



**Westchester
Environmental, LLC**

LEAD IN DRINKING WATER POST REMEDIATION SAMPLING REPORT

BORDENTOWN REGIONAL SCHOOL DISTRICT

PERFORMED FOR:

**BORDENTOWN REGIONAL SCHOOL DISTRICT
48 DUNNS MILL RD
BORDENTOWN, NJ 08505**

PERFORMED BY:

**WESTCHESTER ENVIRONMENTAL LLC
307 N WALNUT STREET
WEST CHESTER, PA**

MAY 2017



May 18, 2017

Mr. Brian Usilton
Operations Supervisor
Bordentown Regional School District
48 Dunns Mill Rd
Bordentown, NJ 08505

**Re: LEAD IN DRINKING WATER POST REMEDIATION REPORT FOR
SCHOOL DISTRICT FACILITIES IN BORDENTOWN, NEW JERSEY**

Dear Mr. Usilton;

Please find enclosed the report for the Lead in Drinking Water Post Remediation Sampling conducted for the Bordentown Regional School District.

If you have any questions, please don't hesitate to contact me at 610-431-7545 or email me at info@WestChesterEnvironmental.com.

Sincerely,

Westchester Environmental, LLC

A handwritten signature in black ink, appearing to read 'Noel Abraham', is written over a horizontal line.

Noel Abraham
Environmental Specialist



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1.0 INTRODUCTION

Westchester Environmental, LLC was contracted to conduct Post Remediation First Draw Drinking Water Sampling at the following Bordentown Regional Schools:

1. Clara Barton Elementary
2. MacFarland Intermediate
3. Bordentown Regional Middle
4. Bordentown Regional High

The purpose of the follow up sampling was to collect and analyze a first draw water sample after remediation had been completed by the district. The objective of the testing was to assure that the remediation (installation of lead filters) was successful. The initial first round first draw sample result from this location had exceeded the lead action limit which is why the remediation was required. A field blank and Point of Entry sample were also collected at this time.

The water sampling was performed on May 6, 2017 by Noel Abraham of Westchester Environmental, LLC.

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

-END OF SECTION-



2.0 SUMMARY OF FINDINGS

First draw water samples and a main flush sample were collected from the facility and submitted for lead analysis. The tables below show the concentration of lead (reported in parts per billion (ppb)) at each sampled location in each facility that were reported to have lead concentrations greater than the recommended New Jersey Department of Environmental Protection (NJDEP) Action Level of 15.5 ppb.

Table 1: Bordentown Regional School District

Sample Number		Location	Result	Action Level	Over Limit
			ppb	ppb	Yes/No
1	B-Field Blank	Field Blank	<1.00	15.5	No
2	B-CBS-1FL-IM-KITCHEN	Clara Barton Ice Machine	<1.00	15.5	No
3	B-MIS-1FL-IM-KITCHEN	MacFarland Ice Machine	<1.00	15.5	No
4	B-RMS-1FL-IM-KITCHEN	Middle Kitchen Ice Machine	<1.00	15.5	No
5	B-RMS-1FL-IM-O/S TRAINER	Middle Trainer Ice Machine	<1.00	15.5	No
6	B-RHS-1FL-IM-G LAUNDRY	High Laundry Ice Machine	<1.00	15.5	No
7	B-RHS-1FL-IM-KITCHEN	High Kitchen Ice Machine	<1.00	15.5	No
8	B-RHS-1FL-IM-CONC	Concession Stand Ice Machine	<1.00	15.5	No
9	B-RHS-CONC-WC-CONC1	Concession Stand	2.63	15.5	No
10	B-RHS-CONC-WC-CONC2	Concession Stand	2.22	15.5	No

-END OF SECTION-



3.0 SAMPLING AND ANALYSIS:

SAMPLING:

Nine first draw samples (water that has been stagnant for a minimum of eight hours) sample were collected from the five facilities where the initial first draw samples was reported to contain lead above the NJDEP action level of 15.5 parts per billion (ppb), along with one (1) Field Blank for Quality Control purposes.

ANALYSIS:

All samples were labeled with a unique identification number and transported to the Suburban Laboratory for analysis of 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.

For further information on guidance protocols and Action Levels that were followed please refer to:

1. N.J.A.C. 6A:26
2. The EPA's Revised Technical Guidance - "3Ts for Reduced Lead in Drinking Water in Schools"

Based on a laboratory analysis after the first draw samples, no analysis of flush samples is required as all samples analyzed fall below the action limit. The remediation (installation of lead filters) was successful in lowering in the lead concentration below the action limit. We recommend that the district develop an Operations and Maintenance plan to check and replace filters.

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..

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.

-END OF SECTION-



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

Two handwritten signatures in black ink. The first signature is 'Noel Abraham' and the second is 'Environmental Specialist'.

Noel Abraham
Environmental Specialist

-END OF REPORT-

APPENDIX I

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



Results Report

Order ID: 7052602

Westchester Environmental
307 North Walnut Street
West Chester, PA 19380

Project: Bordentown, NJ SD - Multiple Schools

Bordentown, NJ

Attn: Westchester Environmental

Regulatory ID:

Sample Number: 7052602-01	Site: Field Blank	Sample ID: B-Field Blank
Collector: NPA	Collect Date: 05/06/2017 1:45 pm	Sample Type: S

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

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 15:44	RPV
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Sample Number: 7052602-02	Site: Clara Barton IM	Sample ID: B-CBS-1FL-IM-KITCHEN
Collector: NPA	Collect Date: 05/06/2017 2:12 pm	Sample Type: S

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

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 15:46	RPV
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Sample Number: 7052602-03	Site: MacFarland IM	Sample ID: B-MIS-1FL-IM-KITCHEN
Collector: NPA	Collect Date: 05/06/2017 2:28 pm	Sample Type: S

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

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 15:56	RPV
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Sample Number: 7052602-04	Site: Middle IM	Sample ID: B-RMS-1FL-IM-KITCHEN
Collector: NPA	Collect Date: 05/06/2017 2:52 pm	Sample Type: S

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

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 15:58	RPV
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Sample Number: 7052602-05	Site: Middle IM	Sample ID: B-RMS-1FL-IM-O/S TRAINER
Collector: NPA	Collect Date: 05/06/2017 2:55 pm	Sample Type: S

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

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 16:00	RPV
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Report Generated On: 05/15/2017 3:00 pm
STL_Results Revision #1.6

7052602
Effective: 07/09/2014





SUBURBAN TESTING LABS

Sample Number: 7052602-06	Site: High IM	Sample ID: B-RHS-1FL-IM-G LAUNDRY
Collector: NPA	Collect Date: 05/06/2017 1:59 pm	Sample Type: S

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

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 16:02	RPV
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Sample Number: 7052602-07	Site: High IM	Sample ID: B-RHS-IM-KITCHEN
Collector: NPA	Collect Date: 05/06/2017 1:55 pm	Sample Type: S

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

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 16:04	RPV
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Sample Number: 7052602-08	Site: Conc Stand	Sample ID: B-RHS-1FL-IM-CONC
Collector: NPA	Collect Date: 05/06/2017 2:10 pm	Sample Type: S

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

Lead	< 1.00	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 16:06	RPV
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Sample Number: 7052602-09	Site: Conc Stand	Sample ID: B-RHS-CONC-WC-CONC1
Collector: NPA	Collect Date: 05/06/2017 2:08 pm	Sample Type: S

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

Lead	2.63	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 16:08	RPV
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Sample Number: 7052602-10	Site: Conc Stand	Sample ID: B-RHS-CONC-WC-CONC2
Collector: NPA	Collect Date: 05/06/2017 2:07 pm	Sample Type: S

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

Lead	2.22	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 16:10	RPV
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Sample Number: 7052602-11	Site: Laboratory Control Sample	Sample ID:
Collector:	Collect Date: 05/10/2017 12:00 am	Sample Type:

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

Lead	15.0	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 16:12	RPV
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Sample Number: 7052602-12	Site: Laboratory Control Sample Duplicate	Sample ID:
Collector:	Collect Date: 05/10/2017 12:00 am	Sample Type:

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

Lead	14.7	µg/L	EPA 200.8	1.00	1	05/11/17	RPV	05/12/17 16:14	RPV
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Report Generated On: 05/15/2017 3:00 pm 7052602
 STL_Results Revision #1.6 Effective: 07/09/2014





Sample Receipt Conditions:

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

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

Report Generated On: 05/15/2017 3:00 pm 7052602
STL_Results Revision #1.6 Effective: 07/09/2014





7052602
Alana Kopicz



TESTING LABS

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

Standard 24hr 48hr 72hr Other

5 Day

Client Name:	Westchester Environmental LLC.			Project Name:	Bordentown SD
Address:	307 N. Walnut Street	Phone:	610-883-3839	Address:	Multiple Schools
	West Chester, PA 19380	Email:	nabraham@westchesterenv ironmental.com		New Jersey
Contact Name:	Noel Abraham			Payment / P.O. Info:	

Comments:

Flush / First Draw	Sample Description / Site ID.	Date Sampled	Time Sampled	Samplers Initials	Westchester Field Sample #	Tests Requested	Bottle Quantity	Matrix	Sample Types	Bottle Type	Preservative	Location Code
	Field Blank	05/06/17	01:45 PM	NPA	001	Pb EPA 200.8	1	PW	G	P	H	B-Field Blank
First	Clara Barton IM	05/06/17	02:12 PM	NPA	002	Pb EPA 200.8	1	PW	G	P	H	B-CBS-1FL-IM-KITCHEN
First	MacFarland IM	05/06/17	02:28 PM	NPA	003	Pb EPA 200.8	1	PW	G	P	H	B-MIS-1FL-IM-KITCHEN
First	Middle IM	05/06/17	02:52 PM	NPA	004	Pb EPA 200.8	1	PW	G	P	H	B-RMS-1FL-IM-KITCHEN
First	Middle IM	05/06/17	02:55 PM	NPA	005	Pb EPA 200.8	1	PW	G	P	H	B-RMS-1FL-IM-O/S TRAINER
First	High IM	05/06/17	01:59 PM	NPA	006	Pb EPA 200.8	1	PW	G	P	H	B-RHS-1FL-IM-G LAUNDRY
First	High IM	05/06/17	01:55 PM	NPA	007	Pb EPA 200.8	1	PW	G	P	H	B-RHS-1FL-IM-KITCHEN
First	Conc Stand	05/06/17	02:10 PM	NPA	008	Pb EPA 200.8	1	PW	G	P	H	B-RHS-1FL-IM-CONC
First	Conc Stand	05/06/17	02:08 PM	NPA	009	Pb EPA 200.8	1	PW	G	P	H	B-RHS-CONC-WC-CONC1
First	Conc Stand	05/06/17	02:07 PM	NPA	010	Pb EPA 200.8	1	PW	G	P	H	B-RHS-CONC-WC-CONC2

pH < 2
↓

Relinquished by:

[Signature]

Date: 5/9/17

Time: 09:00

Received By:

[Signature]

Date: 5/10/17 Temp °C: 21.5

Time: 12:15 Acceptable Y/N

Relinquished by:

[Signature]

Date: 5/10/17 Temp °C: 21.9

Time: 14:00 Acceptable Y/N

Received in Lab By:

[Signature]

Date: 5/10/17 Temp °C: 21.9

Time: 14:00 Acceptable Y/N

Sample Conditions	Matrix Key	Bottle Type Key	Reporting options
Submitted w/ COC <input checked="" type="checkbox"/> Y/N	NPW = Non-Potable Water Solid = Raw Sludge, Dewatered Sludge, soil, etc. (reported as mg/l)	P = Plastic G = Glass O = Other	<input type="checkbox"/> SWDA <input type="checkbox"/> Reportin
Number of containers match <input checked="" type="checkbox"/> Y/N	PW = Potable Water (not for SWDA compliance) SWDA = Safe Drinking Water Act Potable Sample	Preservative Key H = Sodium Thiosulphate A = Ascorbic Acid C = HCl H ₂ SO ₄ NaOH NA = None Required	<input type="checkbox"/> Fax <input type="checkbox"/> Email <input type="checkbox"/> Other <input type="checkbox"/> Return a copy of
All containers intact <input checked="" type="checkbox"/> Y/N	Sample Type Key G = Grab 8 HC = 8 Hour Composite 24 HC = 24 Hour Composite	SWDA Sample Type D = Distribution E = Entry Point R = Raw C = Check S = Special M = Maximum Residence	
Tests within holding times <input checked="" type="checkbox"/> Y/N	40 ml. VOA vials free of headspace? <input type="checkbox"/> Y/N		

pH < 2 msw-5/10/17