



WATER SAMPLING AND REPORTING SERVICES

**COLUMBIA PUBLIC SCHOOLS
ROCK BRIDGE HIGH SCHOOL
4303 SOUTH PROVIDENCE ROAD
COLUMBIA, MISSOURI**

Prepared for:
**COLUMBIA PUBLIC SCHOOLS
COLUMBIA, MISSOURI**

Prepared by:
**GEOTECHNOLOGY, LLC, DBA UES
ST. LOUIS, MISSOURI**

Date:
DECEMBER 22, 2024

Project No.:
J044517.01

**SAFETY
TEAMWORK
RESPONSIVENESS
INTEGRITY
VALUE
EXCELLENCE**



December 22, 2024

Mr. David Seamon
District Project Manager
Columbia Public Schools
1818 West Worley Street
Columbia, Missouri 65203

Re: Water Sampling and Reporting Services
Columbia Public Schools
Rock Bridge High School
4303 South Providence Road
Columbia, Missouri
Project No. J044517.01

Dear Mr. Seamon:

In accordance with Columbia Public Schools' (CPS) Request for Proposal No. C-24043, dated October 10, 2023, Geotechnology, LLC, dba UES, is pleased to provide this drinking water sampling report for the referenced project. Our scope of services included flushing and sampling of drinking water from potable water outlets, laboratory analysis of water samples, and a letter report.

SITE AND PROJECT DESCRIPTION

The subject property consists of the existing Columbia Public Schools Rock Bridge High School, located northwest of the intersection of East Southampton Drive and South Providence Road in Columbia, Missouri. The purpose of the drinking water sampling was to identify potable water outlets that may require remediation in accordance with the State of Missouri's *Get the Lead out of School Drinking Water Act* (RSMo 160.077).

DRINKING WATER SAMPLING

RSMo 160.077 sets standards for lead concentrations in school drinking water, stating that each Missouri school shall provide drinking water with a lead concentration level below five (5) parts per billion (ppb). This Act requires schools to conduct the inventory, sampling, remediation, and monitoring at all potable drinking water outlets used or potentially used for drinking, food preparation, and cooking or cleaning utensils.

In general conformance with the RSMo 160.077 requirements, and the Environmental Protection Agency's (EPA) *3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities* manual, initial water flushing and sampling activities were conducted on March 14 and 15, 2024, and June 25 and 26, 2024, by Mr. Brad Lohrum, a Missouri-licensed lead risk assessor. Copies of Mr. Lohrum's training certificate and lead license are included in Appendix A.



An inventory of potable drinking water outlets was provided to UES by CPS. UES personnel sampled the identified outlets utilizing the EPA’s “first-draw” methods. The identified outlets were flushed, then allowed to sit undisturbed for a period of 8-18 hours. Following this stagnation period, the first 250 milliliters (ml) of water expelled from the outlets were collected in laboratory-provided containers. A copy of the drinking water sampling forms, which include a list of sample locations, and the times and dates of flushing and sampling activities, is included in Appendix B. Floor plans depicting approximate sample locations are included as Figures 1 and 2.

Using standard chain-of-custody procedures, the drinking water samples were submitted to Teklab, Inc. of Collinsville, Illinois, an independent, certified Missouri Department of Natural Resources (MDNR) Drinking Water and National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory, for analysis of lead content via EPA Method 200.8: *Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry*.

RESULTS

Laboratory analyses detected the presence of lead at or above 5 ppb in the following samples.

**TABLE 1
 DRINKING WATER OUTLETS AT OR ABOVE 5 PARTS PER BILLION**

Sample Number / Location and Fixture Type	Results
RBH-14 / Room 101 Sink	13.1 ppb
RBH-15 / Room 103 - Station 1 Sink	61 ppb
RBH-16 / Room 103 - Station 2 Sink	9.5 ppb
RBH-17 / Room 103 - Station 3 Sink	13.3 ppb
RBH-18 / Room 103 - Station 4 Sink	19.4 ppb
RBH-20 / Room 103 - Station 5 Sink	17.1 ppb
RBH-30 / Concession Stand – Right-hand Sink	5.1 ppb
RBH-47 / Room 336 Station 1 North Sink	90.4 ppb
RBH-48 / Room 336 Station 1 South Sink	92.1 ppb
RBH-49 / Room 336 Station 2 North Sink	122 ppb
RBH-50 / Room 336 Station 2 South Sink	90 ppb
RBH-51 / Room 336 Station 3 North Sink	201 ppb
RBH-52 / Room 336 Station 3 South Sink	294 ppb
RBH-53 / Room 336 Station 4 East Sink	77 ppb
RBH-54 / Room 336 Station 4 West Sink	188 ppb
RBH-55 / Room 336 Station 5 East Sink	65.7 ppb
RBH-56 / Room 336 Station 5 West Sink	176 ppb
RBH-57 / Room 336 Station 6 East Sink	214 ppb
RBH-58 / Room 336 Southeast Corner Sink	86.3 ppb



Sample Number / Location and Fixture Type	Results
RBH-59 / Room 337 Northeast Corner Sink	11.4 ppb
RBH-60 / Room 338 West Sink	38.2 ppb
RBH-61 / Room 338 East Sink	48.6 ppb
RBH-62 / Room 339 Northwest Corner Sink	18.1 ppb
RBH-64 / Room 348 East Sink	24.2 ppb
RBH-66 / Room 347 Teacher's Sink	14.8 ppb
RBH-69 / Room 344 Teacher's Sink	17.3 ppb
RBH-73 / Room 243 East Sink	35.6 ppb
RBH-75 / Room 242 Teacher's Sink	30 ppb
RBH-84 / Room 229 Sink	5.4 ppb
RBH-100 / Room 409 Sink	12.6 ppb

UES personnel resampled one client-designated outlet on June 26, 2024 (RBH-30-2). Laboratory analysis detected the presence of lead at the level below.

**TABLE 2
 RESAMPLED DRINKING WATER OUTLETS AT OR ABOVE 5 PARTS PER BILLION**

Sample Number / Location and Fixture Type	Results
RBH-30-2 / Concession Stand – Right-hand Sink	12.4 ppb

UES will not be able to represent that the site contains no lead-bearing water outlets beyond those detected or observed by UES during flushing and sampling activities. Copies of the drinking water analytical results are included in Appendix C.

RECOMMENDATIONS

Our recommendations are summarized below:

- It is our understanding that the outlets identified in Table 1 that have not been retested have either been removed, marked as non-potable, or have otherwise been taken out of service. Should these fixtures be put back into service following remediation activities, or if replacement fixtures are to be put into service, further sampling and testing should be conducted.
- The outlet identified in Table 2 should be taken out of service pending further remediation activities. This fixture should be resampled and tested prior to being put back into service.

* * * * *



The following attachments are included in and complete this report:

- Figure 1 - Drinking Water Sample Locations – Ground Floor
- Figure 2 - Drinking Water Sample Locations – First Floor
- Appendix A - Certificate and License of Environmental Professional
- Appendix B - Drinking Water Sampling Forms
- Appendix C - Drinking Water Laboratory Data Sheets
- Appendix D - Limitations of Report

* * * * *

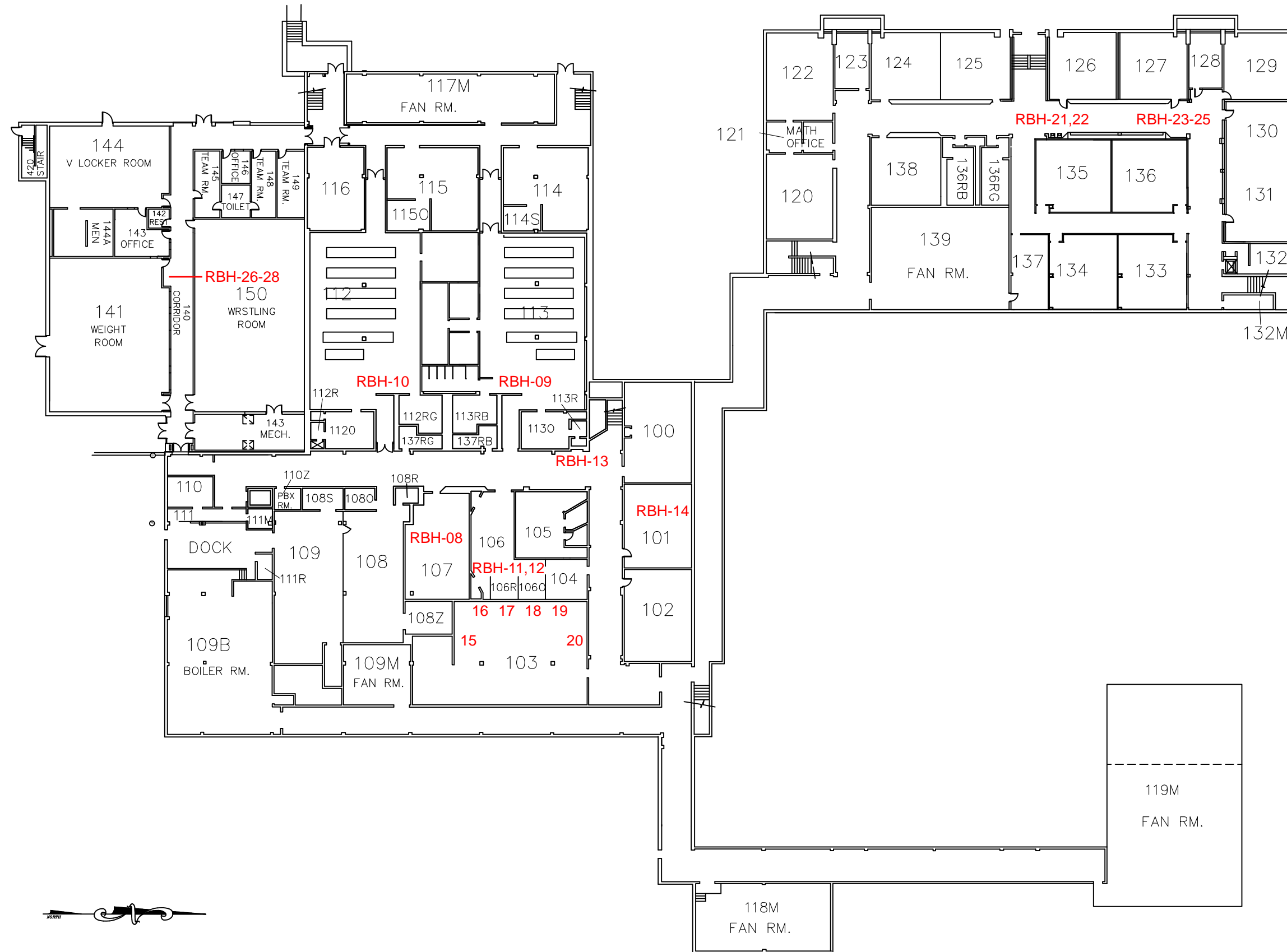
We appreciate the opportunity to provide our professional environmental consulting services to Columbia Public Schools on this project. If you have any questions or comments, please contact me at (314) 997-7440.

Very truly yours,

UES

Bradley J. Lohrum
Project Manager

BJL/MSR:bjl/jsj



NOTES

1. Drawing not to scale.
2. Drawing adapted from "Rock Bridge High School Ground Floor", provided by the client, dated 07/21/2014.
3. Sample locations were identified in the field relative to building features and are approximate only.

Drawn By: BJL	Ck'd By: BJL	App'vd By: MSR
Date: 12-22-24	Date: 12-22-24	Date: 12-22-24

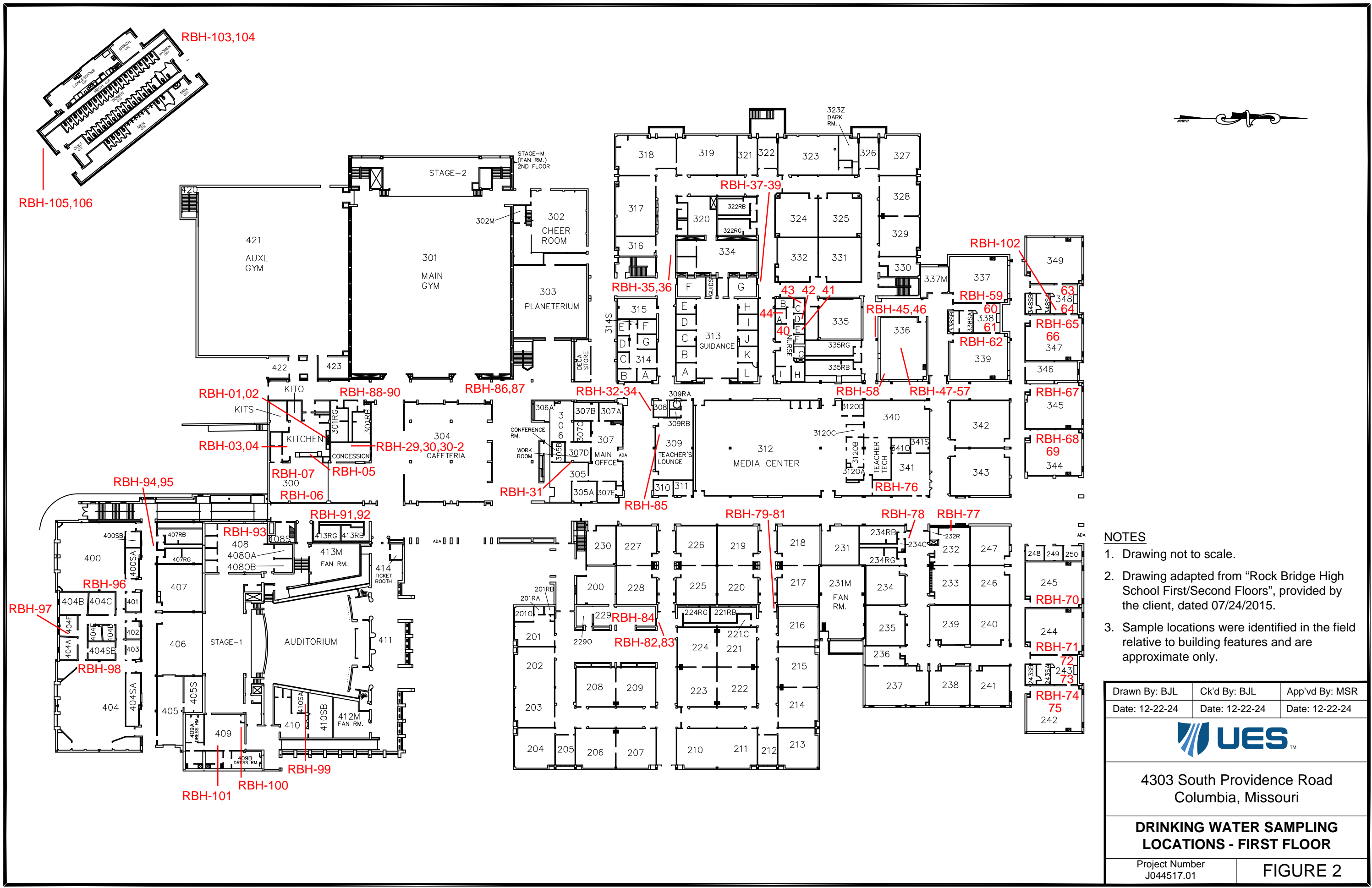


4303 South Providence Road
Columbia, Missouri


**DRINKING WATER SAMPLING
LOCATIONS - GROUND FLOOR**

Project Number
J044517.01

FIGURE 1



- NOTES**
1. Drawing not to scale.
 2. Drawing adapted from "Rock Bridge High School First/Second Floors", provided by the client, dated 07/24/2015.
 3. Sample locations were identified in the field relative to building features and are approximate only.

Drawn By: BJJ	Ck'd By: BJJ	App'vd By: MSR
Date: 12-22-24	Date: 12-22-24	Date: 12-22-24
		
4303 South Providence Road Columbia, Missouri		
DRINKING WATER SAMPLING LOCATIONS - FIRST FLOOR		
Project Number J044517.01	FIGURE 2	



APPENDIX A

CERTIFICATE AND LICENSE OF ENVIRONMENTAL PROFESSIONAL

**STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES**

LEAD OCCUPATION LICENSE REGISTRATION

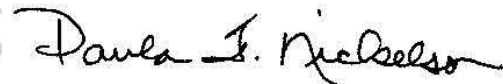
Issued to:

Bradley J. Lohrum

The person, firm or corporation whose name appears on this certificate has fulfilled the requirements for licensure as set forth in the Missouri Revised Statutes 701.300-701.338, as long as not suspended or revoked, and is hereby authorized to engage in the activity listed below.

Lead Risk Assessor
Category of License

Issuance Date: **1/20/2023**
Expiration Date: **1/20/2025**
License Number: **230120-300006460**



Paula F. Nickelson
Acting Director
Department of Health and Senior Services

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

Lead Abatement Contractor License

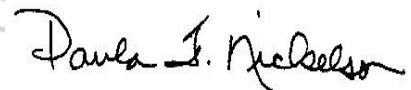
The person, firm or corporation whose name appears on this certificate is licensed as a Lead Abatement Contractor as set forth in the Missouri Revised Statutes 701.300-701.338 and 19 CSR 30-70.180, as long as not suspended or revoked, and is hereby authorized to engage in lead-bearing substance activities.

Issued to:

Geotechnology LLC (UES)

11816 Lackland Rd Suite 150
St. Louis, MO 63146

Issuance Date: **2/28/2024**
Expiration Date: **2/28/2026**
License Number: **240229-4652**



Paula F. Nickelson
Director
Department of Health and Senior Services



APPENDIX B

DRINKING WATER SAMPLING FORMS



DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
 Building Name: Rock Bridge High

Project Number: J044517.01
 Address: 4303 South Providence Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
RBH-01	S	Kitchen - North Dish Wash - Left	BJL - 3/14/24 - 19:52	BJL - 3/15/24 - 4:27
RBH-02	S	Kitchen - North Dish Wash - Right	BJL - 3/14/24 - 19:52	BJL - 3/15/24 - 4:27
RBH-03	S	Kitchen - South Dish Wash - Left	BJL - 3/14/24 - 19:52	BJL - 3/15/24 - 4:27
RBH-04	S	Kitchen - South Dish Wash - Right	BJL - 3/14/24 - 19:52	BJL - 3/15/24 - 4:27
RBH-05	S	Kitchen Food Prep	BJL - 3/14/24 - 19:52	BJL - 3/15/24 - 4:27
RBH-06	S	Room 300	BJL - 3/14/24 - 19:52	BJL - 3/15/24 - 4:27
RBH-07	ICE	Room 300	BJL - 3/14/24 - 19:52	BJL - 3/15/24 - 4:27
RBH-08	S	Room 107	BJL - 3/14/24 - 20:02	BJL - 3/15/24 - 4:33
RBH-09	WF	Room 113	BJL - 3/14/24 - 20:06	BJL - 3/15/24 - 4:36
RBH-10	WF	Room 112	BJL - 3/14/24 - 20:11	BJL - 3/15/24 - 4:36
RBH-11	S	Room 106 - Left	BJL - 3/14/24 - 20:12	BJL - 3/15/24 - 4:38
RBH-12	S	Room 106 - Right	BJL - 3/14/24 - 20:12	BJL - 3/15/24 - 4:38
RBH-13	WF	Hallway at Room 100	BJL - 3/14/24 - 20:14	BJL - 3/15/24 - 4:40
RBH-14	S	Room 101	BJL - 3/14/24 - 20:15	BJL - 3/15/24 - 4:41
RBH-15	S	Room 103 - Station 1	BJL - 3/14/24 - 20:18	BJL - 3/15/24 - 4:47
RBH-16	S	Room 103 - Station 2	BJL - 3/14/24 - 20:18	BJL - 3/15/24 - 4:47
RBH-17	S	Room 103 - Station 3	BJL - 3/14/24 - 20:18	BJL - 3/15/24 - 4:47
RBH-18	S	Room 103 - Station 4	BJL - 3/14/24 - 20:18	BJL - 3/15/24 - 4:47
RBH-19	S	Room 103 - Station 6	BJL - 3/14/24 - 20:18	BJL - 3/15/24 - 4:47
RBH-20	S	Room 103 - Station 5	BJL - 3/14/24 - 20:18	BJL - 3/15/24 - 4:47
RBH-21	WF	Hallway at Room 126 - Left	BJL - 3/14/24 - 20:25	BJL - 3/15/24 - 4:51
RBH-22	WF	Hallway at Room 126 - Right	BJL - 3/14/24 - 20:25	BJL - 3/15/24 - 4:51
RBH-23	WF	Hallway at Room 127 - Left	BJL - 3/14/24 - 20:26	BJL - 3/15/24 - 4:54
RBH-24	WF	Hallway at Room 127 - Right	BJL - 3/14/24 - 20:26	BJL - 3/15/24 - 4:54
RBH-25	BF	Hallway at Room 127 - Right	BJL - 3/14/24 - 20:26	BJL - 3/15/24 - 4:54

BF=Bottle Filling
 B=Bubbler

FW=Filtered Water
 ICE=Ice Machine

S=Classroom/Other Sink
 WF=Water Fountain



DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
 Building Name: Rock Bridge High

Project Number: J044517.01
 Address: 4303 South Providence Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
RBH-26	BF	Hallway at Room 141 - Left	BJL - 3/14/24 - 20:31	BJL - 3/15/24 - 5:00
RBH-27	WF	Hallway at Room 141 - Left	BJL - 3/14/24 - 20:31	BJL - 3/15/24 - 5:00
RBH-28	WF	Hallway at Room 141 - Right	BJL - 3/14/24 - 20:31	BJL - 3/15/24 - 5:00
RBH-29	S	Concession Stand - Left	BJL - 3/14/24 - 20:35	BJL - 3/15/24 - 5:04
RBH-30	S	Concession Stand - Right	BJL - 3/14/24 - 20:35	BJL - 3/15/24 - 5:04
RBH-31	S	Room 307D	BJL - 3/14/24 - 20:37	BJL - 3/15/24 - 5:06
RBH-32	WF	Hallway at Room 309 - Left	BJL - 3/14/24 - 20:39	BJL - 3/15/24 - 5:11
RBH-33	BF	Hallway at Room 309 - Right	BJL - 3/14/24 - 20:39	BJL - 3/15/24 - 5:11
RBH-34	WF	Hallway at Room 309 - Right	BJL - 3/14/24 - 20:39	BJL - 3/15/24 - 5:11
RBH-35	WF	Hallway at Room 316 - Left	BJL - 3/14/24 - 20:42	BJL - 3/15/24 - 5:13
RBH-36	WF	Hallway at Room 316 - Right	BJL - 3/14/24 - 20:42	BJL - 3/15/24 - 5:13
RBH-37	WF	Hallway at Room 334 - Left	BJL - 3/14/24 - 20:45	BJL - 3/15/24 - 5:16
RBH-38	BF	Hallway at Room 334 - Right	BJL - 3/14/24 - 20:45	BJL - 3/15/24 - 5:16
RBH-39	WF	Hallway at Room 334 - Right	BJL - 3/14/24 - 20:45	BJL - 3/15/24 - 5:16
RBH-40	S	Nurse's Office - Main	BJL - 3/14/24 - 20:50	BJL - 3/15/24 - 5:20
RBH-41	S	Nurse's Office - E	BJL - 3/14/24 - 20:50	BJL - 3/15/24 - 5:20
RBH-42	S	Nurse's Office - D	BJL - 3/14/24 - 20:50	BJL - 3/15/24 - 5:20
RBH-43	S	Nurse's Office - C	BJL - 3/14/24 - 20:50	BJL - 3/15/24 - 5:20
RBH-44	S	Nurse's Office - A	BJL - 3/14/24 - 20:50	BJL - 3/15/24 - 5:20
RBH-45	WF	Hallway at Room 335 - Left	BJL - 3/14/24 - 20:54	BJL - 3/15/24 - 5:23
RBH-46	WF	Hallway at Room 335 - Right	BJL - 3/14/24 - 20:54	BJL - 3/15/24 - 5:23
RBH-47	S	Room 336 Station 1 North	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-48	S	Room 336 Station 1 South	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-49	S	Room 336 Station 2 North	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-50	S	Room 336 Station 2 South	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33

BF=Bottle Filling
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S=Classroom/Other Sink
 WF=Water Fountain



DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
 Building Name: Rock Bridge High

Project Number: J044517.01
 Address: 4303 South Providence Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
RBH-51	S	Room 336 Station 3 North	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-52	S	Room 336 Station 3 South	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-53	S	Room 336 Station 4 East	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-54	S	Room 336 Station 4 West	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-55	S	Room 336 Station 5 East	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-56	S	Room 336 Station 5 West	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-57	S	Room 336 Station 6 East	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-58	S	Room 336 Southeast Corner	BJL - 3/14/24 - 20:57	BJL - 3/15/24 - 5:33
RBH-59	S	Room 337 Northeast Corner	BJL - 3/14/24 - 21:03	BJL - 3/15/24 - 5:35
RBH-60	S	Room 338 West	BJL - 3/14/24 - 21:04	BJL - 3/15/24 - 5:37
RBH-61	S	Room 338 East	BJL - 3/14/24 - 21:04	BJL - 3/15/24 - 5:37
RBH-62	S	Room 339 Northwest Corner	BJL - 3/14/24 - 21:06	BJL - 3/15/24 - 5:38
RBH-63	S	Room 348 West	BJL - 3/14/24 - 21:09	BJL - 3/15/24 - 5:42
RBH-64	S	Room 348 East	BJL - 3/14/24 - 21:09	BJL - 3/15/24 - 5:42
RBH-65	S	Room 347 Northwest Corner	BJL - 3/14/24 - 21:11	BJL - 3/15/24 - 5:48
RBH-66	S	Room 347 Teacher	BJL - 3/14/24 - 21:11	BJL - 3/15/24 - 5:48
RBH-67	S	Room 345 Northwest Corner	BJL - 3/14/24 - 21:13	BJL - 3/15/24 - 5:50
RBH-68	S	Room 344 Northwest Corner	BJL - 3/14/24 - 21:14	BJL - 3/15/24 - 5:52
RBH-69	S	Room 344 Teacher	BJL - 3/14/24 - 21:14	BJL - 3/15/24 - 5:52
RBH-70	S	Room 245 Northeast Corner	BJL - 3/14/24 - 21:16	BJL - 3/15/24 - 5:54
RBH-71	S	Room 244 Northeast Corner	BJL - 3/14/24 - 21:17	BJL - 3/15/24 - 5:55
RBH-72	S	Room 243 West	BJL - 3/14/24 - 21:20	BJL - 3/15/24 - 5:57
RBH-73	S	Room 243 East	BJL - 3/14/24 - 21:20	BJL - 3/15/24 - 5:57
RBH-74	S	Room 242 Northwest Corner	BJL - 3/14/24 - 21:22	BJL - 3/15/24 - 5:59
RBH-75	S	Room 242 Teacher	BJL - 3/14/24 - 21:22	BJL - 3/15/24 - 5:59

BF=Bottle Filling
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DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
 Building Name: Rock Bridge High

Project Number: J044517.01
 Address: 4303 South Providence Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
RBH-76	S	Room 341	BJL - 3/14/24 - 21:25	BJL - 3/15/24 - 6:02
RBH-77	S	Room 232	BJL - 3/14/24 - 21:27	BJL - 3/15/24 - 6:03
RBH-78	WF	Hallway at Room 232 - Right	BJL - 3/14/24 - 21:28	BJL - 3/15/24 - 6:04
RBH-79	WF	Hallway at Room 216 - Left	BJL - 3/14/24 - 21:31	BJL - 3/15/24 - 6:07
RBH-80	BF	Hallway at Room 216 - Right	BJL - 3/14/24 - 21:31	BJL - 3/15/24 - 6:07
RBH-81	WF	Hallway at Room 216 - Right	BJL - 3/14/24 - 21:31	BJL - 3/15/24 - 6:07
RBH-82	BF	Hallway at Room 224 - Left	BJL - 3/14/24 - 21:34	BJL - 3/15/24 - 6:10
RBH-83	WF	Hallway at Room 224 - Left	BJL - 3/14/24 - 21:34	BJL - 3/15/24 - 6:10
RBH-84	S	Room 229	BJL - 3/14/24 - 21:36	BJL - 3/15/24 - 6:11
RBH-85	S	Room 309	BJL - 3/14/24 - 21:38	BJL - 3/15/24 - 6:14
RBH-86	WF	Hallway at Gym - North Left	BJL - 3/14/24 - 21:40	BJL - 3/15/24 - 6:16
RBH-87	WF	Hallway at Gym - North Right	BJL - 3/14/24 - 21:40	BJL - 3/15/24 - 6:16
RBH-88	BF	Hallway at Gym - South Left	BJL - 3/14/24 - 21:41	BJL - 3/15/24 - 6:19
RBH-89	WF	Hallway at Gym - South Left	BJL - 3/14/24 - 21:41	BJL - 3/15/24 - 6:19
RBH-90	WF	Hallway at Gym - South Right	BJL - 3/14/24 - 21:41	BJL - 3/15/24 - 6:19
RBH-91	WF	Hallway at Room 413 - Left	BJL - 3/14/24 - 21:45	BJL - 3/15/24 - 6:21
RBH-92	WF	Hallway at Room 413 - Right	BJL - 3/14/24 - 21:45	BJL - 3/15/24 - 6:21
RBH-93	S	Room 408	BJL - 3/14/24 - 21:47	BJL - 3/15/24 - 6:23
RBH-94	WF	Hallway at Room 400 - Left	BJL - 3/14/24 - 21:50	BJL - 3/15/24 - 6:25
RBH-95	WF	Hallway at Room 400 - Right	BJL - 3/14/24 - 21:50	BJL - 3/15/24 - 6:25
RBH-96	WF	Room 400	BJL - 3/14/24 - 21:52	BJL - 3/15/24 - 6:26
RBH-97	S	Room 404F	BJL - 3/14/24 - 21:54	BJL - 3/15/24 - 6:28
RBH-98	WF	Room 404	BJL - 3/14/24 - 21:55	BJL - 3/15/24 - 6:28
RBH-99	S	Room 410SA	BJL - 3/14/24 - 22:00	BJL - 3/15/24 - 6:34
RBH-100	S	Room 409	BJL - 3/14/24 - 22:02	BJL - 3/15/24 - 6:35

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DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
Building Name: Rock Bridge High

Project Number: J044517.01
Address: 4303 South Providence Road
Columbia, Missouri

Table with 5 columns: Sample ID, Fixture Type, Location, Flushed By - Date - Time, and Sampled By - Date - Time. It contains 16 rows of data, including entries for RBH-101 through RBH-30-2.

BF=Bottle Filling
B=Bubbler

FW=Filtered Water
ICE=Ice Machine

S=Classroom/Other Sink
WF=Water Fountain



APPENDIX C

DRINKING WATER LABORATORY DATA SHEETS

April 02, 2024

Brad Lohrum
Geotechnology, Inc.
11816 Lackland Road
St. Louis, MO 63146
TEL: (314) 997-7440
FAX: (314) 997-2067

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: J044517.01

WorkOrder: 24031315

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 3/18/2024 1:52:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com

Report Contents

Client:

Work Order:

Client Project:

Report Date:

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Definitions

Client:

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Abbr Definition

* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)

Definitions

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Qualifiers

- # - Unknown hydrocarbon
 - C - RL shown is a Client Requested Quantitation Limit
 - H - Holding times exceeded
 - J - Analyte detected below quantitation limits
 - ND - Not Detected at the Reporting Limit
 - S - Spike Recovery outside recovery limits
 - X - Value exceeds Maximum Contaminant Level
 - B - Analyte detected in associated Method Blank
 - E - Value above quantitation range
 - I - Associated internal standard was outside method criteria
 - M - Manual Integration used to determine area response
 - R - RPD outside accepted recovery limits
 - T - TIC(Tentatively identified compound)
-



APPENDIX D

LIMITATIONS OF REPORT

ENVIRONMENTAL SAMPLING LIMITATIONS OF REPORT

1. The Report has been prepared on behalf of and for the exclusive use of the addressee, solely for use in documenting specific sample results. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of UES.
2. The sampling was performed in accordance with generally accepted practices of other consultants undertaking similar projects at the same time and in the same geographical area, and UES endeavored to observe that degree of care and skill ordinarily exercised by other consultants under similar circumstances and conditions. The findings and conclusions stated herein must be considered not as scientific certainties, but rather as professional opinions concerning the significance of the limited data gathered during the course of the project. UES does not and cannot represent that the site contains no hazardous waste or material, or other latent condition beyond that observed by UES.
3. In the event that information is developed relative to environmental or hazardous waste or material issues at the site and not contained in this report, such information shall be brought to UES' attention. UES will evaluate such information and, based on this evaluation, may modify the conclusions stated in this Report.
4. The conclusions and recommendations contained in this Report are based in part upon the data obtained from a limited number of water samples. The identified presence of contaminated water is limited to the extent that they could be identified by instrumentation and sampling and testing. There is a potential for contaminated water above the indicated concentrations to occur elsewhere on the site. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, and/or if changes are made in regulations, it will be necessary to reevaluate the conclusions and recommendations of this report.
5. If quantitative laboratory testing was performed as part of the assessment by an outside laboratory, UES has relied upon the data provided, and has not conducted an independent evaluation of the reliability to these data.
6. Chemical analyses have been performed for specific parameters during the course of this sampling as described in the text. Do not assume that a given analyte is not present at the site simply because it was not present at the test locations. The analyte may exist on the site where tests were not performed. In addition, it should be noted that additional chemical constituents not tested for during the sampling could be present in water at the site.