

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

DATE: JANUARY 6, 2022

FACILITY NAME: RIDGEWAY ELEMENTARY SCHOOL

A. SAMPLE COLLECTION

1. NUMBER OF SAMPLES COLLECTED AT THIS FACILITY	32
2. PERCENTAGE OF SAMPLES BELOW COPPER ACTION LIMITS	100.0%
1. COPPER ACTION LIMIT = 1,300 UG/L	
3. PERCENTAGE OF SAMPLES BELOW LEAD ACTION LIMIT A	100.0%
(The requirement in the USEPA Lead and Copper Rule for public	

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:



Joshua D. Lehmen, PE

A

August 26, 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 32 sample(s) the laboratory received on 8/16/21 3:40 pm and logged in under work order EH03502. 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





ANALYTICAL RESULTS

Sample: EH03502-09
Name: 9. Room 10
Alias: RWE-10-DWF-3

Sampled: 08/16/21 06:57
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	140	ug/L		1300	08/20/21 15:27	TJJ	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L		15	08/20/21 15:27	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-10
Name: 10. Room 11
Alias: RWE-11-DWF-4

Sampled: 08/16/21 06:51
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	150	ug/L		1300	08/20/21 15:29	TJJ	EPA 200.8 REV 5.4
Lead	27	ug/L		**15	08/20/21 15:29	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-11
Name: 11. Room 10 Restroom
Alias: RWE-10-RRF-5

Sampled: 08/16/21 06:53
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	53	ug/L		1300	08/23/21 14:19	TJJ	EPA 200.8 REV 5.4
Lead	2.6	ug/L		15	08/23/21 14:19	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-12
Name: 12. Room 11 Restroom
Alias: RWE-11-RRF-6

Sampled: 08/16/21 06:48
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	80	ug/L		1300	08/20/21 15:32	TJJ	EPA 200.8 REV 5.4
Lead	4.7	ug/L		15	08/20/21 15:32	TJJ	EPA 200.8 REV 5.4



ANALYTICAL RESULTS

Sample: EH03502-13

Name: 13. Hall by 11

Alias: RWE-H11-EWC-3

Sampled: 08/16/21 06:46

Received: 08/16/21 15:40

Matrix: Drinking Water - Regular Sample

a0 42.2 0 Td (ug/L)Tj 0.0349998 Tc 238 0 Td (EP)70.012(A)TJ 0.00013188 Tc 13.4574 0 Td (200.8 REV 5.4)Tj -0.000654538 Tc -487.457 0 Td (Copper)Tj -0.0001594 Tc :

Parameter	Result	Unit	Result Qualifier	Unit MCL	Qualifier Analyzed	MCL Analyst	Analyzed Method	Analyst	Method
<u>Total Metals - PIA</u>									
Copper	81	ug/L				1300	08/20/21 15:33	TJJ	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L				15	08/20/21 15:33	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-14

Name: 14. Room 9

Alias: RWE-9-DWF-5

Sampled: 08/16/21 06:39

Received: 08/16/21 15:40

Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
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Total Metals - PIA



ANALYTICAL RESULTS

Sample: EH03502-17
Name: 17. Nurses Office
Alias: RWE-6C-NSF-1

Sampled: 08/16/21 06:33
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	90	ug/L		1300	08/20/21 15:47	TJJ	EPA 200.8 REV 5.4
Lead	6.5	ug/L		15	08/20/21 15:47	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-18
Name: 18. Office Restroom
Alias: RWE-6B-RRF-8

Sampled: 08/16/21 06:30
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	130	ug/L		1300	08/20/21 15:48	TJJ	EPA 200.8 REV 5.4
Lead	11	ug/L		15	08/20/21 15:48	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-19
Name: 19. Office Room 6A
Alias: RWE-6A-TLF-1

Sampled: 08/16/21 06:34
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	100	ug/L		1300	08/20/21 15:50	TJJ	EPA 200.8 REV 5.4
Lead	7.1	ug/L		15	08/20/21 15:50	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-20
Name: 20. Room 8
Alias: RWE-8-EWC-5

Sampled: 08/16/21 06:26
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	130	ug/L		1300	08/20/21 15:51	TJJ	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L		15	08/20/21 15:51	TJJ	EPA 200.8 REV 5.4



ANALYTICAL RESULTS

Sample: EH03502-25
Name: 25. Kitchen
Alias: RWE-__-KF-1

Sampled: 08/16/21 06:17
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	160	ug/L		1300	08/20/21 16:06	TJJ	EPA 200.8 REV 5.4
Lead	3.1	ug/L		15	08/20/21 16:06	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-26
Name: 26. Kitchen
Alias: RWE-__-KF-2

Sampled: 08/16/21 06:20
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	89	ug/L		1300	08/20/21 16:08	TJJ	EPA 200.8 REV 5.4
Lead	2.6	ug/L		15	08/20/21 16:08	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-27
Name: 27. Room 2 Restroom
Alias: RWE-2-RRF-12

Sampled: 08/16/21 05:57
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	37	ug/L		1300	08/20/21 16:09	TJJ	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L		15	08/20/21 16:09	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-28
Name: 28. Room 3 Restroom
Alias: RWE-3-RRF-13

Sampled: 08/16/21 06:00
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	22	ug/L		1300	08/20/21 16:11	TJJ	EPA 200.8 REV 5.4
Lead	2.2	ug/L		15	08/20/21 16:11	TJJ	EPA 200.8 REV 5.4



ANALYTICAL RESULTS

Sample: EH03502-29
Name: 29. Teachers Lounge
Alias: RWE-5-TLF-2

Sampled: 08/16/21 06:03
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	160	ug/L		1300	08/20/21 16:12	TJJ	EPA 200.8 REV 5.4
Lead	1.7	ug/L		15	08/20/21 16:12	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-30
Name: 30. Hall by 5
Alias: RWE-H5-EWC-7

Sampled: 08/16/21 06:06
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	260	ug/L		1300	08/20/21 16:14	TJJ	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L		15	08/20/21 16:14	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-31
Name: 31. Room 4B Restroom
Alias: RWE-4B-RRF-14

Sampled: 08/16/21 06:08
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	160	ug/L		1300	08/20/21 16:15	TJJ	EPA 200.8 REV 5.4
Lead	11	ug/L		15	08/20/21 16:15	TJJ	EPA 200.8 REV 5.4

Sample: EH03502-32
Name: 32. Hall by Media Center
Alias: RWE-__-EWC-8

Sampled: 08/16/21 05:48
Received: 08/16/21 15:40
Matrix: Drinking Water - Regular Sample

Parameter	Result	Unit	Qualifier	MCL	Analyzed	Analyst	Method
<u>Total Metals - PIA</u>							
Copper	220	ug/L		1300	08/20/21 16:17	TJJ	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L		15	08/20/21 16:17	TJJ	EPA 200.8 REV 5.4

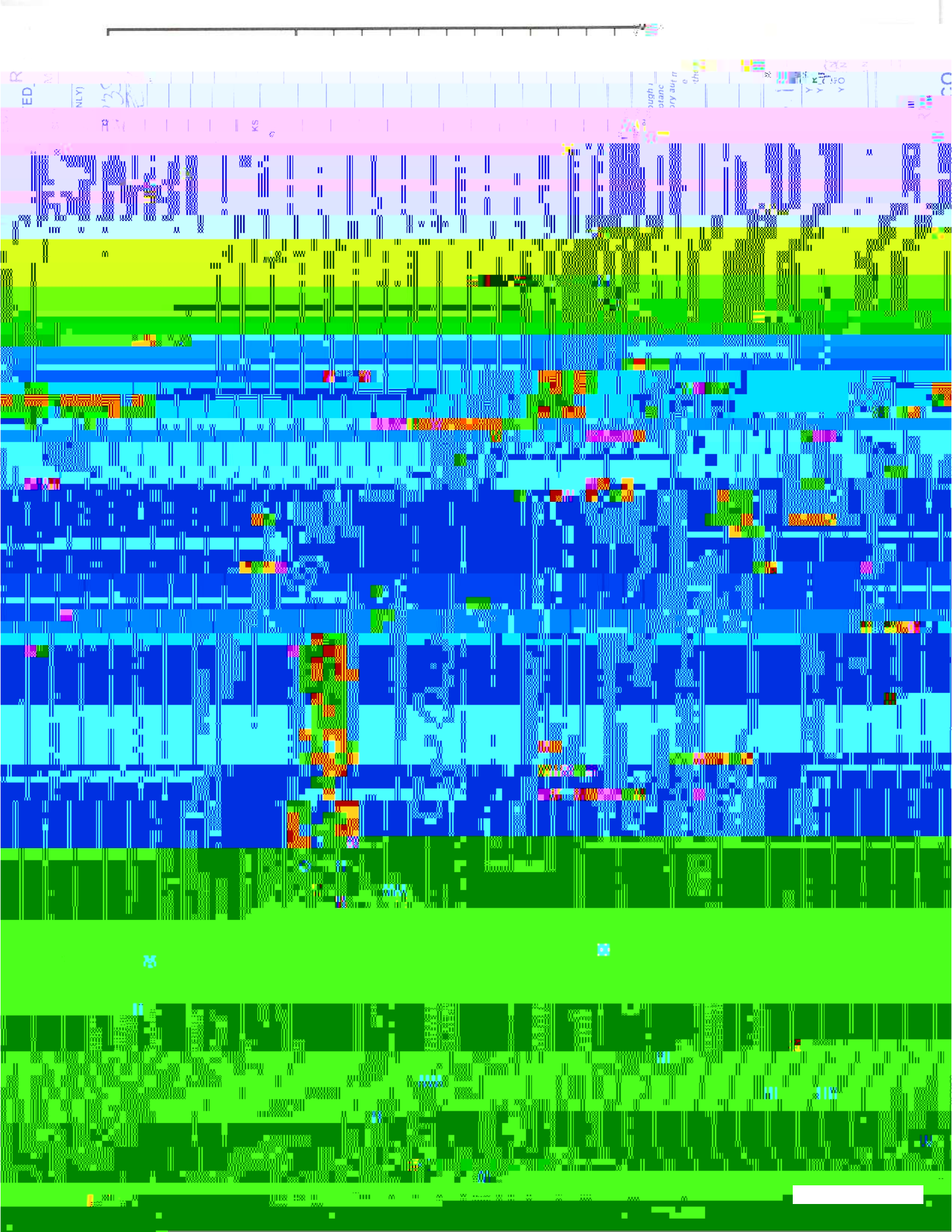


NOTES

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



Location:	Ridgeway Elementary School
Sample Date:	8/13/2021
Sample Time:	Various
Sampled By:	Kyle Vidusic

Sample No.	Coding System	Description	Sample Collected
1	RWE 13 DWF 1	Room 13 Drinking Water Fountain	Yes
2	RWE H13 EWC 1	Hall By 13 Electric Water Cooler	Yes
3	RWE H16 EWC 2	Hall By 16 Electric Water Cooler	Yes
4	RWE 15 DWF 2	Room 15 Drinking Water Fountain	Yes
5	RWE BRR RRF 1	Boys Restroom East	Yes
6	RWE GRR RRF 2	Girls Restroom East	Yes
7	RWE GRR RRF 3	Girls Restroom West	Yes
8	RWE BRR RRF 4	Boys Restroom West	Yes
9	RWE 10 DWF 3	Room 10 Drinking Water Fountain	Yes
10	RWE 11 DWF 4	Room 11 Drinking Water Fountain	Yes
11	RWE 10 RRF 5	Room 10 Restroom	Yes
12	RWE 11 RRF 6	Room 11 Restroom	Yes
13	RWE H11 EWC 3	Hall By 11 Electric Water Cooler	Yes
14	RWE 9 DWF 5	Room 9 Drinking Water Fountain	Yes
15	RWE 9 RRF 7	Room 9 Restroom	Yes
16	RWE OFF EWC 4	Hall By Office Electric Water Cooler	Yes
17	RWE 6C NSF 1	Nurses Office	Yes
18	RWE 6B RRF 8	Office Restroom	Yes
19	RWE 6A TLF 1	Office Room 6A	Yes
20	RWE 8 EWC 5	Room 8 Electric Water Cooler	Yes
21	RWE 8 RRF 9	Room 8 Restroom	Yes
22	RWE MRR RRF 10	Mens Restroom	Yes
23	RWE MRR RRF 11	Mens Restroom	Yes
24	RWE KIT EWC 6	Hall By Kitchen	Yes
25	RWE KIT KF 1	Kitchen Faucet North	Yes
26	RWE KIT KF 2	Kitchen Faucet South	Yes
27	RWE 2 RRF 12	Room 2 Restroom	Yes
28	RWE 3 RRF 13	Room 3 Restroom	Yes
29	RWE 5 TLF 2	Teachers Lounge Faucet	Yes
30	RWE H5 EWC 7	Hall by 5 Electric Water Cooler	Yes
31	RWE 4B RRF 14	Room 4B Restroom	Yes
32	RWE MED EWC 8	Hall by Media Center Electric Water Cooler	Yes
33	RWE		
34	RWE		
35	RWE		
36	RWE		
37	RWE		
38	RWE		
39	RWE		



EL04058-72

12/17/21 06:32

12/20/21 15:10



EL04058-73
5. Boys Restroom East
RWE-__-RRF-1

12/17/21 06:35
12/20/21 15:10
Drinking Water - Grab

Copper	92	ug/L	01/06/22 09:26	1	3.0	01/06/22 12:29	KMC	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L	01/06/22 09:26	1	1.0	01/06/22 12:29	KMC	EPA 200.8 REV 5.4

EL04058-74
10. Room 11 - Drinking Water Fountain
RWE-11-DWF-4

12/17/21 06:40
12/20/21 15:10
Drinking Water - Grab

Copper	65	ug/L	01/06/22 09:26	1	3.0	01/06/22 12:57	KMC	EPA 200.8 REV 5.4
Lead	2.0	ug/L	01/06/22 09:26	1	1.0	01/06/22 12:57	KMC	EPA 200.8 REV 5.4

EL04058-75
14. Room 9 - Drinking Water Fountain
RWE-9-DWF-5

12/17/21 06:42
12/20/21 15:10
Drinking Water - Grab

Copper	64	ug/L	01/06/22 09:26	1	3.0	01/06/22 12:58	KMC	EPA 200.8 REV 5.4
Lead	1.9	ug/L	01/06/22 09:26	1	1.0	01/06/22 12:58	KMC	EPA 200.8 REV 5.4

EL04058-76
22. Mens Restroom
RWE-__-RRF-10

12/17/21 06:46
12/20/21 15:10
Drinking Water - Grab

Copper	160	ug/L	01/06/22 09:26	1	3.0	01/06/22 13:00	KMC	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L	01/06/22 09:26	1	1.0	01/06/22 13:00	KMC	EPA 200.8 REV 5.4



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dnr.mo.gov



Michael L. Parson, Governor

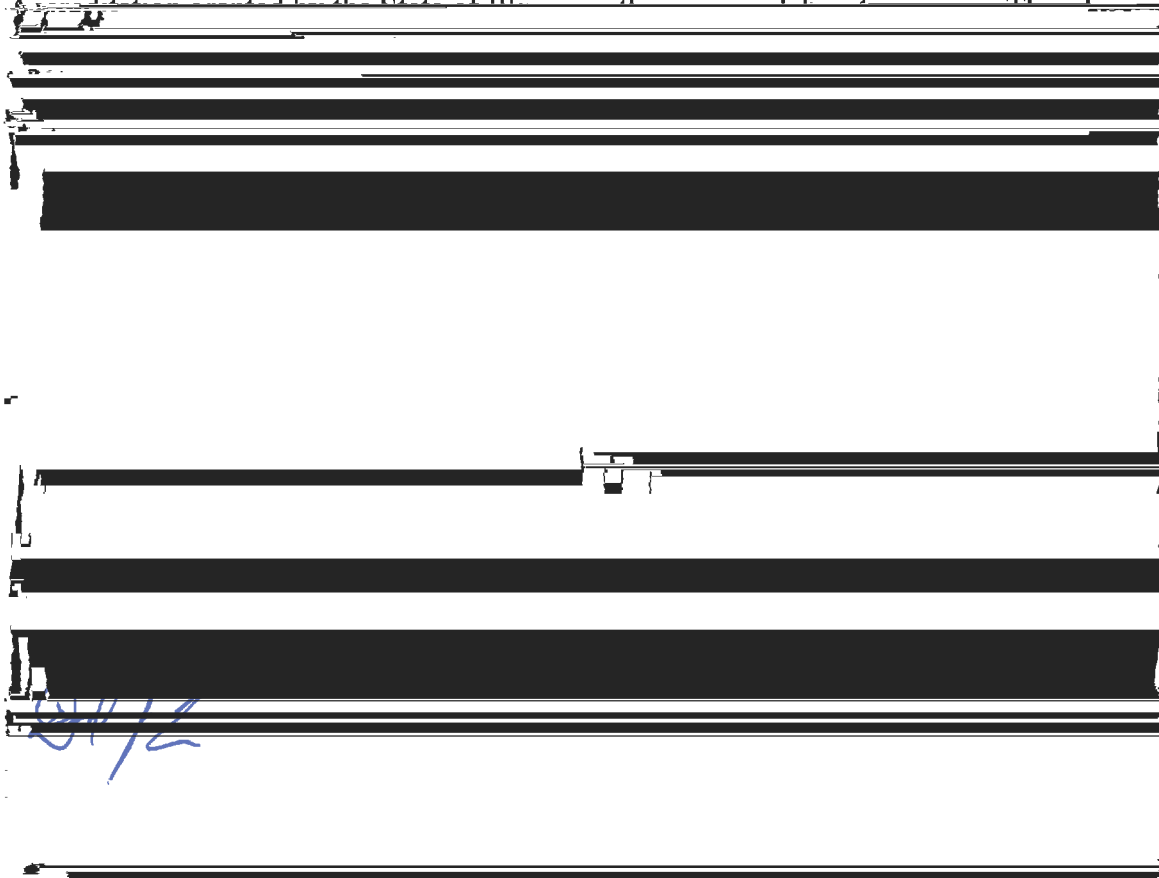
Dru Buntin, Director

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



Handwritten signature or initials in blue ink.



MISSOURI DEPARTMENT OF NATURAL RESOURCES

DRINKING WATER LABORATORY

CERTIFIED PARAMETER LIST

This is to certify that

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

INORGANIC

SM 4500F-C

EPA 245.1

Parameter	Method
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

ORGANIC

EPA 504.1

Dibromochloropropane (DBCP), Ethylene dibromide (EDB)

EPA 515.2

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

EPA 524.2

2,4-Dichlorophenoxyacetic acid, 2,4-Dichlorophenoxyacetic acid, 2,4-Dichlorophenoxyacetic acid

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Department

of

Health

Resources

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 875

Date Issued January 6, 2022

Expiration Date June 30, 2022

Laboratory
Missouri D



Certification
Missouri D