



WATER SAMPLING AND REPORTING SERVICES

**COLUMBIA PUBLIC SCHOOLS
RUSSELL BOULEVARD ELEMENTARY SCHOOL
1800 WEST ROLLINS ROAD
COLUMBIA, MISSOURI**

Prepared for:

**COLUMBIA PUBLIC SCHOOLS
COLUMBIA, MISSOURI**

Prepared by:

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

Date:

SEPTEMBER 20, 2024

Project No.:

J044517.01

**SAFETY
TEAMWORK
RESPONSIVENESS
INTEGRITY
VALUE
EXCELLENCE**



September 20, 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
Russell Boulevard Elementary School
1800 West Rollins Road
Columbia, Missouri
Project No. J044517.01

Dear Mr. Seamon:

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

SITE AND PROJECT DESCRIPTION

The subject property consists of the existing Columbia Public Schools Russell Boulevard Elementary School, located southeast of the intersection of College Park Drive and West Rollins Road in Columbia, Missouri. The purpose of the drinking water sampling was to identify potable water outlets that may require remediation in accordance with the State of Missouri's *Get the Lead out of School Drinking Water Act* (RSMo 160.077).

DRINKING WATER SAMPLING

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

In general conformance with the RSMo 160.077 requirements, and the Environmental Protection Agency's (EPA) *3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities* manual, initial water flushing and sampling activities were conducted on January 15 and 16, 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
RBE-08 / Kitchen Food Prep Sink	9.9 ppb
RBE-11 / Kitchen Dishwash – Right-hand Sink	5.0 ppb

UES personnel returned to the site on June 25 and 26, 2024, to collect water samples from the sinks listed above (RBE-08-2 and RBE-11-2) for laboratory analysis following the completion of remediation activities. The results of the retest water sample analyses were 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:

- If additional drinking water outlets not covered by this report should be identified or put into use, 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 |

* * * * *

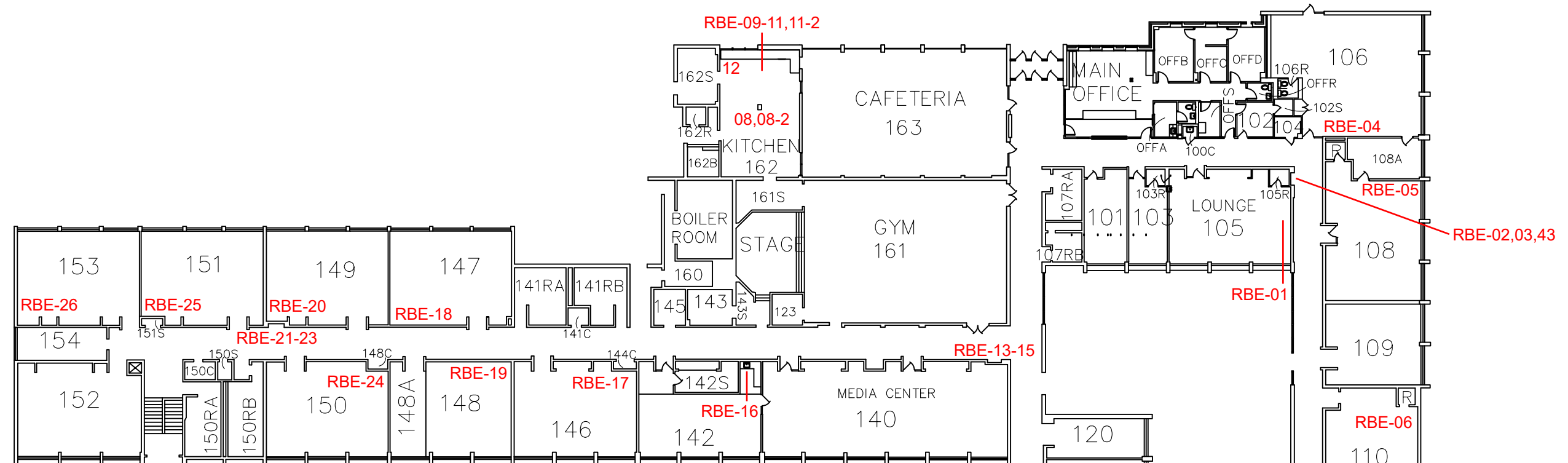
We appreciate the opportunity to provide our professional environmental consulting services to Columbia Public Schools on this project. If you have any questions or comments, please contact me at (314) 997-7440.

Very truly yours,

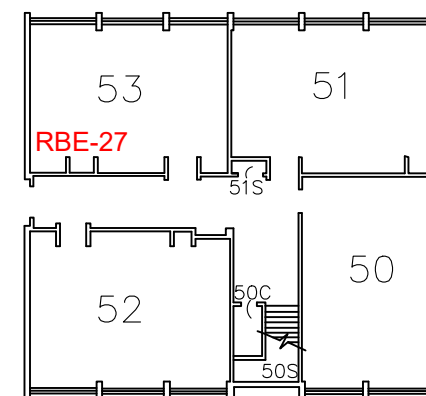
UES

Bradley J. Lohrum
Project Manager

BJL/MSR:bjl/jsj




FIRST FLOOR



GROUND FLOOR

NOTES

1. Drawing not to scale.
2. Drawing adapted from "Russell Boulevard Elementary Floor Plan", provided by the client, dated 06/17/2016.
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: 9-20-24	Date: 9-20-24	Date: 9-20-24
		
1800 West Rollins Road 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:

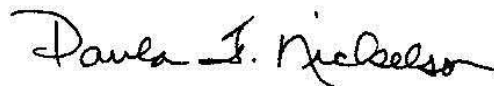
Bradley J. Lohrum

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



A handwritten signature in black ink, reading "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

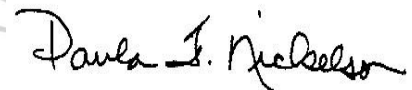
The person, firm or corporation whose name appears on this certificate is licensed as a Lead Abatement Contractor as set forth in the Missouri Revised Statutes 701.300-701.338 and 19 CSR 30-70.180, as long as not suspended or revoked, and is hereby authorized to engage in lead-bearing substance activities.

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**

Page 1 of 2

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

Project Number: J044517.01
Address: 1800 West Rollins Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
RBE-01	S	Room 105	RJH - 1/15/24 - 16:43	RJH - 1/16/24 - 1:52
RBE-02	WF	Hallway at Room 106 - Left	JFT - 1/15/24 - 16:44	JFT - 1/16/24 - 1:55
RBE-03	WF	Hallway at Room 106 - Right	RJH - 1/15/24 - 16:44	JFT - 1/16/24 - 1:55
RBE-04	S	Room 106	RJH - 1/15/24 - 16:45	RJH - 1/16/24 - 1:57
RBE-05	S	Room 108	RJH - 1/15/24 - 16:47	JFT - 1/16/24 - 1:58
RBE-06	S	Room 110	RJH - 1/15/24 - 16:48	RJH - 1/16/24 - 1:59
RBE-07	S	Room 112	RJH - 1/15/24 - 16:50	JFT - 1/16/24 - 2:00
RBE-08	S	Kitchen Food Prep	RJH - 1/15/24 - 16:56	RJH - 1/16/24 - 2:02
RBE-09	S	Kitchen Dishwash - Left	JFT - 1/15/24 - 16:56	RJH - 1/16/24 - 2:02
RBE-10	S	Kitchen Dishwash - Center	JFT - 1/15/24 - 16:56	JFT - 1/16/24 - 2:02
RBE-11	S	Kitchen Dishwash - Right	JFT - 1/15/24 - 16:56	JFT - 1/16/24 - 2:02
RBE-12	ICE	Kitchen	RJH - 1/15/24 - 16:57	RJH - 1/16/24 - 2:03
RBE-13	BF	Hallway at Room 161B - Left	RJH - 1/15/24 - 16:59	JFT - 1/16/24 - 2:06
RBE-14	WF	Hallway at Room 161B - Left	RJH - 1/15/24 - 16:59	RJH - 1/16/24 - 2:06
RBE-15	WF	Hallway at Room 161B - Right	JFT - 1/15/24 - 16:59	JFT - 1/16/24 - 2:06
RBE-16	S	Room 142	RJH - 1/15/24 - 17:01	RJH - 1/16/24 - 2:07
RBE-17	S	Room 146	JFT - 1/15/24 - 17:03	JFT - 1/16/24 - 2:08
RBE-18	S	Room 147	RJH - 1/15/24 - 17:04	RJH - 1/16/24 - 2:08
RBE-19	S	Room 148	RJH - 1/15/24 - 17:05	JFT - 1/16/24 - 2:09
RBE-20	S	Room 149	JFT - 1/15/24 - 17:06	RJH - 1/16/24 - 2:10
RBE-21	BF	Hallway at Room 150 - Left	RJH - 1/15/24 - 17:06	RJH - 1/16/24 - 2:11
RBE-22	WF	Hallway at Room 150 - Left	RJH - 1/15/24 - 17:06	RJH - 1/16/24 - 2:11
RBE-23	WF	Hallway at Room 150 - Right	JFT - 1/15/24 - 17:06	JFT - 1/16/24 - 2:11
RBE-24	S	Room 150	RJH - 1/15/24 - 17:07	RJH - 1/16/24 - 2:12
RBE-25	S	Room 151	RJH - 1/15/24 - 17:08	JFT - 1/16/24 - 2:12

BF=Bottle Filling
B=Bubbler

FW=Filtered Water
ICE=Ice Machine

S=Classroom/Other Sink
WF=Water Fountain



DRINKING WATER SAMPLING FORM

Page 2 of 2

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

Project Number: J044517.01
Address: 1800 West Rollins Road
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
RBE-26	S	Room 153	JFT - 1/15/24 - 17:11	RJH - 1/16/24 - 2:13
RBE-27	S	Room 53	RJH - 1/15/24 - 17:16	JFT - 1/16/24 - 2:14
RBE-28	S	Room 127	RJH - 1/15/24 - 17:19	RJH - 1/16/24 - 2:17
RBE-29	S	Room 126	JFT - 1/15/24 - 17:20	JFT - 1/16/24 - 2:18
RBE-30	S	Room 129	RJH - 1/15/24 - 17:21	RJH - 1/16/24 - 2:19
RBE-31	S	Room 128	JFT - 1/15/24 - 17:22	JFT - 1/16/24 - 2:20
RBE-32	B	Room 128	JFT - 1/15/24 - 17:22	JFT - 1/16/24 - 2:20
RBE-33	WF	Hallway at Room 131 - Left	RJH - 1/15/24 - 17:22	RJH - 1/16/24 - 2:21
RBE-34	BF	Hallway at Room 131 - Right	RJH - 1/15/24 - 17:22	RJH - 1/16/24 - 2:21
RBE-35	WF	Hallway at Room 131 - Right	RJH - 1/15/24 - 17:22	RJH - 1/16/24 - 2:21
RBE-36	S	Room 131	RJH - 1/15/24 - 17:23	JFT - 1/16/24 - 2:22
RBE-37	S	Room 130	JFT - 1/15/24 - 17:23	RJH - 1/16/24 - 2:22
RBE-38	BF	Hallway at Room 133	JFT - 1/15/24 - 17:24	JFT - 1/16/24 - 2:23
RBE-39	WF	Hallway at Room 133	JFT - 1/15/24 - 17:24	RJH - 1/16/24 - 2:23
RBE-40	S	Room 133	RJH - 1/15/24 - 17:26	RJH - 1/16/24 - 2:24
RBE-41	S	Room 135	JFT - 1/15/24 - 17:26	JFT - 1/16/24 - 2:25
RBE-42	S	Room 137	BJL - 1/15/24 - 17:26	RJH - 1/16/24 - 2:25
RBE-43	BF	Hallway at Room 106 - Right	RJH - 1/15/24 - 16:44	JFT - 1/16/24 - 1:55
RBE-08-2	S	Kitchen Food Prep	BJL - 6/25/24 - 20:01	BJL - 6/26/24 - 4:06
RBE-11-2	S	Kitchen Dishwash - Right	BJL - 6/25/24 - 20:01	BJL - 6/26/24 - 4:07

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 15, 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: 24011317

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,



Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

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

Client: Geotechnology, Inc.

Work Order: 24011317

Client Project: J044517.01

Report Date: 15-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: 24011317

Client Project: J044517.01

Report Date: 15-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: 24011317

Client Project: J044517.01

Report Date: 15-Feb-24

Qualifiers

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



Case Narrative

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

Client: Geotechnology, Inc.

Work Order: 24011317

Client Project: J044517.01

Report Date: 15-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

Client: Geotechnology, Inc.**Work Order:** 24011317**Client Project:** J044517.01**Report Date:** 15-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: 24011317

Client Project: J044517.01

Report Date: 15-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									
24011317-001A	GMS-94	NELAP		1.0	34.9	µg/L	1	02/15/2024 9:48	01/16/2024 1:17
24011317-002A	GMS-95	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 9:53	01/16/2024 1:17
24011317-003A	GMS-96	NELAP		1.0	12.3	µg/L	5	02/14/2024 8:44	01/16/2024 1:18
24011317-004A	GMS-97	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 9:58	01/16/2024 1:18
24011317-005A	GMS-98	NELAP		1.0	56.9	µg/L	1	02/15/2024 10:45	01/16/2024 1:19
24011317-006A	GMS-99	NELAP		1.0	38.4	µg/L	1	02/15/2024 10:03	01/16/2024 1:19
24011317-007A	GMS-100	NELAP		1.0	17.8	µg/L	1	02/15/2024 10:50	01/16/2024 1:20
24011317-008A	GMS-101	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 10:55	01/16/2024 1:20
24011317-009A	GMS-102	NELAP		1.0	57.8	µg/L	5	02/13/2024 9:55	01/16/2024 1:22
24011317-010A	GMS-103	NELAP		1.0	84.7	µg/L	5	02/13/2024 9:34	01/16/2024 1:22
24011317-011A	GMS-104	NELAP		1.0	17.6	µg/L	5	02/13/2024 9:38	01/16/2024 1:22
24011317-012A	GMS-105	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 11:01	01/16/2024 1:26
24011317-013A	GMS-106	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 11:06	01/16/2024 1:26
24011317-014A	GMS-107	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 11:11	01/16/2024 1:26
24011317-015A	GMS-108	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 11:16	01/16/2024 1:26
24011317-016A	GMS-109	NELAP		1.0	19.7	µg/L	1	02/02/2024 19:19	01/16/2024 1:26
24011317-017A	GMS-110	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:23	01/16/2024 1:28
24011317-018A	GMS-111	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:27	01/16/2024 1:28
24011317-019A	GMS-112	NELAP		5.0	149	µg/L	5	02/09/2024 5:31	01/16/2024 1:28
24011317-020A	RBE-01	NELAP		1.0	1.2	µg/L	5	02/13/2024 9:42	01/16/2024 1:52
24011317-021A	RBE-02	NELAP		1.0	< 1.0	µg/L	5	02/13/2024 9:47	01/16/2024 1:55
24011317-022A	RBE-03	NELAP		1.0	< 1.0	µg/L	5	02/13/2024 9:51	01/16/2024 1:55
24011317-023A	RBE-04	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:48	01/16/2024 1:57
24011317-024A	RBE-05	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:35	01/16/2024 1:58
24011317-025A	RBE-06	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:39	01/16/2024 1:59
24011317-026A	RBE-07	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:43	01/16/2024 2:00
24011317-027A	RBE-08	NELAP		1.0	9.9	µg/L	1	02/02/2024 20:12	01/16/2024 2:02
24011317-028A	RBE-09	NELAP		1.0	2.3	µg/L	5	02/12/2024 16:05	01/16/2024 2:02
24011317-029A	RBE-10	NELAP		1.0	2.0	µg/L	5	02/12/2024 16:09	01/16/2024 2:02
24011317-030A	RBE-11	NELAP		1.0	5.0	µg/L	5	02/12/2024 16:13	01/16/2024 2:02
24011317-031A	RBE-12	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 20:41	01/16/2024 2:03
24011317-032A	RBE-13	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 20:16	01/16/2024 2:06
24011317-033A	RBE-14	NELAP		1.0	< 1.0	µg/L	5	02/12/2024 15:13	01/16/2024 2:06
24011317-034A	RBE-15	NELAP		1.0	< 1.0	µg/L	5	02/12/2024 15:17	01/16/2024 2:06
24011317-035A	RBE-16	NELAP		1.0	1.6	µg/L	1	02/02/2024 20:21	01/16/2024 2:07
24011317-036A	RBE-17	NELAP		1.0	1.1	µg/L	1	02/02/2024 20:25	01/16/2024 2:08
24011317-037A	RBE-18	NELAP		1.0	1.5	µg/L	1	02/02/2024 20:29	01/16/2024 2:08
24011317-038A	RBE-19	NELAP		1.0	1.8	µg/L	1	02/02/2024 20:33	01/16/2024 2:09
24011317-039A	RBE-20	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 20:37	01/16/2024 2:10
24011317-040A	RBE-21	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:35	01/16/2024 2:11
24011317-041A	RBE-22	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:06	01/16/2024 2:11
24011317-042A	RBE-23	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:10	01/16/2024 2:11
24011317-043A	RBE-24	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:14	01/16/2024 2:12
24011317-044A	RBE-25	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:18	01/16/2024 2:12
24011317-045A	RBE-26	NELAP		1.0	4.3	µg/L	5	02/12/2024 15:22	01/16/2024 2:13
24011317-046A	RBE-27	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:22	01/16/2024 2:14
24011317-047A	RBE-28	NELAP		1.0	1.1	µg/L	1	02/02/2024 21:27	01/16/2024 2:17
24011317-048A	RBE-29	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:31	01/16/2024 2:18



Laboratory Results

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

Client: Geotechnology, Inc.

Work Order: 24011317

Client Project: J044517.01

Report Date: 15-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									
24011317-049A	RBE-30	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:00	01/16/2024 2:19
24011317-050A	RBE-31	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:04	01/16/2024 2:20
24011317-051A	RBE-32	NELAP		1.0	1.4	µg/L	1	02/02/2024 22:28	01/16/2024 2:20
24011317-052A	RBE-33	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:08	01/16/2024 2:21
24011317-053A	RBE-34	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:12	01/16/2024 2:21
24011317-054A	RBE-35	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:16	01/16/2024 2:21
24011317-055A	RBE-36	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:20	01/16/2024 2:22
24011317-056A	RBE-37	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:08	01/16/2024 2:22
24011317-057A	RBE-38	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:12	01/16/2024 2:23
24011317-058A	RBE-39	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:41	01/16/2024 2:23
24011317-059A	RBE-40	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:45	01/16/2024 2:24
24011317-060A	RBE-41	NELAP		1.0	1.7	µg/L	1	02/03/2024 0:49	01/16/2024 2:25



Receiving Check List

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

Client: Geotechnology, Inc.

Work Order: 24011317

Client Project: J044517.01

Report Date: 15-Feb-24

Carrier: Employee

Received By: LM

Completed by:

Reviewed by:

On:

On:

19-Jan-24

19-Jan-24

Amber Dilallo

Ellie Hopkins

Pages to follow:

Chain of custody

6

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C N/A

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. - amberdilallo - 1/19/2024 11:33:21 AM

pg. 61 of 74 Work order # 24011317

[illegible]

CHAIN OF CUSTODY

pg. 62 of 74 Work order # 24011317

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

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

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

Client Comments:

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

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																																			
J044517.01		Brad Lohrum																																							
Results Requested		Billing Instructions		# and Type of Containers										Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8																	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous																													
Lab Use Only	Sample Identification	Date/Time Sampled																																							
24011317 04	RBE-02	1/16/24 1:55	1										X																												
022	RBE-03	+	1										X																												
023	04	1:57	1										X																												
024	05	1:58	1										X																												
025	06	1:59	1										X																												
026	07	2:00	1										X																												
027	08	2:02	1										X																												
028	09		1										X																												
029	10		1										X																												
030	11		1										X																												

Relinquished By		Date/Time	Received By		Date/Time
Brad Lohrum		1/18/24	B. Lohrum		1/18/24
B. Lohrum		1/19/24 10:00	Amur		1/19/24 1000

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

BottleOrder: 80481



pg. 63 of 74 Work order # 24011317

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

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									X																		
24011317	RBE-12	4/16/24 2:03	1								X																		
032	RBE-13	2:06	1								X																		
033	14		1								X																		
034	15		1								X																		
035	16	2:07	1								X																		
036	17	2:08	1								X																		
037	18	2:08	1								X																		
038	19	2:09	1								X																		
039	20	2:10	1								X																		
040	21	2:11	1								X																		

Relinquished By		Date/Time	Received By		Date/Time
[Signature]		1/18/24	[Signature]		1/18/24
Kj [Signature]		1/19/24 10:00	[Signature]		1/19/24 1000



CHAIN OF CUSTODY

pg. 64 of 74 Work order # 24011317

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

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

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

Client Comments:

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

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																	
J044517.01		Brad Lohrum																					
Results Requested		Billing Instructions		# and Type of Containers								Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER												
Lab Use Only	Sample Identification	Date/Time Sampled																					
24011317	RBE-22	1/16/24 2:11	1									X								X			
042	RBE-23	+	1									X								X			
043	24	2:12	1									X								X			
044	25	+	1									X								X			
045	26	2:13	1									X								X			
046	27	2:14	1									X								X			
047	28	2:17	1									X								X			
048	29	2:18	1									X								X			
049	30	2:19	1									X								X			
050	31	2:20	1									X								X			

Relinquished By		Date/Time	Received By		Date/Time
Brad Lohrum		1/18/24	R. J. Lohrum		1/18/24
1/18/24		1/18/24 10:00	Amur		1/19/24 1000

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

BottleOrder: 80481



pg. 65 of 74 Work order # 24011317

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

[illegible]

February 14, 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: 24011318

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,



Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

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

Client: Geotechnology, Inc.

Work Order: 24011318

Client Project: J044517.01

Report Date: 14-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: 24011318

Client Project: J044517.01

Report Date: 14-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: 24011318

Client Project: J044517.01

Report Date: 14-Feb-24

Qualifiers

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



Case Narrative

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

Client: Geotechnology, Inc.

Work Order: 24011318

Client Project: J044517.01

Report Date: 14-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

Client: Geotechnology, Inc.**Work Order:** 24011318**Client Project:** J044517.01**Report Date:** 14-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: 24011318

Client Project: J044517.01

Report Date: 14-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									
24011318-001A	RBE-42	NELAP		1.0	1.1	µg/L	1	02/05/2024 16:43	01/16/2024 2:25
24011318-002A	RBE-43	NELAP		1.0	< 1.0	µg/L	5	02/12/2024 15:52	01/16/2024 1:55
24011318-003A	MCE-01	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 16:47	01/16/2024 2:49
24011318-004A	MCE-02	NELAP		1.0	19.7	µg/L	1	02/05/2024 16:50	01/16/2024 2:49
24011318-005A	MCE-03	NELAP		1.0	1.7	µg/L	1	02/05/2024 16:54	01/16/2024 2:49
24011318-006A	MCE-04	NELAP		1.0	2.4	µg/L	1	02/05/2024 16:58	01/16/2024 2:49
24011318-007A	MCE-05	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 17:09	01/16/2024 2:49
24011318-008A	MCE-06	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 17:12	01/16/2024 2:50
24011318-009A	MCE-07	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 22:01	01/16/2024 2:52
24011318-010A	MCE-08	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 22:04	01/16/2024 2:52
24011318-011A	MCE-09	NELAP		1.0	8.4	µg/L	1	02/07/2024 22:08	01/16/2024 2:53
24011318-012A	MCE-10	NELAP		1.0	45.3	µg/L	1	02/07/2024 22:12	01/16/2024 2:54
24011318-013A	MCE-11	NELAP		1.0	1.3	µg/L	5	02/12/2024 16:22	01/16/2024 2:54
24011318-014A	MCE-12	NELAP		1.0	4.3	µg/L	1	02/07/2024 22:23	01/16/2024 2:57
24011318-015A	MCE-13	NELAP		1.0	1.6	µg/L	5	02/12/2024 15:56	01/16/2024 2:57
24011318-016A	MCE-14	NELAP		1.0	8.1	µg/L	1	02/07/2024 22:26	01/16/2024 2:57
24011318-017A	MCE-15	NELAP		1.0	3.4	µg/L	1	02/02/2024 14:51	01/16/2024 2:57
24011318-018A	MCE-16	NELAP		1.0	13.5	µg/L	1	02/02/2024 14:55	01/16/2024 2:57
24011318-019A	MCE-17	NELAP		1.0	31.8	µg/L	1	02/02/2024 14:59	01/16/2024 2:59
24011318-020A	MCE-18	NELAP		1.0	28.7	µg/L	1	02/02/2024 15:03	01/16/2024 2:59
24011318-021A	MCE-19	NELAP		1.0	7.5	µg/L	1	02/02/2024 16:05	01/16/2024 2:59
24011318-022A	MCE-20	NELAP		1.0	14.8	µg/L	1	02/02/2024 15:07	01/16/2024 2:59
24011318-023A	MCE-21	NELAP		1.0	1.2	µg/L	1	02/02/2024 15:36	01/16/2024 2:59
24011318-024A	MCE-22	NELAP		1.0	6.4	µg/L	1	02/02/2024 15:40	01/16/2024 3:01
24011318-025A	MCE-23	NELAP		1.0	6.1	µg/L	1	02/02/2024 15:45	01/16/2024 3:01
24011318-026A	MCE-24	NELAP		1.0	6.0	µg/L	1	02/02/2024 15:49	01/16/2024 3:01
24011318-027A	MCE-25	NELAP		1.0	4.8	µg/L	1	02/02/2024 15:53	01/16/2024 3:01
24011318-028A	MCE-26	NELAP		1.0	3.6	µg/L	5	02/12/2024 16:01	01/16/2024 3:01
24011318-029A	MCE-27	NELAP		1.0	1.7	µg/L	1	02/02/2024 15:57	01/16/2024 3:03
24011318-030A	MCE-28	NELAP		1.0	1.6	µg/L	1	02/02/2024 16:01	01/16/2024 3:03
24011318-031A	MCE-29	NELAP		1.0	2.1	µg/L	1	02/02/2024 16:30	01/16/2024 3:04
24011318-032A	MCE-30	NELAP		1.0	1.4	µg/L	1	02/02/2024 16:59	01/16/2024 3:04
24011318-033A	MCE-31	NELAP		1.0	2.1	µg/L	1	02/02/2024 16:34	01/16/2024 3:05
24011318-034A	MCE-32	NELAP		1.0	2.0	µg/L	1	02/02/2024 16:38	01/16/2024 3:05
24011318-035A	MCE-33	NELAP		1.0	2.0	µg/L	1	02/02/2024 16:42	01/16/2024 3:05
24011318-036A	MCE-34	NELAP		1.0	2.1	µg/L	1	02/02/2024 16:46	01/16/2024 3:05
24011318-037A	MCE-35	NELAP		1.0	3.0	µg/L	1	02/03/2024 10:04	01/16/2024 3:06
24011318-038A	MCE-36	NELAP		1.0	1.1	µg/L	1	02/03/2024 10:08	01/16/2024 3:06
24011318-039A	MCE-37	NELAP		1.0	1.1	µg/L	1	02/03/2024 10:12	01/16/2024 3:07
24011318-040A	MCE-38	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 10:41	01/16/2024 3:08
24011318-041A	MCE-39	NELAP		1.0	3.7	µg/L	1	02/03/2024 10:45	01/16/2024 3:09
24011318-042A	MCE-40	NELAP		1.0	3.0	µg/L	1	02/03/2024 10:49	01/16/2024 3:10
24011318-043A	MCE-41	NELAP		1.0	5.0	µg/L	1	02/03/2024 10:53	01/16/2024 3:12
24011318-044A	MCE-42	NELAP		1.0	2.5	µg/L	1	02/03/2024 11:09	01/16/2024 3:12
24011318-045A	MCE-43	NELAP		1.0	2.9	µg/L	1	02/03/2024 10:57	01/16/2024 3:12
24011318-046A	MCE-44	NELAP		1.0	5.1	µg/L	1	02/03/2024 11:01	01/16/2024 3:12
24011318-047A	MCE-45	NELAP		1.0	1.1	µg/L	1	02/03/2024 11:05	01/16/2024 3:13
24011318-048A	MCE-46	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 11:34	01/16/2024 3:13



Laboratory Results

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

Client: Geotechnology, Inc.

Work Order: 24011318

Client Project: J044517.01

Report Date: 14-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									
24011318-049A	MCE-47	NELAP		1.0	3.7	µg/L	1	02/03/2024 11:38	01/16/2024 3:14
24011318-050A	MCE-48	NELAP		1.0	1.6	µg/L	1	02/03/2024 12:03	01/16/2024 3:14
24011318-051A	MCE-49	NELAP		1.0	2.4	µg/L	1	02/03/2024 11:42	01/16/2024 3:15
24011318-052A	MCE-50	NELAP		1.0	2.0	µg/L	1	02/03/2024 11:47	01/16/2024 3:15
24011318-053A	MCE-51	NELAP		1.0	2.5	µg/L	1	02/03/2024 11:51	01/16/2024 3:16
24011318-054A	MCE-52	NELAP		1.0	1.1	µg/L	5	02/09/2024 9:57	01/16/2024 3:16
24011318-055A	MCE-53	NELAP		1.0	3.1	µg/L	1	02/03/2024 11:55	01/16/2024 3:16
24011318-056A	MCE-54	NELAP		1.0	1.3	µg/L	1	02/03/2024 11:59	01/16/2024 3:16
24011318-057A	MCE-55	NELAP		1.0	2.6	µg/L	1	02/03/2024 12:28	01/16/2024 3:17
24011318-058A	MCE-56	NELAP		1.0	1.7	µg/L	1	02/03/2024 12:32	01/16/2024 3:17
24011318-059A	MCE-57	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 12:36	01/16/2024 3:18
24011318-060A	MCE-58	NELAP		1.0	1.2	µg/L	1	02/03/2024 12:40	01/16/2024 3:18

Client: Geotechnology, Inc.

Work Order: 24011318

Client Project: J044517.01

Report Date: 14-Feb-24

Carrier: Employee

Received By: LM

Completed by:

On:

19-Jan-24

Amber Dilallo

Reviewed by:

On:

19-Jan-24

Ellie Hopkins

Pages to follow:

Chain of custody

6

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C **N/A**

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. - amberdilallo - 1/19/2024 11:41:14 AM

pg. 66 of 74 Work order # 24011318

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	<u>FOR LAB USE ONLY</u>		
Lab Notes					
Client Comments:					

[illegible]

Relinquished By	Date/Time	Received By	Date/Time
Breda [Signature]	1/18/24	R. J. [Signature]	1/18/24
R. J. [Signature]	1/19/24 10:00	[Signature]	1/19/24 1000

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:

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:** 24062353**Client Project:** J044517.01**Report Date:** 11-Jul-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: 24062353

Client Project: J044517.01

Report Date: 11-Jul-24

Qualifiers

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



Case Narrative

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

Client: Geotechnology, Inc.

Work Order: 24062353

Client Project: J044517.01

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
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

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

Kansas City

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

Client: Geotechnology, Inc.**Work Order:** 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:

On:

28-Jun-24

Paul Schultz

Reviewed by:

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

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

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																			
J044517.01		Brad Lohrum																							
Results Requested		Billing Instructions		# and Type of Containers										Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER														
Lab Use Only	Sample Identification	Date/Time Sampled																							
24062553-011	PKE-70-2	6/26/24 3:55	1																						
-012	RBE-68-2	4:06	1																						
-013	RBE-11-2	4:07	1																						
-014	FES-52-2	4:16	1																						
-015	BRH-82	4:33	1																						
-016	BRH-83	4:36	1																						
-017	MCE-09-2	4:51	1																						
-018	MCE-87	4:54	1																						
-019	MCE-88	+	1																						
-020	RBH-30-2	5:17	1																						

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	6/27/24 17:30	Nick Reed	6/28/24 1400
	6/28/24 1350		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.