# **Evaluation of Lead** in Drinking Water at Northeast Scranton Intermediate School

1539 North Main Street Scranton, PA 18508

**Prepared for:** 

SCRANTON SCHOOL DISTRICT 425 N. Washington Ave. Scranton, PA 18503

Prepared by:



ronmental, and Architectural Engineering

GAI Job No.: SSD.19\_673

Sample Date: December 26, 2019 Report Date: January 20, 2020

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SSD – Northeast Scranton Intermediate School Lead Evaluation Report GAI #: SSD.19\_673 January 20, 2020

## **INTRODUCTION**

Under the 2018 Act 39 Pennsylvania School Code (Section 742) beginning in the 2018-2019 school year and every year thereafter, School Districts in Pennsylvania shall either analyze their drinking water for lead or conduct public meetings to discuss why testing was not conducted.

#### BACKGROUND

Lead is a naturally occurring heavy metal that is toxic when ingested or absorbed into the body. Children in particular are more susceptible to lead poisoning because they absorb more lead into their systems as they grow.

According to the United States Environmental Protection Agency (EPA), "even low levels of lead in the blood of children can result in:

- Behavior and learning problems
- Lower IQ and Hyperactivity
- Slowed growth
- Hearing problems
- Anemia

In rare cases, ingestion of lead can cause seizures, coma and even death" (Available at <u>www.epa.gov/lead/learn-about-lead</u>, April 4, 2016). Although, there are several ways that lead poisoning can occur in children, this report evaluates potential lead exposure only from drinking water within the **Northeast Scranton Intermediate School**.

There are basically two (2) ways in which lead can enter drinking water. The first and least common route would be lead that is present in the source water. This route is extremely rare and would only be addressed if high levels of lead were discovered in the secondary flushed samples.

The second route for lead to enter drinking water (and most common), would be lead that has been leached out of the plumbing material as water passes through it. Although lead is no longer used in pipes or solder, it can still be found in older fittings, fixtures, and plumbing components. The ability of water to leach chemicals from piping and plumbing materials is known as corrosivity. Therefore, the more corrosive the water, the more potential there is for lead to be leached out of the plumbing material. Additionally, as the length of time the water is in contact with the plumbing material increases, so does the potential for the leaching of lead.

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### **SAMPLING PROCEDURES**

Both the Environmental Protection Agency [EPA] and the Pennsylvania Department of Environmental Protection Agency [PADEP] have programs to evaluate and reduce the concentration of lead in drinking water. The Federal (EPA) Program, the **3Ts for Reducing Lead in Drinking Water**, was developed for schools and daycare centers. The State (PADEP) Program is directed toward public drinking water suppliers (*Lead Copper Rule, 1991*). The programs differ slightly in sample quantity. However, because EPA's program is geared specifically toward schools, EPA's 3Ts sampling protocols were utilized.

A lead sampling plan was developed by Guzek Associates, Inc. [GAI] with the assistance of school maintenance staff in accordance with **EPA's 3Ts for Reducing Lead in Drinking Water Toolkit** (available at: www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit). Representative samples of water fountains and/or faucets with the likelihood of ingestion by children were located and sampled. For example, if a classroom has two identical water fountains, only one was sampled; or, if a faucet was located in a maintenance room where children had no access, it would not be sampled.

One sample was taken at each designated location at the Northeast Scranton Intermediate School, according to EPA's 3T's Toolkit sampling protocols. The sample was taken under worst case scenario condition. All samples were taken as First Draw after the water sat (unused) in the pipes for a minimum of eight (8) hours.

Clean/new sample bottles containing a preservative were supplied by a local laboratory. Samples were transported to the laboratory on ice within the specified holding times.

#### **SAMPLE RESULTS**

The sample results were compared to both EPA's Remediation Trigger Level [RTL] of 0.020 mg/l and PADEP's Lead Action Level of 0.015 mg/l.

The following table summarizes the First Draw lead results sampled on December 26, 2019 from the Northeast Scranton Intermediate School:

Sample	Sample Location Description:	Lead	Lead	Lead	Exceeds
ID:		Concentration	RTL*	Action Level**	Action
		(mg/l)	(mg/l)	(mg/l)	Level
NSIS-01	3 <sup>rd</sup> Floor Hallway, Near Elevator – Water Fountain	< 0.001	0.020	0.015	No
NSIS-02	3 <sup>rd</sup> Floor Hallway, Near Medical Room – Water Fountain	< 0.001	0.020	0.015	No
NSIS-03	3 <sup>rd</sup> Floor, Medical Room – Rear Left Sink	0.002	0.020	0.015	No
NSIS-04	3 <sup>rd</sup> Floor, Medical Room – Rear Right Sink	0.002	0.020	0.015	No
NSIS-05	3 <sup>rd</sup> Floor, Medical Room – Refrigerator Water	<0.001	0.020	0.015	No
NSIS-06	3 <sup>rd</sup> Floor, Teachers Lounge – Sink	0.006	0.020	0.015	No
NSIS-07	2 <sup>nd</sup> Floor, Hallway, Near Elevator – Water Fountain	< 0.001	0.020	0.015	No
NSIS-08	2 <sup>nd</sup> Floor, Hallway, Near Room 230 – Water Fountain	< 0.001	0.020	0.015	No
NSIS-09	2 <sup>nd</sup> Floor, Girls Locker Room – Water Fountain	0.001	0.020	0.015	No
NSIS-10	2 <sup>nd</sup> Floor, Girls Locker Room – Sink	0.003	0.020	0.015	No
NSIS-11	1 <sup>st</sup> Floor, Hallway Outside Elevator – Water Fountain	< 0.001	0.020	0.015	No
NSIS-12	1 <sup>st</sup> Floor, Teachers Lounge, Room 108 – Sink	0.001	0.020	0.015	No
NSIS-13	1 <sup>st</sup> Floor Hallway, Outside Room 121 – Water Fountain	< 0.001	0.020	0.015	No
NSIS-14	1 <sup>st</sup> Floor, Home Economics – Sink #1	0.017	0.020	0.015	YES
NSIS-15	1 <sup>st</sup> Floor, Home Economics – Sink #2	0.006	0.020	0.015	No
NSIS-16	1 <sup>st</sup> Floor, Home Economics – Sink #3	0.009	0.020	0.015	No
NSIS-17	1 <sup>st</sup> Floor, Home Economics – Sink #4	0.016	0.020	0.015	YES
NSIS-18	1 <sup>st</sup> Floor, Home Economics – Sink #5	0.027	0.020	0.015	YES
NSIS-19	1 <sup>st</sup> Floor, Room 121 – Sink	0.014	0.020	0.015	No
NSIS-20	No Sample	-	-	-	-
NSIS-21	Ground Floor, Weight Room – Water Fountain	< 0.001	0.020	0.015	No
NSIS-22	Ground Floor, Weight Room – Sink	< 0.001	0.020	0.015	No
NSIS-23	Basement, Cafeteria – Water Fountain	<0.001	0.020	0.015	No
NSIS-24	Basement, Cafeteria – Sink	<0.001	0.020	0.015	No
NSIS-25	Basement, Cafeteria, In Kitchen – Sink	0.021	0.020	0.015	YES
NSIS-26	1 <sup>st</sup> Floor, Teachers Lounge, Room 106 – Sink	<0.001	0.020	0.015	No
NSIS-27	No Sample	-	-	-	-
NSIS-28	No Sample	-	-	-	-

\* RTL is defined by EPA as the level at which remedial action should be taken to reduce potential exposure to lead in public school drinking water. \*\* Action Level is defined by EPA as the level at which action should be taken to reduce the concentration of lead in drinking water.

Samples NSIS-14, NSIS-17, NSIS-18, and NSIS-25 were reported by the laboratory as above the Action Level. If any sample result exceeded PADEP's Action Level (which is the most stringent), the School was contacted and it was recommended that the fountain/faucet be immediately taken out of service or signage be posted stating, "NOT FOR DRINKING/COOKING".

No other samples exceeded either EPA's Remediation Trigger Level [RTL] of 0.020 mg/l and PADEP's Lead Action Level of 0.015 mg/l.

The Laboratory Analytical Reports (with Chain-of-Custody Forms) are found in Appendix A of this report.

# RECOMMENDATIONS

As previously stated, if a sample concentration of 0.015 mg/l of lead was exceeded, GAI contacted the School District and it was recommended that the drinking fountain or faucet of concern be immediately taken out of service or signage be posted stating, "NOT FOR DRINKING/COOKING". If no sample results exceeded the PADEP's Action Level or EPA's RTL, no remediation action was recommended.

As permanent control measure, GAI recommends the following:

1). Any fountain or faucet used for drinking with elevated lead content should be permanently removed and replaced with a bottled water cooler.

2). It is strongly recommended that any faucet with elevated lead be immediately taken out of service or be posted "NOT FOR DRINKING/COOKING". Because there is a possibility that Lead may be present in faucets that have not been tested, it is therefore recommended that untested faucets be posted as well. Postings should be inspected monthly and replaced as needed.

3). As a safeguard, a schedule of flushing drinking water fountains and cooking faucets should be established by the School at the beginning of each school year and after long holidays (e.g. Christmas/New Year, Thanksgiving).

4). Results of lead sampling and remediation actions should be posted on the School District's Website and in the Administrative Offices of the School. Also, according to the PA Public School Code No. 2018-39, an elevated lead level "shall be reported to the Department of Education and posted on the Department's publicly accessible Internet Website".

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**APPENDIX A: SAMPLE CHAIN OF CUSTODY & ANALYTICAL RESULTS** 



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## **Report Narrative**

Customer: Guzek Associates, Inc. 401 Davis Street Clarks Summit, PA 18411 Report Date: 1/17/2020

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HawkMtn WO #:1912-00988Subject Line:Northeast Intermediate School Drinking Water Lead Analysis

Any information provided by client (CLT) has not been performed by HML and is not within the HML scope of accreditation.

All solid samples are reported on an "as received" basis unless otherwise noted.

The test results meet the requirements of 25 PA Code and Chapter 252, except where noted.

The information contained in this analytical report is the sole property of Hawk MTN Laboratories, Inc.

and that of the client. It cannot be reproduced in any form without the consent of Hawk MTN Labs, Inc. or the client for which this report was issued. The results contained in this report(s) are only representative of the sample(s) received. Conditions are dependent on location and time of the sampling event.

Hawk MTN Laboratories, Inc. is not responsible for use or interpretation of the data included herein.

PA DEP 40-417 EPA PA00169



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# **Certificate of Analysis**

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Clarks Summit, PA 18411

Material Tested:	Potable Water			HawkMtn WO #		0.00000.000		
Date Sampled:	12/26/2019	Time Sampled:	10:32	Sampler:		12-00988-00 IENT	2	
Date Received:	12/30/2019			Sample Point ID	): NE	1-02		
Client Sample ID:	NEI-02, Drinking Water	Dilution	0					
		Factor	<u>Quant</u> Limit		<u> </u>		Start	End
<u>Test Name</u>	Test Results	140001	Linit	Method	<u>Qual</u>	<u>Tech</u>	<u>Date/Time</u>	Date/Time
Lead, DW ICP-MS	<0.001 mg/L	1	0.001	EPA 200.8		KLM	1/7/20 22:31	
Material Tested: Date Sampled: Date Received:	Potable Water 12/26/2019 12/30/2019	Time Sampled:	10:30	HawkMtn WO # Sampler: Sample Point ID	CL	.2-00988-003 IENT I-03	3	
Client Sample ID:	NEI-03, Drinking Water	Lead Analysis						
	The A Dama Ha	<u>Dilution</u> Factor	<u>Quant</u> Limit	Method	<u>Qual</u>	<u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Time
<u>Test Name</u>	Test Results					KLM	1/7/20 22:31	
	0.00155 mg/L	1	0.001	EPA 200.8				
		_	0.001	EPA 200.8 HawkMtn WO #	<i>t</i> : 191	2-00988-004		
Lead, DW ICP-MS Material Tested: Date Sampled:	0.00155 mg/L Potable Water 12/26/2019	1 Time Sampled:	0.001	HawkMtn WO # Sampler:	CL	ENT		
Lead, DW ICP-MS Material Tested: Date Sampled: Date Received:	0.00155 mg/L Potable Water 12/26/2019 12/30/2019	Time Sampled:		HawkMtn WO #	CL			
Lead, DW ICP-MS Material Tested: Date Sampled:	0.00155 mg/L Potable Water 12/26/2019	Time Sampled: Lead Analysis	10:30	HawkMtn WO # Sampler:	CL	ENT		
Lead, DW ICP-MS Material Tested: Date Sampled: Date Received: Client Sample ID:	0.00155 mg/L Potable Water 12/26/2019 12/30/2019 NEI-04, Drinking Water	Time Sampled: Lead Analysis <u>Dilution</u>	10:30 <u>Quant</u>	HawkMtn WO # Sampler: Sample Point ID	CLI D: NE	IENT I-04	4 <u>Start</u>	<u>End</u>
Lead, DW ICP-MS Material Tested: Date Sampled: Date Received:	0.00155 mg/L Potable Water 12/26/2019 12/30/2019	Time Sampled: Lead Analysis	10:30	HawkMtn WO # Sampler:	CL	ENT	4	<u>End</u> Date/Time



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Lead, DW ICP-MS

<0.001 mg/L

1

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Report Date: 1/17/2020

Material Tested: Date Sampled: Date Received:	Potable Water 12/26/2019 12/30/2019	Time Sampled:	10:31	HawkMtn WO #: Sampler: Sample Point ID:	1912-00988-005 CLIENT NEI-05		
Client Sample ID: <u>Test Name</u>	NEI-05, Drinking Water <u>Test Results</u>	Lead Analysis <u>Dilution</u> <u>Factor</u>	<u>Quant</u> Limit	<u>Method</u>	<u>Qual Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Time
Lead, DW ICP-MS	<0.001 mg/L	1	0.001	EPA 200.8	KLM	1/7/20 22:31	
Material Tested: Date Sampled:	Potable Water 12/26/2019	Time Sampled:	10:37	HawkMtn WO #: Sampler:	1912-00988-006 CLIENT	i	
Date Banpied: Date Received: Client Sample ID:	12/30/2019 12/30/2019 NEI-06, Drinking Water	-	10.57	Sample Point ID:	NEI-06		
<u>Test Name</u>	<u>Test Results</u>	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	<u>Method</u>	<u>Qual Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Time
Lead, DW ICP-MS	0.00625 mg/L	1	0.001	EPA 200.8	KLM	1/7/20 22:31	
Material Tested: Date Sampled: Date Received: Client Sample ID:	Potable Water 12/26/2019 12/30/2019 NEI-07. Drinking Water	Time Sampled: Lead Analysis	10:39	HawkMtn WO #: Sampler: Sample Point ID:	1912-00988-007 CLIENT NEI-07		
Date Sampled:	12/26/2019	-	10:39 <u>Quant</u> <u>Limit</u>	Sampler: Sample Point ID:	CLIENT	<u>Start</u> Date/Time	<u>End</u> Date/Time
Date Sampled: Date Received: Client Sample ID:	12/26/2019 12/30/2019 NEI-07, Drinking Water	Lead Analysis Dilution	<u>Quant</u>	Sampler: Sample Point ID:	CLIENT NEI-07	<u>Start</u>	
Date Sampled: Date Received: Client Sample ID: <u>Test Name</u>	12/26/2019 12/30/2019 NEI-07, Drinking Water <u>Test Results</u>	Lead Analysis <u>Dilution</u> <u>Factor</u> 1 Time Sampled:	<u>Quant</u> Limit	Sampler: Sample Point ID: <u>Method</u> <u>C</u>	CLIENT NEI-07 <u>Dual Tech</u>	<u>Start</u> <u>Date/Time</u> 1/7/20 22:31	

0.001

EPA 200.8

KLM

1/7/20

22:31



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ad, DW ICP-MS	0.00258 mg/L	1	0.001	EPA 200.8	KLM	1/7/20 22:31	
<u>Test Name</u>	<u>Test Results</u>	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	<u>Method</u> <u>Q</u>	Dual <u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Time
Client Sample ID:	NEI-10, Drinking Water	Lead Analysis					
Date Received:	12/30/2019			Sample Point ID:	NEI-10		
Date Sampled:	12/26/2019	Time Sampled:	10:43	Sampler:	CLIENT		
Material Tested:	Potable Water			HawkMtn WO #:	1912-00988-010	)	
ead, DW ICP-MS	0.00101 mg/L	1	0.001	EPA 200.8	KLM	1/7/20 22:31	
<u>Test Name</u>	<u>Test Results</u>	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	<u>Method</u> <u>C</u>	<u>)ual Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Tim
Client Sample ID:	NEI-09, Drinking Water	Lead Analysis					
Date Received:	12/30/2019			Sample Point ID:	NEI-09		
Date Sampled:	12/26/2019	Time Sampled:	10:43	Sampler:	CLIENT		
Material Tested:	Potable Water			HawkMtn WO #:	1912-00988-009		

Material Tested: Date Sampled: Date Received:	Potable Water 12/26/2019 12/30/2019	Time Sampled	: 10:47	HawkMtn WO #: 1912-00988-011 Sampler: CLIENT Sample Point ID: NEI-11
Client Sample ID: <u>Test Name</u>	NEI-11, Drinking Water <u>Test Results</u>	Lead Analysis <u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	<u>Start End</u> <u>Method Qual Tech Date/Time Date/Time</u>
Lead, DW ICP-MS	<0.001 mg/L	1	0.001	EPA 200.8 KLM 1/7/20 22:31
Material Tested: Date Sampled: Date Received:	Potable Water 12/26/2019 12/30/2019	Time Sampled	: 10:45	HawkMtn WO #: 1912-00988-012 Sampler: CLIENT Sample Point ID: NEI-12
Client Sample ID:	NEI-12, Drinking Water	-		Sample Point ID: NEI-12
<u>Test Name</u>	Test Results	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	<u>Start End</u> Method Qual <u>Tech Date/Time Date/Time</u>
Lead, DW ICP-MS	0.00132 mg/L	1	0.001	EPA 200.8 KLM 1/7/20 22:31



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Lead, DW ICP-MS	<0.001 mg/L	1	0.001	EPA 200.8		KLM	1/7/20 22:31	
Material Tested:	Potable Water		10.50	HawkMtn WO #:		2-00988-014	ļ	
Date Sampled: Date Received:	12/26/2019 12/30/2019	Time Sampled:	10:50	Sampler: Sample Point ID:		ENT		
Client Sample ID:	NEI-14, Drinking Water	Lead Analysis		Sample I out ID.	14121	-14		
	, 0	Dilution	Quant				<b>G</b>	
Test Name	Test Results	Factor	Limit	Method	Qual	Tech	<u>Start</u> Date/Time	<u>End</u> Date/Tim
The leader to be a start of the second s				nin (2011), a dan bahi basi di kasi di kasala di kasa da kasa	-théo in aire roléation		riture contactivite delevers l'internation della sectione	Date/1111
Lead, DW ICP-MS	0.0166 mg/L	1	0.001	EPA 200.8		KLM	1/7/20 22:31	
Material Tested: Date Sampled: Date Received:	Potable Water 12/26/2019 12/30/2019	Time Sampled:	10:50	HawkMtn WO #: Sampler: Sample Point ID:	CLI	2-00988-015 ENT -15		
Client Sample ID:	NEI-15, Drinking Water	-						
	Test Results	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> Limit	Method	<u>Qual</u>	<u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Time
Test Name						KLM	1/7/20 22:31	
	0.00583 mg/L	1	0.001	EPA 200.8				
Lead, DW ICP-MS	Potable Water			HawkMtn WO #:		2-00988-016 ENT		
Lead, DW ICP-MS		I Time Sampled:	0.001			ENT		
Lead, DW ICP-MS Material Tested: Date Sampled:	Potable Water 12/26/2019	Time Sampled:		HawkMtn WO #: Sampler:	CLI	ENT		
Lead, DW ICP-MS Material Tested: Date Sampled: Date Received:	Potable Water 12/26/2019 12/30/2019	Time Sampled: Lead Analysis		HawkMtn WO #: Sampler:	CLI	ENT		Fnd
Lead, DW ICP-MS Material Tested: Date Sampled: Date Received:	Potable Water 12/26/2019 12/30/2019	Time Sampled: Lead Analysis	10:51	HawkMtn WO #: Sampler:	CLI	ENT	<u>Start</u> Date/Time	End Date/Time



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Test Name	Test Results	<u>Factor</u>	<u>Limit</u>	Method	Qual	<u>Tech</u>	Date/Time	Date/Time
		<u>Dilution</u>	Quant				Start	End
Material Tested: Date Sampled: Date Received: Client Sample ID:	Potable Water 12/26/2019 12/30/2019 NOT SAMPLED	Time Sampled:	10:34	HawkMtn WO #: Sampler: Sample Point ID:		2-00988-020 ENT -20	)	
Lead, DW ICP-MS	0.0135 mg/L	1	0.001	EPA 200.8		KLM	1/7/20 22:31	
<u>Test Name</u>	Test Results	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	<u>Method</u>	<u>Qual</u>	<u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Time
Material Tested: Date Sampled: Date Received: Client Sample ID:	Potable Water 12/26/2019 12/30/2019 NEI-19, Drinking Water	Time Sampled: Lead Analysis	10:53	HawkMtn WO #: Sampler: Sample Point ID:		2-00988-019 ENT [-19	9	
* Lead, DW ICP-MS	0.0273 mg/L	L	0.001	EPA 200.8		KLM	1/7/20 22:31	
<u>Test Name</u>	Test Results	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	<u>Method</u>	<u>Qual</u>	<u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Time
Material Tested: Date Sampled: Date Received: Client Sample ID:	Potable Water 12/26/2019 12/30/2019 NEI-18, Drinking Water	Time Sampled: Lead Analysis	10:51	HawkMtn WO #: Sampler: Sample Point ID:	CL	2-00988-01; IENT I-18	8	
* Lead, DW ICP-MS	0.0155 mg/L	1	0.001	EPA 200.8		KLM	1/7/20 22:31	
<u>Test Name</u>	Test Results	Dilution Factor	<u>Quant</u> Limit	<u>Method</u>	<u>Qual</u>	<u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Time
Material Tested: Date Sampled: Date Received: Client Sample ID:	Potable Water 12/26/2019 12/30/2019 NEI-17, Drinking Water	Time Sampled: Lead Analysis	10:51	HawkMtn WO #: Sampler: Sample Point ID:	CL	2-00988-01 IENT I-17	7	





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Lead, DW ICP-MS     <0.001 mg/L	Lead, DW ICP-MS	<0.001 mg/L	1	0.001	EPA 200.8		KLM	1/7/20 22:31	
Date Received:       12/30/2019       Sample Point ID:       NEI-22         Client Sample ID:       NEI-22, Drinking Water Lead Analysis       Dilution       Quant       Method       Qual       Tech       Start       En         Test Name       Test Results       Dilution       Quant       Method       Qual       Tech       Date/Time       D			Time Sampled	10:56					
Client Sample ID: NEI-22, Drinking Water Lead Analysis         Test Name       Test Results       Dilution Factor       Quant Limit       Method       Qual       Tech       Start       En         Lead, DW ICP-MS       <0.001 mg/L	*		Third Sumpieu.	10.00					
Test Name       Test Results       Factor       Limit       Method       Qual       Tech       Date/Time       Date/         Lead, DW ICP-MS       <0.001 mg/L	Client Sample ID:	NEI-22, Drinking Water	Lead Analysis						
Test NameTest ResultsFactorLimitMethodQualTechDate/TimeDate/Lead, DW JCP-MS<0.001 mg/L			<b>Dilution</b>	Quant				Start	Fnd
Material Tested:       Potable Water       HawkMtn WO #:       1912-00988-023         Date Sampled:       12/26/2019       Time Sampled:       10:58       Sampler:       CLIENT         Date Received:       12/30/2019       Sample Point ID:       NEI-23       NEI-23         Client Sample ID:       NEI-23, Drinking Water Lead Analysis       Dilution       Quant       Start       En         Test Name       Test Results       Factor       Limit       Method       Qual       Tech       Date/Time       Date//         Lead, DW ICP-MS       <0.001 mg/L	Test Name	<u>Test Results</u>	<u>Factor</u>	<u>Limit</u>	Method	Qual	<u>Tech</u>		<u>Date/Tin</u>
Material Tested:       Potable Water       HawkMtn WO #:       1912-00988-023         Date Sampled:       12/26/2019       Time Sampled:       10:58       Sampler:       CLIENT         Date Received:       12/30/2019       Sample Point ID:       NEI-23       NEI-23         Client Sample ID:       NEI-23, Drinking Water Lead Analysis       Dilution       Quant       Start       En         Test Name       Test Results       Factor       Limit       Method       Qual       Tech       Date/Time       Date//         Lead, DW ICP-MS       <0.001 mg/L	Lead DWICP-MS	<0.001 mg/l.	1	0.001	FPA 200 8		KIM	1/7/20 22:31	
Test Name     Test Results     Dilution Factor     Quant Limit     Method     Qual     Tech     Start     En       Lead, DW ICP-MS     <0.001 mg/L     I     0.001     EPA 200.8     KLM     1/7/20     22:31       Material Tested:     Potable Water     Image: Start     Image: Start     En     Date/Time     Date/Time     Date/Time       Date Sampled:     12/26/2019     Time Sampled:     11:00     En     Sampler:     CLIENT       Date Received:     12/30/2019     Time Sampled:     11:00     Sample Point ID:     NEI-24       Client Sample ID:     NEI-24, Drinking Water Lead Analysis     Dilution     Ouant     Ouant									
Test Name       Test Results       Factor       Limit       Method       Qual       Tech       Date/Time       Date/         Lead, DW ICP-MS       <0.001 mg/L       I       0.001       EPA 200.8       KLM       1/7/20       22:31         Material Tested:       Potable Water       HawkMtn WO #:       1912-00988-024         Date Sampled:       12/26/2019       Time Sampled:       11:00       Sampler:       CLIENT         Date Received:       12/30/2019       Time Sampled:       11:00       Sample Point ID:       NEI-24         Dilution       Ouant       Dilution       Ouant       Diage Sample       Dilution       Ouant	Date Sampled: Date Received:	12/26/2019 12/30/2019	-	10:58	Sampler:	CLI	ENT		
Material Tested:Potable WaterHawkMtn WO #:1912-00988-024Date Sampled:12/26/2019Time Sampled:11:00Sampler:CLIENTDate Received:12/30/2019Sample Point ID:NEI-24Client Sample ID:NEI-24, Drinking Water Lead AnalysisDilutionQuant	Date Sampled: Date Received:	12/26/2019 12/30/2019	Lead Analysis		Sampler:	CLI	ENT		
Date Sampled:12/26/2019Time Sampled:11:00Sampler:CLIENTDate Received:12/30/2019Sample Point ID:NEI-24Client Sample ID:NEI-24, Drinking Water Lead AnalysisDilutionOuent	Date Sampled: Date Received: Client Sample ID:	12/26/2019 12/30/2019 NEI-23, Drinking Water	Lead Analysis Dilution	Quant	Sampler: Sample Point ID:	CLI NEI	ENT  -23	<u>Start</u>	End Date/Tin
Date Received:     12/30/2019     Sample Point ID:     NEI-24       Client Sample ID:     NEI-24, Drinking Water Lead Analysis     Dilution     Quant	Date Sampled: Date Received: Client Sample ID: <u>Test Name</u>	12/26/2019 12/30/2019 NEI-23, Drinking Water <u>Test Results</u>	Lead Analysis <u>Dilution</u> <u>Factor</u>	<u>Quant</u> Limit	Sampler: Sample Point ID: <u>Method</u>	CLI NEI	ENT  -23 <u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Tin
Client Sample ID: NEI-24, Drinking Water Lead Analysis Dilution Quant	Date Sampled: Date Received: Client Sample ID: <u>Test Name</u> ead, DW ICP-MS	12/26/2019 12/30/2019 NEI-23, Drinking Water <u>Test Results</u> <0.001 mg/L	Lead Analysis <u>Dilution</u> <u>Factor</u>	<u>Quant</u> Limit	Sampler: Sample Point ID: <u>Method</u> EPA 200.8	CLI NEI Qual	ENT I-23 <u>Tech</u> KLM	<u>Start</u> Date/Time	
Dilution Quant	Date Sampled: Date Received: Client Sample ID: <u>Test Name</u> eead, DW ICP-MS Material Tested: Date Sampled:	12/26/2019 12/30/2019 NEI-23, Drinking Water <u>Test Results</u> <0.001 mg/L Potable Water 12/26/2019	Lead Analysis <u>Dilution</u> <u>Factor</u> 1	<u>Quant</u> <u>Limit</u> 0.001	Sampler: Sample Point ID: <u>Method</u> EPA 200.8 HawkMtn WO #: Sampler:	CLI NEI Qual 1912 CLI	ENT  -23 <u>Tech</u> KLM 2-00988-024 ENT	<u>Start</u> Date/Time	
Dilution Quant Start Fr	Date Sampled: Date Received: Client Sample ID: <u>Test Name</u> ead, DW ICP-MS Material Tested: Date Sampled: Date Received:	12/26/2019 12/30/2019 NEI-23, Drinking Water <u>Test Results</u> <0.001 mg/L Potable Water 12/26/2019 12/30/2019	Lead Analysis <u>Dilution</u> <u>Factor</u> 1 Time Sampled:	<u>Quant</u> <u>Limit</u> 0.001	Sampler: Sample Point ID: <u>Method</u> EPA 200.8 HawkMtn WO #: Sampler:	CLI NEI Qual 1912 CLI	ENT  -23 <u>Tech</u> KLM 2-00988-024 ENT	<u>Start</u> Date/Time	
Kactor Limit	Date Sampled: Date Received: Client Sample ID: <u>Test Name</u> Lead, DW ICP-MS Material Tested: Date Sampled: Date Received:	12/26/2019 12/30/2019 NEI-23, Drinking Water <u>Test Results</u> <0.001 mg/L Potable Water 12/26/2019 12/30/2019	Lead Analysis <u>Dilution</u> <u>Factor</u> I Time Sampled: Lead Analysis	<u>Quant</u> <u>Limit</u> 0.001 11:00	Sampler: Sample Point ID: <u>Method</u> EPA 200.8 HawkMtn WO #: Sampler:	CLI NEI Qual 1912 CLI	ENT  -23 <u>Tech</u> KLM 2-00988-024 ENT	<u>Start</u> Date/Time	
Test Name Test Results Factor Limit Method Qual Tech Date/Time Date/	Date Sampled: Date Received: Client Sample ID: Test Name Lead, DW ICP-MS Material Tested: Date Sampled: Date Received: Client Sample ID:	12/26/2019 12/30/2019 NEI-23, Drinking Water <u>Test Results</u> <0.001 mg/L Potable Water 12/26/2019 12/30/2019 NEI-24, Drinking Water	Lead Analysis <u>Dilution</u> <u>Factor</u> I Time Sampled: Lead Analysis <u>Dilution</u>	<u>Quant</u> <u>Limit</u> 0.001 11:00 <u>Quant</u>	Sampler: Sample Point ID: <u>Method</u> EPA 200.8 HawkMtn WO #: Sampler: Sample Point ID:	CLI NEI Qual 1912 CLI NEI	ENT  -23 <u>Tech</u> KLM 2-00988-024 ENT -24	<u>Start</u> Date/Time	





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# **Certificate of Analysis**

Customer: Guzek Associates, Inc. 401 Davis Street

Clarks Summit, PA 18411

lot Sampled			0				0:00	
Test Name	<u>Test Results</u>	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	Method	<u>Qual</u>	<u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Tim
Material Tested: Date Sampled: Date Received: Client Sample ID:	Potable Water 12/26/2019 12/30/2019 NOT SAMPLED	Time Sampled:	10:34	HawkMtn WO #: Sampler: Sample Point ID:	CLI	2-00988-028 ENT I-28		
Vot Sampled			0				0:00	
<u>Test Name</u>	Test Results	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> Limit	Method	<u>Qual</u>	<u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Tin
Date Sampled: Date Received: Client Sample ID:	12/26/2019 12/30/2019 NOT SAMPLED	Time Sampled:	10:34	Sampler: Sample Point ID:		IENT I-27		
Material Tested:	Potable Water			HawkMtn WO #:	191	2-00988-027		
.ead, DW ICP-MS	<0.001 mg/L	1	0.001	EPA 200.8		KLM	1/7/20 22:31	
<u>Test Name</u>	<u>Test Results</u>	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	<u>Method</u>	<u>Qual</u>	<u>Tech</u>	<u>Start</u> <u>Date/Time</u>	<u>End</u> Date/Tin
Client Sample ID:	NEI-26, Drinking Water	Lead Analysis						
Material Tested: Date Sampled: Date Received:	Potable Water 12/26/2019 12/30/2019	Time Sampled:	10:46	HawkMtn WO #: Sampler: Sample Point ID:	CL	2-00988-026 IENT I-26		
Lead, DW ICP-MS	0.0206 mg/L	1	0.001	EPA 200.8		KLM	1/7/20 22:31	
<u>Test Name</u>	Test Results	<u>Dilution</u> <u>Factor</u>	<u>Quant</u> <u>Limit</u>	Method	<u>Qual</u>	<u>Tech</u>	<u>Start</u> Date/Time	<u>End</u> Date/Tir
Client Sample ID:	NEI-25, Drinking Water	Lead Analysis		-				
Date Received:	12/30/2019	Time Sampled.	10.59	Sample Point ID:		I-25		
Date Sampled:	Potable Water 12/26/2019	Time Sampled:	10:59	HawkMtn WO #: Sampler:		12-00988-025 IENT		





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## **Certificate of Analysis**

Customer: Guzek Associates, Inc. 401 Davis Street Clarks Summit, PA 18411

Report Date: 1/17/2020

ND = Non Detect

These results relate only to the sample noted above.

This certificate is not to be reproduced except in full, without the written approval of HawkMtn Labs

Jeff Gittleman, Lab Director

Page 9 of 9



Work (	Work Order #: 1912-00988	38 Purchase Order:	)rder:		Chain of (	Chain of Custody & Analysis Record	alysis Record	Pick	Pick Up Date:	,		Page 1 of 3	l of 3
Site Name:		Guzek Associates, Inc.			H H	HawkMtn Labs, Inc.	i, Inc. Tauratia parte		Printed By:	<i>.</i>	Approve	Approved Bv: Ard	٥
Compo	site	leari.gai@gmail.com	ſ		Ph.(570)	VVESI CIAY AVE, HAZIE TOWIISNIP, Ph.(570) 455-6011 Fax (570) 455-6321	201 Vest Diay Ave, nazie townsnip, FA 10202 Ph.(570) 455-6011 Fax (570) 455-6321		Bottles made by:	CLT	Checked	Checked By: 174	
Start		Time:	}	Smp# Bottle	ц	Preservative	Rcvd Smp# Bottle	ottle	Preser	Preservative	Revd Semoles		21-2766
End Date:		Time:		001 Copper/Lead	Copper/Lead <del>11. Graduates</del> HNO3 Copper/Lead <del>11. Graduates,</del> HNO3	HNO3 HNO3	010	Copper/Lead -IL Graduated, Copper/Lead -IL Graduated	duated HNO3 duated HNO3			rec'e Bor HN03	HN03
Grab		T.mo.			Copper/Lead <del>1L Graduated</del> . H Copper/Lead <del>1L Graduated</del> . H	HNO3 HNO3		Copper/Lead <del>1L Graduated</del> Copper/Lead <del>1L Graduated</del>			1)	ofter fo	
Date:		Time.		005 Copper/Lead	11. Graduatad, 11. Graduatad	HNO3	<pre>014 015</pre>	Copper/Lead <del>11 Graduate</del> d Conner/Lead <del>11 Graduated</del>	iduated HNO3		1	20,32,28	
Date:		Time:			11 Graduated	HN03		Coppen/Lead H-Graduated Coppen/Lead H-Graduated Coppen/Lead H-Graduated			হ বর্	м» КС 12/30/19	PI/0
Date:		Time:				HN03	018	Copper/Lead H-Graduated					
Smp #	t Smp Site	Matrix Smp T	Matrix/ Smp Tvpe	Tests				Temp Ur Receipt	noc	Sample Sample Date Time	ple Field pH	Field CI	Field Temp
001	NEI-01, Drinking Water Lead Analysis		Potable Water	DW-PB-MS					° °	2/24/01/2	10,34A	щяЛ	ç
002	NEI-02, Drinking Water Lead Analysis		Potable Water	DW-PB-MS				ē	ပ္		2	mg/1_	ပံ
003	NEI-03, Drinking Water Lead Analysis		Potable Water	DW-PB-MS				G	12.8°C	10:30	30	L/Jum	ပံ
004	NEI-04, Drinking Water Lead Analysis		Potable Water	DW-PB-MS				G	<b>2.8</b>	00 :01	00	mg/L	ပ္
005	NEI-05, Drinking Water Lead Analysis		Potable Water	DW-PB-MS				ä	ر. د	10131	31	Ш¢/Г	ç
006	NEI-06, Drinking Water Lead Analysis		Potable Water	DW-PB-MS				<u>.</u>	°., , , , , , , , , , , , , , , , , , ,	10:27	u u	mg/L	ပံ
200	NEI-07, Drinking Water Lead Analysis		Potable Water	DW-PB-MS				ġ	·,7 °C	50:01		mµ/L	ç
008	NEI-08, Drinking Water Lead Analysis		Potable Water	DW-PB-MS				. ci	. <b>7</b> °C	04:01	0	mg/L	ပံ
600	NEI-09, Drinking Water Lead Analysis		Potable Water	DW-PB-MS				2	1 <b>2.8</b> °C	10:43	m	ту⁄дш	ပံ
010	NEI-10, Drinking Water Lead Analysis		Potable Water	DW-PB-MS				ŭ	ຸ <b>ຜ</b> ຸ	10: 43	13	mg/L	°C
Recei	Receipt Info: Recieved on ice? Samples intact?	et Q/N N/N	COC intact Correct	COC intact and complete? Correct containers?	z z Ø	Adquate samples? Volatiles: Headsp	Adquate samples? Volatiles: Headspace present?	z z Ot	Completed by: Samples/COC//	Completed by: <u>K</u> C	I is agree?		NOW
Sampl Field M	Sampled By: $\int_{0}^{\infty} h t' s$ Field Meter ID: $N/N$	Noter /	Dud	L'AL		- RELINQI	RELINQUISHED BY:	Think the	in h		Date 12/Ju/1	11 61	Time しいと
Notes: QSP-00	Notes: 008-F02B Rev 004	All sam plastic Hr	ples ta VO3 pr	All samples taken in 250mL plastic HNO3 preserved bottles.	mL ottles.	RECEIVED BY: RELINQUISHEI RECEIVED AT I LOGGED IN AT	RECEIVED BY: RELINQUISHED BY: RECEIVED AT LAB: LOGGED IN AT LAB:		Jer !!	6, 1	12/30/19 13/30/19		13:113
								7				71	12/11/2019

....

Purchase Order: Guzek Associates, Inc. 1912-00988 Work Order #: Site Name:

learl.gai@gmail.com Contact:

Time:	Time:	Time:
<u>Composite</u> Start Date:	End Date:	<u>Grab</u> Date:

	Time:	Time:	Time:	Time:	
<u>Grab</u>	Date:	Date:	Date:	Date:	

Time:	Matrix/ Site Smp Type	NEI-11, Drinking Water Lead Potable Water Analysis	012 NEI-12, Drinking Water Lead Potable Water Analysis
	Smp Site	NEI-11, Drinkin Analysis	NEI-12, Drinkir Analvsis
Date: Date:	Smp #	011	012

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10:45

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Field Temp

Field CI

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Sample Time

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mg/L

Temp Upon Sample Receipt Date ריגו 5.9 <u>[</u>3.] DW-PB-MS DW-PB-MS DW-PB-MS DW-PB-MS DW-PB-MS DW-PB-MS DW-PB-MS Tests Potable Water Potable Water Potable Water Potable Water Potable Water NEI-13, Drinking Water Lead NEI-14, Drinking Water Lead Analysis NEI-15, Drinking Water Lead Analysis NEI-16, Drinking Water Lead Analysis NEI-17, Drinking Water Lead Analysis NEI-18, Drinking Water Lead Analysis

Analysis

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ပ္ ပ္ ပ္ S ပ္ ပ္ ပ္ mg/L mg/L mg/L mg/L T/Sim mg/L 10:50 0: S 10:50 ٥.5) 0.51 10:51 ပ္ ပ္ရ ပ္ ပ္ ပ္ရ ပ္ ပ္ 2.C 12.2 7.7 12.4 1-1. 1. DW-PB-MS DW-PB-MS <u> SM-PB-MS</u> Potable Water Potable Water Potable Water

NE1-19, Drinking Water Lead Analysis

019

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017

Drinking Water Lead

Analysis

NEI-20,

020

にろう lime 6 201 Completed by: <u>**LC**</u> Samples/COC/Analysis agree? zz Ú Ø Adquate samples? Volatiles: Headspace present? **RELINQUISHED BY:** RECEIVED BY: z z Ô COC intact and complete? Correct containers? Ŋ N Q V V Nete Receipt Info: Recieved on ice? Samples intact? Phis 0/N Field Meter ID: Sampled By: Notes:

LOGGED IN AT LAB: **RELINQUISHED BY:** RECEIVED AT LAB: plastic HNO3 preserved bottles. All samples taken in 250mL

QSP-008-F02B Rev 004

12/11/2019

13:12

12/30/19

SFF H

2/30/19

Page 2 of 3

Checked By: M

57

Bottles made by:

201 West Clay Ave, Hazle Township, PA 18202 Ph.(570) 455-6011 Fax (570) 455-6321

019-028:250-6 Plistic KNO3

Printed By:

Pick Up Date:

Chain of Custody & Analysis Record

HawkMtn Labs, Inc.

Approved By: ALP

is Record Pick Up Date: Printed By: Approved By: Act Approved By: Act Bottles made by: CL Checked By: Hu Gestar Decide Field Field Field Field Field Field Receipt Date Time pH Cl Temp	12/26/15 10156 Am	mg/L	13.3 °C  0.55%   mol	12.9 °C 11.0°C	1.2.8 °C 10% SG 10% SG	12.°°C 10.46 mor	130m		$\frac{\bigcirc}{N \ N} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	ED BY: 2. 2. 4 M. 2. 20/19 1132	Y: ED BY: ILAB: Lear Can 12/30/4 11:32 VT LAB: Laar Can 12/30/9 13:15
Chain of Custody & Analysis Record HawkMtn Labs, Inc. 201 West Clay Ave, Hazle Township, PA 18202 Ph.(570) 455-6011 Fax (570) 455-6321 Tests	SM-B4-MQ	SM-84-MQ	DW-PB-MS	DW-PB-MS	DW-PB-MS	DW-PB-MS	DW-PB-MS		intact and complete? $\bigodot{V}$ / N Adquate samples? Correct containers? $\bigodot{V}$ / N Volatiles: Headspace present?		Ken in 250mLRECEIVED BY:Received bottles.Logged in AT LAB:
Purchase Order: tes, Inc. il.com Matrix/ Smp Type	Potable Water	Potable Water	Potable Water	Potable Water	NEI-25, Drinking Water Lead Potable Water D Analysis	NEI-26, Drinking Water Lead Potable Water D Analysis	Potable Water	Analysis Analysis	Receipt Info: Recieved on ice? () N COC intact and complete? Samples intact? ) N COC intact and complete?	Chirs Nethin / But	All samples taken in 250mL plastic HNO3 preserved bottles.
Work Order #: 191 Site Name: Gu Contact: leaa Composite Start Date: End Date: Date: Date: Date: Date: Date: Date: Date: Smp # Smp Site		022 NEI-22, D Analysis	023 NEI-23, D Analysis	024 NEI-24, D Analysis	025 NEI-25, D Analysis	026 NEI-26, D Analysis		OE8 NET-28, D	Receipt Info: R	Sampled By: Field Meter ID:	Notes: OSP-MALEDAR Rev 004