



August 17, 2020

Robert Kleimenhagen, Jr., CFM Director of Facilities & Energy Management Operations Central Bucks School District 320 West Swamp Road Doylestown, PA 18901

Re: Lead in Drinking Water Re-Sample Collection and Reporting **Buckingham Elementary School** 2414 Durham Road Furlong, PA 18912 **Bucks County, Pennsylvania**

Dear Mr. Kleimenhagen:

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 three samples collected from drinking water fixtures at the school at levels above the 15 micrograms per liter (ug/l) regulatory level. The re-sampling was conducted on July 31, 2020 after the former fixtures were replaced with new fixtures. The collected re-samples were 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 resampling results did not detect any exceedances at this school of the Pennsylvania Action Level of 15 micrograms per liter (ug/L) with the exception of the following location:

Location Re-Sample ID Resampling Result

B3R-20 Rm 3 15.8 ug/L

A field sketch of the sampling locations and copy of the laboratory report is attached.

Sincerely,

Langan Engineering & Environmental Services, Inc.

John V. Musco Associate

John V. Musa

Enclosure

CC: B. Lambing - Langan

NJ Certificate of Authorization No. 24GA27996400

\\langan.com\\data\DYL\\data4\200130402\Project Data\Record Data\Reports\Resampling Data and Report\Buckingham_Lead_Re-Sampling_Memo.docx





August 14, 2020

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

RE: Project: CENTRAL BUCKS (BUCKINGHAM)

Pace Project No.: 70140391

Dear Bill Lambing:

Enclosed are the analytical results for sample(s) received by the laboratory on August 01, 2020. 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





Melville, NY 11747 (631)694-3040



CERTIFICATIONS

Project: CENTRAL BUCKS (BUCKINGHAM)

Pace Project No.: 70140391

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747 Maryland Certification #: 208

New York Certification #: 10478 Primary Accrediting Body

New Jersey Certification #: NY158 Pennsylvania Certification #: 68-00350 Connecticut Certification #: PH-0435 Rhode Island Certification #: LAO00340 Massachusetts Certification #: M-NY026 New Hampshire Certification #: 2987



ANALYTICAL RESULTS

Project: CENTRAL BUCKS (BUCKINGHAM)

Pace Project No.: 70140391

Date: 08/14/2020 02:51 PM

Sample: B3R-20	Lab ID: 701	40391001	Collected: 07/31/2	20 07:01	Received: 08	/01/20 11:35	Matrix: Drinking	Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth							
Lead	15.8	ug/L	1.0	1		08/13/20 19:57	7 7439-92-1	
Sample: B24R-20	Lab ID: 701	40391002	Collected: 07/31/2	20 07:02	Received: 08	/01/20 11:35	Matrix: Drinking	Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth							
Lead	8.0	ug/L	1.0	1	08/13/20 19:59 7439-92-1			
Sample: B55R-20	Lab ID: 701	40391003	Collected: 07/31/2	20 07:05	Received: 08	/01/20 11:35	Matrix: Drinking	Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth							
Lead	12.0	ug/L	1.0	1		08/13/20 20:00	0 7439-92-1	



QUALITY CONTROL DATA

Project: CENTRAL BUCKS (BUCKINGHAM)

Pace Project No.: 70140391

QC Batch: 171700 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

Qualifiers

Associated Lab Samples: 70140391001, 70140391002, 70140391003

METHOD BLANK: 830272 Matrix: Water

Associated Lab Samples: 70140391001, 70140391002, 70140391003

Blank Reporting
Parameter Units Result Limit Analyzed

Lead ug/L <1.0 1.0 08/13/20 19:24

LABORATORY CONTROL SAMPLE: 830273

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Lead ug/L 50 49.4 99 85-115

MATRIX SPIKE SAMPLE: 830275

SAMPLE DUPLICATE: 830276

Date: 08/14/2020 02:51 PM

% Rec 70140221015 Spike MS MS Parameter Units Result Conc. Result % Rec Limits Qualifiers <1.0 Lead ug/L 4 4.7 115 70-130

Leau ug/L 11.0 4 4.7 115 70-130

 MATRIX SPIKE SAMPLE:
 830277

 70140393001
 Spike
 MS
 MS
 % Rec

 Parameter
 Units
 Result
 Conc.
 Result
 % Rec
 Limits
 Qualifiers

Lead ug/L 1.5 4 5.9 110 70-130

SAMPLE DUPLICATE: 830274

70140221015 Dup
Parameter Units Result Result RPD Qualifiers

Lead ug/L <1.0 <1.0

 Parameter
 Units
 Result Result Result
 RPD Qualifiers

 Lead
 ug/L
 1.5
 1.5
 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.



QUALIFIERS

Project: CENTRAL BUCKS (BUCKINGHAM)

Pace Project No.: 70140391

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.

Date: 08/14/2020 02:51 PM



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CENTRAL BUCKS (BUCKINGHAM)

Pace Project No.: 70140391

Date: 08/14/2020 02:51 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70140391001	B3R-20	EPA 200.8	171700		
70140391002	B24R-20	EPA 200.8	171700		
70140391003	B55R-20	EPA 200.8	171700		