



WATER SAMPLING AND REPORTING SERVICES

**COLUMBIA PUBLIC SCHOOLS
SHEPARD BOULEVARD ELEMENTARY SCHOOL
2616 SHEPARD BOULEVARD
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
Shepard Boulevard Elementary School
2616 Shepard Boulevard
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 Shepard Boulevard Elementary School, located southeast of the intersection of Audubon Drive and Shepard Boulevard 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 15, 2024, by Mr. Brad Lohrum, a Missouri-licensed lead risk assessor. Mr. Lohrum was assisted by Mr. Bob Haefner, a Missouri-licensed lead risk assessor, and Mr. Jon Tuetken, an



environmental scientist with UES. Copies of training certificates and lead licenses for Messrs. Lohrum and Haefner 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. Copies of the drinking water sampling forms, which include a list of sample locations, and the times and dates of flushing and sampling activities, are included in Appendix B. A floor plan depicting approximate sample locations is included as Figure 1.

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
SBE-02 / Kitchen Dish Wash – Left-hand Sink	7.8 ppb
SBE-33 / Room 127 Left-hand Sink	6.5 ppb
SBE-34 / Room 127 Left-hand Bubblers	5 ppb
SBE-35 / Room 127 Right-hand Sink	18.1 ppb
SBE-36 / Room 127 Right-hand Bubblers	6.3 ppb
SBE-37 / Room 126 Sink	5 ppb
SBE-40 / Room 130 Left-hand Sink	11.4 ppb
SBE-49 / Room 124 Sink	6.7 ppb
SBE-50 / Room 124 Bubblers	5.2 ppb
SBE-51 / Room 122 Sink	7.6 ppb
SBE-54 / Room 120 Sink	5.5 ppb
SBE-56 / Room 118 Sink	7.3 ppb
SBE-59 / Room 101 Sink	5.8 ppb
SBE-61 / Room 104 Sink	16.4 ppb
SBE-62 / Room 104 Bubblers	15.4 ppb
SBE-63 / Room 108A Sink	10.9 ppb
SBE-69 / Room 112 Left-hand Sink	10 ppb
SBE-71 / Room 112 Right-hand Bubblers	11 ppb
SBE-74 / Room 115 Sink	9.4 ppb



UES personnel returned to the site on June 25 and 26, 2024, to collect a water sample from the left-hand kitchen dishwashing sink (SBE-02-2) for laboratory analysis following the completion of remediation activities. The result of the retest water sample analysis was below 5 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 remaining outlets identified in Table 1 that have not been resampled 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 |
| 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.

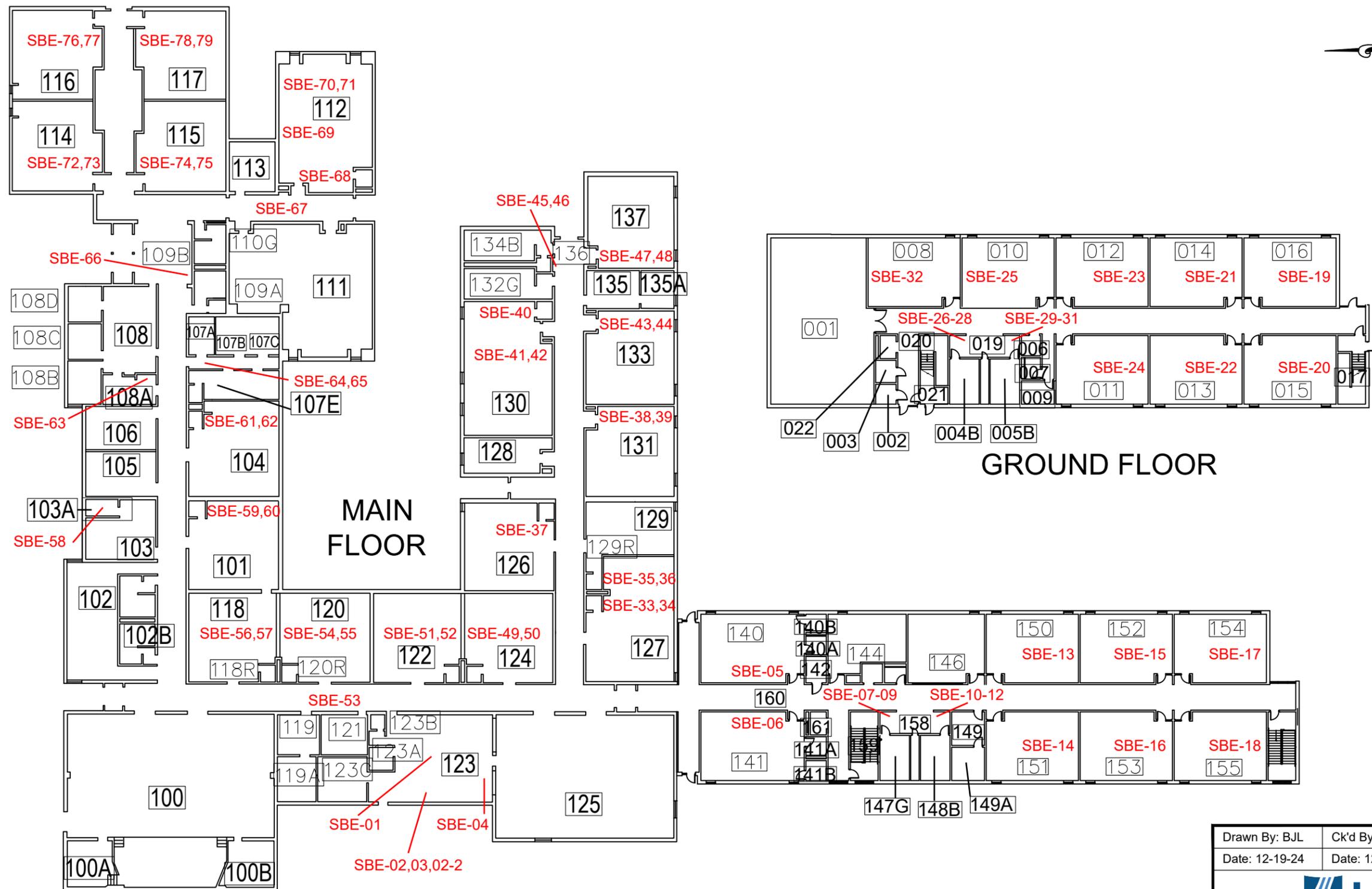
Very truly yours,

UES

A handwritten signature in blue ink that reads "Bradley J. Lohrum".

Bradley J. Lohrum
Project Manager

BJL/MSR:bjl/jsj



NOTES

1. Drawing not to scale.
2. Drawing adapted from "Shepard Boulevard Elementary Floor Plan", provided by the client, dated 07/01/2021.
3. Sample locations were identified in the field relative to building features and are approximate only.

Drawn By: BJJ	Ck'd By: BJJ	App'vd By: MSR
Date: 12-19-24	Date: 12-19-24	Date: 12-19-24



2616 Shepard Boulevard
Columbia, Missouri

**DRINKING WATER
SAMPLE LOCATIONS**

Project Number
J044517.01

FIGURE 1



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

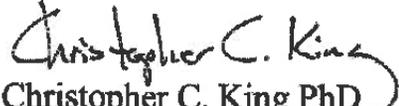
Lead Risk Assessor Refresher

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

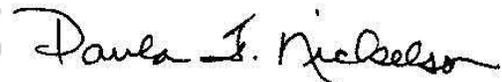
Issued to:

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
Acting Director
Department of Health and Senior Services



SAINT LOUIS UNIVERSITY

CENTER FOR ENVIRONMENTAL EDUCATION AND TRAINING

verifies that

Robert Haefner

3951 Dover Pl, St. Louis, MO 63116

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

Lead Risk Assessor Refresher

St. Louis, MO

Certificate # CEET 325 3/6/2023 118035
Examination Date: 3/6/2023
CEUs: 0.8

Rene Dulle, MBA, Director
Center for Environmental Education & Training

Center for Environmental Education and Training | 3545 Lafayette Ave., St. Louis, MO 63104
(314) 977-8256 | slu.edu/public-health-social-justice/centers-institutes/ceet.php

The training course has been accredited by the Missouri Dept. of Health and Senior Services, and by the Illinois Dept. of Public Health. Certificate expiration is 3 years from examination date for Illinois Dept. of Public Health.

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

Robert J. Haefner

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: **3/28/2023**

Expiration Date: **3/30/2025**

License Number: **150330:300004672**

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



Donald G. Kauerauf

Donald G. Kauerauf
Director
Department of Health and Senior Services

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

Lead Abatement Contractor License

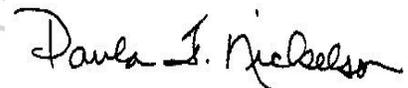
The person, firm or corporation whose name appears on this certificate is licensed as a Lead Abatement Contractor as set forth in the Missouri Revised Statutes 701.300-701.338 and 19 CSR 30-70.180, as long as not suspended or revoked, and is hereby authorized to engage in lead-bearing substance activities.

Issued to:

Geotechnology LLC (UES)

11816 Lackland Rd Suite 150
St. Louis, MO 63146

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



Paula F. Nickelson
Director
Department of Health and Senior Services



APPENDIX B

DRINKING WATER SAMPLING FORMS



DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
 Building Name: Shepard Boulevard Elementary

Project Number: J044517.01
 Address: 2616 Shepard Boulevard
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
SBE-01	S	Kitchen Food Prep	RJH - 1/15/24 - 11:24	RJH - 1/15/24 - 22:24
SBE-02	S	Kitchen Dish Wash - Left	BJL - 1/15/24 - 11:24	JFT - 1/15/24 - 22:24
SBE-03	S	Kitchen Dish Wash - Right	BJL - 1/15/24 - 11:24	JFT - 1/15/24 - 22:24
SBE-04	ICE	Kitchen	JFT - 1/15/24 - 11:24	RJH - 1/15/24 - 22:24
SBE-05	S	Room 140	RJH - 1/15/24 - 11:28	RJH - 1/15/24 - 22:27
SBE-06	S	Room 141	BJL - 1/15/24 - 11:28	JFT - 1/15/24 - 22:27
SBE-07	WF	Room 158 - Left	JFT - 1/15/24 - 11:31	RJH - 1/15/24 - 22:29
SBE-08	BF	Room 158 - Left Center	JFT - 1/15/24 - 11:31	RJH - 1/15/24 - 22:29
SBE-09	WF	Room 158 - Left Center	JFT - 1/15/24 - 11:31	RJH - 1/15/24 - 22:29
SBE-10	WF	Room 158 - Right Center	RJH - 1/15/24 - 11:31	JFT - 1/15/24 - 22:29
SBE-11	BF	Room 158 - Right	RJH - 1/15/24 - 11:31	JFT - 1/15/24 - 22:29
SBE-12	WF	Room 158 - Right	RJH - 1/15/24 - 11:31	JFT - 1/15/24 - 22:29
SBE-13	S	Room 150	RJH - 1/15/24 - 11:33	RJH - 1/15/24 - 22:31
SBE-14	S	Room 151	JFT - 1/15/24 - 11:35	JFT - 1/15/24 - 22:31
SBE-15	S	Room 152	RJH - 1/15/24 - 11:37	RJH - 1/15/24 - 22:32
SBE-16	S	Room 153	JFT - 1/15/24 - 11:37	JFT - 1/15/24 - 22:32
SBE-17	S	Room 154	RJH - 1/15/24 - 11:37	RJH - 1/15/24 - 22:32
SBE-18	S	Room 155	BJL - 1/15/24 - 11:37	RJH - 1/15/24 - 22:33
SBE-19	S	Room 16	RJH - 1/15/24 - 11:40	RJH - 1/15/24 - 22:36
SBE-20	S	Room 15	JFT - 1/15/24 - 11:40	JFT - 1/15/24 - 22:36
SBE-21	S	Room 14	BJL - 1/15/24 - 11:40	RJH - 1/15/24 - 22:37
SBE-22	S	Room 13	RJH - 1/15/24 - 11:41	JFT - 1/15/24 - 22:37
SBE-23	S	Room 12	RJH - 1/15/24 - 11:42	RJH - 1/15/24 - 22:38
SBE-24	S	Room 11	JFT - 1/15/24 - 11:42	JFT - 1/15/24 - 22:38
SBE-25	S	Room 10	BJL - 1/15/24 - 11:42	RJH - 1/15/24 - 22:38

BF=Bottle Filling
 B=Bubbler

FW=Filtered Water
 ICE=Ice Machine

S=Classroom/Other Sink
 WF=Water Fountain



DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
 Building Name: Shepard Boulevard Elementary

Project Number: J044517.01
 Address: 2616 Shepard Boulevard
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
SBE-26	WF	Room 19 - Left	RJH - 1/15/24 - 11:44	RJH - 1/15/24 - 22:41
SBE-27	BF	Room 19 - Left Center	RJH - 1/15/24 - 11:44	RJH - 1/15/24 - 22:41
SBE-28	WF	Room 19 - Left Center	RJH - 1/15/24 - 11:44	RJH - 1/15/24 - 22:41
SBE-29	WF	Room 19 - Right Center	JFT - 1/15/24 - 11:44	JFT - 1/15/24 - 22:41
SBE-30	BF	Room 19 - Right	JFT - 1/15/24 - 11:44	JFT - 1/15/24 - 22:41
SBE-31	WF	Room 19 - Right	JFT - 1/15/24 - 11:44	JFT - 1/15/24 - 22:41
SBE-32	S	Room 8	RJH - 1/15/24 - 11:45	RJH - 1/15/24 - 22:42
SBE-33	S	Room 127 - Left	RJH - 1/15/24 - 11:49	RJH - 1/15/24 - 22:45
SBE-34	B	Room 127 - Left	RJH - 1/15/24 - 11:49	RJH - 1/15/24 - 22:45
SBE-35	S	Room 127 - Right	RJH - 1/15/24 - 11:49	JFT - 1/15/24 - 22:45
SBE-36	B	Room 127 - Right	RJH - 1/15/24 - 11:49	JFT - 1/15/24 - 22:45
SBE-37	S	Room 126	RJH - 1/15/24 - 11:50	RJH - 1/15/24 - 22:46
SBE-38	S	Room 131	JFT - 1/15/24 - 11:53	JFT - 1/15/24 - 22:48
SBE-39	B	Room 131	JFT - 1/15/24 - 11:53	JFT - 1/15/24 - 22:48
SBE-40	S	Room 130 - Left	RJH - 1/15/24 - 11:55	RJH - 1/15/24 - 22:49
SBE-41	S	Room 130 - Right	JFT - 1/15/24 - 11:55	RJH - 1/15/24 - 22:49
SBE-42	B	Room 130 - Right	JFT - 1/15/24 - 11:55	RJH - 1/15/24 - 22:49
SBE-43	S	Room 133	RJH - 1/15/24 - 11:56	JFT - 1/15/24 - 22:51
SBE-44	B	Room 133	RJH - 1/15/24 - 11:56	JFT - 1/15/24 - 22:51
SBE-45	WF	Hallway at Room 137 - Left	RJH - 1/15/24 - 11:58	RJH - 1/15/24 - 22:51
SBE-46	WF	Hallway at Room 137 - Right	JFT - 1/15/24 - 11:58	RJH - 1/15/24 - 22:51
SBE-47	S	Room 137	RJH - 1/15/24 - 11:59	JFT - 1/15/24 - 22:53
SBE-48	B	Room 137	RJH - 1/15/24 - 11:59	JFT - 1/15/24 - 22:53
SBE-49	S	Room 124	RJH - 1/15/24 - 12:04	RJH - 1/15/24 - 22:55
SBE-50	B	Room 124	RJH - 1/15/24 - 12:04	RJH - 1/15/24 - 22:55

BF=Bottle Filling
 B=Bubbler

FW=Filtered Water
 ICE=Ice Machine

S=Classroom/Other Sink
 WF=Water Fountain



DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
 Building Name: Shepard Boulevard Elementary

Project Number: J044517.01
 Address: 2616 Shepard Boulevard
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
SBE-51	S	Room 122	JFT - 1/15/24 - 12:05	JFT - 1/15/24 - 22:57
SBE-52	B	Room 122	JFT - 1/15/24 - 12:05	JFT - 1/15/24 - 22:57
SBE-53	BF	Hallway at Room 120	RJH - 1/15/24 - 12:06	RJH - 1/15/24 - 22:57
SBE-54	S	Room 120	RJH - 1/15/24 - 12:08	JFT - 1/15/24 - 22:58
SBE-55	B	Room 120	RJH - 1/15/24 - 12:08	JFT - 1/15/24 - 22:58
SBE-56	S	Room 118	RJH - 1/15/24 - 12:09	RJH - 1/15/24 - 22:59
SBE-57	B	Room 118	RJH - 1/15/24 - 12:09	RJH - 1/15/24 - 22:59
SBE-58	S	Room 103A	RJH - 1/15/24 - 12:12	JFT - 1/15/24 - 23:00
SBE-59	S	Room 101	JFT - 1/15/24 - 12:13	RJH - 1/15/24 - 23:01
SBE-60	B	Room 101	JFT - 1/15/24 - 12:13	RJH - 1/15/24 - 23:01
SBE-61	S	Room 104	RJH - 1/15/24 - 12:14	JFT - 1/15/24 - 23:03
SBE-62	B	Room 104	RJH - 1/15/24 - 12:14	JFT - 1/15/24 - 23:03
SBE-63	S	Room 108A	JFT - 1/15/24 - 12:16	RJH - 1/15/24 - 23:03
SBE-64	S	Room 107E	RJH - 1/15/24 - 12:17	RJH - 1/15/24 - 23:04
SBE-65	B	Room 107E	RJH - 1/15/24 - 12:17	RJH - 1/15/24 - 23:04
SBE-66	WF	Hallway at Room 109B	JFT - 1/15/24 - 12:18	JFT - 1/15/24 - 23:05
SBE-67	WF	Hallway at Room 112	RJH - 1/15/24 - 12:20	RJH - 1/15/24 - 23:06
SBE-68	S	Room 112 - West	JFT - 1/15/24 - 12:22	JFT - 1/15/24 - 23:06
SBE-69	S	Room 112 - Left	RJH - 1/15/24 - 12:22	RJH - 1/15/24 - 23:07
SBE-70	S	Room 112 - Right	RJH - 1/15/24 - 12:22	JFT - 1/15/24 - 23:07
SBE-71	B	Room 112 - Right	RJH - 1/15/24 - 12:22	JFT - 1/15/24 - 23:07
SBE-72	S	Room 114	RJH - 1/15/24 - 12:24	RJH - 1/15/24 - 23:08
SBE-73	B	Room 114	RJH - 1/15/24 - 12:24	RJH - 1/15/24 - 23:08
SBE-74	S	Room 115	JFT - 1/15/24 - 12:24	JFT - 1/15/24 - 23:09
SBE-75	B	Room 115	JFT - 1/15/24 - 12:24	JFT - 1/15/24 - 23:09

BF=Bottle Filling
 B=Bubbler

FW=Filtered Water
 ICE=Ice Machine

S=Classroom/Other Sink
 WF=Water Fountain



DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
Building Name: Shepard Boulevard Elementary

Project Number: J044517.01
Address: 2616 Shepard Boulevard
Columbia, Missouri

Table with 5 columns: Sample ID, Fixture Type, Location, Flushed By - Date - Time, and Sampled By - Date - Time. It contains 15 rows of data, including sample IDs like SBE-76, SBE-77, SBE-78, SBE-79, and SBE-02-2.

BF=Bottle Filling
B=Bubbler

FW=Filtered Water
ICE=Ice Machine

S=Classroom/Other Sink
WF=Water Fountain



APPENDIX C

DRINKING WATER LABORATORY DATA SHEETS

February 12, 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: 24011321

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 1/19/2024 10:00:00 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,



Patrick Riley
Project Manager
(618)344-1004 ex 44
patrickriley@teklabinc.com



Report Contents

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

Client: Geotechnology, Inc.

Work Order: 24011321

Client Project: J044517.01

Report Date: 12-Feb-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: 24011321

Client Project: J044517.01

Report Date: 12-Feb-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: 24011321

Client Project: J044517.01

Report Date: 12-Feb-24

Qualifiers

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



Case Narrative

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

Client: Geotechnology, Inc.

Work Order: 24011321

Client Project: J044517.01

Report Date: 12-Feb-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



Accreditations

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

Client: Geotechnology, Inc.

Work Order: 24011321

Client Project: J044517.01

Report Date: 12-Feb-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: 24011321

Client Project: J044517.01

Report Date: 12-Feb-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									
24011321-001A	AHL-25	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 3:03	01/12/2024 6:00
24011321-002A	AHL-26	NELAP		1.0	2.4	µg/L	1	02/09/2024 3:07	01/12/2024 6:01
24011321-003A	AHL-27	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 3:10	01/12/2024 6:01
24011321-004A	AHL-28	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 14:23	01/12/2024 6:02
24011321-005A	AHL-29	NELAP		1.0	< 1.0	µg/L	5	02/08/2024 13:15	01/12/2024 6:04
24011321-006A	AHL-30	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 14:34	01/12/2024 6:04
24011321-007A	AHL-31	NELAP		1.0	1.3	µg/L	1	02/03/2024 0:14	01/12/2024 6:04
24011321-008A	AHL-32	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:18	01/12/2024 6:05
24011321-009A	AHL-33	NELAP		1.0	1.4	µg/L	1	02/03/2024 0:22	01/12/2024 6:06
24011321-010A	AHL-34	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:25	01/12/2024 6:07
24011321-011A	AHL-35	NELAP		1.0	1.1	µg/L	1	02/03/2024 0:29	01/12/2024 6:08
24011321-012A	AHL-36	NELAP		1.0	1.4	µg/L	1	02/03/2024 0:33	01/12/2024 6:08
24011321-013A	AHL-37	NELAP		1.0	1.6	µg/L	1	02/03/2024 0:36	01/12/2024 6:09
24011321-014A	AHL-38	NELAP		1.0	1.2	µg/L	1	02/03/2024 0:40	01/12/2024 6:10
24011321-015A	AHL-39	NELAP		1.0	2.2	µg/L	1	02/03/2024 1:02	01/12/2024 6:10
24011321-016A	AHL-40	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 1:06	01/12/2024 6:11
24011321-017A	AHL-41	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 1:09	01/12/2024 6:11
24011321-018A	AHL-42	NELAP		1.0	1.6	µg/L	1	02/03/2024 1:13	01/12/2024 6:13
24011321-019A	AHL-43	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 1:17	01/12/2024 6:15
24011321-020A	AHL-44	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 1:20	01/12/2024 6:15
24011321-021A	AHL-45	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 1:24	01/12/2024 6:15
24011321-022A	AHL-46	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 1:28	01/12/2024 6:16
24011321-023A	AHL-47	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 1:31	01/12/2024 6:16
24011321-024A	AHL-48	NELAP		1.0	1.2	µg/L	1	02/09/2024 14:38	01/12/2024 6:16
24011321-025A	AHL-49	NELAP		1.0	1.1	µg/L	5	02/08/2024 13:19	01/12/2024 6:17
24011321-026A	AHL-50	NELAP		1.0	1.0	µg/L	5	02/08/2024 13:11	01/12/2024 6:17
24011321-027A	AHL-51	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 14:49	01/12/2024 6:18
24011321-028A	AHL-52	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 14:53	01/12/2024 6:18
24011321-029A	AHL-53	NELAP		1.0	1.4	µg/L	1	02/09/2024 15:07	01/12/2024 6:19
24011321-030A	AHL-54	NELAP		1.0	1.5	µg/L	1	02/09/2024 15:11	01/12/2024 6:20
24011321-031A	AHL-55	NELAP		1.0	1.2	µg/L	1	02/09/2024 15:15	01/12/2024 6:21
24011321-032A	AHL-56	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 15:18	01/12/2024 6:23
24011321-033A	AHL-57	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 15:22	01/12/2024 6:23
24011321-034A	AHL-58	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 15:26	01/12/2024 6:23
24011321-035A	FCS-08-2	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 15:29	01/15/2024 16:03
24011321-036A	FCS-09-2	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 4:37	01/15/2024 16:08
24011321-037A	SBE-01	NELAP		1.0	4.6	µg/L	1	02/09/2024 4:41	01/15/2024 22:24
24011321-038A	SBE-02	NELAP		1.0	7.8	µg/L	1	02/09/2024 4:44	01/15/2024 22:24
24011321-039A	SBE-03	NELAP		1.0	4.5	µg/L	1	02/09/2024 4:48	01/15/2024 22:24
24011321-040A	SBE-04	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 4:52	01/15/2024 22:24
24011321-041A	SBE-05	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 6:29	01/15/2024 22:27
24011321-042A	SBE-06	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 6:33	01/15/2024 22:27
24011321-043A	SBE-07	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 6:37	01/15/2024 22:29
24011321-044A	SBE-08	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 6:41	01/15/2024 22:29
24011321-045A	SBE-09	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 6:45	01/15/2024 22:29
24011321-046A	SBE-10	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 6:49	01/15/2024 22:29
24011321-047A	SBE-11	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 7:06	01/15/2024 22:29
24011321-048A	SBE-12	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 7:35	01/15/2024 22:29



Laboratory Results

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

Client: Geotechnology, Inc.

Work Order: 24011321

Client Project: J044517.01

Report Date: 12-Feb-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									
24011321-049A	SBE-13	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 7:10	01/15/2024 22:31
24011321-050A	SBE-14	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 7:14	01/15/2024 22:31
24011321-051A	SBE-15	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 7:18	01/15/2024 22:32
24011321-052A	SBE-16	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 7:23	01/15/2024 22:32
24011321-053A	SBE-17	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 7:27	01/15/2024 22:32
24011321-054A	SBE-18	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 8:29	01/15/2024 22:33
24011321-055A	SBE-19	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 7:31	01/15/2024 22:36
24011321-056A	SBE-20	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 8:00	01/15/2024 22:36
24011321-057A	SBE-21	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 8:04	01/15/2024 22:37
24011321-058A	SBE-22	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 8:08	01/15/2024 22:37
24011321-059A	SBE-23	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 8:12	01/15/2024 22:38
24011321-060A	SBE-24	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 8:16	01/15/2024 22:38



Receiving Check List

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

Client: Geotechnology, Inc.

Work Order: 24011321

Client Project: J044517.01

Report Date: 12-Feb-24

Carrier: Employee

Received By: MEK

Completed by: *Mary E. Kemp*
On: 19-Jan-24
Mary E Kemp

Reviewed by: *Ellie Hopkins*
On: 19-Jan-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. - MaryKemp - 1/19/2024 11:23:21 AM

CHAIN OF CUSTODY

pg. 41 of 74 Work order # 24011321

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 checked="" type="checkbox"/> ICE <input checked="" 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															
<u>644517.01</u>		<u>Brad Lohrum</u>		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)		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER												
Lab Use Only	Sample Identification	Date/Time Sampled																			
<u>24011321-041</u>	<u>SBE-05</u>	<u>1/15/24 22:27</u>								X											
<u>042</u>	<u>SBE-06</u>	<u>+</u>								X											
<u>043</u>	<u>07</u>	<u>22:29</u>								X											
<u>044</u>	<u>08</u>	<u> </u>								X											
<u>045</u>	<u>09</u>	<u> </u>								X											
<u>046</u>	<u>10</u>	<u> </u>								X											
<u>047</u>	<u>11</u>	<u> </u>								X											
<u>048</u>	<u>12</u>	<u> </u>								X											
<u>049</u>	<u>13</u>	<u>22:31</u>								X											
<u>050</u>	<u>14</u>	<u>+</u>								X											
Relinquished By		Date/Time		Received By		Date/Time															
<u>Brad Lohrum</u>		<u>1/18/24</u>		<u>R-D</u>		<u>1/18/24</u>															
<u>R-D</u>		<u>1/19/24 10:00</u>		<u>Mary Kemp</u>		<u>1/19/24 1000</u>															

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. 42 of 74 Work order # 24011321

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:

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED														
<u>6044517.01</u>		<u>Brad Lohrum</u>		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)		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER											
Lab Use Only	Sample Identification	Date/Time Sampled																		
<u>24011321</u> <u>051</u>	<u>SBE - 15</u>	<u>1/15/24 22:32</u>								X										
<u>052</u>	<u>SBE - 16</u>	<u> </u>								X										
<u>053</u>	<u>17</u>	<u> </u>								X										
<u>054</u>	<u>18</u>	<u>22:33</u>								X										
<u>055</u>	<u>19</u>	<u>22:36</u>								X										
<u>056</u>	<u>20</u>	<u>+</u>								X										
<u>057</u>	<u>21</u>	<u>22:37</u>								X										
<u>058</u>	<u>22</u>	<u>+</u>								X										
<u>059</u>	<u>23</u>	<u>22:38</u>								X										
<u>060</u>	<u>24</u>	<u>+</u>								X										

Relinquished By	Date/Time	Received By	Date/Time
<u>Brad Lohrum</u>	<u>1/15/24</u>	<u>R. J. [Signature]</u>	<u>1/13/24</u>
<u>R. J. [Signature]</u>	<u>1/19/24 10:00</u>	<u>Mary Kemp</u>	<u>1/19/24 1000</u>

February 12, 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: 24011315

Dear Brad Lohrum:

TEKLAB, INC received 50 samples on 1/19/2024 10:12:00 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,



Patrick Riley
Project Manager
(618)344-1004 ex 44
patrickriley@teklabinc.com



Report Contents

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

Client: Geotechnology, Inc.

Work Order: 24011315

Client Project: J044517.01

Report Date: 12-Feb-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: 24011315

Client Project: J044517.01

Report Date: 12-Feb-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: 24011315

Client Project: J044517.01

Report Date: 12-Feb-24

Qualifiers

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

Client: Geotechnology, Inc.

Work Order: 24011315

Client Project: J044517.01

Report Date: 12-Feb-24

Cooler Receipt Temp: N/A °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



Accreditations

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

Client: Geotechnology, Inc.

Work Order: 24011315

Client Project: J044517.01

Report Date: 12-Feb-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: 24011315

Client Project: J044517.01

Report Date: 12-Feb-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									
24011315-001A	SBE-25	NELAP		1.0	4.9	µg/L	1	02/09/2024 7:53	01/15/2024 22:38
24011315-002A	SBE-26	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 7:56	01/15/2024 22:41
24011315-003A	SBE-27	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 8:00	01/15/2024 22:41
24011315-004A	SBE-28	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 8:04	01/15/2024 22:41
24011315-005A	SBE-29	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 8:07	01/15/2024 22:41
24011315-006A	SBE-30	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 8:11	01/15/2024 22:41
24011315-007A	SBE-31	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 8:15	01/15/2024 22:41
24011315-008A	SBE-32	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 8:18	01/15/2024 22:42
24011315-009A	SBE-33	NELAP		1.0	6.5	µg/L	1	02/09/2024 8:22	01/15/2024 22:45
24011315-010A	SBE-34	NELAP		1.0	5.0	µg/L	1	02/09/2024 8:44	01/15/2024 22:45
24011315-011A	SBE-35	NELAP		1.0	18.1	µg/L	1	02/09/2024 8:48	01/15/2024 22:45
24011315-012A	SBE-36	NELAP		1.0	6.3	µg/L	1	02/09/2024 8:51	01/15/2024 22:45
24011315-013A	SBE-37	NELAP		1.0	5.0	µg/L	1	02/09/2024 8:55	01/15/2024 22:46
24011315-014A	SBE-38	NELAP		1.0	3.2	µg/L	1	02/09/2024 9:06	01/15/2024 22:48
24011315-015A	SBE-39	NELAP		1.0	1.3	µg/L	1	02/09/2024 9:10	01/15/2024 22:48
24011315-016A	SBE-40	NELAP		1.0	11.4	µg/L	1	02/09/2024 9:13	01/15/2024 22:49
24011315-017A	SBE-41	NELAP		1.0	3.5	µg/L	1	02/09/2024 9:28	01/15/2024 22:49
24011315-018A	SBE-42	NELAP		1.0	2.1	µg/L	1	02/09/2024 9:32	01/15/2024 22:49
24011315-019A	SBE-43	NELAP		1.0	1.7	µg/L	1	02/09/2024 9:35	01/15/2024 22:51
24011315-020A	SBE-44	NELAP		1.0	1.1	µg/L	1	02/09/2024 9:39	01/15/2024 22:51
24011315-021A	SBE-45	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 9:43	01/15/2024 22:51
24011315-022A	SBE-46	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 9:46	01/15/2024 22:51
24011315-023A	SBE-47	NELAP		1.0	3.5	µg/L	1	02/09/2024 9:50	01/15/2024 22:53
24011315-024A	SBE-48	NELAP		1.0	2.3	µg/L	1	02/09/2024 9:54	01/15/2024 22:53
24011315-025A	SBE-49	NELAP		1.0	6.7	µg/L	1	02/09/2024 9:57	01/15/2024 10:55
24011315-026A	SBE-50	NELAP		1.0	5.2	µg/L	1	02/09/2024 10:01	01/15/2024 10:55
24011315-027A	SBE-51	NELAP		1.0	7.6	µg/L	1	02/09/2024 10:16	01/15/2024 22:59
24011315-028A	SBE-52	NELAP		1.0	3.1	µg/L	1	02/09/2024 10:19	01/15/2024 22:59
24011315-029A	SBE-53	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 10:23	01/15/2024 22:59
24011315-030A	SBE-54	NELAP		1.0	5.5	µg/L	1	02/09/2024 10:27	01/15/2024 22:58
24011315-031A	SBE-55	NELAP		1.0	3.4	µg/L	1	02/09/2024 10:38	01/15/2024 22:58
24011315-032A	SBE-56	NELAP		1.0	7.3	µg/L	1	02/09/2024 10:41	01/15/2024 22:59
24011315-033A	SBE-57	NELAP		1.0	2.9	µg/L	1	02/09/2024 10:45	01/15/2024 22:59
24011315-034A	SBE-58	NELAP		1.0	3.8	µg/L	1	02/09/2024 10:49	01/15/2024 23:00
24011315-035A	SBE-59	NELAP		1.0	5.8	µg/L	1	02/09/2024 11:11	01/15/2024 23:01
24011315-036A	SBE-60	NELAP		1.0	3.9	µg/L	1	02/09/2024 11:14	01/15/2024 23:01
24011315-037A	SBE-61	NELAP		1.0	16.4	µg/L	1	02/09/2024 11:18	01/15/2024 23:03
24011315-038A	SBE-62	NELAP		1.0	15.4	µg/L	1	02/09/2024 11:22	01/15/2024 23:03
24011315-039A	SBE-63	NELAP		1.0	10.9	µg/L	1	02/09/2024 11:25	01/15/2024 23:03
24011315-040A	SBE-64	NELAP		1.0	1.8	µg/L	1	02/09/2024 11:29	01/15/2024 23:04
24011315-041A	SBE-65	NELAP		1.0	3.0	µg/L	1	02/08/2024 3:32	01/15/2024 23:04
24011315-042A	SBE-66	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 3:36	01/15/2024 23:05
24011315-043A	SBE-67	NELAP		1.0	2.1	µg/L	1	02/08/2024 3:40	01/15/2024 23:06
24011315-044A	SBE-68	NELAP		1.0	3.6	µg/L	1	02/08/2024 3:45	01/15/2024 23:06
24011315-045A	SBE-69	NELAP		1.0	10.0	µg/L	1	02/12/2024 12:14	01/15/2024 23:07
24011315-046A	SBE-70	NELAP		1.0	4.1	µg/L	1	02/08/2024 3:49	01/15/2024 23:07
24011315-047A	SBE-71	NELAP		1.0	11.0	µg/L	1	02/08/2024 3:53	01/15/2024 23:07
24011315-048A	SBE-72	NELAP		1.0	1.7	µg/L	1	02/08/2024 3:58	01/15/2024 23:08



Laboratory Results

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

Client: Geotechnology, Inc.

Work Order: 24011315

Client Project: J044517.01

Report Date: 12-Feb-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									
24011315-049A	SBE-73	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 4:28	01/15/2024 23:08
24011315-050A	SBE-74	NELAP		1.0	9.4	µg/L	1	02/08/2024 4:32	01/15/2024 23:09



Receiving Check List

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

Client: Geotechnology, Inc.

Work Order: 24011315

Client Project: J044517.01

Report Date: 12-Feb-24

Carrier: Employee

Received By: NR

Completed by:

Amber Dilallo

Reviewed by:

Ellie Hopkins

On:

19-Jan-24

Amber Dilallo

On:

19-Jan-24

Ellie Hopkins

Pages to follow: Chain of custody

Extra pages included

- | | | | | |
|---|--|------------------------------|--|----------------------------------|
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> | Temp °C N/A |
| 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. - amberdilallo - 1/19/2024 11:12:51 AM

CHAIN OF CUSTODY

pg. 43 of 74 Work order # 24011315

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 checked="" type="checkbox"/> NO ICE <u>NA</u> °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		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)		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER												
Lab Use Only	Sample Identification	Date/Time Sampled																			
24011315-001	SBE-25	1/15/24 22:38								X											
002	SBE-26	22:41								X											
003	27									X											
004	28									X											
005	29									X											
006	30									X											
007	31									X											
008	32	22:42								X											
009	33	22:45								X											
010	34									X											
Relinquished By		Date/Time		Received By		Date/Time															
Brad Lohrum		1/18/24		R. Lohrum		1/18/24															
K. Lohrum		1/19/24 10:00		Nide Reed		1/19/24 1012															

CHAIN OF CUSTODY

pg. 45 of 74 Work order # 24011315

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 checked="" type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE _____ °C LTG# _____ Preserved in: <input 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															
<u>J044517.01</u>		<u>Brad Lohrum</u>		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)			UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER										
Lab Use Only	Sample Identification	Date/Time Sampled																			
<u>24011315-021</u>	<u>SBE-45</u>	<u>1/5/24 22:51</u>										X									
<u>022</u>	<u>SBE-46</u>	<u>+</u>										X									
<u>023</u>	<u>47</u>	<u>22:53</u>										X									
<u>024</u>	<u>48</u>	<u>+</u>										X									
<u>025</u>	<u>49</u>	<u>22:55</u>										X									
<u>026</u>	<u>50</u>	<u>+</u>										X									
<u>027</u>	<u>51</u>	<u>22:57</u>										X									
<u>028</u>	<u>52</u>	<u>+</u>										X									
<u>029</u>	<u>53</u>	<u>+</u>										X									
<u>030</u>	<u>54</u>	<u>22:58</u>										X									
Relinquished By		Date/Time	Received By		Date/Time																
<u>Brad Lohrum</u>		<u>1/18/24</u>	<u>R. J. [Signature]</u>		<u>1/18/24</u>																
<u>R. J. [Signature]</u>		<u>1/19/24 10:00</u>	<u>[Signature]</u>		<u>1/19/24 10:12</u>																

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. 46 of 74 Work order # 24011315

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> <u>St. Louis, MO 63146</u> City / State / Zip Contact: <u>Brad Lohrum</u> Phone: <u>(314) 997-7440</u> E-Mail: <u>blohrum@teamues.com</u> 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															
<u>J044517.01</u>		<u>Brad Lohrum</u>		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)		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER												
Lab Use Only	Sample Identification	Date/Time Sampled																			
<u>24011315</u>	<u>021 SBE - 55</u>	<u>1/15/24 22:58</u>									X										
	<u>032 SBE - 56</u>	<u>22:59</u>									X										
	<u>033 57</u>	<u>+</u>									X										
	<u>034 58</u>	<u>23:00</u>									X										
	<u>035 59</u>	<u>23:01</u>									X										
	<u>036 60</u>	<u>+</u>									X										
	<u>037 61</u>	<u>23:03</u>									X										
	<u>038 62</u>	<u>+</u>									X										
	<u>039 63</u>	<u>+</u>									X										
	<u>040 + 64</u>	<u>+ 23:04</u>									X										
Relinquished By		Date/Time	Received By								Date/Time										
<u>Brad Lohrum</u>		<u>1/18/24</u>	<u>Nick Reed</u>								<u>1/18/24</u>										
<u>R. J. [Signature]</u>		<u>1/19/24 10:00</u>									<u>1/19/24 10:12</u>										

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



February 09, 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: 24011322

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 1/19/2024 10:00:00 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,



Patrick Riley
Project Manager
(618)344-1004 ex 44
patrickriley@teklabinc.com



Report Contents

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

Client: Geotechnology, Inc.

Work Order: 24011322

Client Project: J044517.01

Report Date: 09-Feb-24

This reporting package includes the following:

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Laboratory Results	7
Receiving Check List	9
Chain of Custody	Appended

Client: Geotechnology, Inc.

Work Order: 24011322

Client Project: J044517.01

Report Date: 09-Feb-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."

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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

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NELAP NELAP Accredited

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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: 24011322

Client Project: J044517.01

Report Date: 09-Feb-24

Qualifiers

- # - Unknown hydrocarbon
- C - RL shown is a Client Requested Quantitation Limit
- H - Holding times exceeded
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- ND - Not Detected at the Reporting Limit
- S - Spike Recovery outside recovery limits
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- R - RPD outside accepted recovery limits
- T - TIC(Tentatively identified compound)



Case Narrative

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

Client: Geotechnology, Inc.
Client Project: J044517.01

Work Order: 24011322
Report Date: 09-Feb-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



Accreditations

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

Client: Geotechnology, Inc.

Work Order: 24011322

Client Project: J044517.01

Report Date: 09-Feb-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: 24011322

Client Project: J044517.01

Report Date: 09-Feb-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									
24011322-001A	SBE-75	NELAP		1.0	1.7	µg/L	1	02/08/2024 4:37	01/15/2024 23:09
24011322-002A	SBE-76	NELAP		1.0	3.1	µg/L	1	02/08/2024 4:41	01/15/2024 23:11
24011322-003A	SBE-77	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 4:45	01/15/2024 23:11
24011322-004A	SBE-78	NELAP		1.0	3.3	µg/L	1	02/08/2024 4:50	01/15/2024 23:11
24011322-005A	SBE-79	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 5:29	01/15/2024 23:11
24011322-006A	CACC-01	NELAP		1.0	1.3	µg/L	1	02/08/2024 4:54	01/15/2024 23:38
24011322-007A	CACC-02	NELAP		1.0	5.3	µg/L	1	02/08/2024 5:24	01/15/2024 23:38
24011322-008A	CACC-03	NELAP		1.0	3.8	µg/L	5	02/06/2024 15:38	01/15/2024 23:40
24011322-009A	CACC-04	NELAP		1.0	3.1	µg/L	5	02/06/2024 15:03	01/15/2024 23:40
24011322-010A	CACC-05	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 20:22	01/15/2024 23:42
24011322-011A	CACC-06	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 20:25	01/15/2024 23:44
24011322-012A	CACC-07	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 20:29	01/15/2024 23:44
24011322-013A	CACC-08	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 20:33	01/15/2024 23:44
24011322-014A	CACC-09	NELAP		1.0	1.1	µg/L	1	02/07/2024 20:36	01/15/2024 23:45
24011322-015A	CACC-10	NELAP		1.0	1.1	µg/L	1	02/07/2024 20:47	01/15/2024 23:45
24011322-016A	CACC-11	NELAP		1.0	1.1	µg/L	1	02/07/2024 21:02	01/15/2024 23:46
24011322-017A	CACC-12	NELAP		1.0	1.3	µg/L	1	02/07/2024 21:06	01/15/2024 23:46
24011322-018A	CACC-13	NELAP		1.0	1.2	µg/L	1	02/07/2024 21:09	01/15/2024 23:50
24011322-019A	CACC-14	NELAP		1.0	1.4	µg/L	5	02/06/2024 15:42	01/15/2024 23:50
24011322-020A	CACC-15	NELAP		1.0	1.6	µg/L	1	02/07/2024 21:13	01/15/2024 23:50
24011322-022A	CACC-17	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 21:17	01/15/2024 23:52
24011322-023A	CACC-18	NELAP		1.0	1.7	µg/L	5	02/06/2024 15:46	01/15/2024 23:52
24011322-024A	CACC-19	NELAP		1.0	2.6	µg/L	1	02/07/2024 21:20	01/15/2024 23:52
24011322-025A	CACC-20	NELAP		1.0	1.2	µg/L	1	02/07/2024 21:24	01/15/2024 23:52
24011322-026A	CACC-21	NELAP		1.0	1.3	µg/L	1	02/07/2024 21:35	01/15/2024 23:53
24011322-027A	CACC-22	NELAP		1.0	2.3	µg/L	1	02/07/2024 21:39	01/15/2024 23:53
24011322-028A	CACC-23	NELAP		1.0	1.5	µg/L	5	02/06/2024 15:51	01/15/2024 23:53
24011322-029A	CACC-24	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:11	01/15/2024 23:54
24011322-030A	CACC-25	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:15	01/15/2024 23:54
24011322-031A	CACC-26	NELAP		1.0	1.6	µg/L	1	02/05/2024 11:54	01/15/2024 23:59
24011322-032A	CACC-27	NELAP		1.0	1.6	µg/L	1	02/05/2024 11:57	01/15/2024 23:59
24011322-033A	CACC-28	NELAP		1.0	3.1	µg/L	1	02/05/2024 12:01	01/16/2024 0:01
24011322-034A	CACC-29	NELAP		1.0	2.9	µg/L	1	02/05/2024 12:05	01/16/2024 0:01
24011322-035A	CACC-30	NELAP		1.0	1.5	µg/L	1	02/05/2024 12:08	01/16/2024 0:02
24011322-036A	CACC-31	NELAP		1.0	3.7	µg/L	1	02/05/2024 12:19	01/16/2024 0:03
24011322-037A	CACC-32	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 12:23	01/16/2024 0:04
24011322-038A	GMS-01	NELAP		1.0	2.2	µg/L	1	02/05/2024 12:27	01/16/2024 0:26
24011322-039A	GMS-02	NELAP		1.0	1.9	µg/L	1	02/07/2024 19:12	01/16/2024 0:26
24011322-040A	GMS-03	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 19:27	01/16/2024 0:26
24011322-041A	GMS-04	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 19:30	01/16/2024 0:28
24011322-042A	GMS-05	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 19:34	01/16/2024 0:28
24011322-043A	GMS-06	NELAP		1.0	1.3	µg/L	1	02/07/2024 19:38	01/16/2024 0:29
24011322-044A	GMS-07	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 19:41	01/16/2024 0:29
24011322-051A	GMS-24	NELAP		1.0	13.0	µg/L	1	02/07/2024 19:45	01/16/2024 0:37
24011322-052A	GMS-25	NELAP		1.0	20.7	µg/L	1	02/07/2024 19:56	01/16/2024 0:37
24011322-053A	GMS-26	NELAP		1.0	7.5	µg/L	1	02/07/2024 20:00	01/16/2024 0:37
24011322-054A	GMS-27	NELAP		1.0	12.7	µg/L	1	02/07/2024 20:14	01/16/2024 0:38
24011322-055A	GMS-28	NELAP		1.0	47.2	µg/L	5	02/08/2024 13:24	01/16/2024 0:40



Laboratory Results

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

Client: Geotechnology, Inc.

Work Order: 24011322

Client Project: J044517.01

Report Date: 09-Feb-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									
24011322-056A	GMS-29	NELAP		1.0	5.3	µg/L	1	02/07/2024 20:18	01/16/2024 0:40
24011322-057A	GMS-30	NELAP		1.0	1.0	µg/L	1	02/07/2024 22:30	01/16/2024 0:41
24011322-058A	GMS-31	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 1:21	01/16/2024 0:42
24011322-059A	GMS-32	NELAP		1.0	1.1	µg/L	1	02/09/2024 1:24	01/16/2024 0:42
24011322-060A	GMS-33	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 1:28	01/16/2024 0:43



Receiving Check List

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

Client: Geotechnology, Inc.

Work Order: 24011322

Client Project: J044517.01

Report Date: 09-Feb-24

Carrier: Employee

Received By: MEK

Completed by:

Mary E. Kemp

Reviewed by:

Ellie Hopkins

On:

19-Jan-24

Mary E Kemp

On:

19-Jan-24

Ellie Hopkins

Pages to follow: Chain of custody

Extra pages included

- | | | | | |
|---|--|--|--|----------------------------------|
| 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 type="checkbox"/> | No <input checked="" 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. - MaryKemp - 1/19/2024 11:36:02 AM

Did not receive CACC-16 MEK 1/19/24

July 11, 2024

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



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

RE: J044517.01

WorkOrder: 24062353

Dear Brad Lohrum:

TEKLAB, INC received 57 samples on 6/28/2024 3:50:00 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,



Patrick Riley
Project Manager
(618)344-1004 ex 44
patrickriley@teklabinc.com



Report Contents

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

Client: Geotechnology, Inc.

Work Order: 24062353

Client Project: J044517.01

Report Date: 11-Jul-24

This reporting package includes the following:

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Work Order: 24062353

Client Project: J044517.01

Report Date: 11-Jul-24

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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.

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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: 24062353

Client Project: J044517.01

Report Date: 11-Jul-24

Qualifiers

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- E - Value above quantitation range
- I - Associated internal standard was outside method criteria
- M - Manual Integration used to determine area response
- R - RPD outside accepted recovery limits
- T - TIC(Tentatively identified compound)



Case Narrative

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

Client: Geotechnology, Inc.
Client Project: J044517.01

Work Order: 24062353
Report Date: 11-Jul-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
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Fax (217) 698-1005
Email KKlostermann@teklabinc.com

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Fax
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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



Accreditations

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

Client: Geotechnology, Inc.

Work Order: 24062353

Client Project: J044517.01

Report Date: 11-Jul-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville



Laboratory Results

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

Client: Geotechnology, Inc.

Work Order: 24062353

Client Project: J044517.01

Report Date: 11-Jul-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									
24062353-001A	SMS-01-2	NELAP		1.0	4.6	µg/L	1	07/03/2024 17:08	06/26/2024 15:07
24062353-002A	SMS-02-2	NELAP		1.0	3.5	µg/L	1	07/03/2024 17:23	06/26/2024 15:08
24062353-003A	SMS-58-2	NELAP		1.0	7.5	µg/L	1	07/03/2024 17:26	06/26/2024 15:11
24062353-004A	SMS-59-2	NELAP		1.0	3.3	µg/L	1	07/03/2024 17:30	06/26/2024 15:12
24062353-005A	SMS-60-2	NELAP		1.0	8.7	µg/L	1	07/03/2024 17:34	06/26/2024 15:13
24062353-006A	SMS-61-2	NELAP		1.0	6.9	µg/L	1	07/03/2024 17:37	06/26/2024 15:14
24062353-007A	SMS-62-2	NELAP		1.0	7.4	µg/L	1	07/08/2024 22:34	06/26/2024 15:15
24062353-008A	SMS-74-2	NELAP		1.0	1.9	µg/L	1	07/03/2024 17:52	06/26/2024 15:18
24062353-009A	PKE-66-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 17:56	06/26/2024 15:52
24062353-010A	PKE-67-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 18:10	06/26/2024 15:52
24062353-011A	PKE-70-2	NELAP		1.0	2.2	µg/L	1	07/03/2024 18:14	06/26/2024 15:55
24062353-012A	RBE-08-2	NELAP		1.0	1.3	µg/L	1	07/03/2024 18:18	06/26/2024 16:06
24062353-013A	RBE-11-2	NELAP		1.0	1.6	µg/L	1	07/03/2024 18:21	06/26/2024 16:07
24062353-014A	FES-52-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 18:25	06/26/2024 16:16
24062353-015A	BRH-82	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 18:29	06/26/2024 16:33
24062353-016A	BRH-83	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 18:33	06/26/2024 16:36
24062353-017A	MCE-09-2	NELAP		1.0	1.3	µg/L	1	07/08/2024 22:45	06/26/2024 16:51
24062353-018A	MCE-87	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 18:58	06/26/2024 16:54
24062353-019A	MCE-88	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 19:02	06/26/2024 16:54
24062353-020A	RBH-30-2	NELAP		1.0	12.4	µg/L	1	07/03/2024 19:05	06/26/2024 17:17
24062353-021A	RBH-103	NELAP		1.0	1.9	µg/L	1	07/03/2024 19:09	06/26/2024 17:21
24062353-022A	RBH-104	NELAP		1.0	3.6	µg/L	1	07/03/2024 19:13	06/26/2024 17:21
24062353-023A	RBH-105	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 19:16	06/26/2024 17:22
24062353-024A	RBH-106	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 19:20	06/26/2024 17:22
24062353-025A	NHE-10-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 19:24	06/26/2024 17:44
24062353-026A	NHE-16-2	NELAP		1.0	3.7	µg/L	1	07/03/2024 19:28	06/26/2024 17:46
24062353-027A	CRE-70	NELAP		1.0	< 1.0	µg/L	1	07/05/2024 12:13	06/26/2024 18:01
24062353-028A	CRE-71	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 19:53	06/26/2024 18:03
24062353-029A	RAC-08-2	NELAP		1.0	13.2	µg/L	1	07/03/2024 19:57	06/26/2024 18:20
24062353-030A	SBE-02-2	NELAP		1.0	4.6	µg/L	1	07/03/2024 20:01	06/26/2024 18:35
24062353-031A	LSE-06-2	NELAP		1.0	2.1	µg/L	1	07/03/2024 20:04	06/26/2024 18:54
24062353-032A	JMS-11-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 20:08	06/26/2024 19:07
24062353-033A	EF5-01-2	NELAP		1.0	6.4	µg/L	1	07/03/2024 20:12	06/26/2024 19:19
24062353-034A	HHS-18-2	NELAP		1.0	2.7	µg/L	1	07/03/2024 20:15	06/26/2024 19:32
24062353-035A	OMS-08-2	NELAP		1.0	< 1.0	µg/L	1	07/05/2024 12:35	06/26/2024 19:55
24062353-036A	OMS-10-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 20:41	06/26/2024 19:56
24062353-037A	OMS-12-2	NELAP		1.0	1.1	µg/L	1	07/03/2024 20:45	06/26/2024 19:57
24062353-038A	OMS-17-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 20:48	06/26/2024 20:00
24062353-039A	OMS-20-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 20:52	06/26/2024 20:07
24062353-040A	OMS-39	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 20:56	06/26/2024 20:10
24062353-041A	OMS-40	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 20:59	06/26/2024 20:10
24062353-042A	OMS-23-2	NELAP		1.0	< 1.0	µg/L	1	07/05/2024 12:46	06/26/2024 20:11
24062353-043A	OMS-24-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 21:25	06/26/2024 20:11
24062353-044A	OMS-29-2	NELAP		1.0	5.6	µg/L	1	07/03/2024 21:29	06/26/2024 20:13
24062353-045A	EBE-35-3	NELAP		1.0	17.7	µg/L	1	07/03/2024 21:32	06/26/2024 20:39
24062353-046A	EBE-63	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 21:36	06/26/2024 20:43
24062353-047A	BHS-83-2	NELAP		1.0	17.6	µg/L	1	07/08/2024 23:07	06/26/2024 21:10
24062353-048A	BHS-122-2	NELAP		1.0	4.3	µg/L	1	07/03/2024 21:51	06/26/2024 21:20



Laboratory Results

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

Client: Geotechnology, Inc.

Work Order: 24062353

Client Project: J044517.01

Report Date: 11-Jul-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									
24062353-049A	BHS-125-2	NELAP		1.0	8.8	µg/L	1	07/03/2024 21:54	06/26/2024 21:20
24062353-050A	BHS-126-2	NELAP		1.0	5.9	µg/L	1	07/03/2024 22:09	06/26/2024 21:20
24062353-051A	BHS-130-2	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 22:13	06/26/2024 21:26
24062353-052A	BHS-222	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 22:16	06/26/2024 21:30
24062353-053A	BHS-223	NELAP		1.0	1.1	µg/L	1	07/03/2024 22:20	06/26/2024 21:30
24062353-054A	BHS-224	NELAP		1.0	< 1.0	µg/L	1	07/03/2024 22:24	06/26/2024 21:30
24062353-055A	BHS-225	NELAP		1.0	1.3	µg/L	1	07/03/2024 22:27	06/26/2024 21:30
24062353-056A	BHS-226	NELAP		1.0	3.0	µg/L	1	07/03/2024 22:31	06/26/2024 21:15
24062353-057A	BHS-227	NELAP		1.0	2.8	µg/L	1	07/03/2024 22:35	06/26/2024 21:15



Receiving Check List

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

Client: Geotechnology, Inc.

Work Order: 24062353

Client Project: J044517.01

Report Date: 11-Jul-24

Carrier: Craig McKinney

Received By: NR

Completed by:

Reviewed by:

On:

28-Jun-24

Paul Schultz

On:

28-Jun-24

Ellie Hopkins

Pages to follow: Chain of custody

Extra pages included

- | | | | | |
|---|--|------------------------------|--|----------------------------------|
| 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. - pschultz - 6/28/2024 4:49:24 PM

CHAIN OF CUSTODY

pg. 2 of 6 Work order # 24062553

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 type="checkbox"/> NO ICE _____ °C LTG# _____ Preserved in: <input 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		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)		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER												
Lab Use Only	Sample Identification	Date/Time Sampled																			
	04062553-011 PKE-70-2	6/26/24 3:55	1							X											
	-012 RBE-08-2	4:06	1							X											
	-013 RBE-11-2	4:07	1							X											
	-014 FES-52-2	4:16	1							X											
	-015 BRH-82	4:33	1							X											
	-016 BRH-83	4:36	1							X											
	-017 MCE-09-2	4:51	1							X											
	-018 MCE-87	4:54	1							X											
	-019 MCE-88	+	1							X											
	-020 RBH-30-2	+	1							X											

Relinquished By	Date/Time	Received By	Date/Time
<i>Brad Lohrum</i>	6/27/24 17:30	<i>[Signature]</i>	6/28/24 1400
	6/28/24 1350	<i>Mike Reed</i>	6/28/24 1550

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.

Bottle Order: 80481



CHAIN OF CUSTODY

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		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)		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER														
Lab Use Only	Sample Identification	Date/Time Sampled																					
24062353-021	RBH-103	6/26/24 5:21	1								X												
-022	104	+	1								X												
-023	105	5:22	1								X												
-024	106	+	1								X												
-025	NHE-10-2	5:44	1								X												
-026	NHE-16-2	5:46	1								X												
-027	CRE-70	6:01	1								X												
-028	CRE-71	6:03	1								X												
-029	RAC-08-2	6:20	1								X												
-030	SBE-02-2	6:35	1								X												

Relinquished By	Date/Time	Received By	Date/Time
<i>Brad Lohrum</i>	6/27/24 17:30	<i>Mike Reed</i>	6/28/24 12:00
	6/28/24 1550		6/28/24 1550

CHAIN OF CUSTODY

pg. 6 of 6

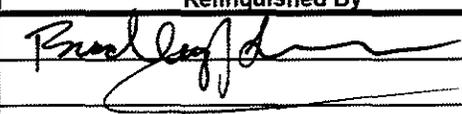
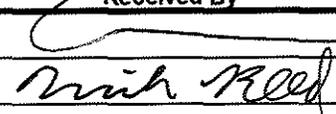
Work order # 24062353

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 checked="" type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE _____ °C LTG# _____ Preserved in: <input 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		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)		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER															
Lab Use Only	Sample Identification	Date/Time Sampled																						
	24062353-51 BHS-130-2	6/26/24 9:26	1								X													
	-52 BHS-222	9:30	1								X													
	-53 223		1								X													
	-54 224		1								X													
	-55 225		1								X													
	-56 226	9:15	1								X													
	-57 227		1								X													

Relinquished By	Date/Time	Received By	Date/Time
	6/27/24 17:30		6/28/24 1400
	6/28/24 1:55		6/28/24 1550

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.

Bottle Order: 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.