August 3, 2022

American Paradigm Schools
8101 Castor Avenue
Philadelphia, PA
Attention: Ms. Jessica Bowers

Re: Lead in Drinking Water Sampling
Tacony Academy Charter School
1330 Rhawn Street
Philadelphia, PA 19111
Project No. 80530

Dear Ms. Bowers:

The Vertex Companies, LLC (VERTEX) is pleased to provide this Letter Report summarizing the lead in drinking water sampling performed within the Tacony Academy Charter School located at 1330 Rhawn Street in Philadelphia, Pennsylvania (the site).

VERTEX's services were performed on July 14, 2022 during the early morning hours prior to normal occupancy; thus, no water use for greater than six hours. Eighteen (18) sample locations were chosen from various water outlets including: hallway fountains, cafeteria ice machine, WaterLogic Dispensers, and kitchen prep, cafeteria food line, nurse's, office 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). In addition, results were compared to The School District of Philadelphia's Safe Water Testing Program which has set a safety limit of 10 ug/L for lead in drinking water. Note: micrograms per liter (ug/L) = parts per billion (ppb).

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

- Each of the eighteen (18) samples were below the USEPA Action Level for lead (15 ug/L).
- Each of the eighteen (18) samples were below the School District of Philadelphia's Safe Water Testing Program Safety Limit for lead (10 ug/L).
- Fifteen (15) of the eighteen (18) samples were below the analytical detection limit.

Conclusion: Based on the project findings, no samples exceeded the USEPA Action Level or The School District of Philadelphia's Safe Water Testing Program safety limit for lead in drinking water.

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.

Sincerely,
The Vertex Companies, LLC

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.
2501 Seaport Drive
Suite BH110
Chester, PA 19013
Phone: (610) 558-8902
Fax: (610) 558-8904

7/28/2022

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 7/14/2022. The results are tabulated on the attached data pages for the following client designated project:

Tacony Academy Charter School

The reference number for these samples is EMSL Order #012210874. 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:

Owen McKenna, 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

Report amended 07/28/2022 08:33:50 Replaces initial report from 07/20/2022 12:15:50 Customer ID changed to reflect the correct location.

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: 012210874
CustomerID: VRTX78
CustomerPO:
ProjectID:

Attn: **William Otten**
The Vertex Companies, Inc.
2501 Seaport Drive
Suite BH110
Chester, PA 19013

Phone: (610) 558-8902
Fax: (610) 558-8904
Received: 7/14/2022 09:00 AM

Project: **Tacony Academy Charter School**

Analytical Results

Client Sample Description 1 Hall fountain across from 108-boys side — ***Collected:*** 7/14/2022 — ***Lab ID:*** *012210874-0001*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:11 KG

Client Sample Description 2 Hall fountain across from 108-girls side — ***Collected:*** 7/14/2022 — ***Lab ID:*** *012210874-0002*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:16 KG

Client Sample Description 3 Sink-staff lounge 106 — ***Collected:*** 7/14/2022 — ***Lab ID:*** *012210874-0003*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:18 KG

Client Sample Description 4 WaterLogic dispenser-staff lounge 106 — ***Collected:*** 7/14/2022 — ***Lab ID:*** *012210874-0004*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:19 KG

Client Sample Description 5 Hall fountain acrss from 185(cafeteria)-girls side — ***Collected:*** 7/14/2022 — ***Lab ID:*** *012210874-0005*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:24 KG

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

EMSL Order: 012210874
CustomerID: VRTX78
CustomerPO:
ProjectID:

Attn: **William Otten**
The Vertex Companies, Inc.
2501 Seaport Drive
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Phone: (610) 558-8902
Fax: (610) 558-8904
Received: 7/14/2022 09:00 AM

Project: **Tacony Academy Charter School**

Analytical Results

Client Sample Description 6
Hall fountain across from 185(cafeteria)-boys side
Collected: 7/14/2022 ***Lab ID:*** *012210874-0006*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
METALS								
200.8	Lead	ND	1.00	µg/L	7/14/2022	KG	7/14/2022 17:25	KG

Client Sample Description 7
Kitchen(183) prep sink
Collected: 7/14/2022 ***Lab ID:*** *012210874-0007*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
METALS								
200.8	Lead	ND	1.00	µg/L	7/14/2022	KG	7/14/2022 17:27	KG

Client Sample Description 8
Cafeteria food line sink
Collected: 7/14/2022 ***Lab ID:*** *012210874-0008*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
METALS								
200.8	Lead	6.35	1.00	µg/L	7/15/2022	JW	7/18/2022 15:51	JW

Client Sample Description 9
Cafeteria ice maker
Collected: 7/14/2022 ***Lab ID:*** *012210874-0009*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
METALS								
200.8	Lead	ND	1.00	µg/L	7/14/2022	KG	7/14/2022 17:28	KG

Client Sample Description 10
Sink-nurse's office -182
Collected: 7/14/2022 ***Lab ID:*** *012210874-0010*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
METALS								
200.8	Lead	ND	1.00	µg/L	7/14/2022	KG	7/14/2022 17:30	KG

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EMSL Order: 012210874
CustomerID: VRTX78
CustomerPO:
ProjectID:

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Phone: (610) 558-8902
Fax: (610) 558-8904
Received: 7/14/2022 09:00 AM

Project: **Tacony Academy Charter School**

Analytical Results

Client Sample Description 11 Sink-nurse's office exam room-182.3 ***Collected:*** 7/14/2022 ***Lab ID:*** *012210874-0011*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	2.32	1.00	µg/L	7/14/2022 KG	7/14/2022 17:32 KG

Client Sample Description 12 Sink-science lab-176 ***Collected:*** 7/14/2022 ***Lab ID:*** *012210874-0012*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:33 KG

Client Sample Description 13 Hall fountain by 176-boys side ***Collected:*** 7/14/2022 ***Lab ID:*** *012210874-0013*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:38 KG

Client Sample Description 14 Hall fountain by 176-girls side ***Collected:*** 7/14/2022 ***Lab ID:*** *012210874-0014*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:42 KG

Client Sample Description 15 Sink-faculty lounge 158 ***Collected:*** 7/14/2022 ***Lab ID:*** *012210874-0015*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:44 KG

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

EMSL Order:	012210874
CustomerID:	VRTX78
CustomerPO:	
ProjectID:	

Attn: **William Otten**
The Vertex Companies, Inc.
2501 Seaport Drive
Suite BH110
Chester, PA 19013

Phone: (610) 558-8902
Fax: (610) 558-8904
Received: 7/14/2022 09:00 AM

Project: **Tacony Academy Charter School**

Analytical Results

Client Sample Description 16
WaterLogic dispenser-faculty lounge 158 ***Collected:*** 7/14/2022 ***Lab ID:*** *012210874-0016*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:45 KG

Client Sample Description 17
Hall fountain by 163 ***Collected:*** 7/14/2022 ***Lab ID:*** *012210874-0017*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	ND	1.00	µg/L	7/14/2022 KG	7/14/2022 17:47 KG

Client Sample Description 18
Sink-art room 163 ***Collected:*** 7/14/2022 ***Lab ID:*** *012210874-0018*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
200.8	Lead	1.38	1.00	µg/L	7/14/2022 KG	7/14/2022 17:49 KG

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

OrderID: 012210874

Lead Chain of Custody

EMSL Order Number / Lab Use Only

012210874

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077

PHONE: (800) 220-3675
EMAIL: CinnaminsonLeadLab@emsl.com

Customer Information		Billing Information	
Customer ID:		Billing ID:	
Company Name:	The Vertex Companies, LLC	Company Name:	
Contact Name:	William Otten	Billing Contact:	
Street Address:	2501 Seaport Drive, Suite BH110	Street Address:	
City, State, Zip:	Chester, PA 19013	City, State, Zip:	
Country:		Country:	
Phone:	610 558-8902	Phone:	
Email(s) for Report:	labresults@vertexeng.com	Email(s) for Invoice:	

Project Information

Project Name/No:	Tacony Academy Charter School	Purchase Order:	80530
EMSL LIMS Project ID: (If applicable, EMSL will provide)		US State where samples collected:	PA
State of Connecticut (CT) must select project location:	☐ Commercial (Taxable) ☐ Residential (Non-Taxable)		
Sampled By Name:	William Otten	Sampled By Signature:	
No. of Samples in Shipment			

Turn-Around-Time (TAT)

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☒ 1 Week ☐ 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

MATRIX	METHOD	INSTRUMENT	REPORTING LIMIT	SELECTION
CHIPS ☐ % by wt. ☐ ppm (mg/kg) ☐ mg/cm²	SW 846-7000B	Flame Atomic Absorption	0.008% (80ppm)	☐
*Reporting Limit based on a minimum 0.25g sample weight	SW 846-6010D*	ICP-OES	0.0004% (4ppm)	☐
AIR	NIOSH 7082	Flame Atomic Absorption	4µg/filter	☐
	NIOSH 7300M / NIOSH 7303M	ICP-OES	0.5µg/filter	☐
	NIOSH 7300M / NIOSH 7303M	ICP-MS	0.05µg/filter	☐
WIPE ☐ ASTM ☐ NON-ASTM	SW 846-7000B	Flame Atomic Absorption	10µg/wipe	☐
*If no box is checked, non-ASTM Wipe is assumed	SW 846-6010D*	ICP-OES	1.0µg/wipe	☐
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
TTLC	22 CCR App. II, 7000B	Flame Atomic Absorption	40mg/kg (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	2mg/kg (ppm)	☐
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
Soil	SW 846-7000B	Flame Atomic Absorption	40mg/kg (ppm)	☐
	SW 846-6010D*	ICP-OES	2mg/kg (ppm)	☐
Wastewater	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
Unpreserved ☐ / Preserved with HNO3 ☐ PH<2	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	☐
Drinking Water	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	☐
Unpreserved ☐ / Preserved with HNO3 ☒ PH<2	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	☒
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	☐
Other:				☐

	Sample Number	Sample Location	Volume / Area	Date / Time Sampled
1	1	Hall Fountain across from 108 - Boys side		7/14/22
2	2	Hall Fountain across from 108 - Girls side		
3	3	Sink - Staff Lounge 106		
4	4	WaterLogic dispenser - Staff Lounge 106		
5	5	Hall Fountain across from 185 (cafeteria) - Girls side		

Method of Shipment:	Drop-Off	Sample Condition Upon Receipt:	
Relinquished by:	Date/Time: 7/14/22	Received by: WI	Date/Time: 7/14/22 9:00
Relinquished by:	Date/Time:	Received by:	Date/Time: 7/15 7/14/22 9:18

Controlled Document - COC-25 Lead R16 4/19/2021

*6010C Available Upon Request

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

OrderID: 012210874

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

Lead Chain of Custody

EMSL Order Number / Lab Use Only

012210874

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077

PHONE: (800) 220-3675
EMAIL: CinnaminsonLeadLab@emsl.com

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

	Sample Number	Sample Location	Volume / Area	Date / Time Sampled
6	6	Hall Fountain across from 185 (cafeteria) - Boys side		7/14/22
7	7	Kitchen (183) Prep Sink		
8	8	Cafeteria Food Line Sink		
9	9	Cafeteria Ice Maker		
10	10	Sink - Nurse's Office - 182		
11	11	Sink - Nurse's Office Exam Room - 182.3		
12	12	Sink - Science Lab - 176		
13	13	Hall Fountain by 176 - Boys side		
14	14	Hall Fountain by 176 - Girls side		
15	15	Sink - Faculty Lounge 158		
16	16	Water Logic dispenser - Faculty Lounge 158		
17	17	Hall Fountain by 163		
18	18	Sink - Art Room 163		

Method of Shipment: Drop-Off		Sample Condition Upon Receipt:	
Relinquished by:	Date/Time: 7/14/22	Received by:	Date/Time
Relinquished by:	Date/Time:	Received by:	Date/Time

Controlled Document - COC-25 Lead R16 4/19/2021

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

Photographic Documentation
Tacony Academy Charter School
1330 Rhawn Street
Philadelphia, Pennsylvania 19111
Project No. 80530

Photograph: 1 **Description:** Photo depicts the site.	
Photograph: 2 **Description:** Photo depicts the location of samples 1 & 2.	

Photographs taken by William Otten on 7/14/22

THE VERTEX COMPANIES, LLC
2501 SEAPORT DRIVE, SUITE BH 110
CHESTER, PA 19013

610.558.8902 | VERTEXENG.COM

Photographic Documentation
Tacony Academy Charter School
1330 Rhawn Street
Philadelphia, Pennsylvania 19111
Project No. 80530

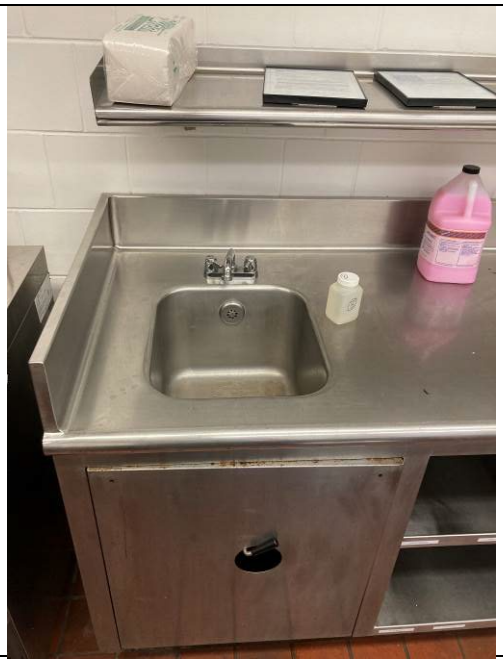
Photograph: 3 **Description:** Photo depicts the location of samples 3 & 4.	

Photograph: 4 **Description:** Photo depicts the location of samples 5 & 6.	

Photographs taken by William Otten on 7/14/22

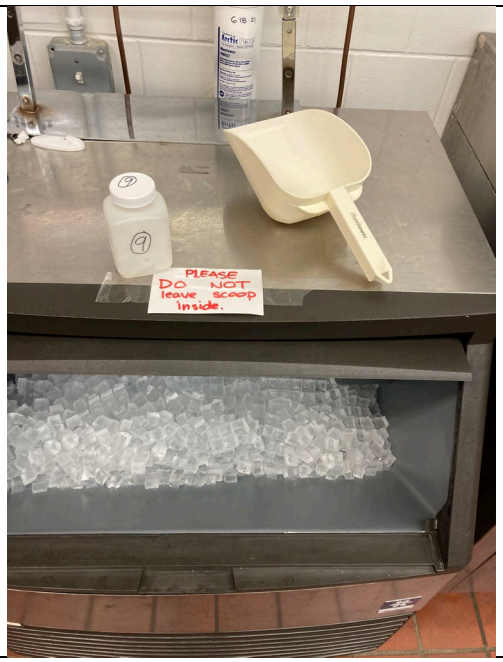
Photographic Documentation
Tacony Academy Charter School
1330 Rhawn Street
Philadelphia, Pennsylvania 19111
Project No. 80530

Photograph: 5 **Description:** Photo depicts the location of sample 7.	

Photograph: 6 **Description:** Photo depicts the location of sample 8.	

Photographs taken by William Otten on 7/14/22

Photographic Documentation
Tacony Academy Charter School
1330 Rhawn Street
Philadelphia, Pennsylvania 19111
Project No. 80530

Photograph: 7 **Description:** Photo depicts the location of sample 9.	
Photograph: 8 **Description:** Photo depicts the location of sample 10.	

Photographs taken by William Otten on 7/14/22

Photographic Documentation
Tacony Academy Charter School
1330 Rhawn Street
Philadelphia, Pennsylvania 19111
Project No. 80530

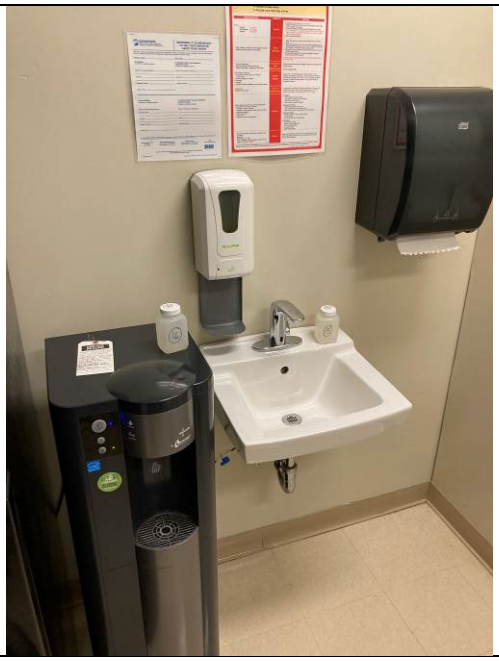
Photograph: 9 **Description:** Photo depicts the location of sample 11.	

Photograph: 10 **Description:** Photo depicts the location of sample 12.	

Photographs taken by William Otten on 7/14/22

Photographic Documentation
Tacony Academy Charter School
1330 Rhawn Street
Philadelphia, Pennsylvania 19111
Project No. 80530

Photograph: 11 **Description:** Photo depicts the location of samples 13 & 14.	

Photograph: 12 **Description:** Photo depicts the location of samples 15 & 16.	

Photographs taken by William Otten on 7/14/22

Photographic Documentation
Tacony Academy Charter School
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Philadelphia, Pennsylvania 19111
Project No. 80530

Photograph: 13 **Description:** Photo depicts the location of sample 17.	

Photograph: 14 **Description:** Photo depicts the location of sample 18.	

Photographs taken by William Otten on 7/14/22

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