	7 04:30	Received: 11	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	ET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead		ND	ug/L	0.10	0.010	1		11/29/17 21:2	22 7439-92-1	
Sample:	LS-04b Elkay Jug Filler Left	Lab ID:	10411780008	Collected	11/14/1	7 04:30	Received: 11.	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	T ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead		ND	ug/L	0.10	0.010	1		11/29/17 21:2	23 74 39-92-1	
Sample:	LS-05a Elkay Drinking Fountain	Lab ID:	10411780009	Collected:	11/14/1	7 04:30	Received: 11	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	TICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead		ND	ug/L	0.10	0.010	1		11/29/17 21:2	24 7439-92-1	
Sample:	LS-05b Elkay Drinking Fountain	Lab ID:	10411780010	Collected:	11/14/1	7 04:30	Received: 11	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	T ICPMS, DW	Analytical	Method: EPA 2	200.8				-		
Lead		ND	ug/L	0.10	0.010	1		11/29/17 21:2	26 7439-92-1	



Project:

Lead

Date: 12/04/2017 04:58 PM

178589-01 SD#41-Lincoln Elem

Pace Project No.:

10411780

Sample: LS-06a Elkay Jug Filler Right	Lab ID:	10411780011	Collected	d: 11/14/1	7 04:30	Received: 11	/20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead	ND	ug/L	0.10	0.010	1		11/29/17 21:30	74 39-92-1	
Sample: LS-06b Elkay Jug Filler Right	Lab ID:	10411780012	Collected	d: 11/14/1	7 04:30	Received: 11/	/20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead	ND	ug/L	0.10	0.010	1		11/29/17 21:31	7439-92-1	
Sample: LS-07a Elkay Drinking Fountain	Lab ID:	10411780013	Collected	d: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead	ND	ug/L	0.10	0.010	1		11/29/17 21:33	7439-92-1	
Sample: LS-07b Elkay Drinking Fountain	Lab ID:	10411780014	Collected	i: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method; EPA 2	8.00						
Lead	ND	ug/L	0.10	0.010	1		11/29/17 21:35	7439-92-1	
Sample: LS-08a Nurse's Office Sin	k Lab ID:	10411780015	Collected	i: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
-									

REPORT OF LABORATORY ANALYSIS

0.10

0.010

0.12

ug/L

11/29/17 21:36 7439-92-1



Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.: 10411780

Date: 12/04/2017 04:58 PM

Sample:	LS-08b Nurse's Office Sin	k Lab ID:	10411780016	Collected	l: 11/14/1	7 04:30	Received: 11	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	ET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead		ND	ug/L	0.10	0.010	1		11/29/17 21:	37 7439-92-1	
Sample:	LS-09a Lunch Serving Room Sink	Lab ID:	10411780017	Collected	: 11/14/1	7 04:30	Received: 11	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	T ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead		1.8	ug/L	0.10	0.010	1		11/29/17 21:	38 7439-92-1	
Sample:	LS-09b Lunch Serving Room Sink	Lab ID:	10411780018	Collected	: 11/14/1	7 04:30	Received: 11	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	TICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead		ND	ug/L	0.10	0.010	1		11/29/17 21:3	39 7439-92-1	
Sample:	LS-10a Elkay Drinking Fountain	Lab ID:	10411780019		: 11/14/1	7 04:30	Received: 11	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	TICPMS, DW	Analytical	Method: EPA 2	200.8			,			
Lead		ND	ug/L	0.10	0.010	1		11/29/17 21:4	11 7439-92-1	
Sample:	LS-10b Elkay Drinking Fountain	Lab ID:	10411780020		: 11/14/1	7 04:30	Received: 11	/20/17 10:30	Matrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	T ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead		ND	ug/L	0,10	0.010	1		11/29/17 21:4	16 7439-92-1	



Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.:

Date: 12/04/2017 04:58 PM

10411780

Sample: LS-11a Elkay Drinking Fountain	Lab ID:	10411780021	Collected	d: 11/14/1	7 04:30	Received: 11/	/20/17 10:30 M	latrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead	ND	ug/L	0.10	0.010	1		12/03/17 20:55	7439-92-1	
Sample: LS-11b Elkay Drinking Fountain	Lab ID:	10411780022	Collected	d: 11/14/1	7 04:30	Received: 11/	/20/17 10:30 M	latrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead	ND	ug/L	0.10	0.010	1		12/03/17 21:14	7439-92-1	
Sample: LS-12a Room 104 Sink	Lab iD:	10411780023	Collected	d: 11/14/1	7 04:30	Received: 11/	/20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead	0.21	u g /L	0.10	0.010	1		12/03/17 21:17	7439-92-1	
Sample: LS-12b Room 104 Sink	Lab ID:	10411780024	Collected	i: 11/14/1	7 04:30	Received: 11/	/20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead	0.15	ug/L	0.10	0.010	1		12/03/17 21:20	7439-92-1	
Sample: LS-13a Room 104 Wash Basin Rig	Lab ID:	10411780025	Collected	i: 11/14/1	7 04:30	Received: 11/	/20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method; EPA 2	200.8						
Lead	0.32	ug/L	0.10	0.010	1		12/03/17 21:23	7439-92-1	



Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.: 10411780

Date: 12/04/2017 04:58 PM

Sample: LS-13b Room 104 Wash Basin Rig	Lab ID:	10411780026		d: 11/14/1	7 04:30	Received: 11	/20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead	0.13	ug/L	0.10	0.010	1		12/03/17 21:26	7439-92-1	
Sample: LS-14a Room 104 Wash Basin Lef	Lab ID:	10411780027	Collecte	d; 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead	0.38	ug/L	0.10	0.010	1		12/03/17 21:30	7439-92-1	
Sample: LS-14b Room 104 Wash Basin Lef	Lab ID:	10411780028	Collecte	d: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	200.8					,	
Lead	ND	ug/L	0.10	0.010	1		12/03/17 21:33	7439-92-1	
Sample: LS-15a Room 105 Sink	Lab ID:	10411780029	Collecte	d: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead	0.70	ug/L	0.10	0.010	1		12/03/17 21:36	7439-92-1	
Sample: LS-15b Room 105 Sink	Lab ID:	10411780030	Collecte	d: 11/14/1	7 04:30	Received: 11/	20/17 10:30 M	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead	0.11	ug/L	0.10	0.010	1		12/03/17 21: 4 5	7439-92-1	



Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.:

Date: 12/04/2017 04:58 PM

10411780

Sample:	LS-16a Room 105 Wash Basin Lef	Lab ID:	10411780031	Collecte	d: 11/14/1	7 04:30	Received: 11	/20/17 10:30 M	atrix: Water	
	D (D #	11.0	Report	MDI	DE	D	0	CACNa	Oud
	Parameters	Results -	Units		MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	ET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead		0.34	ug/L	0.10	0.010	1		12/03/17 21:48	7439-92-1	
Sample:	LS-16b Room 105 Wash Basin Lef	Lab ID:	10411780032		d: 11/14/1	7 04:30	Received: 11.	/20/17 10:30 M	atrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
	- diameters	-			HIDE		- Toparou	7 4 101 17 20 4		
200.8 ME	T ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead		0.11	ug/L	0.10	0.010	1		12/03/17 21:52	7439-92-1	
Sample:	LS-17a Room 105 Wash Basin Rig	Lab ID:	10411780033	Collected	d: 11/14/1	7 04:30	Received: 11	/20/17 10:30 M	atrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	ET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead		0.47	ug/L	0.10	0.010	1		12/03/17 21:55	7439-92-1	
Sample:	LS-17b Room 105 Wash Basin Rig	Lab ID:	10411780034	Collected	d: 11/14/1	7 04:30	Received: 11	/20/17 10:30 M	atrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	ET ICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead		0.18	ug/L	0.10	0.010	1		12/03/17 21:58	7439-92-1	
Sample:	LS-18a Faculty Lounge Sink-Roo	Lab ID:	10411780035	Collected	d: 11/14/1	7 04:30	Received: 11	/20/17 10:30 M	atrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	ET ICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead		0.46	ug/L	0.10	0.010	1		12/03/17 22:01	7439-92-1	





Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.:

10411780

Sample: LS-18b Faculty Lounge Sink-Roo Lab ID: 10411780036

Collected: 11/14/17 04:30

Received: 11/20/17 10:30

Matrix: Water

Parameters Results Units

Report Limit

MDL

DF

1

Prepared Analyzed

CAS No.

Qual

200.8 MET ICPMS, DW

Analytical Method: EPA 200.8

Lead

Date: 12/04/2017 04:58 PM

ug/L

ND

0.10

0.010

12/03/17 22:04 7439-92-1



QUALITY CONTROL DATA

Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.:

10411780

QC Batch:

510205

Analysis Method:

EPA 200.8

QC Batch Method:

EPA 200.8

Analysis Description:

ICPMS Metals, Drinking Water

Associated Lab Samples:

10411780001, 10411780002, 10411780004, 10411780005, 10411780006, 10411780007, 10411780008, 10411780009, 10411780010, 10411780011, 10411780012, 10411780013, 10411780014, 10411780015,

10411780016, 10411780017, 10411780018, 10411780019, 10411780020

METHOD BLANK: 2775005

Matrix: Water

ND

Associated Lab Samples:

10411780001, 10411780002, 10411780004, 10411780005, 10411780006, 10411780007, 10411780008, 10411780009, 10411780010, 10411780011, 10411780012, 10411780013, 10411780014, 10411780015,

10411780016, 10411780017, 10411780018, 10411780019, 10411780020

Blank

Reporting

Parameter

Units

ug/L

Units

10411780001

Units

ug/L

Result

Result

Limit 0.10 MDL.

0.010

Analyzed 11/29/17 20:59 Qualifiers

LABORATORY CONTROL SAMPLE:

Parameter

2775006

Spike

LCS Result LCS % Rec % Rec

. ...

Lead

Lead

Lead

Lead

ug/L

Units

ug/L

Conc. 100

MS

Spike

Conc.

101

2778521

Result

101

100

101

Limits

85-115

Qualifiers

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

2778520

ND

MSD

Conc.

MSD Spike MS

MSD Result

99.4

MS % Rec

101

% Rec

MSD % Rec % Rec Limits

Max RPD RPD

 $\frac{D}{2} \frac{RPD}{20} \frac{Qual}{}$

MATRIX SPIKE SAMPLE:

Date: 12/04/2017 04:58 PM

Parameter

Parameter

2778522

10411780012 Result

100

)12 Spike Conc.

ND

100

Spike MS Conc. Result

99.6

MS

70-130

Qualifiers

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.



QUALITY CONTROL DATA

Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.:

10411780

QC Batch:

510235

Analysis Method:

EPA 200.8

QC Batch Method:

EPA 200.8

Analysis Description:

ICPMS Metals, Drinking Water

Associated Lab Samples:

10411780021, 10411780022, 10411780023, 10411780024, 10411780025, 10411780026, 10411780027, 10411780028, 10411780029, 10411780030, 10411780031, 10411780032, 10411780033, 10411780034,

10411780035, 10411780036

METHOD BLANK: 2775168

Matrix: Water

Associated Lab Samples:

10411780021, 10411780022, 10411780023, 10411780024, 10411780025, 10411780026, 10411780027, 10411780028, 10411780029, 10411780030, 10411780031, 10411780032, 10411780033, 10411780034,

10411780035, 10411780036

Blank

Reporting

Parameter

Units

Result Limit MDL

Analyzed

Qualifiers

Lead

ug/L

ND 0.10

0.010 12/03/17 20:30

85-115

LABORATORY CONTROL SAMPLE: 2775169

Spike Conc.

MS

Spike

LCS Result

LCS % Rec % Rec Limits

Qualifiers

Parameter Units 109 100 109 Lead ug/L

10411780021

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

2779785

2779786

MSD

MS MSD

MS

MSD % Rec

Max

% Rec % Rec RPD RPD Qual Conc. Result Result Limits Units Result Conc. Parameter 20 70-130 0 Lead ug/L ND 100 100 101 101 101 101

Spike

MATRIX SPIKE SAMPLE:

2779787

ug/L

10412155044

Spike

MS

MS

Parameter Lead

Date: 12/04/2017 04:58 PM

Units

Result

0.10

Conc. 100

Result 104 % Rec 104 % Rec Limits 70-130

Qualifiers

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.



QUALITY CONTROL DATA

Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.:

QC Batch Method:

10411780

QC Batch:

510987

EPA 200.8

Analysis Method:

EPA 200.8

Analysis Description:

200.8 MET

Associated Lab Samples: 10411780003

METHOD BLANK: 2779051

Matrix: Water

ND

Associated Lab Samples: 10411780003

Blank

Result

Reporting Limit

0.10

MDL Analyzed

12/01/17 16:48

Qualifiers

Lead

Lead

LABORATORY CONTROL SAMPLE: Parameter

Parameter

2779052 Units

Units

ug/L

Spike Conc.

LCS Result

LCS % Rec

% Rec Limits

85-115

Qualifiers

Lead

Parameter

Date: 12/04/2017 04:58 PM

ug/L

10411759021

Result

Units

ug/L

100

96.1

2779054

MS

96

104

0.028

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

2779053

MSD

100

MSD

MS

MSD % Rec

Max Qual

0.44

MS Spike Conc.

100

Spike Conc.

Result Result 104

% Rec 103 % Rec Limits 103 70-130 RPD RPD

0 20

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





QUALIFIERS

Project:

178589-01 SD#41-Lincoln Elem

Pace Project No.:

10411780

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

Date: 12/04/2017 04:58 PM

PASI-M Pace Analytical Services - Minneapolis



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 178589-01 SD#41-Lincoln Elem

Pace Project No.: 10411780

Date: 12/04/2017 04:58 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10411780001	LS-01a Elkay Drinking Fountain	EPA 200.8	510205		
10411780002	LS-01b Elkay Drinking Fountain	EPA 200.8	510205		
10411780004	LS-02b Elkay Jug Filler Right	EPA 200.8	510205		
10411780005	LS-03a Elkay Drinking Fountain	EPA 200.8	510205		
10411780006	LS-03b Elkay Drinking Fountain	EPA 200.8	510205		
10411780007	LS-04a Elkay Jug Filler Left	EPA 200.8	510205		
10411780008	LS-04b Elkay Jug Filler Left	EPA 200.8	510205		
10411780009	LS-05a Elkay Drinking Fountain	EPA 200.8	510205		
10411780010	LS-05b Elkay Drinking Fountain	EPA 200.8	510205		
10411780011	LS-06a Elkay Jug Filler Right	EPA 200.8	510205		
10411780012	LS-06b Elkay Jug Filler Right	EPA 200.8	510205		
10411780013	LS-07a Elkay Drinking Fountain	EPA 200.8	510205		
10411780014	LS-07b Elkay Drinking Fountain	EPA 200.8	510205		
10411780015	LS-08a Nurse's Office Sink	EPA 200.8	510205		
10411780016	LS-08b Nurse's Office Sink	EPA 200.8	510205		
10411780017	LS-09a Lunch Serving Room Sink	EPA 200.8	510205		
10411780018	LS-09b Lunch Serving Room Sink	EPA 200.8	510205		
10411780019	LS-10a Elkay Drinking Fountain	EPA 200.8	510205		
10411780020	LS-10b Elkay Drinking Fountain	EPA 200.8	510205		
10411780021	LS-11a Elkay Drinking Fountain	EPA 200.8	510235		
10411780022	LS-11b Elkay Drinking Fountain	EPA 200.8	510235		
10411780023	LS-12a Room 104 Sink	EPA 2 00.8	510235		
10411780024	LS-12b Room 104 Sink	EPA 200.8	510235		
10411780025	LS-13a Room 104 Wash Basin	EPA 200.8	510235		
10411780026	Rig LS-13b Room 104 Wash Basin Rig	EPA 200.8	510235		
10411780027	LS-14a Room 104 Wash Basin Lef	EPA 200.8	510235		
10411780028	LS-14b Room 104 Wash Basin Lef	EPA 200.8	510235		
10411780029	LS-15a Room 105 Sink	EPA 200.8	510235		
10411780030	LS-15b Room 105 Sink	EPA 200.8	510235		
10411780031	LS-16a Room 105 Wash Basin Lef	EPA 200.8	510235		
0411780032	LS-16b Room 105 Wash Basin Lef	EPA 200.8	510235		
10411780033	LS-17a Room 105 Wash Basin Rig	EPA 200.8	510235		
10411780034	LS-17b Room 105 Wash Basin Rig	EPA 200.8	510235		
10411780035	LS-18a Faculty Lounge Sink-Roo	EPA 200.8	510235		
10411780036	LS-18b Faculty Lounge Sink-Roo	EPA 200.8	510235		
10411780003	LS-02a Elkay Jug Filler Right	EPA 200.8	5109 87	EPA 200.8	5114 4 2

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

J. (N/A) Samples Samples 00 \(\) しつり S 700 (N/A) 万二 00 D D 0 O Cooler ď Cualody Sealed The Requestion Agence 7 (N/A) Received on -3 25 Residual Chlorine (Y/N) TEMP IA C 1730 1320 11/14/2017 11 5/21 | 1/22/17 170111 Keith Jarvis
DATE Signed: 8 200.6 NA Analyses test Jeff Dunton 1320Kathmi 40981 Invoice Information: Attention: Same Company Name: Same Pace Quote: Pace Project Manager: Pace Profile #: Address: Same (430 Section C auo # OF CONTAINERS 11/5/11 10/21/ DAMPLE TEMP AT COLLECTION SAMBLERINAMERANDISIGNAFILIR PRINT Name of SAMPLER TIME 4:30a 4:30a 11/14/2017 4:302 Project Name: S.D. #41 - Lincoln Elementary School Project #: 1798589-01 욻 11/14/2017 11/14/2017 11/14/2017 1/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 DATE COLLECTED TIME START DATE Required Project Information: Thad Daniels SAMPLE TYPE (G=GRAB C=COMP) DWG DWG DWG OW OW DWG <u>0</u>/\d DWG DWG OW G DW DW Purchase Order #: MATRIX CODE (see valid codes to left) Report Ta: Copy Ta: Section B ក្នុង ក្នុង ក្នុង MATRIX
Drinking Water
Wares
Wares
Wares
Product
Soulisolid
Cili
Wipe
Wipe
Air
Air
Thesue S-01b Elkay Drinking Fountain Right - Learning Center S-01a Elkay Drinking Fountain Right - Learning Center LS-03b Elkay Drinking Fountain Left - Leaming Center LS-03a Elkay Drinking Fountain Left- Leaming Center Fax 630-691-1819 S-02a Elkay Jug Filter Right - Learning Center LS-02b Elkay Jug Filler Right - Learning Center LS-04a Elkay Jug Filler Left - Learning Center Water Last Used in School Building on: 11/13/2017 @ 6:00 p.m. LS-04b Elkay Jug Filler Left - Leaming Center LS-05a Elkay Drinking Fountain Right - Gym LS-05b Elkay Drinking Fountain Right - Gym Required Client Information: Company: United Analytical Services, Inc. (UAS) One Character per box. (A-Z, 0-91, -) Sample lds must be unique LS-06a Elkay Jug Filler Right -Gym Elkay Jug Filler Right -Gym Standard TA SAMPLE ID 1429 Centre Circle Drive Doweners Grove, Illinois 60515 Email: tdaniels@uas1.com 630-691-827 Requested Due Date: Page 18 of 24 # MaTi



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately. $|oldsymbol{b}| \, \mathcal{M} \, \mathcal{M}$

ブス 023 707 020 Samples T 010 SAMPLECONDITIONS (N/N) Ō 7.7 Custody Sealed Cnoler ö Regulation, Agent (M/Y) Received on 먑 27 Residual Chlorine (YVV) Page: TEMP In C 320 533 W W W Repugated Aparts Sidered 7441 (1/22/17) ころん DXT THE Keith Jarvis DATE Signed: ACCEPTED 50% ATRUSTICAL 8.002 Be teeT eseylenA ΝÁ 40981 Jeff Dunton Preservatives Pace Ouote:
Pace Project Manager:
Pace Profile #: Attention: Same Company Name: Same Invoice information: Address: Same 1320 [43] Section C andl # OF CONTAINERS 14 FS / 12 | SAMPLER WANTERIND SIGNATORE SAMPLE TEMP AT COLLECTION PRINT Name of SAMPLER: DATE 4:30g 4.30a 4:30a 4;30a 4:30a 4:30s 4:30a 4.30a 4:30 4:30a 11/14/2017 4:30a 11/14/2017 4:30a Purchase Order #. Project Name: S.D. #41 - Lincoln Elementary School 11/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 11/14/2017 DATE COLLECTED RE-MOURSHED BY A SPEEDER 30 START DATE Required Project Information: Thad Daniels SAMPLE TYPE (G=GRAB C=COMP) D M DWG DWG D M Q DMO OW OW <u>ئ</u> 0 DWG DWG 0 MQ MATRIX CDDE (see valid codes to left) Report To: Copy To: Section B MATRIX Drixting Wazer Wester Waste Wazer Product SoakSesied Oil Wepe Ar Caher Tissue LS-11b Elkay Drinking Fountain Right- Outside Room 101 LS-11a Elkay Drinking Fountain Right-Outside Room 101 LS-10a Elkay Drinking Fountain Left - Outside Room 101 LS-10b Elkay Drinking Fountain Left - Outside Room 101 Fax: 630-691-1819 Nater Last Used in School Building on: 11/13/2017 @ 8:00 p.m United Analytical Services, Inc. (UAS) Elkay Drinking Fountain Left -Gym Elkay Drinking Fountain Left -Gym ADDITIONAL COMMENTS (A-Z, 0-3 f, -) Sample (ds must be unique Standard TAT _S-08a Lunch Serving Room Sink LS-095 Lunch Serving Room Sink One Character per box. SAMPLE ID 1429 Centre Circle Driva S-08b Nurse's Office Sink LS-08a Nurse's Office Sink Email: tdaniels@uas1,com -S-12a Room 104 Sink LS-12b Room 104 Sink Doweners Grave, Illinois 80515 Required Client Information: 630-691-8271 Requested Due Date: S-07a LS-07b Ņ • a) Š £ ω Flage 19 of 24 'n ú ١ # WELL

11/14/2017



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately. 40881 Section C
Invoice Information:
Attention: Same
Company Name: Same
Address: Same Section B
Required Project Information:
Report To: Thad Daniels
Copy To: Purchase Order #; Required Client Information:
Company: United Analytical Services, Inc. (UAS)
Address: 1429 Centre Circle Drive
Doverners Grove, Illinois 60515
Email: <u>trianiels@uas1.com</u>

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Pace Analytical*

Document Name:

Sample Condition Upon Receipt Form

Document No.: F-MN-L-213-rev.21 Document Revised: 30Aug2017

Page 1 of 2

Issuing Authority:
Pace Minnesota Quality Office

Sample Condition Client Name: Upon Receipt \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		PiQji	ect #: WV# · 10411780
Justin Amal	who of		1 1 1 1
ourier: Fed Ex UPS	ŰÜŰŠPŠ	Client	
Commercial Pace SpeeDee	Other:_		10411780
Tracking Number: 1215-5349-30	45/30	16/395	
Custody Seal on Cooler/Box Present? Yes	No (75%)	り 上午のし Seals Intact?	Yes No Optional: Proj. Due Date: Proj. Name:
Packing Material: Bubble Wrap Bubble Ba		e Other:	Temp Blank? 🔲 Yes 🐧
Used: G87A9155100842 Cooler Temp Read (°C): Correction F. SDA Regulated Soll (M/A, water sample)	Corrected (°C)	15.4/	Biological Tissue Frozen? Yes No. AN Date and Initials of Person Examining Contents:
d samples originate in a quarantine zone within the Unite C, NM, NY, OK, OR, SC, TN, TX or VA (check maps)?		∐Yes	□No including Hawaii and Puerto Rico)? □Yes □
If Yes to either question, fill out a l	Regulated Soi	l Checklist (F-N	N-Q-338) and include with SCUR/COC paperwork.
			COMMENTS:
nain of Custody Present?	Μχes	□No	1.
nain of Custody Filled Out?	Yes	□No	2.
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mpler Name and/or Signature on COC?	ýes	□No □N	/A /A.
mples Arrived within Hold Time?	⊠Yes	□No	5.
ort Hold Time Analysis (<72 hr)?	Yes	<u>N</u> No	6.
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fficient Volume?	∑ Yes	□No	8.
rrect Containers Used?	yes	□No	9.
-Pace Containers Used?	Yes .	□No	
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containers needing preservation are found to be in		A' ₹.	Sample #
mpliance with EPA recommendation? NO3, HzSO4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	□Yes	□No ╭\\\\	Λ
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O/8015 (water) and Dioxln.	☐Yes	□No ZN/	A completed: preservative: 117775
adspace in VOA Vials (>6mm)?	Yes	□No □N/	A 14.
p Blank Present?	. □Yes	□No [ÀN/	A 15.
p Blank Custody Seals Present?	□Yes	□No · · · · · · · · · · · · · · · · · · ·	A
ce Trip Blank Lot # (if purchased):		-	
CLIENT NOTIFICATION/RESOLUTION			Field Data Required? Yes No
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Document Name:
Sample Condition Upon Receipt Form
Document No.:
F-MN-L-213-rev.21

Document Revised: 30Aug2017
Page 2 of 2
Issuing Authority:
Pace Minnesota Quality Office

SCUR Exceptions:

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Document Name: Sample Condition Upon Receipt Form Document No.: F-IVIN-L-213-rev.21

Document Revised: 30Aug2017 Page 2 of 2 Issuing Authority: Pace Minnesota Quality Office

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Pace Analytical*

Document Name: Sample Condition Upon Receipt Form Document No.: F-MN-L-213-rev.21

Document Revised: 30Aug2017 Page 2 of 2 Issuing Authority: Pace Minnesota Quality Office

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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).



LEAD RISK ASSESSOR LICENSE

LEAD ID ISSUED 001047 1/17/2017

Thad Daniels 1335 Fagan Road Batavia, IL 60510 EXPIRES 1/31/2018



ILLINOIS LEAD PROGRAM
Environmental Health

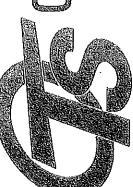
Alteration of this license shall result in legal action RISK ASSESSOR CERTIFICATE EXPIRES 3/8/2019

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

Nationally Accredited by PHAB



DESCRIPTIONS TO A TOPO

Occupational Training & Supply, Inc. certifies that

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, Director way DeSalo



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

John D. Soci

Certificate No.:

003998

Expiration Date:

12/11/2017

Issued On:

11/15/2016

State of Illinois Environmental Protection Agency

Awards the Certificate of Approval

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

Arsenic

Beryllium

Chromium

Lead

Mercury

Selenium

Thallium

Method: USEPA245.1R3.0

Matrix Type: Potable Water

Mercury

Method: USEPA300.0R2.1

Matrix Type: Potable Water

Bromide

Fluoride

Nitrite

Method: USEPA353.2R2.0

Matrix Type: Potable Water

Nitrate

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

1,1,2,2-Tetrachloroethane

1,1-Dichloroethane

Method: SM4500P-E,20Ed

Orthophosphate

003998

Certificate No.:

Antimony

Barium

Cadmium

Copper

Manganese Nickel

Silver

Zinc

Chloride

Nitrate

Sulfate

Nitrite

1,1,1-Trichloroethane

1,1,2-Trichloroethane

1,1-Dichloroethene

Page 3 of 18

Tuesday, November 15, 2016

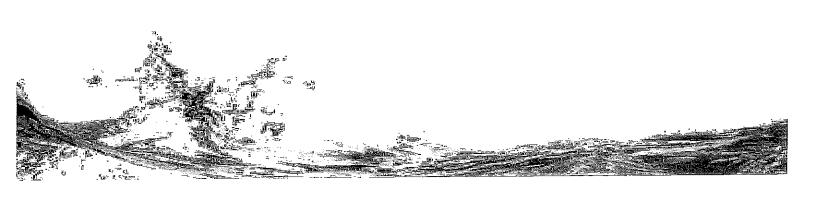
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Mitigation Strategies



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.



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:

- Locate the fixtures farthest from the entry point of the water service to the building and flush them for 10 minutes each morning.
- 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 <u>3Ts for Reducing Lead in Drinking Water In Schools Technical Guidance</u>.

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.



Implement Your Plan

Remove the problem fixture(s) from service

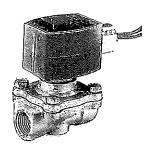
Immediately upon learning that a fixture has tested positive for lead, it should be removed from service. *Install signs, remove handles or bag the device to prevent use until it can be addressed.*



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@işawwa.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