



WATER SAMPLING AND REPORTING SERVICES

**COLUMBIA PUBLIC SCHOOLS
JOHN WARNER MIDDLE SCHOOL
5550 SOUTH SINCLAIR ROAD
COLUMBIA, MISSOURI**

Prepared for:

**COLUMBIA PUBLIC SCHOOLS
COLUMBIA, MISSOURI**

Prepared by:

**GEOTECHNOLOGY, LLC, DBA UES
ST. LOUIS, MISSOURI**

Date:

DECEMBER 21, 2024

Project No.:

J044517.01

**SAFETY
TEAMWORK
RESPONSIVENESS
INTEGRITY
VALUE
EXCELLENCE**



December 21, 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
John Warner Middle School
5550 South Sinclair 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 John Warner Middle School, located southeast of the intersection of Crabapple Lane and South Sinclair 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 January 31 and February 1 and 8, 2024, by Mr. Brad Lohrum, a Missouri-licensed lead risk assessor. Mr. Lohrum was assisted by Mr. Seth Lambie, a Missouri-licensed lead inspector. Copies of training certificates and lead licenses for Messrs. Lohrum and Lambie 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
JWM-32 / Room E106 Sink 7	10.7 ppb
JWM-33 / Room E106 Teacher's Sink	12.7 ppb
JWM-67 / Room D212 East Left Sink	6.5 ppb
JWM-71 / Room D212 Teacher's Sink	6.7 ppb
JWM-92 / Room E210 Sink	6.8 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 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 following attachments are included in and complete this report:

- | | |
|------------|--|
| Figure 1 | - Drinking Water Sample Locations – First Floor |
| Figure 2 | - Drinking Water Sample Locations – Second Floor |
| Appendix A | - Certificates and Licenses of Environmental Professionals |
| Appendix B | - Drinking Water Sampling Forms |
| Appendix C | - Drinking Water Laboratory Data Sheets |
| Appendix D | - Limitations of Report |

* * * * *

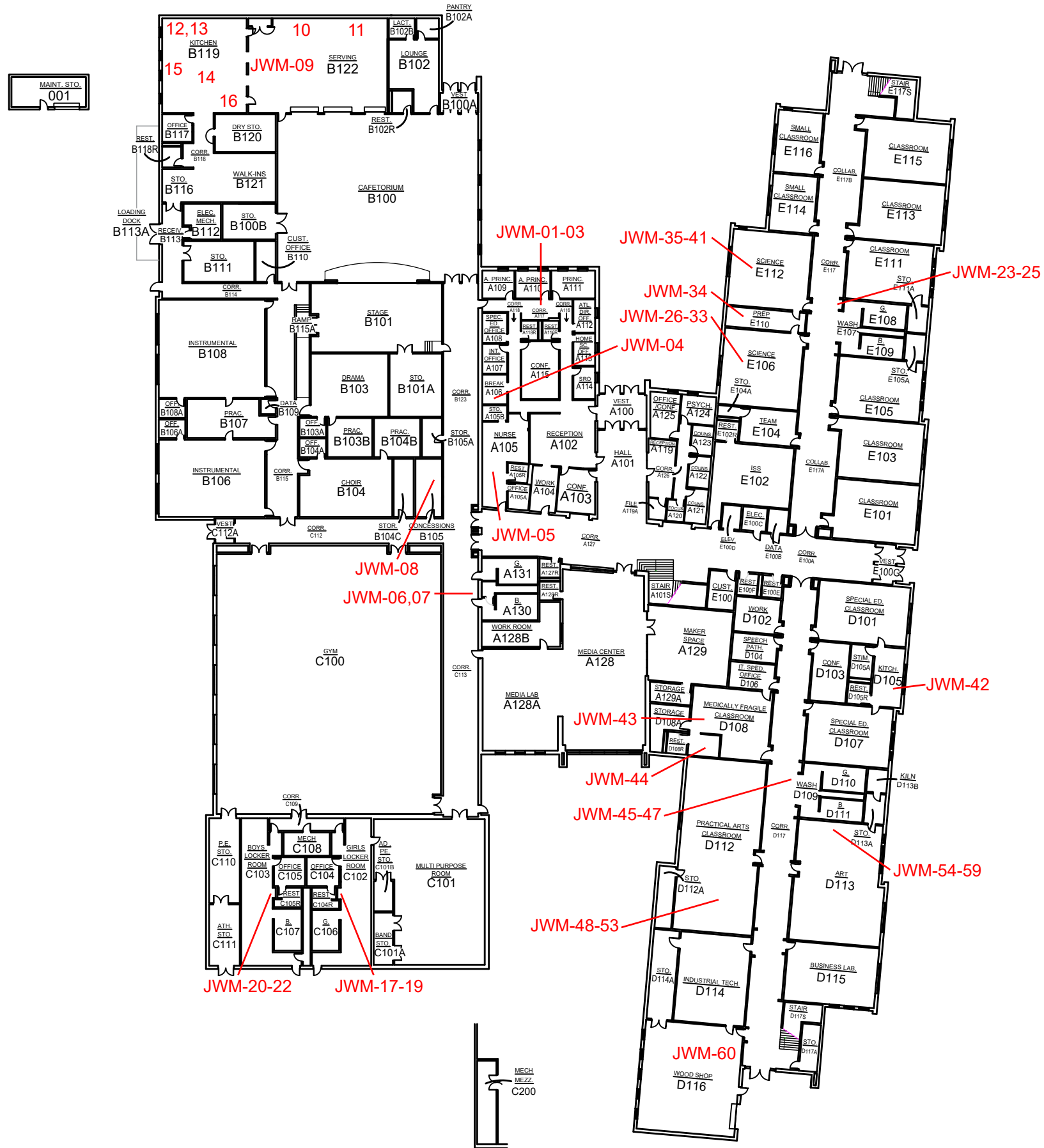
We appreciate the opportunity to provide our professional environmental consulting services to Columbia Public Schools on this project. If you have any questions or comments, please contact me at (314) 997-7440.

Very truly yours,


UES

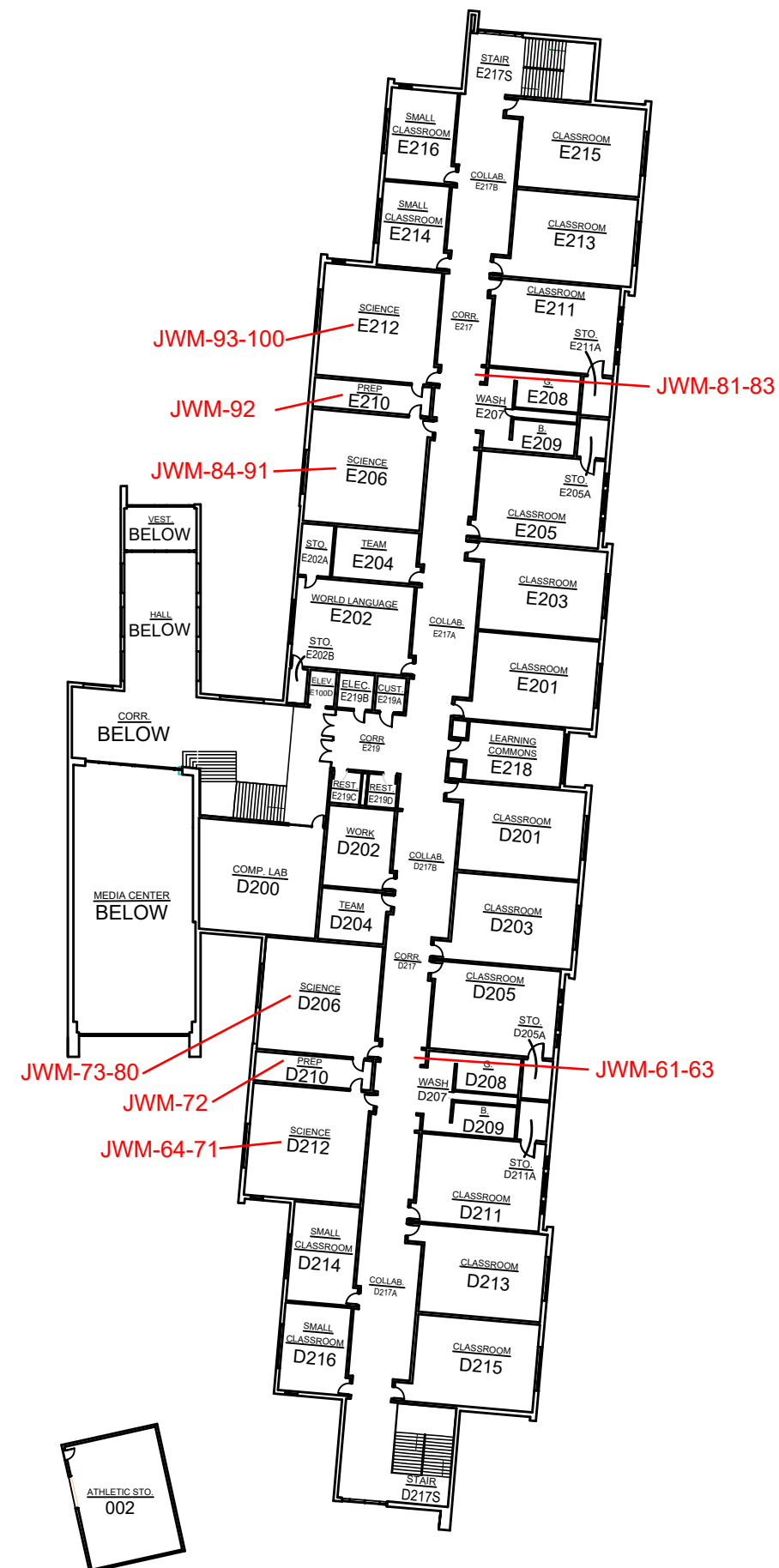
Bradley J. Lohrum
Project Manager

BJL/MSR:bjl/jsj




- NOTES**
1. Drawing not to scale.
 2. Drawing adapted from "John Warner Middle School Floor Plan", provided by the client, dated 07/19/2018.
 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: 12-21-24	Date: 12-21-24	Date: 12-21-24
		
5550 Sinclair Road Columbia, Missouri		
DRINKING WATER SAMPLE LOCATIONS - FIRST FLOOR		
Project Number J044517.01	FIGURE 1	



NOTES

1. Drawing not to scale.
2. Drawing adapted from "John Warner Middle School Floor Plan", provided by the client, dated 07/19/2018.
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: 12-21-24	Date: 12-21-24	Date: 12-21-24
		
5550 Sinclair Road Columbia, Missouri		
DRINKING WATER SAMPLE LOCATIONS - SECOND FLOOR		
Project Number J044517.01	FIGURE 2	



APPENDIX A

CERTIFICATES AND LICENSES OF ENVIRONMENTAL PROFESSIONALS

COLLEGE FOR
PUBLIC HEALTH & SOCIAL JUSTICE

SAINT LOUIS UNIVERSITY

CENTER FOR ENVIRONMENTAL EDUCATION AND TRAINING

verifies that

Bradley Lohrum

817 S Sappington Road, Crestwood, MO 63126

has attended 8 contact hours of training and successfully passed an examination


Lead Risk Assessor Refresher

St. Louis, MO

Certificate # CEET 325 - 12/12/2022 - 189152

Examination Date: 12/12/2022

CEUs: 0.8


Christopher C. King PhD

Director, Center for Environmental
Education and Training

Certificate expiration is 3 years from examination date for Illinois Dept. of Public Health

Center for Environmental Education and Training, 3545 Lafayette, St. Louis, MO 63104

(314) 977-8256 shu.edu/x39753.xml

This training course has been accredited by the Illinois Department of Public Health, and by the Missouri Department of Health & Senior Services.

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

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

COLLEGE FOR
PUBLIC HEALTH & SOCIAL JUSTICE
SAINT LOUIS UNIVERSITY

CENTER FOR ENVIRONMENTAL EDUCATION AND TRAINING

verifies that

Seth Lamble

12040 Chaparral Drive, Bridgeton, Missouri 63044

has attended 8 contact hours of training and successfully passed an examination

Lead Inspector Refresher

St. Louis, MO

Certificate # CEET 315 - 1/4/2022 - 118633

Examination Date: 1/4/2022

CEUs: 0.8

Christopher C. King
Christopher C. King PhD

Director, Center for Environmental
Education and Training

Certificate expiration is 3 years from examination date for Illinois Dept. of Public Health

Center for Environmental Education and Training, 3545 Lafayette, St. Louis, MO 63104
(314) 977-8256 slu.edu/x39753.xml

This training course has been accredited by the Illinois Department of Public Health, and by the Missouri Department of Health & Senior Services.

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

Seth P. Lamble

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 Inspector
Category of License

Issuance Date: **4/25/2022**
Expiration Date: **4/25/2024**
License Number: **160425-300004897**



Paula F. Nickelson

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

Lead Licensing Program, PO Box 570, Jefferson City, MO 65102

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

11816 Lackland Road, Suite 150
St. Louis, MO 63146

Issuance Date: 2/8/2022
Expiration Date: 2/8/2024
License Number: 060208-0095



A handwritten signature in black ink, reading "Donald G. Kauerauf".

Donald G. Kauerauf
Director
Department of Health and Senior Services



APPENDIX B

DRINKING WATER SAMPLING FORMS



DRINKING WATER SAMPLING FORM

Page 1 of 4

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
Building Name: John Warner Middle

Project Number: J044517.01
Address: 5550 South Sinclair Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
JWM-01	BF	Room A117	SPL - 1/31/24 - 19:10	SPL - 2/1/24 - 4:42
JWM-02	WF	Room A117 - Right	SPL - 1/31/24 - 19:10	SPL - 2/1/24 - 4:42
JWM-03	WF	Room A117 - Left	SPL - 1/31/24 - 19:10	SPL - 2/1/24 - 4:42
JWM-04	S	Room A106	SPL - 1/31/24 - 19:10	BJL - 2/1/24 - 4:43
JWM-05	S	Room A105	SPL - 1/31/24 - 19:11	BJL - 2/1/24 - 4:44
JWM-06	BF	Hallway at Room A130	SPL - 1/31/24 - 19:14	SPL - 2/1/24 - 4:45
JWM-07	WF	Hallway at Room A130	SPL - 1/31/24 - 19:14	SPL - 2/1/24 - 4:45
JWM-08	S	Room B105	SPL - 1/31/24 - 19:15	SPL - 2/1/24 - 4:46
JWM-09	S	Room B122 South	SPL - 1/31/24 - 19:21	BJL - 2/1/24 - 4:49
JWM-10	S	Room B122 Center	SPL - 1/31/24 - 19:21	BJL - 2/1/24 - 4:49
JWM-11	S	Room B122 North	SPL - 1/31/24 - 19:21	SPL - 2/1/24 - 4:49
JWM-12	S	Room B119 Dishwash - Left	SPL - 1/31/24 - 19:23	SPL - 2/1/24 - 4:52
JWM-13	S	Room B119 Dishwash - Right	SPL - 1/31/24 - 19:23	SPL - 2/1/24 - 4:52
JWM-14	S	Room B119 Food Prep North	SPL - 1/31/24 - 19:23	SPL - 2/1/24 - 4:53
JWM-15	S	Room B119 Food Prep South	SPL - 1/32/24 - 19:23	SPL - 2/1/24 - 4:53
JWM-16	ICE	Room B119	SPL - 1/31/24 - 19:24	SPL - 2/1/24 - 4:54
JWM-17	BF	Room C102	SPL - 1/31/24 - 19:30	SPL - 2/1/24 - 4:58
JWM-18	WF	Room C102 - Right	SPL - 1/31/24 - 19:30	SPL - 2/1/24 - 4:58
JWM-19	WF	Room C102 - Left	SPL - 1/31/24 - 19:30	SPL - 2/1/24 - 4:58
JWM-20	BF	Room C103	SPL - 1/31/24 - 19:31	BJL - 2/1/24 - 5:00
JWM-21	WF	Room C103 - Right	SPL - 1/31/24 - 19:31	BJL - 2/1/24 - 5:00
JWM-22	WF	Room C103 - Left	SPL - 1/31/24 - 19:31	BJL - 2/1/24 - 5:00
JWM-23	BF	Hallway at Room E112	SPL - 1/31/24 - 19:35	SPL - 2/1/24 - 5:04
JWM-24	WF	Hallway at Room E112 - Right	SPL - 1/31/24 - 19:35	SPL - 2/1/24 - 5:04
JWM-25	WF	Hallway at Room E112 - Left	SPL - 1/31/24 - 19:35	SPL - 2/1/24 - 5:04

BF=Bottle Filling
B=Bubbler

FW=Filtered Water
ICE=Ice Machine

S=Classroom/Other Sink
WF=Water Fountain

**DRINKING WATER SAMPLING FORM**

Page 2 of 4

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
Building Name: John Warner Middle

Project Number: J044517.01
Address: 5550 South Sinclair Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
JWM-26	S	Room E106 - 1	SPL - 1/31/24 - 19:37	SPL - 2/1/24 - 5:06
JWM-27	S	Room E106 - 2	SPL - 1/31/24 - 19:37	SPL - 2/1/24 - 5:06
JWM-28	S	Room E106 - 3	SPL - 1/31/24 - 19:37	SPL - 2/1/24 - 5:06
JWM-29	S	Room E106 - 4	SPL - 1/31/24 - 19:37	SPL - 2/1/24 - 5:07
JWM-30	S	Room E106 - 5	SPL - 1/31/24 - 19:37	SPL - 2/1/24 - 5:07
JWM-31	S	Room E106 - 6	SPL - 1/31/24 - 19:37	BJL - 2/1/24 - 5:07
JWM-32	S	Room E106 - 7	SPL - 1/31/24 - 19:37	BJL - 2/1/24 - 5:07
JWM-33	S	Room E106 - Teacher	SPL - 1/31/24 - 19:37	SPL - 2/1/24 - 5:07
JWM-34	S	Room E110 West	SPL - 1/31/24 - 19:37	BJL - 2/1/24 - 5:07
JWM-35	S	Room E112 - Left	SPL - 1/31/24 - 19:41	BJL - 2/1/24 - 5:09
JWM-36	S	Room E112 - Left Center	SPL - 1/31/24 - 19:41	BJL - 2/1/24 - 5:09
JWM-37	S	Room E112 - Right Center	SPL - 1/31/24 - 19:41	BJL - 2/1/24 - 5:09
JWM-38	S	Room E112 - Right	SPL - 1/31/24 - 19:41	BJL - 2/1/24 - 5:09
JWM-39	S	Room E112 East - Left	SPL - 1/31/24 - 19:41	BJL - 2/1/24 - 5:10
JWM-40	S	Room E112 East - Center	SPL - 1/31/24 - 19:41	BJL - 2/1/24 - 5:10
JWM-41	S	Room E112 East - Right	SPL - 1/31/24 - 19:41	BJL - 2/1/24 - 5:10
JWM-42	S	Room D105	SPL - 1/31/24 - 19:45	SPL - 2/1/24 - 5:13
JWM-43	S	Room D108 West	SPL - 1/31/24 - 19:48	SPL - 2/1/24 - 5:15
JWM-44	S	Room D108 East	SPL - 1/31/24 - 19:48	BJL - 2/1/24 - 5:15
JWM-45	BF	Hallway at Room D109	SPL - 1/31/24 - 19:49	SPL - 2/1/24 - 5:16
JWM-46	WF	Hallway at Room D109 - Right	SPL - 1/31/24 - 19:49	SPL - 2/1/24 - 5:16
JWM-47	WF	Hallway at Room D109 - Left	SPL - 1/31/24 - 19:49	SPL - 2/1/24 - 5:16
JWM-48	S	Room D112 - Red	SPL - 1/31/24 - 19:52	SPL - 2/1/24 - 5:19
JWM-49	S	Room D112 - Orange	SPL - 1/31/24 - 19:52	SPL - 2/1/24 - 5:19
JWM-50	S	Room D112 - Yellow	SPL - 1/31/24 - 19:52	SPL - 2/1/24 - 5:19

BF=Bottle Filling
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ICE=Ice Machine

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WF=Water Fountain

**DRINKING WATER SAMPLING FORM**

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Project Name: Columbia Public Schools Water
Sampling and Reporting Services
Building Name: John Warner Middle

Project Number: J044517.01
Address: 5550 South Sinclair Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
JWM-51	S	Room D112 - Green	SPL - 1/31/24 - 19:52	SPL - 2/1/24 - 5:19
JWM-52	S	Room D112 - Blue	SPL - 1/31/24 - 19:52	BJL - 2/1/24 - 5:19
JWM-53	S	Room D112- Purple	SPL - 1/31/24 - 19:52	BJL - 2/1/24 - 5:19
JWM-54	S	Room D113 - 1	SPL - 1/31/24 - 19:54	SPL - 2/1/24 - 5:22
JWM-55	S	Room D113 - 2	SPL - 1/31/24 - 19:54	SPL - 2/1/24 - 5:22
JWM-56	S	Room D113 - 3	SPL - 1/31/24 - 19:54	SPL - 2/1/24 - 5:22
JWM-57	S	Room D113 - 4	SPL - 1/31/24 - 19:54	BJL - 2/1/24 - 5:22
JWM-58	S	Room D113 - 5	SPL - 1/31/24 - 19:54	BJL - 2/1/24 - 5:22
JWM-59	S	Room D113 - 6	SPL - 1/31/24 - 19:54	BJL - 2/1/24 - 5:22
JWM-60	S	Room D116	SPL - 1/31/24 - 19:57	SPL - 2/1/24 - 5:23
JWM-61	BF	Hallway at Room D207	SPL - 1/31/24 - 20:01	SPL - 2/1/24 - 5:27
JWM-62	WF	Hallway at Room D207 - Right	SPL - 1/31/24 - 20:01	SPL - 2/1/24 - 5:27
JWM-63	WF	Hallway at Room D207 - Left	SPL - 2/8/24 - 19:19	SPL - 2/9/24 - 3:20
JWM-64	S	Room D212 West - Left	SPL - 1/31/24 - 20:02	SPL - 2/1/24 - 5:30
JWM-65	S	Room D212 West - Center	SPL - 1/31/24 - 20:02	SPL - 2/1/24 - 5:30
JWM-66	S	Room D212 West - Right	SPL - 1/31/24 - 20:02	SPL - 2/1/24 - 5:30
JWM-67	S	Room D212 East - Left	SPL - 1/31/24 - 20:02	SPL - 2/1/24 - 5:30
JWM-68	S	Room D121 East - Left Center	SPL - 1/31/24 - 20:02	SPL - 2/1/24 - 5:30
JWM-69	S	Room D212 East - Right Center	SPL - 1/31/24 - 20:02	SPL - 2/1/24 - 5:30
JWM-70	S	D212 - East - Right	SPL - 1/31/24 - 20:02	SPL - 2/1/24 - 5:30
JWM-71	S	Room D212 - Teacher	SPL - 1/31/24 - 20:02	BJL - 2/1/24 - 5:30
JWM-72	S	Room D210	SPL - 1/31/24 - 20:03	BJL - 2/1/24 - 5:31
JWM-73	S	Room D206 East - Left	SPL - 1/31/24 - 20:05	SPL - 2/1/24 - 5:34
JWM-74	S	Room D206 East - Center	SPL - 1/31/24 - 20:05	SPL - 2/1/24 - 5:34
JWM-75	S	Room D206 East - Right	SPL - 1/31/24 - 20:05	SPL - 2/1/24 - 5:34

BF=Bottle Filling
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WF=Water Fountain

**DRINKING WATER SAMPLING FORM**

Page 4 of 4

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
Building Name: John Warner Middle

Project Number: J044517.01
Address: 5550 South Sinclair Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
JWM-76	S	Room D206 West - Left	SPL - 1/31/24 - 20:05	SPL - 2/1/24 - 5:34
JWM-77	S	Room D206 West - Left Center	SPL - 1/31/24 - 20:05	SPL - 2/1/24 - 5:34
JWM-78	S	Room D206 West - Right Center	SPL - 1/31/24 - 20:05	SPL - 2/1/24 - 5:34
JWM-79	S	Room D206 West - Right Center	SPL - 1/31/24 - 20:05	SPL - 2/1/24 - 5:34
JWM-80	S	Room D206 - Teacher	SPL - 1/31/24 - 20:05	BJL - 2/1/24 - 5:34
JWM-81	BF	Hallway at Room E107	SPL - 1/31/24 - 20:09	SPL - 2/1/24 - 5:38
JWM-82	WF	Hallway at Room E107 - Right	SPL - 1/31/24 - 20:09	SPL - 2/1/24 - 5:38
JWM-83	WF	Hallway at Room E107 - Left	SPL - 1/31/24 - 20:09	SPL - 2/1/24 - 5:38
JWM-84	S	Room E206 West - Left	SPL - 1/31/24 - 20:11	SPL - 2/1/24 - 5:41
JWM-85	S	Room E206 West - Center	SPL - 1/31/24 - 20:11	SPL - 2/1/24 - 5:41
JWM-86	S	Room E206 West - Right	SPL - 1/31/24 - 20:11	SPL - 2/1/24 - 5:41
JWM-87	S	Room E206 East - Left	SPL - 1/31/24 - 20:11	SPL - 2/1/24 - 5:41
JWM-88	S	Room E206 East - Left Center	SPL - 1/31/24 - 20:11	SPL - 2/1/24 - 5:41
JWM-89	S	E206 - East - Right Center	SPL - 1/31/24 - 20:11	SPL - 2/1/24 - 5:41
JWM-90	S	Room E206 East - Right	SPL - 1/31/24 - 20:11	SPL - 2/1/24 - 5:41
JWM-91	S	Room E206 - Teacher	SPL - 1/31/24 - 20:11	BJL - 2/1/24 - 5:41
JWM-92	S	Room E210	SPL - 1/31/24 - 20:12	BJL - 2/1/24 - 5:42
JWM-93	S	Room E212 East - Left	SPL - 1/31/24 - 20:15	SPL - 2/1/24 - 5:45
JWM-94	S	Room E212 East - Center Right	SPL - 1/31/24 - 20:15	SPL - 2/1/24 - 5:45
JWM-95	S	Room E212 East - Right	SPL - 1/31/24 - 20:15	SPL - 2/1/24 - 5:45
JWM-96	S	Room E212 West - Left	SPL - 1/31/24 - 20:15	SPL - 2/1/24 - 5:45
JWM-97	S	Room E212 West - Left Center	SPL - 1/31/24 - 20:15	SPL - 2/1/24 - 5:45
JWM-98	S	Room E212 West - Right Center	SPL - 1/31/24 - 20:15	SPL - 2/1/24 - 5:45
JWM-99	S	Room E212 West - Right	SPL - 1/31/24 - 20:15	SPL - 2/1/24 - 5:45
JWM-100	S	Room E212 - Teacher	SPL - 1/31/24 - 20:15	BJL - 2/1/24 - 5:45

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

March 05, 2024

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



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

RE: J044517.01

WorkOrder: 24020197

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 2/2/2024 3:40:00 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

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020197

Client Project: J044517.01

Report Date: 05-Mar-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	9
Chain of Custody	Appended

Client: Geotechnology, Inc.

Work Order: 24020197

Client Project: J044517.01

Report Date: 05-Mar-24

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)

Client: Geotechnology, Inc.

Work Order: 24020197

Client Project: J044517.01

Report Date: 05-Mar-24

Qualifiers

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



Case Narrative

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020197

Client Project: J044517.01

Report Date: 05-Mar-24

Cooler Receipt Temp: NA °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
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Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
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Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
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Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Client: Geotechnology, Inc.**Work Order:** 24020197**Client Project:** J044517.01**Report Date:** 05-Mar-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020197

Client Project: J044517.01

Report Date: 05-Mar-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24020197-001A	PKE-44	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 13:50	02/01/2024 3:42
24020197-002A	PKE-45	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 9:19	02/01/2024 3:44
24020197-003A	PKE-46	NELAP		1.0	1.2	µg/L	1	03/01/2024 13:54	02/01/2024 3:44
24020197-004A	PKE-47	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 13:58	02/01/2024 3:45
24020197-005A	PKE-48	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 9:30	02/01/2024 3:45
24020197-006A	PKE-49	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 9:34	02/01/2024 3:47
24020197-007A	PKE-50	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 9:37	02/01/2024 3:47
24020197-008A	PKE-51	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 10:58	02/01/2024 3:48
24020197-009A	PKE-52	NELAP		1.0	1.3	µg/L	1	03/04/2024 11:02	02/01/2024 3:48
24020197-010A	PKE-53	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:05	02/01/2024 3:49
24020197-011A	PKE-54	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:09	02/01/2024 3:50
24020197-012A	PKE-55	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:13	02/01/2024 3:52
24020197-013A	PKE-56	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:24	02/01/2024 3:52
24020197-014A	PKE-57	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:27	02/01/2024 3:52
24020197-015A	PKE-58	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:42	02/01/2024 3:54
24020197-016A	PKE-59	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:46	02/01/2024 3:55
24020197-017A	PKE-60	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:49	02/01/2024 3:55
24020197-018A	PKE-61	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:53	02/01/2024 4:00
24020197-019A	PKE-62	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 11:57	02/01/2024 4:00
24020197-020A	PKE-63	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:08	02/01/2024 4:00
24020197-021A	PKE-64	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:11	02/01/2024 4:01
24020197-022A	PKE-65	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:15	02/01/2024 4:01
24020197-023A	PKE-66	NELAP		1.0	23.0	µg/L	5	03/02/2024 8:10	02/01/2024 4:02
24020197-024A	PKE-67	NELAP		1.0	5.7	µg/L	5	03/02/2024 8:14	02/01/2024 4:02
24020197-025A	PKE-68	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:30	02/01/2024 4:05
24020197-026A	PKE-69	NELAP		1.0	3.1	µg/L	5	03/02/2024 8:18	02/01/2024 4:05
24020197-027A	PKE-70	NELAP		1.0	5.8	µg/L	5	03/02/2024 8:22	02/01/2024 4:05
24020197-028A	PKE-71	NELAP		1.0	1.2	µg/L	5	03/02/2024 8:26	02/01/2024 4:06
24020197-029A	PKE-72	NELAP		1.0	2.1	µg/L	1	03/04/2024 12:33	02/01/2024 4:06
24020197-030A	PKE-73	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:37	02/01/2024 4:07
24020197-031A	PKE-74	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:41	02/01/2024 4:08
24020197-032A	PKE-75	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:44	02/01/2024 4:08
24020197-033A	JWM-01	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:48	02/01/2024 4:42
24020197-034A	JWM-02	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:52	02/01/2024 4:42
24020197-035A	JWM-03	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:55	02/01/2024 4:42
24020197-036A	JWM-04	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 12:59	02/01/2024 4:43
24020197-037A	JWM-05	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 13:21	02/01/2024 4:44
24020197-038A	JWM-06	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 13:25	02/01/2024 4:45
24020197-039A	JWM-07	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 13:28	02/01/2024 4:45
24020197-040A	JWM-08	NELAP		1.0	1.6	µg/L	1	03/04/2024 13:32	02/01/2024 4:46
24020197-041A	JWM-09	NELAP		1.0	1.9	µg/L	1	03/04/2024 13:43	02/01/2024 4:49
24020197-042A	JWM-10	NELAP		1.0	1.6	µg/L	1	03/04/2024 13:47	02/01/2024 4:49
24020197-043A	JWM-11	NELAP		1.0	1.2	µg/L	1	03/04/2024 13:50	02/01/2024 4:49
24020197-044A	JWM-12	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 14:05	02/01/2024 4:52
24020197-045A	JWM-13	NELAP		1.0	1.4	µg/L	5	03/02/2024 8:30	02/01/2024 4:52
24020197-046A	JWM-14	NELAP		1.0	1.2	µg/L	1	03/04/2024 14:08	02/01/2024 4:53
24020197-047A	JWM-15	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 14:12	02/01/2024 4:53
24020197-048A	JWM-16	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 14:16	02/01/2024 4:54



Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020197

Client Project: J044517.01

Report Date: 05-Mar-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24020197-049A	JWM-17	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 14:19	02/01/2024 4:58
24020197-050A	JWM-18	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 14:23	02/01/2024 4:58
24020197-051A	JWM-19	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 14:27	02/01/2024 4:58
24020197-052A	JWM-20	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 14:30	02/01/2024 5:00
24020197-053A	JWM-21	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 14:34	02/01/2024 5:00
24020197-054A	JWM-22	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 14:38	02/01/2024 5:00
24020197-055A	JWM-23	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 15:00	02/01/2024 5:04
24020197-056A	JWM-24	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 15:03	02/01/2024 5:04
24020197-057A	JWM-25	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 15:07	02/01/2024 5:04
24020197-058A	JWM-26	NELAP		1.0	4.7	µg/L	1	03/04/2024 15:11	02/01/2024 5:06
24020197-059A	JWM-27	NELAP		1.0	1.6	µg/L	1	03/04/2024 15:14	02/01/2024 5:06
24020197-060A	JWM-28	NELAP		1.0	2.8	µg/L	1	03/04/2024 15:18	02/01/2024 5:06

Client: Geotechnology, Inc.

Work Order: 24020197

Client Project: J044517.01

Report Date: 05-Mar-24

Carrier: Craig McKinney

Received By: LM

Completed by:

Reviewed by:

On:

On:

05-Feb-24

06-Feb-24

Amber Dilallo

Ellie Hopkins

Pages to follow: Chain of custody

6

Extra pages included

0

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C NA
Type of thermal preservation?	None <input checked="" type="checkbox"/>	Ice <input type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input type="checkbox"/>	Lab <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Any No responses must be detailed below or on the COC.

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory.

pg. 19 of 40 Work order # 24020197





TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: <u>Geotechnology, LLC</u>		Samples on: <input checked="" type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE <u>NA</u> °C LTG# <u> </u>	
Address: <u>11816 Lackland Road</u>		Preserved in: <input checked="" type="checkbox"/> LAB <input type="checkbox"/> FIELD <u>FOR LAB USE ONLY</u>	
City / State / Zip <u>St. Louis, MO 63146</u>		Lab Notes	
Contact: <u>Brad Lohrum</u>	Phone: <u>(314) 997-7440</u>	Client Comments:	
E-Mail: <u>blohrum@teamues.com</u>	Fax: <u> </u>		

Are these samples known to be hazardous? ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

[illegible]

Relinquished By	Date/Time	Received By	Date/Time
	2/2/24 1230		2/2/24 1230
	2/2/24 1540		2/2/24 1540

BottleOrder: 80481



pg. 20 of 40 Work order # 24020197

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: <u>Geotechnology, LLC</u> Address: <u>11816 Lackland Road</u> City / State / Zip <u>St. Louis, MO 63146</u> Contact: <u>Brad Lohrum</u> Phone: <u>(314) 997-7440</u> E-Mail: <u>blohrum@teamues.com</u> Fax: _____	Samples on: <input type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE _____ °C LTG# _____ Preserved in: <input type="checkbox"/> LAB <input type="checkbox"/> FIELD <u>FOR LAB USE ONLY</u> Lab Notes Client Comments:
---	---

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No

Are these samples known to be hazardous? ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

[illegible]

Relinquished By	Date/Time	Received By	Date/Time
Bridget A. [Signature]	2/2/24 1230	[Signature]	2/2/24 1230
[Signature]	2/2/24 1540	[Signature]	2/2/24 1540

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 80481



pg. 21 of 40 Work order # 24020197

Client:	Geotechnology, LLC		
Address:	11816 Lackland Road		
City / State / Zip	St. Louis, MO 63146		
Contact:	Brad Lohrum	Phone:	(314) 997-7440
E-Mail:	blohrum@teamues.com	Fax:	

Preserved in: ☒ LAB ☐ FIELD **FOR LAB USE ONLY**

Client Comments:

Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.



CHAIN OF CUSTODY

pg. 22 of 40 Work order # 24020197

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC Address: 11816 Lackland Road City / State / Zip: St. Louis, MO 63146 Contact: Brad Lohrum Phone: (314) 997-7440 E-Mail: blohrum@teamues.com Fax:	Samples on: <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE _____ °C LTG# _____ Preserved in: <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD FOR LAB USE ONLY Lab Notes Client Comments:
--	---

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX										INDICATE ANALYSIS REQUESTED													
J044517.01		Brad Lohrum																									
Results Requested		Billing Instructions		# and Type of Containers																							
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8									
Lab Use Only	Sample Identification	Date/Time Sampled																									
24020197	PKE-74	2/1/24 4:08	1										X					X									
032	PKE-75	+	1										X					X									
033	JWM-01	4:42	1										X					X									
034	JWM-02	+	1										X					X									
035	03	+	1										X					X									
036	04	4:43	1										X					X									
037	05	4:44	1										X					X									
038	06	4:45	1										X					X									
039	07	+	1										X					X									
040	08	4:46	1										X					X									
Relinquished By		Date/Time		Received By										Date/Time													
Brad Lohrum		2/2/24 1230		Ce										2/2/24 1230													
		2/2/24 1540		Garry										2/2/24 1540													

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 80481



CHAIN OF CUSTODY

pg. 23 of 40 Work order # 24020197

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC Address: 11816 Lackland Road City / State / Zip: St. Louis, MO 63146 Contact: Brad Lohrum Phone: (314) 997-7440 E-Mail: blohrum@teamues.com Fax:	Samples on: <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE °C LTG# Preserved in: <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD FOR LAB USE ONLY Lab Notes Client Comments:
--	---

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																					
J044517.01		Brad Lohrum																									
Results Requested		Billing Instructions		# and Type of Containers										Aqueous		Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER																
Lab Use Only	Sample Identification	Date/Time Sampled																									
24020197-041	JWM-09	2/1/24 4:49	1										X										X				
042	JWM-10	+	1										X									X					
043	11	+	1										X									X					
044	12	4:52	1										X									X					
045	13	+	1										X									X					
046	14	4:53	1										X									X					
047	15	+	1										X									X					
048	16	4:54	1										X									X					
049	17	4:58	1										X									X					
050	18	+	1										X									X					

Relinquished By		Date/Time		Received By		Date/Time	
Brad Lohrum		2/3/24 1230		[Signature]		2/2/24 1230	
[Signature]		2/2/24 1540		[Signature]		2/2/24 1540	

pg. 24 of 40 Work order # 24020197

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: <u>Geotechnology, LLC</u>		Samples on: <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE <u> </u> °C LTG# <u> </u>	
Address: <u>11816 Lackland Road</u>		Preserved in: <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD <u>FOR LAB USE ONLY</u>	
City / State / Zip <u>St. Louis, MO 63146</u>		Lab Notes	
Contact: <u>Brad Lohrum</u>	Phone: <u>(314) 997-7440</u>	Client Comments:	
E-Mail: <u>blohrum@teamues.com</u>	Fax: <u> </u>		

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No

Are these samples known to be hazardous? ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

[illegible]

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 80481



March 06, 2024

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



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

RE: J044517.01

WorkOrder: 24020198

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 2/2/2024 3:40:00 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

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020198

Client Project: J044517.01

Report Date: 06-Mar-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	9
Chain of Custody	Appended

Client: Geotechnology, Inc.

Work Order: 24020198

Client Project: J044517.01

Report Date: 06-Mar-24

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)

Client: Geotechnology, Inc.

Work Order: 24020198

Client Project: J044517.01

Report Date: 06-Mar-24

Qualifiers

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



Case Narrative

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020198

Client Project: J044517.01

Report Date: 06-Mar-24

Cooler Receipt Temp: NA °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Client: Geotechnology, Inc.**Work Order:** 24020198**Client Project:** J044517.01**Report Date:** 06-Mar-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville

Client: Geotechnology, Inc.

Work Order: 24020198

Client Project: J044517.01

Report Date: 06-Mar-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24020198-001A	JWM-29	NELAP		1.0	3.2	µg/L	1	03/04/2024 15:22	02/01/2024 5:07
24020198-002A	JWM-30	NELAP		1.0	3.0	µg/L	1	03/04/2024 15:25	02/01/2024 5:07
24020198-003A	JWM-31	NELAP		1.0	4.5	µg/L	1	03/04/2024 15:40	02/01/2024 5:07
24020198-004A	JWM-32	NELAP		1.0	10.7	µg/L	1	03/01/2024 22:06	02/01/2024 5:07
24020198-005A	JWM-33	NELAP		1.0	12.7	µg/L	1	03/01/2024 22:10	02/01/2024 5:07
24020198-006A	JWM-34	NELAP		1.0	2.0	µg/L	1	03/01/2024 22:14	02/01/2024 5:07
24020198-007A	JWM-35	NELAP		1.0	3.1	µg/L	1	03/01/2024 22:19	02/01/2024 5:09
24020198-008A	JWM-36	NELAP		1.0	1.8	µg/L	5	02/23/2024 19:47	02/01/2024 5:09
24020198-009A	JWM-37	NELAP		1.0	3.1	µg/L	1	03/01/2024 22:23	02/01/2024 5:09
24020198-010A	JWM-38	NELAP		1.0	3.6	µg/L	1	03/01/2024 22:27	02/01/2024 5:09
24020198-011A	JWM-39	NELAP		1.0	2.8	µg/L	1	03/01/2024 22:31	02/01/2024 5:10
24020198-012A	JWM-40	NELAP		1.0	3.0	µg/L	1	03/01/2024 23:02	02/01/2024 5:10
24020198-013A	JWM-41	NELAP		1.0	3.9	µg/L	1	03/01/2024 23:06	02/01/2024 5:10
24020198-014A	JWM-42	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 22:36	02/01/2024 5:13
24020198-015A	JWM-43	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 23:10	02/01/2024 5:15
24020198-016A	JWM-44	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 23:15	02/01/2024 5:15
24020198-017A	JWM-45	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 23:19	02/01/2024 5:16
24020198-018A	JWM-46	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 23:23	02/01/2024 5:16
24020198-019A	JWM-47	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 23:28	02/01/2024 5:16
24020198-020A	JWM-48	NELAP		1.0	1.2	µg/L	1	03/01/2024 23:58	02/01/2024 5:19
24020198-021A	JWM-49	NELAP		1.0	2.1	µg/L	1	03/01/2024 23:32	02/01/2024 5:19
24020198-022A	JWM-50	NELAP		1.0	1.2	µg/L	1	03/02/2024 0:02	02/01/2024 5:19
24020198-023A	JWM-51	NELAP		1.0	1.4	µg/L	1	03/02/2024 0:06	02/01/2024 5:19
24020198-024A	JWM-52	NELAP		1.0	< 1.0	µg/L	1	03/02/2024 0:11	02/01/2024 5:19
24020198-025A	JWM-53	NELAP		1.0	< 1.0	µg/L	1	03/02/2024 0:15	02/01/2024 5:19
24020198-026A	JWM-54	NELAP		1.0	1.0	µg/L	5	02/23/2024 19:51	02/01/2024 5:22
24020198-027A	JWM-55	NELAP		1.0	< 1.0	µg/L	5	02/23/2024 19:54	02/01/2024 5:22
24020198-028A	JWM-56	NELAP		1.0	< 1.0	µg/L	1	03/02/2024 0:19	02/01/2024 5:22
24020198-029A	JWM-57	NELAP		1.0	< 1.0	µg/L	1	03/02/2024 0:24	02/01/2024 5:22
24020198-030A	JWM-58	NELAP		1.0	1.4	µg/L	1	03/04/2024 15:51	02/01/2024 5:22
24020198-031A	JWM-59	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 15:55	02/01/2024 5:22
24020198-032A	JWM-60	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 15:58	02/01/2024 5:23
24020198-033A	JWM-61	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 16:02	02/01/2024 5:27
24020198-034A	JWM-62	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 16:06	02/01/2024 5:27
24020198-036A	JWM-64	NELAP		1.0	1.7	µg/L	1	03/02/2024 0:28	02/01/2024 5:30
24020198-037A	JWM-65	NELAP		1.0	1.9	µg/L	1	03/04/2024 16:09	02/01/2024 5:30
24020198-038A	JWM-66	NELAP		1.0	3.6	µg/L	1	03/04/2024 16:13	02/01/2024 5:30
24020198-039A	JWM-67	NELAP		1.0	6.5	µg/L	1	03/04/2024 16:28	02/01/2024 5:30
24020198-040A	JWM-68	NELAP		1.0	3.9	µg/L	1	03/04/2024 16:31	02/01/2024 5:30
24020198-041A	JWM-69	NELAP		1.0	2.1	µg/L	1	03/04/2024 16:35	02/01/2024 5:30
24020198-042A	JWM-70	NELAP		1.0	2.6	µg/L	1	03/05/2024 13:32	02/01/2024 5:30
24020198-043A	JWM-71	NELAP		1.0	6.7	µg/L	1	03/04/2024 16:50	02/01/2024 5:30
24020198-044A	JWM-72	NELAP		1.0	3.8	µg/L	1	03/04/2024 16:53	02/01/2024 5:31
24020198-045A	JWM-73	NELAP		1.0	3.0	µg/L	1	03/04/2024 16:57	02/01/2024 5:34
24020198-046A	JWM-74	NELAP		1.0	2.3	µg/L	1	03/04/2024 17:01	02/01/2024 5:34
24020198-047A	JWM-75	NELAP		1.0	1.4	µg/L	1	03/04/2024 17:15	02/01/2024 5:34
24020198-048A	JWM-76	NELAP		1.0	1.6	µg/L	1	03/01/2024 15:48	02/01/2024 5:34
24020198-049A	JWM-77	NELAP		1.0	1.0	µg/L	1	03/01/2024 15:51	02/01/2024 5:34

Client: Geotechnology, Inc.

Work Order: 24020198

Client Project: J044517.01

Report Date: 06-Mar-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24020198-050A	JWM-78	NELAP		1.0	1.4	µg/L	1	03/01/2024 15:55	02/01/2024 5:34
24020198-051A	JWM-79	NELAP		1.0	1.5	µg/L	1	03/01/2024 15:59	02/01/2024 5:34
24020198-052A	JWM-80	NELAP		1.0	1.8	µg/L	1	03/01/2024 16:02	02/01/2024 5:34
24020198-053A	JWM-81	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 16:06	02/01/2024 5:38
24020198-054A	JWM-82	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 16:10	02/01/2024 5:38
24020198-055A	JWM-83	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 16:13	02/01/2024 5:38
24020198-056A	JWM-84	NELAP		1.0	1.3	µg/L	1	03/01/2024 16:17	02/01/2024 5:41
24020198-057A	JWM-85	NELAP		1.0	1.0	µg/L	1	03/01/2024 16:39	02/01/2024 5:41
24020198-058A	JWM-86	NELAP		1.0	2.7	µg/L	1	03/01/2024 16:43	02/01/2024 5:41
24020198-059A	JWM-87	NELAP		1.0	3.0	µg/L	1	03/01/2024 16:46	02/01/2024 5:41
24020198-060A	JWM-88	NELAP		1.0	2.2	µg/L	1	03/01/2024 16:50	02/01/2024 5:41



Receiving Check List

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020198

Client Project: J044517.01

Report Date: 06-Mar-24

Carrier: Craig McKinney

Received By: LM

Completed by:

Reviewed by:

On:

On:

05-Feb-24

06-Feb-24

Amber Dilallo

Ellie Hopkins

Pages to follow:

Chain of custody

6

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C NA

Type of thermal preservation?

None ☒

Ice ☐

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☐

No ☒

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory.

JWM-63 was not received. - DS/ERH 2/6/24

pg. 25 of 40 Work order # 24020198

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: <u>Geotechnology, LLC</u>		Samples on: <input checked="" type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE <u>NA</u> °C <u>LTG#</u>	
Address: <u>11816 Lackland Road</u>		Preserved in: <input checked="" type="checkbox"/> LAB <input type="checkbox"/> FIELD <u>FOR LAB USE ONLY</u>	
City / State / Zip <u>St. Louis, MO 63146</u>		Lab Notes <u>Sample JWM-63 not received DS/S</u>	
Contact: <u>Brad Lohrum</u>	Phone: <u>(314) 997-7440</u>	Client Comments:	
E-Mail: <u>blohrum@teamues.com</u>	Fax: _____		

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

[illegible]

CHAIN OF CUSTODY

pg. 26 of 40 Work order # 24020198

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

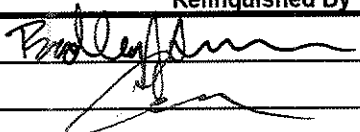
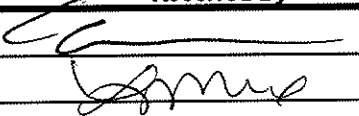
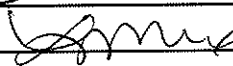
Client: Geotechnology, LLC
 Address: 11816 Lackland Road
 City / State / Zip: St. Louis, MO 63146
 Contact: Brad Lohrum Phone: (314) 997-7440
 E-Mail: blohrum@teamues.com Fax:

Samples on: ☒ ICE ☒ BLUE ICE ☒ NO ICE °C LTG#
 Preserved in: ☒ LAB ☒ FIELD **FOR LAB USE ONLY**
 Lab Notes

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED											
J044517.01		Brad Lohrum															
Results Requested		Billing Instructions		# and Type of Containers								Aqueous					
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER						
Lab Use Only	Sample Identification	Date/Time Sampled										Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8
24020198	JWM - 39	2/1/24	5:10	1								X					X
012	JWM - 40			1								X					X
013	41			1								X					X
014	42		5:13	1								X					X
015	43		5:15	1								X					X
016	44		+	1								X					X
017	45		5:16	1								X					X
018	46			1								X					X
019	47			1								X					X
020	48		5:19	1								X					X

Relinquished By		Date/Time		Received By		Date/Time	
		2/2/24 1230				2/2/24 1230	
		2/2/24 1540				2/2/24 1540	

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 80481



CHAIN OF CUSTODY

pg. 27 of 40 Work order # 2402098

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC
 Address: 11816 Lackland Road
 City / State / Zip: St. Louis, MO 63146
 Contact: Brad Lohrum Phone: (314) 997-7440
 E-Mail: blohrum@teamues.com Fax:

Samples on: ☒ ICE ☒ BLUE ICE ☒ NO ICE °C LTG#
 Preserved in: ☒ LAB ☒ FIELD **FOR LAB USE ONLY**
 Lab Notes

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED											
J044517.01		Brad Lohrum															
Results Requested		Billing Instructions		# and Type of Containers								Aqueous					
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER						
Lab Use Only	Sample Identification	Date/Time Sampled										Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8
2402098-021	JWM-49	2/1/24 5:19		1								X					X
022	JWM-50			1								X					X
023	51			1								X					X
024	52			1								X					X
025	53			1								X					X
026	54	5:22		1								X					X
027	55			1								X					X
028	56			1								X					X
029	57			1								X					X
030	58			1								X					X

Relinquished By		Date/Time		Received By		Date/Time	
Bradley Lohrum		2/2/24 1230		[Signature]		2/2/24 1230	
[Signature]		2/2/24 1540		[Signature]		2/2/24 1540	

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 80481



CHAIN OF CUSTODY

pg. 28 of 40 Work order # 24020198

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC
Address: 11816 Lackland Road
City / State / Zip: St. Louis, MO 63146
Contact: Brad Lohrum **Phone:** (314) 997-7440
E-Mail: blohrum@teamues.com **Fax:**

Samples on: ☒ ICE ☒ BLUE ICE ☒ NO ICE °C **LTG#**
Preserved in: ☒ LAB ☒ FIELD **FOR LAB USE ONLY**
Lab Notes

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX										INDICATE ANALYSIS REQUESTED													
J044517.01		Brad Lohrum																									
Results Requested		Billing Instructions		# and Type of Containers																							
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8									
Lab Use Only	Sample Identification	Date/Time Sampled																									
24020198	JWM - 59	2/1/24 5:22	1									X						X									
032	JWM - 60	5:23	1									X						X									
033	61	5:27	1									X						X									
034	62		1									X						X									
035	63		1									X						X									
036	64	5:30	1									X						X									
037	65		1									X						X									
038	66		1									X						X									
039	67		1									X						X									
040	68		1									X						X									

Relinquished By		Date/Time		Received By		Date/Time	
Brad Lohrum		2/2/24 1230		[Signature]		2/2/24 1230	
[Signature]		2/2/24 1540		[Signature]		2/2/24 1540	

CHAIN OF CUSTODY

pg. 29 of 40 Work order # 24020198

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC
Address: 11816 Lackland Road
City / State / Zip: St. Louis, MO 63146
Contact: Brad Lohrum **Phone:** (314) 997-7440
E-Mail: blohrum@teamues.com **Fax:**

Samples on: ☒ ICE ☒ BLUE ICE ☒ NO ICE °C LTG#
Preserved in: ☒ LAB ☒ FIELD **FOR LAB USE ONLY**
Lab Notes

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX										INDICATE ANALYSIS REQUESTED													
J044517.01		Brad Lohrum																									
Results Requested		Billing Instructions		# and Type of Containers																							
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8									
Lab Use Only	Sample Identification	Date/Time Sampled																									
24020198	JWM-69	2/1/24 5:30	1									X						X									
042	JWM-70		1									X						X									
043	71		1									X						X									
044	72	5:31	1									X						X									
045	73	5:34	1									X						X									
046	74		1									X						X									
047	75		1									X						X									
048	76		1									X						X									
049	77		1									X						X									
050	78		1									X						X									

Relinquished By		Date/Time	Received By		Date/Time
[Signature]		2/2/24 1230	[Signature]		2/2/24 1230
[Signature]		2/2/24 1540	[Signature]		2/2/24 1540

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BottleOrder: 80481



CHAIN OF CUSTODY

pg. 30 of 40 Work order # 24020198

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC Address: 11816 Lackland Road City / State / Zip: St. Louis, MO 63146 Contact: Brad Lohrum Phone: (314) 997-7440 E-Mail: blohrum@teamues.com Fax:	Samples on: <input checked="" type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE °C LTG# Preserved in: <input checked="" type="checkbox"/> LAB <input type="checkbox"/> FIELD FOR LAB USE ONLY Lab Notes Client Comments:
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Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX								INDICATE ANALYSIS REQUESTED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Lab Use Only	Sample Identification	Date/Time Sampled		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

Relinquished By		Date/Time		Received By		Date/Time	
Brad Lohrum		2/3/24 1230		[Signature]		2/2/24 1230	
[Signature]		2/2/24 1540		[Signature]		2/2/24 1540	

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BottleOrder: 80481



March 06, 2024

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



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

RE: J044517.01

WorkOrder: 24020199

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 2/2/2024 3:40:00 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

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020199

Client Project: J044517.01

Report Date: 06-Mar-24

This reporting package includes the following:

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Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	9
Chain of Custody	Appended

Client: Geotechnology, Inc.

Work Order: 24020199

Client Project: J044517.01

Report Date: 06-Mar-24

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)

Client: Geotechnology, Inc.

Work Order: 24020199

Client Project: J044517.01

Report Date: 06-Mar-24

Qualifiers

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



Case Narrative

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020199

Client Project: J044517.01

Report Date: 06-Mar-24

Cooler Receipt Temp: NA °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425

Phone (618) 344-1004

Fax (618) 344-1005

Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425

Phone (618) 344-1004

Fax (618) 344-1005

Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415

Phone (217) 698-1004

Fax (217) 698-1005

Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515

Phone (630) 324-6855

Fax

Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214

Phone (913) 541-1998

Fax (913) 541-1998

Email jhriley@teklabinc.com

Client: Geotechnology, Inc.**Work Order:** 24020199**Client Project:** J044517.01**Report Date:** 06-Mar-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020199

Client Project: J044517.01

Report Date: 06-Mar-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24020199-001A	JWM-89	NELAP		1.0	1.9	µg/L	1	03/01/2024 17:01	02/01/2024 5:41
24020199-002A	JWM-90	NELAP		1.0	1.9	µg/L	1	03/01/2024 17:05	02/01/2024 5:41
24020199-003A	JWM-91	NELAP		1.0	2.8	µg/L	1	03/01/2024 17:26	02/01/2024 5:41
24020199-004A	JWM-92	NELAP		1.0	6.8	µg/L	1	03/01/2024 17:30	02/01/2024 5:42
24020199-005A	JWM-93	NELAP		1.0	2.9	µg/L	1	03/01/2024 17:34	02/01/2024 5:45
24020199-006A	JWM-94	NELAP		1.0	2.3	µg/L	1	03/01/2024 17:37	02/01/2024 5:45
24020199-007A	JWM-95	NELAP		1.0	2.7	µg/L	1	03/01/2024 17:41	02/01/2024 5:45
24020199-008A	JWM-96	NELAP		1.0	3.2	µg/L	1	03/01/2024 17:45	02/01/2024 5:45
24020199-009A	JWM-97	NELAP		1.0	2.8	µg/L	1	03/01/2024 17:48	02/01/2024 5:45
24020199-010A	JWM-98	NELAP		1.0	1.9	µg/L	1	03/01/2024 17:52	02/01/2024 5:45
24020199-011A	JWM-99	NELAP		1.0	2.3	µg/L	1	03/01/2024 17:56	02/01/2024 5:45
24020199-012A	JWM-100	NELAP		1.0	3.0	µg/L	1	03/01/2024 17:59	02/01/2024 5:45
24020199-013A	BRH-01	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 18:14	02/01/2024 6:06
24020199-014A	BRH-02	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 18:18	02/01/2024 6:06
24020199-015A	BRH-03	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 18:29	02/01/2024 6:08
24020199-016A	BRH-04	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 18:32	02/01/2024 6:08
24020199-017A	BRH-05	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 18:36	02/01/2024 6:08
24020199-018A	BRH-06	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 18:40	02/01/2024 6:08
24020199-019A	BRH-07	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 19:02	02/01/2024 6:08
24020199-020A	BRH-08	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 19:05	02/01/2024 6:08
24020199-021A	BRH-09	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 19:09	02/01/2024 6:11
24020199-022A	BRH-10	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 19:13	02/01/2024 6:12
24020199-023A	BRH-11	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 19:16	02/01/2024 6:13
24020199-024A	BRH-12	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 19:20	02/01/2024 6:14
24020199-025A	BRH-13	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 19:24	02/01/2024 6:15
24020199-026A	BRH-14	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 19:27	02/01/2024 6:15
24020199-027A	BRH-15	NELAP		1.0	< 1.0	µg/L	1	03/01/2024 19:31	02/01/2024 6:16
24020199-028A	BRH-16	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 19:45	02/01/2024 6:17
24020199-029A	BRH-17	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 19:49	02/01/2024 6:18
24020199-030A	BRH-18	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 20:00	02/01/2024 6:19
24020199-031A	BRH-19	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 20:04	02/01/2024 6:19
24020199-032A	BRH-20	NELAP		1.0	1.2	µg/L	1	03/04/2024 20:07	02/01/2024 6:20
24020199-033A	BRH-21	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 20:11	02/01/2024 6:21
24020199-034A	BRH-22	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 14:09	02/01/2024 6:21
24020199-035A	BRH-23	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 14:13	02/01/2024 6:22
24020199-036A	BRH-24	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 14:24	02/01/2024 6:22
24020199-037A	BRH-25	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 14:27	02/01/2024 6:24
24020199-038A	BRH-26	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 14:31	02/01/2024 6:24
24020199-039A	BRH-27	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 14:46	02/01/2024 6:24
24020199-040A	BRH-28	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 14:49	02/01/2024 6:25
24020199-041A	BRH-29	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 14:53	02/01/2024 6:25
24020199-042A	BRH-30	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 14:57	02/01/2024 6:25
24020199-043A	BRH-31	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 15:01	02/01/2024 6:26
24020199-044A	BRH-32	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 15:04	02/01/2024 6:26
24020199-045A	BRH-33	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 15:08	02/01/2024 6:26
24020199-046A	BRH-34	NELAP		1.0	4.5	µg/L	5	02/23/2024 19:58	02/01/2024 6:28
24020199-047A	BRH-35	NELAP		1.0	< 1.0	µg/L	1	03/05/2024 15:12	02/01/2024 6:28
24020199-048A	BRH-36	NELAP		1.0	1.4	µg/L	1	03/05/2024 14:05	02/01/2024 6:29



Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020199

Client Project: J044517.01

Report Date: 06-Mar-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24020199-049A	BRH-37	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 17:48	02/01/2024 6:29
24020199-050A	BRH-38	NELAP		1.0	1.7	µg/L	1	03/04/2024 18:03	02/01/2024 6:29
24020199-051A	BRH-39	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 18:06	02/01/2024 6:29
24020199-052A	BRH-40	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 18:10	02/01/2024 6:30
24020199-053A	BRH-41	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 18:14	02/01/2024 6:31
24020199-054A	BRH-42	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 18:17	02/01/2024 6:31
24020199-055A	BRH-43	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 18:21	02/01/2024 6:31
24020199-056A	BRH-44	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 18:32	02/01/2024 6:33
24020199-057A	BRH-45	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 18:36	02/01/2024 6:38
24020199-058A	BRH-46	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 18:50	02/01/2024 6:40
24020199-059A	BRH-47	NELAP		1.0	1.1	µg/L	1	03/04/2024 18:54	02/01/2024 6:40
24020199-060A	BRH-48	NELAP		1.0	< 1.0	µg/L	1	03/04/2024 18:58	02/01/2024 6:42

Client: Geotechnology, Inc.

Work Order: 24020199

Client Project: J044517.01

Report Date: 06-Mar-24

Carrier: Craig McKinney

Received By: LM

Completed by:

Reviewed by:

On:

On:

05-Feb-24

06-Feb-24

Amber Dilallo

Ellie Hopkins

Pages to follow:

Chain of custody

6

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C

NA

Type of thermal preservation?

None ☒

Ice ☐

Blue Ice ☐

Dry Ice

☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory.

CHAIN OF CUSTODY

pg. 31 of 40 Work order # 24020199

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC
Address: 11816 Lackland Road
City / State / Zip: St. Louis, MO 63146
Contact: Brad Lohrum **Phone:** (314) 997-7440
E-Mail: blohrum@teamues.com **Fax:**

Samples on: ☒ ICE ☐ BLUE ICE ☒ NO ICE NA °C LTG# _____
Preserved in: ☒ LAB ☐ FIELD **FOR LAB USE ONLY**
Lab Notes

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																			
J044517.01		Brad Lohrum																							
Results Requested		Billing Instructions		# and Type of Containers										Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous													
Lab Use Only	Sample Identification	Date/Time Sampled																							
24020199	JWM-89	2/1/24 5:41	1										X								X				
001	JWM-90		1										X								X				
002	91		1										X								X				
003	92	5:42	1										X								X				
004	93	5:45	1										X								X				
005	94		1										X								X				
006	95		1										X								X				
007	96		1										X								X				
008	97		1										X								X				
009	98		1										X								X				
010													X								X				

Relinquished By		Date/Time		Received By		Date/Time	
Brad Lohrum		2/2/24 1230		C. Lohrum		2/2/24 1230	
		2/2/24 1540				2/2/24 1540	

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 80481



CHAIN OF CUSTODY

pg. 32 of 40 Work order # 24020199

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC
Address: 11816 Lackland Road
City / State / Zip: St. Louis, MO 63146
Contact: Brad Lohrum **Phone:** (314) 997-7440
E-Mail: blohrum@teamues.com **Fax:**

Samples on: ☒ ICE ☐ BLUE ICE ☐ NO ICE _____ °C LTG# _____
Preserved in: ☒ LAB ☐ FIELD **FOR LAB USE ONLY**
Lab Notes

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX										INDICATE ANALYSIS REQUESTED											
J044517.01		Brad Lohrum		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8															
Results Requested		Billing Instructions									# and Type of Containers														
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)											UNPRS	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER							
Lab Use Only	Sample Identification	Date/Time Sampled																							
2402099 011	JWM-99	2/1/24 5:45		1								X													
012	JWM-100	+		1								X													
013	BRH-01	6:06		1								X													
014	BRH-02	+		1								X													
015	03	6:08		1								X													
016	04			1								X													
017	05			1								X													
018	06			1								X													
019	07			1								X													
020	08			1								X													

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	2/2/24 1230	Cammy	2/2/24 1230
	2/2/24 1540		2/2/24 1540

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BottleOrder: 80481



CHAIN OF CUSTODY

pg. 33 of 40 Work order # 24020199

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

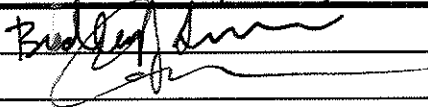
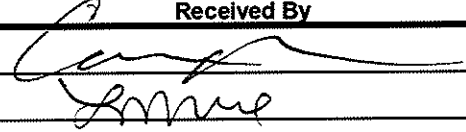
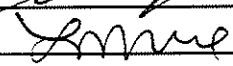
Client:	Geotechnology, LLC		
Address:	11816 Lackland Road		
City / State / Zip	St. Louis, MO 63146		
Contact:	Brad Lohrum	Phone:	(314) 997-7440
E-Mail:	blohrum@teamues.com	Fax:	

Samples on:	<input checked="" type="checkbox"/> ICE	<input type="checkbox"/> BLUE ICE	<input type="checkbox"/> NO ICE	°C	LTG#
Preserved in:	<input type="checkbox"/> LAB	<input type="checkbox"/> FIELD	FOR LAB USE ONLY		
Lab Notes					

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Client Comments:

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED											
J044517.01		Brad Lohrum															
Results Requested		Billing Instructions		# and Type of Containers								Aqueous					
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> 1-2 Day (100% Surcharge)			UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER						
<input type="checkbox"/> Other	<input type="checkbox"/> 3 Day (50% Surcharge)											Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8
Lab Use Only	Sample Identification	Date/Time Sampled															
24010199	BRH- 09	2/1/24 6:11		1								X					X
012	BRH- 10	6:12		1								X					X
023	11	6:13		1								X					X
024	12	6:14		1								X					X
025	13	6:15		1								X					X
026	14	+		1								X					X
027	15	6:16		1								X					X
028	16	6:17		1								X					X
029	17	6:18		1								X					X
030	18	6:19		1								X					X

Relinquished By	Date/Time	Received By	Date/Time
	2/2/24 1230		2/2/24 1230
	2/2/24 1540		2/2/24 1540

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BottleOrder: 80481



CHAIN OF CUSTODY


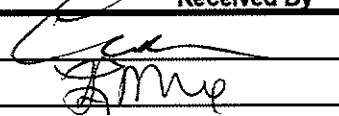

pg. 34 of 40 Work order # 24020199

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC Address: 11816 Lackland Road City / State / Zip: St. Louis, MO 63146 Contact: Brad Lohrum Phone: (314) 997-7440 E-Mail: blohrum@teamues.com Fax:	Samples on: <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE _____ °C LTG# _____ Preserved in: <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD FOR LAB USE ONLY Lab Notes Client Comments:
--	---

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX								INDICATE ANALYSIS REQUESTED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
J044517.01		Brad Lohrum																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Results Requested		Billing Instructions		# and Type of Containers								Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

Relinquished By	Date/Time	Received By	Date/Time
	2/2/24 1230		2/2/24 1230
	2/2/24 1540		2/2/24 1540

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BottleOrder: 80481



CHAIN OF CUSTODY

pg. 35 of 40 Work order # 24020199

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC
 Address: 11816 Lackland Road
 City / State / Zip: St. Louis, MO 63146
 Contact: Brad Lohrum Phone: (314) 997-7440
 E-Mail: blohrum@teamues.com Fax: _____

Samples on: ☐ ICE ☐ BLUE ICE ☐ NO ICE _____ °C LTG# _____
 Preserved in: ☐ LAB ☐ FIELD **FOR LAB USE ONLY**
 Lab Notes

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																			
J044517.01		Brad Lohrum																							
Results Requested		Billing Instructions		# and Type of Containers										Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER														
Lab Use Only	Sample Identification	Date/Time Sampled																							
24020199	BRH - 29	2/1/24 6:25	1									X									X				
042	BRH - 30	+	1									X									X				
043	31	6:26	1									X									X				
044	32	+	1									X									X				
045	33	+	1									X									X				
046	34	6:28	1									X									X				
047	35	+	1									X									X				
048	36	6:29	1									X									X				
049	37	+	1									X									X				
050	38	+	1									X									X				

Relinquished By	Date/Time	Received By	Date/Time
<i>Brad Lohrum</i>	2/2/24 1230	<i>[Signature]</i>	2/2/24 1230
<i>[Signature]</i>	2/2/24 1540	<i>[Signature]</i>	2/2/24 1540

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BottleOrder: 80481



pg. 36 of 40 Work order # 24020199

CHAIN OF CUSTODY

Samples on:	<input type="checkbox"/> ICE	<input type="checkbox"/> BLUE ICE	<input type="checkbox"/> NO ICE	_____ °C	LTG# _____
Preserved in:	<input type="checkbox"/> LAB	<input type="checkbox"/> FIELD	<u>FOR LAB USE ONLY</u>		
Lab Notes					
Client Comments:					

Client Comments:[illegible]

Relinquished By	Date/Time	Received By	Date/Time
B. [Signature]	2/2/24 1230	[Signature]	2/2/24 1230
[Signature]	2/2/24 1540	[Signature]	2/2/24 1540

BottleOrder: 80481



March 08, 2024

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



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

RE: J044517.01

WorkOrder: 24020886

Dear Brad Lohrum:

TEKLAB, INC received 29 samples on 2/12/2024 11:20:00 AM 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

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020886

Client Project: J044517.01

Report Date: 08-Mar-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	8
Chain of Custody	Appended

Client: Geotechnology, Inc.

Work Order: 24020886

Client Project: J044517.01

Report Date: 08-Mar-24

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)

Client: Geotechnology, Inc.

Work Order: 24020886

Client Project: J044517.01

Report Date: 08-Mar-24

Qualifiers

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



Case Narrative

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020886

Client Project: J044517.01

Report Date: 08-Mar-24

Cooler Receipt Temp: NA °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Client: Geotechnology, Inc.**Work Order:** 24020886**Client Project:** J044517.01**Report Date:** 08-Mar-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24020886

Client Project: J044517.01

Report Date: 08-Mar-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24020886-001A	LSE-15	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 8:59	02/09/2024 2:43
24020886-002A	LSE-16	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 9:10	02/09/2024 2:43
24020886-003A	LSE-17	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 9:14	02/09/2024 2:44
24020886-004A	LSE-18	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 9:18	02/09/2024 2:44
24020886-005A	LSE-19	NELAP		1.0	1.5	µg/L	5	03/02/2024 6:49	02/09/2024 2:45
24020886-006A	LSE-20	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 9:21	02/09/2024 2:45
24020886-007A	LSE-21	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 9:25	02/09/2024 2:46
24020886-008A	LSE-22	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 9:29	02/09/2024 2:48
24020886-009A	LSE-23	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 9:43	02/09/2024 2:48
24020886-010A	LSE-24	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 9:47	02/09/2024 2:49
24020886-011A	LSE-25	NELAP		1.0	1.4	µg/L	1	03/07/2024 15:00	02/09/2024 2:50
24020886-012A	LSE-26	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 15:11	02/09/2024 2:50
24020886-013A	LSE-27	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 15:15	02/09/2024 2:52
24020886-014A	LSE-28	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 15:18	02/09/2024 2:52
24020886-015A	LSE-29	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 15:22	02/09/2024 2:53
24020886-016A	LSE-30	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 15:26	02/09/2024 2:53
24020886-017A	LSE-31	NELAP		1.0	1.2	µg/L	1	03/07/2024 15:29	02/09/2024 2:54
24020886-018A	LSE-32	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 15:33	02/09/2024 2:54
24020886-019A	LSE-33	NELAP		1.0	1.2	µg/L	1	03/07/2024 15:48	02/09/2024 2:58
24020886-020A	LSE-34	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 15:51	02/09/2024 2:58
24020886-021A	LSE-35	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 15:55	02/09/2024 2:58
24020886-022A	LSE-36	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 15:59	02/09/2024 2:58
24020886-023A	LSE-37	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 16:02	02/09/2024 2:59
24020886-024A	LSE-38	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 16:06	02/09/2024 2:59
24020886-025A	LSE-39	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 16:10	02/09/2024 3:00
24020886-026A	LSE-40	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 16:13	02/09/2024 3:01
24020886-027A	LSE-41	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 16:17	02/09/2024 3:01
24020886-028A	LSE-42	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 16:21	02/09/2024 3:01
24020886-029A	JWM-63	NELAP		1.0	< 1.0	µg/L	1	03/07/2024 16:35	02/09/2024 3:20

Client: Geotechnology, Inc.

Work Order: 24020886

Client Project: J044517.01

Report Date: 08-Mar-24

Carrier: Craig McKinney

Received By: AMD

Completed by:

On:

12-Feb-24

Amber Dilallo

Reviewed by:

On:

12-Feb-24

Ellie Hopkins

Pages to follow:

Chain of custody

Extra pages included

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C

NA

Type of thermal preservation?

None ☒

Ice ☐

Blue Ice ☐

Dry Ice

☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory.

CHAIN OF CUSTODY

pg. 21 of 23 Work order # 24020886

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC
 Address: 11816 Lackland Road
 City / State / Zip: St. Louis, MO 63146
 Contact: Brad Lohrum Phone: (314) 997-7440
 E-Mail: blohrum@teamues.com Fax:

Samples on: ☐ ICE ☐ BLUE ICE ☒ NO ICE ☐ °C LTG#
 Preserved in: ☒ LAB ☐ FIELD **FOR LAB USE ONLY**
 Lab Notes

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No
 Are these samples known to be hazardous? ☐ Yes ☒ No
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

Client Comments: **COURIER**

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED											
J044517.01		Brad Lohrum															
Results Requested		Billing Instructions		# and Type of Containers													
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge)																	
<input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)																	
Lab Use Only	Sample Identification	Date/Time Sampled		UNRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater
24020886	LSE-15	2/9/24 2:43	1										X				X
001	LSE-16	+	1										X				X
003	17	2:44	1										X				X
004	18	+	1										X				X
005	19	2:45	1										X				X
006	20	+	1										X				X
007	21	2:46	1										X				X
008	22	2:48	1										X				X
009	23	+	1										X				X
010	24	2:49	1										X				X

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	2/12/24 10:15	Chris	2/12/24 10:15
Chris	2/12/24 11:20	Sharon Dillards	2/12/24 11:20

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 80481



CHAIN OF CUSTODY

pg. 22 of 23 Work order # 24020886

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Geotechnology, LLC		
Address:	11816 Lackland Road		
City / State / Zip	St. Louis, MO 63146		
Contact:	Brad Lohrum	Phone:	(314) 997-7440
E-Mail:	blohrum@teamues.com	Fax:	

Samples on:	<input checked="" type="checkbox"/> ICE	<input type="checkbox"/> BLUE ICE	<input type="checkbox"/> NO ICE	°C	LTG#
Preserved in:	<input checked="" type="checkbox"/> LAB	<input type="checkbox"/> FIELD	FOR LAB USE ONLY		
Lab Notes					

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No

Are these samples known to be hazardous? ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																			
J044517.01		Brad Lohrum																							
Results Requested		Billing Instructions		# and Type of Containers										Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER														
Lab Use Only	Sample Identification	Date/Time Sampled																							
24020886	LSE-25	2/9/24 2:50	1										X								X				
012	LSE-26	+	1										X								X				
013	27	2:52	1										X								X				
014	28	+	1										X								X				
015	29	2:53	1										X								X				
016	30	+	1										X								X				
017	31	2:54	1										X								X				
018	32	+	1										X								X				
019	33	2:58	1										X								X				
020	34	+	1										X								X				

Relinquished By	Date/Time	Received By	Date/Time
<i>Brad Lohrum</i>	2/12/24 1015	<i>[Signature]</i>	2/12/24 1015
<i>[Signature]</i>	2/12/24 1120	<i>Eric Dettle</i>	2/12/24 1120

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 80481



pg. 23 of 23 Work order # 2402088u



Client:	Geotechnology, LLC		
Address:	11816 Lackland Road		
City / State / Zip	St. Louis, MO 63146		
Contact:	Brad Lohrum	Phone:	(314) 997-7440
E-Mail:	blohrum@teamues.com	Fax:	

Preserved in: ☒ LAB ☐ FIELD FOR LAB USE ONLY

Client Comments:

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

[illegible]

Relinquished By	Date/Time	Received By	Date/Time
	2/12/24 1015		2/12/24 1015
	2/12/24 1120	Omar D. Hall	2/12/24 1120

BottleOrder: 80481





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.