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E-Mail: uasinc@uas1.com

December 7, 2017

Board of Education Queen Bee School District #16 1560 Bloomingdale Road Glendale Heights, Illinois 60139 **UAS Project #1798621-01** 

Attn: Mr. Dick Mabberley, Director of Buildings and Grounds

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

**Pheasant Ridge Elementary School** - 43 Stevenson Drive, Glendale Heights, IL

November 14, 2017

Dear Mr. Mabberley:

United Analytical Services, Inc. (UAS) prepared this executive summary of findings for the drinking water sampling performed at Queen Bee School District #16's Pheasant Ridge Elementary School located at 43 Stevenson Drive in Glendale Heights, Illinois on November 14, 2017. The current testing involved collecting drinking water samples from ALL thirteen (13) 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 twenty-six (26) water samples were collected during this current assessment.

It should be noted that the current sampling at this Queen Bee School District #16 school facility included only the IDPH required drinking water and/or potable water sources within the school building, as noted.

The laboratory results reveal that the reported concentrations for thirteen (13) of the thirteen (13) drinking water samples resulted in concentrations below the IDPH public notification/communication target level of 5  $\mu$ g Lead/L. Zero (0) of the samples revealed a drinking water concentration above the IDPH public notification/communication target level of 5  $\mu$ g 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:

December 7, 2017
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- 1. The current testing and analysis was limited only to those thirteen (13) 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 Queen Bee School District #16 (Queen Bee S.D. #16) 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 Queen Bee #16. Queen Bee S.D. #16 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 5:30 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 Queen Bee School District #16. 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.

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## 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 thirteen (13) locations/sources noted. Review of the current testing laboratory data reveals the following:

The results from thirteen (13) of the thirteen (13) 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 thirteen (13) 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  $\mu$ g Lead/L.

Zero (0) of the thirteen (13) 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, Queen Bee School District #16 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. Queen Bee School District #16 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

Mr. Dick Mabberley, Director of Buildings and Grounds Summary of Findings - Lead in Drinking Water Sampling & Lab Analysis Queen Bee School District #16 <u>Pheasant Ridge Elementary School</u> -43 Stevenson Drive, Glendale Heights, IL 60139

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 Queen Bee School District #16. If you have any questions regarding this information, please do not hesitate to contact our office.

Sincerely,

UNITED ANALYTICAL SERVICES, INC.

1. V. Damal

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: 1798621-01 S.D.#16-Pheasant

Pace Project No.: 10411759

## 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,

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Sylvia Hunter

sylvia.hunter@pacelabs.com

1(612)607-1700 Project Manager

Sylvia Horter

Enclosures

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





## **CERTIFICATIONS**

Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

10411759

## 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

Indiana Certification #: C-MN-01 lowa 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



## SAMPLE SUMMARY

Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.: 10411759

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10411759001	PR-01a 2nd FI NE Hallway DWC L	Water	11/14/17 05:30	11/20/17 10:30
10411759002	PR-01b 2nd FI NE Hallway DWC L	Water	11/14/17 05:30	11/20/17 10:30
10411759003	PR-02a 2nd Floor NE Hallway BF	Water	11/14/17 05:30	11/20/17 10:30
10411759004	PR-02b 2nd Floor NE Hallway BF	Water	11/14/17 05:30	11/20/17 10:30
10411759005	PR-03a 2nd FI NE Hallway DWC R	Water	11/14/17 05:30	11/20/17 10:30
10411759006	PR-03b 2nd FI NE Hailway DWC R	Water	11/14/17 05:30	11/20/17 10:30
10411759007	PR-04a 2nd Fi NW Hallway DWCLe	Water	11/14/17 05:30	11/20/17 10:30
10411759008	PR-04b 2nd Floor NW Hallway DW	Water	11/14/17 05:30	11/20/17 10:30
10411759009	PR-05a 2nd Floor NW Hallway DW	Water	11/14/17 05:30	11/20/17 10:30
10411759010	PR-05b 2nd Floor NW Hallway DW	Water	11/14/17 05:30	11/20/17 10:30
10411759011	PR-06a 1st FI NE Hallway DWC L	Water	11/14/17 05:30	11/20/17 10:30
10411759012	PR-06b 1st FI NE Hallway DWC L	Water	11/14/17 05:30	11/20/17 10:30
10411759013	PR-07a 1st FI NE Hallway DWC B	Water	11/14/17 05:30	11/20/17 10:30
10411759014	PR-07b 1st FI NE Hallway DWC B	Water	11/14/17 05:30	11/20/17 10:30
10411759015	PR-08a 1st FI NE Hallway DWC R	Water	11/14/17 05:30	11/20/17 10:30
10411759016	PR-08b 1st FI NE Hallway DWC R	Water	11/14/17 05:30	11/20/17 10:30
10411759017	PR-09a 1st FI NW Hallway DWC L	Water	11/14/17 05:30	11/20/17 10:30
10411759018	PR-09b 1st FI NW Hallway DWC L	Water	11/14/17 05:30	11/20/17 10:30
10411759019	PR-10a 1st FI NW Hallway DWC R	Water	11/14/17 05:30	11/20/17 10:30
10411759020	PR-10b 1st FI NW Hallway DWC R	Water	11/14/17 05:30	11/20/17 10:30
10411759021	PR-11a Gymnasium DWC Left	Water	11/14/17 05:30	11/20/17 10:30
10411759022	PR-11b Gymnasium DWC Left	Water	11/14/17 05:30	11/20/17 10:30
10411759023	PR-12a Gymnasium DWC Right	Water	11/14/17 05:30	11/20/17 10:30
10411759024	PR-12b Gymnasium DWC Right	Water	11/14/17 05:30	11/20/17 10:30
10411759025	PR-13a Gymnasium BFS	Water	11/14/17 05:30	11/20/17 10:30
10411759026	PR-13b Gymnasium BFS	Water	11/14/17 05:30	11/20/17 10:30



## **SAMPLE ANALYTE COUNT**

Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.: 10411759

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10411759001	PR-01a 2nd FI NE Hallway DWC L	EPA 200.8	WBS	1	PASI-M
10411759002	PR-01b 2nd Fi NE Hallway DWC L	EPA 200.8	WBS	1	PASI-M
10411759003	PR-02a 2nd Floor NE Hallway BF	EPA 200.8	WBS	1	PASI-M
10411759004	PR-02b 2nd Floor NE Hallway BF	EPA 200.8	WBS	1	PASI-M
10411759005	PR-03a 2nd FI NE Hallway DWC R	EPA 200.8	WBS	1	PASI-M
10411759006	PR-03b 2nd FI NE Hallway DWC R	EPA 200.8	WBS	1	PASI-M
10411759007	PR-04a 2nd FI NW Hallway DWCLe	EPA 200.8	WBS	1	PASI-M
10411759008	PR-04b 2nd Floor NW Hallway DW	EPA 200.8	WBS	1	PASI-M
10411759009	PR-05a 2nd Floor NW Hallway DW	EPA 200.8	WBS	1	PASI-M
10411759010	PR-05b 2nd Floor NW Hallway DW	EPA 200.8	WBS	1	PASI-M
10411759011	PR-06a 1st FI NE Hallway DWC L	EPA 200.8	WBS	1	PASI-M
10411759012	PR-06b 1st FI NE Hallway DWC L	EPA 200.8	WBS	1	PASI-M
10411759013	PR-07a 1st FI NE Hallway DWC B	EPA 200.8	WBS	1	PASI-M
10411759014	PR-07b 1st FI NE Hallway DWC B	EPA 200.8	WBS	1	PASI-M
10411759015	PR-08a 1st Fi NE Hallway DWC R	EPA 200.8	WBS	1	PASI-M
10411759016	PR-08b 1st FI NE Hallway DWC R	EPA 200.8	WBS	1	PASI-M
10411759017	PR-09a 1st FI NW Hallway DWC L	EPA 200.8	WBS	1	PASI-M
10411759018	PR-09b 1st FI NW Hallway DWC L	EPA 200.8	WBS	1	PASI-M
10411759019	PR-10a 1st FI NW Hallway DWC R	EPA 200.8	WBS	1	PASI-M
10411759020	PR-10b 1st F! NW Hallway DWC R	EPA 200.8	WBS	1	PASI-M
10411759021	PR-11a Gymnasium DWC Left	EPA 200.8	WBS	1	PASI-M
10411759022	PR-11b Gymnasium DWC Left	EPA 200.8	WBS	1	PASI-M
10411759023	PR-12a Gymnasium DWC Right	EPA 200.8	WBS	1	PASI-M
10411759024	PR-12b Gymnasium DWC Right	EPA 200.8	WBS	1	PASI-M
10411759025	PR-13a Gymnasium BFS	EPA 200.8	WBS	1	PASI-M
10411759026	PR-13b Gymnasium BFS	EPA 200.8	WBS	1	PASI-M



Project:

Date: 12/04/2017 04:57 PM

1798621-01 S.D.#16-Pheasant

Pace Project No.:

10411759

Sample:	PR-01a 2nd FI NE Hallway DWC L	Lab ID:	10411759001	Collecte	d: 11/14/1	7 05:30	Received: 11	/20/17 10:30	Matrix: Water	
				Report						
	Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	ET ICPMS, DW	Analytical	Method: EPA	200.8						
Lead		ND	ug/L	0.10	0.010	1		11/22/17 20:0	07 7439-92-1	
Sample:	PR-01b 2nd FI NE Hallway DWC L	Lab ID:	10411759002	Collecte	d: 11/14/1	7 05:30	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	200.8						
Lead		ND	ug/L	0.10	0.010	1		11/22/17 20:	13 7439-92-1	
Sample:	PR-02a 2nd Floor NE Hallway BF	Lab ID:	10411759003	Collected	d: 11/14/1	7 05:30	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	200.8						
Lead		ND	ug/L	0.10	0.010	1		11/22/17 20:3	15 7439-92-1	
Sample:	PR-02b 2nd Floor NE Hallway BF	Lab ID:	10411759004	Collected	d: 11/14/1	7 05:30	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	200.8						
Lead		ND	ug/L	0.10	0.010	1		11/22/17 20:1	16 7439-92-1	
Sample:	PR-03a 2nd FI NE Hallway DWC R	Lab ID:	10411759005	Collected	d: 11/14/1	7 05:30	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	200.8						
Lead		ND	ug/L	0.10	0.010	1		11/22/17 20:1	18 7439-92-1	



Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

Date: 12/04/2017 04:57 PM

10411759

Sample: PR-03b 2nd FI NE Hallway DWC R	/ Lab ID:	10411759006	Collecte	d: 11/14/1	7 05:30	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		11/22/17 20:19	7439-92-1	
Sample: PR-04a 2nd Fl NW Hallway DWCLe	y Lab ID:	10411759007		d: 11/14/1	7 05:30	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		11/22/17 20:21	7439-92-1	
Sample: PR-04b 2nd Floor NW Hallway DW	Lab ID:	10411759008	Collected	d: 11/14/1	7 05:30	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	0.14	ug/L	0.10	0.010	1		11/22/17 20:26	7439-92-1	
Sample: PR-05a 2nd Floor NW Hallway DW	Lab ID:	10411759009	Collected	d: 11/14/1	7 05:30	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		11/22/17 20:27	7439-92-1	
Sample: PR-05b 2nd Floor NW Hallway DW	Lab ID:	10411759010	Collected	d: 11/14/1	7 05:30	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	0.13	ug/L	0.10	0.010	1		11/22/17 20:29	7439-92-1	



Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

Date: 12/04/2017 04:57 PM

10411759

Sample:	PR-06a 1st FI NE Hallway DWC L	Lab iD:	10411759011	Collected	: 11/14/1	7 05:30	Received: 11	/20/17 10:30 N	Natrix: 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		ND	ug/L	0.10	0.010	1		11/22/17 20:30	7439-92-1	
Sample:	PR-06b 1st FI NE Hallway DWC L	Lab ID:	10411759012		: 11/14/1	7 05:30	Received: 11.	/20/17 10:30 N	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		11/22/17 20:33	3 7439-92-1	
Sample:	PR-07a 1st FI NE Hallway DWC B	Lab ID:	10411759013	Collected	: 11/14/1	7 05:30	Received: 11.	/20/17 10:30 N	/latrix: 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		ND	ug/L	0.10	0.010	1		11/22/17 20:3	7439-92-1	
Sample:	PR-07b 1st FI NE Hallway DWC B	Lab ID:	10411759014	Collected	: 11/14/1	7 05:30	Received: 11.	/20/17 10:30 N	Natrix: 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		ND	ug/L	0.10	0.010	1		11/22/17 20:36	7439-92-1	
Sample:	PR-08a 1st FI NE Hallway DWC R	Lab ID:	10411759015	Collected	: 11/14/1	7 05:30	Received: 11	/20/17 10:30 N	Natrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200,8 MI	ET ICPMS, DW	Analytical	Method: EPA 2	200.8						
Lead		ND	ug/L	0.10	0.010	1		11/22/17 20:38	3 7439-92-1	



Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

Date: 12/04/2017 04:57 PM

10411759

Sample:	PR-08b 1st FI NE Hallway DWC R	Lab ID:	10411759016	Collecte	d: 11/14/1	7 05:30	Received: 11/	/20/17 10:30 M	latrix: Water	
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MF	ET ICPMS, DW	Analytical	Method: EPA 2	200.8					· · · · · · · · · · · · · · · · · · ·	
Lead		ND	ug/L	0.10	0.010	1		11/22/17 20:39	7439-92-1	
Sample:	PR-09a 1st FI NW Hallway DWC L	Lab ID:	10411759017	Collected	d: 11/14/1	7 05:30	Received: 11/	/20/17 10:30 M	latrix: 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	,	0.12	ug/L	0.10	0.010	1		11/22/17 20:52	7439-92-1	
Sample:	PR-09b 1st FI NW Hallway	Lab ID:	10411759018	Collected	d: 11/14/1	7 05:30	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		0.14	ug/L	0,10	0.010	1		11/22/17 20:53	7439-92-1	
Sample:	PR-10a 1st FI NW Hallway DWC R	Lab ID:	10411759019	Collected	i: 11/14/1	7 05:30	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	8.00.8						
Lead		ND	ug/L	0.10	0.010	1		11/22/17 20:55	7439-92-1	
Sample:	PR-10b 1st FI NW Hallway DWC R	Lab ID:	10411759020	Collected	d: 11/14/1	7 05:30	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		0.15	ug/L	0.10	0.010	1		11/22/17 20:56	7439-92-1	



Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

Date: 12/04/2017 04:57 PM

10411759

Sample:	PR-11a Gymnasium DWC Left	Lab ID:	10411759021	Collected	d: 11/14/1	7 05:30	Received: 11/	20/17 10:30 M	latrix: Water	
Commen	nts: • This is a DW sample.									
	Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 ME	ET ICPMS	Analytical	Method: EPA 2	200.8 Prepa	ration Met	hod: EP/	A 200.8			
Lead		0.44	ug/L	0.10	0.028	1	11/30/17 09:02	12/01/17 16:50	7439-92-1	
Sample:	PR-11b Gymnasium DWC Left	Lab ID:	10411759022		d: 11/14/1	7 05:30	Received: 11/	20/17 10:30 M	latrix: 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		0.52	ug/L	0.10	0.010	1		11/29/17 21:47	7439-92-1	
Sample:	PR-12a Gymnasium DWC Right	Lab ID:	10411759023	Collected	d: 11/14/1	7 05:30	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		0.11	ug/L	0.10	0.010	1		11/29/17 21:53	7439-92-1	
Sample:	PR-12b Gymnasium DWC Right	Lab ID:	10411759024	Collected	d: 11/14/1	7 05:30	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		ND	ug/L	0.10	0.010	1		11/29/17 21:54	7439-92-1	
Sample:	PR-13a Gymnasium BFS	Lab ID:	10411759025	Collected	d: 11/14/1	7 05:30	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		ND	ug/L	0.10	0.010	1		11/29/17 21:55	7439-92-1	





Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

Date: 12/04/2017 04:57 PM

10411759

Sample: PR-13b Gymnasium BFS	Lab ID:	10411759026	Collecte	d: 11/14/17	05:30	Received: 11	1/20/17 10:30	Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, DW	Analytical	Method: EPA 2	8.00						
Lead	ND	ug/L	0.10	0.010	1		11/29/17 22:0	1 7439-92-1	



## QUALITY CONTROL DATA

Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

10411759

QC Batch:

509877

Analysis Method:

EPA 200.8

QC Batch Method:

EPA 200.8

Analysis Description:

ICPMS Metals, Drinking Water

Associated Lab Samples:

10411759001, 10411759002, 10411759003, 10411759004, 10411759005, 10411759006, 10411759007, 10411759008, 10411759009, 10411759010, 10411759011, 10411759012, 10411759013, 10411759014,

10411759015, 10411759016, 10411759017, 10411759018, 10411759019, 10411759020

METHOD BLANK: 2772163

Matrix: Water

Associated Lab Samples:

 $10411759001,\,10411759002,\,10411759003,\,10411759004,\,10411759005,\,10411759006,\,10411759007,\,104$ 10411759008, 10411759009, 10411759010, 10411759011, 10411759012, 10411759013, 10411759014,

10411759015, 10411759016, 10411759017, 10411759018, 10411759019, 10411759020

Blank

Reporting

Parameter

Units

Result

Limit

MDL

0.010

Analyzed 11/22/17 19:49 Qualifiers

Lead

ug/L

ND

0.10

LABORATORY CONTROL SAMPLE:

Parameter

2772164

Spike

LCS Result

LCS % Rec % Rec Limits

Qualifiers

Lead

Units ug/L

10411759001

Result

Conc. 100

97.8

98

85-115

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

Parameter

ND

MS Spike

Conc.

MSD

100

ND

Spike

Conc.

2774652 MS

96.0

Result

MSD

96.7

Result

MS

96

% Rec

MSD % Rec % Rec Limits

97

Max RPD RPD Qual

20

MATRIX SPIKE SAMPLE:

Date: 12/04/2017 04:57 PM

Lead

Lead

2774653

ug/L

Units Parameter

Units

ug/L

10411759011 Result

100

Spike Conc.

100

MS Result

92.6

MS % Rec

93

% Rec

Limits

70-130

Qualifiers

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.



## QUALITY CONTROL DATA

Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

10411759

QC Batch:

509886

Analysis Method:

EPA 200.8

QC Batch Method:

EPA 200.8

Analysis Description:

ICPMS Metals, Drinking Water

Associated Lab Samples:

10411759022, 10411759023, 10411759024, 10411759025, 10411759026

METHOD BLANK: 2772191

Matrix: Water

Associated Lab Samples:

10411759022, 10411759023, 10411759024, 10411759025, 10411759026

Blank

Reporting

Parameter

Units Result Limit

MDL

Analyzed 11/29/17 21:45 Qualifiers

Lead

ug/L

ND

0.10

0.010

LABORATORY CONTROL SAMPLE: Parameter

Parameter

MATRIX SPIKE SAMPLE:

Date: 12/04/2017 04:57 PM

2772192

Spike Conc.

Spike

Conc.

100

LCS Result

LCS % Rec % Rec Limits

Qualifiers

Lead

Lead

Lead

Units ug/L

10411759022

Result

0.52

100

102

MS

Result

102

102

85-115

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

MS MSD 2778884

MSD

MS

% Rec

102

MSD % Rec

101

100

% Rec Limits

Max RPD RPD Qual

20

0

2778885

Units

ug/L

Parameter

Units

ug/L

10411785086 Result

0.96

Spike

Conc.

100

Spike Conc.

100

MS Result

100

Result

102

MS % Rec

% Rec Limits

70-130

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:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

10411759

QC Batch:

510987

QC Batch Method:

EPA 200.8

Analysis Method:

EPA 200.8

Analysis Description:

200.8 MET

Associated Lab Samples:

METHOD BLANK: 2779051

Matrix: Water

Associated Lab Samples:

10411759021

10411759021

Blank

Reporting Limit

Analyzed

Qualifiers

Parameter

Lead

Lead

Units

Units

ug/L

Result ND

0.10

0.028 12/01/17 16:48

LABORATORY CONTROL SAMPLE:

2779052

Spike

LCS Result

LCS % Rec

MDL.

% Rec Limits

% Rec

Parameter Lead

Parameter

Date: 12/04/2017 04:57 PM

Units ug/L

ug/L

Conc. 100

96.1

96

Qualifiers

85-115

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

2779054

Result

MSD

MS MSD

MS % Rec MSD

Max

Qual

Result

0.44

MS 10411759021 Spike Conc.

100

Spike Conc. 100

Result 104 104

103

% Rec Limits 103 70-130

RPD RPD 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:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

10411759

## **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 04:57 PM

PASI-M Pace Analytical Services - Minneapolis



## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:

1798621-01 S.D.#16-Pheasant

Pace Project No.:

Date: 12/04/2017 04:57 PM

10411759

10411759001	Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10411759003         PR-02a 2nd Floor NE Hallway BF         EPA 200.8         509877           10411759004         PR-02b 2nd Floor NE Hallway BF         EPA 200.8         509877           10411759005         PR-03a 2nd Fl NE Hallway DWC R         EPA 200.8         509877           10411759006         PR-03b 2nd Fl NW Hallway DWC R         EPA 200.8         509877           10411759007         PR-04a 2nd Fl NW Hallway DWC Le         EPA 200.8         509877           10411759008         PR-04b 2nd Floor NW Hallway DWC Le         EPA 200.8         509877           10411759010         PR-05b 2nd Floor NW Hallway DWC Le         EPA 200.8         509877           10411759011         PR-06a 1st Fl NE Hallway DWC L         EPA 200.8         509877           10411759012         PR-06b 1st Fl NE Hallway DWC B         EPA 200.8         509877           10411759013         PR-07a 1st Fl NE Hallway DWC B         EPA 200.8         509877           10411759014         PR-07b 1st Fl NE Hallway DWC B         EPA 200.8         509877           10411759015         PR-08a 1st Fl NE Hallway DWC R         EPA 200.8         509877           10411759016         PR-08b 1st Fl NW Hallway DWC R         EPA 200.8         509877           10411759017         PR-09a 1st Fl NW Hallway DWC R         EPA 200.8 <td< td=""><td>10411759001</td><td>PR-01a 2nd FI NE Hallway DWC L</td><td>EPA 200.8</td><td>509877</td><td></td><td></td></td<>	10411759001	PR-01a 2nd FI NE Hallway DWC L	EPA 200.8	509877		
10411759003 PR-02a 2nd Floor NE Hallway BF EPA 200.8 509877 10411759006 PR-03a 2nd Fl NE Hallway DWC R EPA 200.8 509877 10411759006 PR-03b 2nd Fl NE Hallway DWC R EPA 200.8 509877 10411759007 PR-04a 2nd Fl NW Hallway EPA 200.8 509877 10411759008 PR-04b 2nd Floor NW Hallway EPA 200.8 509877 10411759009 PR-05b 2nd Floor NW Hallway EPA 200.8 509877 10411759010 PR-05b 2nd Floor NW Hallway EPA 200.8 509877 10411759011 PR-05b 2nd Floor NW Hallway DWC L EPA 200.8 509877 10411759012 PR-05b 1st Fl NE Hallway DWC L EPA 200.8 509877 10411759013 PR-07a 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759014 PR-07b 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759015 PR-08b 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759016 PR-08b 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759017 PR-09a 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759019 PR-08b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759010 PR-08b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759010 PR-08b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759017 PR-09a 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759019 PR-10b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759019 PR-10b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759020 PR-10b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759020 PR-10b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759020 PR-10b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759020 PR-10b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759021 PR-12a Gymnasium DWC Right EPA 200.8 509886 10411759025 PR-13a Gymnasium DWC Right EPA 200.8 509886 10411759026 PR-13b Gymnasium BFS EPA 200.8 509886 10411759026 PR-13b Gymnasium BFS EPA 200.8 509886	10411759002	PR-01b 2nd FI NE Hallway DWC L	EPA 200.8	509877		
10411759005 PR-03a 2nd FI NE Hallway DWC R EPA 200.8 509877 10411759006 PR-03b 2nd FI NE Hallway DWC R EPA 200.8 509877 10411759007 PR-04a 2nd FI NW Hallway EPA 200.8 509877 10411759008 PR-04b 2nd Floor NW Hallway EPA 200.8 509877 10411759009 PR-05a 2nd Floor NW Hallway EPA 200.8 509877 10411759010 PR-05a 2nd Floor NW Hallway EPA 200.8 509877 10411759011 PR-06a 1st FI NE Hallway DWC L EPA 200.8 509877 10411759012 PR-05b 1st FI NE Hallway DWC L EPA 200.8 509877 10411759013 PR-07a 1st FI NE Hallway DWC B EPA 200.8 509877 10411759014 PR-07b 1st FI NE Hallway DWC B EPA 200.8 509877 10411759015 PR-08a 1st FI NE Hallway DWC B EPA 200.8 509877 10411759016 PR-08b 1st FI NE Hallway DWC R EPA 200.8 509877 10411759017 PR-09a 1st FI NE Hallway DWC R EPA 200.8 509877 10411759019 PR-10a 1st FI NW Hallway DWC L EPA 200.8 509877 10411759010 PR-09a 1st FI NW Hallway DWC L EPA 200.8 509877 10411759010 PR-10a 1st FI NW Hallway DWC R EPA 200.8 509877 10411759010 PR-10a 1st FI NW Hallway DWC R EPA 200.8 509877 10411759010 PR-10a 1st FI NW Hallway DWC R EPA 200.8 509877 10411759020 PR-10b 1st FI NW Hallway DWC R EPA 200.8 509877 10411759020 PR-10b 1st FI NW Hallway DWC R EPA 200.8 509877 10411759021 PR-10a 1st FI NW Hallway DWC R EPA 200.8 509877 10411759022 PR-11b Gymnasium DWC Right EPA 200.8 509886 10411759023 PR-12a Gymnasium DWC Right EPA 200.8 509886 10411759025 PR-13a Gymnasium DWC Right EPA 200.8 509886 10411759026 PR-13b Gymnasium BFS EPA 200.8 509886	10411759003		EPA 200.8	509877		
10411759006	10411759004	PR-02b 2nd Floor NE Hallway BF	EPA 200.8	509877		
10411759007	10411759005	PR-03a 2nd FI NE Hallway DWC R	EPA 200.8	509877		
DWCLe 10411759008	10411759006	PR-03b 2nd FI NE Hallway DWC R	EPA 200.8	509877		
DW 10411759019 PR-05a 2nd Floor NW Hallway DW EPA 200.8 509877 10411759011 PR-06a 1st Fl NE Hallway DWC L EPA 200.8 509877 10411759012 PR-06b 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759013 PR-07a 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759014 PR-07b 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759015 PR-08a 1st Fl NE Hallway DWC R EPA 200.8 509877 10411759016 PR-08b 1st Fl NE Hallway DWC R EPA 200.8 509877 10411759017 PR-09a 1st Fl NW Hallway DWC L EPA 200.8 509877 10411759018 PR-09b 1st Fl NW Hallway DWC L EPA 200.8 509877 10411759019 PR-10a 1st Fl NW Hallway DWC L EPA 200.8 509877 10411759020 PR-10b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759022 PR-11b Gymnasium DWC Left EPA 200.8 509877 10411759024 PR-12b Gymnasium DWC Right EPA 200.8 509886 10411759025 PR-13a Gymnasium BFS EPA 200.8 509886 10411759026 PR-13b Gymnasium BFS EPA 200.8 509886 10411759026 PR-13b Gymnasium BFS EPA 200.8 509886	10411759007		EPA 200.8	509877		
10411759010 PR-05b 2nd Floor NW Hallway EPA 200.8 509877 10411759011 PR-06a 1st Fl NE Hallway DWC L EPA 200.8 509877 10411759012 PR-06b 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759013 PR-07a 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759014 PR-07b 1st Fl NE Hallway DWC B EPA 200.8 509877 10411759015 PR-08a 1st Fl NE Hallway DWC R EPA 200.8 509877 10411759016 PR-08b 1st Fl NE Hallway DWC R EPA 200.8 509877 10411759017 PR-09a 1st Fl NW Hallway DWC L EPA 200.8 509877 10411759018 PR-09b 1st Fl NW Hallway DWC L EPA 200.8 509877 10411759019 PR-10a 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759020 PR-10b 1st Fl NW Hallway DWC R EPA 200.8 509877 10411759022 PR-11b Gymnasium DWC Left EPA 200.8 509866 10411759024 PR-12b Gymnasium DWC Right EPA 200.8 509886 10411759025 PR-13a Gymnasium BFS EPA 200.8 509886 10411759026 PR-13b Gymnasium BFS EPA 200.8 509886	10411759008	•	EPA 200.8	509877		
DW 10411759011 PR-06a 1st FI NE Hallway DWC L EPA 200.8 509877 10411759012 PR-06b 1st FI NE Hallway DWC B EPA 200.8 509877 10411759013 PR-07a 1st FI NE Hallway DWC B EPA 200.8 509877 10411759014 PR-07b 1st FI NE Hallway DWC B EPA 200.8 509877 10411759015 PR-08a 1st FI NE Hallway DWC R EPA 200.8 509877 10411759016 PR-08b 1st FI NE Hallway DWC R EPA 200.8 509877 10411759017 PR-09a 1st FI NW Hallway DWC L EPA 200.8 509877 10411759018 PR-09b 1st FI NW Hallway DWC L EPA 200.8 509877 10411759019 PR-10a 1st FI NW Hallway DWC R EPA 200.8 509877 10411759020 PR-10b 1st FI NW Hallway DWC R EPA 200.8 509877 10411759022 PR-11b Gymnasium DWC Left EPA 200.8 509877 10411759023 PR-12a Gymnasium DWC Right EPA 200.8 509886 10411759024 PR-12b Gymnasium DWC Right EPA 200.8 509886 10411759025 PR-13a Gymnasium BFS EPA 200.8 509886 10411759026 PR-13b Gymnasium BFS EPA 200.8 509886	10411759009	PR-05a 2nd Floor NW Hallway DW	EPA 200.8	509877		
10411759012 PR-06b 1st Fi NE Hallway DWC L EPA 200.8 509877 10411759013 PR-07a 1st Fi NE Hallway DWC B EPA 200.8 509877 10411759014 PR-07b 1st Fi NE Hallway DWC B EPA 200.8 509877 10411759015 PR-08a 1st Fi NE Hallway DWC R EPA 200.8 509877 10411759016 PR-08b 1st Fi NE Hallway DWC R EPA 200.8 509877 10411759017 PR-09a 1st Fi NW Hallway DWC L EPA 200.8 509877 10411759018 PR-09b 1st Fi NW Hallway DWC L EPA 200.8 509877 10411759019 PR-10a 1st Fi NW Hallway DWC R EPA 200.8 509877 10411759020 PR-10b 1st Fi NW Hallway DWC R EPA 200.8 509877 10411759022 PR-11b Gymnasium DWC Left EPA 200.8 509877 10411759023 PR-12a Gymnasium DWC Right EPA 200.8 509886 10411759024 PR-12b Gymnasium DWC Right EPA 200.8 509886 10411759025 PR-13a Gymnasium BFS EPA 200.8 509886 10411759026 PR-13b Gymnasium BFS EPA 200.8 509886	10411759010	•	EPA 200.8	509877		
10411759013	10411759011	PR-06a 1st FI NE Hallway DWC L	EPA 200.8	509877		
10411759014	10411759012	PR-06b 1st Fi NE Hallway DWC L	EPA 200.8	509877		
10411759015	10411759013	PR-07a 1st FI NE Hallway DWC B	EPA 200.8	509877		
10411759016	10411759014	PR-07b 1st FI NE Hallway DWC B	EPA 200.8	509877		
10411759017       PR-09a 1st FI NW Hallway DWC L       EPA 200.8       509877         10411759018       PR-09b 1st FI NW Hallway DWC L       EPA 200.8       509877         10411759019       PR-10a 1st FI NW Hallway DWC R       EPA 200.8       509877         10411759020       PR-10b 1st FI NW Hallway DWC R       EPA 200.8       509877         10411759022       PR-11b Gymnasium DWC Left       EPA 200.8       509886         10411759023       PR-12a Gymnasium DWC Right       EPA 200.8       509886         10411759024       PR-12b Gymnasium DWC Right       EPA 200.8       509886         10411759025       PR-13a Gymnasium BFS       EPA 200.8       509886         10411759026       PR-13b Gymnasium BFS       EPA 200.8       509886	10411759015	PR-08a 1st FI NE Hallway DWC R	EPA 200.8	509877		
10411759018         PR-09b 1st FI NW Hallway DWC L         EPA 200.8         509877           10411759019         PR-10a 1st FI NW Hallway DWC R         EPA 200.8         509877           10411759020         PR-10b 1st FI NW Hallway DWC R         EPA 200.8         509877           10411759022         PR-11b Gymnasium DWC Left         EPA 200.8         509886           10411759023         PR-12a Gymnasium DWC Right         EPA 200.8         509886           10411759024         PR-12b Gymnasium DWC Right         EPA 200.8         509886           10411759025         PR-13a Gymnasium BFS         EPA 200.8         509886           10411759026         PR-13b Gymnasium BFS         EPA 200.8         509886	10411759016	PR-08b 1st FI NE Hallway DWC R	EPA 200.8	509877		
10411759019         PR-10a 1st FI NW Hallway DWC R         EPA 200.8         509877           10411759020         PR-10b 1st FI NW Hallway DWC R         EPA 200.8         509877           10411759022         PR-11b Gymnasium DWC Left         EPA 200.8         509886           10411759023         PR-12a Gymnasium DWC Right         EPA 200.8         509886           10411759024         PR-12b Gymnasium DWC Right         EPA 200.8         509886           10411759025         PR-13a Gymnasium BFS         EPA 200.8         509886           10411759026         PR-13b Gymnasium BFS         EPA 200.8         509886	10411759017	PR-09a 1st FI NW Hallway DWC L	EPA 200.8	509877		
10411759020         PR-10b 1st FI NW Hallway DWC R         EPA 200.8         509877           10411759022         PR-11b Gymnasium DWC Left         EPA 200.8         509886           10411759023         PR-12a Gymnasium DWC Right         EPA 200.8         509886           10411759024         PR-12b Gymnasium DWC Right         EPA 200.8         509886           10411759025         PR-13a Gymnasium BFS         EPA 200.8         509886           10411759026         PR-13b Gymnasium BFS         EPA 200.8         509886	10411759018	PR-09b 1st FI NW Hallway DWC L	EPA 200.8	509877		
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	10411759021	PR-11a Gymnasium DWC Left	EPA 200.8	510987	EPA 200.8	511442

CHAIN-OF-CUSTODY / Analytical Request Document

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

(N/X) บารณ 010 ا جا خان 000 00 4 00 4 80 h 000 O O N salqms2 50g (N/Y) 00 Seated ŏ Custody 2/8/3 (N/X) IDPH Received on Residual Chlorine (YV) Page: лемь и с CEO 1/23/ 35 11/14/2017 ()2/ DATE Signed: Thad Daniels Own 8,002 Bq Analyses Testum N/X Jeff Dunton 40981 Preservatives Same Pace Project Manager; Pace Profile #: Invoice Information: Aftention: Same Company Name: Say Address: Same 1320 430 Pace Quote: Aone # OF CONTAINERS SAMPLERAMEANDSIGNATURE 1/5/0 SAMPLE TEMP AT COLLECTION PRINT Name of SAMPLER: SIGNATURE of SAMPLER: 11/14/2017 5:30a 띪 11/14/2017 11/14/2017 11/14/2017 Project Name: S.D. #15 - Pheasant Ridge School Project #. 1798521-01 DATE COLLECTED 1 Clored TIME START DATE Required Project Information: Thad Daniels KAHANI DWG (G=GRAB C=COMP) SAMPLE TYPE DW/G DWG DWG DWG DW G DWG DWG DWG DW G Purchase Order #: WATRIX CODE (see valid codes to left) Section B Report To: MATRIX Orining Water Waste Weste Waste Weste Product Product Product Oil Wife Art Cher Tissue Fax 630-691-1819 Water Last Used in Schjool Building on: 11/13/2017 @ 8:00 p.m. PR-05a 2nd Floor NW Haliway DWC Right PR-05b 2nd Floor NW Hallway DWC Right R-04b 2nd Floor NW Hallway DWC Left PR-03a 2nd FI NE Hallway DWC Right PR-03b 2nd FI NE Hallway DWC Right PR-01b 2nd FINE Hallway DWC Left 7 Jan PR-04a 2nd FI NW Hallway DWCLeft PR-01a 2nd FI NE Hallway DWC Left PR-06a 1st FI NE Hallway DWC Left PR-05b 1st FINE Hallway DWC Left PR-02a 2nd Floor NE Hallway BFS (A-Z, 0-9 / , -) Sample (ds must be unique PR-02b 2nd Floor NE Hallway BFS Standard TAT One Character per box. United Analytical Services, I SAMPLE ID 1429 Centre Circle Drive Email: tdaniels@uas1.com Doweners Grove, Illinois 60515 Required Client Information: 630-691-8271 Requested Due Date: 9 Page 16 of 22 TEM #



## CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Address:	United Analytical Services, Inc. (UAS)	Cook Tr	Laneis					Company Name: Same	2 S											
Posterior C	1423 Certae Criste Olive	253	***************************************				Address	Same									C. C			
Email:	Email: tdaniels@uas1.com	Purchase Order#.					Pace Quote:		-	40981								DPH		
Phone:	630-691-8271 Fax: 630-691-1819	Project Name:	S.D. #16 - Pheasant	sant Ridge	Ridge School		Pace Pr	Pace Project Manager.	١.	Jeff Dunton							Read Parts	HORE		
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7 of 2				PRIN	PRINT Name of SAMPLER:	AMPLER: AMPLER:		6			Thao	Thad Daniels DATE Signed:	aned:			$\top$	) ni GME	(N/	(N) sled sled	seldme tos (N/
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## CHAIN-OF-CUSTODY / Analytical Request Document

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

デルゴ (WW) OBG の気力 seidmes (N/A) SNOLICHOUGHANS Sealed Cooler ö Custody 7.7 State 7 Location (N/N) Received on レバ 230 Jus Residual Chlotine (YIV) Page: TEMP in C 37.0 HAME 11/14/2017 Requested Applying Pilithed 1974 115/17 CIFE, Thad Daniels DATE Signed: JONOL ACCEPTED BY LAFFICIATION 8 200.8 teal seavienA NΆ くてきれ Jeff Dunton 40981 Preservatives Attention: Same Company Name: Same Address: Same Pace Quote: Pace Project Manager: Pace Profile #. Invoice Information: 1520 Section C n e 1000 # OF CONTAINERS SAMPLER NAME AND SIGNATURE SAMPLE TEMP AT COLLECTION SIGNATURE of SAMPLER: PRINT Name of SAMPLER: 4 TIME 5:30a 8 11/14/2017 11/14/2017 S.D. #16 - Pheasant Ridge School DATE COLLECTED MANOCH MANOCH WORKED TO AFFERTANCE 1798621-01 Š TIME START DATE Required Project Information: Report To: Thad Daniels Copy To: SAMPLE TYPE (G=GRAB C=COMP) Purchase Order #. WATRIX CODE (see valid codes to left) Project Name: Project#, Section B MATRIX
Drinking Water
Wasse Weden
Peraduct
SouldSolid
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Mate
Air
Charact
Tissue Fax: 630-691-1819 Nater Lest Used in Schipol Buliding on: 11/13/2017 😤 8:00 p.m. Required Client information:
Company: United Analytical Services, Inc. (UAS)
Address: 1429 Centre Circle Drive One Character per box. (A-2, 0-9 f., -) Sample ids must be unique ADDITIONAL COMMENTS Standard TAT SAMPLE ID PR-13a Gymnasíum BFS PR-13b Gymnasium BFS tdaniels@uas1.com Joweners Grove, Illinois 60515 630-691-8271 Requested Due Date; (8) e Ņ Page 18 of 22 N an Ŧ 69 4) . # WBII

## Pace Analytical\*

hold, Incorrect preservative, out of temp, incorrect containers).

## 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:		Project	#: WO#: 10411759
United Anola	Men)	•	TI M C
Courier: Fed Ex DUPS	USPS	Client	
Commercial Pace SpeeDee	Other:		10411759
Tracking Number: 121/2-5349-396	<u> 5/39</u>	14/3957	
Custody Seal on Cooler/Box Present? Yes	PAG	Seals Intact?	Yes No Optional: Proj. Due Date: Proj. Name:
Packing Material: Bubble Wrap Bubble Bags	Non	e []Other:	Temp Blank? Yes
Thermometer Used: G87A9155100842  Cooler Temp Read (°C): Cooler Temp Cooler Temp Should be above freezing to 6°C Correction Fact USDA Regulated Soil (N/A, water sample) Did samples originate in a quarantine zone within the United NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)?	rrected (°C) tor:	R, CA, FL, GA, ID, I	Biological Tissue Frozen? Yes No. ANA
	gulated Soi		-Q-338) and include with SCUR/COC paperwork.
	3. 0	<del></del>	COMMENTS:
Chain of Custody Present?	Myes	□No	1,
Chain of Custody Filled Out?	Yes	□No	2.
Chain of Custody Relinguished?	Yes	Mo	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	.MNo	6, ·
Rush Turn Around Time Requested?	Yes	₩Ño	7.
Sufficient Volume?	χ∐Yes	□No	8.
Correct Containers Used?	্ৰীপ্ৰেs	∐No	9.
-Pace Containers Used?	<b>[</b> €]Yes	□No	
Containers Intact?	Yes	□No	10.
filtered Volume Received for Dissolved Tests?	Yes	□No ⊠Ñ/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	Ϋ́	□No	12 To be filtered low lab
-Includes Date/Time/ID/Analysis Matrix: 14	and the state of t		
All containers needing acid/base preservation have been			13. THNO3 TH2SO4 TNAOH Positive for Res
checked? All containers needing preservation are found to be in	Yes	□No N/A	Chlorine? Y N
compliance with EPA recommendation?	•		Sample #
HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	Yes	□No XÍN/A	·
xceptions: VOA, Coliform, TOC/DOC Oil and Grease, PRO/8015 (water) and Dioxin.	□Yes	□No SZIN/A	Initial when Lot # of added completed: preservative;
eadspace in VOA Vials (>6mm)?	Yes	□No □N/A	completed: preservative: 14.
rip Blank Present?	Yes	□No □N/A	15.
rip Blank Custody Seals Present?	∐Yes	□No AN/A	
ace Trip Blank Lot # (if purchased):			
CLIENT NOTIFICATION/RESOLUTION		-	Field Data Required? Yes No
erson Contacted:			Date/Time:
omments/Resolution:			
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Project Manager Review: MAIITA	Lun	trx -	



Document Name: Sample Condition Upon Receipt Form

Page 2 of 2 Issuing Authority: Pace Minnesota Quality Office

Document No.: F-MN-L-213-rev.21

Document Revised: 30Aug2017

Workorder # 16411759 **SCUR Exceptions:** 

SCOR Exceptions:		workorder :	** 10411 ヤフラ
Issue	San	nple ID	Container Type/#
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			A Ho	djust	me	nt Lo	g for	Preserved	l Sar	nples		e aar	ل	3
	Sample ID	Type Preserv		pH U Rece	•	Prese	ate rvation usted	Time Preservation Adjusted	Ad Pre:	nount of ditional servative	Lot # of Preservative Added	pH After Adjustment		tials
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	Document Name: Sample Condition Upon Receipt Form	Document Revised: 30Aug2017 Page 2 of 2		
Pace Analytical	Document No.; F-MN-L-213-rev.21	Issuing Authority: Pace Minnesota Quality Office		
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SCUR Exceptions: Workorder #:

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Page 2 of 3 pH Adjustment Log for Preserved Samples Amount of Date Time Additional Lot#of Type of pH Upon Preservation Preservation Preservative Preservative pH After Sample ID Preservative Receipt Adjusted Adjusted Added Added Adjustment Initials 117050 1 1/8 11 11 11 11 11 1 1, €. 11 11 11 11 11 11 11 10 11 Ċ  $H^{\perp}$  $I_{\mathcal{J}}$ 11 11 81 18 11 1 e d براد Ŋ. ( 11 11 17 1 1 11 H 15 H £ 1 1 ×5.7 \$ 11 IJ17 17 11 11 11 1, 1) 11  $'_r$ 11 and James U 11 11 11 1  $\mathcal{H}$ 16.5 11 11 11  $\Pi$ 11

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

**SCUR Exceptions:** 

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Sample ID	Type of Preservativ		pH Upoi Receipt	- 1	Preservation Adjusted	Preservation Adjusted	Prese	litional ervative ided	Lot # of Preservative Added	pH After Adjustment	lai	tials
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525-535 West Jefferson Street · Springfield, lilinois 62761-0001 · www.dph.illinois.gov

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

LEADID ISSUED 001047 1/17/2017

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



ILLINOIS LEAD PROGRAM
Environmental Health

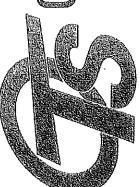
Alteration of this license shall result in legal action RISK ASSESSOR CERTIFICATE EXPIRES 3/8/2019

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



## COUPER THOUND TO THE TRANSPORT T233 S. Adams Street & Willowbrook, 1L 60527 & (630) 655-3900

# DESCRIPTIONS OF ASTROPORD

Occupational Training & Supply, Inc. certifles 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 lety DeSaly



## 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

Method: SM4500P-E,20Ed

Matrix Type: Potable Water

Orthophosphate

003998

Certificate No.:

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

Chloride

Bromide

Nitrate

Fluoride 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

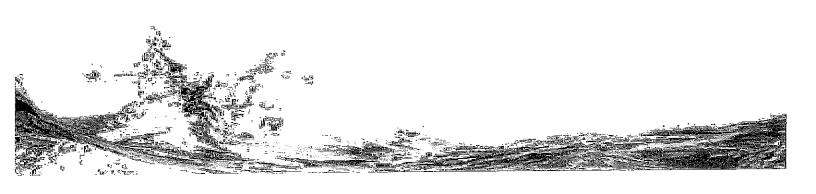
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## **Mitigation Strategies**



**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

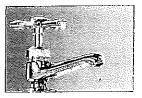
These individuals will be key to implementing whatever program you develop.



## **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.



## 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

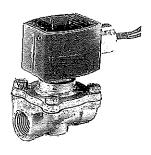
Immediately upon learning that a fixture has tested positive for lead, it should be removed from service. *Install signs, remove handles or bag the device to prevent use until it can be addressed.* 



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