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

DATE: JANUARY 6, 2022

**FACILITY NAME:** RUSSELL BOULEVARD ELEMENTARY SCHOOL

#### A. SAMPLE COLLECTION

1. NUMBER OF SAMPLES COLLECTED AT THIS FACILITY

40

2. PERCENTAGE OF SAMPLES BELOW COPPER ACTION LIMITS

100.0%

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

2. NUMBER OF SAMPLES EXCEEDING LEAD ACTION LIMIT

0

#### 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 **40** sample(s) the laboratory received on **8/23/21 2:47 pm** and logged in under work order **EH04765**. 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 EH04765
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
YES	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
NO	Case narrative provided

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Lead

#### **ANALYTICAL RESULTS**

Sample: EH04765-01

Name: 1. Hall by 53 - Electric Water Cooler

Sampled: 08/20/21 06:11

Received: 08/23/21 10:52

Name: Alias:	Hall by 53 - Electric Water Cooler  RUS-H53-EWC-1					Received: Matrix:	08/23/21 Drinking V	10:52 Vater - Grab
Parameter	Re	sult	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - Pl	<u>4</u>							
Copper		330	ug/L		1300	08/31/21 15:26	TJJ	EPA 200.8 REV 5.4
Lead		1.8	ug/L		15	08/31/21 15:26	TJJ	EPA 200.8 REV 5.4
Sample:	EH04765-02					Sampled:	08/20/21 (	06:10
Name:	2. Room 52 - Drinking Water Founta	ain					08/23/21	
Alias:	RUS-52-DWF-1					Matrix:	Drinking V	Vater - Grab
Parameter	Re	esult	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - Pl</u>	<u> </u>							
Copper		300	ug/L		1300	08/31/21 15:28	TJJ	EPA 200.8 REV 5.4
Lead		1.5	ug/L		15	08/31/21 15:28	TJJ	EPA 200.8 REV 5.4
Sample:	EH04765-03					Sampled:	08/20/21	06:10
Name:	3. Room 53 - Drinking Water Founta	ain				Received:	08/23/21	
Alias:	RUS-53-DWF-2					Matrix:	Drinking V	Vater - Grab
Parameter	Re	esult	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - Pl</u>	<u>4</u>							
Copper		290	ug/L		1300	08/31/21 15:29	TJJ	EPA 200.8 REV 5.4
Lead		5.4	ug/L		15	08/31/21 15:29	TJJ	EPA 200.8 REV 5.4
Sample:	EH04765-04					Sampled:	08/20/21 (	06:09
Name:	4. Room 51 - Drinking Water Founta	ain				Received:	08/23/21	10:52
Alias:	RUS-51-DWF-3					Matrix:	Drinking V	Vater - Grab
Parameter	Re	esult	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - Pl	<u> </u>							
Copper		390	ug/L		1300	08/31/21 15:31	TJJ	EPA 200.8 REV 5.4
					4.5	00/04/04 45 04	<b>+</b>	ED4 000 0 DEV/ E 4

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15

08/31/21 15:31

TJJ

EPA 200.8 REV 5.4

7.4

ug/L



Sample: EH04765-05

**Sampled:** 08/20/21 06:09

	Name:	5. Room 152 - Drinking Water Foun	ıtain					08/23/21	
	Alias:	RUS-152-DWF-4					Matrix:	Drinking v	Vater - Grab
Paramet	er	R	esult	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	tals - PIA	<u>\</u>							
Copper			200	ug/L		1300	08/31/21 15:40	TJJ	EPA 200.8 REV 5.4
Lead			8.9	ug/L		15	08/31/21 15:40	TJJ	EPA 200.8 REV 5.4
;	Sample:	EH04765-06					Sampled:	08/20/21 (	09:07
	Name:	6. Room 153 - Drinking Water Foun	ıtain					08/23/21	
	Alias:	RUS-153-DWF-5					Matrix:	Drinking V	Vater - Grab
Paramet	er	R	esult	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	tals - PIA	1							
Copper			480	ug/L		1300	08/31/21 15:41	TJJ	EPA 200.8 REV 5.4
Lead			3.4	ug/L		15	08/31/21 15:41	TJJ	EPA 200.8 REV 5.4
;	Sample:	EH04765-07					Sampled:	08/20/21 (	06:06
	Name:	7. Room 151 - Drinking Water Foun	ıtain					08/23/21	
4	Alias:	RUS-151-DWF-6					Matrix:	Drinking V	Vater - Grab
Paramet	er	R	esult	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	tals - PIA	<u>.</u>							
Copper			510	ug/L		1300	08/31/21 15:43	TJJ	EPA 200.8 REV 5.4
Lead			18	ug/L		**15	08/31/21 15:43	TJJ	EPA 200.8 REV 5.4
;	Sample:	EH04765-08					Sampled:	08/20/21 (	06:05
I	Name:	8. Hall by 150 - Electric Water Cool	er				Received:	08/23/21	10:52
	Alias:	RUS-H150-EWC-2					Matrix:	Drinking V	Vater - Grab
Paramet	er	R	esult	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	tals - PIA	<u></u>							
Copper			510	ug/L		1300	08/31/21 15:44	TJJ	EPA 200.8 REV 5.4
Lead			2.7	ug/L		15	08/31/21 15:44	TJJ	EPA 200.8 REV 5.4

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EPA 200.8 REV 5.4

EPA 200.8 REV 5.4



Copper

Lead

#### **ANALYTICAL RESULTS**

Sample: EH04765-09

**Sampled:** 08/20/21 06:04

Name:	9. Room 150 - Drinking Water Fountain				Received:	08/23/21	10:52
Alias:	RUS-150-DWF-7				Matrix:	Drinking V	Vater - Grab
Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - Pl	<u>A</u>						
Copper	350	ug/L		1300	08/31/21 15:46	TJJ	EPA 200.8 REV 5.4
Lead	15	ug/L		15	08/31/21 15:46	TJJ	EPA 200.8 REV 5.4
Sample:	EH04765-10				Sampled:	08/20/21 (	06:02
Name:	10. Room 149 - Drinking Water Fountain				Received:	08/23/21	10:52
Alias:	RUS-149-DWF-8				Matrix:	Drinking V	Vater - Grab
Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - Pl	<u>A</u>						
Copper	670	ug/L		1300	08/31/21 15:47	TJJ	EPA 200.8 REV 5.4
₋ead	1.2	ug/L		15	08/31/21 15:47	TJJ	EPA 200.8 REV 5.4
Sample:	EH04765-11				Sampled:	08/20/21	06:01
Name:	11. Room 148 - Drinking Water Fountain				Received:	08/23/21	10:52
Alias:	RUS-148-DWF-9				Matrix:	Drinking V	Vater - Grab
Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - Pl	<u>A</u>						
Copper	1200	ug/L		1300	08/31/21 15:49	TJJ	EPA 200.8 REV 5.4
Lead	4.8	ug/L		15	08/31/21 15:49	TJJ	EPA 200.8 REV 5.4
Sample:	EH04765-12				Sampled:	08/20/21	05:59
Name:	12. Room 147 - Drinking Water Fountain				Received:	08/23/21	10:52
Alias:	RUS-147-DWF-10				Matrix:	Drinking V	Vater - Grab
Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - Pl	Δ						
O	<u></u>			1000	00/04/04 45 50	<b>T.</b>	EDA 000 0 DEV. 5 1

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480

4.4

ug/L

ug/L

1300

15

08/31/21 15:50

08/31/21 15:50

TJJ

TJJ



Sample: EH04765-13

Sampled: 08/20/21 05:58

Nam		3. Room 146 - Drinking Water Fo	untain				Received:	08/23/21 1	
Alias	s: R	RUS-146-DWF-11					Matrix:	Drinking V	Vater - Grab
Parameter		R	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals	- PIA								
Copper			500	ug/L		1300	08/31/21 14:40	KMC	EPA 200.8 REV 5.4
Lead			5.2	ug/L		15	08/31/21 14:40	KMC	EPA 200.8 REV 5.4
Sam	ple: E	H04765-14					Sampled:	08/20/21 (	05:50
Nam		4. Room 142 - Classroom Faucet						08/23/21 1	
Alias	s: F	RUS-142-CF-1					Matrix:	Drinking V	Vater - Grab
Parameter		R	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals	- PIA								
Copper			230	ug/L		1300	08/31/21 14:41	KMC	EPA 200.8 REV 5.4
Lead			8.9	ug/L		15	08/31/21 14:41	KMC	EPA 200.8 REV 5.4
Sam	•	H04765-15					Sampled:	08/20/21 (	06:16
Nam		5. Hall by Gym - Electric Water Co	ooler					08/23/21 1	
Alias	s: R	RUS-GYM-EWC-3					Matrix:	Drinking V	Vater - Grab
Parameter		R	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals	- PIA								
Copper			270	ug/L		1300	08/31/21 14:43	KMC	EPA 200.8 REV 5.4
Lead			1.5	ug/L		15	08/31/21 14:43	KMC	EPA 200.8 REV 5.4
Sam	ple: E	H04765-16					Sampled:	08/20/21 (	06:18
Nam	ne: 1	6. Room 127 - Drinking Water Fo	untain				Received:	08/23/21 1	10:52
Alias	s: F	RUS-127-DWF-12					Matrix:	Drinking V	Vater - Grab
Parameter		R	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals	- PIA								
Copper			590	ug/L		1300	08/31/21 14:44	KMC	EPA 200.8 REV 5.4
Lead			< 1.0	ug/L		15	08/31/21 14:44	KMC	EPA 200.8 REV 5.4
Lead			< 1.0	ug/L		15	08/31/21 14:44	KMC	EPA 200.8 REV 5.4

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Sample: EH04765-17

Sampled: 08/20/21 06:41

Name: Alias:	17. Room 126 - Drinking Water F RUS-126-DWF-13	ountain				Received: Matrix:	08/23/21 Drinking V	10:52 Vater - Grab
Parameter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - P	<u>IA</u>							
Copper		110	ug/L		1300	08/31/21 14:46	KMC	EPA 200.8 REV 5.4
Lead		3.9	ug/L		15	08/31/21 14:46	KMC	EPA 200.8 REV 5.4
Sample	e: EH04765-18						08/20/21 (	
Name:	18. Room 129 - Drinking Water F	ountain				Received:	08/23/21	10:52
Alias:	RUS-129-DWF-14					Matrix:	Drinking V	Vater - Grab
Parameter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - P</u>	<u>IA</u>							
Copper		690	ug/L		1300	08/31/21 14:48	KMC	EPA 200.8 REV 5.4
Lead		1.6	ug/L		15	08/31/21 14:48	KMC	EPA 200.8 REV 5.4
Sample	e: EH04765-19						08/20/21 (	
Name:	19. Room 128 - Classroom Fauce	et					08/23/21	
Alias:	RUS-128-DWF-15					Matrix:	Drinking V	Vater - Grab
Parameter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - P	<u>IA</u>							
Copper		270	ug/L		1300	08/31/21 14:55	KMC	EPA 200.8 REV 5.4
Lead		< 1.0	ug/L		15	08/31/21 14:55	KMC	EPA 200.8 REV 5.4
Sample	e: EH04765-20					Sampled:	08/20/21 (	06:45
Name:	20. Hall by 131 - Electric Water C	ooler				Received:	08/23/21	
Alias:	RUS-H131-EWC-4					Matrix:	Drinking V	Vater - Grab
Parameter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - P								
Copper		350	ug/L		1300	08/31/21 14:57	KMC	EPA 200.8 REV 5.4
Lead		2.1	ug/L		15	08/31/21 14:57	KMC	EPA 200.8 REV 5.4

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Sample: EH04765-21

Sampled: 08/20/21 06:47

	Name:	21. Room 131 - Drinking Water Fe	ountain				Received:	08/23/21 1	10:52
	Alias:	RUS-131-DWF-16					Matrix:	Drinking V	Vater - Grab
Parame	eter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total M	etals - PIA	<u>.</u>							
Copper			690	ug/L		1300	08/31/21 14:58	KMC	EPA 200.8 REV 5.4
Lead			1.0	ug/L		15	08/31/21 14:58	KMC	EPA 200.8 REV 5.4
	Sample:	EH04765-22					Sampled:	08/20/21 0	06:47
	Name:	22. Room 130 - Drinking Water Fo	ountain					08/23/21 1	
	Alias:	RUS-130-DWF-17					Matrix:	Drinking V	Vater - Grab
Parame	eter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total M	etals - PIA	1							
Copper			1300	ug/L		1300	09/01/21 14:37	KMC	EPA 200.8 REV 5.4
Lead			2.4	ug/L		15	08/31/21 15:00	KMC	EPA 200.8 REV 5.4
	Sample:	EH04765-23					Sampled:	08/20/21 0	06:48
	Name:	23. Room 106 - Drinking Water Fo	ountain					08/23/21 1	
	Alias:	RUS-106-DWF-18					Matrix:	Drinking V	Vater - Grab
Parame	eter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total M	etals - PIA	<u>.</u>							
Copper			230	ug/L		1300	08/31/21 15:02	KMC	EPA 200.8 REV 5.4
Lead			< 1.0	ug/L		15	08/31/21 15:02	KMC	EPA 200.8 REV 5.4
	Sample:	EH04765-24					Sampled:	08/20/21 0	07:00
	Name:	24. Room 135- Classroom Fauce	t				Received:	08/23/21 1	10:52
	Alias:	RUS-135-CF-135					Matrix:	Drinking V	Vater - Grab
Parame	eter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total M	etals - PIA	<u> </u>							
Copper			230	ug/L		1300	08/31/21 15:03	KMC	EPA 200.8 REV 5.4

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Sample: EH04765-25

**Sampled:** 08/20/21 06:52

	Name:	25. Room 137 - Classroom Fa	aucet					08/23/21	
	Alias:	RUS-137-CF-137					Matrix:	Drinking V	Vater - Grab
Paramet	ter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	etals - PIA	<u>.</u>							
Copper			270	ug/L		1300	08/31/21 15:05	KMC	EPA 200.8 REV 5.4
Lead			11	ug/L		15	08/31/21 15:05	KMC	EPA 200.8 REV 5.4
	Sample:	EH04765-26					Sampled:	08/20/21 (	06:52
	Name:	26. Hall by 133 - Electric Water	er Cooler				Received:	08/23/21	10:52
	Alias:	RUS-133-EWC-5					Matrix:	Drinking V	Vater - Grab
Paramet	ter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	etals - PIA	<u>.</u>							
Copper			440	ug/L		1300	08/31/21 15:06	KMC	EPA 200.8 REV 5.4
Lead			6.1	ug/L		15	08/31/21 15:06	KMC	EPA 200.8 REV 5.4
	Sample:	EH04765-27					Sampled:	08/20/21 (	06:51
	Name:	27. Room 135 - Classroom Fa	aucet					08/23/21	
	Alias:	RUS-135-CF-2					Matrix:	Drinking V	Vater - Grab
Paramet	ter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	etals - PIA	<u>1</u>							
Copper			220	ug/L		1300	08/31/21 15:14	KMC	EPA 200.8 REV 5.4
Lead			4.4	ug/L		15	08/31/21 15:14	KMC	EPA 200.8 REV 5.4
	Sample:	EH04765-28					Sampled:	08/20/21 (	06:51
	Name:	28. Hall by Main Entrance - El	lectric Water C	Cooler			Received:	08/23/21	
	Alias:	RUS-ENT-EWC-6					Matrix:	Drinking V	Vater - Grab
Paramet	ter		Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Me	etals - PIA	<u> </u>							
Copper			200	ug/L		1300	08/31/21 15:15	KMC	EPA 200.8 REV 5.4
Lead			< 1.0	ug/L		15	08/31/21 15:15	KMC	EPA 200.8 REV 5.4

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Sampled: 08/20/21 06:20



Lead

#### **ANALYTICAL RESULTS**

Sample: EH04765-29

29. Room 105 - Teachers Lounge Faucet Received: 08/23/21 10:52 Name: Drinking Water - Grab

Alias: RUS-105-TLF-1 Matrix:

**Parameter** Result Unit Qualifier MCL Analyzed Analyst Method Total Metals - PIA 1300 08/31/21 15:17 Copper 290 ug/L **KMC** EPA 200.8 REV 5.4 Lead < 1.0 15 08/31/21 15:17 **KMC** EPA 200.8 REV 5.4 ug/L

Sample: EH04765-30 Sampled: 08/20/21 06:30 Name: 30. Nurses Office Received: 08/23/21 10:52 Alias: **RUS-NSF-1** Matrix: Drinking Water - Grab

Analyst Method Result Unit Qualifier MCL **Parameter** Analyzed <u>Total Metals - PIA</u> 1300 Copper 130 ug/L 08/31/21 15:19 KMC EPA 200.8 REV 5.4 Lead < 1.0 15 08/31/21 15:19 KMC EPA 200.8 REV 5.4 ug/L

Sample: EH04765-31 08/20/21 06:25 Sampled:

Name: 31. Hall by 106- Electric Water Cooler Received: 08/23/21 10:52

RUS-H106-EWC-7 Drinking Water - Grab Alias: Matrix:

MCL **Parameter** Result Unit Qualifier Analyzed Analyst Method Total Metals - PIA Copper 350 1300 08/31/21 15:20 KMC EPA 200.8 REV 5.4 ug/L Lead 1.2 15 08/31/21 15:20 **KMC** EPA 200.8 REV 5.4 ug/L

Sampled: 08/20/21 06:31 Sample: EH04765-32 Name: 32. Room 108 - Drinking Water Fountain Received: 08/23/21 10:52

ug/L

3.1

RUS-108-DWF-19 Matrix: Drinking Water - Grab Alias:

Qualifier MCL Result Unit **Parameter** Analyzed Analyst Method **Total Metals - PIA** Copper 230 ug/L 1300 08/31/21 15:22 **KMC** EPA 200.8 REV 5.4

15

08/31/21 15:22

KMC

EPA 200.8 REV 5.4

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Sample: EH04765-33

Sampled: 08/20/21 00:33

	•	33. Room 110 - Drinking Wate	r Fountain				•	08/23/21	
Alia		RUS-110-DWF-20	i i Guillaili				Matrix:		Vater - Grab
Parameter			Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals	s - PIA								
Copper			94	ug/L		1300	08/31/21 15:23	KMC	EPA 200.8 REV 5.4
Lead			< 1.0	ug/L		15	08/31/21 15:23	KMC	EPA 200.8 REV 5.4
Sar	mple:	EH04765-34					Sampled:	08/20/21 (	06:30
		34. Room 112 - Drinking Wate	r Fountain					08/23/21	
Alia	as:	RUS-112-DWF-21					Matrix:	Drinking V	Vater - Grab
Parameter			Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals	s - PIA								
Copper			190	ug/L		1300	08/31/21 15:28	KMC	EPA 200.8 REV 5.4
Lead			1.1	ug/L		15	08/31/21 15:28	KMC	EPA 200.8 REV 5.4
Sar	mple:	EH04765-35					Sampled:	08/20/21 (	07:00
Nar		35. Restroom in 108					Received:	08/23/21	
Alia	as:	RUS-108-RRF-1					Matrix:	Drinking V	Vater - Grab
Parameter			Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals	<u>s - PIA</u>								
Copper			220	ug/L		1300	08/31/21 15:33	KMC	EPA 200.8 REV 5.4
Lead			1.2	ug/L		15	08/31/21 15:33	KMC	EPA 200.8 REV 5.4
Sar	mple:	EH04765-36					Sampled:	08/20/21 (	07:02
Nar	me:	36. Office Restroom					Received:	08/23/21	
	ae.	RUS-OFF-RRF-2					Matrix:	Drinking V	Vater - Grab
Alia	us.								
Alia Parameter			Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
			Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Parameter			Result	<b>Unit</b>	Qualifier	MCL 1300	Analyzed 08/31/21 15:34	Analyst	Method  EPA 200.8 REV 5.4



Sample: EH04765-37

Name: #37

Matrix: Drinking Water - Grab

Sampled: 08/20/21 06:24

**Received:** 08/23/21 14:47

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	100	ug/L		1300	08/31/21 15:36	KMC	EPA 200.8 REV 5.4
Lead	10	ug/L		15	08/31/21 15:36	KMC	EPA 200.8 REV 5.4

Sample: EH04765-38

Name: #38

Matrix: Drinking Water - Grab

Sampled: 08/20/21 06:25

Received: 08/23/21 14:47

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - PIA							
Copper	130	ug/L		1300	08/31/21 15:37	KMC	EPA 200.8 REV 5.4
Lead	2.7	ug/L		15	08/31/21 15:37	KMC	EPA 200.8 REV 5.4

Sample: EH04765-39

Name: #39

Matrix: Drinking Water - Grab

Sampled: 08/20/21 06:27

Received: 08/23/21 14:47

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
Total Metals - PIA							
Copper	230	ug/L		1300	08/31/21 15:39	KMC	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L		15	08/31/21 15:39	KMC	EPA 200.8 REV 5.4

Sample: EH04765-40

Name: #40

Matrix: Drinking Water - Grab

Sampled: 08/20/21 06:31

Received: 08/23/21 14:47

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method	
Total Metals - PIA								
Copper	240	ug/L		1300	08/31/21 15:40	KMC	EPA 200.8 REV 5.4	
Lead	1.3	ug/L		15	08/31/21 15:40	KMC	EPA 200.8 REV 5.4	



#### **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):	NPDES	
MORBCA	RCRA	
CCDD	TACO: RES OR IND/COMM	

#### **CHAIN OF CUSTODY RECORD**

STATE WHERE SAMPLE COLLECTED MO

		HLIGHTED ARE											1	
CLIENT	PROJECT NUMBER		Columbia, MO		PURCHASE ORDER #		3 ANALYSIS REQUESTED				ED	(FO	OR LAB USE ONLY)	
Engineering Surveys & Services	L14571	IMPED	Colur		E-MAIL DATE SHIPPED			<del>                                     </del>						H04765-4
Address	PHONE NUMBER			/			/						LOGGED B	$(\mathcal{N}, \mathcal{N})$
1113 Fay Street		3-2040	jlehmen@ess-inc.com			8/0	974						CLIENT:	
CITY STATE	SAMPLER (PLEASE PRINT)					MATRIX T		3					PROJECT:	
Columbia, MO	Josh Lehr	nen	WW- WASTEWATER DW- DRINKING WATER GW- GROUND WATER WWSL -SLUDGE			ATER	3					_	L:	
CONTACT PERSON	SAMPLER'S SIGNATURE					NAS- NON AQUEO LCHT-LEACHATE OIL-OIL	OUS SOLID	+					CUSTODY	SEAL #:
Josh Lehmen						SO-SOIL SOL-SOLID								
SAMPLE DESCRIPTION  (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	COLLECTED	TIME	SAMPLI GRAB	COMP	MATRIX TYPE	COUNT	PRES CODE CLIENT PROVIDED	B						REMARKS
Russel Blad, Eloutary School			Х					40						
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CHEMICAL PRESERVATION CODES: I – HCL 2 – H2SO4 3 –	HNO3 4 - NAOH	H 5 – NA2	28203	6 – UNPR	RESERVED	7 – OTHER					****			
TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORM. (RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)  RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE	AL RUSH		NEEDEI		6	not meet all	sample confo	rmance i	requiren	nents as	defined	in the r	receiving facility's	lysis, even though it may Sample Acceptance to all regulatory authorities.
EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE	i:						VITH ANALYS				No. of London		0:1	_
RELINQUISHED BY: (SIGNATURE) DATE	34 24	RECEIVE	D BY: (SIG	NATURE)			DATE	-	-11				TS: (FOR LAB USE	ONLY)
	DAUG 21	Ri	401				TIME	Q:10		(8)	-			
	10	RECEIVE	D BY: (SIG	(A)TURE)	1	Α	DATE		48		-			
BUSTIME TIME	20.11	Zpolv	reig		m	7	TIME		) AM				JRE UPON RECEIP	20-+
RELINQUISHED BY: (SIGNATURE)	3-21	RECEIVE	D BY: (SIGN	NATURE)			DATE	23	u	SAMPL	E(S) RE	CEIVED	RTED PRIOR TO RI D ON ICE CE NONCONFORMA	Y ORN
Splighten	1:47(	)	-(	1	1	d	TIME	447		REPOR	RT IS NE	EDED	EN FROM SAMPLE	YORN
	1			/\			1	1 1 1						1 Page 14 of 15

OHALTDAY 2010 DEVE

DACE

Location:	Russel Elementary School
Sample Date:	8/20/2021
Sample Time:	Various
Sampled By:	Josh Lehmen

Sample No.	Coding System	Description	Sample Collected
1	RUS-H53-EWC-1	Hall by 53 - Electric Water Cooler	Yes
2	RUS-52-DWF-1	Room 52 - Drinking Water Fountain	Yes
3	RUS-53-DWF-2	Room 53 - Drinking Water Fountain	Yes
4	RUS-51-DWF-3	Room 51 - Drinking Water Fountain	Yes
5	RUS-152-DWF-4	Room 152 - Drinking Water Fountain	Yes
6	RUS-153-DWF-5	Room 153 - Drinking Water Fountain	Yes
7	RUS-151-DWF-6	Room 151 - Drinking Water Fountain	Yes
8	RUS-H150-EWC-2	Hall by 150 - Electric Water Cooler	Yes
9	RUS-150-DWF-7	Room 150 - Drinking Water Fountain	Yes
10	RUS-149-DWF-8	Room 149 - Drinking Water Fountain	Yes
11	RUS-148-DWF-9	Room 148 - Drinking Water Fountain	Yes
12	RUS-147-DWF-10	Room 147 - Drinking Water Fountain	Yes
13	RUS-146-DWF-11	Room 146 - Drinking Water Fountain	Yes
14	RUS-142-CF-1	Room 142 - Classroom Faucet	Yes
15	RUS-GYM-EWC-3	Hall by Gym - Electric Water Cooler	Yes
16	RUS-127-DWF-12	Room 127 - Drinking Water Fountain	Yes
17	RUS-126-DWF-13	Room 126 - Drinking Water Fountain	Yes
18	RUS-129-DWF-14	Room 129 - Drinking Water Fountain	Yes
19	RUS-128-DWF-15	Room 128 - Classroom Faucet	Yes
20	RUS-H131-EWC-4	Hall by 131 - Electric Water Cooler	Yes
21	RUS-131-DWF-16	Room 131 - Drinking Water Fountain	Yes
22	RUS-130-DWF-17	Room 130 - Drinking Water Fountain	Yes
23	RUS-106-DWF-18	Room 106 - Drinking Water Fountain	Yes
24	RUS-135-CF-19	Room 135 - Classroom Faucet	Yes
25	RUS-137-CF-20	Room 137 - Classroom Faucet	Yes
26	RUS-133-EWC-5	Hall by 133 - Electric Water Cooler	Yes
27	RUS-135-CF-21	Room 135 - Classroom Faucet	Yes
28	RUS-ENT-EWC-6	Hall by Main Entrance - Electric Water Cooler	Yes
29	RUS-105-TLF-1	Room 105 - Teachers Lounge Faucet	Yes
30	RUS-NSF-1	Nurses Office	Yes
31	RUS-H106-EWC-7	Hall by 106 - Electric Water Cooler	Yes
32	RUS-108-DWF-19	Room 108 - Drinking Water Fountain	Yes
33	RUS-110-DWF-20	Room 110 - Drinking Water Fountain	Yes
34	RUS-112-DWF-21	Room 112 - Drinking Water Fountain	Yes
35	RUS-108-RRF-1	Restroom in 108	Yes
36	RUS-OFF-RRF-2	Office Restroom	Yes
37	RUS-KIT-KF1	Kitchen Faucet - Island	Yes
38	RUS-KIT-KF2	Kitchen Faucet - North Wall	Yes
39	RUS-OFF	Office Sink	Yes
40	RUS-106-CF-22	Room 106 - Classroom Faucet	Yes



**Sample:** EL04058-87

Name: 7. Room 151 - Drinking Water Fountain

Alias: RUS-151-DWF-6

Sampled: 12/09/21 05:00

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	780	ug/L	01/06/22 09:26	1	3.0	01/06/22 13:23	KMC	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L	01/06/22 09:26	1	1.0	01/06/22 13:23	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	egg f -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