COLUMBIA PUBLIC SCHOOLS COLUMBIA, MO LEAD AND COPPER MONITORING **SUMMARY REPORT**

DATE: **JANUARY 6, 2022**

FACILITY NAME: PARKADE ELEMENTARY SCHOOL

A. SAMPLE COLLECTION

1. NUMBER OF SAMPLES COLLECTED AT THIS FACILITY 40

100.0% 2. PERCENTAGE OF SAMPLES BELOW COPPER ACTION LIMITS

1. COPPER ACTION LIMIT = 1,300 UG/

PERCENTAGE OF SAMPLES BELOW LEAD ACTION LIMITS 100.0%

> 1. LEAD ACTION LIMIT = 15 UG/L (The requirement in the USEPA Lead and Copper Rule for public water supplies is 90% passing)

B. SAMPLE EXCEEDANCE

1. NUMBER OF SAMPLES EXCEEDING COPPER ACTION LIMIT 0 0

2. NUMBER OF SAMPLES EXCEEDING LEAD ACTION LIMIT

C. CONCLUSION

This facility meets the (recommended) requirements of the United States Environmental Protection Agency (USEPA) and the published Lead and Copper Rule (LCR) of 1991 (reference: 40 CFR Part 141 Subpart I). Public Run Water Suppliers must comply with the USEPA law and the LCR. Columbia Water & Light is the publicly run water utility that serves this school.

Initially failed tests were resampled using the first flush method and tested for verification. Should the laboratory analysis reveal results that exceed the LCR action limits, you can utilize the recommendations within the LCR to address those specific locations. They include but are not limited to: flushing prior to use (make it a practice to run the water at each tap before use), repairing and/or replacing fixtures and/or piping and by not using the water for consumption. All are recommended by the Lead and Copper Rule.

Although the Lead and Copper Rule may not directly apply to Columbia Public Schools and each of its schools or support buildings that are part of the 2020 City of Columbia Water Quality Assessment Report; it is a common practice for experts in the field and members of the known industry to use the standard as a guideline for water assessment studies.

Prepared By:

Jahn DLA

Joshua D. Lehmen, PE



PDC Laboratories, Inc.

PROFESSIONAL • DEPENDABLE • COMMITTED

September 08, 2021

Josh Lehmen Engineering Surveys & Services 1113 Fay Street Columbia, MO 65201

RE: L14571

Dear Josh Lehmen:

Please find enclosed the analytical results for the **41** sample(s) the laboratory received on **8/16/21 3:40 pm** and logged in under work order **EH03487**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of PDC Laboratories, Inc.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

PDC Laboratories, Inc. appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lgrant@pdclab.com.

Sincerely,

Erin Lane

Project Manager





SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

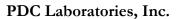
	Work Order EH03487
YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
NO	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
NO	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided

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Case Narrative

Sample EH03497-41 - Sample bottle was received at lab, but was not listed on the COC or ESS sample form.







 Sample:
 EH03487-01
 Sampled:
 08/11/21 06:30

 Name:
 1. Room 306
 Received:
 08/16/21 15:40

Alias: PAR-306-DWF-1 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Analyzed Analyst Method Total Metals - PIA 1300 EPA 200.8 REV 5.4 Copper 130 ug/L 08/19/21 13:43 TJJ Lead 31 **15 08/19/21 13:43 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-02
 Sampled:
 08/11/21 06:32

 Name:
 2. Room 304
 Received:
 08/16/21 15:40

Alias: PAR-304-DWF-2 Matrix: Drinking Water - Regular Sample

Analyst **Parameter** Result Unit Qualifier MCL Analyzed Method <u>Total Metals - PIA</u> 1300 Copper 87 ug/L 08/19/21 13:52 TJJ EPA 200.8 REV 5.4 Lead 3.7 15 08/19/21 13:52 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-03
 Sampled:
 08/11/21 06:31

 Name:
 3. Room 305
 Received:
 08/16/21 15:40

Alias: PAR-305-DWF-3 Matrix: Drinking Water - Regular Sample

Qualifier MCL **Parameter** Result Unit Analyzed Analyst Method Total Metals - PIA Copper 87 ug/L 1300 08/19/21 13:54 TJJ EPA 200.8 REV 5.4 Lead 3.7 15 08/19/21 13:54 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-04
 Sampled:
 08/11/21 06:32

 Name:
 4. Room 307
 Received:
 08/16/21 15:40

Alias: PAR-307-DWF-4 Matrix: Drinking Water - Regular Sample

Qualifier MCL Analyst Method Result Unit **Parameter** Analyzed **Total Metals - PIA** Copper 91 ug/L 1300 08/19/21 13:55 TJJ EPA 200.8 REV 5.4 Lead 10 ug/L 15 08/19/21 13:55 TJJ EPA 200.8 REV 5.4



 Sample:
 EH03487-05
 Sampled:
 08/11/21 06:33

 Name:
 5. Room 303
 Received:
 08/16/21 15:40

Alias: PAR-303-DWF-5 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Analyzed Analyst Method Total Metals - PIA 90 1300 EPA 200.8 REV 5.4 Copper ug/L 08/19/21 13:57 TJJ Lead 3.4 15 08/19/21 13:57 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-06
 Sampled:
 08/11/21 06:34

 Name:
 6. Room 302
 Received:
 08/16/21 15:40

Alias: PAR-302-DWF-6 Matrix: Drinking Water - Regular Sample

Analyst **Parameter** Result Unit Qualifier MCL Analyzed Method <u>Total Metals - PIA</u> 1300 Copper 89 ug/L 08/19/21 13:58 TJJ EPA 200.8 REV 5.4 Lead 4.6 15 08/19/21 13:58 EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-07
 Sampled:
 08/11/21 06:36

 Name:
 7. Room 301
 Received:
 08/16/21 15:40

Alias: PAR-301-DWF-7 Matrix: Drinking Water - Regular Sample

Qualifier MCL **Parameter** Result Unit Analyzed Analyst Method Total Metals - PIA Copper 120 ug/L 1300 08/19/21 13:59 TJJ EPA 200.8 REV 5.4 Lead 12 15 08/19/21 13:59 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-08
 Sampled:
 08/11/21 06:39

 Name:
 8. Room 99
 Received:
 08/16/21 15:40

Alias: PAR-99-DWF-8 Matrix: Drinking Water - Regular Sample

Qualifier MCL Analyst Method Result Unit **Parameter** Analyzed **Total Metals - PIA** Copper 89 ug/L 1300 08/19/21 14:01 TJJ EPA 200.8 REV 5.4 Lead 1.2 ug/L 15 08/19/21 14:01 TJJ EPA 200.8 REV 5.4



Sampled: 08/11/21 06:39 Sample: EH03487-09 9. Room 98 Received: 08/16/21 15:40 Name:

PAR-98-DWF-9 Alias: Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Analyzed Analyst Method Total Metals - PIA 66 1300 08/19/21 14:02 EPA 200.8 REV 5.4 Copper ug/L TJJ Lead 3.3 15 08/19/21 14:02 TJJ EPA 200.8 REV 5.4 ug/L

Sample: EH03487-10 Sampled: 08/11/21 06:40 Name: 10. Room 96 Received: 08/16/21 15:40

Alias: PAR-96-DWF-10 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Method Analyzed Analyst <u>Total Metals - PIA</u> 1300 Copper 94 ug/L 08/19/21 14:04 TJJ EPA 200.8 REV 5.4 Lead 2.7 15 08/19/21 14:04 EPA 200.8 REV 5.4 ug/L

08/11/21 06:41 Sample: EH03487-11 Sampled: Name: 11. Nurses Office Received: 08/16/21 15:40

PAR-NSF-1 Drinking Water - Regular Sample Alias: Matrix:

Qualifier MCL **Parameter** Result Unit Analyzed Analyst Method Total Metals - PIA Copper 98 1300 08/19/21 14:05 TJJ EPA 200.8 REV 5.4 ug/L Lead 2.4 15 08/19/21 14:05 TJJ EPA 200.8 REV 5.4 ug/L

Sampled: 08/11/21 06:42 Sample: EH03487-12 Name:

12. Restroom By Nurses Office Received: 08/16/21 15:40

PAR-RRF-1 Drinking Water - Regular Sample Alias: Matrix:

Qualifier MCL Analyst Method Result Unit **Parameter** Analyzed **Total Metals - PIA** Copper 84 ug/L 1300 08/20/21 13:50 TJJ EPA 200.8 REV 5.4 Lead 1.2 ug/L 15 08/20/21 13:50 TJJ EPA 200.8 REV 5.4

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Sample: EH03487-13

Sampled: 08/11/21 06:43

	Name:	13. Hall By Room 100					Received:	08/16/21 1	15:40
	Alias:	PAR-H100-EWC-1					Matrix:	Drinking V	Vater - Regular Sample
Parame	ter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	etals - PIA	<u>.</u>							
Copper			270	ug/L		1300	08/20/21 13:52	TJJ	EPA 200.8 REV 5.4
Lead			7.1	ug/L		15	08/20/21 13:52	TJJ	EPA 200.8 REV 5.4
	Sample:	EH03487-14					Sampled:	08/11/21 0	06:43
	Name:	14. Room 100					Received:	08/16/21 1	
	Alias:	PAR-100-DWF-11					Matrix:	Drinking V	Vater - Regular Sample
Parame	ter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	etals - PIA	<u> </u>							
Copper			5.1	ug/L		1300	08/20/21 13:53	TJJ	EPA 200.8 REV 5.4
Lead			2.7	ug/L		15	08/20/21 13:53	TJJ	EPA 200.8 REV 5.4
	Sample:	EH03487-15					Sampled:	08/11/21 0	06:45
	Name:	15. Office					Received:	08/16/21 1	15:40
	Alias:	PAR-RRF-2					Matrix:	Drinking V	Vater - Regular Sample
Parame	ter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	etals - PIA	<u>.</u>							
Copper			76	ug/L		1300	08/20/21 13:55	TJJ	EPA 200.8 REV 5.4
			1.1	ug/L		15	08/20/21 13:55	TJJ	EPA 200.8 REV 5.4
Lead			***	3					
	Sample:	EH03487-16					Sampled:	08/11/21 0	06:38
	Sample: Name:	EH03487-16 16. Kitchen Center						08/11/21 0 08/16/21 1	
	•			3				08/16/21 1	
	Name: Alias:	16. Kitchen Center	Result	Unit	Qualifier	MCL	Received:	08/16/21 1	5:40 Vater - Regular Sample
Parame	Name: Alias:	16. Kitchen Center PAR-KF-1			Qualifier	MCL	Received: Matrix:	08/16/21 1 Drinking V	5:40 Vater - Regular Sample
Parame	Name: Alias: ter	16. Kitchen Center PAR-KF-1			Qualifier	MCL 1300	Received: Matrix:	08/16/21 1 Drinking V	5:40 Vater - Regular Sample



Sample: EH03487-17

Name: 17. Kitchen North Wall

Alias: PAR-KF-2 Sampled: 08/11/21 06:38

Received: 08/16/21 15:40

Drinking Water - Regular Sample Matrix:

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	90	ug/L		1300	08/20/21 14:08	TJJ	EPA 200.8 REV 5.4
Lead	1.8	ug/L		15	08/20/21 14:08	TJJ	EPA 200.8 REV 5.4

Sample: EH03487-18

Name: 18. Hall By Cafeteria

PAR-EWC-2 Alias:

Sampled: 08/11/21 06:47

Received: 08/16/21 15:40 Drinking Water - Regular Sample Matrix:

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - PIA							
Copper	180	ug/L		1300	08/20/21 14:09	TJJ	EPA 200.8 REV 5.4
Lead	2.7	ug/L		15	08/20/21 14:09	TJJ	EPA 200.8 REV 5.4

Sampled: 08/11/21 06:08 Sample: EH03487-19 Name: 19. Room 201

PAR-201-DWF-12 Alias:

Received: 08/16/21 15:40

Drinking Water - Regular Sample Matrix:

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - PIA							
Copper	120	ug/L		1300	08/20/21 14:10	TJJ	EPA 200.8 REV 5.4
Lead	4.4	ug/L		15	08/20/21 14:10	TJJ	EPA 200.8 REV 5.4

Sample: EH03487-20 Name: 20. Room 202

Alias: PAR-202-DWF-13 Sampled: 08/11/21 06:49

Received: 08/16/21 15:40

Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - PIA							
Copper	32	ug/L		1300	08/20/21 14:12	TJJ	EPA 200.8 REV 5.4
Lead	3.0	ug/L		15	08/20/21 14:12	TJJ	EPA 200.8 REV 5.4

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 Sample:
 EH03487-21
 Sampled:
 08/11/21 07:02

 Name:
 21. Room 203
 Received:
 08/16/21 15:40

Alias: PAR-203-DWF-14 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Analyzed Analyst Method Total Metals - PIA 440 1300 EPA 200.8 REV 5.4 Copper ug/L 08/20/21 14:13 TJJ Lead 14 15 08/20/21 14:13 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-22
 Sampled:
 08/11/21 06:52

 Name:
 22. Room 204
 Received:
 08/16/21 15:40

Alias: PAR-204-DWF-15 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Method Analyzed Analyst <u>Total Metals - PIA</u> 1300 Copper 52 ug/L 08/20/21 14:15 TJJ EPA 200.8 REV 5.4 Lead 3.1 15 08/20/21 14:15 EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-23
 Sampled:
 08/11/21 06:53

 Name:
 23. Room 205
 Received:
 08/16/21 15:40

Alias: PAR-205-DWF-16 Matrix: Drinking Water - Regular Sample

Qualifier MCL **Parameter** Result Unit Analyzed Analyst Method Total Metals - PIA Copper 20 ug/L 1300 08/20/21 14:16 TJJ EPA 200.8 REV 5.4 Lead 1.9 15 08/20/21 14:16 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-24
 Sampled:
 08/11/21 06:54

 Name:
 24. Room 206
 Received:
 08/16/21 15:40

Alias: PAR-206-DWF-17 Matrix: Drinking Water - Regular Sample

Qualifier MCL Analyst Method Result Unit **Parameter** Analyzed **Total Metals - PIA** Copper 12 ug/L 1300 08/20/21 14:18 TJJ EPA 200.8 REV 5.4 Lead 1.1 ug/L 15 08/20/21 14:18 TJJ EPA 200.8 REV 5.4



 Sample:
 EH03487-25
 Sampled:
 08/11/21 06:55

 Name:
 25. Hall By 208
 Received:
 08/16/21 15:40

Alias: PAR-H208-DWF-18 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Analyzed Analyst Method Total Metals - PIA 39 1300 EPA 200.8 REV 5.4 Copper ug/L 08/20/21 14:27 TJJ Lead 1.1 15 08/20/21 14:27 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-26
 Sampled:
 08/11/21 06:56

 Name:
 26. Room 208
 Received:
 08/16/21 15:40

Alias: PAR-208-DWF-19 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Method Analyzed Analyst <u>Total Metals - PIA</u> 72 1300 Copper ug/L 08/20/21 14:29 TJJ EPA 200.8 REV 5.4 Lead 6.5 15 08/20/21 14:29 EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-27
 Sampled:
 08/11/21 06:56

 Name:
 27. Room 207
 Received:
 08/16/21 15:40

Alias: PAR-207-DWF-20 Matrix: Drinking Water - Regular Sample

Qualifier MCL **Parameter** Result Unit Analyzed Analyst Method Total Metals - PIA Copper 52 ug/L 1300 08/20/21 14:30 TJJ EPA 200.8 REV 5.4 Lead 1.8 15 08/20/21 14:30 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-28
 Sampled:
 08/11/21 06:58

 Name:
 28. Room 209
 Received:
 08/16/21 15:40

Alias: PAR-209-CF-1 Matrix: Drinking Water - Regular Sample

Qualifier MCL Analyst Method Result Unit **Parameter** Analyzed **Total Metals - PIA** Copper 1200 ug/L 1300 08/20/21 14:31 TJJ EPA 200.8 REV 5.4 Lead 27 ug/L **15 08/20/21 14:31 TJJ EPA 200.8 REV 5.4

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Parameter

Copper

Lead

ANALYTICAL RESULTS

 Sample:
 EH03487-29
 Sampled:
 08/11/21 07:00

 Name:
 29. Teachers Lounge
 Received:
 08/16/21 15:40

Unit

Result

34

1.5

ug/L

Alias: PAR-TLF-1 Matrix: Drinking Water - Regular Sample

Qualifier

MCL

1300

15

Analyzed

08/20/21 14:34

08/20/21 14:37

TJJ

EPA 200.8 REV 5.4

TJJ

EPA 200.8 REV 5.4

Analyst Method

 Total Metals - PIA

 Copper
 200
 ug/L
 1300
 08/20/21 14:33
 TJJ
 EPA 200.8 REV 5.4

 Lead
 < 1.0</td>
 ug/L
 15
 08/20/21 14:33
 TJJ
 EPA 200.8 REV 5.4

 Sample:
 EH03487-30
 Sampled:
 08/11/21 07:00

 Name:
 30. Room 101
 Received:
 08/16/21 15:40

Alias: PAR-101-DWF-21 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Analyzed Analyst Method

Total Metals - PIA

Lead 3.2 ug/L 15 08/20/21 14:34 TJJ EPA 200.8 REV 5.4

 Sample:
 EH03487-31
 Sampled:
 08/11/21 07:02

 Name:
 31. Room 103
 Received:
 08/16/21 15:40

ug/L

Alias: PAR-103-DWF-22 Matrix: Drinking Water - Regular Sample

Qualifier MCL **Parameter** Result Unit Analyzed Analyst Method Total Metals - PIA Copper 13 ug/L 1300 08/20/21 14:36 TJJ EPA 200.8 REV 5.4 Lead 1.6 15 08/20/21 14:36 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-32
 Sampled:
 08/11/21 07:02

 Name:
 32. Room 105
 Received:
 08/16/21 15:40

Alias: PAR-105-DWF-23 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Analyzed Analyst Method

Total Metals - PIA

Copper 20 ug/L 1300 08/20/21 14:37 TJJ EPA 200.8 REV 5.4

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 Sample:
 EH03487-33
 Sampled:
 08/11/21 07:02

 Name:
 33. Hall By 105
 Received:
 08/16/21 15:40

Alias: PAR-H105-EWC-3 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Analyzed Analyst Method Total Metals - PIA 1300 EPA 200.8 REV 5.4 Copper 210 ug/L 08/20/21 14:47 TJJ Lead < 1.0 15 08/20/21 14:47 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-34
 Sampled:
 08/11/21 07:03

 Name:
 34. Room 107
 Received:
 08/16/21 15:40

Alias: PAR-107-DWF-24 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Method Analyzed Analyst <u>Total Metals - PIA</u> 1300 Copper 23 ug/L 08/20/21 14:48 TJJ EPA 200.8 REV 5.4 Lead 2.8 15 08/20/21 14:48 EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-35
 Sampled:
 08/11/21 07:06

 Name:
 35. Room 109
 Received:
 08/16/21 15:40

Alias: PAR-109-CF-2 Matrix: Drinking Water - Regular Sample

Qualifier MCL **Parameter** Result Unit Analyzed Analyst Method Total Metals - PIA Copper 19 ug/L 1300 08/20/21 14:50 TJJ EPA 200.8 REV 5.4 Lead 2.2 15 08/20/21 14:50 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-36
 Sampled:
 08/11/21 07:09

 Name:
 36. Room 113
 Received:
 08/16/21 15:40

Alias: PAR-113-CF-3 Matrix: Drinking Water - Regular Sample

Qualifier MCL Analyst Method Result Unit **Parameter** Analyzed **Total Metals - PIA** Copper 190 ug/L 1300 08/20/21 14:51 TJJ EPA 200.8 REV 5.4 Lead 23 ug/L **15 08/20/21 14:51 TJJ EPA 200.8 REV 5.4



 Sample:
 EH03487-37
 Sampled:
 08/11/21 07:11

 Name:
 37. Room 114
 Received:
 08/16/21 15:40

Alias: PAR-114-CF-4 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Analyzed Analyst Method Total Metals - PIA 330 1300 EPA 200.8 REV 5.4 Copper ug/L 08/20/21 14:53 TJJ Lead 65 **15 08/20/21 14:53 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-38
 Sampled:
 08/11/21 07:12

 Name:
 38. Hall By 114
 Received:
 08/16/21 15:40

Alias: PAR-H114-EWC-4 Matrix: Drinking Water - Regular Sample

Parameter Result Unit Qualifier MCL Method Analyzed Analyst <u>Total Metals - PIA</u> 390 1300 Copper ug/L 08/20/21 14:54 TJJ EPA 200.8 REV 5.4 Lead 2.4 15 08/20/21 14:54 EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-39
 Sampled:
 08/11/21 07:13

 Name:
 39. Room 115
 Received:
 08/16/21 15:40

Alias: PAR-115-CF-5 Matrix: Drinking Water - Regular Sample

Qualifier MCL **Parameter** Result Unit Analyzed Analyst Method Total Metals - PIA Copper 170 ug/L 1300 08/20/21 14:55 TJJ EPA 200.8 REV 5.4 Lead 9.6 15 08/20/21 14:55 TJJ EPA 200.8 REV 5.4 ug/L

 Sample:
 EH03487-40
 Sampled:
 08/11/21 07:13

 Name:
 40. Room 116
 Received:
 08/16/21 15:40

Alias: PAR-116-CF-6 Matrix: Drinking Water - Regular Sample

Qualifier MCL Analyst Method Result Unit **Parameter** Analyzed **Total Metals - PIA** Copper 170 ug/L 1300 08/20/21 14:57 TJJ EPA 200.8 REV 5.4 Lead 32 ug/L **15 08/20/21 14:57 TJJ EPA 200.8 REV 5.4

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NOTES

Specifications regarding method revisions and method modifications used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279 Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807 USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389 TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080 Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050 Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Eni Mosane

Certified by: Erin Lane, Project Manager





REGULATORY PROGRAM (CIRCLE):

MORBCA

CCDD

TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED MO

*	(FOR LAB USE ONLY)	LOGGED BY: EH 03487-41	CLIENT:PROJECT:	PROJ. MGR.: CUSTODY SEAL #:	REMARKS						of to proceed with analyze is soon the col. is	not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may <u>NOT</u> be acceptable to report to all regulatory authorities.		COMMENTS: (FOR LAB USE ONLY)	SAMPLE TEMPERATURE UPON RECEIPT 70.3 °C	CHILL PROCESS STARTED PRIOR TO RECEIPT YORKN SAMPLE(S) RECEIVED ON ICE SAMPLE ACCEPTANCE NONCONFORMANT YORN REPORT IS NEEDED	DATE AND TIME TAKEN FROM SAMPLE BOTTLE	
	3 ANALYSIS REQUESTED		Pos	7 7/2	May	(1)					ing this hay I nive the lah nermission	mance requirements as defined in t qualified. Qualified data may NOT be	PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS)	8-13-21 6	SAMPLE TEMPERA	2	1540 DATE AND TIME TA	ç
LIENT (PLEASE PRINT)	PURCHASE ORDER#	7-16-21	MATRIX TYPES: www.wastewater DW. Drainking water GW. Ground water	WWNSL-SLUDGE MAS-NON AQUEOUS SOLID LCHT-LEACHATE SOL-SOIL SOL-SOILD	BOTTLE PRES COUNT CODE	PROMDED				7-OTHER	understand that by initial	ot meet all sample confor	ROCEED WITH ANALYS	DATE	DATE	DARE	0/	10 POD 10
ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)	Columbia, MO	E-MAIL jlehmen@ess-inc.com			SAMPLE TYPE MATRIX GRAB COMP TYPE	×				6 – UNPRESERVED	DATE RESULTS NEEDED	•)		RECEIVED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)	RECEIVED BY: (SIGNATURE)	3	חלאם
ALL HIGHLIGHTED ARE	L14571	PHONE NUMBER 573-449-2646	sampler (Please print) Josh Lehmen	SAMPLER'S SIGNATURE	DATE TIME COLLECTED					NO3 4-NAOH 5NA2S2O3	RUSH			The state of the s	A	RECEIVED)	
A LINE	Engineering Surveys & Services	1113 Fay Street	srare Columbia, MO	contact Person Josh Lehmen	SAMPLE DESCRIPTION SAMPLE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	Portrade Elmestery School				SHEMICAL PRESERVATION CODES: I - HCL 2 - H2SO4 3 - HNO3	TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL (RUSH TAT IS SUBJECT TO POC LABS APPROVAL AND SURCHARGE)	IA (PLEASE CII	PHONE # IF DIFFERENT F	TRELINGUISHED BY: SIGNATURE) THE THIRD THE TABLE TO THE	TINQUISHED BY: (SIGNATURE) DATE TIME	LINQUISHED BY: (SIGNATURE) A TIME		חוות אמדווווח

Location:	Parkade Elementary School
Sample Date:	8/11/2021
Sample Time:	Various
Sampled By:	Josh Lehmen & Kyle Vidusic

Sample No.	Coding System	Description	Sample Collected
1	PAR-306-DWF-1	Room 306 - Drinking Water Fountain	Yes
2	PAR-304-DWF-2	Room 304 - Drinking Water Fountain	Yes
3	PAR-305-DWF-3	Room 305 - Drinking Water Fountain	Yes
4	PAR-307-DWF-4	Room 307 - Drinking Water Fountain	Yes
5	PAR-303-DWF-5	Room 303 - Drinking Water Fountain	Yes
6	PAR-302-DWF-6	Room 302 - Drinking Water Fountain	Yes
7	PAR-301-DWF-7	Room 301 - Drinking Water Fountain	Yes
8	PAR-99-DWF-8	Room 99 - Drinking Water Fountain	Yes
9	PAR-98-DWF-9	Room 98 - Drinking Water Fountain	Yes
10	PAR-96-DWF-10	Room 96 - Drinking Water Fountain	Yes
11	PAR-NSF-1	Nurses Station Faucet	Yes
12	PAR-RRF-1	Restroom By Nurses Office	Yes
13	PAR-H100-EWC-1	Hall by Room 100 - Electric Water Cooler	Yes
14	PAR-100-DWF-11	Room 100 - Drinking Water Fountain	Yes
15	PAR-RRF-2	Main Office Restroom Faucet	Yes
16	PAR-KF-1	Kitchen Faucet - Center	Yes
17	PAR-KF-2	Kitchen Faucet - North Wall	Yes
18	PAR-CAF-EWC-2	Hall by Cafeteria - Electric Water Cooler	Yes
19	PAR-201-DWF-12	Room 201 - Drinking Water Fountain	Yes
20	PAR-202-DWF-13	Room 202 - Drinking Water Fountain	Yes
21	PAR-203-DWF-14	Room 203 - Drinking Water Fountain	Yes
22	PAR-204-DWF-15	Room 204 - Drinking Water Fountain	Yes
23	PAR-205-DWF-16	Room 205 - Drinking Water Fountain	Yes
24	PAR-206-DWF-17	Room 206 - Drinking Water Fountain	Yes
25	PAR-H208-DWF-18	Hall by 208 - Drinking Water Fountain	Yes
26	PAR-208-DWF-19	Room 208 - Drinking Water Fountain	Yes
27	PAR-207-DWF-20	Room 207 - Drinking Water Fountain	Yes
28	PAR-209-CF-1	Room 209 - Classroom Faucet	Yes
29	PAR-TLF-1	Teachers Lounge Faucet	Yes
30	PAR-101-DWF-21	Room 101 - Drinking Water Fountain	Yes
31	PAR-103-DWF-22	Room 103 - Drinking Water Fountain	Yes
32	PAR-105-DWF-23	Room 105 - Drinking Water Fountain	Yes
33	PAR-H105-EWC-3	Hall By 105 - Electric Water Cooler	Yes
34	PAR-107-DWF-24	Room 107 - Drinking Water Fountain	Yes
35	PAR-109-CF-2	Room 109 - Classroom Faucet	Yes
36	PAR-113-CF-3	Room 113 - Classroom Faucet	Yes
37	PAR-114-CF-4	Room 114 - Classroom Faucet	Yes
38	PAR-H114-EWC-4	Hall By 114 - Electric Water Cooler	Yes
39	PAR-115-CF-5	Room 115 - Classroom Faucet	Yes
40	PAR-116-CF-6	Room 116 - Classroom Faucet	Yes



Sample: EL04058-62

Name: 1. Room 306 - Drinking Water Fountain

Alias: PAR-306-DWF-1

Sampled: 12/14/21 05:34

Received: 12/20/21 15:10

Matrix: Drinking Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Total Metals - PIA									
Copper	18	ug/L	0	1/06/22 09:26	1	3.0	01/06/22 12:06	KMC	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L	0	1/06/22 09:26	1	1.0	01/06/22 12:06	KMC	EPA 200.8 REV 5.4

Sample: EL04058-63

Name: 28. Room 209 - Classroom Faucet

Alias: PAR-209-CF-1

Sampled: 12/14/21 05:36 Received: 12/20/21 15:10

Matrix: Drinking Water - Grab

Parameter	Result	Unit	Qualifier Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>								
Copper	130	ug/L	01/06/22 09:26	1	3.0	01/06/22 12:08	KMC	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L	01/06/22 09:26	1	1.0	01/06/22 12:08	KMC	EPA 200.8 REV 5.4

Sample: EL04058-64

Name: 36. Room 113 - Classroom Faucet

Alias: PAR-113-CF-3

 Sampled:
 12/14/21 05:38

 Received:
 12/20/21 15:10

 Matrix:
 Drinking Water - Grab

Parameter	Result	Unit	Qualifier Prepared	Dilution	MRL	Analyzed	Analyst	Method
Total Metals - PIA								
Copper	130	ug/L	01/06/22 09:26	1	3.0	01/06/22 12:09	KMC	EPA 200.8 REV 5.4
Lead	5.3	ug/L	01/06/22 09:26	1	1.0	01/06/22 12:09	KMC	EPA 200.8 REV 5.4



Sample: EL04058-65

Name: 37. Room 114 - Classroom Faucet

Alias: PAR-114-CF-4

Sampled: 12/14/21 05:40

Received: 12/20/21 15:10

Matrix: Drinking Water - Grab

Parameter	Result	Unit	Qualifier Pre	epared I	Dilution	MRL	Analyzed	Analyst	Method
Total Metals - PIA									
Copper	320	ug/L	01/06	/22 09:26	1	3.0	01/06/22 12:11	KMC	EPA 200.8 REV 5.4
Lead	3.1	ug/L	01/06	/22 09:26	1	1.0	01/06/22 12:11	KMC	EPA 200.8 REV 5.4

Sample: EL04058-66

Name: 40. Room 116 - Classroom Faucet

Alias: PAR-116-CF-6

Sampled: 12/14/21 05:42 **Received:** 12/20/21 15:10

Matrix: Drinking Water - Grab

Parameter	Result	Unit	Qualifier Prepared	Dilution	MRL	Analyzed	Analyst	Method
Total Metals - PIA								
Copper	140	ug/L	01/06/22 09:26	1	3.0	01/06/22 12:18	KMC	EPA 200.8 REV 5.4
Lead	2.5	ug/L	01/06/22 09:26	1	1.0	01/06/22 12:18	KMC	EPA 200.8 REV 5.4

January 6, 2022

Mr. Michael Travis Corporate Director of Quality Assurance Pace Analytical Services, LLC – Peoria, Illinois (Lab #870) 2231 West Altorfer Drive Peoria, IL 61615-1807

Dear Mr. Travis:

The Missouri Department of Natural Resources has received your notification that PDC Laboratories, LLC was purchased by Pace Analytical Services, LLC effective December 13, 2021 and that the new laboratory name is Pace Analytical Services, LLC –Peoria, Illinois. The Department has also received a copy of the new Environmental Laboratory Accreditation granted by the State of Illinois with your new laboratory name. Therefore, the Department hereby reciprocally certifies Pace Analytical Services, LLC – Peoria, Illinois under the provisions of the Missouri Safe Drinking Water Regulations to perform chemical analyses for public water systems in the State of Missouri.

Enclosed please find a certificate of approval and a certified parameter list for your laboratory. The certified parameter list references the parameters and methods of analysis that the Department has approved. Your certification will expire on June 30, 2022, and is contingent upon no changes of the approved methods or equipment and maintenance of certification from the primary certification authority.

Thank you for your efforts to comply with Missouri's laboratory certification requirements. Should there be any changes to your Illinois certification status, please notify this office within 30 days. Direct any notifications or inquiries related to the approval to Lauren Ferland of my staff, who may be reached at P.O. Box 176, Jefferson City, MO 65102, or by telephone at 573-526-0135.

Sincerely,

WATER PROTECTION PROGRAM

David J/Lamb

Public Drinking Water Branch Chief

DJL/lf

Enclosures

c: Mr. Richard Kirsch, Environmental Services Program



MISSOURI DEPARTMENT OF NATURAL RESOURCES

DRINKING WATER LABORATORY

CERTIFIED PARAMETER LIST

This is to certify that

Pace Analytical Services, LLC - Peoria, Illinois

located at

2231 West Altorfer Drive, Peoria, Illinois 61615-1807

has been approved to perform the indicated procedures on drinking water under the Missouri Public Drinking Water Regulations (10 CSR 60-5.020). Specific method numbers or references are included in parenthesis when appropriate.

INORGANIC

SM 4500F-C

Fluoride

SM 4500NO3-F

Nitrate, Nitrite

EPA 200.7

Barium, Beryllium, Cadmium,

Chromium, Copper, Nickel

EPA 200.8

Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Thallium

EPA 245.1

Mercury

EPA 300.0

Fluoride, Nitrate, Nitrite

EPA 335.4

Total cyanide

EPA 353.2

Nitrate, Nitrite, Total Nitrate and Nitrite

ORGANIC

EPA 504.1

Dibromochloropropane (DBCP), Ethylene dibromide (EDB)

EPA 515.3

2,4-D, Dalapon, Dinoseb, Pentachlorophenol, Picloram, 2,4,5-TP (Silvex)

EPA 524.2

Benzene, Carbon tetrachloride, Monochlorobenzene, o-Dichlorobenzene, para-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1-2-Dichloroethylene, trans-1-2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Styrene, Tetrachloroethylene, Toluene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, Xylenes (total), Bromodichloromethane, Bromoform, Chloroform, Dibromochloromethane, Total THMs

EPA 525.2

Alachlor, Atrazine, Chlordane, Di(2-ethylhexyl)adipate, Di(2-ethylhexl)phthalate, Endrin, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Simazine, Toxaphene, PCBs (as Arochlors, qualitative, screening)

EPA 531.1

Carbofuran, Oxamyl (Vydate)

EPA 547

Glyphosate

EPA 548.1

Endothall

EPA 549.2

Diquat

EPA 550

Benzo(a)pyrene

EPA 552.2

Dibromoacetic acid, Dichloroacetic acid, Monobromoacetic acid, Monochloroacetic acid, Trichloroacetic acid

Pace Analytical Services, LLC - Peoria, Illinois

Expiration Date: June 30, 2022
Missouri Certificate No.: 870
Original Certifying State: Illinois

State of Missouri Department of Natural Resources

Certificate of Approval for Chemical Laboratory Service

This is to certify that

Pace Analytical Services, LLC – Peoria, Illinois

is hereby approved to perform the analysis of drinking water as specified on the Certified Parameter List, which must accompany this certificate to be valid.

Certification Number	870	ego for -l				
Date Issued	January 6, 2022	Laboratory Certification Authority, Public Drinking Water Branch Missouri Department of Natural Resources				
Expiration Date	June 30, 2022	Rola Kind				

Missouri Department of Natural Resources