

September 17, 2021

Thomas M. Hanna, P.E., LEED AP
Capital Projects Manager
Central Bucks School District
320 West Swamp Road
Doylestown, PA 18901

**Re: Lead in Drinking Water Re-Sample Collection and Reporting
Lenape Middle School
313 W State Street
Doylestown, PA 18901**

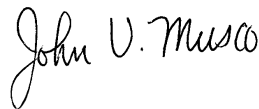
Dear Mr. Hanna:

This document has been prepared by Langan to provide the results of the drinking water re-sampling activities at the above referenced school. One water sample (L127CBR2) was collected from the school. The re-sampling activities were conducted on September 3, 2021 after the drinking water fixture was replaced. The collected sample was sent to a Pennsylvania certified environmental laboratory, PACE Analytical, and analyzed for total lead by USEPA Method 200.8, to meet Pennsylvania's action level requirements.

The re-sampling result of the one fixture sampled did not detect an exceedance of the Pennsylvania Action Level of 15 ug/L.

A figure of the re-sampling location and copy of the laboratory report is attached.

Sincerely,
Langan Engineering & Environmental Services, Inc.



John V. Musco
Associate

Enclosure

cc: B. Lambing - Langan

NJ Certificate of Authorization No. 24GA27996400

\\langan.com\data\DYL\data4\200130403\Project Data\Record Data\Reports\ReSampling - September 2021\Lenape\Lenape_Lead_Re-Sampling_Report_09-2021.docx

September 10, 2021

Bill Lambing
Langan Engineering
2700 Kelly Road
Suite 200
Warrington, PA 18976

RE: Project: CENTRAL BUCKS SCHOOL (LENAPE)
Pace Project No.: 70186443

Dear Bill Lambing:

Enclosed are the analytical results for sample(s) received by the laboratory on September 04, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Sophia Sparkes
sophia.sparkes@pacelabs.com
(631)694-3040
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: CENTRAL BUCKS SCHOOL (LENAPE)
Pace Project No.: 70186443

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
A2LA Certification #: 2926.01*
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064

Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
Please Note: Applicable air certifications are denoted with an asterisk ().

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: CENTRAL BUCKS SCHOOL (LENAPE)
Pace Project No.: 70186443

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
70186443001	L127CBR2_090321	EPA 200.8	PW1	1	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

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ANALYTICAL RESULTS

Project: CENTRAL BUCKS SCHOOL (LENAPE)

Pace Project No.: 70186443

Sample: L127CBR2_090321 **Lab ID: 70186443001** Collected: 09/03/21 07:02 Received: 09/04/21 09:10 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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200.8 MET ICPMS, DW

Analytical Method: EPA 200.8
Pace Analytical Services - Minneapolis

Lead	1.4	ug/L	0.10	1		09/09/21 18:01	7439-92-1	
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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CENTRAL BUCKS SCHOOL (LENAPE)
Pace Project No.: 70186443

QC Batch: 769219	Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8	Analysis Description: ICPMS Metals, Drinking Water
	Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 70186443001

METHOD BLANK: 4098714 Matrix: Water
Associated Lab Samples: 70186443001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	ug/L	<0.10	0.10	09/09/21 17:47	

LABORATORY CONTROL SAMPLE: 4098750

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	100	106	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4098752 4098753

Parameter	Units	70186444001		4098753		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Lead	ug/L	1.0	100	100	116	112	115	111	70-130	3

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: CENTRAL BUCKS SCHOOL (LENAPE)

Pace Project No.: 70186443

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CENTRAL BUCKS SCHOOL (LENAPE)

Pace Project No.: 70186443

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70186443001	L127CBR2_090321	EPA 200.8	769219		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields

WO#: 70186443
70186443

Section A

Required Client Information:

Company: Langan Engineering
 Address: 2700 Kelly Road, Suite 200
 Warrington, PA 18976
 Email: blaming@langan.com
 Phone: 215-491-6500 Fax: 2015-491-6501
 Requested Due Date: 72 hour (3 day) Turn Around

Section B

Required Project Information:

Report To: Bill Lambing
 Copy To:
 Purchase Order #: 200130403-00-001
 Project Name: Central Bucks School District (Lenape)
 Project #: 200130403

Section C

Invoice Information:

Attention: Bill Lambing
 Company Name: Langan Engineering
 Address: 2700 Kelly Road, Suite 200
 Pace Quote: See Langan-Pace MSA
 Pace Project Manager: sophia.sparkes@pacelabs.com
 Pace Profile #: 7983
 State / Location: PA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique	MATRIX CODE (see valid codes to left) SAMPLE TYPE: (G=GRAB, C=COMP)	COLLECTED	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							200.7 Metals (PB)	Requested Analysis Filtered (Y/N)		Residual Chlorine (Y/N)					
						DATE	TIME	DATE	TIME	Unpreserved	H2SO4	HNO3		HCl	NaOH		Na2S2O3	Methanol	Other		
																				Y	N
1	L127CBR2_090321	DW G	9/3/2021 702	9/3/2021 702	1								X								
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	<i>Bill Lambing</i>	9/3/2021		<i>Bill Lambing / PACE</i>	9/4/21	9:10	21.2 ~ Y Y

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Bill Lambing					
SIGNATURE of SAMPLER:	<i>Bill Lambing</i>	DATE Signed:	9/3/2021			



Document Name:
Sample Condition Upon Receipt (SCUR) - MN

Document No.:
ENV-FRM-MIN4-0150 Rev.02

Document Revised: 14Apr2021
Page 1 of 1
Pace Analytical Services -
Minneapolis

Sample Condition
Upon Receipt

Client Name:
Langan Engineering

Project #:

WO#: 70186443

PM: STS

Due Date: 09/21/21

CLIENT: LAN-PA

Courier: Fed Ex UPS USPS Client
 Pace Speedee Commercial

Tracking Number: 7747 1740 4528 See Exceptions
ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Biological Tissue Frozen? Yes No N/A

Packing Material: Bubble Wrap Bubble Bags None Other: Paper Temp Blank? Yes No

Thermometer: T1(0461) T2(1336) T3(0459) OS418-LS Type Wet Blue None Dry Melted
 T4(0254) T5(0489) 160285052 of Ice:

Did Samples Originate in West Virginia? Yes No Were All Container Temps Taken? Yes No N/A

Temp should be above freezing to 6°C Cooler Temp Read w/temp blank: _____ °C Average Corrected Temp (no temp blank only): 2.2 °C See Exceptions ENV-FRM-MIN4-0142 1 Container

Correction Factor: true Cooler Temp Corrected w/temp blank: _____ °C

USDA Regulated Soil: (N/A, water sample/Other: _____)

Date/Initials of Person Examining Contents: STS 9/4/21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

	COMMENTS:
Chain of Custody Present and Filled Out? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Relinquished? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Sampler Name and/or Signature on COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Short Hold Time Analysis (<72 hr)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. <input type="checkbox"/> Fecal Coliform <input type="checkbox"/> HPC <input type="checkbox"/> Total Coliform/E coli <input type="checkbox"/> BOD/cBOD <input type="checkbox"/> Hex Chrome <input type="checkbox"/> Turbidity <input type="checkbox"/> Nitrate <input type="checkbox"/> Nitrite <input type="checkbox"/> Orthophos <input type="checkbox"/> Other
Rush Turn Around Time Requested? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. <u>3-day</u>
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Field Filtered Volume Received for Dissolved Tests? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10. Is sediment visible in the dissolved container? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is sufficient information available to reconcile the samples to the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. If no, write ID/ Date/Time on Container Below: See Exception <input type="checkbox"/> ENV-FRM-MIN4-0142
Matrix: <input checked="" type="checkbox"/> Water <input type="checkbox"/> Soil <input type="checkbox"/> Oil <input type="checkbox"/> Other	
All containers needing acid/base preservation have been checked? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. Sample # <u>001</u> <input type="checkbox"/> NaOH <input checked="" type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> Zinc Acetate <u>1/1</u>
All containers needing preservation are found to be in compliance with EPA recommendation? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (HNO ₃ , H ₂ SO ₄ , <2pH, NaOH >9 Sulfide, NaOH >10 Cyanide)	Positive for Res. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Chlorine? <input type="checkbox"/> No pH Paper Lot#
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	See Exception <input type="checkbox"/> ENV-FRM-MIN4-0142 Res. Chlorine 0-6 Roll <u>221419</u> 0-6 Strip 0-14 Strip
Extra labels present on soil VOA or WIDRO containers? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. See Exception <input type="checkbox"/> ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Pace Trip Blank Lot # (if purchased):

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____ Date/Time: _____
Comments/Resolution: _____

Project Manager Review:

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).