

**REPORT OF DRINKING WATER SAMPLING FOR
LEAD CONTENT:**



East Carter R-II
SCHOOL DISTRICT

PREPARED FOR:

EAST CARTER R-II
24 S. HERREN AVE
ELLSINORE, MO 63937

PREPARED BY:

SEMO COMPLIANCE & REMEDIATION
3349 COUNTY ROAD 484
POPLAR BLUFF, MO 63901

JULY 2024

DOCUMENT TO BE RETAINED INDEFINITELY

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Drinking Water Sampling for Lead
East Carter R-II
24 S. Herren Ave
Ellsinore, MO 63937

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EXECUTIVE SUMMARY

SEMO Compliance performed lead testing of multiple drinking fountain water sources at the Campus of East Carter R-II located at 24 S. Herren Ave Ellsinore, Missouri. The sampling was performed by trained and licensed personnel in accordance with USEPA, HUD, and State of Missouri Regulations and Guidelines.

All inspectors involved with sampling activities had EPA-approved training in Lead. Credentials for our firm and the inspector collecting the samples are included in Attachment C to this document.

All samples were collected on a “first draw” basis. “First draw” is achieved by allowing the water system to rest for at least eight hours prior to sampling in order to collect any existing debris or settlement within the sample. The intent of this sampling is to replicate “worst-case scenario” conditions. As such, ENPAQ inspectors met at the school to collect water samples before the systems were used by staff or students. The sampling was completed in accordance with the Missouri SB681 *Get the Lead Out of Schools Drinking Water Act* requirements. The Missouri SB681 *Get the Lead Out of Schools Drinking Water Act*.

Drinking water samples were collected from sixty-two (62) different locations throughout the East Carter Campus during the sampling event. The water samples were collected from drinking fountains utilized for drinking activities at the campus. After sample collection, samples were immediately delivered to Teklab, Inc. located in Collinsville, Illinois following strict chain of custody procedures. Teklab is a NELAP-accredited and State of Missouri-licensed laboratory specializing in drinking water analysis. Detailed sampling locations and sample results are located in Attachment A of this report.

Any samples reported over 5.0 ppb should be re-sampled on an annual basis at a minimum.

CONCLUSION/RECOMMENDATIONS

SEMO Compliance recommends that all water sources testing at 5.0 ppb or above be removed from service. These sources are subject to additional maintenance activities and remediation prior to use. Before being put back into service, it is recommended these sources be re-tested to confirm compliance with acceptable levels. **The initial testing resulted in one (1) water source above the recommended level.**

Remediation includes decreasing lead concentrations below 5 parts per billion using methods such as replacement of plumbing, solder, fittings, or fixtures, installation of filters and filter devices, or other effective methods in accordance with Missouri SB681 *Get the Lead Out of Schools Drinking Water Act*. **The water source that was above 5.0 ppb has been remediated and re-tested to meet the recommended level.**

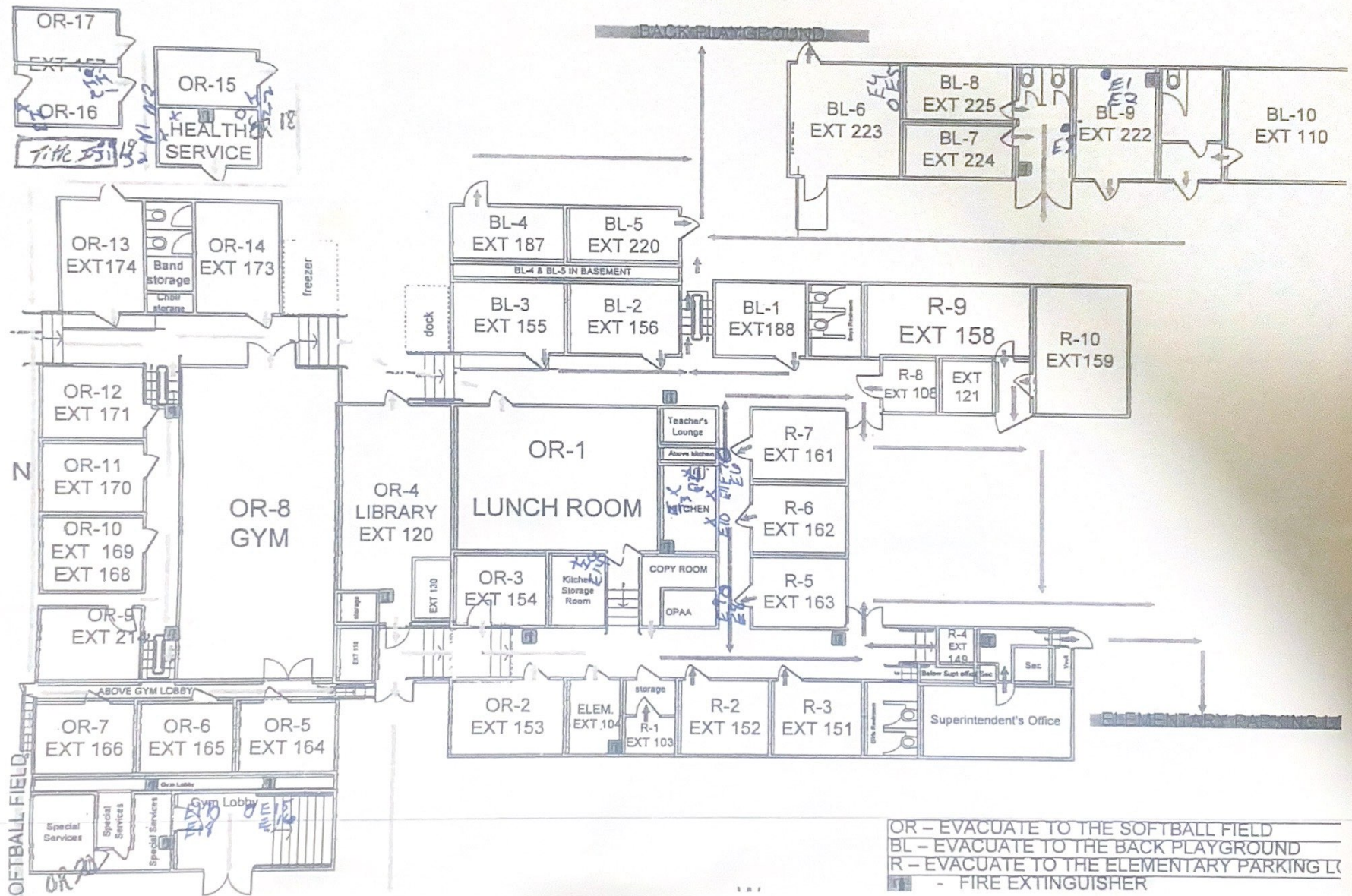
Any sources above the recommended level will be subject to an ongoing maintenance program and re-testing at appropriate intervals. Any samples reported over 5.0 ppb should be re-sampled on an annual basis at a minimum.

SEMO Compliance recommends that all water sources run for at least thirty seconds prior to use as recommended by the USEPA.

APPENDIX A
SAMPLE LOCATION MAPPING

EVACUATION PLANS

E



SOFTBALL FIELD

N

BACK PLAYGROUND

ELEMENTARY PARKING LOT

OR-17
EXT 152
OR-16
Title B31182

OR-15
HEALTH SERVICE

OR-13 EXT 174
OR-14 EXT 173
Band storage
Chair storage
freezer

OR-12 EXT 171
OR-11 EXT 170
OR-10 EXT 169
EXT 168
OR-9 EXT 21

OR-7 EXT 166
OR-6 EXT 165
OR-5 EXT 164

Special Services
Special Services
Special Services
Gym Lobby

BL-4 EXT 187
BL-5 EXT 220
BL-4 & BL-5 IN BASEMENT

BL-3 EXT 155
BL-2 EXT 156
dock

OR-1
LUNCH ROOM
OR-4 LIBRARY EXT 120

OR-3 EXT 154
Kitchen Storage Room
COPY ROOM
OPAA

OR-2 EXT 153
ELEM. EXT 104
R-1 EXT 103
R-2 EXT 152
R-3 EXT 151

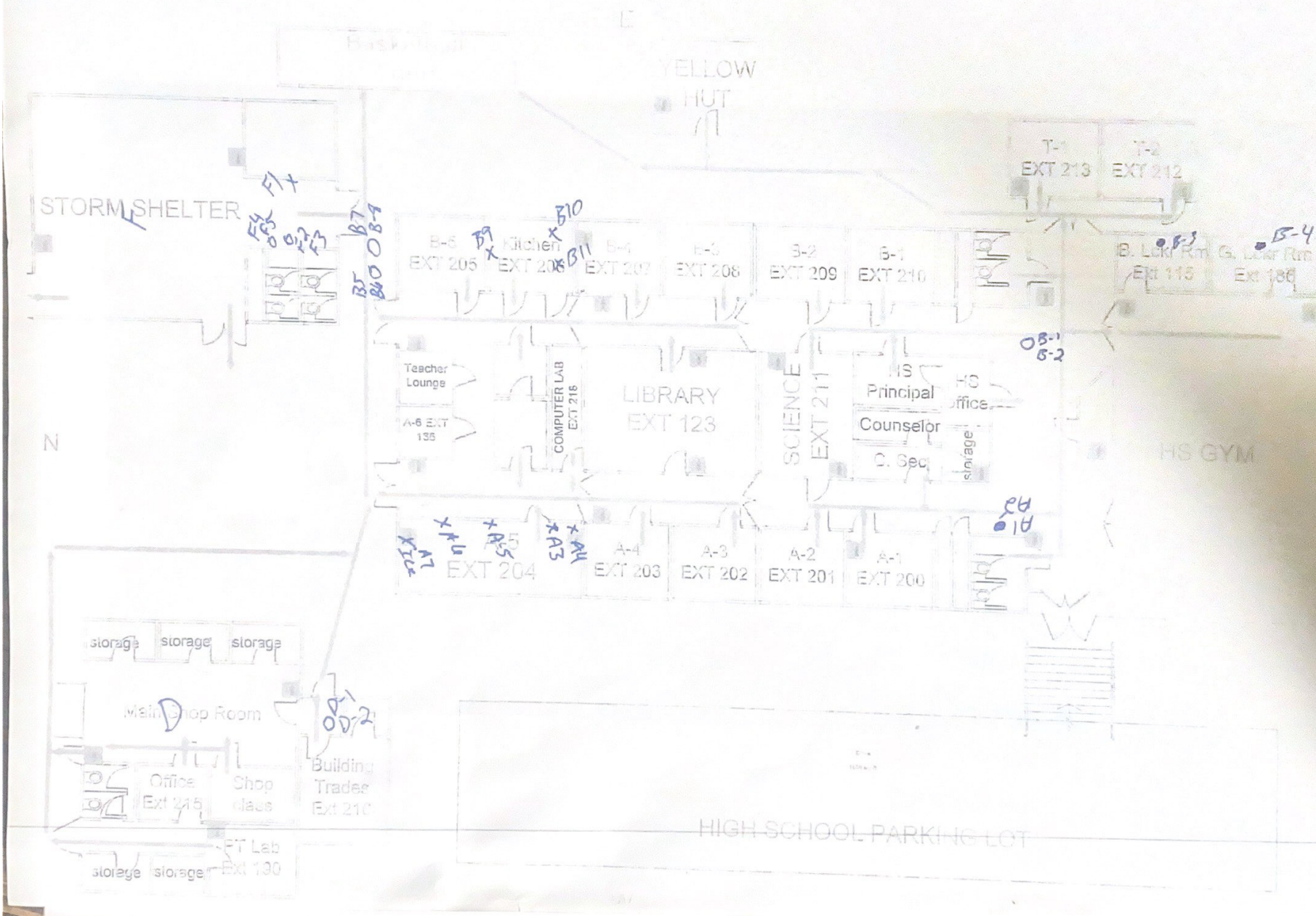
Teacher's Lounge
Above kitchen
KITCHEN
R-7 EXT 161
R-6 EXT 162
R-5 EXT 163

BL-1 EXT 188
R-9 EXT 158
R-8 EXT 106
EXT 121
R-10 EXT 159

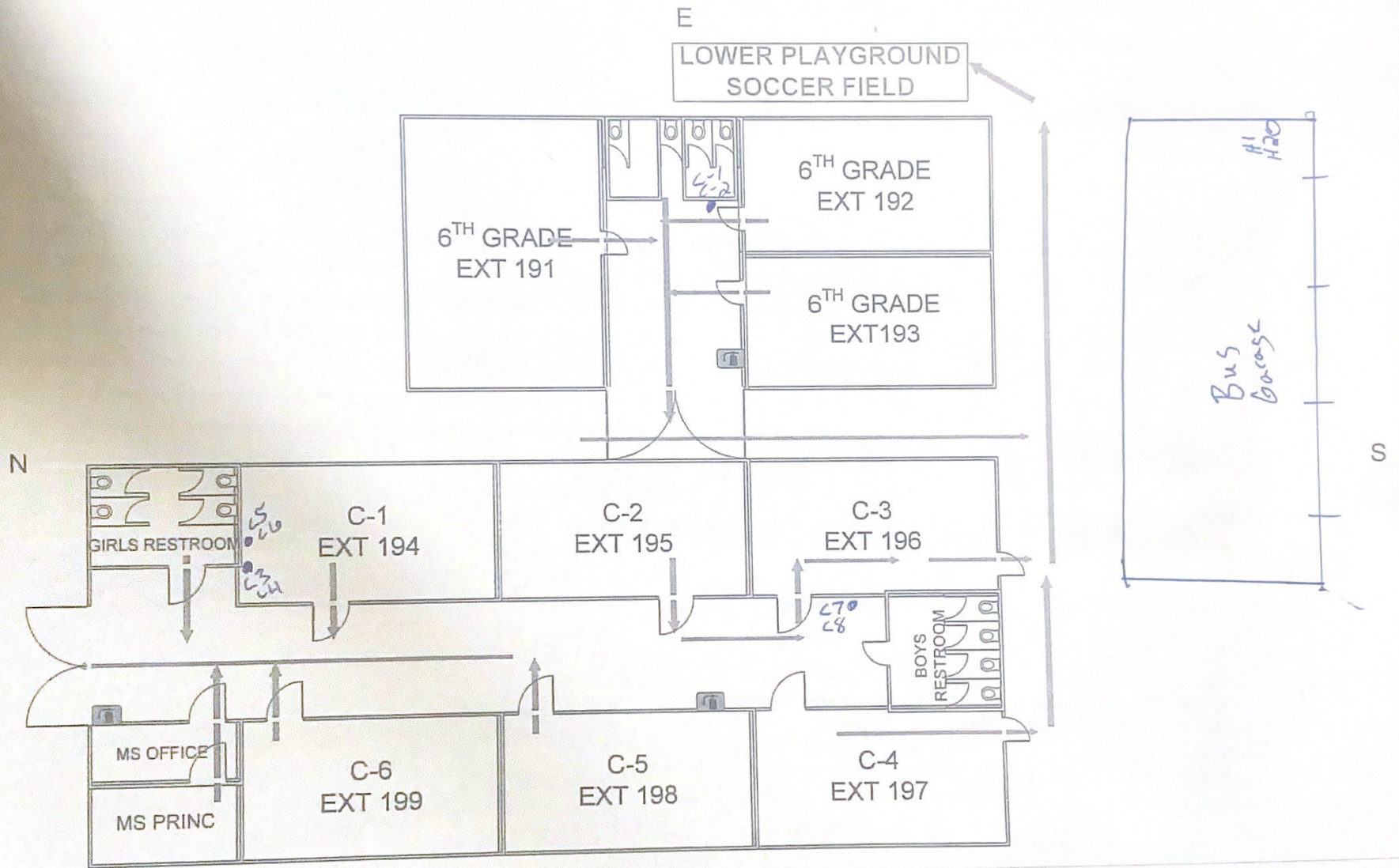
R-4 EXT 149
Below Supt office
Sec
Superintendent's Office

BL-6 EXT 223
BL-8 EXT 225
BL-7 EXT 224
BL-9 EXT 222
BL-10 EXT 110

EVACUATION PLANS



EVACUATION PLANS



APPENDIX B
LABORATORY ANALYSIS

June 28, 2024

Matt Marshall
Semo Compliance & Remediation
3349 County Road 484
Poplar Bluff, MO 63901
TEL: (574) 718-9812
FAX:



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

RE: DW Lead Analysis East Carter

WorkOrder: 24061706

Dear Matt Marshall:

TEKLAB, INC received 62 samples on 6/20/2024 12:00:00 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: Semo Compliance & Remediation

Work Order: 24061706

Client Project: DW Lead Analysis East Carter

Report Date: 28-Jun-24

This reporting package includes the following:

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Chain of Custody	Appended

Client: Semo Compliance & Remediation

Work Order: 24061706

Client Project: DW Lead Analysis East Carter

Report Date: 28-Jun-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)

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Qualifiers

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



Case Narrative

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

Client: Semo Compliance & Remediation

Work Order: 24061706

Client Project: DW Lead Analysis East Carter

Report Date: 28-Jun-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: Semo Compliance & Remediation

Work Order: 24061706

Client Project: DW Lead Analysis East Carter

Report Date: 28-Jun-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	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: Semo Compliance & Remediation

Work Order: 24061706

Client Project: DW Lead Analysis East Carter

Report Date: 28-Jun-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									
24061706-001A	A-1	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 11:28	06/15/2024 9:14
24061706-002A	A-2	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 11:31	06/15/2024 9:15
24061706-003A	A-3	NELAP		1.0	1.3	µg/L	1	06/24/2024 11:35	06/15/2024 9:17
24061706-004A	A-4	NELAP		1.0	3.1	µg/L	1	06/24/2024 11:38	06/15/2024 9:18
24061706-005A	A-5	NELAP		1.0	1.0	µg/L	1	06/24/2024 11:41	06/15/2024 9:19
24061706-006A	A-6	NELAP		1.0	1.7	µg/L	1	06/24/2024 11:45	06/15/2024 9:20
24061706-007A	A-7 ice	NELAP		1.0	3.3	µg/L	1	06/24/2024 11:48	06/15/2024 9:20
24061706-008A	B-1	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 12:12	06/15/2024 9:07
24061706-009A	B-2	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 12:15	06/15/2024 9:08
24061706-010A	B-3	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 11:51	06/15/2024 9:10
24061706-011A	B-4	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 12:19	06/15/2024 9:11
24061706-012A	B-5	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 12:22	06/15/2024 9:22
24061706-013A	B-6	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 12:26	06/15/2024 9:23
24061706-014A	B-7	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 12:29	06/15/2024 9:24
24061706-015A	B-8	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 12:32	06/15/2024 9:24
24061706-016A	B-9	NELAP		1.0	1.7	µg/L	1	06/24/2024 12:36	06/15/2024 9:27
24061706-017A	B-10	NELAP		1.0	2.2	µg/L	1	06/24/2024 12:39	06/15/2024 9:28
24061706-018A	B-11	NELAP		1.0	1.6	µg/L	1	06/24/2024 12:43	06/15/2024 9:29
24061706-019A	C-1	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 12:56	06/15/2024 9:46
24061706-020A	C-2	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 13:20	06/15/2024 9:47
24061706-021A	C-3	NELAP		1.0	2.0	µg/L	1	06/24/2024 13:00	06/15/2024 9:50
24061706-022A	C-4	NELAP		1.0	2.5	µg/L	1	06/24/2024 13:03	06/15/2024 9:50
24061706-023A	C-5	NELAP		1.0	2.6	µg/L	1	06/24/2024 13:06	06/15/2024 9:51
24061706-024A	C-6	NELAP		1.0	3.6	µg/L	1	06/24/2024 13:10	06/15/2024 9:51
24061706-025A	C-7	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 13:13	06/15/2024 9:52
24061706-026A	C-8	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 13:17	06/15/2024 9:53
24061706-027A	D-1	NELAP		1.0	1.6	µg/L	1	06/24/2024 13:40	06/15/2024 9:42
24061706-028A	D-2	NELAP		1.0	1.8	µg/L	1	06/24/2024 13:44	06/15/2024 9:43
24061706-029A	H-1	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 14:04	06/15/2024 10:37
24061706-030A	H-2	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 13:47	06/15/2024 10:38
24061706-031A	E-1	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 13:51	06/15/2024 9:57
24061706-032A	E-2	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 13:54	06/15/2024 9:58
24061706-033A	E-3	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 13:57	06/15/2024 9:59
24061706-034A	E-4	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 14:01	06/15/2024 10:01
24061706-035A	E-5	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 14:25	06/15/2024 10:02
24061706-036A	E-6	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 14:28	06/15/2024 10:04
24061706-037A	E-7	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 14:31	06/15/2024 10:04
24061706-038A	E-8	NELAP		1.0	1.1	µg/L	1	06/24/2024 14:35	06/15/2024 10:07
24061706-039A	E-9	NELAP		1.0	1.1	µg/L	1	06/24/2024 14:48	06/15/2024 10:08
24061706-040A	E-10	NELAP		1.0	2.0	µg/L	1	06/24/2024 14:38	06/15/2024 10:09
24061706-041A	E-11	NELAP		1.0	1.2	µg/L	1	06/24/2024 14:41	06/15/2024 10:09
24061706-042A	E-12	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 14:45	06/15/2024 10:10
24061706-043A	E-13	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 15:09	06/15/2024 10:10
24061706-044A	E-14 ice	NELAP		1.0	2.9	µg/L	1	06/24/2024 15:12	06/15/2024 10:12
24061706-045A	E-15	NELAP		1.0	2.0	µg/L	1	06/24/2024 15:15	06/15/2024 10:16
24061706-046A	E-16	NELAP		1.0	2.2	µg/L	1	06/24/2024 15:19	06/15/2024 10:16
24061706-047A	E-17	NELAP		1.0	1.9	µg/L	1	06/24/2024 15:22	06/15/2024 10:17
24061706-048A	E-18	NELAP		1.0	2.7	µg/L	1	06/24/2024 15:32	06/15/2024 10:17



Laboratory Results

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

Client: Semo Compliance & Remediation

Work Order: 24061706

Client Project: DW Lead Analysis East Carter

Report Date: 28-Jun-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									
24061706-049A	J-1	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 15:26	06/15/2024 10:28
24061706-050A	J-2	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 15:29	06/15/2024 10:29
24061706-051A	F-1 ice	NELAP		1.0	3.0	µg/L	1	06/24/2024 15:53	06/15/2024 9:31
24061706-052A	F-2	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 15:56	06/15/2024 9:33
24061706-053A	F-3	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 15:59	06/15/2024 9:33
24061706-054A	F-4	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 16:03	06/15/2024 9:34
24061706-055A	F-5	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 16:06	06/15/2024 9:34
24061706-056A	I-1	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 16:10	06/15/2024 10:33
24061706-057A	I-2	NELAP		1.0	1.2	µg/L	1	06/24/2024 16:16	06/15/2024 10:34
24061706-058A	I-3	NELAP		1.0	9.8	µg/L	5	06/27/2024 11:00	06/15/2024 10:35
24061706-059A	N-1	NELAP		1.0	< 1.0	µg/L	1	06/24/2024 16:13	06/15/2024 10:24
24061706-060A	N-2	NELAP		1.0	2.9	µg/L	1	06/24/2024 16:37	06/15/2024 10:25
24061706-061A	N-3	NELAP		1.0	3.7	µg/L	1	06/24/2024 16:50	06/15/2024 10:25
24061706-062A	N-4	NELAP		1.0	2.8	µg/L	1	06/24/2024 16:54	06/15/2024 10:26



Receiving Check List

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

Client: Semo Compliance & Remediation

Work Order: 24061706

Client Project: DW Lead Analysis East Carter

Report Date: 28-Jun-24

Carrier: UPS

Received By: LEH

Completed by:

Amber Dilallo

Reviewed by:

Ellie Hopkins

On:

20-Jun-24

Amber Dilallo

On:

20-Jun-24

Ellie Hopkins

Pages to follow: Chain of custody

Extra pages included

- 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 - 6/20/2024 4:32:48 PM

CHAIN OF CUSTODY

pg. _____ of _____

Work order # 24061701

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

Client: Semo Compliance & Remediation
Address: 3349 County Road 484
City / State / Zip: Poplar Bluff, MO 63901
Contact: Matt Marshall **Phone:** _____
E-Mail: mattmarshall1986@gmail.com **Fax:** _____

Samples on: ICE BLUE ICE NO ICE N/A °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? If yes, include details of the hazard. 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														
DW Lead Analysis <u>East Carter</u>		<u>Matt Marshall</u>		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW Lead										
Results Requested	Billing Instructions	# and Type of Containers																		
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER											
Lab Use Only	Sample Identification	Date/Time Sampled																		
<u>24061701</u>	<u>A-1</u>	<u>6-15-24 9:14 am</u>	X							X										
<u>001</u>	<u>A-2</u>	<u>6-15-24 9:15 am</u>	X							X										
<u>002</u>	<u>A-3</u>	<u>6-15-24 9:17 am</u>	X							X										
<u>003</u>	<u>A-4</u>	<u>6-15-24 9:18 am</u>	X							X										
<u>004</u>	<u>A-5</u>	<u>6-15-24 9:19 am</u>	X							X										
<u>005</u>	<u>A-6</u>	<u>6-15-24 9:20 am</u>	X							X										
<u>006</u>	<u>A-7 ice</u>	<u>6-15-24 9:20 am</u>	X							X										
<u>007</u>	<u>B-1</u>	<u>6-15-24 9:07 am</u>	X							X										
<u>008</u>	<u>B-2</u>	<u>6-15-24 9:08 am</u>	X							X										
<u>009</u>	<u>B-3</u>	<u>6-15-24 9:12 am</u>	X							X										
<u>010</u>																				

Relinquished By	Date/Time	Received By	Date/Time
		<u>[Signature]</u>	<u>6/20/24 1200</u>
		<u>UPS</u>	

CHAIN OF CUSTODY

pg. ___ of ___ Work order # 24061706

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

Client: Semo Compliance & Remediation
Address: 3349 County Road 484
City / State / Zip: Poplar Bluff, MO 63901
Contact: Matt Marshall **Phone:** _____
E-Mail: mattmarshall1986@gmail.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? If yes, include details of the hazard. Yes No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. Yes No

Client Comments:

Project Name/Number		Sample Collector's Name		MATRIX										INDICATE ANALYSIS REQUESTED													
<u>East Carter</u>		<u>Matt Marshall</u>																									
Results Requested		Billing Instructions		# and Type of Containers																							
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)																											
Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW Lead										
<u>24061706</u>	<u>Oil</u>	<u>B-4</u>	<u>6-15-24</u>	<u>9:11am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
	<u>Oil</u>	<u>B-5</u>	<u>6-15-24</u>	<u>9:22am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
	<u>Oil</u>	<u>B-6</u>	<u>6-15-24</u>	<u>9:23am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
	<u>Oil</u>	<u>B-7</u>	<u>6-15-24</u>	<u>9:24am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
	<u>Oil</u>	<u>B-8</u>	<u>6-15-24</u>	<u>9:24am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
	<u>Oil</u>	<u>B-9</u>	<u>6-15-24</u>	<u>9:27am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
	<u>Oil</u>	<u>B-10</u>	<u>6-15-24</u>	<u>9:28am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
	<u>Oil</u>	<u>B-11</u>	<u>6-15-24</u>	<u>9:29am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
	<u>Oil</u>	<u>L-1</u>	<u>6-15-24</u>	<u>9:46am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
	<u>Oil</u>	<u>L-2</u>	<u>6-15-24</u>	<u>9:47am</u>	<u>X</u>							<u>X</u>					<u>X</u>										
Relinquished By			Date/Time			Received By			Date/Time																		
						<u>UPS</u>			<u>6/20/24</u>			<u>1200</u>															

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

BottleOrder: 84328



CHAIN OF CUSTODY

pg. ___ of ___ Work order # 24061706

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

Client: Semo Compliance & Remediation
Address: 3349 County Road 484
City / State / Zip: Poplar Bluff, MO 63901
Contact: Matt Marshall **Phone:** _____
E-Mail: mattmarshall1986@gmail.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? If yes, include details of the hazard. Yes No
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. Yes No

Project Name/Number		Sample Collector's Name											MATRIX		INDICATE ANALYSIS REQUESTED																						
<u>East Carter</u>		<u>Matt Marshall</u>											Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW Lead																		
Results Requested	Billing Instructions	# and Type of Containers																																			
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)		UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER																												
Lab Use Only	Sample Identification	Date/Time Sampled																																			
<u>24061706</u> <u>81</u>	<u>L-3</u>	<u>6-15-24 9:50am</u>	X											X							X																
<u>022</u>	<u>L-4</u>	<u>6-15-24 9:50am</u>	X											X							X																
<u>023</u>	<u>L-5</u>	<u>6-15-24 9:51am</u>	X											X							X																
<u>024</u>	<u>L-6</u>	<u>6-15-24 9:51am</u>	X											X							X																
<u>025</u>	<u>L-7</u>	<u>6-15-24 9:52am</u>	X											X							X																
<u>026</u>	<u>L-8</u>	<u>6-15-24 9:53am</u>	X											X							X																
<u>027</u>	<u>D-1</u>	<u>6-15-24 9:42am</u>	X											X							X																
<u>028</u>	<u>D-2</u>	<u>6-15-24 9:43am</u>	X											X							X																
<u>029</u>	<u>H-1</u>	<u>6-15-24 10:37am</u>	X											X							X																
<u>030</u>	<u>H-2</u>	<u>6-15-24 10:38am</u>	X											X							X																

Relinquished By		Date/Time	Received By		Date/Time
			<u>[Signature]</u>		<u>UPS 6/20/24 12:00</u>

CHAIN OF CUSTODY

pg. of Work order # 24061706

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

Client: Semo Compliance & Remediation
Address: 3349 County Road 484
City / State / Zip Poplar Bluff, MO 63901
Contact: Matt Marshall **Phone:**
E-Mail: mattmarshall1986@gmail.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? If yes, include details of the hazard. 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															
<i>East Carter</i>		<i>Matt Marshall</i>			Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW Lead												
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																					
24061706-031	E-1	6-15-24 9:57 AM	X											X									
032	E2	6-15-24 9:58 AM	X											X									
033	E3	6-15-24 9:59 AM	X											X									
034	E4	6-15-24 10:01 AM	X											X									
035	E5	6-15-24 10:02 AM	X											X									
036	E6	6-15-24 10:04 AM	X											X									
037	E7	6-15-24 10:04 AM	X											X									
038	E8	6-15-24 10:07 AM	X											X									
039	E9	6-15-24 10:08 AM	X											X									
040	E10	6-15-24 10:09 AM	X											X									

Relinquished By		Date/Time		Received By		Date/Time	
				<i>[Signature]</i>		6/20/24 12:00	

CHAIN OF CUSTODY

pg. ___ of ___ Work order # 24061706

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

Client: Semo Compliance & Remediation	Samples on: <input type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE _____ °C LTG# _____
Address: 3349 County Road 484	Preserved in: <input type="checkbox"/> LAB <input type="checkbox"/> FIELD FOR LAB USE ONLY
City / State / Zip: Poplar Bluff, MO 63901	Lab Notes
Contact: Matt Marshall Phone: _____	Client Comments:
E-Mail: mattmarshall1986@gmail.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? If yes, include details of the hazard. 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														
<i>East Carter</i>		<i>Matt Marshall</i>								Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW Lead												
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	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW Lead											
24061706 011	E11	6-15-24 10:09 ^{am}	X								X	X					X											
012	E12	6-15-24 10:10 ^{am}	X								X	X					X											
013	E13	6-15-24 10:10 ^{am}	X								X	X					X											
014	E14 ice	6-15-24 10:12 ^{am}	X								X	X					X											
015	E15	6-15-24 10:16 ^{am}	X								X	X					X											
016	E16	6-15-24 10:16 ^{am}	X								X	X					X											
017	E17	6-15-24 10:17 ^{am}	X								X	X					X											
018	E18	6-15-24 10:17 ^{am}	X								X	X					X											
019	J-1	6-15-24 10:28 ^{am}	X								X	X					X											
050	J-2	6-15-24 10:29 ^{am}	X								X	X					X											
Relinquished By			Date/Time								Received By				Date/Time													
											<i>[Signature]</i> UPS				6/20/24 1250													



July 10, 2024

Matt Marshall
Semo Compliance & Remediation
3349 County Road 484
Poplar Bluff, MO 63901
TEL: (574) 718-9812
FAX:



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

RE: east carter

WorkOrder: 24070452

Dear Matt Marshall:

TEKLAB, INC received 1 sample on 7/5/2024 1:59:00 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: Semo Compliance & Remediation

Work Order: 24070452

Client Project: east carter

Report Date: 10-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	8
Chain of Custody	Appended

Client: Semo Compliance & Remediation

Work Order: 24070452

Client Project: east carter

Report Date: 10-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: Semo Compliance & Remediation

Work Order: 24070452

Client Project: east carter

Report Date: 10-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: Semo Compliance & Remediation

Work Order: 24070452

Client Project: east carter

Report Date: 10-Jul-24

Cooler Receipt Temp: 29.8 °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: Semo Compliance & Remediation

Work Order: 24070452

Client Project: east carter

Report Date: 10-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: Semo Compliance & Remediation

Work Order: 24070452

Client Project: east carter

Report Date: 10-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									
24070452-001A	I-3	NELAP		1.0	< 1.0	µg/L	1	07/09/2024 13:45	07/03/2024 15:50



Receiving Check List

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

Client: Semo Compliance & Remediation

Work Order: 24070452

Client Project: east carter

Report Date: 10-Jul-24

Carrier: Employee

Received By: LEH

Completed by:

Reviewed by:

On:

05-Jul-24

Paul Schultz

On:

05-Jul-24

Ellie Hopkins

Pages to follow: Chain of custody

Extra pages included

- Shipping container/cooler in good condition? Yes No Not Present Temp °C **29.8**
- 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. - pschultz - 7/5/2024 2:32:25 PM

APPENDIX C

CREDENTIALS

*Missouri Department of Natural Resources
Public Drinking Water Program
Certificate of Competency*



DS III


WATER DISTRIBUTION LEVEL - III


*This is to Certify that **Matthew R. Marshall** having submitted satisfactory evidence of his/her qualifications, knowledge and experience, has been awarded this certificate of competency in drinking water system operations, as provided for in Public Drinking Water Program, Certification of Public Water System Operators Rule 10 CSR 60-14.020, effective August 1, 2001.*

CERTIFICATION NUMBER 14310

ORIGINAL ISSUE DATE March 8, 2023

CERTIFICATE EXPIRES March 31, 2026


Issued By


Public Drinking Water Branch Chief

RENEWAL STICKER

All training must be completed prior to the expiration date of the certificate. There is no grace period to complete training.