



**Westchester
Environmental, LLC**

LEAD IN DRINKING WATER KEYPORT SCHOOL DISTRICT POST-REMEDIATION SAMPLING REPORT

PERFORMED FOR:

KEYPORT SCHOOL DISTRICT
370 BROAD STREET
KEYPORT, NJ 07735

PERFORMED BY:

WESTCHESTER ENVIRONMENTAL LLC
307 N WALNUT STREET
WEST CHESTER, PA 19380

AUGUST 2017



Westchester Environmental, LLC

August 23, 2017

Mr. Anthony Rapolla
Keyport School District
370 Broad Street
Keyport, NJ 07735

Re: POST-REMEDICATION LEAD IN DRINKING WATER REPORT

Dear Mr. Rapolla;

Please find enclosed the report for the Lead in Drinking Water Post-Remediation sampling conducted for the Keyport School District.

If you have any questions, please contact me at 610-431-7545 or email me at nabraham@westchesterenvironmental.com.

Sincerely,

Westchester Environmental, LLC

Noel Abraham
Environmental Specialist



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KEYPORT SCHOOL DISTRICT

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Appendix I – Water Sampling Chain-of-Custody & Laboratory Reports



1.0 INTRODUCTION

Westchester Environmental, LLC was contracted to conduct Post-Remediation Water Sampling for Lead at the Keyport School District.

The purpose of the post remediation sampling was to collect and analyze first draw water samples at locations that previously exceeded the lead action limit after remediation had been completed by the district. The objective of the testing was to assure that the remediation was successful. A field blank was also collected at this time.

The water sampling was performed on August 3, 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 samples were collected and submitted for lead analysis. Table 1 below shows the concentration of lead (parts per billion or microgram per liter) at each location sampled.

Table 1 Keyport Central School and Keyport High School

| Field ID | Location | Result | Action Level | Lead Hazard |
|----------------------------|------------------|--------|--------------|-------------|
| | | ppb | ppb | Yes / No |
| KCS-1FL-S-Tech Rm | Tech Rm | 1.48 | 15.5 | No |
| KHS-1FL-DW-Girls Locker Rm | Girls Locker Rm | 1.35 | 15.5 | No |
| KHS-1FL-DW-Hall o/s 109-2 | Hall o/s 109 - 2 | <1.00 | 15.5 | No |
| KHS-1FL-FP-Kitchen-1 | Kitchen - 1 | <1.00 | 15.5 | No |
| KHS-2FL-DW-Hall o/s 209 | Hall o/s 209 | 3.28 | 15.5 | No |

-END OF SECTION-



3.0 SAMPLING AND ANALYSES

The following guidance documents were followed for all sampling:

1. The EPA's Revised Technical Guidance - "3Ts for Reduced Lead in Drinking Water in Schools"
2. The 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".
3. N.J.A.C. 6A:26 Educational Facilities drinking water regulations.
4. The districts Sampling Plan and QAPP.

Five (5) first draw samples were collected and analyzed after remediation at locations where first draw or flush draw samples were reported to contain lead above the action level of 15.5 parts per billion (ppb).

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. 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 laboratory analysis of the samples analyzed, the samples fall below the action limit. The remediation (replacement of the tap fixtures) was successful in lowering in the lead concentration below the action limit.

The type of samples collected for this assessment is 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

A handwritten signature in black ink, appearing to read 'Noel Abraham', followed by a horizontal line.

Noel Abraham
Environmental Specialist

-END OF REPORT-

APPENDIX I

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



Results Report

Order ID: 7082170

Westchester Environmental
307 North Walnut Street
West Chester, PA 19380

Project: Keyport, NJ SD - Central School
335 Broad Street
Keyport, NJ 07735

Attn: Westchester Environmental

Regulatory ID:

| | | |
|---------------------------|----------------------------------|----------------------|
| Sample Number: 7082170-01 | Site: Blank | Sample ID: KHS-Blank |
| Collector: NPA | Collect Date: 08/03/2017 7:20 am | Sample Type: S |

| 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 | 08/07/17 | RPV | 08/16/17 2:46 | RPV |
|------|--------|------|-----------|------|---|----------|-----|---------------|-----|

| | | |
|---------------------------|----------------------------------|---------------------------------|
| Sample Number: 7082170-02 | Site: Kitchen-1 | Sample ID: KHS-1FL-FP-Kitchen-1 |
| Collector: NPA | Collect Date: 08/03/2017 7:20 am | Sample Type: S |

| 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 | 08/07/17 | RPV | 08/16/17 2:40 | RPV |
|------|--------|------|-----------|------|---|----------|-----|---------------|-----|

| | | |
|---------------------------|----------------------------------|--------------------------------------|
| Sample Number: 7082170-03 | Site: Hall o/s 109-2 | Sample ID: KHS-1FL-DW-HALL o/s 109-2 |
| Collector: NPA | Collect Date: 08/03/2017 7:22 am | Sample Type: S |

| 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 | 08/07/17 | RPV | 08/16/17 2:48 | RPV |
|------|--------|------|-----------|------|---|----------|-----|---------------|-----|

| | | |
|---------------------------|----------------------------------|------------------------------------|
| Sample Number: 7082170-04 | Site: Hall o/s 209 | Sample ID: KHS-2FL-DW-Hall o/s 209 |
| Collector: NPA | Collect Date: 08/03/2017 7:25 am | Sample Type: S |

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

Metals

| | | | | | | | | | |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|
| Lead | 3.28 | µg/L | EPA 200.8 | 1.00 | 1 | 08/07/17 | RPV | 08/16/17 2:50 | RPV |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|

| | | |
|---------------------------|----------------------------------|---|
| Sample Number: 7082170-05 | Site: Girls Locker Room | Sample ID: KHS-1FL-DW-Girls Locker Room |
| Collector: NPA | Collect Date: 08/03/2017 7:26 am | Sample Type: S |

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

Metals

| | | | | | | | | | |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|
| Lead | 1.35 | µg/L | EPA 200.8 | 1.00 | 1 | 08/07/17 | RPV | 08/16/17 2:52 | RPV |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|

Report Generated On: 08/17/2017 3:54 pm 7082170
STL_Results Revision #1.6 Effective: 07/09/2014





| | | |
|---------------------------|----------------------------------|------------------------------|
| Sample Number: 7082170-06 | Site: Tech Rm | Sample ID: KHS-1FL-S-Tech Rm |
| Collector: NPA | Collect Date: 08/03/2017 7:37 am | Sample Type: S |

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

Metals

| | | | | | | | | | |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|
| Lead | 1.48 | µg/L | EPA 200.8 | 1.00 | 1 | 08/07/17 | RPV | 08/16/17 2:54 | RPV |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|

| | | |
|---------------------------|-----------------------------------|--------------|
| Sample Number: 7082170-07 | Site: Laboratory Control Sample | Sample ID: |
| Collector: | Collect Date: 08/07/2017 12:00 am | Sample Type: |

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

Metals

| | | | | | | | | | |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|
| Lead | 14.8 | µg/L | EPA 200.8 | 1.00 | 1 | 08/07/17 | RPV | 08/16/17 3:00 | RPV |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|

| | | |
|---------------------------|--|--------------|
| Sample Number: 7082170-08 | Site: Laboratory Control Sample Douplicate | Sample ID: |
| Collector: | Collect Date: 08/07/2017 12:00 am | Sample Type: |

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

Metals

| | | | | | | | | | |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|
| Lead | 14.6 | µg/L | EPA 200.8 | 1.00 | 1 | 08/07/17 | RPV | 08/16/17 3:02 | RPV |
|------|------|------|-----------|------|---|----------|-----|---------------|-----|

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: 08/17/2017 3:54 pm 7082170
STL_Results Revision #1.6 Effective: 07/09/2014





7082170
Alana Kopicz

COC Pg 1



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

| | | | |
|---------------|--|----------------------|--|
| Client Name: | Westchester Environmental LLC. | Project Name: | Keyport SD |
| Address: | 307 N. Walnut Street West Chester, PA 19380 | Address: | Keyport High/Central School 315 Broad St, Keyport, NJ 07735 |
| Contact Name: | Noel Abraham | Payment / P.O. Info: | |
| Phone: | 610-883-3839 | | |
| Email: | nabraham@westchesterenviromental.com | | |

Comments:

| Flush / First Draw | Sample Description / Site ID. | Date Sampled | Time Sampled | Samplers Initials | Westchester Field Sample # | Tests Requested | Matrix | Sample Types | Bottle Type | Preservative | Location Code |
|--------------------|-------------------------------|--------------|--------------|-------------------|----------------------------|-----------------|--------|--------------|-------------|--------------|------------------------------|
| | Blank | 08/03/17 | 07:20 AM | NPA | 001 | Pb EPA 200.8 | PW | G | P | H | KHS-Blank |
| First | Kitchen - 1 | 08/03/17 | 07:20 AM | NPA | 002 | Pb EPA 200.8 | PW | G | P | H | KHS-1FL-FP-Kitchen-1 |
| First | Hall o/s 109 - 2 | 08/03/17 | 07:22 AM | NPA | 003 | Pb EPA 200.8 | PW | G | P | H | KHS-1FL-DW-Hall o/s 109-2 |
| First | Hall o/s 209 | 08/03/17 | 07:25 AM | NPA | 004 | Pb EPA 200.8 | PW | G | P | H | KHS-2FL-DW-Hall o/s 209 |
| First | Girls Locker Room | 08/03/17 | 07:26 AM | NPA | 005 | Pb EPA 200.8 | PW | G | P | H | KHS-1FL-DW-Girls Locker Room |
| First | Tech Rm | 08/03/17 | 07:37 AM | NPA | 006 | Pb EPA 200.8 | PW | G | P | H | KCS-1FL-S-Tech Rm |

Relinquished by:
 Date: 8/7/17
 Time: 10:45 am

Received By:
 Date: 8-7-17 Temp °C: 13.5
 Time: 10:47 Acceptable Y/N

Relinquished by:
 Date: 8-7-17 Temp °C: 10
 Time: 14:55 Acceptable Y/N

Received in Lab By:
 Date: 8/7/17 Temp °C:
 Time: 14:55 Acceptable Y/N

| Sample Conditions | Matrix Key | Bottle Type Key | Reporting options |
|-------------------------------------|---|---|--|
| Submitted w/ COC | NPW = Non-Potable Water Solid = Raw Sludge, Dewatered Sludge/soil, etc. (reported as mg/l) PW = Potable Water (not for SWDA compliance) SWDA = Safe Drinking Water Act Sample Type Key: SWDA Sample Type G = Grab 8 HC = 8 Hour Composite 24 HC = 24 Hour Composite | P = Plastic G = Glass O = Other Preservative Key H = Sodium Thiosulphate A = Ascorbic Acid H = HNO3 C = HCl H2SO4 NaOH NA = None Required | SWDA Reportin Fax Email Other Return a copy of |
| Number of containers match | D = Distribution E = Entry Point R = Raw S = Check M = Maximum Residence | | |
| All containers intact. | | | |
| Tests within holding times | | | |
| 40 ml. VOA vials free of headspace? | | | |