

#### WATER SAMPLING AND REPORTING SERVICES

COLUMBIA PUBLIC SCHOOLS
TWO MILE PRAIRIE ELEMENTARY SCHOOL
5450 NORTH ROUTE Z
COLUMBIA, MISSOURI

Prepared for:

COLUMBIA PUBLIC SCHOOLS
COLUMBIA, MISSOURI

Prepared by:

GEOTECHNOLOGY, LLC, DBA UES St. Louis, Missouri

Date:

**JULY 19, 2024** 

Project No.:

J044517.01





Environmental
Geotechnical Engineering
Materials Testing
Field Inspections & Code Compliance
Geophysical Technology

July 19, 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

Two Mile Prairie Elementary School

5450 North Route Z 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 Two Mile Prairie Elementary School, located northeast of the intersection of East Judy School Road and North Route Z 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 December 14 and 15, 2023, by Mr. Brad Lohrum, a Missouri-licensed lead risk assessor. Mr. Lohrum was assisted by Mr. Robert Haefner, a Missouri-licensed lead risk assessor, and Mr. Seth Lamble, a



Missouri-licensed lead inspector. Copies of training certificates and lead licenses for Messrs. Lohrum, Haefner, and Lamble are included in Appendix A.

An inventory of potable drinking water outlets was provided to UES by CPS. UES personnel sampled the identified outlets utilizing the EPA's "first-draw" methods. The identified outlets were flushed, then allowed to sit undisturbed for a period of 8-18 hours. Following this stagnation period, the first 250 milliliters (ml) of water expelled from the outlets were collected in laboratory-provided containers. A copy of the drinking water sampling form, which includes a list of sample locations, and the times and dates of flushing and sampling activities, is 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
TMP-02 / Room 110 Ice Machine	585 ppb
TMP-05 / Room 102 Sink	10.8 ppb
TMP-10 / Room 97 Bubbler	13.9 ppb
TMP-11 / Room 97 Sink	17.3 ppb
TMP-12 / Room 96 Bubbler	19 ppb
TMP-13 / Room 96 Sink	18.3 ppb
TMP-14 / Room 95 Bubbler	23.5 ppb
TMP-15 / Room 95 Sink	9.2 ppb
TMP-16 / Office C Sink	9.3 ppb

Sample TMP-02 was collected from the water outlet feeding the ice machine within Room 110. UES personnel returned to the site on February 8, 2024, to collect an ice sample (TMP-02-2) from within the machine for laboratory analysis. The result of the ice sample analysis was below 5 ppb.



UES personnel returned to the site on April 11 and 12, 2024, to retest the sink in Office C (TMP-16-2) following remediation activities. The retest result 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 outlets identified in Table 1 that have not been retested
have either been removed, marked as non-potable, or have otherwise been taken out of
service. Should these fixtures be put back into service following remediation activities, or
if replacement fixtures are to be put into service, further sampling and testing should be
conducted.

\* \* \* \* \*

The 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 Form

Appendix C - Drinking Water Laboratory Data Sheets

Appendix D - Limitations of Report

\* \* \* \* \* \*

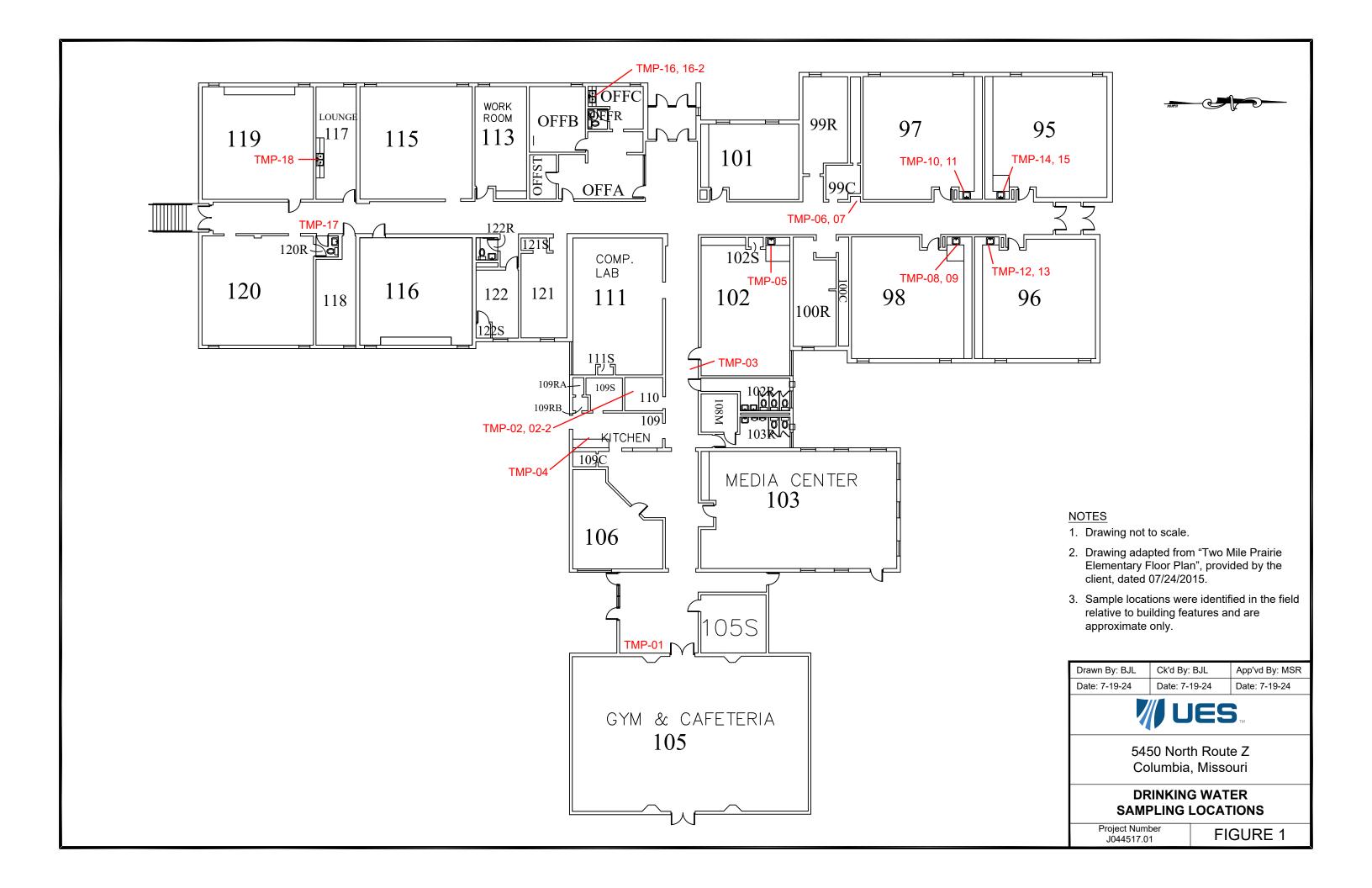
We appreciate the opportunity to provide our professional environmental consulting services to Columbia Public Schools on this project. If you have any questions or comments, please contact me at (314) 997-7440.

Very truly yours,

UFS

Bradley J. Lohrum Project Manager

BJL/MSR:bjl/jsj





#### **APPENDIX A**

**CERTIFICATES AND LICENSES OF ENVIRONMENTAL PROFESSIONALS** 

# 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 sh.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

Davea I. Nichel



# SAINT LOUIS UNIVERSITY

# CENTER FOR ENVIRONMENTAL EDUCATION AND TRAINING

verifies that

### **Robert Haefner**

3951 Dover PI, 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** 

)35

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: Expiration Date:

License Number:

3/28/2023

3/30/2025

150330-300004672

POPULI SUPREN

Paula F. Nickelson

**Acting Director** 

Department of Health and Senior Services

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

### COLLEGE FOR PUBLIC HEALTH & SOCIAL JUSTICE

SAINT LOUIS UNIVERSITY

CENTER FOR ENVIRONMENTAL EDUCATION AND TRAINING

verifies that

### Seth Lamble

12040 Chaparral Drive, Bridgeton, Missouri 63044

contact hours of training and successfully passed an examination has attended

### **Lead Inspector Refresher**

St. Louis, MO

Certificate #

**CEET 315** 

1/4/2022

118633

**Examination Date:** 

**CEUs: 0.8** 

1/4/2022

Director, Center for Environmental **Education and Training** 

Christopher C. King PhD

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

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

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

# STATE OF MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES

## **LEAD OCCUPATION LICENSE REGISTRATION**

Issued to:

# Seth P. Lamble

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

### **Lead Inspector**

Category of License

Issuance Date: 4/25/2022 Expiration Date: 4/25/2024

License Number: 160425-300004897

Paula F. Nickelson Acting Director

Daves I. Nichels

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 Director

Department of Health and Senior Services

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



#### **APPENDIX B**

**DRINKING WATER SAMPLING FORM** 



#### DRINKING WATER SAMPLING FORM

Project Name: Columbia Public Schools Water

Sampling and Reporting Services

Building Name: Two Mile Prairie Elementary School

Project Number: J044517.01

Address: 5450 North Route Z

Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
TMP-01	WF	Hallway at Gym	SPL - 12/14/23 - 20:45	RJH - 12/15/23 - 6:24
TMP-02	ICE	Room 110	SPL - 12/14/23 -20:46	BJL - 12/15/23 - 6:26
TMP-03	WF	Hallway at Room 110	SPL - 12/14/23 - 20:47	RJH - 12/15/23 - 6:26
TMP-04	S	Room 109	BJL - 12/14/23 - 20:51	SPL - 12/15/23 - 6:26
TMP-05	S	Room 102	BJL - 12/14/23 - 20:55	SPL - 12/15/23 - 6:35
TMP-06	BF	Hallway at Room 99C	SPL - 12/14/23 - 20:58	RJH - 12/15/23 - 6:37
TMP-07	WF	Hallway at Room 99C	SPL - 12/14/23 - 20:58	RJH - 12/15/23 - 6:37
TMP-08	S	Room 98	SPL - 12/14/23 - 20:59	SPL - 12/15/23 - 6:39
TMP-09	В	Room 98	SPL - 12/14/23 - 20:59	SPL - 12/15/23 - 6:39
TMP-10	В	Room 97	RJH - 12/14/23 - 21:00	SPL - 12/15/23 - 6:41
TMP-11	S	Room 97	RJH - 12/14/23 - 21:00	RJH - 12/15/23 - 6:41
TMP-12	В	Room 96	SPL - 12/14/23 - 21:01	RJH - 12/15/23 - 6:43
TMP-13	S	Room 96	SPL - 12/14/23 - 21:01	SPL - 12/15/23 - 6:43
TMP-14	В	Room 95	SPL - 12/14/23 - 21:02	RJH - 12/15/23 - 6:44
TMP-15	S	Room 95	SPL - 12/14/23 - 21:02	SPL - 12/15/23 - 6:44
TMP-16	S	Office C	SPL - 12/14/23 - 21:05	RJH - 12/15/23 - 6:46
TMP-17	WF	Hallway at Room 118	SPL - 12/14/23 - 21:11	RJH - 12/15/23 - 6:47
TMP-18	S	Room 117	SPL - 12/14/23 - 21:12	SPL - 12/15/23 - 6:47
TMP-02-2	ICE	Room 110	BJL - 2/8/24 - 3:28	SPL - 2/8/24 - 16:46
TMP-16-2	S	Office C	BJL - 4/11/24 - 19:07	BJL - 4/12/24 - 3:42



#### **APPENDIX C**

**DRINKING WATER LABORATORY DATA SHEETS** 

100226

E-10374

05002

05003

9978

Illinois

Kansas

Louisiana

Louisiana

Oklahoma



December 29, 2023

**Brad Lohrum** Geotechnology, Inc. 11816 Lackland Road St. Louis, MO 63146

TEL: (314) 997-7440 FAX: (314) 997-2067

**RE:** J044517.01 **WorkOrder:** 23121317

Dear Brad Lohrum:

TEKLAB, INC received 50 samples on 12/15/2023 4:40:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,

Patrick Riley

Project Manager

(618)344-1004 ex 44

patrickriley@teklabinc.com



### **Report Contents**

http://www.teklabinc.com/

Client: Geotechnology, Inc.

Work Order: 23121317

Client Project: J044517.01

Report Date: 29-Dec-23

#### 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



#### **Definitions**

http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 23121317

Client Project: J044517.01 Report Date: 29-Dec-23

#### Abbr Definition

- \* Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
  - DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
  - DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- NC Data is not acceptable for compliance purposes
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
  - PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
  - RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
  - RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
  - SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
  - Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
  - TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count ( > 200 CFU )



#### **Definitions**

http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 23121317

Client Project: J044517.01 Report Date: 29-Dec-23

#### Qualifiers

- # Unknown hydrocarbonC 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/

Work Order: 23121317

Report Date: 29-Dec-23

Client: Geotechnology, Inc.

Client Project: J044517.01

Cooler Receipt Temp: NA °C

#### Locations

	Collinsville		Springfield	Kansas City					
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road				
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214				
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998				
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998				
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com				
	Collinsville Air		Chicago						
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.						
	Collinsville, IL 62234-7425		Downers Grove, IL 60515						
Phone	(618) 344-1004	Phone	(630) 324-6855						
Fax	(618) 344-1005	Fax							
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com						



### **Accreditations**

#### http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 23121317

Client Project: J044517.01 Report Date: 29-Dec-23

State	Dept	Cert#	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	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		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



### **Laboratory Results**

http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 23121317

Client Project: J044517.01 Report Date: 29-Dec-23

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4 Lead	4, 200.8 R5.4, MET <i>A</i>	ALS BY ICPMS (TOTAL	-)					
23121317-001	A BSES-01	NELAP	1.0	< 1.0	µg/L	1	12/20/2023 22:47	12/15/2023 5:07
23121317-002	A BSES-02	NELAP	1.0	< 1.0	μg/L	1	12/20/2023 22:52	12/15/2023 5:07
23121317-003	BA BSES-03	NELAP	1.0	< 1.0	μg/L	1	12/20/2023 22:56	12/15/2023 5:08
23121317-004	A BSES-04	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 0:00	12/15/2023 5:08
23121317-005	SA BSES-05	NELAP	1.0	< 1.0	μg/L	1	12/20/2023 23:28	12/15/2023 5:11
23121317-006	SA BSES-06	NELAP	1.0	5.4	μg/L	1	12/20/2023 23:33	12/15/2023 5:11
23121317-007	'A BSES-07	NELAP	1.0	3.4	μg/L	1	12/20/2023 23:37	12/15/2023 5:13
23121317-008	BA BSES-08	NELAP	1.0	3.3	μg/L	1	12/20/2023 23:42	12/15/2023 5:13
23121317-009	A BSES-09	NELAP	1.0	< 1.0	μg/L	1	12/20/2023 23:46	12/15/2023 5:15
23121317-010	A BSES-10	NELAP	1.0	< 1.0	μg/L	1	12/20/2023 23:51	12/15/2023 5:15
23121317-011	A BSES-11	NELAP	1.0	1.9	μg/L	1	12/20/2023 23:55	12/15/2023 5:15
23121317-012	A BSES-12	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 11:56	12/15/2023 5:16
23121317-013	BA BSES-13	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 12:00	12/15/2023 5:16
23121317-014	A BSES-14	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 12:05	12/15/2023 5:19
23121317-015	SA BSES-15	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 12:09	12/15/2023 5:19
23121317-016	SA BSES-16	NELAP	1.0	6.5	μg/L	1	12/21/2023 12:14	12/15/2023 5:20
23121317-017	A BSES-17	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 12:28	12/15/2023 5:22
23121317-018	BA BSES-18	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 12:19	12/15/2023 5:22
23121317-019	A BSES-19	NELAP	1.0	13.3	μg/L	1	12/21/2023 12:23	12/15/2023 5:23
23121317-020	A BSES-20	NELAP	1.0	5.2	μg/L	1	12/21/2023 12:55	12/15/2023 5:23
23121317-021	A TF-01	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 12:59	12/15/2023 5:38
23121317-022	2A TF-02	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 13:04	12/15/2023 5:38
23121317-023	BA TF-03	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 13:09	12/15/2023 5:38
23121317-024	A TF-04	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 13:13	12/15/2023 5:39
23121317-025	SA FCS-01	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 13:27	12/15/2023 5:50
23121317-026	SA FCS-02	NELAP	1.0	1.1	µg/L	1	12/21/2023 13:18	12/15/2023 5:51
23121317-027	A FCS-03	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 13:22	12/15/2023 5:51
23121317-028	BA FCS-04	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 13:59	12/15/2023 5:55
23121317-029	A FCS-05	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 14:03	12/15/2023 5:55
23121317-030	A FCS-06	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 14:08	12/15/2023 5:56
23121317-031	A FCS-07	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 14:12	12/15/2023 5:56
23121317-032	A FCS-08	NELAP	1.0	77.5	µg/L	1	12/21/2023 14:17	12/15/2023 5:57
23121317-033	BA FCS-09	NELAP	10.0	117	µg/L	10	12/22/2023 10:17	12/15/2023 6:01
23121317-034	A TMP-01	NELAP	1.0	2.6	μg/L	1	12/21/2023 14:21	12/15/2023 6:24
23121317-035	SA TMP-02	NELAP	25.0	585	μg/L	25	12/21/2023 14:53	12/15/2023 6:26
23121317-036	SA TMP-03	NELAP	1.0	2.1	μg/L	1	12/21/2023 14:26	12/15/2023 6:26
23121317-037	'A TMP-04	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 14:58	12/15/2023 6:26
23121317-038	BA TMP-05	NELAP	1.0	10.8	μg/L	1	12/21/2023 15:02	12/15/2023 6:35
23121317-039	A TMP-06	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 15:07	12/15/2023 6:37
23121317-040	A TMP-07	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 15:11	12/15/2023 6:37
23121317-041	A TMP-08	NELAP	1.0	1.3	μg/L	1	12/21/2023 15:16	12/15/2023 6:39
23121317-042	2A TMP-09	NELAP	1.0	4.5	μg/L	1	12/21/2023 15:20	12/15/2023 6:39
23121317-043	BA TMP-10	NELAP	1.0	13.9	μg/L	1	12/21/2023 15:25	12/15/2023 6:41
23121317-044	A TMP-11	NELAP	1.0	17.3	μg/L	1	12/21/2023 15:52	12/15/2023 6:41
23121317-045	SA TMP-12	NELAP	1.0	19.0	μg/L	1	12/21/2023 15:57	12/15/2023 6:43
23121317-046	SA TMP-13	NELAP	1.0	18.3	μg/L	1	12/21/2023 16:01	12/15/2023 6:43
23121317-047	'A TMP-14	NELAP	1.0	23.5	μg/L	5	12/28/2023 8:28	12/15/2023 6:44
23121317-048	BA TMP-15	NELAP	1.0	9.2	μg/L	1	12/21/2023 16:06	12/15/2023 6:44



### **Laboratory Results**

http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 23121317

Client Project: J044517.01 Report Date: 29-Dec-23

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification Qu	ıal RL	Result	Units	DF	Date Analyzed	Date Collected
	4, 200.8 R5.4, META	LS BY ICPMS (TOT	AL)					
Lead								
23121317-049	A TMP-16	NELAP	1.0	9.3	μg/L	1	12/21/2023 16:11	12/15/2023 6:46
23121317-050	A TMP-17	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 16:15	12/15/2023 6:47



### **Receiving Check List**

http://www.teklabinc.com/

Work Order: 23121317 Client: Geotechnology, Inc. Client Project: J044517.01 Report Date: 29-Dec-23 Carrier: Brad Lohrum Received By: MEK Completed by: Mary E. Kemp Reviewed by: On: On: 15-Dec-23 18-Dec-23 Mary E Kemp Ellie Hopkins Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? **✓** No 🗔 Not Present Temp °C NA Type of thermal preservation? **V** Ice \_ Blue Ice None Dry Ice Chain of custody present? **~** No 🗌 Yes Chain of custody signed when relinquished and received? **~** Yes No L **~** Chain of custody agrees with sample labels? No 🗀 Yes **~** No 🗌 Samples in proper container/bottle? Yes **V** No 🗌 Sample containers intact? Yes Sufficient sample volume for indicated test? Yes **~** No **~** No  $\square$ All samples received within holding time? Yes NA 🗸 Field Lab Reported field parameters measured: Yes 🗸 No 🗌 Container/Temp Blank temperature in compliance? 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 🗸 No TOX containers Water - TOX containers have zero headspace? Yes No 🗌 Yes 🗹 No 🗌 Water - pH acceptable upon receipt? NA 🗹 NPDES/CWA TCN interferences checked/treated in the field? Yes No 🗀

Samples were checked for turbidity and then preserved with nitric acid (94914) upon arrival in the laboratory. - MaryKemp - 12/15/2023 5:03:28 PM

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

CHAIN OF CUSTODY pg. 4 of C Work order # 23/2/317

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

Client	•		Geotechnology, L	LC											s	am	ıple	s o	n:	羉	ICE	∭ Bi	UE IC	E 🏻	NO I	CE	_		°c	<b>C</b>	LTG#	‡	320
Addre			11816 Lackland F	Road	***************************************										Р	res	serv	red	in:		LAB	FI	ELD			F	<u>OR L</u>	_AB	USE	ONL	<u>.Y</u>		500000
		/ Zip	St. Louis, MO 63	146					******			*********			L	ab	No	tes															
Conta		Brad L	ohrum			Phone	e:	(	314)	997	-744	10																					some setting
E-Mail	I:	blohrur	m@teamues.com			Fax:									CI	ien	it C	omi	me	nts	s:	,						<u> </u>	411				. *
Are these	sample	s known	to be involved in li	itigation?	? If yes, a	surcharge	will	appi	У		Yes	, )	٩N	lo	1																		
Are these	sample:	s known	to be hazardous?	☐ Ye	s XN	0						•																					
Are there a	any requ e comm	ired rep ent sec	oorting limits to be to toon.	met on t No	the reques	ted analys	is?.	. If ye	s, p	leas	e pr	ovide	₽																				
			/Number		San	nple Co	lled	ctor	's N	lam	ne			T	<u> </u>	M	AT	RIX					IN	DIC	ATE	ANA	LYS	IS R	EQUE	ESTI	ΞD		
	-			<u>-</u>		_								ŀ	١,	_	_	_			Q.			T			T				$\overline{}$	T	
امل			uested	J.	S rea	Lan		and	ITV	oe o	f Co	ntai	ners	4	اح	<u>.</u>		وا ي	Spec	G G	DW - I												
Standa	rd	1-2 Day	(100% Surcharge)	Billil	ng Instri	uctions			<u> </u>	_		_ [:	z .	7	que la		S		3	m l	Lead												***************************************
Other		☐ 3 Da	ay (50% Surcharge)				NP R	N N	Nao	12SC	된	<u>≲</u> 8	aHS		suo	₩a	=	Sludge	Was	Groundwater	E200.8												**************************************
Lab Use	Only	Sam	ple Identification	Da	ite/Time S	ampled	S	HNO3	I	4		<b>=</b>  :	2   3	٦	1			1	र्व	약	0.8												
231213	317	FC	5-07	12	115/2	3 5:54	7														X												
The state of the s	032	Fa	5-08		5	5:51	I														X												
	033	FC	5-09		Ţ,	2:01	١														×												
	034	TH	P-01	$\top$ /	6	.24	I							T			T				አ												
	035	1	-02		6	:26	١	Γ								T					X												
1	036		- 03	$\Box$		:26	(				T			1	Ì	1					X												
	037		- 04			7.26	ι	<u> </u>					T	1	T	T		7	7		X												
	038		- 05		I	:35	Īī				T			T		T			7		X												
	034		- 06		1	.37	١				1	1		1		7		1	7		Х												
	040	ユ	- 07	1_	-	e:37	1				1	1	T	1	1	7	1	十	1		X		†								$\Box$		
	Λ	Relin	quished By					Date	/Ti	ne	1	1		İ						Re	,	d By							Da	te/Ti	ne		
Bree		w/ 1	<u>(                                    </u>			12/1	5	12	3		(0:	.4(	<u> </u>				1	la	زبد	_	10	w	)				iaj	15 la	3	16	10		
, ,		1/																	_	5		U											
														I																			
								*******				,		I																			

CHAIN OF CUSTODY pg. 5 of 10 Work order # 23121317

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

		•											-							•	-												-10
Client:		Geotechnology, L	LC										S	an	ple	es (	on:	꽳	ICE	<b>33</b>	BLUE	ICE	纂	NO I	CE	_			°C	L	rg# _		Barrae C
Address:		11816 Lackland F	Road									_	Р	res	ser	vec	l in	• <b>@</b>	LAB		FIELI	)			F	OR	LAB	USE	E 01	<u>ILY</u>			0.00.000
City / State	/ Zip	St. Louis, MO 63	146									_			No																		4
Contact:		.ohrum		Phone	e:	- (	(314	) 997	7-74	40																							West design.
E-Mail:	blohru	m@teamues.com		Fax:		_							CI	ior	t C	:on	ımı	ents	<u>.</u> ,					••							)*************************************		
Are these sample	s know	n to be involved in li	tigation 2	If ves a surcharge	will	anr	alv.	П	Ye	s J	×Ν	^	ľ	101		, <b>(</b> 11			,														
		n to be hazardous?			*****	ւ գրբ	.,,	۰	1 0	· /		Ĭ																					
Are there any req	uired re	porting limits to be partion.	met on the	e requested analys	is?.	. If y	es, p	oleas	e p	rovid	e		l																				
		/Number	7/1/0	Sample Co	المرا	cto	r'e i	Man	ne			_		N/	ΙΑΊ	ופו	Y					INI	NCA	ΤF	ΔΝΔ	I VS	is F	REQI	IFS'	TED			
			تنامد	<u>-</u>								H	1.									1142	,,,,,		1	T	T	T	T	T		<u> </u>	
1044	<u> </u>	.01	⊅	ired La	<u> </u>	LY	JV	V \				4,		۲ <u>.</u>			Spe	ð	Š														Annia Anta-Sana
Result Standard	S Req	uested / (100% Surcharge)	Billing	g Instructions	F	7 an	а iy	pe o	i Co	ontai	ners	- 4		<u> </u>	δ	Silu	cia	Ē	Lea		1												
Other	3 D:	ay (50% Surcharge)			Įş	Ę	Z	H2S	¥	ĭ.		2		<u>2</u>	≗	dge	Wa	Groundwater	d E;														
Lab Use Only		ple Identification	Date	e/Time Sampled	Ē	ျပ္	일	ğ	H	MeOH		; [ˈ	۰   <u>د</u>	Drinking Water		Sludge	iste	ē	DW - Lead E200.8	İ	ı												
Enternance communication and contract c	( <b>32</b> )		+	de la compied	ļ.,	+-	+				-	+	_	-						+	+				ļ	-	+-	<del></del>	+	+-	-	┿	
23121317 -041		1P-08	12/1	5/63 6.31	1	╄	╀			$\perp$	+	╀	_						X		_				-		┿	+-	+	+	+	+	+-
042		-09		6:39	1	_	lacksquare				$\bot$	╀	_	_					Κ̈́		_						╄	┷	igspace	4	┿	_	-
043		-10		6:41	1	_	<u> </u>					_	_						X														
044		- 11		6:41	I		L					L							X										$oldsymbol{ol}}}}}}}}}}}}}}}}}}$				
045		- 17-		6:43	1														X														
046		-13		6:43	(			П				T							x							T							
047		-14		(e:44	ı	<u> </u>						T				********			X										T				
048		-15		6:44	T	T	T			一	1	1	1		$\neg$				$\dot{\mathbf{x}}$							T	1	1			1	1	1
049		-16		4 : 4 b	1	T	╁		$\neg$	1	┪	1	T	_					X	$\top$	1					<del> </del>	1	+	T	+	†	$\dagger$	1
1		17		6:47	ī	+	$\vdash$		$\neg$		+	†	$\dagger$	+	$\dashv$				$\overrightarrow{\nabla}$	$\dashv$	$\dashv$					+	+	$\dagger$	+	+	1	+	+
7 050	Relir	nguished By		<u> </u>	1	Dat	e/Ti	me			_	╁						Re	ceive	d By					╁	1	<u> —</u>	<u> </u>	ate/	lime.			
Frank ()	11/ 0		···	12/15						ł0		Ť			1	M,	^) ı			Cu						12	1,4	23			_		-99
LAMO	He			10/15	L					<u> </u>		╁					<u> </u>		-		5				十		<u> </u>	تلهلا	<u>s 10</u>	<i>y</i> 7(_			
	V											+													+			<del></del>		<del>,</del>	,		
		<del>.</del>										-								-					╫								
				1								l													ı								



100226

E-10374

05002

05003

9978

Illinois

Kansas

Louisiana

Louisiana

Oklahoma



December 29, 2023

Brad Lohrum Geotechnology, Inc. 11816 Lackland Road St. Louis, MO 63146

TEL: (314) 997-7440 FAX: (314) 997-2067

**RE:** J044517.01 **WorkOrder:** 23121318

Dear Brad Lohrum:

TEKLAB, INC received 43 samples on 12/15/2023 4:40:00 PM for the analysis presented in the following report.

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

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

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

Sincerely,

Patrick Riley Project Manager

(618)344-1004 ex 44

patrickriley@teklabinc.com



### **Report Contents**

http://www.teklabinc.com/

Client: Geotechnology, Inc.

Work Order: 23121318

Client Project: J044517.01

Report Date: 29-Dec-23

#### This reporting package includes the following:

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



#### **Definitions**

http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 23121318

Client Project: J044517.01 Report Date: 29-Dec-23

#### **Abbr Definition**

- \* Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
  - DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
  - DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- NC Data is not acceptable for compliance purposes
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
  - PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
  - RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
  - RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
  - SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
  - Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
  - TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count ( > 200 CFU )



#### **Definitions**

http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 23121318

Client Project: J044517.01 Report Date: 29-Dec-23

#### **Qualifiers**

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

- # Unknown hydrocarbon
- 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
  - Spike Recovery outside recovery limits
- X Value exceeds Maximum Contaminant Level



### **Case Narrative**

http://www.teklabinc.com/

Work Order: 23121318

Report Date: 29-Dec-23

Client: Geotechnology, Inc.

Cooler Receipt Temp: NA °C

Client Project: J044517.01

#### Locations

	Collinsville		Springfield	Kansas City					
Address	5445 Horseshoe Lake Road	Address	3920 Pintail Dr	Address	8421 Nieman Road				
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214				
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998				
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998				
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com				
	Collinsville Air		Chicago						
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.						
	Collinsville, IL 62234-7425		Downers Grove, IL 60515						
Phone	(618) 344-1004	Phone	(630) 324-6855						
Fax	(618) 344-1005	Fax							
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com						



### **Accreditations**

#### http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 23121318

Client Project: J044517.01 Report Date: 29-Dec-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	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		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



### **Laboratory Results**

http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 23121318

Client Project: J044517.01 Report Date: 29-Dec-23

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification Qual	RL	Result	Units	DF	Date Analyzed	<b>Date Collected</b>
EPA 600 4.1.4, Lead	200.8 R5.4, META	LS BY ICPMS (TOTAL)						
23121318-001A	TMP-18	NELAP	1.0	2.4	μg/L	1	12/21/2023 16:20	12/15/2023 6:47
23121318-002A	RES-01	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 5:23	12/15/2023 7:11
23121318-003A	RES-02	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 5:27	12/15/2023 7:11
23121318-004A	RES-03	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 16:24	12/15/2023 7:13
23121318-005A	RES-04	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 5:32	12/15/2023 7:13
23121318-006A	RES-05	NELAP	1.0	1.1	µg/L	1	12/21/2023 5:36	12/15/2023 7:13
23121318-007A	RES-06	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 5:41	12/15/2023 7:15
23121318-008A	RES-07	NELAP	1.0	1.7	µg/L	1	12/21/2023 5:45	12/15/2023 7:15
23121318-009A	RES-08	NELAP	1.0	3.0	µg/L	1	12/21/2023 5:50	12/15/2023 7:17
23121318-010A	RES-09	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 5:54	12/15/2023 7:17
23121318-011A	RES-10	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 5:59	12/15/2023 7:17
23121318-012A	RES-11	NELAP	1.0	8.9	µg/L	1	12/21/2023 6:03	12/15/2023 7:20
23121318-013A	RES-12	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 7:08	12/15/2023 7:22
23121318-014A	RES-13	NELAP	1.0	6.5	µg/L	1	12/21/2023 6:36	12/15/2023 7:22
23121318-015A	RES-14	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 6:41	12/15/2023 7:24
23121318-016A	RES-15	NELAP	1.0	15.4	µg/L	1	12/21/2023 6:45	12/15/2023 7:20
23121318-017A	RES-16	NELAP	1.0	3.3	µg/L	1	12/21/2023 6:50	12/15/2023 7:20
23121318-018A	RES-17	NELAP	1.0	< 1.0	µg/L	1	12/21/2023 6:54	12/15/2023 7:2
23121318-019A	RES-18	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 6:59	12/15/2023 7:2
23121318-020A	RES-19	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 7:03	12/15/2023 7:2
23121318-021A	RES-20	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 7:55	12/15/2023 7:2
23121318-022A	RES-21	NELAP	1.0	10.8	μg/L	1	12/21/2023 8:00	12/15/2023 7:3
23121318-023A	RES-22	NELAP	1.0	2.5	μg/L	1	12/21/2023 8:04	12/15/2023 7:3
23121318-024A	RES-23	NELAP	1.0	1.8	μg/L	1	12/21/2023 8:09	12/15/2023 7:3
23121318-025A	RES-24	NELAP	1.0	< 1.0	μg/L	1	12/21/2023 8:13	12/15/2023 7:3
23121318-026A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 8:18	12/15/2023 7:30
23121318-027A		NELAP	1.0	27.3	μg/L	1	12/21/2023 8:27	12/15/2023 7:38
23121318-028A		NELAP	1.0	5.3	μg/L	1	12/21/2023 8:23	12/15/2023 7:38
23121318-029A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 9:04	12/15/2023 7:5
23121318-030A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 9:08	12/15/2023 7:5
23121318-031A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 9:13	12/15/2023 7:5
23121318-032A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 9:17	12/15/2023 7:5
23121318-033A		NELAP	1.0	3.7	μg/L	1	12/21/2023 9:22	12/15/2023 8:0
23121318-034A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 9:57	12/15/2023 8:0
23121318-035A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 10:29	12/15/2023 8:0
23121318-036A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 10:02	12/15/2023 8:04
23121318-037A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 10:06	12/15/2023 8:0
23121316-037A 23121318-038A		NELAP	1.0	< 1.0	μg/L	1	12/21/2023 10:00	12/15/2023 8:0
23121316-036A 23121318-039A		NELAP	1.0	< 1.0		1	12/21/2023 10:11	12/15/2023 8:0
23121318-039A 23121318-040A		NELAP	1.0	< 1.0	µg/L	1	12/21/2023 10:10	12/15/2023 8:1
23121316-040A 23121318-041A		NELAP			µg/L		12/21/2023 10:25	12/15/2023 8:2
			1.0	< 1.0	μg/L	1		
23121318-042A		NELAP	5.0	111	µg/L	5	12/21/2023 16:52	12/15/2023 8:29
23121318-043A	AAB-15	NELAP	1.0	56.8	µg/L	5	12/28/2023 8:32	12/15/2023 8:30



Client: Geotechnology, Inc.

### **Receiving Check List**

http://www.teklabinc.com/

Work Order: 23121318

Client Project: J044517.01 Report Date: 29-Dec-23 Carrier: Employee Received By: MEK Completed by: Reviewed by: On: On: 15-Dec-23 18-Dec-23 Hannah Walker Ellie Hopkins Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes **✓** No 🗔 Not Present Temp °C NA Type of thermal preservation? **~** Ice \_ Blue Ice None Dry Ice Chain of custody present? **~** No L Yes Chain of custody signed when relinquished and received? **~** Yes No L **~** Chain of custody agrees with sample labels? No 🗀 Yes **~** No 🗌 Samples in proper container/bottle? Yes **V** Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes **~** No **~** No  $\square$ All samples received within holding time? Yes NA 🗸 Field Lab Reported field parameters measured: Yes 🗸 No 🗌 Container/Temp Blank temperature in compliance? 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. No VOA vials 🗸 Water - at least one vial per sample has zero headspace? Yes 🗌 No 🗀 No TOX containers Water - TOX containers have zero headspace? Yes No 🗌 Yes 🗹 No 🗌 Water - pH acceptable upon receipt? NA 🗸 NPDES/CWA TCN interferences checked/treated in the field? Yes No 🗀 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. - hwalker - 12/15/2023 5:10:57 PM

CHAIN OF CUSTODY pg. 6 of 6 Work order # 23121318

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

Client:	Geotechnology, L	LC			S	ample	s on:		ICE BL	UE ICE	NO ICE	N	<u>∤</u> °c	LTG#	- Control of the Cont	
Address:	11816 Lackland F	Lohrum Phone: (314) 997-7440				Preserved in: LAB FIELD							FOR LAB USE ONLY			
City / State	/ Zip St. Louis, MO 63					Lab Notes										
Contact:	Brad Lohrum					Client Comments:										
E-Mail:	blohrum@teamues.com															
Are these sample Are there any req	s known to be hazardous?	met on the requested analysi		Yes 🔏 No												
Project Name/Number		Sample Col	ample Collector's Name		MATRIX INDICA						TE ANALYSIS REQUESTED					
1044	517.01	Brad Loh	CUM		2	ا اچ	S	G	- Wd					VIII.		
∠ Result	s Requested	Billing Instructions		of Containers		<u> </u>	si Si	rou	) - Le							
Standard C	1-2 Day (100% Surcharge) 3 Day (50% Surcharge)	Ü	NaOH HNO3	OTHER NaHSO4 MeOH HCL	Aqueous	Soil	Special Waste	Groundwater	Lead E200.8				***************************************			
Lab Use Only	Sample Identification	Date/Time Sampled	ω 1 4 8	1   4   R	<u> 1</u>	Ď	ਰਿ	14	0.8							
831211318-001	TMP-18	12/15/23 6:47	r						X						<b></b>	
-002	RES-OL	1 7:11							X					200	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
- 503	1 -02	7:11	1						X					Tananananananananananananananananananan		
- 004	-03	7:13	1						X					2000		
-106	-04	7:13							x					2000	- Inches	
- 000	-05	7.13							X						- The second sec	
- 007	-00	7:15	1						X				en de la companya de			
- 009	-01	7:15							X							
_ 009	-08	7:17							X							
- 010	1-09	7:17							X				duhiverpredulede			
Relinguished By			Date/Time			Received By					Date/Time					
Budl	w f	12/15	- 12/15/23 10:40			Many 1cmp					12/15/23 (640)					
-	• / -								<u> </u>							
	<del></del>															

100226

E-10374

05002

05003

9978

1004652024-2

Illinois

Illinois

Kansas

Louisiana

Louisiana

Oklahoma



May 16, 2024

Brad Lohrum Geotechnology, Inc. 11816 Lackland Road St. Louis, MO 63146

TEL: (314) 997-7440 FAX: (314) 997-2067

**RE:** J044517.01 **WorkOrder:** 24041267

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 4/15/2024 12:37:00 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: 24041267

Client Project: J044517.01

Report Date: 16-May-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



#### **Definitions**

http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 24041267

Client Project: J044517.01 Report Date: 16-May-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 )



#### **Definitions**

http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 24041267

Client Project: J044517.01 Report Date: 16-May-24

#### Qualifiers

- # Unknown hydrocarbonC 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/

Work Order: 24041267

Report Date: 16-May-24

Client: Geotechnology, Inc.

Client Project: J044517.01

Cooler Receipt Temp: N/A °C

#### Locations

Collinsville			Springfield	Kansas City		
Address 5445 Horseshoe Lake Road		Address	3920 Pintail Dr	Address	8421 Nieman Road	
	Collinsville, IL 62234-7425		Springfield, IL 62711-9415		Lenexa, KS 66214	
Phone	(618) 344-1004	Phone	(217) 698-1004	Phone	(913) 541-1998	
Fax	(618) 344-1005	Fax	(217) 698-1005	Fax	(913) 541-1998	
Email	jhriley@teklabinc.com	Email	KKlostermann@teklabinc.com	Email	jhriley@teklabinc.com	
	Collinsville Air		Chicago			
Address	5445 Horseshoe Lake Road	Address	1319 Butterfield Rd.			
	Collinsville, IL 62234-7425		Downers Grove, IL 60515			
Phone	(618) 344-1004	Phone	(630) 324-6855			
Fax	(618) 344-1005	Fax				
Email	EHurley@teklabinc.com	Email	arenner@teklabinc.com			



### **Accreditations**

#### http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 24041267

Client Project: J044517.01 Report Date: 16-May-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	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	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		6/1/2024	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: 24041267

Client Project: J044517.01 Report Date: 16-May-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification Qual	RL	Result	Units	DF	Date Analyzed	<b>Date Collected</b>
EPA 600 4.1.4 Lead	, 200.8 R5.4, META	LS BY ICPMS (TOTAL)						
24041267-001 <i>A</i>	A EBE-35-2	NELAP	1.0	9.8	µg/L	1	05/10/2024 15:55	04/12/2024 3:28
24041267-002 <i>A</i>		NELAP	1.0	1.5	μg/L	1	05/10/2024 15:59	04/12/2024 3:42
24041267-003 <i>A</i>		NELAP	1.0	< 1.0	µg/L	1	05/10/2024 16:02	04/12/2024 4:15
24041267-004 <i>A</i>		NELAP	1.0	< 1.0	µg/L	1	05/10/2024 16:06	04/12/2024 4:15
24041267-005A	HHS-03	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 16:09	04/12/2024 4:15
24041267-006A		NELAP	1.0	< 1.0	µg/L	1	05/10/2024 16:13	04/12/2024 4:15
24041267-007A	A HHS-05	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 16:17	04/12/2024 4:15
24041267-008A	HHS-06	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 16:39	04/12/2024 4:25
24041267-009A	A HHS-07	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 16:42	04/12/2024 4:27
24041267-010A	HHS-08	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 16:46	04/12/2024 4:27
24041267-011A	HHS-09	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 16:50	04/12/2024 4:31
24041267-012A	HHS-10	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 16:53	04/12/2024 4:31
24041267-013A	A HHS-11	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 16:57	04/12/2024 4:34
24041267-014A	A HHS-12	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 17:01	04/12/2024 4:34
24041267-015A	A HHS-13	NELAP	1.0	< 1.0	μg/L	5	05/15/2024 9:43	04/12/2024 4:34
24041267-016A	A HHS-14	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 17:04	04/12/2024 4:36
24041267-017A	HHS-15	NELAP	1.0	< 1.0	μg/L	1	05/10/2024 17:08	04/12/2024 4:36
24041267-018A	A HHS-16	NELAP	1.0	< 1.0	μg/L	1	05/13/2024 9:31	04/12/2024 4:38
24041267-019A	A HHS-17	NELAP	1.0	5.9	µg/L	1	05/13/2024 9:34	04/12/2024 4:38
24041267-020 <i>A</i>	A HHS-18	NELAP	1.0	7.8	µg/L	1	05/13/2024 9:38	04/12/2024 4:45
24041267-021 <i>A</i>	A HHS-19	NELAP	1.0	< 1.0	μg/L	1	05/13/2024 9:42	04/12/2024 4:50
24041267-022 <i>A</i>	HHS-20	NELAP	1.0	< 1.0	µg/L	1	05/13/2024 9:45	04/12/2024 4:52
24041267-023 <i>A</i>	HHS-21	NELAP	1.0	< 1.0	µg/L	1	05/13/2024 9:49	04/12/2024 4:52
24041267-024 <i>A</i>	HHS-22	NELAP	1.0	< 1.0	µg/L	1	05/13/2024 9:53	04/12/2024 4:54
24041267-025A	A HHS-23	NELAP	1.0	< 1.0	µg/L	1	05/13/2024 9:56	04/12/2024 4:54
24041267-026A	HHS-24	NELAP	1.0	< 1.0	µg/L	1	05/13/2024 10:00	04/12/2024 4:54
24041267-027 <i>A</i>	A HHS-25	NELAP	1.0	< 1.0	µg/L	1	05/13/2024 10:04	04/12/2024 4:56
24041267-028 <i>A</i>	A HHS-26	NELAP	1.0	< 1.0	µg/L	1	05/13/2024 10:26	04/12/2024 4:58
24041267-029A	A HHS-27	NELAP	1.0	36.5	µg/L	1	05/13/2024 10:29	04/12/2024 5:00
24041267-030A	HHS-28	NELAP	1.0	17.8	µg/L	1	05/13/2024 10:33	04/12/2024 5:01
24041267-031 <i>A</i>	A HHS-29	NELAP	1.0	4.7	µg/L	1	05/13/2024 10:37	04/12/2024 5:01
24041267-032 <i>A</i>	HHS-30	NELAP	1.0	3.9	µg/L	1	05/13/2024 10:40	04/12/2024 5:03
24041267-033 <i>A</i>	HHS-31	NELAP	1.0	< 1.0	µg/L	1	05/15/2024 9:29	04/12/2024 5:06
24041267-034 <i>A</i>	HHS-32	NELAP	1.0	2.9	µg/L	1	05/13/2024 10:48	04/12/2024 5:07
24041267-035A	HHS-33	NELAP	1.0	2.7	µg/L	1	05/10/2024 17:23	04/12/2024 5:07
24041267-036A	HHS-34	NELAP	1.0	2.2	µg/L	1	05/10/2024 17:34	04/12/2024 5:10
24041267-037 <i>A</i>	HHS-35	NELAP	1.0	< 1.0	µg/L	1	05/10/2024 17:37	04/12/2024 5:10
24041267-038 <i>A</i>	HHS-36	NELAP	1.0	< 1.0	µg/L	1	05/10/2024 17:41	04/12/2024 5:11
24041267-039A	HHS-37	NELAP	1.0	2.3	µg/L	1	05/10/2024 17:45	04/12/2024 5:13
24041267-040A	HHS-38	NELAP	1.0	2.0	µg/L	1	05/10/2024 17:48	04/12/2024 5:14
24041267-041 <i>A</i>	HHS-39	NELAP	1.0	< 1.0	µg/L	1	05/10/2024 17:52	04/12/2024 5:14
24041267-042A	HHS-40	NELAP	1.0	4.9	µg/L	1	05/10/2024 17:56	04/12/2024 5:16
24041267-043 <i>A</i>	HHS-41	NELAP	1.0	1.6	µg/L	1	05/10/2024 18:10	04/12/2024 5:18
24041267-044 <i>A</i>	HHS-42	NELAP	1.0	1.1	µg/L	1	05/10/2024 18:21	04/12/2024 5:19
24041267-045A	HHS-43	NELAP	1.0	< 1.0	µg/L	1	05/10/2024 18:25	04/12/2024 5:21
24041267-046A	HHS-44	NELAP	1.0	2.0	µg/L	1	05/10/2024 18:28	04/12/2024 5:23
24041267-047 <i>A</i>	HHS-45	NELAP	1.0	< 1.0	µg/L	5	05/15/2024 10:05	04/12/2024 5:25
24041267-048A	HHS-46	NELAP	1.0	< 1.0	µg/L	1	05/10/2024 18:32	04/12/2024 5:25



## **Laboratory Results**

#### http://www.teklabinc.com/

Client: Geotechnology, Inc. Work Order: 24041267

Client Project: J044517.01 Report Date: 16-May-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4 Lead	, 200.8 R5.4, META	LS BY ICPMS (TOTAL)						
24041267-049	A HHS-47	NELAP	1.0	< 1.0	μg/L	5	05/15/2024 10:09	04/12/2024 5:25
24041267-050 <i>A</i>	HHS-48	NELAP	1.0	< 1.0	µg/L	5	05/15/2024 10:13	04/12/2024 5:25
24041267-051 <i>A</i>	HHS-49	NELAP	1.0	< 1.0	µg/L	1	05/10/2024 18:36	04/12/2024 5:25
24041267-052 <i>A</i>	HHS-50	NELAP	1.0	1.6	µg/L	1	05/10/2024 18:39	04/12/2024 5:25
24041267-053 <i>A</i>	HHS-51	NELAP	1.0	1.1	µg/L	1	05/10/2024 18:43	04/12/2024 5:29
24041267-054	HHS-52	NELAP	1.0	6.2	µg/L	1	05/09/2024 6:24	04/12/2024 5:30
24041267-055A	HHS-53	NELAP	1.0	2.4	µg/L	1	05/09/2024 6:27	04/12/2024 5:31
24041267-056A	HHS-54	NELAP	1.0	20.7	µg/L	1	05/09/2024 6:52	04/12/2024 5:32
24041267-057 <i>A</i>	HHS-55	NELAP	1.0	1.1	µg/L	1	05/09/2024 6:55	04/12/2024 5:35
24041267-058 <i>A</i>	HHS-56	NELAP	1.0	< 1.0	µg/L	1	05/09/2024 6:59	04/12/2024 5:38
24041267-059	A HHS-57	NELAP	1.0	< 1.0	µg/L	1	05/09/2024 7:02	04/12/2024 5:38
24041267-060 <i>A</i>	HHS-58	NELAP	1.0	6.9	µg/L	1	05/09/2024 7:06	04/12/2024 5:40



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

#### **Receiving Check List**

http://www.teklabinc.com/

Work Order: 24041267 Client: Geotechnology, Inc. Client Project: J044517.01 Report Date: 16-May-24 Carrier: Employee Received By: LM Completed by: moor Oleanc Reviewed by: On: On: 15-Apr-24 15-Apr-24 Amber Dilallo Ellie Hopkins Extra pages included 0 Pages to follow: Chain of custody Shipping container/cooler in good condition? Yes **✓** No 🗔 Not Present Temp °C N/A Type of thermal preservation? **~** Ice \_ Blue Ice None Dry Ice Chain of custody present? **~** No L Yes Chain of custody signed when relinquished and received? **~** Yes No L **~** Chain of custody agrees with sample labels? No 🗀 Yes **~** No 🗌 Samples in proper container/bottle? Yes **V** No 🗌 Sample containers intact? Yes Yes **~** No Sufficient sample volume for indicated test? **~** No  $\square$ All samples received within holding time? Yes NA 🗸 Field Lab  $\square$ Reported field parameters measured: Yes 🗸 No 🗌 Container/Temp Blank temperature in compliance? 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 🗸 No TOX containers Water - TOX containers have zero headspace? Yes No 🗌 Yes 🗸 No 🗌 Water - pH acceptable upon receipt?

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory. - amberdilallo - 4/15/2024 2:13:24 PM

Yes

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

No 🗀

NA 🗹

CHAIN OF CUSTODY pg. 1 of 13 Work order # 3404/267

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

Client:	Geotechnology,	LLC		Samples o	n: 🖾 ICE	BLUE ICE X NO ICI	■ NA °c	LTG#			
Address:	11816 Lackland	Road				Preserved in: A LAB FIELD FOR LAB USE ONLY					
City / State	/ Zip St. Louis, MO 63	3146		Lab Notes							
Contact:	Brad Lohrum	Phon	e: (314) 997-7440								
E-Mail:	blohrum@teamues.com	Fax:		Client Com	nents:						
Are these sample Are there any requ	s known to be hazardous?	met on the requested analys									
	Name/Number	The second secon	llector's Name	MATRIX		INDICATE AI	NALYSIS REQUESTE	D			
J04	14517.01	Brad L	ohrum	، و	ଜୁ						
Result	s Requested 1-2 Day (100% Surcharge)	Billing Instructions	# and Type of Containers	Sl	rou !						
	3 Day (50% Surcharge)		# and Type of Containers  NaHSO4  HCL  H2SO4  HNO3  HNO3	Sludge Soil Drinking Water Aqueous	W - Lead E200 Groundwater						
Lab Use Only	Sample Identification	Date/Time Sampled		iter	200.8 ater						
2404/497	EBE-35-2	4/12/24 3:28	4	X	X						
ردن	TMP-16-2	3:42	1	X	X						
003	HHS-01	4:15		X	X						
004	445-02		1	X	X						
005	03		7	X	X						
200	04	vojeja jaja je pode	4	X	X						
66	05		1	X	X						
300	06	4:25	1	X	Х						
970	01	4:27	America de la companya del la companya de la compan	X	X						
010	1 08	+ +	1	X	X						
N /1. /	Relinquished By		Date/Time		Receiv	ed By	Date/Tim	ne			
Buelly	Jan -	4/15/2	10 2:36		My	0	4/15/24	1237			
V	V	•		· · · · · · · · · · · · · · · · · · ·	•						
			····		*********						
							<u>-</u>				



#### **APPENDIX D**

LIMITATIONS OF REPORT

# ENVIRONMENTAL SAMPLING LIMITATIONS OF REPORT

- 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.