

July 17, 2019

Mike Nickerson, CHMM
Environmental/Safety Coordinator
Central Bucks School District
320 West Swamp Road
Doylestown, PA 18901

**Re: Lead in Drinking Water Sample Collection and Reporting
Tamanend Middle School
1492 Stuckert Road
Warrington, PA 18976
Bucks County, Pennsylvania**

Dear Mr. Nickerson:

This document has been prepared by Langan to provide the results of the drinking water sampling activities at the above referenced school. Langan sampled the drinking water sources (e.g. fountains, sink faucets, etc.) as identified by the Central Bucks School District facility inventory. The collected 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 results did not detect any exceedances at this school of the Pennsylvania Action Level of 15 micrograms per liter (ug/L).

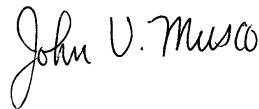
As requested by Mike Nickerson, here is a list of locations with lead results above 10 ug/L, but below Pennsylvania Action Level of 15 ug/L are as follows:

| <u>Location</u> | <u>Sample ID</u> | <u>Result</u> |
|-----------------------------------|------------------|---------------|
| Kitchen 1 - bowl next to uprights | T3012 | 12.1 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

Enclosure

cc: R. Copenhaver, PG – Langan
B. Lambing. - Langan
Tyler Arinder – Langan

NJ Certificate of Authorization No. 24GA27996400

\\Langan.com\data\DYL\data4\200130401\Project Data\Record Data\Reports\Day 1_6-5-19_Tamanend_Doyle\Tamanend_Lead_Sampling_Memo.docx

June 21, 2019

Randy Copenhaver
Langan Engineering
2700 Kelly Road, Suite 200
Warrington, PA 18976

RE: Project: CENTRAL BUCKS SCHOOL(TAMANEND)
Pace Project No.: 7093917

Dear Randy Copenhaver:

Enclosed are the analytical results for sample(s) received by the laboratory on June 12, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



John D. Stanton
john.stanton@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Bill Lambing, Langan Engineering



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: CENTRAL BUCKS SCHOOL(TAMANEND)

Pace Project No.: 7093917

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747

New York Certification #: 10478 Primary Accrediting Body

New Jersey Certification #: NY158

Pennsylvania Certification #: 68-00350

Connecticut Certification #: PH-0435

Maryland Certification #: 208

Rhode Island Certification #: LAO00340

Massachusetts Certification #: M-NY026

New Hampshire Certification #: 2987

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CENTRAL BUCKS SCHOOL(TAMANEND)

Pace Project No.: 7093917

| Sample: TAUD | | Lab ID: 7093917001 | Collected: 06/05/19 03:36 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
|---------------------------------------|---------|------------------------------|---------------------------|--------------------------|------------------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:08 | 7439-92-1 | |
| Sample: TNA | | Lab ID: 7093917002 | Collected: 06/05/19 04:22 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:11 | 7439-92-1 | |
| Sample: TNB | | Lab ID: 7093917003 | Collected: 06/05/19 04:21 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:14 | 7439-92-1 | |
| Sample: TN | | Lab ID: 7093917004 | Collected: 06/05/19 04:24 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:17 | 7439-92-1 | |
| Sample: T225A | | Lab ID: 7093917005 | Collected: 06/05/19 04:18 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:20 | 7439-92-1 | |
| Sample: T225B | | Lab ID: 7093917006 | Collected: 06/05/19 04:17 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | 1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:23 | 7439-92-1 | |

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ANALYTICAL RESULTS

Project: CENTRAL BUCKS SCHOOL(TAMANEND)
Pace Project No.: 7093917

| Sample: T238 | Lab ID: 7093917007 | Collected: 06/05/19 04:15 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | | |
|---------------------------------------|------------------------------|---------------------------|--------------------------|------------------------|----------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical Method: EPA 200.8 | | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:26 | 7439-92-1 | |
| Sample: T508A | Lab ID: 7093917008 | Collected: 06/05/19 04:14 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical Method: EPA 200.8 | | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:29 | 7439-92-1 | |
| Sample: T508B | Lab ID: 7093917009 | Collected: 06/05/19 04:13 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical Method: EPA 200.8 | | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:44 | 7439-92-1 | |
| Sample: TBA | Lab ID: 7093917010 | Collected: 06/05/19 04:11 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical Method: EPA 200.8 | | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:47 | 7439-92-1 | |
| Sample: TBB | Lab ID: 7093917011 | Collected: 06/05/19 04:10 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical Method: EPA 200.8 | | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:50 | 7439-92-1 | |
| Sample: TLO | Lab ID: 7093917012 | Collected: 06/05/19 04:20 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | Analytical Method: EPA 200.8 | | | | | | | |
| Lead | 5.5 | ug/L | 1.0 | 1 | | 06/21/19 03:53 | 7439-92-1 | |

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ANALYTICAL RESULTS

Project: CENTRAL BUCKS SCHOOL(TAMANEND)
Pace Project No.: 7093917

| Sample: T307A | | Lab ID: 7093917013 | Collected: 06/05/19 04:00 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
|---------------------------------------|---------|------------------------------|---------------------------|--------------------------|------------------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:56 | 7439-92-1 | |
| Sample: T307B | | Lab ID: 7093917014 | Collected: 06/05/19 04:01 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 03:59 | 7439-92-1 | |
| Sample: T307C | | Lab ID: 7093917015 | Collected: 06/05/19 04:02 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 04:02 | 7439-92-1 | |
| Sample: T307D | | Lab ID: 7093917016 | Collected: 06/05/19 04:03 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | 1.5 | ug/L | 1.0 | 1 | | 06/21/19 04:05 | 7439-92-1 | |
| Sample: T307E | | Lab ID: 7093917017 | Collected: 06/05/19 04:04 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | 2.0 | ug/L | 1.0 | 1 | | 06/21/19 04:08 | 7439-92-1 | |
| Sample: T307F | | Lab ID: 7093917018 | Collected: 06/05/19 04:05 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | 1.1 | ug/L | 1.0 | 1 | | 06/21/19 04:23 | 7439-92-1 | |

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ANALYTICAL RESULTS

Project: CENTRAL BUCKS SCHOOL(TAMANEND)

Pace Project No.: 7093917

| Sample: T310 | | Lab ID: 7093917019 | Collected: 06/05/19 04:08 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
|---------------------------------------|---------|------------------------------|---------------------------|--------------------------|------------------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 04:35 | 7439-92-1 | |
| Sample: T303 | | Lab ID: 7093917020 | Collected: 06/05/19 04:07 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | 1.8 | ug/L | 1.0 | 1 | | 06/21/19 04:39 | 7439-92-1 | |
| Sample: T301C | | Lab ID: 7093917021 | Collected: 06/05/19 04:26 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | 1.6 | ug/L | 1.0 | 1 | | 06/21/19 04:42 | 7439-92-1 | |
| Sample: T3012 | | Lab ID: 7093917022 | Collected: 06/05/19 03:47 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | 12.1 | ug/L | 1.0 | 1 | | 06/21/19 04:45 | 7439-92-1 | |
| Sample: T3014 | | Lab ID: 7093917023 | Collected: 06/05/19 03:50 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | 3.0 | ug/L | 1.0 | 1 | | 06/21/19 04:54 | 7439-92-1 | |
| Sample: T107 | | Lab ID: 7093917024 | Collected: 06/05/19 03:42 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | |
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 200.8 MET ICPMS Drinking Water | | Analytical Method: EPA 200.8 | | | | | | |
| Lead | <1.0 | ug/L | 1.0 | 1 | | 06/21/19 04:57 | 7439-92-1 | |

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ANALYTICAL RESULTS

Project: CENTRAL BUCKS SCHOOL(TAMANEND)

Pace Project No.: 7093917

| Sample: T104 | Lab ID: 7093917025 | Collected: 06/05/19 03:39 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | | |
|---------------------|---------------------------|---------------------------|--------------------------|------------------------|----------|----------|---------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |

200.8 MET ICPMS Drinking Water Analytical Method: EPA 200.8

| | | | | | | | | |
|------|------------|------|-----|---|--|----------------|-----------|--|
| Lead | 2.5 | ug/L | 1.0 | 1 | | 06/21/19 05:00 | 7439-92-1 | |
|------|------------|------|-----|---|--|----------------|-----------|--|

| Sample: T105 | Lab ID: 7093917026 | Collected: 06/05/19 03:40 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | | |
|---------------------|---------------------------|---------------------------|--------------------------|------------------------|----------|----------|---------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |

200.8 MET ICPMS Drinking Water Analytical Method: EPA 200.8

| | | | | | | | | |
|------|------------|------|-----|---|--|----------------|-----------|--|
| Lead | 1.3 | ug/L | 1.0 | 1 | | 06/21/19 05:03 | 7439-92-1 | |
|------|------------|------|-----|---|--|----------------|-----------|--|

| Sample: TMO | Lab ID: 7093917027 | Collected: 06/05/19 03:33 | Received: 06/12/19 11:00 | Matrix: Drinking Water | | | | |
|--------------------|---------------------------|---------------------------|--------------------------|------------------------|----------|----------|---------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |

200.8 MET ICPMS Drinking Water Analytical Method: EPA 200.8

| | | | | | | | | |
|------|------------|------|-----|---|--|----------------|-----------|--|
| Lead | 1.6 | ug/L | 1.0 | 1 | | 06/21/19 05:06 | 7439-92-1 | |
|------|------------|------|-----|---|--|----------------|-----------|--|

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