

## Chain of Custody

– Environmental Lead –

<b>Contact Information</b>	
<b>Client Company:</b> Garden State Environmental, inc.	<b>Project Number:</b> <u>8402</u>
<b>Office Address:</b> 555 South Broad St.	<b>Project Name:</b> <u>Board office: Hopatcong</u>
<b>City, State, Zip:</b> Glen Rock, NJ, 07452	<b>Primary Contact:</b> Kaitlynn Pinero
<b>Fax Number:</b> 201-652-0612	<b>Office Phone:</b> 201-652-1119
<b>Email Address:</b> labreports@gseconsultants.com	<b>Cell Phone:</b> _____

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:**

\_\_\_\_\_

\_\_\_\_\_

**Turnaround Time**

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

Specific date / time

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): Kaitlynn Pinero (GSE)	Date: <u>5-27-22</u>	Time: <u>12:45 pm</u>
Received (Name / iATL): _____	Date: _____	Time: _____
Sample Login (Name / iATL): _____	Date: _____	Time: _____
Analysis(Name(s) / iATL): _____	Date: <u>6/6/22</u>	Time: _____
QA/QC Review (Name / iATL): _____	Date: _____	Time: _____
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____

RECEIVED

iATL BY \_\_\_\_\_

## Sample Log

–Environmental Lead–

Client: Garden State Environmental, inc. Project: 8402: Board office, Hopatcong

Sampling Date/Time: 4-23-22 1:06 pm

Client Sample #	iATL #	Location/Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
HA-1-S-01A	7437738	Kitchenette		1:06 pm	initial		
HA-2022-FBA	7437739	field blank		/	initial		
	Amplified MS						
	6/2/22 18150						

\* = 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: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 6/6/2022  
Report No.: 662249 - Lead Water  
Project: Board Office: Hopatcong  
Project No.: 8402

Client: GAR373

---

LEAD WATER SAMPLE ANALYSIS SUMMARY

---

Lab No.: 7437738  
Client No.: HA-1-S-01A

Location: Kitchenette  
\* Sample acidified to pH <2.

Result(ppb): 10.3

Lab No.: 7437739  
Client No.: HA-2022-FBA


Location: Field Blank  
\* 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: 6/2/2022  
Date Analyzed: 06/06/2022  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

---

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 6/6/2022  
Report No.: 662249 - Lead Water  
Project: Board Office: Hopatcong  
Project No.: 8402

Client: GAR373

## Appendix to Analytical Report:

**Customer Contact:** Send ALL Lab Reports  
**Analysis:** AAS-GF - ASTM D3559-08D

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:** Kelly Klippel  
**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 D3559-08D

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: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 6/6/2022  
Report No.: 662249 - Lead Water  
Project: Board Office: Hopatcong  
Project No.: 8402

Client: GAR373

**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.



## Hopatcong Borough Schools

P.O. Box 1029 • Hopatcong, New Jersey 07843 • (973) 770-8840 • FAX (973) 398-2590  
**Matthew Geary, Facilities Supervisor**

June 8<sup>th</sup>, 2022

Hopatcong Borough Schools  
Hopatcong High School  
2A Windsor Avenue  
Hopatcong, NJ 07843

Dear Hopatcong High School Community,

Our school system is committed to protecting student, teacher, and staff health. To protect our community and be in compliance with the Department of Education regulations, Hopatcong Borough Schools tested our schools' drinking water for lead.

In accordance with the Department of Education regulations, Hopatcong High School will implement immediate remedial measures for any drinking water outlet with a result greater than the action level of 15  $\mu\text{g/l}$  (parts per billion [ppb]). This includes turning off the outlet unless it is determined the location must remain on for non-drinking purposes. In these cases, a "DO NOT DRINK – SAFE FOR HANDWASHING ONLY" sign will be posted.

### Results of our Testing

Following instructions given in technical guidance developed by the New Jersey Department of Environmental Protection, we completed a plumbing profile for each of the buildings within Hopatcong Borough Schools. Through this effort, we identified and tested all drinking water and food preparation outlets. Of the 36 samples taken, all but 3 tested below the lead action level established by the US Environmental Protection Agency for lead in drinking water (15  $\mu\text{g/l}$  [ppb]).

The table below identifies the drinking water outlet(s) that tested above the 15  $\mu\text{g/l}$  for lead, the actual lead level, and what temporary remedial action Hopatcong Borough Schools has taken to reduce the levels of lead at these locations.

<b>Sample Location</b>	<b>First Draw Result in <math>\mu\text{g/l}</math> (ppb)</b>	<b>Remedial Action</b>
Kitchen Dish Wash Sink ID# HHS-1-S-04	23.4	Outlet Immediately Taken Out of Service
Nurse Eyewash IS# HHS-1-EW-01	25.0	Outlet Not Utilized for Drinking Water Purposes. Marked as "For Flushing Eyes <b>Only</b> ."
PE-7 Comp, Left Sink ID#HHS-1-S-16	36.6	Outlet Immediately Taken Out of Service

## Health Effects of Lead

High levels of lead in drinking water can cause health problems. Lead is most dangerous for pregnant women, infants, and children under 6 years of age. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. Exposure to high levels of lead during pregnancy contributes to low birth weight and developmental delays in infants. In young children, lead exposure can lower IQ levels, affect hearing, reduce attention span, and hurt school performance. At *very* high levels, lead can even cause brain damage. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

## How Lead Enters our Water

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like groundwater, rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and in building plumbing. These materials include lead-based solder used to join copper pipe, brass, and chrome-plated brass faucets. In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials. However, even the lead in plumbing materials meeting these new requirements is subject to corrosion. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into the drinking water. This means the first water drawn from the tap in the morning *may* contain fairly high levels of lead.

## Lead in Drinking Water

Lead in drinking water, although rarely the sole cause of lead poisoning can significantly increase a person's total lead exposure, particularly the exposure of children under the age of 6. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

## For More Information

A copy of the test results is available in our central office for inspection by the public, including students, teachers, other school personnel, and parents, and can be viewed between the hours of 8:30 a.m. and 4:00 p.m. and are also available on our website at <https://www.hopatcongschools.org/p/facilities/>. For more information about water quality in our schools, contact Matthew Geary at the Facilities Department at 973-770-8840 or email at [mgeary@hopatcongschools.org](mailto:mgeary@hopatcongschools.org).

For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at [www.epa.gov/lead](http://www.epa.gov/lead), call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

If you are concerned about lead exposure at this facility or in your home, you may want to ask your health care providers about testing children to determine levels of lead in their blood.

Sincerely,  
Matthew Geary  
Facilities Supervisor

## Chain of Custody

– Environmental Lead –

<b>Contact Information</b>	
<b>Client Company:</b> <u>Garden State Environmental, Inc.</u>	<b>Project Number:</b> <u>8402</u>
<b>Office Address:</b> <u>555 South Broad Street</u>	<b>Project Name:</b> <u>Hopatcong High School</u>
<b>City, State, Zip:</b> <u>Glen Rock, NJ 07452</u>	<b>Primary Contact:</b> <u>Christian Valdes</u>
<b>Fax Number:</b> <u>201-652-0612</u>	<b>Office Phone:</b> <u>201-652-1119</u>
<b>Email Address:</b> <u>labreports@gseconsultants.com</u>	<b>Cell Phone:</b> _____

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:**

\_\_\_\_\_

\_\_\_\_\_

**Turnaround Time**

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

Specific date / time

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>Christian Valdes</u>	<b>RECEIVED</b>
Received (Name / iATL): _____	Date: <u>4/28/22</u> Time: <u>1:30 pm</u>
Sample Login (Name / iATL): _____	Date: _____ Time: _____
Analysis(Name(s) / iATL): <u>MS / SLIN</u>	Date: <u>2022 5/10/22</u> Time: _____
QA/QC Review (Name / iATL): _____	Date: _____ Time: _____
Archived / Released: _____	Date: _____ Time: _____

**iATL - by**





# Sample Log

-Environmental Lead-

Client: \_\_\_\_\_ Project: Mopacong High School

Sampling Date/Time: 4/23/22 8:00 am

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HHS-1-H-01A	7421339	Room A-32	-	8:15	initial	-	
HHS-1-S-01A	7421340	Kitchen Island by Oven	-	8:20	initial	-	
HHS-1-S-02A	7421341	Kitchen Comp Left	-	8:25	initial	-	
HHS-1-S-03A	7421342	Kitchen Comp Right	-	8:29	initial	-	
HHS-1-ST-01A	7421343	Kitchen Steam Kettle	-	8:33	initial	-	
HHS-1-H-02A	7421344	Dishwash Hose	-	8:37	initial	-	
HHS-1-S-04A	7421345	Dishwash Sink	-	8:41	initial	-	
HHS-1-S-05A	7421346	Kitchen Island by Freezer	-	8:47	initial	-	
HHS-1-EW-01A	7421347	Recess Eyewash	-	8:52	initial	-	
HHS-1-S-13A	7421348	Recess Sink	-	8:56	initial	-	
HHS-1-S-14A	7421349	Room A-19	-	9:03	initial	-	
HHS-1-WC-08A	7421350	Cafeteria	-	9:06	initial	-	
HHS-1-BF-05A	7421351	Cafeteria	-	9:08	initial	-	
HHS-1-WC-01A	7421352	Hall by A-20	-	9:16	initial	-	
HHS-1-BF-01A	7421353	Hall by A-20	-		initial	-	

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

\*\* = 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: \_\_\_\_\_ Project: Hopatcong High School

Sampling Date/Time: 4/23/22 8:00 am

Client Sample #	iATL #	Location/Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HHS-1-S-06A	7421354	Room A-14	—	9:22	initial	—	
HHS-1-S-07A	7421355	A-12 Right Wall	—	9:27	initial	—	
HHS-1-S-08A	7421356	A-12 Back Wall R	—	9:29	initial	—	
HHS-1-S-09A	7421357	A-12 Middle Right	—	9:32	initial	—	
HHS-1-S-10A	7421358	A-12 Middle Left	—	9:36	initial	—	
HHS-1-S-11A	7421359	A-12 Back Wall L	—	9:39	initial	—	
HHS-1-S-12A	7421360	A-12 Left Wall	—	9:43	initial	—	
HHS-1-S-13A	7421361	Room A-10	—	9:46	initial	—	
HHS-1-WC-02A	7421362	Hall by C-4	—	9:48	initial	—	
HHS-1-BF-02A	7421363	Hall by C-4	—	9:54	initial	—	
HHS-1-WC-03A	7421364	Hall by PE-3	—	9:59	initial	—	
HHS-1-BF-03A	7421365	Hall by PE-3	—	10:01	initial	—	
HHS-1-S-15A	7421366	PE-7 Right Comp	—	10:06	initial	—	
HHS-1-S-16A	7421367	PE-7 Left Comp	—	10:10	initial	—	
HHS-1-WC-04A	7421368	Room PE-4B	—	10:16	initial	—	

\* = 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: \_\_\_\_\_ Project: Hopatcong High SchoolSampling Date/Time: 4/23/22 8:00 am

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
HHS-1-1M-01	7421369	Room PE-10B	—	10:20	initial	—	
HHS-1-5-17A	7421370	Room PE-10	—	10:22	initial	—	
HHS-1-WC-05A	7421371	Hall by Awd. - 3	—	10:33	initial	—	
HHS-1-BF-04A	7421372	Hall by Awd. - 3	—	10:36	initial	—	
HHS-1-WC-06A	7421373	Hall by B16 A Left	—	10:42	initial	—	
HHS-1-WC-07A	7421374	Hall by B16 A Right	—	10:44	initial	—	
HHS-4-23-FBA	7421375	—	—	—	—	—	
	Acidified w/						
	S/7/02 1100						

\* = 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.

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: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452  
  
Client: GAR373


Report Date: 5/10/2022  
Report No.: 660316 - Lead Water  
Project: Hopatcong, High School  
Project No.: 8402

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7421339 Client No.: HHS-1-H-01A	Location: Room A32 * Sample acidified to pH <2.	Result(ppb): 1.20
Lab No.: 7421340 Client No.: HHS-1-S-01A	Location: Kitchen Island By Oven * Sample acidified to pH <2.	Result(ppb): 4.20
Lab No.: 7421341 Client No.: HHS-1-S-02A	Location: Kitchen Comp Left * Sample acidified to pH <2.	Result(ppb): 3.70
Lab No.: 7421342 Client No.: HHS-1-S-03A	Location: Kitchen Comp Right * Sample acidified to pH <2.	Result(ppb): 1.60
Lab No.: 7421343 Client No.: HHS-1-ST-01A	Location: Kitchen Steam Kettle * Sample acidified to pH <2.	Result(ppb): 160
Lab No.: 7421344 Client No.: HHS-1-H-02A	Location: Dishwash Hose * Sample acidified to pH <2.	Result(ppb): <1.00
Lab No.: 7421345 Client No.: HHS-1-S-04A	Location: Dishwash Sink * Sample acidified to pH <2.	Result(ppb): 23.4
Lab No.: 7421346 Client No.: HHS-1-S-05A	Location: Kitchen Island By Freezer * Sample acidified to pH <2.	Result(ppb): 1.30
Lab No.: 7421347 Client No.: HHS-1-EW-01A	Location: Nurse Eyewash * Sample acidified to pH <2.	Result(ppb): 25.0
Lab No.: 7421348 Client No.: HHS-1-S-18A	Location: Nurse Sink * Sample acidified to pH <2.	Result(ppb): 7.90

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

Date Received: 5/4/2022  
Date Analyzed: 05/10/2022  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452  
  
Client: GAR373

Report Date: 5/10/2022  
Report No.: 660316 - Lead Water  
Project: Hopatcong, High School  
Project No.: 8402

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7421349                      Location: Room A-19                      Result(ppb): <1.00  
Client No.: HHS-1-S-14A              \* Sample acidified to pH <2.

Lab No.: 7421350                      Location: Cafeteria                      Result(ppb): <1.00  
Client No.: HHS-1-WC-08A              \* Sample acidified to pH <2.

Lab No.: 7421351                      Location: Cafeteria                      Result(ppb): <1.00  
Client No.: HHS-1-BF-05A              \* Sample acidified to pH <2.

Lab No.: 7421352                      Location: Hall By A-20                      Result(ppb): <1.00  
Client No.: HHS-1-WC-01A              \* Sample acidified to pH <2.

Lab No.: 7421353                      Location: Hall By A-20                      Result(ppb): <1.00  
Client No.: HHS-1-BF-01A              \* Sample acidified to pH <2.

Lab No.: 7421354                      Location: Room A-14                      Result(ppb): <1.00  
Client No.: HHS-1-S-06A              \* Sample acidified to pH <2.

Lab No.: 7421355                      Location: A-12 Right Wall                      Result(ppb): <1.00  
Client No.: HHS-1-S-07A              \* Sample acidified to pH <2.

Lab No.: 7421356                      Location: A-12 Back Wall R                      Result(ppb): <1.00  
Client No.: HHS-1-S-08A              \* Sample acidified to pH <2.

Lab No.: 7421357                      Location: A-12 Middle Right                      Result(ppb): 1.30  
Client No.: HHS-1-S-09A              \* Sample acidified to pH <2.

Lab No.: 7421358                      Location: A-12 Middle Left                      Result(ppb): <1.00  
Client No.: HHS-1-S-10A              \* Sample acidified to pH <2.

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

Date Received: 5/4/2022  
Date Analyzed: 05/10/2022  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452  
  
Client: GAR373

Report Date: 5/10/2022  
Report No.: 660316 - Lead Water  
Project: Hopatcong, High School  
Project No.: 8402

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7421359                      Location: A-12 Back Wall L                      Result(ppb): <1.00  
Client No.: HHS-1-S-11A                      \* Sample acidified to pH <2.

Lab No.: 7421360                      Location: A-12 Left Wall                      Result(ppb): 2.80  
Client No.: HHS-1-S-12A                      \* Sample acidified to pH <2.

Lab No.: 7421361                      Location: Room A-10                      Result(ppb): <1.00  
Client No.: HHS-1-S-13A                      \* Sample acidified to pH <2.

Lab No.: 7421362                      Location: Hall By C-4                      Result(ppb): <1.00  
Client No.: HHS-1-WC-02A                      \* Sample acidified to pH <2.

Lab No.: 7421363                      Location: Hall By C-4                      Result(ppb): <1.00  
Client No.: HHS-1-BF-02A                      \* Sample acidified to pH <2.

Lab No.: 7421364                      Location: Hall By PE-3                      Result(ppb): <1.00  
Client No.: HHS-1-WC-03A                      \* Sample acidified to pH <2.


Lab No.: 7421365                      Location: Hall By PE-3                      Result(ppb): <1.00  
Client No.: HHS-1-BF-03A                      \* Sample acidified to pH <2.

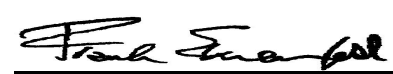
Lab No.: 7421366                      Location: PE-7 Right Comp                      Result(ppb): 14.7  
Client No.: HHS-1-S-15A                      \* Sample acidified to pH <2.

Lab No.: 7421367                      Location: PE-7 Left Comp                      Result(ppb): 36.6  
Client No.: HHS-1-S-16A                      \* Sample acidified to pH <2.

Lab No.: 7421368                      Location: Room PE-4B                      Result(ppb): <1.00  
Client No.: HHS-1-WC-04A                      \* Sample acidified to pH <2.

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

Date Received: 5/4/2022  
Date Analyzed: 05/10/2022  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 5/10/2022  
Report No.: 660316 - Lead Water  
Project: Hopatcong, High School  
Project No.: 8402

Client: GAR373

LEAD WATER SAMPLE ANALYSIS SUMMARY

**Lab No.:** 7421369                      **Location:** Room PE-10B                      **Result(ppb):** <1.00  
**Client No.:** HHS-1-IM-01                      \* Sample acidified to pH <2.

**Lab No.:** 7421370                      **Location:** Room PE-10                      **Result(ppb):** 5.10  
**Client No.:** HHS-1-S-17A                      \* Sample acidified to pH <2.

**Lab No.:** 7421371                      **Location:** Hall By Aud-3                      **Result(ppb):** <1.00  
**Client No.:** HHS-1-WC-05A                      \* Sample acidified to pH <2.


**Lab No.:** 7421372                      **Location:** Hall By Aud-3                      **Result(ppb):** <1.00  
**Client No.:** HHS-1-BF-04A                      \* Sample acidified to pH <2.


**Lab No.:** 7421373                      **Location:** Hall By B16A Left                      **Result(ppb):** 5.00  
**Client No.:** HHS-1-WC-06A                      \* Sample acidified to pH <2.

**Lab No.:** 7421374                      **Location:** Hall By B16A Right                      **Result(ppb):** 1.80  
**Client No.:** HHS-1-WC-07A                      \* Sample acidified to pH <2.

**Lab No.:** 7421375                      **Location:**                      **Result(ppb):** <1.00  
**Client No.:** HHS-4-23-FBA                      \* Sample acidified to pH <2.

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

Date Received: 5/4/2022  
Date Analyzed: 05/10/2022  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

---

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 5/10/2022  
Report No.: 660316 - Lead Water  
Project: Hopatcong, High School  
Project No.: 8402

Client: GAR373

## Appendix to Analytical Report:

**Customer Contact:** Send ALL Lab Reports  
**Analysis:** AAS-GF - ASTM D3559-08D

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:** Kelly Klippel  
**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 D3559-08D

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: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 5/10/2022  
Report No.: 660316 - Lead Water  
Project: Hopatcong, High School  
Project No.: 8402

Client: GAR373

**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.



## Hopatcong Borough Schools

P.O. Box 1029 • Hopatcong, New Jersey 07843 • (973) 770-8840 • FAX (973) 398-2590

**Matthew Geary, Facilities Supervisor**

June 8<sup>th</sup>, 2022

Hopatcong Borough Schools  
Hopatcong Middle School  
1 David Road  
Stanhope, NJ 07874

Dear Hopatcong Middle School Community,

Our school system is committed to protecting student, teacher, and staff health. To protect our community and be in compliance with the Department of Education regulations, Hopatcong Borough Schools tested our schools' drinking water for lead.

In accordance with the Department of Education regulations, Hopatcong Middle School will implement immediate remedial measures for any drinking water outlet with a result greater than the action level of 15 µg/l (parts per billion [ppb]). This includes turning off the outlet unless it is determined the location must remain on for non-drinking purposes. In these cases, a "DO NOT DRINK – SAFE FOR HANDWASHING ONLY" sign will be posted.

### Results of our Testing

Following instructions given in technical guidance developed by the New Jersey Department of Environmental Protection, we completed a plumbing profile for each of the buildings within Hopatcong Borough Schools. Through this effort, we identified and tested all drinking water and food preparation outlets. Of the 18 samples taken, all but 4 tested below the lead action level established by the US Environmental Protection Agency for lead in drinking water (15 µg/l [ppb]).

The table below identifies the drinking water outlet(s) that tested above the 15 µg/l for lead, the actual lead level, and what temporary remedial action Hopatcong Borough Schools has taken to reduce the levels of lead at these locations.

<b>Sample Location</b>	<b>First Draw Result in µg/l (ppb)</b>	<b>Remedial Action</b>
Kitchen Comp, Right Sink ID # HM-1-S-01	27.4	Outlet immediately taken out of service.
Kitchen Comp, Left Sink ID# HM-1-S-02	32.0	Outlet immediately taken out of service.
Kitchen Hose ID #: HM-1-H-01	21.2	Outlet immediately taken out of service.
Room B104, Right Sink	29.4	Outlet immediately taken out of

### Health Effects of Lead

High levels of lead in drinking water can cause health problems. Lead is most dangerous for pregnant women, infants, and children under 6 years of age. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. Exposure to high levels of lead during pregnancy contributes to low birth weight and developmental delays in infants. In young children, lead exposure can lower IQ levels, affect hearing, reduce attention span, and hurt school performance. At *very* high levels, lead can even cause brain damage. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

### How Lead Enters our Water

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like groundwater, rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and in building plumbing. These materials include lead-based solder used to join copper pipe, brass, and chrome-plated brass faucets. In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials. However, even the lead in plumbing materials meeting these new requirements is subject to corrosion. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into the drinking water. This means the first water drawn from the tap in the morning *may* contain fairly high levels of lead.

### Lead in Drinking Water

Lead in drinking water, although rarely the sole cause of lead poisoning can significantly increase a person's total lead exposure, particularly the exposure of children under the age of 6. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

### For More Information

A copy of the test results is available in our central office for inspection by the public, including students, teachers, other school personnel, and parents, and can be viewed between the hours of 8:30 a.m. and 4:00 p.m. and are also available on our website at <https://www.hopatcongschools.org/p/facilities/>. For more information about water quality in our schools, contact Matthew Geary at the Facilities Department at 973-770-8840 or email at [mgeary@hopatcongschools.org](mailto:mgeary@hopatcongschools.org).

For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at [www.epa.gov/lead](http://www.epa.gov/lead), call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

If you are concerned about lead exposure at this facility or in your home, you may want to ask your health care providers about testing children to determine levels of lead in their blood.

Sincerely,  
Matthew Geary  
Facilities Supervisor

## Chain of Custody

– Environmental Lead –

**Contact Information**

**Client Company:** Garden State Environmental, inc.  
**Office Address:** 555 South Broad St.  
**City, State, Zip:** Glen Rock, NJ, 07452  
**Fax Number:** 201-652-0612  
**Email Address:** labreports@gseconsultants.com

**Project Number:** 8402  
**Project Name:** Kapatcong Middle School  
**Primary Contact:** Kaitlynn Pinero  
**Office Phone:** 201-652-1119  
**Cell Phone:** \_\_\_\_\_

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:**

\_\_\_\_\_  
 \_\_\_\_\_

**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): <u>Kaitlynn Pinero (GSE)</u>	Date: <u>5-27-22</u>	Time: <u>4:45 pm</u>
Received (Name / iATL): _____	Date: _____	Time: _____
Sample Login (Name / iATL): <u>h6/3/22</u>	Date: _____	Time: _____
Analysis(Name(s) / iATL): <u>MS</u>	Date: <u>6/3/22</u>	Time: _____
QA/QC Review (Name / iATL): <u>h6/6/22</u>	Date: _____	Time: <u>JUN - 2 2022</u>
Archived / Released: _____ QA/QC InterLAB Use: _____	Date: _____	Time: _____

## Sample Log

—Environmental Lead—

Client: Garden State Environmental, inc. Project: 8402: Hopatcong Middle School

Sampling Date/Time: 4-23-22 3:35 pm

Client Sample #	iATL #	Location/ Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HM-1-WC-01A	7437715	Hall by A101		3:35 pm	initial		
HM-1-BF-01A	7437716	Hall by A101		3:36 pm	initial		
HM-1-WC-02A	7437717	Hall by A101		3:37 pm	initial		
HM-1-BF-02A	7437718	Hall by A101		3:38 pm	initial		
HM-1-S-01A	7437719	Kitchen comp, Right		3:39 pm	initial		
HM-1-S-02A	7437720	Kitchen comp, left		3:40 pm	initial		
HM-1-S-03A	7437721	Kitchen Island		3:41 pm	initial		
HM-1-H-01A	7437722	Kitchen Hose		3:42 pm	initial		
HM-1-WC-03A	7437723	Hall by M112, left		3:45 pm	initial		
HM-1-BF-03A	7437724	Hall by M112, left		3:46 pm	initial		
HM-1-WC-04A	7437725	Hall by M112, right		3:47 pm	initial		
HM-1-BF-04A	7437726	Hall by M112, right		3:49 pm	initial		
HM-1-S-06A	7437727	Room B104, Right		3:51 pm	initial		
HM-1-S-07A	7437728	Room B104, left		3:52 pm	initial		
HM-1-WC-05A	7437729	Hall by B104, left		3:53 pm	initial		

\* = 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.



9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054  
Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

# Sample Log

—Environmental Lead—

Client: Garden State Environmental, inc. Project: 8402: Hopatcong Middle School

Sampling Date/Time: 4-23-22 3:35 pm

Client Sample #	iATL #	Location/Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HM-1-BF-05A	7437730	Hall by B104, left		3:53 pm	initial		
HM-1-BF-06A	7437731	Hall by , B104, Right		3:54 pm	initial		
HM-1-WC-06A	7437732	Hall by B104, Right		3:56 pm	initial		
HM-2022-FBA	7437733	field Blank		/	initial		
	Acidified MS						
	6/8/22 18:50						

\* = 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: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452  
  
Client: GAR373

Report Date: 6/3/2022  
Report No.: 662247 - Lead Water  
Project: Hopatcong Middle School  
Project No.: 8402

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7437715                      Location: Hall By A101                      Result(ppb): <1.00  
Client No.: HM-1-WC-01A              \* Sample acidified to pH <2.

Lab No.: 7437716                      Location: Hall By A101                      Result(ppb): 1.10  
Client No.: HM-1-BF-01A              \* Sample acidified to pH <2.

Lab No.: 7437717                      Location: Hall By A101                      Result(ppb): 1.20  
Client No.: HM-1-WC-02A              \* Sample acidified to pH <2.

Lab No.: 7437718                      Location: Hall By A101                      Result(ppb): 1.10  
Client No.: HM-1-BF-02A              \* Sample acidified to pH <2.

Lab No.: 7437719                      Location: Kitchen Comp, Right              Result(ppb): 27.4  
Client No.: HM-1-S-01A              \* Sample acidified to pH <2.

Lab No.: 7437720                      Location: Kitchen Comp, Left              Result(ppb): 32.0  
Client No.: HM-1-S-02A              \* Sample acidified to pH <2.

Lab No.: 7437721                      Location: Kitchen Island                      Result(ppb): 11.2  
Client No.: HM-1-S-03A              \* Sample acidified to pH <2.

Lab No.: 7437722                      Location: Kitchen Hose                      Result(ppb): 21.2  
Client No.: HM-1-H-01A              \* Sample acidified to pH <2.

Lab No.: 7437723                      Location: Hall By M112, Left              Result(ppb): <1.00  
Client No.: HM-1-WC-03A              \* Sample acidified to pH <2.

Lab No.: 7437724                      Location: Hall By M112, Left              Result(ppb): <1.00  
Client No.: HM-1-BF-03A              \* Sample acidified to pH <2.

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

Date Received: 6/2/2022  
Date Analyzed: 06/03/2022  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS


Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452  
  
Client: GAR373


Report Date: 6/3/2022  
Report No.: 662247 - Lead Water  
Project: Hopatcong Middle School  
Project No.: 8402

LEAD WATER SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 7437725 <b>Client No.:</b> HM-1-WC-04A	<b>Location:</b> Hall By M112, Right * Sample acidified to pH <2.	<b>Result(ppb):</b> <1.00
<b>Lab No.:</b> 7437726 <b>Client No.:</b> HM-1-BF-04A	<b>Location:</b> Hall By M112, Right * Sample acidified to pH <2.	<b>Result(ppb):</b> <1.00
<b>Lab No.:</b> 7437727 <b>Client No.:</b> HM-1-S-06A	<b>Location:</b> Room B104, Right * Sample acidified to pH <2.	<b>Result(ppb):</b> 29.4
<b>Lab No.:</b> 7437728 <b>Client No.:</b> HM-1-S-07A	<b>Location:</b> Room B104, Left * Sample acidified to pH <2.	<b>Result(ppb):</b> 12.2
<b>Lab No.:</b> 7437729 <b>Client No.:</b> HM-1-WC-05A	<b>Location:</b> Hall By B104, Left * Sample acidified to pH <2.	<b>Result(ppb):</b> <1.00
<b>Lab No.:</b> 7437730 <b>Client No.:</b> HM-1-BF-05A	<b>Location:</b> Hall By B104, Left * Sample acidified to pH <2.	<b>Result(ppb):</b> <1.00
<b>Lab No.:</b> 7437731 <b>Client No.:</b> HM-1-BF-06A	<b>Location:</b> Hall By B104, Right * Sample acidified to pH <2.	<b>Result(ppb):</b> <1.00
<b>Lab No.:</b> 7437732 <b>Client No.:</b> HM-1-WC-06A	<b>Location:</b> Hall By B104, Right * Sample acidified to pH <2.	<b>Result(ppb):</b> <1.00
<b>Lab No.:</b> 7437733 <b>Client No.:</b> HM-2022-FBA	<b>Location:</b> Field Blank * Sample acidified to pH <2.	<b>Result(ppb):</b> <1.00

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

Date Received: 6/2/2022  
Date Analyzed: 06/03/2022  
Signature:   
Analyst: Mark Stewart

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



---

CERTIFICATE OF ANALYSIS

---

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 6/3/2022  
Report No.: 662247 - Lead Water  
Project: Hopatcong Middle School  
Project No.: 8402

Client: GAR373

## Appendix to Analytical Report:

**Customer Contact:** Send ALL Lab Reports  
**Analysis:** AAS-GF - ASTM D3559-08D

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:** Kelly Klippel  
**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 D3559-08D

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: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 6/3/2022  
Report No.: 662247 - Lead Water  
Project: Hopatcong Middle School  
Project No.: 8402

Client: GAR373

**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.



9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054  
 Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

## Chain of Custody

– Environmental Lead –

<b>Contact Information</b>	
<b>Client Company:</b> <u>Garden State Environmental, Inc.</u>	<b>Project Number:</b> <u>8402</u>
<b>Office Address:</b> <u>555 South Broad Street</u>	<b>Project Name:</b> <u>Tulsa Trail, Hapatcong</u>
<b>City, State, Zip:</b> <u>Glen Rock, NJ 07452</u>	<b>Primary Contact:</b> <u>Christian Valdes</u>
<b>Fax Number:</b> <u>201-652-0612</u>	<b>Office Phone:</b> <u>201-652-1119</u>
<b>Email Address:</b> <u>labreports@gseconsultants.com</u>	<b>Cell Phone:</b> _____

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:**

\_\_\_\_\_

\_\_\_\_\_

**Turnaround Time**

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

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\*\*\*

Verbal  Email  Fax

**Chain of Custody**

Relinquished (Name/Organization): <u>Christian Valdes</u>	Date: <u>4/27/22</u>	Time: _____
Received (Name / iATL): _____	Date: _____	Time: _____
Sample Login (Name / iATL): <u>LS/SLW</u>	Date: _____	Time: _____
Analysis(Name(s) / iATL): <u>LS/SLW</u>	Date: _____	Time: _____
QA/QC Review (Name / iATL): <u>W</u>	Date: <u>5/10/22</u>	Time: _____
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____

RECEIVED  
MAY - 1 2022

## Sample Log

—Environmental Lead—

Client: Garden State Environmental, Inc. Project: Tulsa Trail, Hopatecong

Sampling Date/Time: 4/23/22 1:00 pm

Acidified w/ S/11/22 1:15

Client Sample #	iATL #	Location/Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
X HT-1-S-05A	7421830	Kitchen Cafe	—	1:08	initial	—	
HT-1-WC-02A	7421831	Hall by B-3	—	1:09	initial	—	
HT-1-BF-02A	7421832	Hall by B-3	—	1:10	initial	—	
HT-1-S-02A	7421833	Kitchen Comp R	—	1:11	initial	—	
X HT-1-S-03A	7421834	Kitchen Comp L	—	1:12	initial	—	
HT-1-WC-01A	7421835	Hall by Conf. Room	—	1:13	initial	—	
HT-1-BF-01A	7421836	Hall by Conf. Room	—	1:14	initial	—	
HT-1-S-01A	7421837	Main Office K.	—	1:15	initial	—	
HT-1-WC-03A	7421838	Hall by Room 16	—	1:16	initial	—	
HT-1-BF-03A	7421839	Hall by Room 16	—	1:17	initial	—	
HT-1-S-06A	7421840	Nurse Room	—	1:18	initial	—	
HT-1-WC-04A	7421841	Hall by Room 6	—	1:19	initial	—	
HT-1-BF-04A	7421842	Hall by Room 6	—	1:21	initial	—	
HT-1-S-07A	7421843	Room 23	—	1:23	initial	—	
HT-4-23-EBA	7421844	—	—	—	—	—	

\* = 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. duplicate 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.

PSP  
HT-1-S-03A 7421845

\* both labeled S-03A, as Calculating more than 30 years...one sample at a time assigned randomly

CERTIFICATE OF ANALYSIS

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452  
  
Client: GAR373

Report Date: 5/13/2022  
Report No.: 660337 - Lead Water  
Project: Tulsa Tail Hopatcong  
Project No.: 8402

LEAD WATER SAMPLE ANALYSIS SUMMARY

**Lab No.:** 7421830                      **Location:** Cafe                      **Result(ppb):** 10.8  
**Client No.:** HT-1-S-05A              \* Sample acidified to pH <2.

**Lab No.:** 7421831                      **Location:** Hall By B-3                      **Result(ppb):** <1.00  
**Client No.:** HT-1-WC-02A              \* Sample acidified to pH <2.

**Lab No.:** 7421832                      **Location:** Hall By B-3                      **Result(ppb):** <1.00  
**Client No.:** HT-1-BF-02A              \* Sample acidified to pH <2.

**Lab No.:** 7421833                      **Location:** Kitchen Comp R                      **Result(ppb):** 9.00  
**Client No.:** HT-1-S-02A              \* Sample acidified to pH <2.

**Lab No.:** 7421834                      **Location:** Kitchen Comp L                      **Result(ppb):** 3.50  
**Client No.:** HT-1-S-03A              \* Sample acidified to pH <2.

**Lab No.:** 7421835                      **Location:** Hall By Conf Room                      **Result(ppb):** <1.00  
**Client No.:** HT-1-WC-01A              \* Sample acidified to pH <2.

**Lab No.:** 7421836                      **Location:** Hall By Conf Room                      **Result(ppb):** <1.00  
**Client No.:** HT-1-BF-01A              \* Sample acidified to pH <2.

**Lab No.:** 7421837                      **Location:** Main Office K                      **Result(ppb):** <1.00  
**Client No.:** HT-1-S-01A              \* Sample acidified to pH <2.

**Lab No.:** 7421838                      **Location:** Hall By Room 16                      **Result(ppb):** <1.00  
**Client No.:** HT-1-WC-03A              \* Sample acidified to pH <2.

**Lab No.:** 7421839                      **Location:** Hall By Room 16                      **Result(ppb):** <1.00  
**Client No.:** HT-1-BF-03A              \* Sample acidified to pH <2.

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

Date Received: 5/4/2022  
Date Analyzed: 05/13/2022  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 5/13/2022  
Report No.: 660337 - Lead Water  
Project: Tulsa Tail Hopatcong  
Project No.: 8402

Client: GAR373

LEAD WATER SAMPLE ANALYSIS SUMMARY

**Lab No.:** 7421840                      **Location:** Nurse Room                      **Result(ppb):** 3.00  
**Client No.:** HT-1-S-06A              \* Sample acidified to pH <2.

**Lab No.:** 7421841                      **Location:** Hall By Room 6                      **Result(ppb):** <1.00  
**Client No.:** HT-1-WC-04A              \* Sample acidified to pH <2.


**Lab No.:** 7421842                      **Location:** Hall By Room 6                      **Result(ppb):** <1.00  
**Client No.:** HT-1-BF-04A              \* Sample acidified to pH <2.


**Lab No.:** 7421843                      **Location:** Room 23                      **Result(ppb):** <1.00  
**Client No.:** HT-1-S-07A              \* Sample acidified to pH <2.

**Lab No.:** 7421844                      **Location:**                      **Result(ppb):** <1.00  
**Client No.:** HT-4-23-FBA              \* Sample acidified to pH <2.

**Lab No.:** 7421845                      **Location:** Additional Sample Received                      **Result(ppb):** 6.30  
**Client No.:** HT-1-S-03A              \* Sample acidified to pH <2.

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

Date Received: 5/4/2022  
Date Analyzed: 05/13/2022  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

---

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 5/13/2022  
Report No.: 660337 - Lead Water  
Project: Tulsa Tail Hopatcong  
Project No.: 8402

Client: GAR373

## Appendix to Analytical Report:

**Customer Contact:** Send ALL Lab Reports  
**Analysis:** AAS-GF - ASTM D3559-08D

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:** Kelly Klippel  
**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 D3559-08D

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: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 5/13/2022  
Report No.: 660337 - Lead Water  
Project: Tulsa Tail Hopatcong  
Project No.: 8402

Client: GAR373

**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.





## Hopatcong Borough Schools

P.O. Box 1029 • Hopatcong, New Jersey 07843 • (973) 770-8840 • FAX (973) 398-2590  
**Matthew Geary, Facilities Supervisor**

June 8<sup>th</sup>, 2022

Hopatcong Borough Schools  
Durban Avenue School  
616 Durban Avenue  
Hopatcong, NJ 07843

Dear Durban Avenue School Community,

Our school system is committed to protecting student, teacher, and staff health. To protect our community and be in compliance with the Department of Education regulations, Hopatcong Borough Schools tested our schools' drinking water for lead.

In accordance with the Department of Education regulations, Durban Avenue School will implement immediate remedial measures for any drinking water outlet with a result greater than the action level of 15 µg/l (parts per billion [ppb]). This includes turning off the outlet unless it is determined the location must remain on for non-drinking purposes. In these cases, a "DO NOT DRINK – SAFE FOR HANDWASHING ONLY" sign will be posted.

### Results of our Testing

Following instructions given in technical guidance developed by the New Jersey Department of Environmental Protection, we completed a plumbing profile for each of the buildings within Hopatcong Borough Schools. Through this effort, we identified and tested all drinking water and food preparation outlets. Of the 13 samples taken, all but 1 tested below the lead action level established by the US Environmental Protection Agency for lead in drinking water (15 µg/l [ppb]).

The table below identifies the drinking water outlet(s) that tested above the 15 µg/l for lead, the actual lead level, and what temporary remedial action Hopatcong Borough Schools has taken to reduce the levels of lead at these locations.

<b>Sample Location</b>	<b>First Draw Result in µg/l (ppb)</b>	<b>Remedial Action</b>
First Floor Kitchen Dish-Wash Hose	76.0	Outlet immediately taken out of service.

### Health Effects of Lead

High levels of lead in drinking water can cause health problems. Lead is most dangerous for pregnant women, infants, and children under 6 years of age. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. Exposure to high levels of lead during pregnancy contributes to low birth weight and developmental delays in infants. In young children, lead exposure can lower IQ levels, affect hearing, reduce attention span, and hurt school performance. At *very* high levels, lead can even cause brain damage. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

### How Lead Enters our Water

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like groundwater, rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and in building plumbing. These materials include lead-based solder used to join copper pipe, brass, and chrome-plated brass faucets. In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials. However, even the lead in plumbing materials meeting these new requirements is subject to corrosion. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into the drinking water. This means the first water drawn from the tap in the morning *may* contain fairly high levels of lead.

### Lead in Drinking Water

Lead in drinking water, although rarely the sole cause of lead poisoning can significantly increase a person's total lead exposure, particularly the exposure of children under the age of 6. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

### For More Information

A copy of the test results is available in our central office for inspection by the public, including students, teachers, other school personnel, and parents, and can be viewed between the hours of 8:30 a.m. and 4:00 p.m. and are also available on our website at <https://www.hopatcongschools.org/p/facilities/>. For more information about water quality in our schools, contact Matthew Geary at the Facilities Department at 973-770-8840 or email at [mgeary@hopatcongschools.org](mailto:mgeary@hopatcongschools.org).

For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at [www.epa.gov/lead](http://www.epa.gov/lead), call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

If you are concerned about lead exposure at this facility or in your home, you may want to ask your health care providers about testing children to determine levels of lead in their blood.

Sincerely,  
Matthew Geary  
Facilities Supervisor

## Chain of Custody

– Environmental Lead –

<b>Contact Information</b>	
<b>Client Company:</b> Garden State Environmental, Inc.	<b>Project Number:</b> 8402
<b>Office Address:</b> 555 South Broad Street	<b>Project Name:</b> Durham ES, Hopatcong
<b>City, State, Zip:</b> Glen Rock, NJ 07452	<b>Primary Contact:</b> Christian Valdes
<b>Fax Number:</b> 201-652-0612	<b>Office Phone:</b> 201-652-1119
<b>Email Address:</b> labreports@gseconsultants.com	<b>Cell Phone:</b> _____

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:**

\_\_\_\_\_

\_\_\_\_\_

**Turnaround Time**

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

Specific date / time

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\*\*\*

RECEIVED

**Chain of Custody**

Relinquished (Name/Organization):	Christian Valdes	Date:	4/28/22	Time:	1:45 pm
Received (Name / iATL):	MAY - 4 2022	Date:		Time:	
Sample Login (Name / iATL):		Date:		Time:	
Analysis(Name(s) / iATL):	crstilla	Date:		Time:	
QA/QC Review (Name / iATL):		Date:		Time:	
Archived / Released:		Date:		Time:	
	iATL By				



# Sample Log

## -Environmental Lead-

Client: \_\_\_\_\_ Project: Durban Ave Elementary Hopatcong

Sampling Date/Time: 4/23/22 2:25 pm

Client Sample #	iATL #	Location/Description	Flow Rate	Start End	Sampling time (min)	Area (ft <sup>2</sup> ) Volume (L)	Results ( )
HD-1-WC-02A	7421376	Hall by C-1	-	2:25	initial	-	
HD-1-BF-02A	7421377	Hall by C-1	-	2:26	initial	-	
HD-1-S-04A	7421378	Nurse Room	-	2:27	initial	-	
HD-1-WC-03A	7421379	Hall Outside Nurse	-	2:28	initial	-	
HD-1-BF-03A	7421380	Hall Outside Nurse	-	2:29	initial	-	
HD-1-H-02A	7421381	Kitchen Comp Horse	-	2:31	initial	-	
HD-1-S-03A	7421382	Kitchen Comp Left	-	2:32	initial	-	
HD-1-H-01A	7421383	Dishwash Horse	-	2:33	initial	-	
HD-1-WC-01A	<del>7421384</del> 7421385	Hall by D-9	-	2:34	initial	-	
HD-1-BF-01A		Hall by D-9	-	2:36	initial	-	
HD-1-S-01A	7421386	Faculty Room	-	2:38	initial	-	
HD-4- <del>23-FBA</del>	7421387	-	-	-	-	-	
HD-1-S-02A	7421388	Kitchen Comp Right	-	2:33	initial	-	
* HD-1-S-05A	7421389				Acidified	MS	
	extra	sample rec'd			5/7/22	100	

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

\*\* = 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.

CERTIFICATE OF ANALYSIS

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452  
  
Client: GAR373

Report Date: 5/11/2022  
Report No.: 660317 - Lead Water  
Project: Durban ES, Hopatcong  
Project No.: 8402

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7421376                      Location: Hall By C-1                      Result(ppb): <1.00  
Client No.: HD-1-WC-02A              \* Sample acidified to pH <2.

Lab No.: 7421377                      Location: Hall By C-1                      Result(ppb): <1.00  
Client No.: HD-1-BF-02A              \* Sample acidified to pH <2.

Lab No.: 7421378                      Location: Nurse Room                      Result(ppb): 9.00  
Client No.: HD-1-S-04A                \* Sample acidified to pH <2.

Lab No.: 7421379                      Location: Hall Outside Nurse              Result(ppb): <1.00  
Client No.: HD-1-WC-03A              \* Sample acidified to pH <2.

Lab No.: 7421380                      Location: Hall Outside Nurse              Result(ppb): <1.00  
Client No.: HD-1-BF-03A              \* Sample acidified to pH <2.

Lab No.: 7421381                      Location: Kitchen Comp Hose              Result(ppb): <1.00  
Client No.: HD-1-H-02A                \* Sample acidified to pH <2.

Lab No.: 7421382                      Location: Kitchen Comp Left              Result(ppb): 5.60  
Client No.: HD-1-S-03A                \* Sample acidified to pH <2.

Lab No.: 7421383                      Location: Dishwash Hose                      Result(ppb): 76.0  
Client No.: HD-1-H-01A                \* Sample acidified to pH <2.

Lab No.: 7421384                      Location: Hall By D-9                      Result(ppb): <1.00  
Client No.: HD-1-WC-01A              \* Sample acidified to pH <2.

Lab No.: 7421385                      Location: Hall By D-9                      Result(ppb): <1.00  
Client No.: HD-1-BF-01A              \* Sample acidified to pH <2.

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

Date Received: 5/4/2022  
Date Analyzed: 05/11/2022  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 5/11/2022  
Report No.: 660317 - Lead Water  
Project: Durban ES, Hopatcong  
Project No.: 8402

Client: GAR373

LEAD WATER SAMPLE ANALYSIS SUMMARY


Lab No.: 7421386                      Location: Faculty Room                      Result(ppb): 7.20  
Client No.: HD-1-S-01A              \* Sample acidified to pH <2.


Lab No.: 7421387                      Location:    Result(ppb): <1.00  
Client No.: HD-4-23-FBA              \* Sample acidified to pH <2.

Lab No.: 7421388                      Location: Kitchen Comp Right              Result(ppb): <1.00  
Client No.: HD-1-S-02A              \* Sample acidified to pH <2.

Lab No.: 7421389                      Location: Additional Sample Received      Result(ppb): <1.00  
Client No.: HD-1-S-05A              \* Sample acidified to pH <2.

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

Date Received: 5/4/2022  
Date Analyzed: 05/11/2022  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

---

Client: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452  
  
Client: GAR373

Report Date: 5/11/2022  
Report No.: 660317 - Lead Water  
Project: Durban ES, Hopatcong  
Project No.: 8402

## Appendix to Analytical Report:

**Customer Contact:** Send ALL Lab Reports  
**Analysis:** AAS-GF - ASTM D3559-08D

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:** Kelly Klippel  
**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 D3559-08D

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: Garden State Environmental, Inc.  
555 S Broad St. Ste. K  
Glen Rock NJ 07452

Report Date: 5/11/2022  
Report No.: 660317 - Lead Water  
Project: Durban ES, Hopatcong  
Project No.: 8402

Client: GAR373

**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.