



## **Attachment A:**

## **Analytical Lab Results**

# CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date: 9/4/2024  
Report No.: 703991 - Lead Water  
Project: Jackson Ave  
Project No.: 24-0702

## LEAD WATER SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 7783222	<b>Location:</b> Bottle Filler	<b>Result(ppb):</b> 1.50
<b>Client No.:</b> JA-BF-106	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7783223	<b>Location:</b> Bubbler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> JA-FB-106	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7783224	<b>Location:</b> Cafe - Right Bottle Filler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> JA-BF-CAFE-R	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7783225	<b>Location:</b> Cafe - Right Bubbler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> JA-FB-CAFE-R	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7783226	<b>Location:</b> Cafe - Left Bottle Filler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> JA-BF-CAFE-L	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7783227	<b>Location:</b> Cafe - Left Bubbler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> JA-FB-CAFE-L	* Sample acidified to pH <2.	


<b>Lab No.:</b> 7783228	<b>Location:</b> Gym - Bottle Filler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> JA-BF-GYM	* Sample acidified to pH <2.	


<b>Lab No.:</b> 7783229	<b>Location:</b> Gym - Bubbler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> JA-FB-GYM	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7783230	<b>Location:</b> Kitchen	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> JA-SO-Kitchen	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7783231	<b>Location:</b> 209 - Bubbler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> JA-FB-209	* Sample acidified to pH <2.	

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/23/2024  
Date Analyzed: 09/04/2024  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Report Date: 9/4/2024  
Report No.: 703991 - Lead Water  
Project: Jackson Ave  
Project No.: 24-0702

Client: KAR387

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7783232 Location: 209 - Bottle Filler Result(ppb): <1.00  
Client No.: JA-BF-209 \* Sample acidified to pH <2.

Lab No.: 7783233 Location: Faculty Sink Result(ppb): 1.00  
Client No.: JA-SO-Faculty \* Sample acidified to pH <2.

Lab No.: 7783234 Location: 200 - Left Bottle Filler Result(ppb): <1.00  
Client No.: JA-BF-200-L \* Sample acidified to pH <2.

Lab No.: 7783235 Location: 200 - Left Bubbler Result(ppb): <1.00  
Client No.: JA-FB-200-L \* Sample acidified to pH <2.

Lab No.: 7783236 Location: 200 Right - Bottle Filler Result(ppb): <1.00  
Client No.: JA-BF-200-R \* Sample acidified to pH <2.

Lab No.: 7783237 Location: 200 Right - Bubbler Result(ppb): <1.00  
Client No.: JA-FB-200-R \* Sample acidified to pH <2.


Lab No.: 7783238 Location: Nurse - Water Cooler Result(ppb): <1.00  
Client No.: JA-WC-202 \* Sample acidified to pH <2.


Lab No.: 7783239 Location: 305 - Bottle Filler Result(ppb): <1.00  
Client No.: JA-BF-305 \* Sample acidified to pH <2.

Lab No.: 7783240 Location: 305 - Bubbler Result(ppb): <1.00  
Client No.: JA-FB-305 \* Sample acidified to pH <2.

Lab No.: 7783241 Location: Field Blank Result(ppb): <1.00  
Client No.: JA-Blank \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/23/2024  
Date Analyzed: 09/04/2024  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

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CERTIFICATE OF ANALYSIS

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Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date: 9/4/2024  
Report No.: 703991 - Lead Water  
Project: Jackson Ave  
Project No.: 24-0702

## Appendix to Analytical Report:

**Customer Contact:** Mike Karl  
**Analysis:** AAS-GF - ASTM D3559-15D

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

**iATL Customer Service:** customerservice@iatl.com  
**iATL Office Manager:** ?wchampion@iatl.com  
**iATL Account Representative:** Shirley Clark  
**Sample Login Notes:** See Batch Sheet Attached  
**Sample Matrix:** Water  
**Exceptions Noted:** See Following Pages

### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at [www.iATL.com](http://www.iATL.com) and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

### Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:

- ASTM D3559-15D

Certification:

- NYS-DOH No. 11021

- NJDEP No. 03863

### Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B

- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample

- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB

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CERTIFICATE OF ANALYSIS

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Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/4/2024  
Report No.: 703991 - Lead Water  
Project: Jackson Ave  
Project No.: 24-0702

**Disclaimers / Qualifiers:**

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at [customerservice@iatl.com](mailto:customerservice@iatl.com).

Matrix spiking is performed on each client batch to determine if interferences could impact results. When spike recoveries fall out of acceptable range matrix interference is suspected and samples are diluted until acceptable spike recovery can be achieved. Reporting limits will increase by the same degree as the dilution required.

Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

\* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.



## Chain of Custody

– Environmental Lead –

### Contact Information

Client Company: Karl Environmental  
Office Address: 20 Hawk Rd  
City, State, Zip: Mohnton, PA  
Fax Number: 610-856-5040  
Email Address: ameas@karlenv.com

Project Number: 24-0702  
Project Name: Jackson Ave  
Primary Contact: Angela Meas  
Office Phone: 610-856-7700  
Cell Phone: 484-345-9846

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

### Matrix/Method:

- ☐ Paint by AAS: ASTM D3335-85a, 2009  
☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010  
☐ Air by AAS: NIOSH 7082, 1994  
☐ Soil by AAS: EPA SW 846 (Soil)  
☒ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9  
☐ Other Metals (Cd, Zn, Cr) by AAS  
☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311  
☐ Other \_\_\_\_\_

### Special Instructions:

200.8

### Turnaround Time

Preliminary Results Requested Date: \_\_\_\_\_

☐ Verbal ☐ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day\* ☐ 12 Hour\*\* ☐ 6 Hour\*\* ☐ RUSH\*\*

\* End of next business day unless otherwise specified. \*\* Matrix Dependent. \*\*\*Please notify the lab before shipping\*\*\*

### Chain of Custody

Relinquished (Name/Organization): [Signature]  
Received (Name / iATL): \_\_\_\_\_  
Sample Login (Name / iATL): \_\_\_\_\_  
Analysis(Name(s) / iATL): \_\_\_\_\_  
QA/QC Review (Name / iATL): \_\_\_\_\_  
Archived / Released: \_\_\_\_\_ QA/QC InterLAB Use: \_\_\_\_\_

Date: 8/23/24 Time: \_\_\_\_\_  
Date: 8/23/24 Time: 11:01 AM  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: AUG 23 2024  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

iATL - EV

## Sample Log

—Environmental Lead—

Client: Harl Environmental Project: 24-0702 Jackson Ave

Sampling Date/Time: 8/23/24 7:00 AM

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
JA-BF-106	7783222	Bottle filler				250mL ↓	
JA-FB-106	7783223	Bubbler					
JA-BF-CAFE-R	7783224	Cafe - Right Bottle filler					
JA-FB-CAFE-R	7783225	Cafe - Right Bubbler					
JA-BF-CAFE-L	7783226	Cafe - Left Bottle filler					
JA-FB-CAFE-L	7783227	Cafe - Left Bubbler					
JA-BF-GYM	7783228	Gym - Bottle filler					
JA-FB-GYM	7783229	Gym - Bubbler					
JA-SO-Kitchen	7783230	Kitchen					
JA-FB-209	7783231	209 - <del>Bottle</del> Bubbler					
JA-BF-209	7783232	209 - Bottle filler					
JA-SO-Faculty	7783233	Faculty Sink					
JA-BF-200-L	7783234	200 - Left Bottle filler					
JA-FB-200-L	7783235	200 - Left Bubbler					
JA-BF-200-R	7783236	200 - right Bottle filler					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 Jackson Ave

Sampling Date/Time: 8/23/24 7:00AM

[illegible]

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

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CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/10/2024  
Report No.: 704199 - Lead Water Rev #2, 9/13/2024  
Project: Fairmount  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7785036 Location: Left Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-115L \* Sample acidified to pH <2.

Lab No.: 7785037 Location: Left Bubbler Result(ppb): <1.00  
Client No.: FM-FB-115L \* Sample acidified to pH <2.

Lab No.: 7785038 Location: Right Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-115R \* Sample acidified to pH <2.

Lab No.: 7785039 Location: Right Bubbler Result(ppb): <1.00  
Client No.: FM-FB-115R \* Sample acidified to pH <2.

Lab No.: 7785040 Location: Left Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-106L \* Sample acidified to pH <2.

Lab No.: 7785041 Location: Left Bubbler Result(ppb): <1.00  
Client No.: FM-FB-106L \* Sample acidified to pH <2.


Lab No.: 7785042 Location: Right Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-106R \* Sample acidified to pH <2.


Lab No.: 7785043 Location: Right Bubbler Result(ppb): <1.00  
Client No.: FM-FB-106R \* Sample acidified to pH <2.

Lab No.: 7785044 Location: Left Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-215L \* Sample acidified to pH <2.

Lab No.: 7785045 Location: Left Bubbler Result(ppb): <1.00  
Client No.: FM-FB-215L \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/29/2024  
Date Analyzed: 09/10/2024  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/10/2024  
Report No.: 704199 - Lead Water Rev #2, 9/13/2024  
Project: Fairmount  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7785046 Location: Right Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-215R \* Sample acidified to pH <2.

Lab No.: 7785047 Location: Right Bubbler Result(ppb): <1.00  
Client No.: FM-FB-215R \* Sample acidified to pH <2.

Lab No.: 7785048 Location: Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-206 \* Sample acidified to pH <2.

Lab No.: 7785049 Location: Bubbler Result(ppb): <1.00  
Client No.: FM-FB-206 \* Sample acidified to pH <2.

Lab No.: 7785050 Location: Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-311 \* Sample acidified to pH <2.

Lab No.: 7785051 Location: Bubbler Result(ppb): <1.00  
Client No.: FM-FB-311 \* Sample acidified to pH <2.


Lab No.: 7785052 Location: Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-21 \* Sample acidified to pH <2.

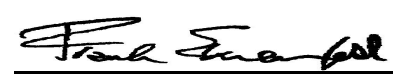
Lab No.: 7785053 Location: Bubbler Result(ppb): <1.00  
Client No.: FM-FB-21 \* Sample acidified to pH <2.

Lab No.: 7785054 Location: Bottle Filler Result(ppb): <1.00  
Client No.: FM-BF-4 \* Sample acidified to pH <2.

Lab No.: 7785055 Location: Bubbler Result(ppb): <1.00  
Client No.: FM-FB-4 \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/29/2024  
Date Analyzed: 09/10/2024  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



Built Environment Testing  
iATL

9000 Commerce Parkway Suite B  
Mt. Laurel, New Jersey 08054  
Telephone: 856-231-9449  
Email: customerservice@iatl.com

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CERTIFICATE OF ANALYSIS

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Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Report Date: 9/10/2024  
Report No.: 704199 - Lead Water      Rev #2, 9/13/2024  
Project: Fairmount  
Project No.: 24-0702

Client: KAR387

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LEAD WATER SAMPLE ANALYSIS SUMMARY

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Lab No.: 7785056

Location: Room 5 Faculty Sink

Result(ppb): <1.00

Client No.: FM-Faculty Sink

\* Sample acidified to pH <2.

Lab No.: 7785057

Location: Field Blank

Result(ppb): <1.00

Client No.: FM-Blank

\* Sample acidified to pH <2.

---

Please refer to the Appendix of this report for further information regarding your analysis.

---

Date Received: 8/29/2024

Date Analyzed: 09/10/2024

Signature:

Analyst: Mark Stewart

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director

## CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

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Report Date: 9/10/2024  
Report No.: 704199 - Lead Water  
Project: Fairmount  
Project No.: 24-0702

## Appendix to Analytical Report:

**Customer Contact:** Mike Karl  
**Analysis:** AAS-GF - ASTM D3559-15D

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**iATL Office Manager:** ?wchampion@iatl.com  
**iATL Account Representative:** Shirley Clark  
**Sample Login Notes:** See Batch Sheet Attached  
**Sample Matrix:** Water  
**Exceptions Noted:** See Following Pages

### General Terms, Warrants, Limits, Qualifiers:

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iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

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### Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:

- ASTM D3559-15D

Certification:

- NYS-DOH No. 11021

- NJDEP No. 03863

### Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B

- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample

- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

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Report Date: 9/10/2024  
Report No.: 704199 - Lead Water  
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Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

\* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.



## Chain of Custody

- Environmental Lead -

### Contact Information

Client Company: Karl Environmental  
Office Address: 20 Launch Rd  
City, State, Zip: Mohnton PA  
Fax Number: 610-856-5040  
Email Address: ameas@karlenv.com

Project Number: 24-0702  
Project Name: Fairmount  
Primary Contact: Angela Meas  
Office Phone: 610-856-7700  
Cell Phone: 484-345-9846

IATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

### Matrix/Method:

- ☐ Paint by AAS: ASTM D3335-85a, 2009  
☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010  
☐ Air by AAS: NIOSH 7082, 1994  
☐ Soil by AAS: EPA SW 846 (Soil)  
☒ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9  
☐ Other Metals (Cd, Zn, Cr) by AAS  
☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311  
☐ Other \_\_\_\_\_

### Special Instructions:

200.8

### Turnaround Time

Preliminary Results Requested Date: \_\_\_\_\_ ☐ Verbal ☐ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day\* ☐ 12 Hour\*\* ☐ 6 Hour\*\* ☐ RUSH\*\*

\* End of next business day unless otherwise specified. \*\* Matrix Dependent. \*\*\*Please notify the lab before shipping\*\*\*

### Chain of Custody

Relinquished (Name/Organization): <u>Angela Meas</u>	Date: <u>8/29/24</u>	Time: _____
Received (Name / IATL): <u>[Signature]</u>	Date: <u>8/29/24</u>	Time: <u>10:30 AM</u>
Sample Login (Name / IATL): _____	Date: _____	Time: _____
Analysis (Name(s) / IATL): _____	Date: _____	Time: _____
QA/QC Review (Name / IATL): _____	Date: _____	Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____	Date: _____	Time: <u>AUG 29 2024</u>

## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 Fairmount

Sampling Date/Time: 8/29/24 6:00 AM

Client Sample #	IATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
FM-BF-115L	7785036	Left Bottle filler				250 mL	
FM-FB-115L	7785037	Left Bubbler				↓	
FM-BF-115R	7785038	Right Bottle filler					
FM-FB-115R	7785039	Right Bubbler					
FM-BF-106L	7785040	Left Bottle filler					
FM-FB-106L	7785041	Left Bubbler					
FM-BF-106R	7785042	Right Bottle filler					
FM-FB-106R	7785043	Right Bubbler					
FM-BF-215L	7785044	Left Bottle filler					
<del>FM-FB-215L</del>	7785045	Left Bubbler					
FM-BF-215R	7785046	Right Bottle filler					
FM-FB-215R	7785047	Right Bubbler					
FM-BF-206	7785048	Bottle filler					
FM-FB-206	7785049	Bubbler					
FM-BF-311	7785050	Bottle filler					

\* - Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* - Insufficient Sample Provided to Analyze (<50mg) \*\*\* - Matrix / Substrate Interference Possible

FB - Method Requires the submittal of blanks. ML - Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by IATL to expedite procedures by clients based upon the above data. IATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 Fairmount

Sampling Date/Time: 8/29/24 6:00 Am

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
FM-FB-311	7785051	Bibber				250ml	
FM-BF-21	7785052	Bottle filter				↓	
FM-FB-21	7785053	Bibber					
FM-BF-4	7785054	Bottle filter					
FM-FB-4	7785055	Bibber					
FM-Faulty-Sink	7785056	Room 5 Faulty Sink					
FM-Blank	7785057	field blank					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.





CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/11/2024  
Report No.: 704198 - Lead Water  
Project: Parker  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7785012      Location: Sink      Result(ppb): <1.00  
Client No.: NP-SO-Kitchen      \* Sample acidified to pH <2.

Lab No.: 7785013      Location: Bubbler      Result(ppb): <1.00  
Client No.: NP-FB-Cafe      \* Sample acidified to pH <2.

Lab No.: 7785014      Location: Bottle Filler      Result(ppb): <1.00  
Client No.: NP-BF-Cafe      \* Sample acidified to pH <2.

Lab No.: 7785015      Location: Bottle Filler      Result(ppb): <1.00  
Client No.: NP-BF-201      \* Sample acidified to pH <2.

Lab No.: 7785016      Location: Bubbler      Result(ppb): <1.00  
Client No.: NP-FB-201      \* Sample acidified to pH <2.

Lab No.: 7785017      Location: Bottle Filler      Result(ppb): <1.00  
Client No.: NP-FB1-Gym      \* Sample acidified to pH <2.


Lab No.: 7785018      Location: Bubbler      Result(ppb): <1.00  
Client No.: NP-FB2-Gym      \* Sample acidified to pH <2.


Lab No.: 7785019      Location: Bottle Filler      Result(ppb): <1.00  
Client No.: NP-FB1-111      \* Sample acidified to pH <2.

Lab No.: 7785020      Location: Bubbler      Result(ppb): <1.00  
Client No.: NP-FB2-111      \* Sample acidified to pH <2.

Lab No.: 7785021      Location: Bottle Filler      Result(ppb): <1.00  
Client No.: NP-FB1-102      \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/29/2024  
Date Analyzed: 09/10/2024  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Report Date: 9/11/2024  
Report No.: 704198 - Lead Water  
Project: Parker  
Project No.: 24-0702

Client: KAR387

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7785022      Location: Bubbler      Result(ppb): <1.00  
Client No.: NP-FB2-102      \* Sample acidified to pH <2.

Lab No.: 7785023      Location: Bottle Filler      Result(ppb): <1.00  
Client No.: NP-BF-131      \* Sample acidified to pH <2.

Lab No.: 7785024      Location: Bubbler      Result(ppb): <1.00  
Client No.: NP-FB-131      \* Sample acidified to pH <2.

Lab No.: 7785025      Location: Bottle Filler      Result(ppb): <1.00  
Client No.: NP-BF-309      \* Sample acidified to pH <2.


Lab No.: 7785026      Location: Bubbler      Result(ppb): <1.00  
Client No.: NP-FB-309      \* Sample acidified to pH <2.


Lab No.: 7785027      Location: Bottle Filler      Result(ppb): <1.00  
Client No.: NP-BF-319      \* Sample acidified to pH <2.

Lab No.: 7785028      Location: Bubbler      Result(ppb): <1.00  
Client No.: NP-FB-319      \* Sample acidified to pH <2.

Lab No.: 7785029      Location: Bottle Filler      Result(ppb): <1.00  
Client No.: NP-BF-413      \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/29/2024  
Date Analyzed: 09/10/2024  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



Built Environment Testing  
iATL

9000 Commerce Parkway Suite B  
Mt. Laurel, New Jersey 08054  
Telephone: 856-231-9449  
Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Report Date: 9/11/2024  
Report No.: 704198 - Lead Water  
Project: Parker  
Project No.: 24-0702

Client: KAR387

#### LEAD WATER SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 7785030	<b>Location:</b> Bubbler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> NP-FB-413	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7785031	<b>Location:</b> Bottle Filler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> NP-BF-416	* Sample acidified to pH <2.	


<b>Lab No.:</b> 7785032	<b>Location:</b> Bubbler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> NP-FB-416	* Sample acidified to pH <2.	


<b>Lab No.:</b> 7785033	<b>Location:</b> Bottle Filler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> NP-BF-401	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7785034	<b>Location:</b> Bubbler	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> NP-FB-401	* Sample acidified to pH <2.	

<b>Lab No.:</b> 7785035	<b>Location:</b> Field Blank	<b>Result(ppb):</b> <1.00
<b>Client No.:</b> NP-Blank	* Sample acidified to pH <2.	

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/29/2024  
Date Analyzed: 09/11/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

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CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date: 9/11/2024  
Report No.: 704198 - Lead Water  
Project: Parker  
Project No.: 24-0702

## Appendix to Analytical Report:

**Customer Contact:** Mike Karl  
**Analysis:** AAS-GF - ASTM D3559-15D

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

**iATL Customer Service:** customerservice@iatl.com  
**iATL Office Manager:** ?wchampion@iatl.com  
**iATL Account Representative:** Shirley Clark  
**Sample Login Notes:** See Batch Sheet Attached  
**Sample Matrix:** Water  
**Exceptions Noted:** See Following Pages

### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at [www.iATL.com](http://www.iATL.com) and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

### Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:

- ASTM D3559-15D

Certification:

- NYS-DOH No. 11021

- NJDEP No. 03863

### Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B

- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample

- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB

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CERTIFICATE OF ANALYSIS

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Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Report Date: 9/11/2024  
Report No.: 704198 - Lead Water  
Project: Parker  
Project No.: 24-0702

Client: KAR387

**Disclaimers / Qualifiers:**

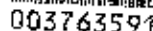
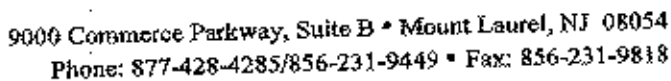
There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at [customerservice@iatl.com](mailto:customerservice@iatl.com).

Matrix spiking is performed on each client batch to determine if interferences could impact results. When spike recoveries fall out of acceptable range matrix interference is suspected and samples are diluted until acceptable spike recovery can be achieved. Reporting limits will increase by the same degree as the dilution required.

Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

\* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.



Project Number: 24-0702  
Project Name: Parker  
Primary Contact: Angela Meas  
Office Phone: 610-856-7700  
Cell Phone: 484-345-9846

2008

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## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 Parker

Sampling Date/Time: 8/29/24 7:00 AM

Client Sample #	IATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
NP-SO-KITCHEN	7785012	Sink				250ml	
NP-FB-CAFE	7785013	Bubbler				↓	
NP-BF-CAFE	7785014	Bottle filler					
NP-BF-201	7785015	Bottle filler					
NP-FB-201	7785016	Bubbler					
NP-FB1-6YM	7785017	Bottle filler					
NP-FB2-6YM	7785018	Bubbler					
NP-FB1-111	7785019	Bottle filler					
NP-FB2-111	7785020	Bubbler					
NP-FB1-02	7785021	Bottle filler					
NP-FB2-02	7785022	Bubbler					
NP-BF-313	7785023	Bottle filler					
NP-FB-313	7785024	Bubbler					
NP-BF-309	7785025	Bottle filler					
NP-FB-309	7785026	Bubbler					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by IATL to expedite procedures by clients based upon the above data. IATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 Parker

Sampling Date/Time: 8/29/24 7:00 Am

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
NP-BF-319	7785027	Bottle filler				250ml	
NP-FB-319	7785028	Bubbler				↓	
NP-BF-413	7785029	Bottle filler					
NP-FB-413	7785030	Bubbler					
NP-BF-416	7785031	Bottle filler					
NP-FB-416	7785032	Bubbler					
NP-BF-401	7785033	Bottle filler					
NP-FB-401	7785034	Bubbler					
NP-Blank	7785035	Field blank					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.





CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/6/2024  
Report No.: 703990 - Lead Water  
Project: Hillers School  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7783187      Location: Outside Custodial Office - Bottle Filler      Result(ppb): <1.00  
Client No.: FH-BF-Custodial      \* Sample acidified to pH <2.

Lab No.: 7783188      Location: Outside Custodial Office - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-Custodial      \* Sample acidified to pH <2.

Lab No.: 7783189      Location: Outside 214 - Bottle Filler      Result(ppb): <1.00  
Client No.: FH-BF-214      \* Sample acidified to pH <2.

Lab No.: 7783190      Location: Outside 214 - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-214      \* Sample acidified to pH <2.

Lab No.: 7783191      Location: Outside 205 - Bottle Filler - Left      Result(ppb): <1.00  
Client No.: FH-BF-205-Left 1      \* Sample acidified to pH <2.

Lab No.: 7783192      Location: Outside 205 - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-205-Left 1      \* Sample acidified to pH <2.


Lab No.: 7783193      Location: Outside 205 - Bottle Filler - Right      Result(ppb): <1.00  
Client No.: FH-BF-205-Right 2      \* Sample acidified to pH <2.


Lab No.: 7783194      Location: Outside 205 - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-205-Right 2      \* Sample acidified to pH <2.

Lab No.: 7783195      Location: Outside 113 - Bottle Filler      Result(ppb): <1.00  
Client No.: FH-BF-113      \* Sample acidified to pH <2.

Lab No.: 7783196      Location: Outside 113 - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-113      \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/23/2024  
Date Analyzed: 09/06/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date: 9/6/2024  
Report No.: 703990 - Lead Water  
Project: Hillers School  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7783197      Location: Beside 114 - Bottle Filler      Result(ppb): <1.00  
Client No.: FH-BF-114      \* Sample acidified to pH <2.

Lab No.: 7783198      Location: Beside 114 - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-114      \* Sample acidified to pH <2.

Lab No.: 7783199      Location: Outside 303 - Bottle Filler      Result(ppb): <1.00  
Client No.: FH-BF-303      \* Sample acidified to pH <2.

Lab No.: 7783200      Location: Outside 303 - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-303      \* Sample acidified to pH <2.

Lab No.: 7783201      Location: 304 - Bottle Filler      Result(ppb): <1.00  
Client No.: FH-BF-304      \* Sample acidified to pH <2.

Lab No.: 7783202      Location: 304 - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-304      \* Sample acidified to pH <2.


Lab No.: 7783203      Location: Outside Auditorium Left - Bottle Filler      Result(ppb): <1.00  
Client No.: FH-BF-AUD-LEFT      \* Sample acidified to pH <2.


Lab No.: 7783204      Location: Outside Auditorium Left - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-AUD-LEFT      \* Sample acidified to pH <2.

Lab No.: 7783205      Location: Outside Auditorium Right - Bottle Filler      Result(ppb): <1.00  
Client No.: FH-BF-AUD-RIGHT      \* Sample acidified to pH <2.

Lab No.: 7783206      Location: Outside Auditorium Right - Bubblers      Result(ppb): <1.00  
Client No.: FH-WC-AUD-RIGHT      \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/23/2024  
Date Analyzed: 09/06/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/6/2024  
Report No.: 703990 - Lead Water  
Project: Hillers School  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7783207 Location: Health Hall Left - Bottle Filler Result(ppb): <1.00  
Client No.: FH-BF-Health Hall - Left \* Sample acidified to pH <2.

Lab No.: 7783208 Location: Health Hall Left - Bubblers Result(ppb): <1.00  
Client No.: FH-WC-Health Hall - Left \* Sample acidified to pH <2.

Lab No.: 7783209 Location: Health Hall Right - Bottle Filler Result(ppb): <1.00  
Client No.: FH-BF-Health Hall - Right \* Sample acidified to pH <2.

Lab No.: 7783210 Location: Health Hall Right - Bubblers Result(ppb): <1.00  
Client No.: FH-WC-Health Hall - Right \* Sample acidified to pH <2.

Lab No.: 7783211 Location: Kindergarten Hall Left - Bottle Filler Result(ppb): <1.00  
Client No.: FH-BF-K Hall - Left \* Sample acidified to pH <2.

Lab No.: 7783212 Location: Kindergarten Hall Left - Bubblers Result(ppb): <1.00  
Client No.: FH-WC-K Hall - Left \* Sample acidified to pH <2.


Lab No.: 7783213 Location: Kindergarten Hall Right - Bottle Filler Result(ppb): <1.00  
Client No.: FH-BF-K Hall - Right \* Sample acidified to pH <2.


Lab No.: 7783214 Location: Kindergarten Hall Right - Bubblers Result(ppb): <1.00  
Client No.: FH-WC-K Hall - Right \* Sample acidified to pH <2.

Lab No.: 7783215 Location: 413 - Bottle Filler Result(ppb): <1.00  
Client No.: FH-BF-413 \* Sample acidified to pH <2.

Lab No.: 7783216 Location: 413 - Bubblers Result(ppb): <1.00  
Client No.: FH-WC-413 \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/23/2024  
Date Analyzed: 09/06/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



### CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Report Date: 9/6/2024  
Report No.: 703990 - Lead Water  
Project: Hillers School  
Project No.: 24-0702

Client: KAR387

### LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7783217      Location: 401 - Bottle Filler      Result(ppb): <1.00  
Client No.: FH-BF-401      \* Sample acidified to pH <2.


Lab No.: 7783218      Location: 401 - Bubbler      Result(ppb): <1.00  
Client No.: FH-WC-401      \* Sample acidified to pH <2.


Lab No.: 7783219      Location: Faculty Water Cooler      Result(ppb): <1.00  
Client No.: FH-BF-Faculty      \* Sample acidified to pH <2.

Lab No.: 7783220      Location: Faculty Sink      Result(ppb): <1.00  
Client No.: FH-WC-Faculty      \* Sample acidified to pH <2.

Lab No.: 7783221      Location: Field Blank      Result(ppb): <1.00  
Client No.: FH-Blank      \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/23/2024  
Date Analyzed: 09/06/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date: 9/6/2024  
Report No.: 703990 - Lead Water  
Project: Hillers School  
Project No.: 24-0702

## Appendix to Analytical Report:

**Customer Contact:** Mike Karl  
**Analysis:** AAS-GF - ASTM D3559-15D

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

**iATL Customer Service:** customerservice@iatl.com  
**iATL Office Manager:** ?wchampion@iatl.com  
**iATL Account Representative:** Shirley Clark  
**Sample Login Notes:** See Batch Sheet Attached  
**Sample Matrix:** Water  
**Exceptions Noted:** See Following Pages

### General Terms, Warrants, Limits, Qualifiers:

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iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

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This report shall not be reproduced except in full, without written approval of the laboratory.

### Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:

- ASTM D3559-15D

Certification:

- NYS-DOH No. 11021

- NJDEP No. 03863

### Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B

- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample

- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB

---

CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/6/2024  
Report No.: 703990 - Lead Water  
Project: Hillers School  
Project No.: 24-0702

**Disclaimers / Qualifiers:**

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at [customerservice@iatl.com](mailto:customerservice@iatl.com).

Matrix spiking is performed on each client batch to determine if interferences could impact results. When spike recoveries fall out of acceptable range matrix interference is suspected and samples are diluted until acceptable spike recovery can be achieved. Reporting limits will increase by the same degree as the dilution required.

Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

\* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.



## Chain of Custody

– Environmental Lead –

### Contact Information

Client Company: Karl Environmental  
Office Address: 20 Lasick Rd  
City, State, Zip: Wilmington, PA  
Fax Number: 610-856-5410  
Email Address: ameas@karlenv.com

Project Number: 24-0702  
Project Name: Hillers School  
Primary Contact: Angela Meas  
Office Phone: 610-856-7700  
Cell Phone: 484-345-9846

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

### Matrix/Method:

- ☐ Paint by AAS: ASTM D3335-85a, 2009  
☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010  
☐ Air by AAS: NIOSH 7082, 1994  
☐ Soil by AAS: EPA SW 846 (Soil)  
☒ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9  
☐ Other Metals (Cd, Zn, Cr) by AAS  
☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311  
☐ Other \_\_\_\_\_

### Special Instructions:

200.8

### Turnaround Time

Preliminary Results Requested Date: \_\_\_\_\_ ☐ Verbal ☐ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day\* ☐ 12 Hour\*\* ☐ 6 Hour\*\* ☐ RUSH\*\*

\* End of next business day unless otherwise specified. \*\* Matrix Dependent. \*\*\*Please notify the lab before shipping\*\*\*

### Chain of Custody

Relinquished (Name/Organization): Angela Meas  
Received (Name / iATL): [Signature]  
Sample Login (Name / iATL): \_\_\_\_\_  
Analysis(Name(s) / iATL): \_\_\_\_\_  
QA/QC Review (Name / iATL): \_\_\_\_\_  
Archived / Released: \_\_\_\_\_ QA/QC InterLAB Use: \_\_\_\_\_

Date: 8/23/24 Time: 11:01 am  
Date: 8/23/24 Time: 11:01 am  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: AUG 23 2024  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

**RECEIVED**  
**iATL - PA** [Signature]

## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 Fanny Hillers

Sampling Date/Time: 8/23/24 6:00 AM

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
FH-BF-Custodial	7783187	Outside Custodial office - Bottle filler				250 mL	
FH-WC-Custodial	7783188	Outside Custodial office - bubbler				↓	
FH-BF-214	7783189	Outside 214 Bottle filler					
FH-WC-214	7783190	Outside 214 Bubbler					
FH-BF-205- Left1	7783191	Outside 205 Bottle filler - left					
FH-WC-205- Left1	7783192	Outside 205 Bubbler - left					
FH-BF-205- Right2	7783193	Outside 205 Bottle filler - right					
FH-WC-205- Right2	7783194	Outside 205 Bubbler - right					
FH-BF-113	7783195	Outside 113 Bottle filler					
FH-WC-113	7783196	Outside 113 <del>Bottle filler</del> bubbler					
FH-BF-114	7783197	Beside 114 Bottle filler					
<del>FH-WC-114</del>	7783198	Beside 114 Bubbler					
FH-BF-303	7783199	Outside 303 Bottle filler					
FH-WC-303	7783200	Outside 303 Bubbler					
FH-BF-304	7783201	304 - Bottle filler					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.



## Sample Log

-Environmental Lead -

Client: Harl Environmental Project: 24-0702 Fanny Hillers

Sampling Date/Time: 8/23/24 6:00 AM

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
FH-WC-304	7783202	Left Bubble				250 mL	
FH-BF-AUD- LEFT	7783203	Outside Auditorium Left Bottle filler				↓	
FH-WC-AUD- LEFT	7783204	Outside Auditorium Left Bubble					
FH-BF-AUD- RIGHT	7783205	Outside Auditorium Right Bottle filler					
FH-WC-AUD- RIGHT	7783206	Outside Auditorium Right Bubble					
FH-BF-Health Hall-Left	7783207	Health Hall Left Bottle filler					
FH-WC-Health Hall-Left	7783208	Health Hall Left Bubble					
FH-BF-Health Hall-Right	7783209	Health Hall Right Bottle filler					
FH-WC-Health Hall-Right	7783210	Health Hall Right Bubble					
FH-BF-K Hall- Left	7783211	Kindergarten Hall Left Bottle filler					
FH-WC-K Hall- Left	7783212	Kindergarten Hall Left Bubble					
FH-BF-K Hall- Right	7783213	Kindergarten Hall Right Bottle filler					
FH-WC-K Hall- Right	7783214	Kindergarten Hall Right Bubble					
FH-BF-413	7783215	413 Bottle filler					
FH-WC-413	7783216	413 Bubble					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

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CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date:  
Report No.: 703935 - Lead Water  
Project: Hackensack MS  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7782860      Location: 306 Sink      Result(ppb): 9.60  
Client No.: HM-SO-306      \* Sample acidified to pH <2.

Lab No.: 7782861      Location: 304 Bubblers      Result(ppb): <1.00  
Client No.: HM-FB-304      \* Sample acidified to pH <2.

Lab No.: 7782862      Location: Cafe Bubblers      Result(ppb): <1.00  
Client No.: HM-BF-CAFE      \* Sample acidified to pH <2.

Lab No.: 7782863      Location: 310 Bottle Filler      Result(ppb): <1.00  
Client No.: HM-BF-310      \* Sample acidified to pH <2.

Lab No.: 7782864      Location: 304 Bottle Filler      Result(ppb): <1.00  
Client No.: HM-BF-304      \* Sample acidified to pH <2.

Lab No.: 7782865      Location: 219 Bottle Filler      Result(ppb): 2.50  
Client No.: HM-BF-219      \* Sample acidified to pH <2.

Lab No.: 7782866      Location: 224 Bottle Filler      Result(ppb): <1.00  
Client No.: HM-BF-224      \* Sample acidified to pH <2.

Lab No.: 7782867      Location: 236 Bottle Filler      Result(ppb): <1.00  
Client No.: HM-BF-236      \* Sample acidified to pH <2.

Lab No.: 7782868      Location: 241 Bottle Filler      Result(ppb): <1.00  
Client No.: HM-BF-241      \* Sample acidified to pH <2.

Lab No.: 7782869      Location: 131 Bottle Filler      Result(ppb): <1.00  
Client No.: HM-BF-131      \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/22/2024  
Date Analyzed: 09/06/2024

Signature: \_\_\_\_\_  
Analyst: \_\_\_\_\_

Approved By:

Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date:  
Report No.: 703935 - Lead Water  
Project: Hackensack MS  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7782870 Location: Right Bank Right Bottle Filler Result(ppb): <1.00  
Client No.: HM-BF-LOBBY-RR \* Sample acidified to pH <2.

Lab No.: 7782871 Location: Right Bank Right Bubbler Result(ppb): <1.00  
Client No.: HM-WC-LOBBY-RR \* Sample acidified to pH <2.

Lab No.: 7782872 Location: Right Bank Left Bottle Filler Result(ppb): <1.00  
Client No.: HM-BF-LOBBY-RL \* Sample acidified to pH <2.

Lab No.: 7782873 Location: Right Bank Left Bubbler Result(ppb): <1.00  
Client No.: HM-WC-LOBBY-RL \* Sample acidified to pH <2.

Lab No.: 7782874 Location: 117 Bubbler Result(ppb): <1.00  
Client No.: HM-FB-117 \* Sample acidified to pH <2.

Lab No.: 7782875 Location: 219 Annex Bottle Filler Result(ppb): <1.00  
Client No.: HM-FD-219ANNEX \* Sample acidified to pH <2.

Lab No.: 7782876 Location: 219 Annex Bubbler Result(ppb): <1.00  
Client No.: HM-FB1-219ANNEX \* Sample acidified to pH <2.

Lab No.: 7782877 Location: 203 Bubbler Result(ppb): <1.00  
Client No.: HM-FB-203 \* Sample acidified to pH <2.

Lab No.: 7782878 Location: 1st Floor Annex Elevator Bubbler Result(ppb): <1.00  
Client No.: HM-FB-ELEVATOR \* Sample acidified to pH <2.

Lab No.: 7782879 Location: 1st Floor Annex Elevator Bottle Filler Result(ppb): <1.00  
Client No.: HM-BF-ELEVATOR \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/22/2024  
Date Analyzed: 09/06/2024

Signature: \_\_\_\_\_  
Analyst: \_\_\_\_\_

Approved By:

Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date:  
Report No.: 703935 - Lead Water  
Project: Hackensack MS  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7782880 Location: 202 Annex Bubbler Result(ppb): <1.00  
Client No.: HM-FB-202ANNEX \* Sample acidified to pH <2.

Lab No.: 7782881 Location: 2022 Annex Bottle Filler Result(ppb): <1.00  
Client No.: HM-BF-202ANNEX \* Sample acidified to pH <2.  
Note: Sample turbidity >1.0 NTU. Does not meet Federal and NJ State Primary and Secondary Drinking Water Standards.

Lab No.: 7782882 Location: 110 Annex Bubbler Result(ppb): <1.00  
Client No.: HM-FB1-110ANNEX \* Sample acidified to pH <2.

Lab No.: 7782883 Location: 110 Annex Bottle Filler Result(ppb): <1.00  
Client No.: HM-FB2-110ANNEX \* Sample acidified to pH <2.

Lab No.: 7782884 Location: 219 Bubbler Result(ppb): 2.40  
Client No.: HM-FB-219 \* Sample acidified to pH <2.

Lab No.: 7782885 Location: 224 Bubbler Result(ppb): <1.00  
Client No.: HM-FB-224 \* Sample acidified to pH <2.

Lab No.: 7782886 Location: 236 Bubbler Result(ppb): <1.00  
Client No.: HM-FB-236 \* Sample acidified to pH <2.

Lab No.: 7782887 Location: 241 Bubbler Result(ppb): <1.00  
Client No.: HM-FB-241 \* Sample acidified to pH <2.


Lab No.: 7782888 Location: 203 Bottle Filler Result(ppb): <1.00  
Client No.: HM-BF-203 \* Sample acidified to pH <2.

Lab No.: 7782889 Location: 310 Bubbler Result(ppb): <1.00  
Client No.: HM-FB-310 \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/22/2024  
Date Analyzed: 09/06/2024

Signature: \_\_\_\_\_  
Analyst: \_\_\_\_\_

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date:  
Report No.: 703935 - Lead Water  
Project: Hackensack MS  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7782890      Location: Blank      Result(ppb): <1.00  
Client No.: HM-BLANK      \* Sample acidified to pH <2.

Lab No.: 7782891      Location: Nurse Sink      Result(ppb): 1.00  
Client No.: HM-SO-NURSE      \* Sample acidified to pH <2.

Lab No.: 7782892      Location: Cafe Bubbler      Result(ppb): <1.00  
Client No.: HM-FB-CAFE      \* Sample acidified to pH <2.

Lab No.: 7782893      Location: Left Bank Left Bubbler      Result(ppb): <1.00  
Client No.: HM-FB2-GYL      \* Sample acidified to pH <2.

Lab No.: 7782894      Location: Left Bank Right Bubbler      Result(ppb): <1.00  
Client No.: HM-FB1-GYMLOBBY      \* Sample acidified to pH <2.

Lab No.: 7782895      Location: Ice Machine      Result(ppb): <1.00  
Client No.: HM-ICM-KIT      \* Sample acidified to pH <2.

Lab No.: 7782896      Location: Food Prep Sink      Result(ppb): <1.00  
Client No.: HM-SO1-KIT      \* Sample acidified to pH <2.

Lab No.: 7782897      Location: Left Bank Left Bottle Filler      Result(ppb): <1.00  
Client No.: HM-FB4-GYL      \* Sample acidified to pH <2.

Lab No.: 7782898      Location: Left Bank Right Bottle Filler      Result(ppb): <1.00  
Client No.: HM-FB3-GYL      \* Sample acidified to pH <2.

Lab No.: 7782899      Location: 131 Bubbler      Result(ppb): <1.00  
Client No.: HM-FB-131      \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/22/2024  
Date Analyzed: 09/06/2024

Signature: \_\_\_\_\_  
Analyst: \_\_\_\_\_

Approved By:

Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date:  
Report No.: 703935 - Lead Water  
Project: Hackensack MS  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7782900  
Client No.: HM-SO1-116A

Location: 116 Left Sink  
\* Sample acidified to pH <2.

Result(ppb): 1.00

Lab No.: 7782901  
Client No.: HM-SO2-116A

Location: 116 Right Sink  
\* Sample acidified to pH <2.

Result(ppb): 1.00

Lab No.: 7782902  
Client No.: HM-FB1-BL

Location: Girl's Locker Bubbler  
\* Sample acidified to pH <2.

Result(ppb): <1.00

Lab No.: 7782903  
Client No.: HM-FB2-BL

Location: Girl's Locker Bottle Filler  
\* Sample acidified to pH <2.

Result(ppb): <1.00

Lab No.: 7782904  
Client No.: HM-BF-117

Location: 117 Bottle Filler  
\* Sample acidified to pH <2.

Result(ppb): <1.00

Lab No.: 7782905  
Client No.: HM-BF-BLR

Location: Boy's Locker Bottle Filler  
\* Sample acidified to pH <2.

Result(ppb): <1.00

Lab No.: 7782906  
Client No.: HM-FB-BLR

Location: Boy's Locker Bubbler  
\* Sample acidified to pH <2.

Result(ppb): <1.00

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/22/2024  
Date Analyzed: 09/06/2024

Signature: \_\_\_\_\_  
Analyst: \_\_\_\_\_

Approved By:

Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date:  
Report No.: 703935 - Lead Water  
Project: Hackensack MS  
Project No.: 24-0702

## Appendix to Analytical Report:

**Customer Contact:** Mike Karl  
**Analysis:** AAS-GF - ASTM D3559-15D

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

**iATL Customer Service:** customerservice@iatl.com  
**iATL Office Manager:** ?wchampion@iatl.com  
**iATL Account Representative:** Shirley Clark  
**Sample Login Notes:** See Batch Sheet Attached  
**Sample Matrix:** Water  
**Exceptions Noted:** See Following Pages

### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at [www.iATL.com](http://www.iATL.com) and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

### Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:

- ASTM D3559-15D

Certification:

- NYS-DOH No. 11021

- NJDEP No. 03863

### Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B

- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample

- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB





---

CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date:  
Report No.: 703935 - Lead Water  
Project: Hackensack MS  
Project No.: 24-0702

**Disclaimers / Qualifiers:**

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Matrix spiking is performed on each client batch to determine if interferences could impact results. When spike recoveries fall out of acceptable range matrix interference is suspected and samples are diluted until acceptable spike recovery can be achieved. Reporting limits will increase by the same degree as the dilution required.

Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

\* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.

## Chain of Custody

— Environmental Lead —



### Contact Information

Client Company: Karl Environmental Project Number: 24-0702  
Office Address: 20 Lauck Rd. Project Name: Hackensack middle school  
City, State, Zip: Mohnton, PA 19540 Primary Contact: Sean Kennedy  
Fax Number: 610-856-5040 Office Phone: 610-856-7700  
Email Address: skennedy@karlenv.com & dcorbano@karlenv.com Cell Phone: 484-269-7870

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

### Matrix/Method:

- ☐ Paint by AAS: ASTM D3335-85a, 2009  
☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010  
☐ Air by AAS: NIOSH 7082, 1994  
☐ Soil by AAS: EPA SW 846 (Soil)  
☒ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9  
☐ Other Metals (Cd, Zn, Cr) by AAS  
☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311  
☐ Other \_\_\_\_\_

### Special Instructions:

200.8

### Turnaround Time

Preliminary Results Requested Date: \_\_\_\_\_ ☐ Verbal ☒ Email ☐ Fax

Specific date / time  
☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day\* ☐ 12 Hour\*\* ☐ 6 Hour\*\* ☐ RUSH\*\*

\* End of next business day unless otherwise specified. \*\* Matrix Dependent. \*\*\*Please notify the lab before shipping\*\*\*

### Chain of Custody

Relinquished (Name/Organization): [Signature] Date: 8/22/24 Time: 10:00 AM  
Received (Name / iATL): [Signature] Date: 8/22/24 Time: 10:00 AM  
Sample Login (Name / iATL): \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Analysis(Name(s) / iATL): \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
QA/QC Review (Name / iATL): \_\_\_\_\_ Date: \_\_\_\_\_ Time: AUG 22 2024  
Archived / Released: \_\_\_\_\_ QA/QC InterLAB Use: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 Middle School

Sampling Date/Time: 8/22/24

Client Sample #	IATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HM-SO-306	7782860	306 Sink				250ml	
HM-FB-304	7782861	304 Bubbler					
HM-BF-CAFE	7782862	Cafe Bubbler					
HM-BF-310	7782863	310 Bottle Filler					
HM-BF-304	7782864	304 Bottle Filler					
HM-BF-219	7782865	219 Bottle Filler					
HM-BF-224	7782866	224 Bottle Filler					
HM-BF-236	7782867	236 Bottle Filler					
HM-BF-241	7782868	241 Bottle Filler					
HM-BF-131	7782869	131 Bottle Filler					
HM-BF-Lobby-RL	7782870	Right bank right bottle filler					
HM-UX-Lobby-RL	7782871	Right bank right bubbler					
HM-BF-Lobby-RL	7782872	Right bank left bottle filler					
HM-UX-Lobby-RL	7782873	Right bank left bubbler					
HM-FB-117	7782874	117 Bubbler					

\* - Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* - Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by IATL to expedite procedures by clients based upon the above data. IATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

## Sample Log

—Environmental Lead—

Client: Karl Environmental/ Project: 24-0702 middle school

Sampling Date/Time: 8/22/24

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HM-FB-219 ANNEX	7782875	219 annex Bottle Filler				280m <sup>2</sup>	
HM-FB1-219 ANNEX	7782876	219 annex Bubbler					
HM-FB-203	7782877	203 Bubbler					
HM-FB-ELEVATOR	7782878	1st floor annex elevator bubbler					
HM-BE-ELEVATOR	7782879	1st floor annex elevator bottle filler					
HM-FB-202 ANNEX	7782880	202 annex Bubbler					
HM-BE-202 ANNEX	7782881	202 annex Bottle Filler					
HM-FB1-110 ANNEX	7782882	110 annex bubbler					
HM-FB2-110 ANNEX	7782883	110 annex bottle filler					
HM-FB-219	7782884	219 Bubbler					
HM-FB-224	7782885	224 Bubbler					
HM-FB-236	7782886	236 Bubbler					
HM-FB-241	7782887	241 Bubbler					
HM-BE-203	7782888	203 Bottle Filler					
HM-FB-310	7782889	310 Bubbler					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submission of blank(s). ML = Multi Layered Sample, May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 middle school

Sampling Date/Time: 8/22/24

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HM-BLANK	7782890	Blank				250ml	
HM-SO-NURSE	7782891	Nurse sinks					
HM-FB-CAFE	7782892	Cafe bubbler					
HM-FB2-GYL	7782893	Left bank left bubbler					
HM-FB1-GYMLOCK	7782894	Left bank right bubbler					
HM-ICM-KIT	7782895	Ice machine					
HM-SO1-KIT	7782896	Food prep sink					
HM-FB4-GYL	7782897	Left bank left bottle filler					
HM-FB3-GYL	7782898	Left bank right bottle filler					
HM-FB-131	7782899	131 Bubbler					
HM-SO1-116A	7782900	116 left sink					
HM-SO2-116A	7782901	116 right sink					
<del>HM-FB-GYM</del>							
HM-FB1-BL	7782902	Girl's locker bubbler					
HM-FB2-BL	7782903	Girl's locker bottle filler					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<30mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the substitution of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.



Middle school

C O C	Sample I.D.	Type of Collection Point	Sampled?	Time	Notes
✓	HM-BLANK	Field Blank			
	HM-SO-MAIN OFFICE	Sink	X		DNE
	HM-WC-MO	Water Cooler			DNE
✓	HM-SO-NURSE	Sink	✓✓	7:12	
✓	HM-FB-CAFE	Fountain Bubbler	✓✓	8:10	
✓	HM-FB2-GYL	Fountain Bubbler	✓✓	8:55	left bank
✓	HM-FB1-GYM LOBBY	Fountain Bubbler	✓✓	8:55	left bank
✓	HM-ICM-KIT	Ice Machine	✓✓	8:03	left bank @ 48
	HM-SO5-KIT	Sink	X		Nut P
	HM-SO4-KIT	Sink	X		
	HM-SO3-KIT	Sink	X		
	HM-SO2-KIT	Sink	X		
✓	HM-SO1-KIT	Sink	✓✓	8:01	② Read prop
✓	HM-FB4-GYL	Fountain Bubbler	✓✓	8:55	left bank left BF
✓	HM-FB3-GYL	Fountain Bubbler	✓✓	8:55	left bank ② BF
✓	HM-FB-131	Fountain Bubbler	✓✓	7:11	
✓	HM-SO1-116A	Sink	✓✓	7:16	②
✓	HM-SO2-116A	Sink	✓✓	7:16	②
	HM-FB-GYM	Fountain Bubbler			
✓	HM-FB1-BL	Fountain Bubbler	✓✓	7:57	Girls locker
✓	HM-FB2-BL	Bottle Filler	✓✓	7:57	Girls locker
✓	HM-FB1-110 ANNEX	Water Cooler	✓✓	7:25	Girls
✓	HM-FB2-110 ANNEX	Bottle Filler	✓✓	7:25	
	HM-FB1-134N ANNEX	Water Cooler			
	HM-FB2-134N ANNEX	Bottle Filler			
	HM-FB-214 ANNEX	Fountain Bubbler			
✓	HM-FB2-214 ANNEX	Water Cooler	✓✓		
✓	HM-FB1-214 ANNEX	Bottle Filler	✓✓		
✓	HM-FB-203	Fountain Bubbler	✓✓	7:32	

✓ HM-FB-Elevator  
 ✓ HM-BF-Elevator  
 ✓ HM-FB-202 ANNEX  
 ✓ HM-BF-202-ANNEX

Annex elevator



Built Environment Testing  
iATL

9000 Commerce Parkway Suite B  
Mt. Laurel, New Jersey 08054  
Telephone: 856-231-9449  
Email: customerservice@iatl.com

### CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 8/22/2024  
Report No.: 703672 - Lead Water Rev #2, 8/26/2024  
Project: Hackensack High School  
Project No.: 24-0702

### LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7780891 Location: 160 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-160 \* Sample acidified to pH <2.

Lab No.: 7780892 Location: 160 Bubbler Result(ppb): 1.00  
Client No.: HH-WC-160 \* Sample acidified to pH <2.

Lab No.: 7780893 Location: Cafe Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-Cafe \* Sample acidified to pH <2.

Lab No.: 7780894 Location: Cafe Bubbler Result(ppb): <1.00  
Client No.: HH-WC-Cafe \* Sample acidified to pH <2.

Lab No.: 7780895 Location: 210 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-210 \* Sample acidified to pH <2.

Lab No.: 7780896 Location: 210 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-210 \* Sample acidified to pH <2.


Lab No.: 7780897 Location: 201 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-201 \* Sample acidified to pH <2.


Lab No.: 7780898 Location: 201 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-201 \* Sample acidified to pH <2.

Lab No.: 7780899 Location: 218 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-218 \* Sample acidified to pH <2.

Lab No.: 7780900 Location: 218 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-218 \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/15/2024  
Date Analyzed: 08/22/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director





Built Environment Testing  
iATL

9000 Commerce Parkway Suite B  
Mt. Laurel, New Jersey 08054  
Telephone: 856-231-9449  
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### CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 8/22/2024  
Report No.: 703672 - Lead Water Rev #2, 8/26/2024  
Project: Hackensack High School  
Project No.: 24-0702

### LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7780901 Location: 406 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-406 \* Sample acidified to pH <2.

Lab No.: 7780902 Location: 406 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-406 \* Sample acidified to pH <2.

Lab No.: 7780903 Location: 422 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-422 \* Sample acidified to pH <2.

Lab No.: 7780904 Location: 422 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-422 \* Sample acidified to pH <2.

Lab No.: 7780905 Location: 307 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-307 \* Sample acidified to pH <2.

Lab No.: 7780906 Location: 307 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-307 \* Sample acidified to pH <2.


Lab No.: 7780907 Location: 301 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-301 \* Sample acidified to pH <2.


Lab No.: 7780908 Location: 301 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-301 \* Sample acidified to pH <2.

Lab No.: 7780909 Location: 344 Bubbler Result(ppb): <1.00  
Client No.: HH-FB1-344 \* Sample acidified to pH <2.

Lab No.: 7780910 Location: 344 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-344 \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/15/2024  
Date Analyzed: 08/22/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 8/22/2024  
Report No.: 703672 - Lead Water Rev #2, 8/26/2024  
Project: Hackensack High School  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7780911 Location: 334 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-334 \* Sample acidified to pH <2.

Lab No.: 7780912 Location: 334 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-334 \* Sample acidified to pH <2.

Lab No.: 7780913 Location: Library Bubbler Result(ppb): <1.00  
Client No.: HH-FB-Library \* Sample acidified to pH <2.

Lab No.: 7780914 Location: Library Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-Library \* Sample acidified to pH <2.

Lab No.: 7780915 Location: 322 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-322 \* Sample acidified to pH <2.

Lab No.: 7780916 Location: 322 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-322 \* Sample acidified to pH <2.


Lab No.: 7780917 Location: 186 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-186 \* Sample acidified to pH <2.


Lab No.: 7780918 Location: 186 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-186 \* Sample acidified to pH <2.

Lab No.: 7780919 Location: 181 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-181 \* Sample acidified to pH <2.

Lab No.: 7780920 Location: 181 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-181 \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/15/2024  
Date Analyzed: 08/22/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 8/22/2024  
Report No.: 703672 - Lead Water Rev #2, 8/26/2024  
Project: Hackensack High School  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7780921 Location: Fieldhouse 1 Right Bubbler Result(ppb): <1.00  
Client No.: HH-FB-FH1 \* Sample acidified to pH <2.

Lab No.: 7780922 Location: Fieldhouse 1 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-FH1 \* Sample acidified to pH <2.

Lab No.: 7780923 Location: Fieldhouse 1 Left Bubbler Result(ppb): <1.00  
Client No.: HH-FB2-FH1 \* Sample acidified to pH <2.

Lab No.: 7780924 Location: Fieldhouse 1 Ice Machine Result(ppb): <1.00  
Client No.: HH-ICM-FH1 \* Sample acidified to pH <2.

Lab No.: 7780925 Location: Fieldhouse 2 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-FH2 \* Sample acidified to pH <2.

Lab No.: 7780926 Location: Fieldhouse 2 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-FH2 \* Sample acidified to pH <2.


Lab No.: 7780927 Location: 287 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-287 \* Sample acidified to pH <2.


Lab No.: 7780928 Location: 287 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-287 \* Sample acidified to pH <2.

Lab No.: 7780929 Location: 276 Bubbler Result(ppb): <1.00  
Client No.: HH-FB-276 \* Sample acidified to pH <2.

Lab No.: 7780930 Location: 276 Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-276 \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/15/2024  
Date Analyzed: 08/22/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



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#### CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 8/22/2024  
Report No.: 703672 - Lead Water Rev #2, 8/26/2024  
Project: Hackensack High School  
Project No.: 24-0702

#### LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7780931 Location: Wight Room Bubbler Result(ppb): <1.00  
Client No.: HH-FB-Weight \* Sample acidified to pH <2.


Lab No.: 7780932 Location: Weight Room Bottle Filler Result(ppb): <1.00  
Client No.: HH-BF-Weight \* Sample acidified to pH <2.


Lab No.: 7780933 Location: Blank Result(ppb): <1.00  
Client No.: HH-Blank-FH1 \* Sample acidified to pH <2.

Lab No.: 7780934 Location: Blank Result(ppb): <1.00  
Client No.: HH-Blank-FH2 \* Sample acidified to pH <2.

Lab No.: 7780935 Location: Blank Result(ppb): <1.00  
Client No.: HH-Blank \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/15/2024  
Date Analyzed: 08/22/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

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Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date: 8/22/2024  
Report No.: 703672 - Lead Water  
Project: Hackensack High School  
Project No.: 24-0702

## Appendix to Analytical Report:

**Customer Contact:** Mike Karl  
**Analysis:** AAS-GF - ASTM D3559-15D

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

**iATL Customer Service:** customerservice@iatl.com  
**iATL Office Manager:** ?wchampion@iatl.com  
**iATL Account Representative:** Shirley Clark  
**Sample Login Notes:** See Batch Sheet Attached  
**Sample Matrix:** Water  
**Exceptions Noted:** See Following Pages

### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at [www.iATL.com](http://www.iATL.com) and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

### Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:

- ASTM D3559-15D

Certification:

- NYS-DOH No. 11021

- NJDEP No. 03863

### Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B

- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample

- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB

---

CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 8/22/2024  
Report No.: 703672 - Lead Water  
Project: Hackensack High School  
Project No.: 24-0702

**Disclaimers / Qualifiers:**

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at [customerservice@iatl.com](mailto:customerservice@iatl.com).

Matrix spiking is performed on each client batch to determine if interferences could impact results. When spike recoveries fall out of acceptable range matrix interference is suspected and samples are diluted until acceptable spike recovery can be achieved. Reporting limits will increase by the same degree as the dilution required.

Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

\* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.

## Chain of Custody

– Environmental Lead –

### Contact Information

Client Company: Karl Environmental  
Office Address: 20 Lawrence Rd  
City, State, Zip: Mohnton, PA 19540  
Fax Number: 610-856-5040  
Email Address: amcas@karlenv.com

Project Number: 24-0702  
Project Name: Hackensack High School  
Primary Contact: Angela Meas  
Office Phone: 610-856-7700  
Cell Phone: 484-345-9846

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

### Matrix/Method:

- ☐ Paint by AAS: ASTM D3335-85a, 2009  
☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010  
☐ Air by AAS: NIOSH 7082, 1994  
☐ Soil by AAS: EPA SW 846 (Soil)  
☒ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9  
☐ Other Metals (Cd, Zn, Cr) by AAS  
☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311  
☐ Other \_\_\_\_\_

### Special Instructions:

200.8

### Turnaround Time

Preliminary Results Requested Date: \_\_\_\_\_

☐ Verbal ☒ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day\* ☐ 12 Hour\*\* ☐ 6 Hour\*\* ☐ RUSH\*\*

\* End of next business day unless otherwise specified. \*\* Matrix Dependent. \*\*\*Please notify the lab before shipping\*\*\*

### Chain of Custody

Relinquished (Name/Organization): Angela Meas  
Received (Name / iATL): \_\_\_\_\_  
Sample Login (Name / iATL): \_\_\_\_\_  
Analysis(Name(s) / iATL): W812121  
QA/QC Review (Name / iATL): \_\_\_\_\_  
Archived / Released: \_\_\_\_\_ QA/QC InterLAB Use: \_\_\_\_\_

Date: 8/15/24 Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

RECEIVED

AUG 15 2024

## Sample Log

—Environmental Lead—

Client: Harl Environmental Project: Hackensack High School

Sampling Date/Time: 8/15/24

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
HH-BF-160	7780891	160 Bottle Filler		557		250ml	
HH-WX-160	7780892	160 Bubbler		577			
HH-BF-CAFE	7780893	Cafe Bottle Filler		602			
HH-WX-CAFE	7780894	Cafe Bubbler		602			
* HH-BF-210	7780895	210 Bottle Filler		605			
HH-FB-210	7780896	210 Bubbler		605			
HH-FB-201	7780897	201 Bubbler		606			
HH-BF-201	7780898	201 Bottle Filler		606			
HH-BF-218	7780899	218 Bottle Filler		610			
HH-FB-218	7780900	218 Bubbler		610			
HH-FB-406	7780901	406 Bubbler		615			
HH-BF-406	7780902	406 Bottle Filler		615			
HH-BF-1122	7780903	1122 Bottle Filler		617			
HH-FB-1122	7780904	1122 Bubbler		617			
HH-FB-307	7780905	307 Bubbler		620			

\* - Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* - Insufficient Sample Provided to Analyze (<30mg) \*\*\* - Matrix / Substrate Interference Possible

FB - Method Requires the submittal of blank(s). ML - Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

\* Labeled HH-BF-110

Celebrating more than 30 years...one sample at a time  
www.iatl.com



## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: Hackensack High School

Sampling Date/Time: 8/15/24

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HH-BF-307	7780906	307 Bottle Filler		620		250 L	
HH-BF-301	7780907	301 Bottle Filler		622			
HH-FB-301	7780908	301 Bubbler		622			
HH-FB1-344	7780909	344 Bubbler		626			
HH-BF-344	7780910	344 Bottle Filler		626			
HH-FB-334	7780911	334 Bubbler		630			
HH-BF-334	7780912	334 Bottle Filler		630			
HH-FB-LIBRARY	7780913	Library Bubbler		632			
HH-BF-LIBRARY	7780914	Library Bottle Filler		632			
HH-FB-322	7780915	322 Bubbler		635			
HH-BF-322	7780916	322 Bottle Filler		635			
HH-FB-186	7780917	186 Bubbler		640			
HH-BF-186	7780918	186 Bottle Filler		640			
HH-FB-181	7780919	181 Bubbler		642			
HH-BF-181	7780920	181 Bottle Filler		642			

\* - Insufficient Sample Provided to Perform QC Reanalysis (&lt;200mg)

\*\* - Insufficient Sample Provided to Analyze (&lt;50mg) \*\*\* - Matrix / Substrate Interference Possible

FB - Method Requires the submittal of blank(s). ML - Multi Layered Sample. May result in inconsistent results.

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## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: Hackensack High School  
Sampling Date/Time: 8/15/24

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
HH-FB-FH1	7780031	Field house 1 Right bubbler		650		250ml	
HH-BF-FH1	7780032	Field house 1 Bottle filler		650			
HH-FB2-FH1	7780033	Field house 1 Left bubbler		650			
HH-TCM-FH1	7780034	Field house 1 Ice machine		650			
HH-BF-FH2	7780035	Field house 2 Bottle filler		655			
HH-FB-FH2	7780036	Field house 2 Bubbler		655			
HH-FB-287	7780037	287 Bubbler		702			
HH-BF-287	7780038	287 Bottle filler		702			
HH-FB-276	7780039	276 Bubbler		704			
HH-BF-276	7780030	276 Bottle filler		704			
HH-FB-Weight	7780031	Weight room Bubbler		710			
HH-BF-Weight	7780032	Weight room Bottle filler		710			
HH- <del>FH</del> BLANK-FH1	7780033	Blank					
HH-BLANK-FH2	7780034	Blank					
HH-BLANK	7780035	Blank	Acidified	MS 8/19/24	710		

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date: 9/12/2024  
Report No.: 704360 - Lead Water  
Project: Hackensack HS  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7786104      Location: Gym Main Lobby Right Bottle Filler      Result(ppb): <1.00  
Client No.: HH-BF-1-MGL      \* Sample acidified to pH <2.

Lab No.: 7786105      Location: Gym Main Lobby Right Bubbler      Result(ppb): <1.00  
Client No.: HH-FB-1-MGL      \* Sample acidified to pH <2.

Lab No.: 7786106      Location: Gym Main Lobby Bottle Filler      Result(ppb): <1.00  
Client No.: HH-BF-2-MGL      \* Sample acidified to pH <2.

Lab No.: 7786107      Location: Gym Main Lobby Middle Bubbler      Result(ppb): <1.00  
Client No.: HH-FB-2-MGL      \* Sample acidified to pH <2.

Lab No.: 7786108      Location: Gym Main Lobby Left Bubbler      Result(ppb): <1.00  
Client No.: HH-FB3-MGL      \* Sample acidified to pH <2.

Lab No.: 7786109      Location: Gym Main Lobby Left Bubbler      Result(ppb): <1.00  
Client No.: HH-FB4-MGL      \* Sample acidified to pH <2.

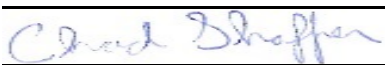
Lab No.: 7786110      Location: Gym Main Lobby Left Bottle Filler      Result(ppb): <1.00  
Client No.: HH-BF4-MGL      \* Sample acidified to pH <2.


Lab No.: 7786111      Location: Gym Main Lobby Right Bottle Filler      Result(ppb): <1.00  
Client No.: HH-BF5-MGL      \* Sample acidified to pH <2.

Lab No.: 7786112      Location: Gym Main Lobby Right Bubbler      Result(ppb): <1.00  
Client No.: HH-FB5-MGL      \* Sample acidified to pH <2.

Lab No.: 7786113      Location: Bubbler      Result(ppb): <1.00  
Client No.: HH-FB-Rear Gym      \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2024  
Date Analyzed: 09/12/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

# CERTIFICATE OF ANALYSIS


Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

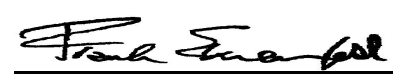
Report Date: 9/12/2024  
Report No.: 704360 - Lead Water  
Project: Hackensack HS  
Project No.: 24-0702

## LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7786114 Client No.: HH-S01-195	Location: Sink HH-S01-195 * Sample acidified to pH <2.	Result(ppb): 1.60
Lab No.: 7786115 Client No.: HH-S02-195	Location: Sink HH-S02-195 * Sample acidified to pH <2.	Result(ppb): Sample Not Received
Lab No.: 7786116 Client No.: HH-S03-195	Location: Sink HH-S03-195 * Sample acidified to pH <2.	Result(ppb): 2.00
Lab No.: 7786117 Client No.: HH-S04-195	Location: Sink HH-S04-195 * Sample acidified to pH <2.	Result(ppb): 2.50
Lab No.: 7786118 Client No.: HH-PotFiller-195	Location: Pot Filler * Sample acidified to pH <2.	Result(ppb): <1.00
Lab No.: 7786119 Client No.: HH-S05-195	Location: Sink HH-S05-195 * Sample acidified to pH <2.	Result(ppb): 2.10
Lab No.: 7786120 Client No.: HH-S02-Cafe	Location: Cafe Kitchen * Sample acidified to pH <2.	Result(ppb): <1.00
Lab No.: 7786121 Client No.: HH-S01-Cafe	Location: Cafe Kitchen * Sample acidified to pH <2.	Result(ppb): 32.3
Lab No.: 7786122 Client No.: HH-S03-Cafe	Location: Cafe Kitchen * Sample acidified to pH <2.	Result(ppb): 2.30
Lab No.: 7786123 Client No.: HH-S04-Cafe	Location: Cafe Kitchen * Sample acidified to pH <2.	Result(ppb): <1.00

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2024  
Date Analyzed: 09/12/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



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CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Report Date: 9/12/2024  
Report No.: 704360 - Lead Water  
Project: Hackensack HS  
Project No.: 24-0702

Client: KAR387

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LEAD WATER SAMPLE ANALYSIS SUMMARY

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Lab No.: 7786124

Location: Ice Machine

Result(ppb): <1.00

Client No.: HH-ICM-Cafe

\* Sample acidified to pH <2.

Lab No.: 7786125

Location: Custodian Break Room

Result(ppb): 1.10

Client No.: HH-S0-Custodian

\* Sample acidified to pH <2.

Lab No.: 7786126

Location: Field Blank

Result(ppb): <1.00

Client No.: HH-Field Blank

\* Sample acidified to pH <2.

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Please refer to the Appendix of this report for further information regarding your analysis.

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Date Received: 9/4/2024

Date Analyzed: 09/12/2024

Signature:

Analyst: Chad Shaffer

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director

---

CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date: 9/12/2024  
Report No.: 704360 - Lead Water  
Project: Hackensack HS  
Project No.: 24-0702

## Appendix to Analytical Report:

**Customer Contact:** Mike Karl  
**Analysis:** AAS-GF - ASTM D3559-15D

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

**iATL Customer Service:** customerservice@iatl.com  
**iATL Office Manager:** ?wchampion@iatl.com  
**iATL Account Representative:** Shirley Clark  
**Sample Login Notes:** See Batch Sheet Attached  
**Sample Matrix:** Water  
**Exceptions Noted:** See Following Pages

### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at [www.iATL.com](http://www.iATL.com) and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

### Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:

- ASTM D3559-15D

Certification:

- NYS-DOH No. 11021

- NJDEP No. 03863

### Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B

- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample

- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB

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CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/12/2024  
Report No.: 704360 - Lead Water  
Project: Hackensack HS  
Project No.: 24-0702

**Disclaimers / Qualifiers:**

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at [customerservice@iatl.com](mailto:customerservice@iatl.com).

Matrix spiking is performed on each client batch to determine if interferences could impact results. When spike recoveries fall out of acceptable range matrix interference is suspected and samples are diluted until acceptable spike recovery can be achieved. Reporting limits will increase by the same degree as the dilution required.

Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

\* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.

## Chain of Custody

– Environmental Lead –



### Contact Information

Client Company: <u>Karl Environmental</u>	Project Number: <u>24-0702</u>
Office Address: <u>20 Laver Rd</u>	Project Name: <u>Hackensack High School</u>
City, State, Zip: <u>Mohnton, PA</u>	Primary Contact: <u>Angela Meas</u>
Fax Number: <u>610-856-5040</u>	Office Phone: <u>610-856-7700</u>
Email Address: <u>ameas@karlenv.com</u>	Cell Phone: <u>484-345-9846</u>

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

### Matrix/Method:

- ☐ Paint by AAS: ASTM D3335-85a, 2009
- ☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
- ☐ Air by AAS: NIOSH 7082, 1994
- ☐ Soil by AAS: EPA SW 846 (Soil)
- ☒ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9
- ☐ Other Metals (Cd, Zn, Cr) by AAS
- ☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311
- ☐ Other \_\_\_\_\_

### Special Instructions:

200.8

### Turnaround Time

Preliminary Results Requested Date: \_\_\_\_\_

☐ Verbal ☐ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day\* ☐ 12 Hour\*\* ☐ 6 Hour\*\* ☐ RUSH\*\*

\* End of next business day unless otherwise specified. \*\* Matrix Dependent. \*\*\*Please notify the lab before shipping\*\*\*

### Chain of Custody

Relinquished (Name/Organization): <u>Angela Meas</u>	Date: <u>9/14/24</u>	Time: _____
Received (Name / iATL): _____	Date: _____	Time: <u>SEP - 4 2024</u>
Sample Login (Name / iATL): _____	Date: _____	Time: _____
Analysis(Name(s) / iATL): _____	Date: _____	Time: _____
QA/QC Review (Name / iATL): _____	Date: _____	Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____	Date: _____	Time: <u>By</u>



## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 High School

Sampling Date/Time: 8/31/24 6:30 AM

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HH-BF1-MGL	7786104	Gym-Main Lobby Right Bottle Filler				250 mL ↓	
HH-FB1-MGL	7786105	Gym-Main Lobby Right Bubbler					
* HH-BF2-MGL	7786103	Gym-Main Lobby Middle Bottle Filler					
HH-FB2-MGL	7786107	Gym-Main Lobby Middle Bubbler					
HH-FB3-MGL	7786103	Gym-Main Lobby Left Bubbler					
HH-FB4-MGL	7786109	Gym-Main Lobby Left Bubbler					
HH-BF4-MGL	7786110	Gym-Main Lobby Left Bottle Filler					
HH-BF5-MGL	7786111	Gym-Main Lobby Right Bottle Filler					
HH-FB5-MGL	7786112	Gym-Main Lobby Right Bubbler					
HH-FB-Rear Gym	7786113	Bubbler					
HH-S01-195	7786114	Sink HH-S01-195					
* HH-S02-195	7786115	Sink HH-S02-195					
HH-S03-195	7786116	Sink HH-S03-195					
HH-S04-195	7786117	Sink HH-S04-195					
HH-Pot Filler-195	7786118	Pot Filler					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB - Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assures that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed Certificate of Analysis is considered the official results. All EPA, HUD, and NJDEP conditions apply.

iATL 7786115

\*labeled HH-BF3-MGL

one sample at a time  
Sample not rec'd

# Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 High School

Sampling Date/Time: 8/31/24 6:30 AM

[illegible]

\* - Insufficient Sample Provided to Perform QC Reanalysts (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NDEP conditions apply.



CERTIFICATE OF ANALYSIS

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/3/2024  
Report No.: 703936 - Lead Water  
Project: ECDC  
Project No.: 24-0702

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7782907      Location: Blank      Result(ppb): <1.00  
Client No.: ECDC-Blank      \* Sample acidified to pH <2.

Lab No.: 7782908      Location: Cafe Bubblers      Result(ppb): <1.00  
Client No.: ECDC-01      \* Sample acidified to pH <2.

Lab No.: 7782909      Location: Cafe Bottle Filler      Result(ppb): <1.00  
Client No.: ECDC-02      \* Sample acidified to pH <2.

Lab No.: 7782910      Location: Kitchen Line Sink      Result(ppb): 6.30  
Client No.: ECDC-03      \* Sample acidified to pH <2.

Lab No.: 7782911      Location: Dish Sink      Result(ppb): 1.10  
Client No.: ECDC-04      \* Sample acidified to pH <2.


Lab No.: 7782912      Location: 112 Bottle Filler      Result(ppb): <1.00  
Client No.: ECDC-05      \* Sample acidified to pH <2.


Lab No.: 7782913      Location: 112 Bubblers      Result(ppb): <1.00  
Client No.: ECDC-06      \* Sample acidified to pH <2.

Lab No.: 7782914      Location: 206 Bottle Filler      Result(ppb): <1.00  
Client No.: ECDC-07      \* Sample acidified to pH <2.

Lab No.: 7782915      Location: 206 Bubblers      Result(ppb): <1.00  
Client No.: ECDC-08      \* Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/22/2024  
Date Analyzed: 09/03/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540  
  
Client: KAR387

Report Date: 9/3/2024  
Report No.: 703936 - Lead Water  
Project: ECDC  
Project No.: 24-0702

## Appendix to Analytical Report:

**Customer Contact:** Mike Karl  
**Analysis:** AAS-GF - ASTM D3559-15D

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

**iATL Customer Service:** customerservice@iatl.com  
**iATL Office Manager:** ?wchampion@iatl.com  
**iATL Account Representative:** Shirley Clark  
**Sample Login Notes:** See Batch Sheet Attached  
**Sample Matrix:** Water  
**Exceptions Noted:** See Following Pages

### General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at [www.iATL.com](http://www.iATL.com) and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

### Information Pertinent to this Report:

#### Analysis by AAS Graphite Furnace:

- ASTM D3559-15D

#### Certification:

- NYS-DOH No. 11021

- NJDEP No. 03863

### Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B

- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample

- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB

---

CERTIFICATE OF ANALYSIS

---

Client: Karl Environmental Group  
20 Lauck Road  
Mohnton PA 19540

Client: KAR387

Report Date: 9/3/2024  
Report No.: 703936 - Lead Water  
Project: ECDC  
Project No.: 24-0702

**Disclaimers / Qualifiers:**

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at [customerservice@iatl.com](mailto:customerservice@iatl.com).

Matrix spiking is performed on each client batch to determine if interferences could impact results. When spike recoveries fall out of acceptable range matrix interference is suspected and samples are diluted until acceptable spike recovery can be achieved. Reporting limits will increase by the same degree as the dilution required.

Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

\* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.



## Chain of Custody

— Environmental Lead —

### Contact Information

Client Company:	<u>Karl Environmental</u>	Project Number:	<u>74-0702</u>
Office Address:	<u>20 Lauck Rd.</u>	Project Name:	<u>ECDC</u>
City, State, Zip:	<u>Mohnton, PA 19540</u>	Primary Contact:	<u>Sean Kennedy</u>
Fax Number:	<u>610-886-5040</u>	Office Phone:	<u>610-886-7700</u>
Email Address:	<u>skennedy@karlen.com &amp; dcorbone@karlen.com</u>	Cell Phone:	<u>484-269-7870</u>

IATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

### Matrix/Method:

- ☐ Paint by AAS: ASTM D3335-85a, 2009
- ☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
- ☐ Air by AAS: NIOSH 7082, 1994
- ☐ Soil by AAS: EPA SW 846 (Soil)
- ☒ Water by AAS-GF: ASTM D3559-03D, US EPA 200.9
- ☐ Other Metals (Cd, Zn, Cr) by AAS
- ☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311
- ☐ Other \_\_\_\_\_

### Special Instructions:

200.8

### Turnaround Time

Preliminary Results Requested Date: \_\_\_\_\_ ☐ Verbal ☒ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day\* ☐ 12 Hour\*\* ☐ 6 Hour\*\* ☐ RUSH\*\*

\* End of next business day unless otherwise specified. \*\* Matrix Dependent. \*\*\*Please notify the lab before shipping\*\*\*

### Chain of Custody

Relinquished (Name/Organization):	<u>[Signature]</u>	Date:	<u>8/22/24</u>	Time:	
Received (Name / iATL):	<u>[Signature]</u>	Date:	<u>8/22/24</u>	Time:	<u>10:45 am</u>
Sample Login (Name / iATL):		Date:		Time:	<u>AUG 22 2024</u>
Analysis(Name(s) / iATL):		Date:		Time:	
QA/QC Review (Name / iATL):		Date:		Time:	
Archived / Released:		Date:		Time:	

## Sample Log

—Environmental Lead—

Client: Karl Environmental Project: 24-0702 EDC

Sampling Date/Time: 8/22/24

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
EDC-BLANK	7782907	Blank				200 mL	
EDC-01	7782908	Cafe bubbler					
EDC-02	7782909	Cafe Bottle filler					
EDC-03	7782910	Kitchen line sink					
EDC-04	7782911	Dish sink					
EDC-05	7782912	WZ Bottle filler					
EDC-06	7782913	WZ Bubbler					
EDC-07	7782914	206 Bottle filler					
EDC-08	7782915	206 Bubbler					

\* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)

\*\* = Insufficient Sample Provided to Analyze (<50mg) \*\*\* = Matrix / Substrate Interference Possible

FB = Method Requires the submitted of blank(s). ML = Multi Layered Sample. May result in inconsistent results.

These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.