

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

Titus Elementary School 2333 Lower Barness Rd 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).

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





June 25, 2019

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

RE: Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

# 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

Joh Shu

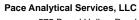
john.stanton@pacelabs.com

(631)694-3040 Project Manager

Enclosures

cc: Bill Lambing, Langan Engineering





575 Broad Hollow Road Melville, NY 11747 (631)694-3040



## **CERTIFICATIONS**

Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

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



Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

Date: 06/25/2019 02:08 PM

Pace Project No.: 7093839								
Sample: TBRF	Lab ID: 709	3839001	Collected: 06/08/1	19 07:56	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 Meth	nod: EPA 200	0.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 09:3	34 7439-92-1	
Sample: T402	Lab ID: 709	3839002	Collected: 06/08/1	19 07:54	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 200	0.8					
Lead	1.1	ug/L	1.0	1		06/19/19 09:3	37 7439-92-1	
Sample: T401	Lab ID: 709	3839003	Collected: 06/08/1	19 07:55	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 200	0.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 09:4	10 7439-92-1	
Sample: T404	Lab ID: 709	3839004	Collected: 06/08/1	19 07:52	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 200	0.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 09:4	13 7439-92-1	
Sample: T403	Lab ID: 709	3839005	Collected: 06/08/1	19 07:53	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 200	0.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 09:4	16 7439-92-1	
Sample: TKB	Lab ID: 709	3839006	Collected: 06/08/1	19 07:37	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 200	0.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 09:4	19 7439-92-1	



Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

Date: 06/25/2019 02:08 PM

Sample: TKA	Lab ID: 7	093839007	Colle	ected: 06/08/	19 07:37	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units		Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical M	lethod: EPA 20	8.00						
Lead	<1.0	ug/L		1.0	1		06/19/19 09:5	58 7439-92-1	
Sample: T406F	Lab ID: 7	093839008	Colle	ected: 06/08/	19 07:39	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units		Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical M	lethod: EPA 20	8.00						
Lead	<1.0	ug/L		1.0	1		06/19/19 10:0	07 7439-92-1	
Sample: T406	Lab ID: 7	093839009	Colle	ected: 06/08/	19 07:39	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units		Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical M	lethod: EPA 20	8.00						
Lead	1.3	ug/L		1.0	1		06/19/19 10:	10 7439-92-1	
Sample: T407	Lab ID: 7	093839010	Colle	ected: 06/08/	19 07:41	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units		Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical M	lethod: EPA 20	8.00						
Lead	1.8	ug/L		1.0	1		06/19/19 10:	13 7439-92-1	
Sample: T407F	Lab ID: 7	093839011	Colle	ected: 06/08/	19 07:42	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units		Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical M	lethod: EPA 20	8.00						
Lead	<1.0	ug/L		1.0	1		06/19/19 10:	16 7439-92-1	
Sample: T501	Lab ID: 7	093839012	Colle	ected: 06/08/	19 07:43	Received:	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units		Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical M	lethod: EPA 20	8.00						
Lead	<1.0	ug/L		1.0	1		06/19/19 10:	19 7439-92-1	



Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

Date: 06/25/2019 02:08 PM

Pace Project No.: 7093839								
Sample: T502	Lab ID: 709	3839013	Collected: 06/08/1	19 07:44	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 Met	hod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 10:2	22 7439-92-1	
Sample: T503	Lab ID: 709	3839014	Collected: 06/08/1	19 07:45	Received: (	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	8.00					
Lead	1.9	ug/L	1.0	1		06/19/19 10:2	25 7439-92-1	
Sample: T504	Lab ID: 709	3839015	Collected: 06/08/1	19 07:46	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 Met	hod: EPA 20	00.8					
Lead	1.3	ug/L	1.0	1		06/19/19 10:2	28 7439-92-1	
Sample: T505	Lab ID: 709	3839016	Collected: 06/08/1	19 07:47	Received: (	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	00.8					
Lead	1.8	ug/L	1.0	1		06/19/19 10:4	13 7439-92-1	
Sample: T506	Lab ID: 709	3839017	Collected: 06/08/1	19 07:48	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 Met	hod: EPA 20	00.8					
Lead	1.0	ug/L	1.0	1		06/19/19 10:5	52 7439-92-1	
Sample: T507	Lab ID: 709	3839018	Collected: 06/08/1	19 07:48	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 Met	hod: EPA 20	00.8					
Lead	<1.0	ug/L						



Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

Date: 06/25/2019 02:08 PM

Pace Project No.: 7093839								
Sample: T508	Lab ID: 709	3839019	Collected: 06/08/1	19 07:49	Received: 0	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 Met	nod: EPA 20	00.8					
Lead	1.1	ug/L	1.0	1		06/19/19 10:5	59 7439-92-1	
Sample: T508F	Lab ID: 709	3839020	Collected: 06/08/1	19 07:51	Received: 0	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	8.00					
Lead	<1.0	ug/L	1.0	1		06/19/19 11:0	2 7439-92-1	
Sample: T307F	Lab ID: 709	3839021	Collected: 06/08/1	19 08:10	Received: 0	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 Met	nod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 11:1	1 7439-92-1	
Sample: T306	Lab ID: 709	3839022	Collected: 06/08/1	19 08:09	Received: (	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	nod: EPA 20	00.8					
Lead	1.9	ug/L	1.0	1		06/19/19 11:1	4 7439-92-1	
Sample: T305	Lab ID: 709	3839023	Collected: 06/08/1	19 08:08	Received: 0	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 11:1	7 7439-92-1	
Sample: T304	Lab ID: 709	3839024	Collected: 06/08/1	19 08:06	Received: (	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: FPA 20	nn 8					
• • • • • • • • • • • • • • • • • • • •	7 trialy troat friet	10a. L. 7 ( L )	50.0					



Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

Date: 06/25/2019 02:08 PM

Pace Project No.: 7093839								
Sample: T303	Lab ID: 709	3839025	Collected: 06/08/19	9 08:05	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 Meth	nod: EPA 20	0.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 11:2	29 7439-92-1	
Sample: T301	Lab ID: 709	3839026	Collected: 06/08/19	9 08:03	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 Meth	nod: EPA 20	0.8					
Lead	1.2	ug/L	1.0	1		06/19/19 11:3	32 7439-92-1	
Sample: T302C	Lab ID: 709	3839027	Collected: 06/08/19	9 08:02	Received: (	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 20	0.8					
Lead	1.1	ug/L	1.0	1		06/19/19 11:4	12 7439-92-1	
Sample: T107	Lab ID: 709	3839028	Collected: 06/08/19	9 07:58	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 Meth	nod: EPA 20	0.8					
Lead	1.7	ug/L	1.0	1		06/19/19 11:4	5 7439-92-1	
Sample: T109	Lab ID: 709	3839029	Collected: 06/08/19	9 07:57	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 Meth	nod: EPA 20	0.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 11:4	18 7439-92-1	
Sample: T108	Lab ID: 709	3839030	Collected: 06/08/19	9 07:58	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 Meth	nod: EPA 20	0.8					



Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

Date: 06/25/2019 02:08 PM

Pace Project No.: 7093839								
Sample: T106	Lab ID: 709	3839031	Collected: 06/08/	19 08:00	Received: 0	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 Met	hod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 11:5	64 7439-92-1	
Sample: T105	Lab ID: 709	3839032	Collected: 06/08/	19 08:01	Received: 0	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 12:0	3 7439-92-1	
Sample: T103	Lab ID: 709	3839033	Collected: 06/08/	19 08:22	Received: 0	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	00.8					
Lead	1.1	ug/L	1.0	1		06/19/19 12:0	06 7439-92-1	
Sample: TMOF	Lab ID: 709	3839034	Collected: 06/08/	19 08:21	Received: 0	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 12:0	9 7439-92-1	
Sample: T101E	Lab ID: 709	3839035	Collected: 06/08/	19 08:20	Received: 0	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/19/19 12:1	2 7439-92-1	
Sample: T201	Lab ID: 709	3839036	Collected: 06/08/	19 08:19	Received: 0	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	00.8					



Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

Date: 06/25/2019 02:08 PM

Pace Project No.: 7093839								
Sample: T201A	Lab ID: 709	3839037	Collected: 06/08/	19 08:19	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 Met	hod: EPA 20	00.8					
Lead	1.2	ug/L	1.0	1		06/25/19 06:1	1 7439-92-1	
Sample: T203	Lab ID: 709	3839038	Collected: 06/08/	19 08:17	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 Met	hod: EPA 20	00.8					
Lead	1.4	ug/L	1.0	1		06/25/19 06:1	4 7439-92-1	
Sample: T204	Lab ID: 709	3839039	Collected: 06/08/	19 08:16	Received: (	06/12/19 11:00	Matrix: Drinking	y Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Met	hod: EPA 20	00.8					
Lead	1.9	ug/L	1.0	1		06/25/19 06:1	7439-92-1	
Sample: T205	Lab ID: 709	3839040	Collected: 06/08/	19 08:15	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 Met	hod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/25/19 06:2	20 7439-92-1	
Sample: T206	Lab ID: 709	3839041	Collected: 06/08/	19 08:15	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 Met	hod: EPA 20	00.8					
Lead	1.2	ug/L	1.0	1		06/25/19 06:2	23 7439-92-1	
Sample: T209	Lab ID: 709	3839042	Collected: 06/08/	19 08:14	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 Met	hod: EPA 20	00.8					



Project: CENTRAL BUCKS SCHOOL (TITUS)

Pace Project No.: 7093839

Date: 06/25/2019 02:08 PM

Sample: T210	Lab ID: 709	3839043	Collected: 06/08/	19 08:13	Received: 06	6/12/19 11:00	Matrix: Drinking	Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Metl	hod: EPA 200	.8					
Lead	1.1	ug/L	1.0	1		06/25/19 06:2	9 7439-92-1	
Sample: T208	Lab ID: 709	3839044	Collected: 06/08/	19 08:12	Received: 06	6/12/19 11:00	Matrix: Drinking	Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 200	.8					
Lead	<1.0	ug/L	1.0	1		06/25/19 06:3	8 7439-92-1	