



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

> **Holicong Middle School** 2900 Township 391 Hwy Doylestown, PA 18902 **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

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 9_6-15-19 Holicong_Warwick_Jamison\Holicong_Lead_Sampling_Memo.docx





July 02, 2019

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

RE: Project: CENTRAL BUCKS SCHOOL(HOLICONG)

Pace Project No.: 7094191

Dear Randy Copenhaver:

Enclosed are the analytical results for sample(s) received by the laboratory on June 18, 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(HOLICONG)

Pace Project No.: 7094191

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(HOLICONG)

Pace Project No.: 7094191

Date: 07/02/2019 09:38 AM

Lab ID: 709	4191001	Collected: 06/15/	19 07:13	Received:	06/18/19 11:00	Matrix: Drinking	Water
Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Meth	nod: EPA 20	00.8					
<1.0	ug/L	1.0	1		06/29/19 05:3	33 7439-92-1	
Lab ID: 709	4191002	Collected: 06/15/	19 07:16	Received:	06/18/19 11:00	Matrix: Drinking	Water
Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Meth	nod: EPA 20	00.8					
<1.0	ug/L	1.0	1		06/29/19 05:3	86 7439-92-1	
Lab ID: 709	4191003	Collected: 06/15/	19 07:15	Received:	06/18/19 11:00	Matrix: Drinking	Water
Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Meth	nod: EPA 20	00.8					
<1.0	ug/L	1.0	1		06/29/19 05:3	39 7439-92-1	
Lab ID: 709	4191004	Collected: 06/15/	19 07:15	Received:	06/18/19 11:00	Matrix: Drinking	Water
Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Meth	nod: EPA 20	00.8					
<1.0	ug/L	1.0	1		06/29/19 05:4	19 7439-92-1	
Lab ID: 709	4191005	Collected: 06/15/	19 07:15	Received:	06/18/19 11:00	Matrix: Drinking	Water
Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Analytical Meth	nod: EPA 20	00.8					
<1.0	ug/L	1.0	1		06/29/19 05:5	52 7439-92-1	
1 -1 10 700	4191006	Collected: 06/15/	19 07:19	Received:	06/18/19 11:00	Matrix: Drinking	Water
Lab ID: 709							
Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
	Units		DF	Prepared	Analyzed	CAS No.	Qual
	Analytical Meth <1.0 Lab ID: 709 Results Analytical Meth <1.0	Analytical Method: EPA 20 <1.0 ug/L Lab ID: 7094191002 Results Units Analytical Method: EPA 20 <1.0 ug/L Lab ID: 7094191003 Results Units Analytical Method: EPA 20 <1.0 ug/L Lab ID: 7094191004 Results Units Analytical Method: EPA 20 <1.0 ug/L Lab ID: 7094191005 Analytical Method: EPA 20 <1.0 ug/L Lab ID: 7094191005 Results Units Analytical Method: EPA 20 Analytical Method: EPA 20 <1.0 ug/L Lab ID: 7094191005 Results Units Analytical Method: EPA 20 Analytical Method: EPA 20	Analytical Method: EPA 200.8 <1.0	Analytical Method: EPA 200.8 <1.0	Analytical Method: EPA 200.8 <1.0	Analytical Method: EPA 200.8 ug/L 1.0 06/29/19 05:3 Lab ID: 7094191002 Collected: 06/15/19 07:16 Received: 06/18/19 11:00 Results Units Report Limit DF Prepared Analyzed Analytical Method: EPA 200.8 ug/L 1.0 06/29/19 05:3 Lab ID: 7094191003 Collected: 06/15/19 07:15 Received: 06/18/19 11:00 Results Units Report Limit DF Prepared Analyzed Analytical Method: EPA 200.8 ug/L 1.0 06/29/19 05:3 Lab ID: 7094191004 Collected: 06/15/19 07:15 Received: 06/18/19 11:00 Results Units Report Limit DF Prepared Analyzed Analytical Method: EPA 200.8 ug/L 1.0 06/29/19 05:4 Received: 06/18/19 11:00 Results Units Report Limit DF Prepared Analyzed Analyzed Analytical Method: EPA 200.8 Units Report Limit DF Prepared Analyzed Analytical Method: EPA 200.8 	Analytical Method: EPA 200.8



Project: CENTRAL BUCKS SCHOOL(HOLICONG)

Pace Project No.: 7094191

Date: 07/02/2019 09:38 AM

Pace Project No.: 7094191								
Sample: 113	Lab ID: 709	4191007	Collected: 06/15/1	19 07:21	Received: (06/18/19 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		06/29/19 05:5	58 7439-92-1	
Sample: 150A	Lab ID: 709	4191008	Collected: 06/15/1	19 07:09	Received: (06/18/19 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		06/29/19 06:0	7439-92-1	
Sample: 150B	Lab ID: 709	4191009	Collected: 06/15/1	19 07:09	Received: (06/18/19 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		06/29/19 06:1	0 7439-92-1	
Sample: 143A	Lab ID: 709	4191010	Collected: 06/15/1	19 07:11	Received: (06/18/19 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		06/29/19 06:1	3 7439-92-1	
Sample: 144A	Lab ID: 709	4191011	Collected: 06/15/1	19 07:11	Received: (06/18/19 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		06/29/19 06:1	6 7439-92-1	
Sample: 141A	Lab ID: 709	4191012	Collected: 06/15/1	19 07:04	Received: (06/18/19 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		06/29/19 06:1	9 7439-92-1	



Project: CENTRAL BUCKS SCHOOL(HOLICONG)

Pace Project No.: 7094191

Date: 07/02/2019 09:38 AM

Pace Project No.: 7094191								
Sample: 141B	Lab ID: 709	4191013	Collected: 06/15/1	19 07:04	Received:	06/18/19 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		06/29/19 06:2	28 7439-92-1	
Sample: 141C	Lab ID: 7094	4191014	Collected: 06/15/1	19 07:05	Received:	06/18/19 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		06/29/19 06:4	3 7439-92-1	
Sample: 141D	Lab ID: 7094	4191015	Collected: 06/15/1	19 07:05	Received:	06/18/19 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		06/29/19 06:4	6 7439-92-1	
Sample: 141E	Lab ID: 7094	4191016	Collected: 06/15/1	19 07:05	Received:	06/18/19 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		06/29/19 06:4	19 7439-92-1	
Sample: 141F	Lab ID: 709	4191017	Collected: 06/15/1	19 07:04	Received:	06/18/19 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		06/29/19 06:5	52 7439-92-1	
Sample: 141G	Lab ID: 7094	4191018	Collected: 06/15/1	19 07:04	Received:	06/18/19 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		06/29/19 06:5	55 7439-92-1	



Project: CENTRAL BUCKS SCHOOL(HOLICONG)

Pace Project No.: 7094191

Date: 07/02/2019 09:38 AM

Pace Project No.: 7094191								
Sample: 140A	Lab ID: 709	4191019	Collected: 06/15/	19 07:02	Received:	06/18/19 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		06/29/19 06:5	59 7439-92-1	
Sample: 140B	Lab ID: 709	4191020	Collected: 06/15/	19 07:02	Received:	06/18/19 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		06/29/19 07:0	02 7439-92-1	
Sample: 140C	Lab ID: 709	4191021	Collected: 06/15/	19 07:02	Received:	06/18/19 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		06/29/19 07:0	05 7439-92-1	
Sample: 126	Lab ID: 709	4191022	Collected: 06/15/	19 06:59	Received:	06/18/19 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	1.4	ug/L	1.0	1		06/29/19 07:0	08 7439-92-1	
Sample: 126A	Lab ID: 709	4191023	Collected: 06/15/	19 06:59	Received:	06/18/19 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		06/29/19 07:1	1 7439-92-1	
Sample: 126B	Lab ID: 709	4191024	Collected: 06/15/	19 06:59	Received:	06/18/19 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		06/29/19 07:2	26 7439-92-1	



Project: CENTRAL BUCKS SCHOOL(HOLICONG)

Pace Project No.: 7094191

Date: 07/02/2019 09:38 AM

Pace Project No.: 7094191								
Sample: 126C	Lab ID: 709	4191025	Collected: 06/15/	19 06:59	Received:	06/18/19 11:00	Matrix: Drinking	g Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/29/19 07:2	29 7439-92-1	
Sample: C4	Lab ID: 709	4191026	Collected: 06/15/	19 06:56	Received:	06/18/19 11:00	Matrix: Drinking	g Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/29/19 07:3	32 7439-92-1	
Sample: 240	Lab ID: 709	4191027	Collected: 06/15/	19 07:27	Received:	06/18/19 11:00	Matrix: Drinking	g Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/29/19 07:3	35 7439-92-1	
Sample: 240B	Lab ID: 709	4191028	Collected: 06/15/	19 07:26	Received:	06/18/19 11:00	Matrix: Drinking	g Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/29/19 07:3	88 7439-92-1	
Sample: 240C	Lab ID: 709	4191029	Collected: 06/15/	19 07:26	Received:	06/18/19 11:00	Matrix: Drinking	g Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	nod: EPA 20	00.8					
Lead	<1.0	ug/L	1.0	1		06/29/19 07:4	11 7439-92-1	
Sample: 218A	Lab ID: 709	4191030	Collected: 06/15/	19 07:24	Received:	06/18/19 11:00	Matrix: Drinking	g Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Meth	and: EDA 20	nn 8					
200.0 MET TOT MO DITIKING WATER	Allalytical Meti	IOU. LFA 20	50.0					



Project: CENTRAL BUCKS SCHOOL(HOLICONG)

Pace Project No.: 7094191

Date: 07/02/2019 09:38 AM

Pace Project No.: 7094191								
Sample: 218B	Lab ID: 709	4191031	Collected: 06/15/	19 07:24	Received: 0	06/18/19 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		06/29/19 07:4	17 7439-92-1	
Sample: 207	Lab ID: 709	4191032	Collected: 06/15/	19 07:32	Received: 0	06/18/19 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		06/29/19 07:5	56 7439-92-1	
Sample: 207A	Lab ID: 709	4191033	Collected: 06/15/	19 07:30	Received: 0	06/18/19 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		06/29/19 08:0	05 7439-92-1	
Sample: 207B	Lab ID: 709	4191034	Collected: 06/15/	19 07:30	Received: (06/18/19 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		06/29/19 08:1	15 7439-92-1	
Sample: 207C	Lab ID: 709	4191035	Collected: 06/15/	19 07:30	Received: 0	06/18/19 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		06/29/19 08:1	18 7439-92-1	
Sample: 240A	Lab ID: 709	4191036	Collected: 06/15/	19 07:26	Received: (06/18/19 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(HOLICONG)

Pace Project No.: 7094191

Date: 07/02/2019 09:38 AM

Sample: 207D	Lab ID: 709	4191037	Collected: 06/15/	19 07:31	Received: 06	6/18/19 11:00	Matrix: Drinking	Water
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS Drinking Water	Analytical Metl	nod: EPA 200.	.8					
Lead	<1.0	ug/L	1.0	1		06/29/19 08:2	4 7439-92-1	
Sample: 230G	Lab ID: 709	4191038	Collected: 06/15/	19 07:29	Received: 06	6/18/19 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		06/30/19 13:3	9 7439-92-1	