



**Karl
Environmental
Group**

*Effective and Economical
Environmental Solutions*

**Comprehensive Lead in Drinking Water Services
Per amendments to N.J.A.C 6A:26 Educational Facilities
Northvale Public School
441 Tappan Road
Northvale, NJ 07647**

Karl Environmental Group Project #: 21-0653

August 6, 2021

Prepared for:
Mr. Anthony Coppola
Northvale Public School
411 Tappan Road
Northvale, NJ 07647

Prepared by:
Karl Environmental Group
20 Lauck Road
Mohnton, PA 19540
Tel: (800) 527-5581
Fax: (610) 856-5040



20 Lauck Road
Mohnton, PA 19540
Tel: (800) 527-5581
Fax: (610) 856-5040
Web: www.karlenv.com

August 6, 2021

Mr. Anthony Coppola
Northvale Public School
411 Tappan Road
Northvale, NJ 07647

**Re: Comprehensive Lead in Drinking Water Services per N.J.A.C 6A:26
Northvale Public School
441 Tappan Road, Northvale, NJ 07647
Karl Environmental Group Project #: 21-0653**

Dear Mr. Coppola:

Thank you for selecting Karl Environmental Group ("Karl") for this project. This report details the methods and findings of the comprehensive lead in drinking water services as per New Jersey state regulations (amendments to N.J.A.C 6A:26 Educational Facilities) performed at the Northvale School (the "Facility"), on July 22, 2021.

1.0 PROJECT BACKGROUND

Karl Environmental was contacted by the Northvale Public School (the "Client") to perform lead in drinking water sampling to determine the lead content of drinking water from sources throughout the Facility. The purpose of lead in drinking water sampling is to determine if any sampled drinking water sources exhibit lead levels exceeding the Regulatory Action Level of 15 parts per billion (ppb).

Drinking water collection points included any water sources from which a student, staff, or faculty may reasonably drink; or from which the water may be used for cooking or beverage preparation, including kitchen faucets and sinks in Faculty/Staff lounges.

2.0 LEAD IN DRINKING WATER

Lead is a toxic substance that can be harmful to human health. As compared to adults, children are more susceptible to the detrimental health effects of lead, as their nervous systems are not yet fully developed. Exposure to lead can occur in a variety of ways including through food, soil, deteriorating lead-based paint, and drinking water. Lead can leach into drinking water from plumbing materials such as pipes and solder, as well as brass plumbing fixtures. For this investigation, planning, preparation, methodology, sampling, and follow-up actions were conducted according to the technical guidance provided by New Jersey following the adoption of amendments to N.J.A.C. 6A:26: Educational Facilities, requiring the sampling of drinking water for lead in schools.

3.0 DRINKING WATER SAMPLING METHODOLOGY

Karl Environmental collected drinking water samples from water outlets throughout the Facility. At each collection point, Karl Environmental filled a 250 milliliter (mL) wide-mouth high density polyethylene (HDPE) sample collection bottle from the selected water source. Samples were collected after the water in each building had not been used for at least 8 hours, but not more than 48 hours. Samples were preserved using concentrated Nitric Acid (HNO₃). The initial sample at each collection point represents the first draw sample. The first draw sample is representative of the water from the end point of the water source (i.e., the bubbler or tap).

A field blank using lead-free laboratory reagent water was also collected at each Facility during the sampling event to rule out contamination of samples during the collection and transportation process. All samples were recorded under proper chain of custody and couriered to Suburban Testing Labs (Suburban), a New Jersey certified laboratory (NJ Lab ID #PA081) located in Reading, Pennsylvania for analysis by EPA method 200.8, NJ DOE.

During the initial sampling event on July 22, 2021, Karl Environmental collected the following number of samples at the Facility:

Northvale School

- Thirty-one (31) first draw samples
- One (1) field blank sample

4.0 DRINKING WATER ANALYSIS RESULTS

The analytical lead in drinking water results for each first draw samples are listed in Table 1, below:

Table 1: Northvale School – July 22, 2021

Sample I.D.	Type of Collection Point	Lead Concentration (ppb)	Above Regulatory Action Level?
NV-BLANK	Field Blank	<1.00	No
BFMSH-1	Bottle Filler	<1.00	No
WFMSH-R1	Water Fountain	<1.00	No
WFMSH-L1	Water Fountain	<1.00	No
WFMSH-R2	Water Fountain	<1.00	No
WFMSH-L2	Water Fountain	<1.00	No
WFMSH-R3	Water Fountain	<1.00	No
WFMSH-L3	Water Fountain	<1.00	No
WFMSH-R4	Water Fountain	<1.00	No
WFMSH-L4	Water Fountain	<1.00	No
WFG-R1	Water Fountain	1.89	No
WFG-L1	Water Fountain	2.77	No
WFEX-1	Water Fountain	12.7	No
SKB-1 CLASSRM 1	Sink	1.20	No
SKB-2 CLASSRM 2	Sink	<1.00	No
SKB-3 CLASSRM 3	Sink	<1.00	No
SKB-4 CLASSRM 4	Sink	1.49	No
SKB-5 CLASSRM 5	Sink	<1.00	No
SKB-6 CLASSRM 6	Sink	<1.00	No
SKB-7 CLASSRM 7	Sink	1.45	No
SKB-8 CLASSRM 8	Sink	<1.00	No
SKB-9 CLASSRM 9	Sink	2.52	No
SKB-10 CLASSRM 10	Sink	<1.00	No
SKB-11 CLASSRM 11	Sink	1.44	No
SKB-12 CLASSRM 12	Sink	8.11	No
WCK-1	Water Cooler	1.51	No
SKB-13 CLASSRM 13	Sink	1.29	No
SKB-14 CLASSRM 14	Sink	2.03	No
SKB-15 CLASSRM 15	Sink	<1.00	No
BFMSH-L2	Bottle Filler	<1.00	No
BFMSH-L3	Bottle Filler	1.02	No
BFMSH-L4	Bottle Filler	<1.00	No

All laboratory analytical results were compared to the NJ Department of Education Regulatory Action Level of 15 ppb for lead. Analysis of lead in the first draw drinking water samples indicated that, at the time of the sampling event, none of the potable outlets exceeded concentrations above the regulatory action level of 15 ppb. The analytical lab results are included as an Attachment.

5.0 CONCLUSIONS & RECOMMENDATIONS

Following the lead in drinking water sampling event conducted on July 22, 2021, all potable outlets tested were below the regulatory Action Level of 15 ppb. At the conclusion of the comprehensive lead in drinking water services, Karl Environmental Group offers the following recommendations at this time:

- Continue to monitor lead in drinking water levels as part of a regular sampling and maintenance plan, as per New Jersey State regulations. Amendments will require district-wide sampling every three (3) years.
- In the interim, when drinking water outlets are replaced/added, or the plumbing is disturbed, sampling of the impacted outlets should be completed to determine if lead levels were affected.
- Implement an aerator cleaning maintenance program to prevent the build-up of debris behind the screen which may contribute to elevated lead levels.
- Enter all filter maintenance, aerator maintenance, plumbing repairs/changes and any other pertinent information into the Field Log Book for the Facility.
- Use only cold water for food and beverage preparation. Hot water is more likely to contribute to the corrosion of plumbing materials and therefore contain a greater level of contaminants from the plumbing system.

6.0 LIMITATIONS

This investigation focused on lead in drinking water only. No other heavy metals or additional contaminants were sampled for or analyzed. Lead concentrations can change as water continues to move through the water system. Each sample was a grab sample and represents lead concentrations only at the specific time of collection and may vary based on the water usage in the facility. Interpretation of these results is only valid if the facility is serviced by a municipal water supplier or water utility.

This lead sampling event was in response to the amendments to N.J.A.C. 6A:26, Educational Facilities dated July 13, 2016, which requires testing for lead in the drinking water of public and charter school districts every three (3) years.

7.0 CLOSING

Thank you for using Karl Environmental Group to assist you with this project. Please do not hesitate to call if you have any questions relating to this report or for any other environmental health and safety concerns.

Respectfully submitted,
Karl Environmental Group



Jake Edwards
Industrial Hygienist
610-856-7700 (Phone)
610-856-5040 (Fax)
jedwards@karlenv.com
Attachment A: Analytical Lab Results

Attachment A:
Analytical Lab Results



Results Report

Order ID: 1G06098

Karl Environmental Group 20 Lauck Road Mohnton, PA 19540	Project: 21-0653 Northvale
Attn: Jake Edwards	Regulatory ID:

Sample Number: 1G06098-01	Site: NV-BLANK	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 7:47 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 9:27	MKR
------	--------	------	-----------	------	---	----------	-----	---------------	-----

Sample Number: 1G06098-02	Site: BFMSH1	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:08 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:41	MKR
------	--------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-03	Site: WFMSH-R1	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:08 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:43	MKR
------	--------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-04	Site: WFMSH-L1	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:08 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:45	MKR
------	--------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-05	Site: WFMSH-R2	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:10 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:47	MKR
------	--------	------	-----------	------	---	----------	-----	----------------	-----

Report Generated On: 07/29/2021 5:19 pm 1G06098
STL_Results Revision #1.9 Effective: 04/16/2020





SUBURBAN TESTING LABS

Sample Number: 1G06098-06	Site: WFMSH-L2	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:10 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Metals									
Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:53	MKR

Sample Number: 1G06098-07	Site: WFMSH-R3	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:12 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Metals									
Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:55	MKR

Sample Number: 1G06098-08	Site: WFMSH-L3	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:12 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Metals									
Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:58	MKR

Sample Number: 1G06098-09	Site: WFMSH-R4	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:19 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Metals									
Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 12:02	MKR

Sample Number: 1G06098-10	Site: WFMSH-L4	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:19 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Metals									
Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 12:04	MKR

Sample Number: 1G06098-11	Site: WFG-R1	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:21 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Metals									
Lead	1.89	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 12:00	MKR

Sample Number: 1G06098-12	Site: WFG-L1	Sample ID: Northvale Public School
Collector: JE	Collect Date: 07/22/2021 8:21 am	Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
Metals									
Lead	2.77	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 9:33	MKR

Report Generated On: 07/29/2021 5:19 pm 1G06098
 STL_Results Revision #1.9 Effective: 04/16/2020

SUBURBAN TESTING LABS

1037F MacArthur Road, Reading, PA 19605 Phone: 610-375-TEST Fax: 610-375-4090 suburbantestinglabs.com



PA DEP # 06-00208
NJDEP# PA081



SUBURBAN TESTING LABS

Sample Number: 1G06098-13 Site: WFEX-1 Sample ID: Northvale Public School
 Collector: JE Collect Date: 07/22/2021 8:26 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead 12.7 µg/L EPA 200.8 1.00 1 07/23/21 MKR 07/28/21 9:12 MKR

Sample Number: 1G06098-14 Site: SKB-1 CLASSROOM 1 Sample ID: Northvale Public School
 Collector: JE Collect Date: 07/22/2021 7:48 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead 1.20 µg/L EPA 200.8 1.00 1 07/23/21 MKR 07/28/21 10:55 MKR

Sample Number: 1G06098-15 Site: SKB-2 CLASSROOM 2 Sample ID: Northvale Public School
 Collector: JE Collect Date: 07/22/2021 7:49 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead < 1.00 µg/L EPA 200.8 1.00 1 07/23/21 MKR 07/28/21 10:57 MKR

Sample Number: 1G06098-16 Site: SKB-3 CLASSROOM 3 Sample ID: Northvale Public School
 Collector: JE Collect Date: 07/22/2021 7:50 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead < 1.00 µg/L EPA 200.8 1.00 1 07/23/21 MKR 07/28/21 11:03 MKR

Sample Number: 1G06098-17 Site: SKB-4 CLASSROOM 4 Sample ID: Northvale Public School
 Collector: JE Collect Date: 07/22/2021 7:51 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead 1.49 µg/L EPA 200.8 1.00 1 07/23/21 MKR 07/28/21 11:05 MKR

Sample Number: 1G06098-18 Site: SKB-5 CLASSROOM 5 Sample ID: Northvale Public School
 Collector: JE Collect Date: 07/22/2021 7:52 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead < 1.00 µg/L EPA 200.8 1.00 1 07/23/21 MKR 07/28/21 11:08 MKR

Sample Number: 1G06098-19 Site: SKB-6 CLASSROOM 6 Sample ID: Northvale Public School
 Collector: JE Collect Date: 07/22/2021 7:53 am Sample Type: Grab

Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By
-------------------------------	--------	-------	--------	------	----	-----------	----	---------------	----

Metals

Lead < 1.00 µg/L EPA 200.8 1.00 1 07/23/21 MKR 07/28/21 11:10 MKR

Report Generated On: 07/29/2021 5:19 pm 1G06098
 STL_Results Revision #1.9 Effective: 04/16/2020

SUBURBAN TESTING LABS

1037F MacArthur Road, Reading, PA 19605 Phone: 610-375-TEST Fax: 610-375-4090 suburbantestinglabs.com



PA DEP # 06-00208
 NJDEP# PA081



SUBURBAN TESTING LABS

Sample Number: 1G06098-20	Site: SKB-7 CLASSROOM 7	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 7:54 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	1.45	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:12	MKR
------	------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-21	Site: SKB-8 CLASSROOM 8	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 7:55 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:14	MKR
------	--------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-22	Site: SKB-9 CLASSROOM 9	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 7:56 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	2.52	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:16	MKR
------	------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-23	Site: SKB-10 CLASSROOM 10	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 7:58 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:18	MKR
------	--------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-24	Site: SKB-11 CLASSROOM 11	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 7:59 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	1.44	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:20	MKR
------	------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-25	Site: SKB-12 CLASSROOM 12	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 8:00 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	8.11	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:22	MKR
------	------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-26	Site: WCK-1	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 8:02 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	1.51	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:28	MKR
------	------	------	-----------	------	---	----------	-----	----------------	-----

Report Generated On: 07/29/2021 5:19 pm 1G06098
 STL_Results Revision #1.9 Effective: 04/16/2020

SUBURBAN TESTING LABS

1037F MacArthur Road, Reading, PA 19605 Phone: 610-375-TEST Fax: 610-375-4090 suburbantestinglabs.com



PA DEP # 06-00208
NJDEP# PA031



SUBURBAN TESTING LABS

Sample Number: 1G06098-27	Site: SKB-13 CLASSROOM 13	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 8:02 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	1.29	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:30	MKR
------	------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-28	Site: SKB-14 CLASSROOM 14	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 8:03 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	2.03	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:33	MKR
------	------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-29	Site: SKB-15 CLASSROOM 15	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 8:09 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:35	MKR
------	--------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-30	Site: BFMSH-L2	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 8:10 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:37	MKR
------	--------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-31	Site: BFMSH-L3	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 8:12 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	1.02	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 11:39	MKR
------	------	------	-----------	------	---	----------	-----	----------------	-----

Sample Number: 1G06098-32	Site: BFMSH-L4	Sample ID: Northvale Public School							
Collector: JE	Collect Date: 07/22/2021 8:19 am	Sample Type: Grab							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	By	Analysis Date	By

Metals

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	07/23/21	MKR	07/28/21 9:23	MKR
------	--------	------	-----------	------	---	----------	-----	---------------	-----

Sample Receipt Conditions:
All samples met the sample receipt requirements for the relevant analyses.

Report Generated On: 07/29/2021 5:19 pm 1G06098
STL_Results Revision #1.9 Effective: 04/16/2020

SUBURBAN TESTING LABS

1037F MacArthur Road, Reading, PA 19605 Phone: 610-375-TEST Fax: 610-375-4090 suburbantestinglabs.com



PA DEP # 06-00208
NJDEP# PA081



SUBURBAN TESTING LABS

The test *pH, Lab* is performed in the Laboratory as soon as possible. These results are not appropriate for compliance with NPDES, SDWA, or other regulatory programs that require analysis within 15 minutes of sample collection and should be considered for informational purposes only.

**pH, Final* for ASTM leachate is performed by method SM 4500-H-B.

All results meet the requirements of STL's TNI (NELAC) Accredited Quality System unless otherwise noted. If your results contain any data qualifiers or comments, you should evaluate useability relative to your needs.

If collectors initials include "STL", samples have been collected in accordance with STL SOP SL0015.

All results reported on an As Received (Wet Weight) basis unless otherwise noted.

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

Results are considered Preliminary unless report is signed by authorized representative of STL.

Reviewed and Released By:

Ryan F Knerr
Project Manager II

Report Generated On: 07/29/2021 5:19 pm 1G06098
STL_Results Revision #1.9 Effective: 04/16/2020

SUBURBAN TESTING LABS

1037F MacArthur Road, Reading, PA 19605 Phone: 610-375-TEST Fax: 610-375-4090 suburbantestinglabs.com



PA DEP # 06-00208
NJ DEP # PA001



1G06098
Ryan F Knerr



Chain of Custody Record
1037F MacArthur Road, Reading, PA 19605
610-375-TEST - Fax: 610-375-4090 - suburbantestinglabs.com

TAT (Check One) Standard 24hr 48hr 72hr Other
(Additional charges may apply for rush TAT. If not specified, standard TAT will apply)
Order ID: _____

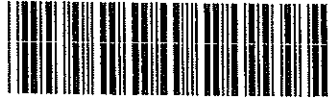
Client Name: <u>Karl Environmental Group</u>	Project Name: <u>21-0653 Northvale</u>
Address: <u>20 Lauck Road</u> <u>Mohnton, PA 19540</u>	Address: <u>441 Tappan Rd</u> <u>Northvale, NJ 07647</u>
Phone: <u>610-856-7700</u> Fax: <u>610-856-5040</u>	Payment / P.O. Info: _____
Contact Name: <u>Jake Edwards</u> Email: <u>jedwards@karlennv.com</u>	

Comments: NJ DOE Lead in Drinking Water Samples - PG 1

SVTL Sample Number	Sample Description / Site ID:	Date Sampled	Time Sampled	Samplers Initials	Test(s) Requested:	Bottle Quantity	See Codes Below				Comments / Field Data:	
							Matrix	Sample Type	Bottle Type	Preservative		
	X = Ph2 7-22-21 CB											
	NV-BLANK	X	7/22/21	7:47	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	FIELD BLANK
	WFMSH-1	X	7/22/21	8:08	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFMSH-R1	X	7/22/21	8:08	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFMSH-L1	X	7/22/21	8:06	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFMSH-L1		7/22/21		JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFMSH-R2	X	7/22/21	8:10	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFMSH-L2	X	7/22/21	8:10	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFMSH-R3	X	7/22/21	8:12	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	

Relinquished By: <u>[Signature]</u>	Date: <u>7/22/21</u> Time: <u>11:44</u>	Sample Conditions Submitted with COC? <input checked="" type="checkbox"/> Number of containers, match number on COC? <input checked="" type="checkbox"/> All containers labeled? <input checked="" type="checkbox"/> Tests within holding time? <input checked="" type="checkbox"/> 10 mL VOA vials, 125 mL headspace? <input checked="" type="checkbox"/>	Matrix Key NPV = Non-Potable Water Solid - Res/Sedg, Dewatered sludge, soil, etc. (reported as mg/kg) PW = Potable Water (not for SDWA compliance) SDWA = Safe Drinking Water Act Potable Sample Sample Type Key G = Grab BHC = 6 Hr Composite 24HC = 24 Hr Composite	Bottle Type Key P = Plastic G = Glass O = Other Preservative Key N = Sodium Thiosulfate A = Ascorbic Acid W = HCl S = H ₂ SO ₄ OH = NaOH O = Other NA = None Required	Reporting Options <input type="checkbox"/> SDWA Reporting PWSID: _____ <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Other <input type="checkbox"/> Return a copy of this form with Report
Received By:	Date:				
Relinquished By:	Date:				
Received in Lab By: <u>[Signature]</u>	Date: <u>7/22/21</u> Time: <u>11:44</u> Temp °C: <u>23.0</u> Acceptable: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N				

Signing this form indicates your agreement with SVTL's Standard Terms and Conditions unless otherwise specified in writing. SLF059 Rev. 1.4 Effective November 12, 2014
Shaded areas are for SVTL use only.



1G06098
Ryan F Knerr



Chain of Custody Record
1037F MacArthur Road, Reading, PA 19605
610-375-TEST - Fax: 610-375-4090 - suburbantestinglabs.com

TAT (Check One): Standard 24hr 48hr 72hr Other
(Additional charges may apply for rush TAT. If not specified, standard TAT will apply)
Order ID: _____

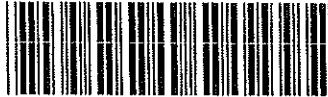
Client Name: <u>Karl Environmental Group</u>	Project Name: <u>21-0653 Northvale</u>
Address: <u>20 Lauck Road</u> <u>Mohnton, PA 19540</u>	Address: <u>441 Tappan Rd</u> <u>Northvale, NJ 07647</u>
Phone: <u>610-856-7700</u>	
Fax: <u>610-856-5040</u>	
Contact Name: <u>Jake Edwards</u>	Payment / P.O. Info: _____
Email: <u>jedwards@karlenv.com</u>	

Comments:
NJ DOE Lead in Drinking Water Samples - PG 2

SVC Sample Number	Sample Description / Site ID	Date Sampled	Time Sampled	Samplers Initials	Test(s) Requested	Bottle Quantity	See Codes Below				Comments / Field Data
							Matrix	Sample Type	Bottle Type	Preservative	
X = Ph L2 7-22-21 CB	WFMSH-L3	7/22/21	8:12	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFMSH-R4	7/22/21	8:19	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFMSH-L4	7/22/21	8:19	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFMSH-L4	7/22/21	8:19	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFG-R1	7/22/21	8:21	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFG-L1	7/22/21	8:21	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFG-L1	7/22/21	8:21	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WFEX-1	7/22/21	8:20	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	

Relinquished By:	Date: <u>7/22/21</u> Time: <u>11:44</u>	Temp °C: _____ Acceptable: Y/N	Sample Container Submitted with COC? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Matrix Key NFW = Non-Potable Water SWS = Raw Sludge, Dewatered Sludge, Solids (reported as mg/L) PW = Potable Water (not for SDWA compliance) SDWA = Safe Drinking Water Act Potable Sample	Bottle Type Key P = Plastic G = Glass O = Other	Reporting Options <input type="checkbox"/> SOWA Reporting PWSID: _____ <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Other <input type="checkbox"/> Return a copy of this form with Report
Received By:	Date: _____ Time: _____	Temp °C: _____ Acceptable: Y/N	Number of containers (match number on COC) <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample Type Key G = Grow EHC = &H Composite SAC = S&C Composite	Preservative Key N = Sodium P = Phosphate A = Ascorbic Acid L = LNO3 C = HCl S = H2SO4 OH = NaOH O = Other NA = None R = Rust	
Relinquished By:	Date: _____ Time: _____	Temp °C: _____ Acceptable: Y/N	All containers in bag? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	SDWA Sample Types D = Detection E = Entry Point R = Raw C = Check S = Special M = Maximum R = Residual		
Received in Lab By:	Date: <u>7/22/21</u> Time: <u>11:44</u>	Temp °C: <u>23.0</u> Acceptable: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Tests with holding times? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			

Signing this form indicates your agreement with SWPL's Standard Terms and Conditions unless otherwise specified in writing. SLF059 Rev. 1.4 Effective November 12, 2014
Shaded areas are for SWPL use only.



1G06098
Ryan F Knerr



Chain of Custody Record
1037F MacArthur Road, Reading, PA 19605
610-375-TEST - Fax: 610-375-4090 - suburbantestinglabs.com

TAT (Check One): Standard 24hr 48hr 72hr Other
(Additional charges may apply for rush TAT. If not specified, standard TAT will apply)
Order ID: _____

Client Name: <u>Karl Environmental Group</u> Address: <u>20 Lauck Road</u> <u>Mohnton, PA 19540</u> Contact Name: <u>Jake Edwards</u>	Project Name: <u>21-0653 Northvale</u> Address: <u>441 Tappan Rd</u> <u>Northvale, NJ 07647</u> Payment / P.O. Info: _____
Phone: <u>610-856-7700</u> Fax: <u>610-856-5040</u> Email: <u>jedwards@karlenv.com</u>	

Comments:

NJ DOE Lead in Drinking Water Samples - PG 3

SWTL Sample Number	Sample Description / Site ID:	Date Sampled	Time Sampled	Samplers Initials	Test(s) Requested:	Bottle Quantity	See Codes Below				Comments / Field Data:	
							Matrix	Sample Type	Bottle Type	Preservative		
	X = PL 2 7-22-21 CB											
	SKB-1 CLASSROOM 1	X	7/22/21	7:45	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-2 CLASSROOM 2	X	7/22/21	7:49	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-3 CLASSROOM 3	X	7/22/21	7:50	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-4 CLASSROOM 4	X	7/22/21	7:51	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-5 CLASSROOM 5	X	7/22/21	7:52	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-6 CLASSROOM 6	X	7/22/21	7:53	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-7 CLASSROOM 7	X	7/22/21	7:54	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-8 CLASSROOM 8	X	7/22/21	7:55	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	

Requisitioned By: <u>[Signature]</u>	Date: <u>7/22/21</u>	Time: <u>7:44</u>	Temp °C: _____ Acceptable: Y/N	Sample Conditions Sealed with COC? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Number of containers (with number on COC) <u>8</u> Y <input type="checkbox"/> N All containers intact? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Tests within holding time? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N 140 mL VOA vials free of headspace? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Matrix Key NPW = Non-Potable Water Solid = Raw Sludge, Dewatered Sludge, etc. (reported as mg/kg) PW = Potable Water (not for SDWA compliance) SDWA = Safe Drinking Water Act Potable Sample	Bottle Type Key P = Plastic G = Glass O = Other Preservative Key H = Sodium Thiosulfate A = Ascorbic Acid K = KNO ₃ C = HCl S = H ₂ SO ₄ GH = HNO ₃ O = Other NA = None Required	Reporting Options <input type="checkbox"/> SDWA Reporting FW/SID: _____ <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Other <input type="checkbox"/> Return a copy of this form with Report
Received By: _____	Date: _____	Time: _____	Temp °C: _____ Acceptable: Y/N	Sample Type Key G = Grab BFC = B.V. Composite 24HC = 24 Hr. Composite	SDWA Sample Types D = Drinking Water E = Entry Point R = Residential C = Check S = Special R = Residential Res = Residual	Temp °C: <u>23.0</u> Acceptable: <u>Y</u>	Received in Lab By: <u>[Signature]</u> <u>(8)</u> Date: <u>7/22/21</u> Time: <u>7:44</u>

Signing this form indicates your agreement with SWTL's Standard Terms and Conditions unless otherwise specified in writing. SFL059 Rev. 1.4 Effective November 12, 2014
Shaded areas are for SWTL use only.



1G06098
Ryan F Knerr



Chain of Custody Record
1037F MacArthur Road, Reading, PA 19605
610-375-TEST - Fax: 610-375-4090 - suburbantestinglabs.com

TAT (Check One) Standard 24hr 48hr 72hr Other _____
(Additional charges may apply for rush TAT. If not specified, standard TAT will apply)
Order ID: _____

Client Name: <u>Karl Environmental Group</u> Address: <u>20 Lauck Road</u> <u>Mohnton, PA 19540</u> Contact Name: <u>Jake Edwards</u>	Phone: <u>610-856-7700</u> Fax: <u>610-856-5040</u> Email: <u>jedwards@karlenv.com</u>	Project Name: <u>21-0653 Northvale</u> Address: <u>441 Tappan Rd</u> <u>Northvale, NJ 07647</u> Payment / P.O. Info: _____
--	--	---

Comments: NJ DOE Lead in Drinking Water Samples - PG 4

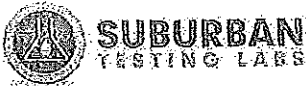
SWTL Sample Number	Sample Description / Site ID	Date Sampled	Time Sampled	Samplers Initials	Test(s) Requested	Bottle Quantity	See Codes Below				Comments / Field Data	
							Matrix	Sample Type	Bottle Type	Preservative		
	X = Ph 2 7-22-21 CB											
	SKB-9 CLASSROOM 9	X	7/22/21	7:56	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-10 CLASSROOM 10	X	7/22/21	7:50	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-11 CLASSROOM 11	X	7/22/21	7:59	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-12 CLASSROOM 12	X	7/22/21	8:00	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-13 CLASSROOM 13		7/22/21		JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	WCK-1	X	7/22/21	8:00	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-13 CLASSROOM 13	X	7/22/21	8:00	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	SKB-14 CLASSROOM 14	X	7/22/21	8:03	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	

Refilled By: <u>Free</u> Date: <u>7/22/21</u> Time: <u>11:44</u>	Temp °C: _____ Acceptable: Y/N	Sample Conditions Submitted with COC? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Number of containers match number on COC? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N All containers in leak? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Tests with leaking tubes? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N 40 ml. NCA Vials free of headspace? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Matrix Key NPW = Non Potable Water Soft = Raw Sludge, Dewatered Sludge, etc. (reported as ml/l) PW = Potable Water (not for SDWA compliance) SDWA = Safe Drinking Water Act Potable Sample	Bottle Type Key P = Plastic G = Glass O = Other Preservative Key N = Sodium Thiosulfate A = Acetic Acid H = HNO ₃ C = HCl S = H ₂ SO ₄ OH = NaOH O = Other UA = None Required	Reporting Options <input type="checkbox"/> SDWA Reporting PWSID: _____ <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Other <input type="checkbox"/> Return a copy of this form with Report
Received By: _____ Date: _____ Time: _____	Temp °C: _____ Acceptable: Y/N				
Refilled By: _____ Date: _____ Time: _____	Temp °C: _____ Acceptable: Y/N				
Received in Lab By: <u>SMH (i)</u> Date: <u>7/22/21</u> Time: <u>11:44</u>	Temp °C: <u>23.0</u> Acceptable: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				

Signing this form indicates your agreement with SWTL's Standard Terms and Conditions unless otherwise specified in writing. SLF059 Rev. 1.4 Effective November 12, 2014
Shaded areas are for SWTL use only.



1G06098
Ryan F Knerr



Chain of Custody Record
1037F MacArthur Road, Reading, PA 19605
610-375-TEST - Fax: 610-375-4090 - suburbantestinglabs.com

TAT (Check One): Standard 24hr 48hr 72hr Other
(Additional charges may apply for rush TAT. If not specified, standard TAT w/2 apply)
Order ID: _____

Client Name: <u>Karl Environmental Group</u>	Project Name: <u>21-0653 Northvale</u>
Address: <u>20 Lauck Road</u> <u>Mohnton, PA 19540</u>	Address: <u>441 Tappan Rd</u> <u>Northvale, NJ 07647</u>
Contact Name: <u>Jake Edwards</u>	Payment / P.O. Info: _____
Phone: <u>610-856-7700</u>	
Fax: <u>610-856-5040</u>	
Email: <u>Jedwards@karlenv.com</u>	

Comments:

NJ DOE Lead in Drinking Water Samples - PG 5

SWTL Sample Number	Sample Description / Site ID	Date Sampled	Time Sampled	Samplers Initials	Test(s) Requested	Bottle Quantity	See Codes Below				Comments / Field Data
							Matrix	Sample Type	Bottle Type	Preservative	
X = Ph L2 7-22-21 CB	SKB-15 CLASSROOM 15	7/22/21	8:04	JE	Lead, 200.8, NJ DOE	1	PW	G	P	H	
	BS-M5H-LA	7/22	8:10								
	BS-M5H-LB	7/22	8:12								
	BS-M5H-L4		8:19								

Relinquished By: <u>[Signature]</u>	Date: <u>7/22/21</u>	Temp °C: _____	Sample Conditions Submitted with COC? <input checked="" type="checkbox"/> Y/N	Matrix Key NPW = Non-Potable Water Sd = Raw Sludge, Dewatered Sludge, Sol, etc. (reported as m/s) PW = Potable Water (not for SDWA compliance) SDWA = Safe Drinking Water Act Potable Sample	Bottle Type Key P = Plastic G = Glass O = Other	Reporting Options <input type="checkbox"/> SDWA Reporting PWSID: _____ <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Other <input type="checkbox"/> Return a copy of this form with Report
Received By: <u>[Signature]</u>	Date: <u>7/22/21</u>	Acceptable: Y/N				
Relinquished By: _____	Date: _____	Temp °C: _____	All containers intact? <input checked="" type="checkbox"/> Y/N	SDWA Sample Types D = Drip/leak S = Spring Point R = Rain C = Check S = Special M = Maximum Residence		
Received in Lab By: <u>[Signature]</u>	Date: <u>7/22/21</u>	Temp °C: <u>23.0</u>	Tests within holding times? <input checked="" type="checkbox"/> Y/N			
	Date: <u>7/22/21</u>	Acceptable: Y/N	40 ml VOA vials free of headspace? <input checked="" type="checkbox"/> Y/N			

Signing this form indicates your agreement with SWTL's Standard Terms and Conditions unless otherwise specified in writing. SLF099 Rev. 1.4 Effective November 12, 2014
Shaded areas are for SWTL use only.