



WATER SAMPLING AND REPORTING SERVICES

**COLUMBIA PUBLIC SCHOOLS
SMITHTON MIDDLE SCHOOL
3600 WEST WORLEY STREET
COLUMBIA, MISSOURI**

Prepared for:

**COLUMBIA PUBLIC SCHOOLS
COLUMBIA, MISSOURI**

Prepared by:

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

Date:

DECEMBER 21, 2024

Project No.:

J044517.01

**SAFETY
TEAMWORK
RESPONSIVENESS
INTEGRITY
VALUE
EXCELLENCE**



December 21, 2024

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

Re: Water Sampling and Reporting Services
Columbia Public Schools
Smithton Middle School
3600 West Worley Street
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 revised 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 Smithton Middle School, located southeast of the intersection of Silvey Street and West Worley Street 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 10 and 11 and March 5 and 6, 2024, 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. 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. Floor plans depicting approximate sample locations are included as Figures 1 and 2.

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

RESULTS

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

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

Sample Number / Location and Fixture Type	Results
SMS-01 / Office F Sink	12.7 ppb
SMS-02 / Nurse's Office Sink	6 ppb
SMS-08 / Room 101 Bubbler	23.1 ppb
SMS-09 / Room 103 Sink	35.1 ppb
SMS-11 / Room 105 Sink	31.4 ppb
SMS-13 / Room 106 Sink	18.5 ppb
SMS-14 / Room 107 Sink	19 ppb
SMS-16 / Room 108 Left-hand Sink	20.2 ppb
SMS-17 / Room 108 Right-hand Sink	50.4 ppb
SMS-22 / Room 113 Sink	36.8 ppb
SMS-24 / Room 115 Sink	16.8 ppb
SMS-26 / Room 116 Left-hand Sink	220 ppb
SMS-27 / Room 116 Right-hand Sink	207 ppb
SMS-28 / Room 117 Sink	78.7 ppb
SMS-30 / Room 118 Left-hand Sink	281 ppb
SMS-31 / Room 118 Right-hand Sink	184 ppb



Sample Number / Location and Fixture Type	Results
SMS-34 / Room 160 Sink	28.5 ppb
SMS-38 / Room 163 Sink	6.1 ppb
SMS-40 / Room 165 Left-hand Sink	21.4 ppb
SMS-41 / Room 165 Left Center Sink	16.1 ppb
SMS-42 / Room 165 Right Center Sink	12.6 ppb
SMS-43 / Room 165 Right-hand Sink	22.2 ppb
SMS-45 / Room 167 Left-hand Sink	19 ppb
SMS-46 / Room 167 Left Center Sink	19.4 ppb
SMS-47 / Room 167 Right Center Sink	7.8 ppb
SMS-48 / Room 167 Right-hand Sink	10.8 ppb
SMS-52 / Room 150 Left-hand Sink	28.4 ppb
SMS-54 / Room 150 Right-hand Sink	16.4 ppb
SMS-58 / Room 153 Yellow Sink	41.5 ppb
SMS-59 / Room 153 Orange Sink	11 ppb
SMS-60 / Room 153 Green Sink	9.9 ppb
SMS-61 / Room 153 Purple Sink	26 ppb
SMS-62 / Room 153 Red Sink	40.8 ppb
SMS-63 / Room 154 Left-hand Sink	19.6 ppb
SMS-64 / Room 154 Right-hand Sink	26.3 ppb
SMS-65 / Room 155 Sink	27.2 ppb
SMS-79 / Kitchen B – Food Prep Sink	6.8 ppb
SMS-88 / Room 201 Sink	21.2 ppb
SMS-90 / Room 203 Sink	25.8 ppb
SMS-92 / Room 205 Sink	36.3 ppb
SMS-94 / Room 206 Left-hand Sink	16.4 ppb
SMS-95 / Room 206 Right-hand Sink	38.5 ppb
SMS-97 / Room 207 Bubbler	31.4 ppb
SMS-103 / Room 211 Sink	20 ppb
SMS-105 / Room 213 Sink	22.2 ppb
SMS-110 / Room 216 Right-hand Bubbler	171 ppb
SMS-111 / Room 217 Sink	20.5 ppb
SMS-113 / Room 218 Left-hand Sink	33.4 ppb
SMS-115 / Room 218 Eye Wash Sink	33.7 ppb

UES personnel returned to the site on June 25 and 26, 2024, to resample the locations listed as SMS-01, 02, 58-62, and 74. Laboratory analyses detected the presence of lead at or above 5 ppb in the following samples.



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

Sample Number / Location and Fixture Type	Results
SMS-58-2 / Room 153 Yellow Sink	7.5 ppb
SMS-60-2 / Room 153 Green Sink	8.7 ppb
SMS-61-2 / Room 153 Purple Sink	6.9 ppb
SMS-62-2 / Room 153 Red Sink	7.4 ppb

UES personnel returned to the site on September 19, 2024, to resample the locations listed in Table 2. Laboratory analyses detected the presence of lead at or above 5 ppb in the following samples.

TABLE 3
RESAMPLED DRINKING WATER OUTLETS AT OR ABOVE 5 PARTS PER BILLION

Sample Number / Location and Fixture Type	Results
SMS-58-3 / Room 153 Yellow Sink	13.5 ppb
SMS-60-3 / Room 153 Green Sink	12.8 ppb

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

RECOMMENDATIONS

Our recommendations are summarized below:

- It is our understanding that the outlets identified in Table 1, that have not been resampled, and the outlets identified in Table 3 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 Sampling Locations – First Floor |
| Figure 2 | - Drinking Water Sampling Locations – Second Floor |
| Appendix A | - Certificates and Licenses of Environmental Professionals |
| Appendix B | - Drinking Water Sampling Forms |
| Appendix C | - Drinking Water Laboratory Data Sheets |
| Appendix D | - Limitations of Report |

* * * * *

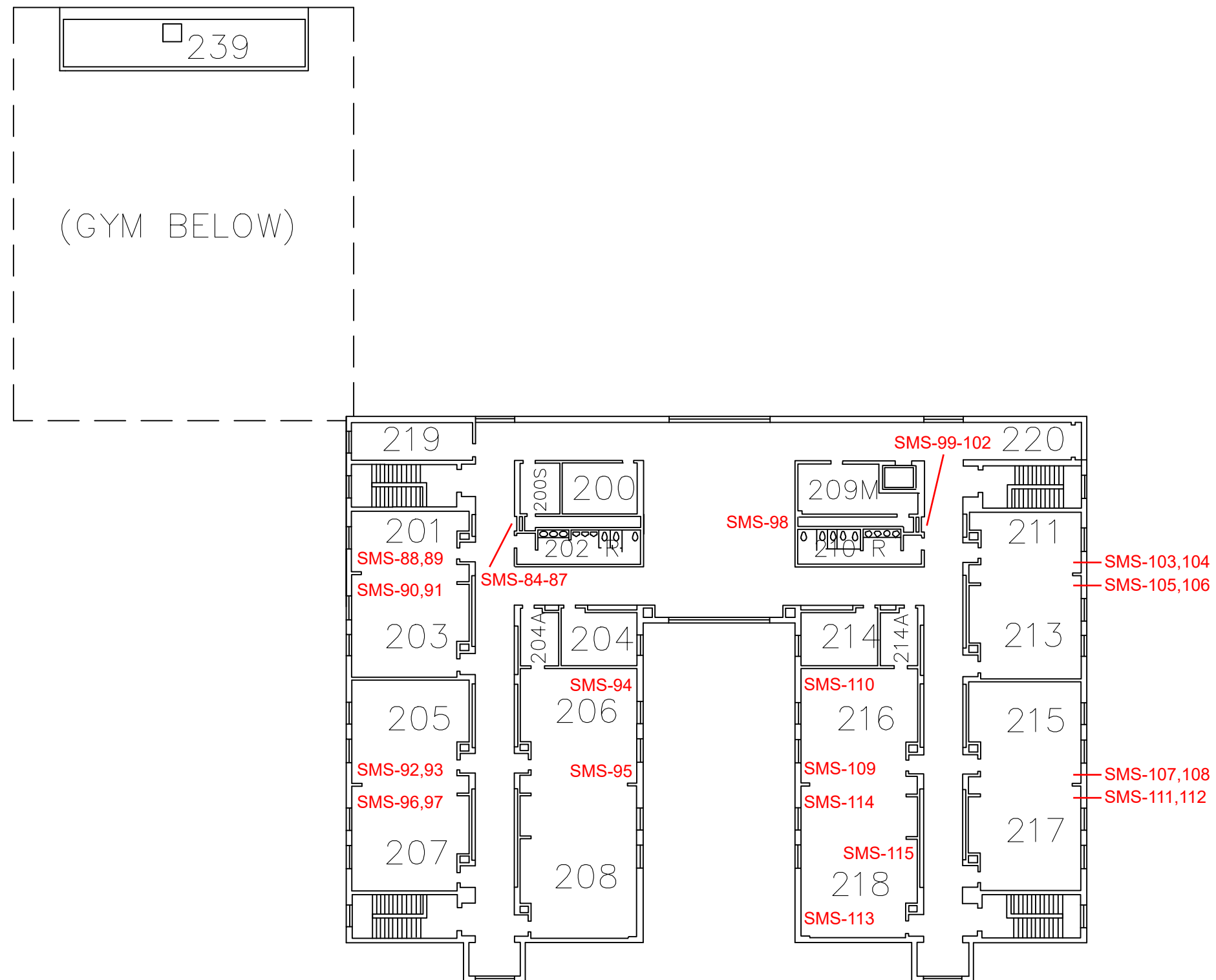
We appreciate the opportunity to provide our professional environmental consulting services to Columbia Public Schools on this project. If you have any questions or comments, please contact me at (314) 997-7440.

Very truly yours,

UES


Bradley J. Lohrum
Project Manager

BJL/MSR:bjl/jsj



NOTES

1. Drawing not to scale.
2. Drawing adapted from "Smithton Middle School Second Floor Plan", provided by the client, dated 08/13/2013.
3. Sample locations were identified in the field relative to building features and are approximate only.

Drawn By: BJL	Ck'd By: BJL	App'vd By: MSR
Date: 12-21-24	Date: 12-21-24	Date: 12-21-24
		
3600 West Worley Street Columbia, Missouri		
DRINKING WATER SAMPLE LOCATIONS - SECOND FLOOR		
Project Number J044517.01	FIGURE 2	



APPENDIX A

CERTIFICATES AND LICENSES OF ENVIRONMENTAL PROFESSIONALS

COLLEGE FOR
PUBLIC HEALTH & SOCIAL JUSTICE

SAINT LOUIS UNIVERSITY

CENTER FOR ENVIRONMENTAL EDUCATION AND TRAINING

verifies that

Bradley Lohrum

817 S Sappington Road, Crestwood, MO 63126

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


Lead Risk Assessor Refresher

St. Louis, MO

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

Examination Date: 12/12/2022

CEUs: 0.8


Christopher C. King PhD

Director, Center for Environmental
Education and Training

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

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

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

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

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

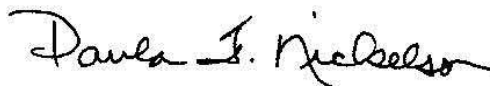
Bradley J. Lohrum

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

Lead Risk Assessor

Category of License

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



Paula F. Nickelson
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

COLLEGE FOR
PUBLIC HEALTH & SOCIAL JUSTICE
SAINT LOUIS UNIVERSITY

CENTER FOR ENVIRONMENTAL EDUCATION AND TRAINING

verifies that

Seth Lamble

12040 Chaparral Drive, Bridgeton, Missouri 63044

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

Lead Inspector Refresher

St. Louis, MO

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

Examination Date: 1/4/2022

CEUs: 0.8


Christopher C. King PhD

Director, Center for Environmental
Education and Training

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

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

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

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

Seth P. Lamble

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

Lead Inspector
Category of License

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



Paula F. Nickelson

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

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

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

Lead Abatement Contractor License

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

Issued to:

Geotechnology, LLC

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

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



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

Donald G. Kauerauf
Director
Department of Health and Senior Services

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

Lead Abatement Contractor License

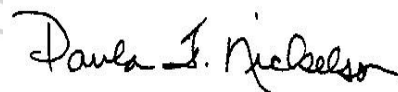
The person, firm or corporation whose name appears on this certificate is licensed as a Lead Abatement Contractor as set forth in the Missouri Revised Statutes 701.300-701.338 and 19 CSR 30-70.180, as long as not suspended or revoked, and is hereby authorized to engage in lead-bearing substance activities.

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 6

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
Building Name: Smithton Middle School

Project Number: J044517.01
Address: 3600 West Worley Street
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
SMS-01	S	Office F	SPL - 1/10/24 - 19:00	SPL - 1/11/24 - 4:51
SMS-02	S	Nurse	SPL - 1/10/24 - 19:00	RJH - 1/11/24 - 4:52
SMS-03	BF	Hallway at Room 101 - Left	RJH - 1/10/24 - 19:09	SPL - 1/11/24 - 5:04
SMS-04	WF	Hallway at Room 101 - Left	RJH - 1/10/24 - 19:09	SPL - 1/11/24 - 5:04
SMS-05	BF	Hallway at Room 101 - Right	BJL - 3/5/24 - 19:52	BJL - 3/6/24 - 3:32
SMS-06	WF	Hallway at Room 101 - Right	SPL - 1/10/24 - 19:09	RJH - 1/11/24 - 5:04
SMS-07	S	Room 101	SPL - 1/10/24 - 19:10	RJH - 1/11/24 - 4:57
SMS-08	B	Room 101	SPL - 1/10/24 - 19:10	RJH - 1/11/24 - 4:57
SMS-09	S	Room 103	SPL - 1/10/24 - 19:11	SPL - 1/11/24 - 5:05
SMS-10	B	Room 103	SPL - 1/10/24 - 19:11	SPL - 1/11/24 - 5:05
SMS-11	S	Room 105	SPL - 1/10/24 - 19:13	RJH - 1/11/24 - 5:07
SMS-12	B	Room 105	SPL - 1/10/24 - 19:13	RJH - 1/11/24 - 5:07
SMS-13	S	Room 106	SPL - 1/10/24 - 19:14	SPL - 1/11/24 - 5:08
SMS-14	S	Room 107	SPL - 1/10/24 - 19:15	RJH - 1/11/24 - 5:09
SMS-15	B	Room 107	SPL - 1/10/24 - 19:15	RJH - 1/11/24 - 5:09
SMS-16	S	Room 108 - Left	SPL - 1/10/24 - 19:18	RJH - 1/11/24 - 5:11
SMS-17	S	Room 108 - Right	RJH - 1/10/24 - 19:18	SPL - 1/11/24 - 5:11
SMS-18	BF	Hallway at Room 110 - Left	RJH - 1/10/24 - 19:27	RJH - 1/11/24 - 5:13
SMS-19	WF	Hallway at Room 110 - Left	RJH - 1/10/24 - 19:27	RJH - 1/11/24 - 5:13
SMS-20	BF	Hallway at Room 110 - Right	SPL - 1/10/24 - 19:27	SPL - 1/11/24 - 5:13
SMS-21	WF	Hallway at Room 110 - Right	SPL - 1/10/24 - 19:27	SPL - 1/11/24 - 5:13
SMS-22	S	Room 113	SPL - 1/10/24 - 19:30	RJH - 1/11/24 - 5:14
SMS-23	B	Room 113	SPL - 1/10/24 - 19:30	RJH - 1/11/24 - 5:14
SMS-24	S	Room 115	SPL - 1/10/24 - 19:32	RJH - 1/11/24 - 5:16
SMS-25	B	Room 115	SPL - 1/10/24 - 19:32	RJH - 1/11/24 - 5:16

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 6

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
Building Name: Smithton Middle School

Project Number: J044517.01
Address: 3600 West Worley Street
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
SMS-26	S	Room 116 - Left	SPL - 1/10/24 - 19:34	RJH - 1/11/24 - 5:17
SMS-27	S	Room 116 - Right	SPL - 1/10/24 - 19:34	SPL - 1/11/24 - 5:17
SMS-28	S	Room 117	SPL - 1/10/24 - 19:35	RJH - 1/11/24 - 5:18
SMS-29	B	Room 117	SPL - 1/10/24 - 19:35	RJH - 1/11/24 - 5:18
SMS-30	S	Room 118 - Left	RJH - 1/10/24 - 19:36	RJH - 1/11/24 - 5:19
SMS-31	S	Room 118 - Right	SPL - 1/10/24 - 19:36	SPL - 1/11/24 - 5:19
SMS-32	S	Room 141	RJH - 1/10/24 - 19:40	RJH - 1/11/24 - 5:22
SMS-33	ICE	Room 141	RJH - 1/10/24 - 19:40	SPL - 1/11/24 - 5:22
SMS-34	S	Room 160	SPL - 1/10/24 - 19:43	RJH - 1/11/24 - 5:25
SMS-35	B	Room 160	SPL - 1/10/24 - 19:43	RJH - 1/11/24 - 5:25
SMS-36	S	Room 161	SPL - 1/10/24 - 19:44	SPL - 1/11/24 - 5:25
SMS-37	S	Room 162	SPL - 1/10/24 - 19:45	RJH - 1/11/24 - 5:26
SMS-38	S	Room 163	SPL - 1/10/24 - 19:46	SPL - 1/11/24 - 5:27
SMS-39	S	Room 164	SPL - 1/10/24 - 19:48	RJH - 1/11/24 - 5:28
SMS-40	S	Room 165 - Left	SPL - 1/10/24 - 19:50	SPL - 1/11/24 - 5:30
SMS-41	S	Room 165 - Left Center	SPL - 1/10/24 - 19:50	SPL - 1/11/24 - 5:30
SMS-42	S	Room 165 - Right Center	SPL - 1/10/24 - 19:50	RJH - 1/11/24 - 5:30
SMS-43	S	Room 165 - Right	SPL - 1/10/24 - 19:50	RJH - 1/11/24 - 5:30
SMS-44	S	Room 166	SPL - 1/10/24 - 19:52	SPL - 1/11/24 - 5:31
SMS-45	S	Room 167 - Left	SPL - 1/10/24 - 19:54	SPL - 1/11/24 - 5:33
SMS-46	S	Room 167 - Left Center	SPL - 1/10/24 - 19:54	SPL - 1/11/24 - 5:33
SMS-47	S	Room 167 - Right Center	RJH - 1/10/24 - 19:54	SPL - 1/11/24 - 5:33
SMS-48	S	Room 167 - Right	RJH - 1/10/24 - 19:54	SPL - 1/11/24 - 5:33
SMS-49	S	Room 168	SPL - 1/10/24 - 19:55	SPL - 1/11/24 - 5:34
SMS-50	WF	Hallway at Room 150 - Left	SPL - 1/10/24 - 19:57	RJH - 1/11/24 - 5:36

BF=Bottle Filling
B=Bubbler

FW=Filtered Water
ICE=Ice Machine

S=Classroom/Other Sink
WF=Water Fountain

**DRINKING WATER SAMPLING FORM**

Page 3 of 6

Project Name: Columbia Public Schools Water
Sampling and Reporting Services
Building Name: Smithton Middle School

Project Number: J044517.01
Address: 3600 West Worley Street
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
SMS-51	WF	Hallway at Room 150 - Right	SPL - 1/10/24 - 19:57	SPL - 1/11/24 - 5:36
SMS-52	S	Room 150 - Left	RJH - 1/10/24 - 19:59	SPL - 1/11/24 - 5:38
SMS-53	B	Room 150 - Left	RJH - 1/10/24 - 19:59	SPL - 1/11/24 - 5:38
SMS-54	S	Room 150 - Right	SPL - 1/10/24 - 19:59	RJH - 1/11/24 - 5:38
SMS-55	B	Room 150 - Right	SPL - 1/10/24 - 19:59	RJH - 1/11/24 - 5:38
SMS-56	S	Room 152	SPL - 1/10/24 - 20:02	SPL - 1/11/24 - 5:39
SMS-57	S	Room 153 - Blue	SPL - 1/10/24 - 20:06	RJH - 1/11/24 - 5:41
SMS-58	S	Room 153 - Yellow	SPL - 1/10/24 - 20:06	RJH - 1/11/24 - 5:41
SMS-59	S	Room 153 - Orange	SPL - 1/10/24 - 20:06	RJH - 1/11/24 - 5:41
SMS-60	S	Room 153 - Green	SPL - 1/10/24 - 20:06	SPL - 1/11/24 - 5:41
SMS-61	S	Room 153 - Purple	SPL - 1/10/24 - 20:06	SPL - 1/11/24 - 5:41
SMS-62	S	Room 153 - Red	SPL - 1/10/24 - 20:06	SPL - 1/11/24 - 5:41
SMS-63	S	Room 154 - Left	SPL - 1/10/24 - 20:09	SPL - 1/11/24 - 5:42
SMS-64	S	Room 154 - Right	SPL - 1/10/24 - 20:09	SPL - 1/11/24 - 5:42
SMS-65	S	Room 155	SPL - 1/10/24 - 20:12	BJL - 1/11/24 - 5:43
SMS-66	BF	Room 181L	RJH - 1/10/24 - 20:14	RJH - 1/11/24 - 5:46
SMS-67	WF	Room 181L	RJH - 1/10/24 - 20:14	RJH - 1/11/24 - 5:46
SMS-68	BF	Room 180L	SPL - 1/10/24 - 20:16	SPL - 1/11/24 - 5:47
SMS-69	WF	Room 180L	SPL - 1/10/24 - 20:16	SPL - 1/11/24 - 5:47
SMS-70	WF	Room 99	SPL - 1/10/24 - 20:18	RJH - 1/11/24 - 5:49
SMS-71	WF	Room 98	SPL - 1/10/24 - 20:19	SPL - 1/11/24 - 5:50
SMS-72	WF	Room 97	SPL - 1/10/24 - 20:20	RJH - 1/11/24 - 5:50
SMS-73	S	Kitchen A	SPL - 1/10/24 - 20:23	SPL - 1/11/24 - 5:52
SMS-74	S	Kitchen B - Food Prep	SPL - 1/10/24 - 20:24	SPL - 1/11/24 - 5:53
SMS-75	S	Kitchen B - Dish Wash Left	SPL - 1/10/24 - 20:24	RJH - 1/11/24 - 5:53

BF=Bottle Filling
B=Bubbler

FW=Filtered Water
ICE=Ice Machine

S=Classroom/Other Sink
WF=Water Fountain

**DRINKING WATER SAMPLING FORM**

Page 4 of 6

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Sampling and Reporting Services
Building Name: Smithton Middle School

Project Number: J044517.01
Address: 3600 West Worley Street
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
SMS-76	S	Kitchen B - Dish Wash Center	SPL - 1/10/24 - 20:24	RJH - 1/11/24 - 5:54
SMS-77	S	Kitchen B - Dish Wash Right	SPL - 1/10/24 - 20:24	RJH - 1/11/24 - 5:54
SMS-78	ICE	Kitchen B	SPL - 1/10/24 - 20:25	SPL - 1/11/24 - 5:54
SMS-79	S	Kitchen B - Food Prep	RJH - 1/10/24 - 20:28	SPL - 1/11/24 - 5:54
SMS-80	BF	Hallway at Room 94R/95R - Left	RJH - 1/10/24 - 20:32	RJH - 1/11/24 - 4:55
SMS-81	WF	Hallway at Room 94R/95R - Left	RJH - 1/10/24 - 20:32	RJH - 1/11/24 - 4:55
SMS-82	BF	Hallway at Room 94R/95R - Right	RJH - 1/10/24 - 20:32	RJH - 1/11/24 - 4:55
SMS-83	WF	Hallway at Room 94R/95R - Right	RJH - 1/10/24 - 20:32	RJH - 1/11/24 - 4:55
SMS-84	BF	Hallway at Room 202R - Left	RJH - 1/10/24 - 20:35	RJH - 1/11/24 - 6:00
SMS-85	WF	Hallway at Room 202R - Left	RJH - 1/10/24 - 20:35	RJH - 1/11/24 - 6:00
SMS-86	BF	Hallway at Room 202R - Right	SPL - 1/10/24 - 20:35	RJH - 1/11/24 - 6:00
SMS-87	WF	Hallway at Room 202R - Right	SPL - 1/10/24 - 20:35	RJH - 1/11/24 - 6:00
SMS-88	S	Room 201	SPL - 1/10/24 - 20:36	SPL - 1/11/24 - 6:01
SMS-89	B	Room 201	SPL - 1/10/24 - 20:36	SPL - 1/11/24 - 6:01
SMS-90	S	Room 203	SPL - 1/10/24 - 20:37	RJH - 1/11/24 - 6:02
SMS-91	B	Room 203	SPL - 1/10/24 - 20:37	RJH - 1/11/24 - 6:02
SMS-92	S	Room 205	SPL - 1/10/24 - 20:38	SPL - 1/11/24 - 6:03
SMS-93	B	Room 205	SPL - 1/10/24 - 20:38	SPL - 1/11/24 - 6:03
SMS-94	S	Room 206 - Left	RJH - 1/10/24 - 20:39	RJH - 1/11/24 - 6:04
SMS-95	S	Room 206 - Right	RJH - 1/10/24 - 20:39	RJH - 1/11/24 - 6:04
SMS-96	S	Room 207	SPL - 1/10/24 - 20:40	SPL - 1/11/24 - 6:05
SMS-97	B	Room 207	SPL - 1/10/24 - 20:40	SPL - 1/11/24 - 6:05
SMS-98	S	Room 202	SPL - 1/10/24 - 20:44	RJH - 1/11/24 - 6:06
SMS-99	BF	Hallway at Room 210R - Left	RJH - 1/10/24 - 20:46	RJH - 1/11/24 - 6:08
SMS-100	WF	Hallway at Room 210R - Left	RJH - 1/10/24 - 20:46	RJH - 1/11/24 - 6:08

BF=Bottle Filling
B=Bubbler

FW=Filtered Water
ICE=Ice Machine

S=Classroom/Other Sink
WF=Water Fountain

**DRINKING WATER SAMPLING FORM**

Page 5 of 6

Project Name: Columbia Public Schools WaterProject Number: J044517.01Sampling and Reporting ServicesAddress: 3600 West Worley StreetBuilding Name: Smithton Middle SchoolColumbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
SMS-101	BF	Hallway at Room 210R - Right	SPL - 1/10/24 - 20:46	SPL - 1/11/24 - 6:08
SMS-102	WF	Hallway at Room 210R - Right	SPL - 1/10/24 - 20:46	SPL - 1/11/24 - 6:08
SMS-103	S	Room 211	SPL - 1/10/24 - 20:47	RJH - 1/11/24 - 6:09
SMS-104	B	Room 211	SPL - 1/10/24 - 20:47	RJH - 1/11/24 - 6:09
SMS-105	S	Room 213	SPL - 1/10/24 - 20:49	RJH - 1/11/24 - 6:10
SMS-106	B	Room 213	SPL - 1/10/24 - 20:49	RJH - 1/11/24 - 6:10
SMS-107	S	Room 215	SPL - 1/10/24 - 20:50	SPL - 1/11/24 - 6:11
SMS-108	B	Room 215	SPL - 1/10/24 - 20:50	SPLL - 1/11/24 - 6:11
SMS-109	S	Room 216 - Left	SPL - 1/10/24 - 20:52	SPL - 1/11/24 - 6:12
SMS-110	B	Room 216 - Right	SPL - 1/10/24 - 20:52	RJH - 1/11/24 - 6:12
SMS-111	S	Room 217	SPL - 1/10/24 - 20:54	SPL - 1/11/24 - 6:13
SMS-112	B	Room 217	SPL - 1/10/24 - 20:54	SPL - 1/11/24 - 6:13
SMS-113	S	Room 218 - Left	SPL - 1/10/24 - 20:56	RJH - 1/11/24 - 6:14
SMS-114	S	Room 218 - Right	SPL - 1/10/24 - 20:56	RJH - 1/11/24 - 6:14
SMS-115	S	Room 218 - Eyewash	SPL - 1/10/24 - 20:56	RJH - 1/11/24 - 6:14
SMS-01-2	S	Office F	BJL - 6/25/24 - 16:42	BJL - 6/26/24 - 3:07
SMS-02-2	S	Nurse	BJL - 6/25/24 - 16:43	BJL - 6/26/24 - 3:08
SMS-58-2	S	Room 153 - Yellow	BJL - 6/25/24 - 16:48	BJL - 6/26/24 - 3:11
SMS-59-2	S	Room 153 - Orange	BJL - 6/25/24 - 16:48	BJL - 6/26/24 - 3:12
SMS-60-2	S	Room 153 - Green	BJL - 6/25/24 - 16:48	BJL - 6/26/24 - 3:13
SMS-61-2	S	Room 153 - Purple	BJL - 6/25/24 - 16:48	BJL - 6/26/24 - 3:14
SMS-62-2	S	Room 153 - Red	BJL - 6/25/24 - 16:48	BJL - 6/26/24 - 3:15
SMS-74-2	S	Kitchen B - Food Prep	BJL - 6/25/24 - 17:04	BJL - 6/26/24 - 3:18
SMS-58-3	S	Room 153 - Yellow	CPS Staff - 9/18/24	BJL - 9/19/24 - 5:37
SMS-60-3	S	Room 153 - Green	CPS Staff - 9/18/24	BJL - 9/19/24 - 5:39

BF=Bottle Filling

FW=Filtered Water

S=Classroom/Other Sink

B=Bubbler

ICE=Ice Machine

WF=Water Fountain



APPENDIX C

DRINKING WATER LABORATORY DATA SHEETS

February 12, 2024

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



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

RE: J044517.01

WorkOrder: 24011312

Dear Brad Lohrum:

TEKLAB, INC received 61 samples on 1/19/2024 10:12:00 AM for the analysis presented in the following report.

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

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

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

Sincerely,



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



Report Contents

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

Client: Geotechnology, Inc.

Work Order: 24011312

Client Project: J044517.01

Report Date: 12-Feb-24

This reporting package includes the following:

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

Client: Geotechnology, Inc.**Work Order:** 24011312**Client Project:** J044517.01**Report Date:** 12-Feb-24**Abbr Definition**

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

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

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

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

DNI Did not ignite

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

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

IDPH IL Dept. of Public Health

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

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

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

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

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

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

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

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

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

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

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

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

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

TNTC Too numerous to count (> 200 CFU)

Client: Geotechnology, Inc.

Work Order: 24011312

Client Project: J044517.01

Report Date: 12-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: 24011312

Client Project: J044517.01

Report Date: 12-Feb-24

Cooler Receipt Temp: N/A °C

Locations

Collinsville

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

Collinsville Air

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

Springfield

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

Chicago

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

Kansas City

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

Client: Geotechnology, Inc.**Work Order:** 24011312**Client Project:** J044517.01**Report Date:** 12-Feb-24

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



Laboratory Results

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

Client: Geotechnology, Inc.

Work Order: 24011312

Client Project: J044517.01

Report Date: 12-Feb-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24011312-001A	SMS-01	NELAP		1.0	12.7	µg/L	5	02/08/2024 8:19	01/11/2024 4:51
24011312-002A	SMS-02	NELAP		1.0	6.0	µg/L	5	02/08/2024 8:24	01/11/2024 4:52
24011312-003A	SMS-03	NELAP		1.0	< 1.0	µg/L	1	02/12/2024 10:16	01/11/2024 5:04
24011312-004A	SMS-04	NELAP		1.0	< 1.0	µg/L	1	02/12/2024 11:22	01/11/2024 5:04
24011312-006A	SMS-06	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 16:28	01/11/2024 5:04
24011312-007A	SMS-07	NELAP		1.0	1.3	µg/L	1	02/12/2024 11:26	01/11/2024 4:57
24011312-008A	SMS-08	NELAP		1.0	23.1	µg/L	5	02/08/2024 8:50	01/11/2024 4:57
24011312-009A	SMS-09	NELAP		1.0	35.1	µg/L	5	02/08/2024 8:54	01/11/2024 5:05
24011312-010A	SMS-10	NELAP		1.0	< 1.0	µg/L	1	02/12/2024 12:10	01/11/2024 5:05
24011312-011A	SMS-11	NELAP		1.0	31.4	µg/L	5	02/08/2024 8:58	01/11/2024 5:07
24011312-012A	SMS-12	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 16:06	01/11/2024 5:07
24011312-013A	SMS-13	NELAP		1.0	18.5	µg/L	1	02/12/2024 10:11	01/11/2024 5:08
24011312-014A	SMS-14	NELAP		1.0	19.0	µg/L	1	02/09/2024 16:10	01/11/2024 5:09
24011312-015A	SMS-15	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 16:15	01/11/2024 5:09
24011312-016A	SMS-16	NELAP		1.0	20.2	µg/L	1	02/08/2024 1:13	01/11/2024 5:11
24011312-017A	SMS-17	NELAP		1.0	50.4	µg/L	1	02/09/2024 16:19	01/11/2024 5:11
24011312-018A	SMS-18	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 0:43	01/11/2024 5:13
24011312-019A	SMS-19	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 0:47	01/11/2024 5:13
24011312-020A	SMS-20	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 0:52	01/11/2024 5:13
24011312-021A	SMS-21	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 0:56	01/11/2024 5:13
24011312-022A	SMS-22	NELAP		1.0	36.8	µg/L	5	02/08/2024 9:03	01/11/2024 5:14
24011312-023A	SMS-23	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 1:00	01/11/2024 5:14
24011312-024A	SMS-24	NELAP		1.0	16.8	µg/L	1	02/08/2024 1:05	01/11/2024 5:16
24011312-025A	SMS-25	NELAP		1.0	1.3	µg/L	5	02/08/2024 9:07	01/11/2024 5:16
24011312-026A	SMS-26	NELAP		1.0	220	µg/L	5	02/08/2024 9:11	01/11/2024 5:17
24011312-027A	SMS-27	NELAP		1.0	207	µg/L	5	02/08/2024 9:16	01/11/2024 5:17
24011312-028A	SMS-28	NELAP		1.0	78.7	µg/L	5	02/08/2024 9:20	01/11/2024 5:18
24011312-029A	SMS-29	NELAP		1.0	< 1.0	µg/L	5	02/08/2024 9:24	01/11/2024 5:18
24011312-030A	SMS-30	NELAP		1.0	281	µg/L	5	02/08/2024 9:28	01/11/2024 5:19
24011312-031A	SMS-31	NELAP		1.0	184	µg/L	5	02/08/2024 10:06	01/11/2024 5:19
24011312-032A	SMS-32	NELAP		1.0	< 1.0	µg/L	5	02/08/2024 10:10	01/11/2024 5:22
24011312-033A	SMS-33	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 1:09	01/11/2024 5:22
24011312-034A	SMS-34	NELAP		1.0	28.5	µg/L	1	02/08/2024 1:39	01/11/2024 5:25
24011312-035A	SMS-35	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 17:11	01/11/2024 5:25
24011312-036A	SMS-36	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 1:44	01/11/2024 5:25
24011312-037A	SMS-37	NELAP		1.0	1.2	µg/L	1	02/08/2024 1:48	01/11/2024 5:26
24011312-038A	SMS-38	NELAP		1.0	6.1	µg/L	1	02/08/2024 1:52	01/11/2024 5:27
24011312-039A	SMS-39	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 1:57	01/11/2024 5:28
24011312-040A	SMS-40	NELAP		1.0	21.4	µg/L	5	02/08/2024 10:14	01/11/2024 5:30
24011312-041A	SMS-41	NELAP		1.0	16.1	µg/L	5	02/08/2024 10:36	01/11/2024 5:30
24011312-042A	SMS-42	NELAP		1.0	12.6	µg/L	5	02/08/2024 10:18	01/11/2024 5:30
24011312-043A	SMS-43	NELAP		1.0	22.2	µg/L	5	02/08/2024 10:23	01/11/2024 5:30
24011312-044A	SMS-44	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 2:01	01/11/2024 5:31
24011312-045A	SMS-45	NELAP		1.0	19.0	µg/L	5	02/08/2024 10:27	01/11/2024 5:33
24011312-046A	SMS-46	NELAP		1.0	19.4	µg/L	5	02/08/2024 10:31	01/11/2024 5:33
24011312-047A	SMS-47	NELAP		1.0	7.8	µg/L	5	02/06/2024 14:55	01/11/2024 5:33
24011312-048A	SMS-48	NELAP		1.0	10.8	µg/L	5	02/06/2024 14:59	01/11/2024 5:33
24011312-049A	SMS-49	NELAP		1.0	1.0	µg/L	1	02/08/2024 2:05	01/11/2024 5:34

Client: Geotechnology, Inc.

Work Order: 24011312

Client Project: J044517.01

Report Date: 12-Feb-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24011312-050A	SMS-50	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 3:06	01/11/2024 5:36
24011312-051A	SMS-51	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 2:36	01/11/2024 5:36
24011312-052A	SMS-52	NELAP		1.0	28.4	µg/L	1	02/08/2024 2:40	01/11/2024 5:38
24011312-053A	SMS-53	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 2:44	01/11/2024 5:38
24011312-054A	SMS-54	NELAP		1.0	16.4	µg/L	1	02/12/2024 11:35	01/11/2024 5:38
24011312-055A	SMS-55	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 2:49	01/11/2024 5:38
24011312-056A	SMS-56	NELAP		1.0	2.0	µg/L	1	02/08/2024 2:53	01/11/2024 5:39
24011312-057A	SMS-57	NELAP		1.0	3.8	µg/L	1	02/08/2024 2:57	01/11/2024 5:41
24011312-058A	SMS-58	NELAP		1.0	41.5	µg/L	5	02/06/2024 15:29	01/11/2024 5:41
24011312-059A	SMS-59	NELAP		1.0	11.0	µg/L	5	02/06/2024 15:33	01/11/2024 5:41
24011312-060A	SMS-60	NELAP		1.0	9.9	µg/L	1	02/08/2024 3:01	01/11/2024 5:41

Client: Geotechnology, Inc.

Work Order: 24011312

Client Project: J044517.01

Report Date: 12-Feb-24

Carrier: Employee

Received By: NR

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 10:47:53 AM

Received two bottles labeled SMS-05. Both put into storage, unable to identify. MEK 1/19/24

pg. 1 of 74 Work order # 24011312

Client: <u>Geotechnology, LLC</u> Address: <u>11816 Lackland Road</u> City / State / Zip <u>St. Louis, MO 63146</u> Contact: <u>Brad Lohrum</u> Phone: <u>(314) 997-7440</u> E-Mail: <u>blohrum@teamues.com</u> Fax: _____	Samples on: <input checked="" type="checkbox"/> ICE <input 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 <u>Two bottles labeled SMS-05 MEK 1/19/24</u> Client Comments: _____
---	---

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

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

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

[illegible]

BottleOrder: 80481



CHAIN OF CUSTODY

pg. 2 of 74 Work order # 24011312

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		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															
24011312	SMS-11	1/11/24 5:07															
012	SMS-12	+															
013	13	5:08															
014	14	5:09															
015	15	+															
016	16	5:11															
017	17	+															
018	18	5:13															
019	19	+															
020	20	+															
Relinquished By		Date/Time		Received By		Date/Time											
Brad Lohrum		1/18/24		Rick Reed		1/18/24											
13 J of Hef		1/19/24 10:00				1/19/24 1012											

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. 3 of 74 Work order # 24011312

[illegible]

BottleOrder: 80481



pg. 4 of 74 Work order # 24011312

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

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

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

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

Project Name/Number		Sample Collector's Name										MATRIX		INDICATE ANALYSIS REQUESTED																					
J044517.01		Brad Lohrum										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																																	
24011312	SMS-31	1/11/24 5:19																																	
032	SMS-32	5:22																																	
033	33	+																																	
034	34	5:25																																	
035	35	+																																	
036	36	5:25																																	
037	37	5:26																																	
038	38	5:27																																	
039	39	5:28																																	
040	40	5:30																																	

Relinquished By		Date/Time		Received By		Date/Time	
		1/18/24 1/18/24 10:00				1/18/24 1/19/24 1012	



CHAIN OF CUSTODY

pg. 5 of 74

Work order # 24011312

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

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

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

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																	
Results Requested		Billing Instructions		# and Type of Containers		DW/Aquifers	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																					
24011312	SMS-41	1/18/24 5:30																					
041	SMS-42																						
043	43																						
044	44	5:31																					
045	45	5:33																					
046	46																						
047	47																						
048	48																						
049	49	5:34																					
050	50	5:36																					

Relinquished By		Date/Time	Received By		Date/Time
Brad Lohrum		1/18/24	Rick Reed		1/18/24
Rick Reed		1/19/24 10:00			1/19/24 10:12

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. 6 of 74 Work order # 24011312

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																										
Results Requested		Billing Instructions		# and Type of Containers								Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8															
Standard <input checked="" 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																														
240113N	SMS 51	1/15/24 5:30										X																				
052	SMS 52	5:38										X																				
053	53											X																				
054	54											X																				
055	55											X																				
056	56	5:39										X																				
057	57	5:41										X																				
058	58											X																				
059	59											X																				
060	60											X																				

Relinquished By		Date/Time		Received By		Date/Time	
B. J. [Signature]		1/18/24		T. L. [Signature]		1/18/24	
[Signature]		1/19/24 10:00		Nick Reed		1/19/24 10:12	

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: 24011313

Dear Brad Lohrum:

TEKLAB, INC received 59 samples on 1/19/2024 10:12:00 AM for the analysis presented in the following report.

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

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

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

Sincerely,



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



Report Contents

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

Client: Geotechnology, Inc.

Work Order: 24011313

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: 24011313

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: 24011313

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: 24011313

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:** 24011313**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: 24011313

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									
24011313-001A	SMS-61	NELAP		1.0	26.0	µg/L	5	02/09/2024 9:48	01/11/2024 5:41
24011313-002A	SMS-62	NELAP		1.0	40.8	µg/L	5	02/09/2024 9:53	01/11/2024 5:41
24011313-003A	SMS-63	NELAP		1.0	19.6	µg/L	1	02/09/2024 10:01	01/11/2024 5:42
24011313-004A	SMS-64	NELAP		1.0	26.3	µg/L	1	02/09/2024 12:21	01/11/2024 5:42
24011313-005A	SMS-65	NELAP		1.0	27.2	µg/L	1	02/09/2024 12:26	01/11/2024 5:43
24011313-006A	SMS-66	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 0:42	01/11/2024 5:46
24011313-007A	SMS-67	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 0:46	01/11/2024 5:46
24011313-008A	SMS-68	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 0:49	01/11/2024 5:47
24011313-009A	SMS-69	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 0:53	01/11/2024 5:47
24011313-010A	SMS-70	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 0:57	01/11/2024 5:49
24011313-011A	SMS-71	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 1:00	01/11/2024 5:50
24011313-012A	SMS-72	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 1:04	01/11/2024 5:50
24011313-013A	SMS-73	NELAP		1.0	2.2	µg/L	1	02/06/2024 1:15	01/11/2024 5:52
24011313-014A	SMS-74	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 12:30	01/11/2024 5:53
24011313-015A	SMS-75	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 12:13	01/11/2024 5:53
24011313-016A	SMS-76	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 19:22	01/11/2024 5:54
24011313-017A	SMS-77	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 19:27	01/11/2024 5:54
24011313-018A	SMS-78	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 12:34	01/11/2024 5:54
24011313-019A	SMS-79	NELAP		1.0	6.8	µg/L	1	02/06/2024 19:31	01/11/2024 5:54
24011313-020A	SMS-80	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 19:35	01/11/2024 5:55
24011313-021A	SMS-81	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 19:40	01/11/2024 5:55
24011313-022A	SMS-82	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 14:47	01/11/2024 5:55
24011313-023A	SMS-83	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 19:44	01/11/2024 5:55
24011313-024A	SMS-84	NELAP		1.0	< 1.0	µg/L	1	02/06/2024 19:48	01/11/2024 6:00
24011313-025A	SMS-85	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 18:45	01/11/2024 6:00
24011313-026A	SMS-86	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 18:48	01/11/2024 6:00
24011313-027A	SMS-87	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 18:52	01/11/2024 6:00
24011313-028A	SMS-88	NELAP		1.0	21.2	µg/L	1	02/02/2024 18:56	01/11/2024 6:01
24011313-029A	SMS-89	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 18:59	01/11/2024 6:01
24011313-030A	SMS-90	NELAP		1.0	25.8	µg/L	1	02/06/2024 19:53	01/11/2024 6:02
24011313-031A	SMS-91	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:14	01/11/2024 6:02
24011313-032A	SMS-92	NELAP		1.0	36.3	µg/L	1	02/02/2024 19:29	01/11/2024 6:03
24011313-033A	SMS-93	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:32	01/11/2024 6:03
24011313-034A	SMS-94	NELAP		1.0	16.4	µg/L	1	02/06/2024 20:19	01/11/2024 6:04
24011313-035A	SMS-95	NELAP		1.0	38.5	µg/L	1	02/02/2024 19:40	01/11/2024 6:04
24011313-036A	SMS-96	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:43	01/11/2024 6:05
24011313-037A	SMS-97	NELAP		1.0	31.4	µg/L	1	02/06/2024 20:23	01/11/2024 6:05
24011313-038A	SMS-98	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:58	01/11/2024 6:06
24011313-039A	SMS-99	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 20:02	01/11/2024 6:08
24011313-040A	SMS-100	NELAP		1.0	< 1.0	µg/L	1	02/12/2024 8:09	01/11/2024 6:08
24011313-041A	SMS-101	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 20:20	01/11/2024 6:08
24011313-042A	SMS-102	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 14:43	01/11/2024 6:08
24011313-043A	SMS-103	NELAP		1.0	20.0	µg/L	1	02/02/2024 15:20	01/11/2024 6:09
24011313-044A	SMS-104	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 15:16	01/11/2024 6:09
24011313-045A	SMS-105	NELAP		1.0	22.2	µg/L	1	02/02/2024 15:12	01/11/2024 6:10
24011313-046A	SMS-106	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 14:06	01/11/2024 6:10
24011313-047A	SMS-107	NELAP		1.0	< 1.0	µg/L	5	02/13/2024 13:57	01/11/2024 6:11
24011313-048A	SMS-108	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 14:02	01/11/2024 6:11

Client: Geotechnology, Inc.

Work Order: 24011313

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									
24011313-049A	SMS-109	NELAP		1.0	4.8	µg/L	5	02/13/2024 13:27	01/11/2024 6:12
24011313-050A	SMS-110	NELAP		1.0	171	µg/L	5	02/13/2024 13:44	01/11/2024 6:12
24011313-051A	SMS-111	NELAP		1.0	20.5	µg/L	1	02/02/2024 13:58	01/11/2024 6:13
24011313-052A	SMS-112	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 13:53	01/11/2024 6:13
24011313-053A	SMS-113	NELAP		1.0	33.4	µg/L	5	02/13/2024 13:49	01/11/2024 6:14
24011313-054A	SMS-114	NELAP		1.0	3.9	µg/L	5	02/13/2024 13:53	01/11/2024 6:14
24011313-055A	SMS-115	NELAP		1.0	33.7	µg/L	1	02/02/2024 14:26	01/11/2024 6:14
24011313-056A	JMS-01	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 14:22	01/11/2024 6:35
24011313-057A	JMS-02	NELAP		1.0	< 1.0	µg/L	1	02/12/2024 8:39	01/11/2024 6:36
24011313-058A	JMS-03	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 13:16	01/11/2024 6:37
24011313-059A	JMS-04	NELAP		1.0	1.0	µg/L	1	02/02/2024 13:12	01/11/2024 6:37



Receiving Check List

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

Client: Geotechnology, Inc.

Work Order: 24011313

Client Project: J044517.01

Report Date: 14-Feb-24

Carrier: Employee

Received By: NR

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 10:57:21 AM

Did not receive JMS-05 MEK 1/19/24

CHAIN OF CUSTODY

pg. 7 of 74 Work order # 24011313

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

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

Samples on: ☒ ICE ☐ BLUE ICE ☒ NO ICE NA °C LTG#
Preserved in: ☒ LAB ☐ FIELD **FOR LAB USE ONLY**
Lab Notes: Did not receive SMS-05 MEK 1/19/24
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														
1044517.01		Brad Lohrum		DW	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8										
Results Requested <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)		Billing Instructions		# and Type of Containers UNPRES HNO3 NaOH H2SO4 HCL MeOH NaHCO4 OTHER																
Lab Use Only	Sample Identification	Date/Time Sampled																		
TE 2412 24011313	SMS-61	1/11/24 5:41																		
002	SMS-62	+																		
003	63	5:42																		
004	64	+																		
005	65	5:43																		
006	66	5:46																		
007	67	+																		
008	68	5:47																		
009	69	+																		
010	70	5:49																		

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	1/18/24	R-J A	1/18/24
	1/19/24 10:00	Michelle Reed	1/19/24 10:12

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. 8 of 74 Work order # 24011313

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

Preserved in: ☒ LAB ☐ FIELD

FOR LAB USE ONLY

Lab Notes

Client Comments:

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

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

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

[illegible]

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. 9 of 74 Work order # 24011313

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

Preserved in: ☒ LAB ☐ FIELD FOR LAB USE ONLY

Client Comments:

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

[illegible]

BottleOrder: 80481



pg. 10 of 74 Work order # 24011313

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:	

Lab Notes

Client Comments:

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

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

BottleOrder: 80481



CHAIN OF CUSTODY

pg. 11 of 74 Work order # 24011313

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

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

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

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED											
J044517.01		Brad Lohrum		Drinking Water Soil Sludge Special Waste Groundwater DW - Lead E200.8													
Results Requested <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)		Billing Instructions		# and Type of Containers													
Lab Use Only		Sample Identification		Date/Time Sampled		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER				
24011313	SM5-101	1/11/24 6:08												X			
041	SM5-102	+												X			
043	103	6:09												X			
044	104	+												X			
045	105	6:10												X			
046	106	+												X			
047	107	6:11												X			
048	108	+												X			
049	109	6:12												X			
050	110	+												X			

Relinquished By		Date/Time		Received By		Date/Time	
Brad Lohrum		1/18/24		Nick Reed		1/18/24	
12/16/24		1/12/24 10:00				1/12/24 10:12	

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.teklabinco.com for terms and conditions.

BottleOrder: 80481



pg. 12 of 74 Work order # 24011313

[illegible]

March 28, 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: 24030694

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 3/8/2024 4:11:00 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,



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



Report Contents

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

Client: Geotechnology, Inc.

Work Order: 24030694

Client Project: J044517.01

Report Date: 28-Mar-24

This reporting package includes the following:

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

Client: Geotechnology, Inc.

Work Order: 24030694

Client Project: J044517.01

Report Date: 28-Mar-24

Abbr Definition

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

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

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

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

DNI Did not ignite

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

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

IDPH IL Dept. of Public Health

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

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

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

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

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

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

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

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

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

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

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

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

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

TNTC Too numerous to count (> 200 CFU)

Client: Geotechnology, Inc.

Work Order: 24030694

Client Project: J044517.01

Report Date: 28-Mar-24

Qualifiers

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



Case Narrative

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

Client: Geotechnology, Inc.

Work Order: 24030694

Client Project: J044517.01

Report Date: 28-Mar-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:** 24030694**Client Project:** J044517.01**Report Date:** 28-Mar-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	4/30/2024	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: 24030694

Client Project: J044517.01

Report Date: 28-Mar-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24030694-001A	SMS-05	NELAP		1.0	< 1.0	µg/L	1	03/27/2024 11:59	03/06/2024 3:32
24030694-002A	CACC-16	NELAP		1.0	1.9	µg/L	1	03/27/2024 12:03	03/06/2024 3:52
24030694-003A	JMS-05	NELAP		1.0	< 1.0	µg/L	1	03/27/2024 12:06	03/06/2024 4:12
24030694-004A	JMS-44	NELAP		1.0	< 1.0	µg/L	1	03/19/2024 9:52	03/06/2024 4:16
24030694-005A	JMS-48	NELAP		1.0	1.7	µg/L	1	03/19/2024 9:56	03/06/2024 4:18
24030694-006A	JMS-49	NELAP		1.0	< 1.0	µg/L	1	03/19/2024 9:59	03/06/2024 4:20
24030694-007A	BHS-01	NELAP		1.0	3.8	µg/L	1	03/19/2024 10:03	03/06/2024 4:46
24030694-008A	BHS-02	NELAP		1.0	1.2	µg/L	1	03/19/2024 10:07	03/06/2024 4:48
24030694-009A	BHS-03	NELAP		1.0	< 1.0	µg/L	1	03/19/2024 10:18	03/06/2024 4:51
24030694-010A	BHS-04	NELAP		1.0	1.2	µg/L	1	03/21/2024 14:06	03/06/2024 4:55
24030694-011A	BHS-05	NELAP		1.0	1.2	µg/L	1	03/19/2024 10:28	03/06/2024 5:00
24030694-012A	BHS-06	NELAP		1.0	1.4	µg/L	1	03/19/2024 10:59	03/06/2024 5:00
24030694-013A	BHS-07	NELAP		1.0	11.4	µg/L	1	03/19/2024 11:03	03/06/2024 5:06
24030694-014A	BHS-08	NELAP		1.0	5.0	µg/L	1	03/19/2024 11:08	03/06/2024 5:10
24030694-015A	BHS-09	NELAP		1.0	3.8	µg/L	1	03/19/2024 11:11	03/06/2024 5:12
24030694-016A	BHS-10	NELAP		1.0	< 1.0	µg/L	1	03/19/2024 11:16	03/06/2024 5:15
24030694-017A	BHS-11	NELAP		1.0	< 1.0	µg/L	1	03/19/2024 11:19	03/06/2024 5:15
24030694-018A	BHS-12	NELAP		1.0	< 1.0	µg/L	1	03/19/2024 11:23	03/06/2024 5:15
24030694-019A	BHS-13	NELAP		1.0	5.0	µg/L	1	03/19/2024 11:34	03/06/2024 5:17
24030694-020A	BHS-14	NELAP		1.0	13.1	µg/L	1	03/19/2024 11:49	03/06/2024 5:17
24030694-021A	BHS-15	NELAP		1.0	9.9	µg/L	1	03/19/2024 11:52	03/06/2024 5:17
24030694-022A	BHS-16	NELAP		1.0	14.4	µg/L	1	03/19/2024 11:56	03/06/2024 5:17
24030694-023A	BHS-17	NELAP		1.0	25.9	µg/L	1	03/19/2024 12:00	03/06/2024 5:17
24030694-024A	BHS-18	NELAP		1.0	5.2	µg/L	1	03/19/2024 12:03	03/06/2024 5:20
24030694-025A	BHS-19	NELAP		1.0	9.4	µg/L	1	03/21/2024 14:10	03/06/2024 5:20
24030694-026A	BHS-20	NELAP		1.0	17.1	µg/L	1	03/19/2024 12:11	03/06/2024 5:20
24030694-027A	BHS-21	NELAP		1.0	16.4	µg/L	1	03/19/2024 12:14	03/06/2024 5:20
24030694-028A	BHS-22	NELAP		1.0	14.6	µg/L	1	03/21/2024 14:13	03/06/2024 5:20
24030694-029A	BHS-23	NELAP		1.0	26.8	µg/L	1	03/19/2024 12:40	03/06/2024 5:20
24030694-030A	BHS-24	NELAP		1.0	8.1	µg/L	1	03/19/2024 12:44	03/06/2024 5:20
24030694-031A	BHS-25	NELAP		1.0	3.5	µg/L	1	03/19/2024 12:47	03/06/2024 5:25
24030694-032A	BHS-26	NELAP		1.0	< 1.0	µg/L	1	03/19/2024 12:51	03/06/2024 5:25
24030694-033A	BHS-27	NELAP		1.0	6.5	µg/L	1	03/19/2024 12:55	03/06/2024 5:27
24030694-034A	BHS-28	NELAP		1.0	9.3	µg/L	1	03/19/2024 12:58	03/06/2024 5:27
24030694-035A	BHS-29	NELAP		1.0	7.3	µg/L	1	03/19/2024 13:02	03/06/2024 5:27
24030694-036A	BHS-30	NELAP		1.0	8.1	µg/L	1	03/19/2024 13:06	03/06/2024 5:27
24030694-037A	BHS-31	NELAP		1.0	9.3	µg/L	1	03/19/2024 13:09	03/06/2024 5:27
24030694-038A	BHS-32	NELAP		1.0	5.7	µg/L	1	03/19/2024 13:24	03/06/2024 5:27
24030694-039A	BHS-33	NELAP		1.0	12.5	µg/L	1	03/19/2024 13:35	03/06/2024 5:27
24030694-040A	BHS-34	NELAP		1.0	24.1	µg/L	1	03/19/2024 13:39	03/06/2024 5:27
24030694-041A	BHS-35	NELAP		1.0	1.2	µg/L	1	03/19/2024 13:42	03/06/2024 5:33
24030694-042A	BHS-36	NELAP		1.0	1.0	µg/L	1	03/19/2024 13:46	03/06/2024 5:33
24030694-043A	BHS-37	NELAP		1.0	6.6	µg/L	1	03/19/2024 13:50	03/06/2024 5:35
24030694-044A	BHS-38	NELAP		1.0	5.1	µg/L	1	03/23/2024 3:48	03/06/2024 5:35
24030694-045A	BHS-39	NELAP		1.0	5.8	µg/L	1	03/19/2024 17:48	03/06/2024 5:35
24030694-046A	BHS-40	NELAP		1.0	6.0	µg/L	1	03/19/2024 17:51	03/06/2024 5:35
24030694-047A	BHS-41	NELAP		1.0	4.5	µg/L	1	03/19/2024 17:55	03/06/2024 5:35
24030694-048A	BHS-42	NELAP		1.0	5.9	µg/L	1	03/19/2024 18:10	03/06/2024 5:35



Laboratory Results

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

Client: Geotechnology, Inc.

Work Order: 24030694

Client Project: J044517.01

Report Date: 28-Mar-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24030694-049A	BHS-43	NELAP		1.0	4.6	µg/L	1	03/19/2024 18:21	03/06/2024 5:35
24030694-050A	BHS-44	NELAP		1.0	5.7	µg/L	1	03/19/2024 18:24	03/06/2024 5:35
24030694-051A	BHS-45	NELAP		1.0	5.3	µg/L	1	03/19/2024 18:28	03/06/2024 5:42
24030694-052A	BHS-46	NELAP		1.0	9.2	µg/L	1	03/19/2024 18:32	03/06/2024 5:43
24030694-053A	BHS-47	NELAP		1.0	8.3	µg/L	1	03/19/2024 18:35	03/06/2024 5:43
24030694-054A	BHS-48	NELAP		1.0	5.7	µg/L	1	03/19/2024 18:39	03/06/2024 5:43
24030694-055A	BHS-49	NELAP		1.0	9.6	µg/L	1	03/19/2024 18:43	03/06/2024 5:43
24030694-056A	BHS-50	NELAP		1.0	7.3	µg/L	1	03/19/2024 18:57	03/06/2024 5:43
24030694-057A	BHS-51	NELAP		1.0	4.7	µg/L	1	03/19/2024 19:01	03/06/2024 5:43
24030694-058A	BHS-52	NELAP		1.0	10.6	µg/L	1	03/21/2024 14:35	03/06/2024 5:43
24030694-059A	BHS-53	NELAP		1.0	9.2	µg/L	1	03/21/2024 14:46	03/06/2024 5:43
24030694-060A	BHS-54	NELAP		1.0	< 1.0	µg/L	1	03/19/2024 19:19	03/06/2024 5:48

Client: Geotechnology, Inc.

Work Order: 24030694

Client Project: J044517.01

Report Date: 28-Mar-24

Carrier: John Duarte

Received By: WAO

Completed by:

On:

08-Mar-24

Nick Reed

Reviewed by:

On:

11-Mar-24

Ellie Hopkins

 Pages to follow: Chain of custody

 Extra pages included

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C N/A
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" 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. - ehopkins - 3/11/2024 9:56:33 AM

CHAIN OF CUSTODY

pg. 1 of 23 Work order # 24030694

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

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

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

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

Client Comments:

COURIER

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED											
J044517.01		Brad Lohrum															
Results Requested		Billing Instructions		# and Type of Containers													
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES HNO3 NaOH H2SO4 HCL MeOH NaHSO4 OTHER													
Lab Use Only	Sample Identification	Date/Time Sampled				Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8					
1030694-001	SMS-05	3/6/24	3:32	1			X					X					
-002	CACC-16		3:52	1			X					X					
-003	JMS-05		4:12	1			X					X					
-004	-44		4:16	1			X					X					
-005	48		4:18	1			X					X					
-006	49		4:20	1			X					X					
-007	BHS 01		4:46	1			X					X					
-008	02		4:48	1			X					X					
-009	03		4:51	1			X					X					
-010	04		4:55	1			X					X					

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	3/8/24 1350	John Daulton	3/8/24 1350
John Daulton	3/8/24 1611	Whitney Queen	3/8/24 1611

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



pg. 2 of 23 Work order # 24030694

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

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

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

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

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

[illegible]

Relinquished By	Date/Time	Received By	Date/Time
<i>[Signature]</i>	3/8/24 1350	<i>[Signature]</i>	3/8/24 1350
<i>[Signature]</i>	3/8/24 1611	<i>[Signature]</i>	3/8/24 1611

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BottleOrder: 80481



CHAIN OF CUSTODY

pg. 3 of 23 Work order # 2403094

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

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

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

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																	
J044517.01		Brad Lohrum																					
Results Requested		Billing Instructions		# and Type of Containers								Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8	
<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																					
403064-02	BHS 15	3/6/24 5:17	1									X								X			
-022	16		1									X								X			
-023	17		1									X								X			
-024	18	5:20	1									X								X			
-025	19		1									X								X			
-026	20		1									X								X			
-027	21		1									X								X			
-028	22		1									X								X			
-029	23		1									X								X			
-030	24		1									X								X			

Relinquished By	Date/Time	Received By	Date/Time
<i>[Signature]</i>	3/8/24 1350	<i>[Signature]</i>	3/8/24 1350
<i>[Signature]</i>	3/8/24 1611	<i>[Signature]</i>	3/8/24 1611

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BottleOrder: 80481



CHAIN OF CUSTODY

pg. 4 of 23 Work order # 24030694

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

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

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

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

Client Comments:

Project Name/Number		Sample Collector's Name				MATRIX			INDICATE ANALYSIS REQUESTED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
J044517.01		Brad Lohrum				Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

Relinquished By		Date/Time		Received By		Date/Time	
Brad Lohrum		3/8/24 1350		Whitney Durr		3/8/24 1350	
John Durr		3/8/24 1611				3/8/24 1611	

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BottleOrder: 80481



CHAIN OF CUSTODY

pg. 5 of 23 Work order # 24030694
24030694

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

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

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

Client Comments:

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

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																		
J044517.01		Brad Lohrum																						
Results Requested		Billing Instructions		# and Type of Containers		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8												
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNRES	HNO3																			NaOH
Lab Use Only	Sample Identification	Date/Time Sampled																						
24030694-04	BHS - 35	3/6/24 6:33	1																					
-042	36	+	1																					
-043	37	5:35	1																					
-044	38		1																					
-045	39		1																					
-046	40		1																					
-047	41		1																					
-048	42		1																					
-049	43		1																					
-050	44		1																					

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	3/6/24 1350	John D. Smith	3/8/24 1350
John D. Smith	3/8/24 1611	Whitney Ann	3/8/24 1611

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BottleOrder: 80481



CHAIN OF CUSTODY

pg. 6 of 23 Work order # 24030694

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

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

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

Client Comments:

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

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED											
J044517.01		Brad Lohrum															
Results Requested		Billing Instructions		# and Type of Containers								Aqueous					
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER						
Lab Use Only	Sample Identification	Date/Time Sampled										Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8
4030694-05	BHS-45	3/6/24	5:42	1								X					X
-052	46		5:43	1								X					X
-053	47			1								X					X
-054	48			1								X					X
-055	49			1								X					X
-056	50			1								X					X
-057	51			1								X					X
-058	52			1								X					X
-059	53			1								X					X
-060	54		5:48	1								X					X

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	3/8/24 1350	John R. Smith	3/8/24 1350
John R. Smith	3/8/24 1611	Christy Lohrum	3/8/24 1611

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BottleOrder: 80481



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	EFS-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. 1 of 6 Work order # 24062359

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

Client: Geotechnology, LLC Address: 11816 Lackland Road City / State / Zip: St. Louis, MO 63146 Contact: Brad Lohrum Phone: (314) 997-7440 E-Mail: blohrum@teamues.com Fax:	Samples on: <input checked="" type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE <input type="checkbox"/> °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

**TEKLAB
Courier**

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																					
24062359-001	SMS-01-2	6/26/24	3:07	1										X						X			
-002	02-2		3:08	1										X					X				
-003	58-2		3:11	1										X					X				
-004	59-2		3:12	1										X					X				
-005	60-2		3:13	1										X					X				
-006	61-2		3:14	1										X					X				
-007	62-2		3:15	1										X					X				
-008	74-2		3:18	1										X					X				
-009	PKE-66-2		3:52	1										X					X				
-010	PKE-67-2		3:52	1										X					X				

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

BottleOrder: 80481



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										X							X			
-012	RBE-68-2	4:06	1										X							X			
-013	RBE-11-2	4:07	1										X							X			
-014	FES-52-2	4:16	1										X							X			
-015	BRH-82	4:33	1										X							X			
-016	BRH-83	4:36	1										X							X			
-017	MCE-09-2	4:51	1										X							X			
-018	MCE-87	4:54	1										X							X			
-019	MCE-88	+	1										X							X			
-020	RBH-30-2	5:17	1										X							X			

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



pg. 3 of 6

Work order # 24062353

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

Client:	Geotechnology, LLC		Samples on:	<input type="checkbox"/> ICE	<input type="checkbox"/> BLUE ICE	<input type="checkbox"/> NO ICE	_____ °C	LTG#	_____
Address:	11816 Lackland Road		Preserved in:	<input type="checkbox"/> LAB	<input 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						
E-Mail:	blohrum@teamues.com	Fax:							
			Client Comments:						

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

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

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

[illegible]

Relinquished By	Date/Time	Received By	Date/Time
<i>Paul [Signature]</i>	6/27/24 17:30	<i>[Signature]</i>	6/28/24 12:00
	6/28/24 1550	<i>Trish Reed</i>	6/28/24 1550

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

BottleOrder: 80481



pg. 4 of 6 Work order # 24062353

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

Client:	Geotechnology, LLC			Samples on:	<input type="checkbox"/> ICE	<input type="checkbox"/> BLUE ICE	<input type="checkbox"/> NO ICE	_____ °C	LTG# _____		
Address:	11816 Lackland Road			Preserved in:	<input type="checkbox"/> LAB	<input 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	
E-Mail:	blohrum@teamues.com		Fax:								
					Client Comments:						

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

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

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

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																	
J044517.01		Brad Lohrum		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8													
Results Requested		Billing Instructions																					# and Type of Containers
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)				UNRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER												
Lab Use Only	Sample Identification	Date/Time Sampled																					
J044517-031	LSE-06-2	6/26/24	6:54	1																			
-032	JMS-11-2	7:07	1																				
-033	EFS-01-2	7:19	1																				
-034	HHS-18-2	7:32	1																				
-035	OMS-08-2	7:55	1																				
-036	OMS-10-2	7:56	1																				
-037	12-2	7:57	1																				
-038	17-2	8:00	1																				
-039	20-2	8:07	1																				
-040	39	8:10	1																				

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	6/27/24 17:30	Trish Reed	6/28/24 1400
	6/28/24 1550		6/28/24 1550



pg. 5 of 6 Work order # 24062353

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



Client:	Geotechnology, LLC		Samples on:	<input type="checkbox"/> ICE	<input type="checkbox"/> BLUE ICE	<input type="checkbox"/> NO ICE	_____ °C	LTG# _____
Address:	11816 Lackland Road		Preserved in:	<input type="checkbox"/> LAB	<input 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					
E-Mail:	blohrum@teamues.com	Fax:						
			Client Comments:					

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

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

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

[illegible]

Relinquished By	Date/Time	Received By	Date/Time
	6/27/24 17:30		6/28/24 1400
	6/28/24 1538	Chuck Reed	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.

BottleOrder: 80481



pg. 6 of 6

Work order # 2466 2353

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

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

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

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

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

[illegible]

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



September 30, 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: 24091622

Dear Brad Lohrum:

TEKLAB, INC received 7 samples on 9/20/2024 1:13:00 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: 24091622

Client Project: J044517.01

Report Date: 30-Sep-24

This reporting package includes the following:

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

Client: Geotechnology, Inc.

Work Order: 24091622

Client Project: J044517.01

Report Date: 30-Sep-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: 24091622

Client Project: J044517.01

Report Date: 30-Sep-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: 24091622

Client Project: J044517.01

Report Date: 30-Sep-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:** 24091622**Client Project:** J044517.01**Report Date:** 30-Sep-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	12/31/2024	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: 24091622

Client Project: J044517.01

Report Date: 30-Sep-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									
24091622-001A	SMS-58-3	NELAP		1.0	13.5	µg/L	1	09/26/2024 12:20	09/19/2024 5:37
24091622-002A	SMS-60-3	NELAP		1.0	12.8	µg/L	1	09/26/2024 12:24	09/19/2024 5:39
24091622-003A	SMS-61-3	NELAP		1.0	2.7	µg/L	1	09/26/2024 12:28	09/19/2024 5:39
24091622-004A	SMS-62-3	NELAP		1.0	3.7	µg/L	1	09/26/2024 12:57	09/19/2024 5:40
24091622-005A	OMS-29-3	NELAP		1.0	15.8	µg/L	1	09/26/2024 12:32	09/19/2024 6:00
24091622-006A	EFS-01-3	NELAP		1.0	1.9	µg/L	1	09/26/2024 13:01	09/19/2024 6:13
24091622-007A	RAC-08-3	NELAP		1.0	< 1.0	µg/L	1	09/26/2024 13:05	09/19/2024 6:27

Client: Geotechnology, Inc.

Work Order: 24091622

Client Project: J044517.01

Report Date: 30-Sep-24

Carrier: John Duarte

Received By: NR

Completed by:

On:

20-Sep-24

Amber Dilallo

Amber Dilallo

Reviewed by:

On:

20-Sep-24

Ellie Hopkins

Ellie Hopkins

Pages to follow:

Chain of custody

1

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 - 9/20/2024 1:42:56 PM

Work order # 24091622

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

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

9/20



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.