

# LEAD IN DRINKING WATER REPORT ROCKAWAY BOROUGH SCHOOL DISTRICT

# THOMAS JEFFERSON MIDDLE SCHOOL & LINCOLN ELEMENTARY SCHOOL

PERFORMED FOR: ROCKAWAY BOROUGH SCHOOL DISTRICT 103 EAST MAIN STREET ROCKAWAY, NJ 07866

PERFORMED BY:

WESTCHESTER ENVIRONMENTAL LLC 1248 WRIGHTS LANE WEST CHESTER, PA 19380

OCTOBER 2019



October 7, 2019

Michael Klein Supervisor of Building & Grounds Rockaway Borough School District 103 East Main Street Rockaway, NJ 07866

#### **Re:** LEAD IN DRINKING WATER REPORT

Dear Mr. Klein,

Please find enclosed the report for the Lead in Drinking Water sampling conducted for the Rockaway Borough School District, Thomas Jefferson Middle School, and Lincoln Elementary School.

If you have any questions, please contact me at 484-894-4841 or email me at pfmccaa@WestChesterEnvironmental.com.

Sincerely,

Westchester Environmental, LLC

Caul & Milaa

Paul F. McCaa Senior Environmental Specialist



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### **1.0 INTRODUCTION**

Westchester Environmental, LLC. was contracted by Michael Klein to conduct Drinking Water Sampling for Lead at the Lincoln Elementary & Thomas Jefferson Middle Schools following remediation measures undertaken by the district.

The water sampling was performed on September 24, 2019 by Paul McCaa of Westchester Environmental, LLC.

The purpose of the assessment was to collect water samples at locations in the facility designated by Michael Klein

All samples were analyzed by Suburban Testing Labs located at 1037 MacArthur Rd, Reading, PA 19605, a New Jersey certified Lead in Drinking Water testing facility.

-END OF SECTION-



#### 2.0 SUMMARY OF FINDINGS

Fourteen first draw water samples were collected and submitted for lead analysis. The tables below show the concentration of lead in ppb (parts per billion or microgram per liter) at each sampled location.

Sample	Location	Action Level	Result	Lead Hazard
Number	Location	ppb	ppb	YES/NO
9094785-01	MFL-DW-CR110	15.5	9.66	NO
9094785-02	1FL-S-Principal's Office	15.5	31.2	YES
9094785-03	1FL-BF-Hall	15.5	<1.00	NO
9094785-04	1FL-BF-Hall	15.5	<1.00	NO
9094785-05	2FL-BF-Hall	15.5	<1.00	NO
9094785-06	2FL-BF-Hall	15.5	<1.00	NO
9094785-07	LFL-S-B 41	15.5	<1.00	NO

#### Table 1Lincoln Elementary

Samples highlighted in yellow were above the EPA action level of 15.5 parts per billion (ppb) or 0.015 milligrams per liter (mg/l)).

Sample	Location	Action Level	Result	Lead Hazard
Number	Location	ppb	ppb	YES/NO
<mark>9094784-01</mark>	Field House-DW-Outside DF1	15.5	51.6	YES
9094784-02	Field-DW-Outside DF2	15.5	9.38	NO
9094784-03	1FL-BF-Cafe	15.5	<1.00	NO
9094784-04	1FL-BF-Hall @ 132	15.5	<1.00	NO
9094784-05	1FL-BF-Hall O/S 118	15.5	<1.00	NO
<mark>9094784-06</mark>	IFL-S-Staff Restroom	15.5	15.7	YES
9094784-07	IFL-DW-O/S Main Office	15.5	2.58	NO

#### Table 2 Thomas Jefferson Middle School

Samples highlighted in yellow were above the EPA action level of 15.5 parts per billion (ppb) or 0.015 milligrams per liter (mg/l)).

Lead in Drinking Water Sampling Report



#### 3.0 SAMPLING AND ANALYSES

The following guidance documents were followed for all sampling:

- 1. N.J.A.C. 6A:26
- 2. The EPA's Revised Technical Guidance "3Ts for Reduced Lead in Drinking Water in Schools"
- 3. Guidance Document from NJDEP Division of Water Supply and Geoscience "Lead in Drinking Water: Guidance for Schools and Child Care Facilities Served by Public Water".

Seven 250 ml. first draw samples were collected from the Lincoln Elementary School, at locations in the facility from locations identified by Mike Klein.

Seven 250 ml. first draw samples were collected from the Thomas Jefferson Middle School at locations in the facility at locations in the facility from locations identified by Mike Klein.

All samples were labeled with a unique identification number and transported to the Suburban Laboratory for analysis for lead in drinking water using EPA Method 200.8.

-END OF SECTION-



#### 4.0 DISCUSSION & RECOMMENDATIONS

According to the US EPA, lead enters drinking water primarily through plumbing materials.

Laboratory analysis for the round of sampling indicates that in some instances the remediation measures completed by the district did not reduce lead levels below the 15.5 ppb NJDOE Action Level.

The following are recommended:

#### Immediate / Short Term Action Required:

1. Take measures to ensure that no water from these locations exceeding the NJDEP 15.5 ppb Action Level is used for consumption.

#### **Further Actions:**

Perform additional remediation measures to reduce lead level to below the 15.5 ppb Action Level.

\* Sampling must be conducted following remediation to ensure that the measures taken were successful in reducing the lead in water concentration to below the Action Level before water from units is made available for consumption.

The type of samples collected for this assessment are referred to as grab samples. Grab samples are individual discrete samples collected at a specific time and location and are reflective of the conditions at that time of collection. Since conditions may vary over time we recommend periodic sampling to monitor the lead concentrations at the facilities.

It is important to note that the Lead Hazard Assessment was a snap shot of the conditions existing at the time of the assessment and conditions may vary with time.



#### 5.0 **DISCLAIMER**

The Lead Hazard Assessment has limitations with regards to identification of actual health and environmental issues. It is limited to only those items listed in the report and all items reflect conditions at the time of the assessment only.

Westchester Environmental LLC warrants only that the contents of this report constitute an informed discussion of the assessment at the subject property and is prepared exclusively for, and is confidential to, the above noted client. Westchester Environmental LLC assumes no liability with regards to the use of this information or decisions, which are made regarding the subject property. The user(s) of this information must use their own best judgment to determine the appropriate course of action.

Westchester Environmental LLC

Caul 9. Milaa

Paulk F. McCaa Senior Environmental Specialist

-END OF REPORT-

Lead in Drinking Water Sampling Report



### **APPENDIX I**

### LEAD IN DRINKING WATER SAMPLING CHAINS-OF-CUSTODY & LAB REPORTS



## Order ID: 9094784

Westchester Environmental 1248 Wrights Lane West Chester, PA 19380	Project: Rockaway Borough, NJ SD - Jefferson MS 95 E. Main Street Rockaway, NJ 07866											
Attn: Westchester Environmental		Regi	ulatory ID:									
Sample Number: 9094784-01 Collector: PFM		Site: Field House-DW-Ou Collect Date: 09/24/2019			imple IE ample T							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Metals</u> Lead	51.6	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	09/28/19 15:21	RPV			
Sample Number: 9094784-02 Collector: PFM		Site: Field-DW-Outside DF2Sample ID:012Collect Date:09/24/20198:03 amSample Type: S										
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Metals</u> Lead	9.38	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	09/28/19 15:17	RPV			
Sample Number: 9094784-03 Collector: PFM		Site:     1FL-BF-Cafe     Sample ID:     015       Collect Date:     09/24/2019     7:43 am     Sample Type: S										
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Metals</u> Lead	< 1.00	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:11	RPV			
Sample Number: 9094784-04 Collector: PFM		Site: 1FL-BF-Hall @ 132 Collect Date: 09/24/2019	9 7:45 am		Imple IE							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Metals</u> Lead	< 1.00	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:09	RPV			
Sample Number: 9094784-05 Collector: PFM		Site: 1FL-BF-Hall O/S 11 Collect Date: 09/24/2019		imple IE ample T								
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Metals</u> Lead	< 1.00	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	09/28/19 15:19	RPV			

Report Generated On: 10/07/2019 12:05 pm STL\_Results Revision #1.6

9094784 Effective: 07/09/2014



1037F MacArthur Road, Reading, PA 19605 Phone: 800-433-6595

SUBURBAN TESTING LABS Fax: 610-375-4090 suburbantestinglabs.com



Sample Number: 9094784-06 Collector: PFM		Site: IFL-S-Staff Restro Collect Date: 09/24/20		ample II ample T					
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
<u>Metals</u> Lead	15.7	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:07	RPV
Sample Number: 9094784-07 Collector: PFM		Site: IFL-DW-O/S Main Collect Date: 09/24/20		ample II ample T					
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
<u>Metals</u> Lead	2.58	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:05	RPV
Sample Receipt Conditions:									

All samples met the sample receipt requirements for the relevant analyses.

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.

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:** 

Alana Kopicz Project Manager II

Alana M. Kopicz.

9094784 Effective: 07/09/2014

SUBURBAN TESTING LABS



1037F MacArthur Road, Reading, PA 19605 Phone: 800-433-6595



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Alana Kopicz

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TESTING LABS

1037F Mac)

lient Name:	Westchester Environmental	LLC.				Project Name:	Rockaway Bor	ough S	.D.				
ddress:	1248 Wrights Lane		Phone:		484-894-4841	Facility	Jefferson Scho	ol					
	West Chester, PA 19380		Fax:			Address:	95 East Main S	St.				÷	
ontact Nam	e: Paul McCaa		Email:	mccaapau	J@gmail.com	City, State	Rockaway, NJ	07866					
omments:													
Firsh / First Draw	e Description / Site ID.	Date Sampled	Time Sampled	Samplers Initials	NJDEP TAG CODE	Tests Re	quested	Bottle Quantity	Matrix	Sample Types	Bottle Type	Preservative	Sample #
rst aw <b>3</b> Field	House-DW-Outside DF1	09/24/19	08:00 AM	PFM	RJMS-Field House-DW-Outside DF1	Pb EPA	200.8	1	PW	G	Р	н	011
aw Field-	-DW-Outside DF2	09/24/19	08:03 AM	PFM	RJMS-Field-DW-Outside DF2	Pb EPA	200.8	1	PW	G	Р	н	012
rst awl 1FL-E	BF-Cąfe	09/24/19	07:43 AM	PFM	RJMS-1FL-BF-Cafe	Pb EPA	200.8	1	PW	G	Р	н	015
st aw 1FL-E	BF-Hall @ 132	09/24/19	07:45 AM	PFM	RJMS-1FL-BF-Hall @ 132	Pb EPA	200.8	1	PW	G	Р	н	016
st aw 1FL-E	BF-Hall O/S 118	09/24/19	07:53 AM	PFM	RJMS-1FL-BF-Hall O/S 118	Pb EPA	200.8	1	PW	G	P	Н	017
st aw 1FL-S	S-Staff Restroom	09/24/19	07:47 AM	PFM	RJMS-1FL-S-Staff Restroom	Pb EPA	200.8	2	PW	G	Р	Н	018
aw 1FL-D	DW-O/S Main Office	09/24/19	07:50 AM	PFM	RJMS-1FL-DW-O/S Main Office	Pb EPA	200.8	4	PW	G	Р	Н	019
					· · · · · · · · · · · · · · · · · · ·								
	1-1-26	50 mlp	W-	HNOR	11/202 - 1/0								
					Prize 9 25/19 -								

Relinquished by: Paul McCaa

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A

Date: Time:

Date: 9 Bry Temp .C:MA Time: 1008 Acceptable Y / N Date: G-JS-13 Temp °C: J. C Ia Time: 1997 Acceptable N

Date: Temp °C: Time: Acceptable Y / N Do not need

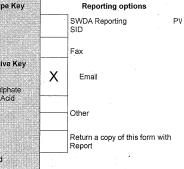
Number of containers match number on COC ? (Y)N (Y)N All containers intact ( YVN Tests within holding times 40 ml. VOA vials free of headspace? ATN HJ LOS/LC DQC Dq 9.2519

Sample Conditions

( vi)

Submitted w/ COC

(not for SVDA compliance)       SWDA = Safe Drinking Water Act       Potable Sample       Bample       Sample Type Key       G = Grab       B = Distribution       C = HCl       D = Distribution       S = H.SQ,       SHC = 8 Hour       Composite       C = Check       S = Special	IVI	Bottle Typ	
(not for SWDA compliance)     Freshvar       SWDA = Safe Dinking Water Act Potabia Sample     H = Sodium Thiosu       Sample Type Key     SWDA Sample Type (D = Disrtibution)     A = Ascorbic H = HNO3       G = Grab     E = Entry Point     S = H, SO, E = Entry Point       SHC = 8 Hour Composite     R = Raw S = Special     O = Ditribution	Solid  = Raw Sludg∈ Sludge,soil, etc	G = Glass	
Sample Type Key         SWDA Sample Type         H = HNO3           G = Grab         D = Distribution         C = HCI           S = Grab         E = Entry Point         S = H, SO,           8 HC = 8 Hour         C = Raw         OH = NaOH           Composite         C = Check         O = Other           S = Special         NA = None	(not for SWDA SWDA = Safe Drin	Preservati H = Sodium Thiosul	
Composite Residence	G = Grab 8 HC = 8 Hour Composite 24 HC = 24 Hour	D = Disrtibution E = Entry Point R = Raw C = Check S = Special M = Maximum	C = HCI $S = H_3SO_4$ OH = NaOH O = Other



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## Order ID: 9094785

Westchester Environmental 1248 Wrights Lane West Chester, PA 19380		Project: Rockaway Borough, NJ SD - Lincoln ES 37 Keller Avenue Rockaway, NJ 07866										
Attn: Westchester Environmental		Regul	atory ID:									
Sample Number: 9094785-01 Collector: PFM		Site: MFL-DW-CR110 Collect Date: 09/24/2019	7:15 am		Sample II Sample T							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Metals</u> Lead	9.66	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:03	RPV			
Sample Number: 9094785-02 Collector: PFM		Site:1FL-S-Principal's OfficeSample ID:004Collect Date:09/24/20197:20 amSample Type: S										
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Metals</u> Lead	31.2	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:34	RPV			
Sample Number: 9094785-03 Collector: PFM		Site:     1FL-BF-Hall     Sample ID:     006       Collect Date:     09/24/2019     7:22 am     Sample Type: S										
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Metals</u> Lead	< 1.00	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:32	RPV			
Sample Number: 9094785-04 Collector: PFM		Site: 1FL-BF-Hall Collect Date: 09/24/2019	7:23 am		Sample II Sample T							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
<u>Metals</u> Lead	< 1.00	μg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:30	RPV			
Sample Number: 9094785-05 Collector: PFM		Site: 2FL-BF-Hall Collect Date: 09/24/2019	7:26 am		Sample II Sample T							
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву			
Metals Lead	< 1.00	μg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:21	RPV			

Report Generated On: 10/07/2019 12:04 pm STL\_Results Revision #1.6

9094785 Effective: 07/09/2014



 SUBURBAN TESTING LABS

 1037F MacArthur Road, Reading, PA 19605
 Phone: 800-433-6595
 Fax: 610-375-4090
 suburbantestinglabs.com



Sample Number: 9094785-06 Collector: PFM		Site: 2FL-BF-Hall Collect Date: 09/24/2019 7:30 am			ample II ample T				
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
<u>Metals</u> Lead	< 1.00	µg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:19	RPV
Sample Number: 9094785-07 Collector: PFM	9094785-07         Site: LFL-S-B 41         Sample ID:         010           Collect Date:         09/24/2019         7:36 am         Sample Type: S								
Department / Test / Parameter	Result	Units	Method	R.L.	DF	Prep Date	Ву	Analysis Date	Ву
<u>Metals</u> Lead	< 1.00	μg/L	EPA 200.8	1.00	1	09/26/19	RPV	10/05/19 14:17	RPV
Sample Receipt Conditions:									

Sample Receipt Conditions:

All samples met the sample receipt requirements for the relevant analyses.

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.

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

**Reviewed and Released By:** 

Alana Kopicz Project Manager II

Alana M. Kopicz

SUBURBAN TESTING LABS



1037F MacArthur Road, Reading, PA 19605 Phone: 800-433-6595



	Alana Kopicz Standard														
	TESTI	ING LABS		10371	<sup>-</sup> MacArthur Ro	b,	<b>,, </b>	· _							
Client	Name:	Westchester E	nvironmental	LLC.				Project Name:	Rockaway Bor	ough S	.D.				
Addres		1248 Wrights L			Phone:	·	484-894-4841	Facility Lincoln School							
		West Chester,	PA 19380		Fax:			Address:	41 Jackson Va	illey Ro	ad				4.
Contac	ct Name:	Paul McCaa			Email:	mccaapa	aul@gmail.com	City, State	Rockaway, NJ	07866					
Comments:													· .		
Flush / First Draw	Sample [	Description / Site ID.		Date Sampled	Time Sampled	Samplers Initials	NJDEP TAG CODE	Tests Re	quested	Bottle Quantity	Matrix	Sample Types	Bottle Type	Preservative	Sample #
First Draw	MFL-D	W CR110		09/24/19	07:15 AM	PFM	RLES-MFL-DW-CR110	Pb EPA	200.8	.1	PW	G	Ρ	Н	002
Firs <b>tø</b> Draw	1FL-S-F	Principal's Office	· ·	09/24/19	07:20 AM	PFM	RLES-1FL-S-Principal's Office	Pb EPA	200.8	1	PW	G	Р	Н	004
First Draw	1		•			-								· · ·	
First Draw₿	1FL-BF	-Hall	· · · ·	09/24/19	07:22 AM	PFM	RLES-1FL-BF-Hall	Pb EPA	200.8	1	PW	G	Р	Н	006
First Draw	1FIBF	-Hall		09/24/19	07:23 AM	<sub>،</sub> PFM	RLES-1FL-BF-Hall	Pb EPA 200.8		1	PW	G	Р	Н	007
First <b>ð</b> Úraw	2FL-BF	Hạll		09/24/19	07:26 AM:	PFM	RLES-2FL-BF-Hall	Pb EPA 200.8		1	PW	G	Ρ.	Н	008
First <b>s</b> Draw	2FL-BF	-Hall		09/24/19	07:30 AM	PFM	RLES-2FL-BF-Hall	Pb EPA 200.8		1	PW	G	Р	Н	009
First Draw	LFL-S-E	B 41 ,		09/24/19	07:36 AM	PFM	RLES-LFL-S-B 41	Pb EPA 200.8		2	PW	G	Р	Н	010
First Draw			(m)	1	2	2			1 1						
First Draw		-	(D)	- 1	-25	sur	P WHNU3 -pHZ	295-9	123/19	7			•		

#### Relinquished by: Paul McCaa

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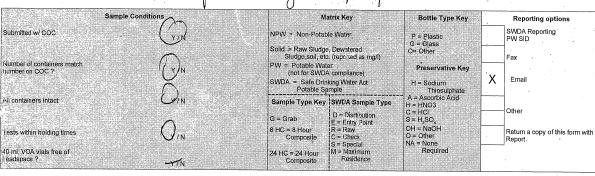
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