

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

DATE: JANUARY 6, 2022

FACILITY NAME: PARKADE ELEMENTARY SCHOOL

A. SAMPLE COLLECTION

1. 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:



Joshua D. Lehmen, PE

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Case Narrative





ANALYTICAL RESULTS

Sample: EH03487-01
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-02
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-03
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-04
Name:
Alias:

Sampled:
Received:
Matrix:

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



ANALYTICAL RESULTS

Sample: EH03487-05
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-06
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-07
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-08
Name:
Alias:

Sampled:
Received:
Matrix:

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



ANALYTICAL RESULTS

Sample: EH03487-09
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-10
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-11
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-12
Name:
Alias:

Sampled:
Received:
Matrix:

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



ANALYTICAL RESULTS

Sample: EH03487-13
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-14
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-15
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-16
Name:
Alias:

Sampled:
Received:
Matrix:

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



ANALYTICAL RESULTS

Sample: EH03487-17
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-18
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-19
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-20
Name:
Alias:

Sampled:
Received:
Matrix:

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



PDC Laboratories, Inc.



PDC Laboratories, Inc.



ANALYTICAL RESULTS

Sample: EH03487-29
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-30
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-31
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-32
Name:
Alias:

Sampled:
Received:
Matrix:

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



ANALYTICAL RESULTS

Sample: EH03487-33
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-34
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-35
Name:
Alias:

Sampled:
Received:
Matrix:

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

Sample: EH03487-36
Name:
Alias:

Sampled:
Received:
Matrix:

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



NOTES

Certifications

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED MO

(FOR LAB USE ONLY)

4

LOGIN # 117-41
 LOGGED BY [Signature]
 CLIENT: KEC
 PROJECT:
 PROJ. MGR.:
 CUSTODY SEAL #:

REMARKS

3 ANALYSIS REQUESTED

E PRINT ORDER #

PED

ES:

QUID

PRES CODE CLIENT PROVIDED

Lead

X

School

original
[Signature]
[Signature]

through it may acceptance laboratory authorities.

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RECEIVED BY: SIGNATURE

11-1-22
10:30 AM

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



EL04058-62
1. Room 306 - Drinking Water Fountain
PAR-306-DWF-1

12/14/21 05:34
12/20/21 15:10
Drinking Water - Grab

Copper	18	ug/L	01/06/22 09:26	1	3.0	01/06/22 12:06	KMC	EPA 200.8 REV 5.4
Lead	< 1.0	ug/L	01/06/22 09:26	1	1.0	01/06/22 12:06	KMC	EPA 200.8 REV 5.4

EL04058-63
28. Room 209 - Classroom Faucet
PAR-209-CF-1

12/14/21 05:36
12/20/21 15:10
Drinking Water - Grab

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

EL04058-64
36. Room 113 - Classroom Faucet
PAR-113-CF-3

12/14/21 05:38
12/20/21 15:10
Drinking Water - Grab

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



EL04058-65
37. Room 114 - Classroom Faucet
PAR-114-CF-4

12/14/21 05:40
12/20/21 15:10
Drinking Water - Grab



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dnr.mo.gov



Michael L. Parson, Governor

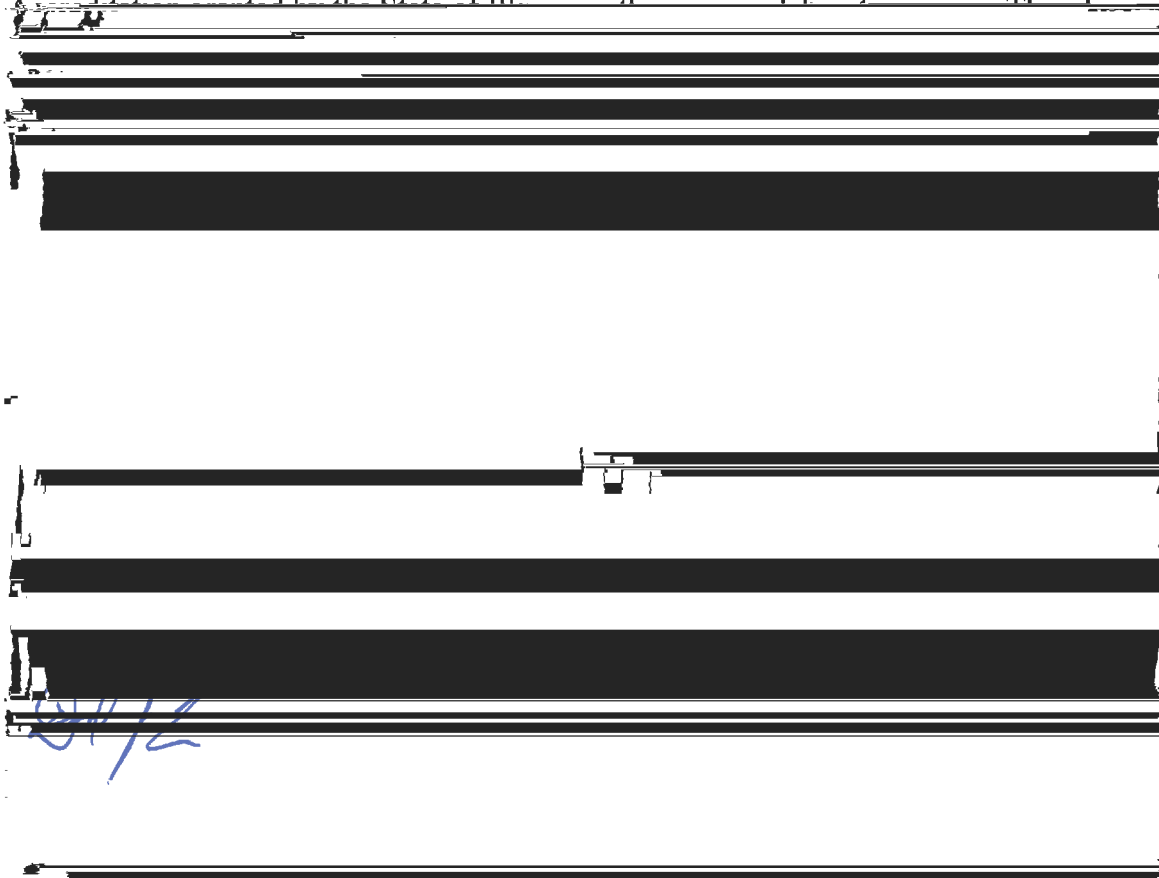
Dru Buntin, Director

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 blue initials or signature.



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