



January 30, 2020

American Paradigm Schools
8101 Castor Avenue
Philadelphia, PA
Attention: Ms. Katie Santilli

Re: Lead in Drinking Water Sampling
Tacony Academy Charter High School
6201 Keystone Street
Philadelphia, PA
Project No. 61445

Dear Ms. Santilli:

The Vertex Companies, Inc. (VERTEX) is pleased to provide this Letter Report summarizing the lead in drinking water sampling performed within the Tacony Academy Charter High School located at 6201 Keystone Street in Philadelphia, Pennsylvania (the site).

VERTEX's services were performed on January 23, 2020 during the early morning hours prior to normal occupancy; thus, no water use for greater than six hours. Ten (10) sample locations were chosen from various water outlets including: hallway fountains, restroom sinks, kitchen prep sink, a cafeteria water dispenser, and classroom sinks. Sample collection methodology incorporated a 1st draw sample from each location.

Sampling bottle ware was provided by the laboratory. The samples were submitted under chain-of-custody to an NELAP certified laboratory (EMSL Analytical, Inc. of Cinnaminson, New Jersey) and analyzed by inductively coupled plasma – mass spectrometry for lead in drinking water via USEPA Method 200.8.

Sample results were compared to the USEPA National Primary Drinking Water Regulations. The maximum contaminant level goal for lead is zero; which allow for a margin of safety and are non-enforceable public health goals. The maximum contaminant level for lead where treatment techniques would be required is 15 ug/L (Action Level). Note: The School District of Philadelphia has set a safety limit of 10 ug/L for lead in drinking water.

Results for the lead in drinking water samples collected identified the following:

- Nine (9) of the ten (10) samples were below the USEPA Action Level for lead (15 ug/L). Sample DW-T10: sink 5 in the 3rd floor science lab - Room 314 was above the Action Level with a concentration of 25.7 ug/L.

- Nine (9) of the ten (10) samples were below the analytical detection limit.

Conclusion: Based on the project findings, one (1) of the ten (10) samples exceeded the USEPA Action Level for lead in drinking water. However, results are within the 90th percentile of tap water samples when compared to the USEPA Lead and Copper Rule.

VERTEX recommends the following for the water outlet (sink 5 in the 3rd floor science lab - Room 314):

- Remove the water outlet;
- Install a filter;
- Or repair the water outlet.

Limitations:

Professional opinions presented in this report are based on information made available to VERTEX either by review of data provided by others or data obtained by VERTEX personnel.

VERTEX affirms that data gathered and presented by VERTEX in this report was collected in an appropriate manner in accordance with generally accepted guidelines, methods and practices.

Changes in conditions which affect the site can occur over time. Should additional information become available which would affect the status of this report, we reserve the right to amend our opinions and professional judgments.

VERTEX appreciates the opportunity to assist you with respect to this project. Please do not hesitate to contact our office, should you have any questions. Thank you.

If you should have any questions or require further information, please feel do not hesitate to contact me.

Sincerely,
The Vertex Companies, Inc.



William Otten
Senior Project Manager

Attachments: Laboratory Results
Photographs



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 303-2500 Fax: (856) 858-4571 Email: EnvChemistry2@emsl.com

Attn:

**William Otten
The Vertex Companies, Inc.
700 Turner Way, Suite 105
Aston, PA 19014**

1/30/2020

Phone: (610) 558-8902
Fax: (610) 558-8904

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 1/23/2020. The results are tabulated on the attached data pages for the following client designated project:

Tacony

The reference number for these samples is EMSL Order #012000764. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:

Phillip Worby, Environmental Chemistry
Laboratory Director



The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.
NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, CA ELAP 1877

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856) 303-2500 / (856) 858-4571
<http://www.EMSL.com> EnvChemistry2@emsl.com

EMSL Order: 012000764
 CustomerID: VRTX78
 CustomerPO:
 ProjectID:

Attn: **William Otten**
The Vertex Companies, Inc.
700 Turner Way, Suite 105
Aston, PA 19014

Phone: (610) 558-8902
 Fax: (610) 558-8904
 Received: 01/23/20 9:00 AM

Project: **Tacony**

Analytical Results

Client Sample Description DW-T1
 1st Floor-Fountain **Collected:** 1/23/2020 **Lab ID:** 012000764-0001

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|----|-----------|--------------|-------------------|
| 200.8 | Lead | ND | 1.00 µg/L | 1/23/2020 SK | 01/23/20 18:55 SK |
|-------|------|----|-----------|--------------|-------------------|

Client Sample Description DW-T2
 1st Floor-Faculty **Collected:** 1/23/2020 **Lab ID:** 012000764-0002

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|----|-----------|--------------|-------------------|
| 200.8 | Lead | ND | 1.00 µg/L | 1/23/2020 SK | 01/24/20 10:14 SK |
|-------|------|----|-----------|--------------|-------------------|

Client Sample Description DW-T3
 1st Floor-Cafeteria **Collected:** 1/23/2020 **Lab ID:** 012000764-0003

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|----|-----------|--------------|-------------------|
| 200.8 | Lead | ND | 1.00 µg/L | 1/23/2020 SK | 01/23/20 19:05 SK |
|-------|------|----|-----------|--------------|-------------------|

Client Sample Description DW-T4
 1st Floor-Kitchen **Collected:** 1/23/2020 **Lab ID:** 012000764-0004

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|----|-----------|--------------|-------------------|
| 200.8 | Lead | ND | 1.00 µg/L | 1/23/2020 KB | 01/24/20 15:47 JW |
|-------|------|----|-----------|--------------|-------------------|

Client Sample Description DW-T5
 2nd Floor-Fountain **Collected:** 1/23/2020 **Lab ID:** 012000764-0005

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|----|-----------|--------------|-------------------|
| 200.8 | Lead | ND | 1.00 µg/L | 1/23/2020 SK | 01/23/20 19:07 SK |
|-------|------|----|-----------|--------------|-------------------|

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (856) 303-2500 / (856) 858-4571
<http://www.EMSL.com> EnvChemistry2@emsl.com

EMSL Order: 012000764
 CustomerID: VRTX78
 CustomerPO:
 ProjectID:

Attn: **William Otten**
The Vertex Companies, Inc.
700 Turner Way, Suite 105
Aston, PA 19014

Phone: (610) 558-8902
 Fax: (610) 558-8904
 Received: 01/23/20 9:00 AM

Project: **Tacony**

Analytical Results

Client Sample Description DW-T6
 2nd Floor-Boys Sink **Collected:** 1/23/2020 **Lab ID:** 012000764-0006

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|----|-----------|--------------|-------------------|
| 200.8 | Lead | ND | 1.00 µg/L | 1/23/2020 SK | 01/23/20 19:09 SK |
|-------|------|----|-----------|--------------|-------------------|

Client Sample Description DW-T7
 2nd Floor-Art Sink **Collected:** 1/23/2020 **Lab ID:** 012000764-0007

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|----|-----------|--------------|-------------------|
| 200.8 | Lead | ND | 1.00 µg/L | 1/23/2020 SK | 01/23/20 19:11 SK |
|-------|------|----|-----------|--------------|-------------------|

Client Sample Description DW-T8
 3rd Floor-Fountain **Collected:** 1/23/2020 **Lab ID:** 012000764-0008

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|----|-----------|--------------|-------------------|
| 200.8 | Lead | ND | 1.00 µg/L | 1/23/2020 SK | 01/23/20 19:13 SK |
|-------|------|----|-----------|--------------|-------------------|

Client Sample Description DW-T9
 3rd Floor-Girls Sink **Collected:** 1/23/2020 **Lab ID:** 012000764-0009

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|----|-----------|--------------|-------------------|
| 200.8 | Lead | ND | 1.00 µg/L | 1/23/2020 SK | 01/23/20 19:19 SK |
|-------|------|----|-----------|--------------|-------------------|

Client Sample Description DW-T10
 3rd Floor-Science **Collected:** 1/23/2020 **Lab ID:** 012000764-0010

| Method | Parameter | Result | RL Units | Prep Date & Analyst | Analysis Date & Analyst |
|--------|-----------|--------|----------|---------------------|-------------------------|
|--------|-----------|--------|----------|---------------------|-------------------------|

METALS

| | | | | | |
|-------|------|------|-----------|--------------|-------------------|
| 200.8 | Lead | 25.7 | 1.00 µg/L | 1/23/2020 SK | 01/23/20 19:21 SK |
|-------|------|------|-----------|--------------|-------------------|

Definitions:

- MDL - method detection limit
- J - Result was below the reporting limit, but at or above the MDL
- ND - indicates that the analyte was not detected at the reporting limit
- RL - Reporting Limit (Analytical)
- D - Dilution Sample required a dilution which was used to calculate final results

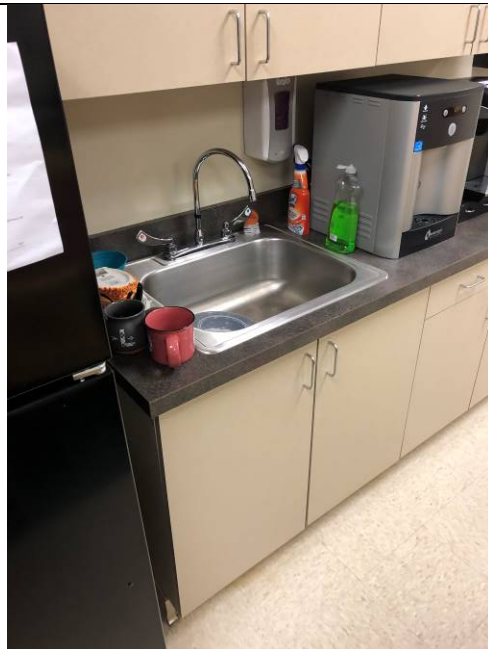
**Photographic Documentation
Tacony Academy Charter High School
6201 Keystone Street
Philadelphia, Pennsylvania
Project No. 61445**

Photograph: 1**Description:**

Photo depicts 1st floor hallway fountain.

**Photograph: 2****Description:**

Photo depicts the 1st floor faculty room sink.



Photographs taken by William Otten on 1/23/20

**Photographic Documentation
Tacony Academy Charter High School
6201 Keystone Street
Philadelphia, Pennsylvania
Project No. 61445**

Photograph: 3**Description:**

Photo depicts the cafeteria fountain dispenser.

**Photograph: 4****Description:**

Photo depicts the kitchen prep sink.



Photographs taken by William Otten on 1/23/20

**Photographic Documentation
Tacony Academy Charter High School
6201 Keystone Street
Philadelphia, Pennsylvania
Project No. 61445**

Photograph: 5**Description:**

Photo depicts the 2nd floor hallway fountain.

**Photograph: 6****Description:**

Photo depicts the 2nd floor boy's restroom.



Photographs taken by William Otten on 1/23/20

**Photographic Documentation
Tacony Academy Charter High School
6201 Keystone Street
Philadelphia, Pennsylvania
Project No. 61445**

Photograph: 7**Description:**

Photo depicts the art room sink.

**Photograph: 8****Description:**

Photo depicts the 3rd floor hallway sink.



Photographs taken by William Otten on 1/23/20

**Photographic Documentation
Tacony Academy Charter High School
6201 Keystone Street
Philadelphia, Pennsylvania
Project No. 61445**

Photograph: 9**Description:**

Photo depicts the 3rd floor girl's restroom.

**Photograph: 10****Description:**

Photo depicts sink 5 in the 3rd floor science lab (Room 314).

Note: Sample DW-T10 exceeded the USEPA Action Level for lead.



Photographs taken by William Otten on 1/23/20