



August 24, 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

Gayman Elementary School 4440 Point Pleasant Pike Doylestown, PA 18902

Dear Mr. Hanna:

This document has been prepared by Langan to provide the results of the drinking water resampling activities at the above referenced school. The results of the initial drinking water sampling activities documented that total lead was present in one sample collected from a drinking water fixture (Sample Location G19) at a level above the 15 micrograms per liter (ug/L) regulatory level. The re-sampling was conducted on August 12, 2021 after the fixture was flushed. The collected sample was sent to the 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 did not detect an exceedance of the Pennsylvania Action Level of 15 ug/L.

John V. Musco

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 August 2021\Resampling Report\Gayman\Gayman_Lead_Re-Sampling Report 2021.docx





August 18, 2021

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

RE: Project: CENTRAL BUCKS SCHOOL (GAYMAN)

Pace Project No.: 70184251

Dear Bill Lambing:

Enclosed are the analytical results for sample(s) received by the laboratory on August 14, 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 - Melville

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

Sincerely,

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

Sophia Sparkes

Project Manager

Enclosures



(631)694-3040



CERTIFICATIONS

Project: CENTRAL BUCKS SCHOOL (GAYMAN)

Pace Project No.: 70184251

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747 Connecticut Certification #: PH-0435 Delaware Certification # NY 10478

Maryland Certification #: 208

Massachusetts Certification #: M-NY026 New Hampshire Certification #: 2987 New Jersey Certification #: NY158

New York Certification #: 10478 Primary Accrediting Body

Pennsylvania Certification #: 68-00350 Rhode Island Certification #: LAO00340

Virginia Certification # 460302

(631)694-3040



ANALYTICAL RESULTS

Project: CENTRAL BUCKS SCHOOL (GAYMAN)

Pace Project No.: 70184251

Date: 08/18/2021 03:38 PM

Sample: G19R_081221	Lab ID: 70	184251001	Collected: 08/12/2	21 09:14	Received: 08	3/14/21 10:40 I	Matrix: Drinking Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual			
200.8 MET ICPMS Drinking Water	Analytical Me Pace Analytic										
Lead	13.0	ug/L	1.0	1		08/17/21 17:17	7439-92-1				



QUALITY CONTROL DATA

Project: CENTRAL BUCKS SCHOOL (GAYMAN)

Pace Project No.: 70184251

QC Batch: 222172 Analysis Method: EPA 200.8

QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET No Prep Drinking Water

Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70184251001

METHOD BLANK: 1120313 Matrix: Water

Associated Lab Samples: 70184251001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Lead ug/L <1.0 1.0 08/17/21 17:04

LABORATORY CONTROL SAMPLE: 1120314

Spike LCS LCS % Rec Result Conc. % Rec Limits Qualifiers Parameter Units Lead 50.2 100 85-115 ug/L

MATRIX SPIKE SAMPLE: 1120316

Date: 08/18/2021 03:38 PM

MS % Rec 70184249004 Spike MS Parameter Units Result Conc. Result % Rec Limits Qualifiers 490 Lead ug/L 50 528 77 70-130

Lead ug/L 450 50 528 // /0-130

 MATRIX SPIKE SAMPLE:
 1120318
 70184252002
 Spike
 MS
 MS
 % Rec

 Parameter
 Units
 Result
 Conc.
 Result
 % Rec
 Limits
 Qualifiers

Lead ug/L 7.1 50 72.5 131 70-130 M1

SAMPLE DUPLICATE: 1120315

 Parameter
 Units
 Result Result Result
 RPD Qualifiers

 Lead
 ug/L
 490
 493
 1

SAMPLE DUPLICATE: 1120317 70184252002 Dup

ParameterUnitsResultResultRPDQualifiersLeadug/L7.17.11

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.



QUALIFIERS

Project: CENTRAL BUCKS SCHOOL (GAYMAN)

Pace Project No.: 70184251

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 08/18/2021 03:38 PM

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

(631)694-3040



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CENTRAL BUCKS SCHOOL (GAYMAN)

Pace Project No.: 70184251

Date: 08/18/2021 03:38 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70184251001	G19R 081221	EPA 200.8	222172		



215-491-6500

Fax 2015-491-6501

72 hour (3 day) Turn Around

Phone:

Requested Due Date:

CHAIN-OF-CUSTODY / Analytical Request Do

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

WO#:70184251

Regulatory Agency

Section A Section B Section C
Required Client Information: Required Project Information: Invoice Information:

Project Name:

Project #: 200130403

Attention: Report To: Bill Lambing Company: Langan Engineering Company Name: Langan Engineering Copy To: Address: 2700 Kelly Road, Suite 200 2700 Kelly Road, Suite 200 Warrington, PA 18976 Purchase Order #: 200130403-400-001 Pace Quote: See Langan-Pace MSA blambing@langan.com

Central Bucks School District (Gayman)

Pace Project Manager: sophia.sparkes@pacelabs.com State / Location
Pace Profile #: 7983 PA

		Requested Analysis Filtered (Y/N)																													
			to left)	COMP)		COLLE	ECTED					Pr	eser	rvativ	ves		N/A														
ITEM#	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Sample Ids must be unique	MATRIX CODE Drinking Water WT Waste Waler WP Product P Soli/Solid SL Oil OL Wipe WP Air AR Olher OT Tissue TS	ODE (see valid cod	MPLE TYPE (G=GRAB C=	STAF		EN DATE	D TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved H2SO4	HNO3	HCI	NaOH	Na2S203	Methanol	Other Analyses Test	Sol Costialis	ZUU_/ Metals (PB)									Residual Chlorine (Y/N)			
10 C F	G19R_081221				12/2021	914	8/12/2021	914		1		x							х												
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Page						Office market	R NAME A			E			18						k		Ť.			Ņ				U	no		
Page 7 of 8						PRINT Name of SAMPLER: Bill Lambing DATE Signed: 8/12/2021									TEMP in (Custody Sealed Cooler (Y/N)	Samples													

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Face Analytical "	Client Nai	me:			Project	PM: STS Du	e Date: 08/19/21
Courier: Fed Ex UPS USPS Client	7Comme	rcial Pa	ice 🗆 Other			CLIENT: LAN-PA	
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a to the Cool of Coolor (Poy Drosent F 1Yes	INO	26912 1110	act: 🗆 Yes[No		Temperature Blank Pre	Selli. 103/2 110
Custody Sear on Codie1760x Present. — 166 Packing Material:	Raos □Z	iploc ¬N	Ione 🖵 Oth	ier		Type of Ice: Wet Blu	P NUTTE
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mermenteter edea.	Conter Te	emperatur	e Correcte	d(°C)	21,0	Date/Time 5035A kits p	laced in it éezei
Temp should be above freezing to 6.0°C	000101 11				Initials of t	person examining content	s: KO 8/14/21
UCDA Dogulated Soil (TN/A water sample)						Did comples originate for	m a foreign source
Did samples originate in a quarantine zone wit	hin the Ur	nited State	s: AL, AR, CA,	, FL, GA, IU,	LA, MS, NC,	including Hawaii and Pue	erto Ricol? Yes No
NM, NY, OK, OR, SC, TN, TX, or VA (check map)?	☐ Yes	□No	(1)	المناب المناب	t+b cclib	/COC panarwork	
NM, NY, OK, OR, SC, TN, TX, or VA (check map)? If Yes to either question, fill out a Regulate	d Soil Ch	ecklist [F-	LI-C-010) a	na incluae	WITH 200K	COMMENTS:	
ii res to citioi questian				4		COMPLETO.	
Chain of Custody Present:	ZYes	□No		1.			The second secon
Chain of Custody Filled Out:	∠Yes	□No		ζ.			
Chain of Custody Relinquished:	Yes	□No		3.			
Sampler Name & Signature on COC:	⊠Yes	□No	□N/A	4.			
Samples Arrived within Hold Time:	-ElYes	□No		5.		<u>, </u>	
Short Hold Time Analysis (<72hr):	□Yes	₽No.		6.			
Rush Turn Around Time Requested:	□Yes	N O		7.			
Sufficient Volume: (Triple volume provided for	∠¥es	□No		8.			
Correct Containers Used:	∠Yes	□No		9.			
-Pace Containers Used:	⊿ Yes	□No		1.			
Containers Intact:	∠eyes	□No		10.	11 1 15	ediment is visible in the disso	olved container.
Filtered volume received for Dissolved tests	□Yes	□No	A/A	11.	Note if se	ediment is visible in the dissi	DIVEG CONCUMENT
Sample Labels match COC:	E Yes	□No		12.			8
-Includes date/time/ID, Matrix: SL WT				1	- 11110	□H ₂ SO ₄ □NaOH	□HCl
All containers needing preservation have been	en 🗗 Yes	□No	□N/A	13.	□ HNO ₃	□H ₂ SO ₄ □NaOH	
chackad?				İ			
Inthopper Lot # M (SS46X				Sample	#		
All containers needing preservation are foun	d to be			Sample	TF .		
in compliance with method recommendation	1!		□N/A				
(HNO3, H2SO4, HCI, NaOH>9 Sulfide,	, PYes	□No	□N/A			· · · · · · · · · · · · · · · · · · ·	
NAOH>12 Cyanide)							
Exceptions: VOA, Coliform, TOC/DOC, Oil and	Grease,			Initial w	hen comple	ted: Lot # of added	Date/Time preservative
DRO/8015 (water).				linda w	tich comple	preservative:	added:
Per Method, VOA pH is checked after analys	is		ſDN/A	14.			
Samples checked for dechlorination:	□Yes	□No	LIN/A	14.			
KI starch test strips Lot #					Positive fo	or Res. Chlorine? Y N	
Residual chlorine strips Lot #			□N/A	15.	1 00.010		
SM 4500 CN samples checked for sulfide?	□Yes	□No	LIN/A	13.			
Lead Acetate Strips Lot #			DN/A	16.			
Headspace in VOA Vials (>6mm):	□Yes	□No	DN/A	17.	- 2		
Trip Blank Present:	□Yes	□No	DN/A		.1		
Trip Blank Custody Seals Present	□Yes	□No	LINA		1		
Pace Trip Blank Lot # (if applicable):				Field D	ata Required	17 Y / N	
Client Notification/ Resolution:			- 11	i ielu D		ime:	
Person Contacted							•
Comments/ Resolution:							
,							

^{*} PM (Project Manager) review is documented electronically in LIMS