### The Lotis Engineering Group, P.C.

6465 Transit Road – Suite 23 East Amherst, New York 14051-2232 716.276.8707

March 15, 2019

Michael Bryniarski Lancaster Central School District 177 Central Avenue Lancaster, New York 14086

Re: Lead Testing in School Drinking Water

Carousel Academy 149 Central Avenue Lancaster, New York 14086

And

Como Park Elementary School 1985 Como Park Blvd, Lancaster, NY 14086

Dear: Mr. Bryniarski

On September 6, 2016, Governor Andrew M. Cuomo signed legislation (S.8158/A.10740) mandating that public schools in New York State test potable water for lead contamination. The New York State Department of Health (NYSDOH) also issued emergency regulations pursuant to the new legislation (NYCRR Title X, Subpart 67-4).

In accordance with the new law and regulations, Lancaster Central School District (District) contracted The Lotis Engineering Group, P.C. (Lotis), to complete water testing in all District buildings. This submission summarizes the analytical results of sampling completed on February 6 and 13, 2019 at Carousel Academy (Central Avenue) and Como Park Elementary.

Maintenance closets and showers are not required to be tested under the new state mandates and were not included under this scope of work. Per the emergency regulations issued by the NYSDOH, first-draw samples were collected from cold water outlets after water lay motionless in the pipes for a minimum of 8 hours, but not more than 18 hours. The school district was responsible for flushing outlets at least 8 hours prior to sample collection. Lotis was notified by the school district that flushing was completed over 8 hours prior to sampling. However, this could not be independently verified by Lotis.

Samples were collected by placing a sterile container under each outlet and turning on the water source, allowing Lotis to collect a first-draw cold water sample. Samples were collected in clean 250 mL containers containing the appropriate nitric acid preservative, as provided by the testing laboratory. Samples were then delivered to Microbac Laboratories (a certified Environmental Laboratory Approved Program) following standard chain of custody protocols.

A total of fourteen outlets were sampled inside Carousel Academy and a total of nine samples were sampled inside the Como Park Elementary School during the re-sampling event.

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At Carousel Academy, one sample exceeded the 15 parts per billion (ppb) action level set forth by the NYSDOH. A summary of these samples is included in the following table:

Table 2 - Samples Exceeding 15 ppb

Sample ID	Location Details	Results (ppb)
17-CAE-113-Bubbler	Room 113- Bubbler	104

No samples at the Como Park Elementary School exceeded the 15 parts per billion (ppb) action level set forth by the NYSDOH.

Included in this submission are the complete laboratory analytical reports, chain of custody logs and photos of sample locations that exceeded the action levels.

In accordance with the new legislation, use of the aforementioned outlet is prohibited until a lead remediation plan is implemented and new testing demonstrates that the resulting lead levels are below 15 ppb. Alternative water supplies may be necessary in impacted areas. The legislation requires that Lancaster Central School District provide these results to the NYSDOH within one business day of receipt. Further, notification to building staff, all persons in parental relation to students, the local health department and the State Education Department is required within 10 business days of receipt of these results. These results and any associated remedial plans must be posted on the District's website within six weeks of receipt and all records must be retained by the District for at least 10 years.

The NYSDOH recommends reviewing "3Ts for Reducing Lead in Drinking Water in Schools, Revised Technical Guidance" published by the United States Environmental Protection Agency (USEPA) to assist schools in assessing an appropriate remediation plan. A copy of this publication can be reviewed through the following hyperlink <u>3Ts for Reducing Lead in Drinking Water in Schools</u>.

Lotis is available at your convenience to discuss this issue further.

Sincerely,

Kelly Reidy

**Environmental Scientist** 

David N. Robinson, P.E. President/CEO



Laboratory Analytical Results



## CERTIFICATE OF ANALYSIS

19B0845

The Lotis Engineering Group, P.C.

Kelly Reidy 6465 Transit Road - Suite 23 East Amherst, NY 14051-2232 Project Name: CAE & CPE Lead

Project / PO Number: N/A Received: 02/15/2019 Reported: 02/22/2019

**Analytical Testing Parameters** 

Client Sample ID:

11-CAE-130-S1

Sample Matrix:

Aqueous

Lab Sample ID:

19B0845-01

Collected By:

Kelly Reidy-Kaczmarek

**Collection Date:** 

02/06/2019 6:35

Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.7 Rev 4.4/EPA 200.8 Rev 5.4							
Lead	1.45	1.00	μg/L			02/21/19 1211	втм

14-CAE-138-S1 Client Sample ID:

Sample Matrix: Lab Sample ID:

19B0845-02

Aqueous

Collected By:

Kelly Reidy-Kaczmarek

02/06/2019 6:37 **Collection Date:** 

Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.7 Rev 4.4/EPA 200.8 Rev 5.4							
Lead	3.88	1.00	μg/L			02/21/19 1215	втм

Client Sample ID:

15-CAE-139-S1

Sample Matrix:

Lab Sample ID:

Aqueous

19B0845-03

Collected By:

Kelly Reidy-Kaczmarek

**Collection Date:** 

02/06/2019 6:39

Result	RL	Units	Note	Prepared	Analyzed	Analyst
<1.00	1.00	μg/L			02/21/19 1220	втм
						, and the same of

Client Sample ID:

16-CAE-140-S1

Sample Matrix:

Aqueous

Collected By:

Kelly Reidy-Kaczmarek

Collection Date: 02/06/2019 6:41

19B0845-04 Lab Sample ID: Analyst Prepared Analyzed Result RL Units Note Metals Method: EPA 200.7 Rev 4.4/EPA 200.8 Rev 5.4 02/21/19 1224 BTM <1.00 1.00 µg/L Lead



# **CERTIFICATE OF ANALYSIS**

Client Sample ID:	17-CAE-113-Bubbler		***************************************						
Sample Matrix:	Aqueous				Collected By:	Kelly Reic	ly-Kaczmarel	<	
Lab Sample ID:	19B0845-05				Collection Date:	02/06/201	9 6:43		
Metals		Result	RL	Units	Note Prep	ared	Analyzed	Analy	
Method: EPA 200.7 R	ev 4.4/EPA 200.8 Rev 5.4								
Lead		104	1.00	μg/L		0	2/21/19 1229	ВТМ	
Client Sample ID:	4-CAE-124-S1								
Sample Matrix:	Aqueous				Collected By:	Kelly Reic	ly-Kaczmarek		
Lab Sample ID:	19B0845-06		4		Collection Date:	02/13/201	9 6:30		
Metals		Result	RL	Units	Note Prep	ared	Analyzed	Analys	
Method: EPA 200.7 Re	ev 4.4/EPA 200.8 Rev 5.4								
Lead		1.75	1.00	μg/L		0	2/21/19 1233	втм	
Client Sample ID:	5-CAE-125-BR-S1								
Sample Matrix:	Aqueous				Collected By:	Kelly Reid	y-Kaczmarek	ale III =	
Lab Sample ID:	19B0845-07				Collection Date:	02/13/201	9 6:31		
Metals		Result	RL	Units	s Note Prepared		Analyzed A		
Method: EPA 200.7 Re	ev 4.4/EPA 200.8 Rev 5.4								
Lead		1.49	1.00	μg/L		0:	2/21/19 1238	ВТМ	
Client Sample ID:	6-CAE-126-S1		***************************************	***************************************	***************************************	***************************************	•••••••••••••••••••••••••••••••••••••••		
Sample Matrix:	Aqueous				Collected By:	Kelly Reid	y-Kaczmarek		
Lab Sample ID:	19B0845-08	***************************************		***************************************	Collection Date:	02/13/201	9 6:32		
Metals		Result	RL	Units	Note Prep	ared	Analyzed	Analys	
Method: EPA 200.7 Re	ev 4.4/EPA 200.8 Rev 5.4								
Lead		<1.00	1.00	μg/L		02	2/21/19 1242	ВТМ	
Client Sample ID:	7-CAE-127-S1							F	
Sample Matrix: Lab Sample ID:	Aqueous 19B0845-09				Collected By: Collection Date:	Kelly Reid 02/13/201	y-Kaczmarek 9 6:33		
Metals		Result	RL	Units	Note Prep	ared	Analyzed	Analys	
Method: EPA 200.7 Re	v 4.4/EPA 200.8 Rev 5.4								



## **CERTIFICATE OF ANALYSIS**

Client Sample ID:	10-CAE-128-S1							
Sample Matrix:	Aqueous				Collected By:		Reidy-Kaczmarek	
Lab Sample ID:	19B0845-10				Collection Date:	02/13/2	2019 6:34	
Metals		Result	RL	Units	Note Pre	pared	Analyzed	Analys
Method: EPA 200.7 R	ev 4.4/EPA 200.8 Rev 5.4							
Lead		8.33	1.00	μg/L			02/21/19 1309	втм
Client Sample ID:	8-CAE-128-BR1-S1					**************		
Sample Matrix:	Aqueous				Collected By:		Reidy-Kaczmarek	
Lab Sample ID:	19B0845-11				Collection Date:	02/13/	2019 6:35	
Metals		Result	RL	Units	Note Pre	oared	Analyzed	Analys
Method: EPA 200.7 R	ev 4.4/EPA 200.8 Rev 5.4							
Lead		2.82	1.00	μg/L			02/21/19 1313	ВТМ
Client Sample ID:	9-CAE-128-BR2-S2							
Sample Matrix:	Aqueous				Collected By:		Reidy-Kaczmarek	
Lab Sample ID:	19B0845-12	***************************************			Collection Date:	02/13/2	2019 6:35	
Metals	Result RL		RL	Units	Note Pre	pared	Analyzed	Analys
Method: EPA 200.7 R	ev 4.4/EPA 200.8 Rev 5.4							
Lead		2.31	1.00	μg/L			02/21/19 1318	втм
Client Sample ID:	12-CAE-WBR-S1							
Sample Matrix:	Aqueous				Collected By:		Reidy-Kaczmarek	
Lab Sample ID:	19B0845-13				Collection Date:	02/13/	2019 6:37	
Metals		Result	RL	Units	Note Pre	pared	Analyzed	Analys
Method: EPA 200.7 R	ev 4.4/EPA 200.8 Rev 5.4							
Lead		1.53	1.00	μg/L			02/21/19 1322	ВТМ
Client Sample ID:	13-CAE-WBR-S2							
Sample Matrix:	Aqueous				Collected By:		Reidy-Kaczmarek	
Lab Sample ID:	19B0845-14				Collection Date:		2019 6:37	
Metals		Result	RL	Units	Note Pre	pared	Analyzed	Analys
Method: EPA 200.7 R	ev 4.4/EPA 200.8 Rev 5.4							
Lead		<1.00	1.00	μg/L			02/21/19 1327	BTM



# CERTIFICATE OF ANALYSIS

Client Sample ID:	2-CPE-114-S1		***************************************					
Sample Matrix:	Aqueous				Collected By:	Kelly I	Reidy-Kaczmarek	
Lab Sample ID:	19B0845-15				Collection Date:	02/13/	/2019 7:10	
Metals	i i a mačali – triuli	Result	RL	Units	Note Pre	pared	Analyzed	Analys
Method: EPA 200.7 Re	ev 4.4/EPA 200.8 Rev 5.4							
Lead		1.42	1.00	µg/L			02/21/19 1331	ВТМ
Client Sample ID:	5-CPE-227-S1					***************************************		demonstration of the second
Sample Matrix:	Aqueous				Collected By:	Kelly F	Reidy-Kaczmarek	
Lab Sample ID:	19B0845-16				Collection Date:	02/13/	2019 7:11	24.5
Metals		Result	RL	Units	Note Pre	pared	Analyzed	Analys
Method: EPA 200.7 Re	ev 4.4/EPA 200.8 Rev 5.4							
Lead		1.60	1.00	μg/L			02/21/19 1336	втм
Client Sample ID:	6-CPE-226-S1		***************************************	***************************************			Contention	. Procession
Sample Matrix:	Aqueous				Collected By:	Kelly F	Reidy-Kaczmarek	
Lab Sample ID:	19B0845-17				Collection Date:	02/13/2019 7:12		Left Su
Metals		Result RL Units		Note Prep	Analyzed	Analys		
Method: EPA 200.7 Re	v 4.4/EPA 200.8 Rev 5.4							
Lead		1.53	1.00	μg/L			02/21/19 1358	втм
Client Sample ID:	7-CPE-225-S1			***************************************				rimis5
Sample Matrix: Lab Sample ID:	Aqueous 19B0845-18				Collected By: Collection Date:		Reidy-Kaczmarek 2019 7:13	igmist ist dad
Metals		Result	RL	Units	Note Prep	ared	Analyzed	Analys
Method: EPA 200.7 Re	v 4.4/EPA 200.8 Rev 5.4							
Lead		1.51	1.00	μg/L			02/21/19 1402	ВТМ
Client Sample ID:	8-CPE-224-S1							
Sample Matrix:	Aqueous				Collected By:	Kelly F	Reidy-Kaczmarek	
Lab Sample ID:	19B0845-19				Collection Date:	02/13/	2019 7:14	
		Result	RL	Units	Note Prep	ared	Analyzed	Analys
Metals							, many zou	
	v 4.4/EPA 200.8 Rev 5.4						7.11diy20d	



## **CERTIFICATE OF ANALYSIS**

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Client Sample ID: Sample Matrix: Lab Sample ID:	11-CPE-216-S1 Aqueous 19B0845-20					Collected E		400000000000000000000000000000000000000	leidy-Kaczmarek 2019 7:15	
Metals		Result		RL	Units	Note	Prep	ared	Analyzed	Analys
Method: EPA 200.7 R Lead	lev 4.4/EPA 200.8 Rev 5.4	1.39		1.00	μg/L				02/21/19 1411	ВТМ
Client Sample ID: Sample Matrix: Lab Sample ID:	12-CPE-214-S1 Aqueous 19B0845-21					Collected E			eidy-Kaczmarek 2019 7:05	
Metals		Result		RL	Units	Note	Prep	ared	Analyzed	Analys
Method: EPA 200.7 R Lead	lev 4.4/EPA 200.8 Rev 5.4	3.19		1.00	μg/L				02/21/19 1416	втм
Client Sample ID: Sample Matrix: Lab Sample ID:	13-CPE-215-S1 Aqueous 19B0845-22					Collected I			deidy-Kaczmarek 2019 7:06	
Metals		Result		RL	Units	Note	Prep	ared	Analyzed	Analys
Method: EPA 200.7 R Lead	lev 4.4/EPA 200.8 Rev 5.4	3.24		1.00	μg/L				02/21/19 1420	втм
Client Sample ID: Sample Matrix: Lab Sample ID:	14-CPE-FBR-S1 Aqueous 19B0845-23					Collected I			Reidy-Kaczmarek 2019 7:16	
Metals		Result		RL	Units	Note	Prep	ared	Analyzed	Analys
Method: EPA 200.7 R Lead	lev 4.4/EPA 200.8 Rev 5.4	2.63		1.00	μg/L				02/21/19 1425	втм
Definitions μg/L: RL:	micrograms per liter Reporting Limit									
Cooler Receipt Log	3		7/20					-		
Cooler ID: Comments Samples pr	Default Cooler reserved at lab	Тетр:	°C							



# CERTIFICATE OF ANALYSIS

### 19B0845

#### **Cooler Inspection Checklist**

Ice Present or not required?	Yes	Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes	Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes	Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes	Sample type identified on COC?	Yes
Correct type of Containers Received	Yes	Correct number of containers listed on COC?	Yes
Containers Intact?	Yes	COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes	Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes	Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes	Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes		

### Project Requested Certification(s)

Microbac Laboratories, Inc. - Chicagoland 12006

New York State Department of Health (m)

### **Report Comments**

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included.

Reviewed and Approved By:

stationonly For Karen Ziolkowski Senior Project Manager 02/22/2019 15:07

Microbac Laboratories, Inc.

**Chain of Custody Log** 

Sampled SampledBy 2/6/2019 06:35 Kelly Reidy-Kaczmarek 2/6/2019 06:37 Kelly Reidy-Kaczmarek	2/6/2019 06:39 Kelly Reidy-Kaczmarek	2/6/2019 06:43 Kelly Reidy-Kaczmarek	2/13/2019 06:30 Kelly Reidy-Kaczmarek	2/13/2019 06:31 Kelly Reidy-Kaczmarek	2/13/2019 06:32 Kelly Reidy-Kaczmarek	2/13/2019 06:33 Kelly Reidy-Kaczmarek	2/13/2019 06:34 Kelly Reidy-Kaczmarek	2/13/2019 06:35 Kelly Reidy-Kaczmarek	2/13/2019 06:35 Kelly Reidy-Kaczmarek	2/13/2019 06:37 Kelly Reidy-Kaczmarek	2/13/2019 06:37 Kelly Reidy-Kaczmarek	2/13/2019 07:10 Kelly Reidy-Kaczmarek	2/13/2019 07:11 Kelly Reidy-Kaczmarek	2/13/2019 07:12 Kelly Reidy-Kaczmarek	2/13/2019 07:13 Kelly Reidy-Kaczmarek	2/13/2019 07:14 Kelly Reidy-Kaczmarek	2/13/2019 07:15 Kelly Reidy-Kaczmarek	2/13/2019 07:05 Kelly Reidy-Kaczmarek	2/13/2019 07:06 Kelly Reidy-Kaczmarek	2/13/2019 07:16 Kelly Reidy-Kaczmarek
s SampleAlias S1 S1	એ બું	3-Bubbler		R-S1			ો કે જે	K151	R2-52		75-							λο	).C	S1
SampleID Matrix SampleName 1 Aqueous 11-CAE-130-S1 2 Aqueous 14-CAE-138-S1	3 Aqueous 15-CAE-139-S1 4 Aqueous 16-CAE-140-S1	17-CAE-11		ere de cons	<b>©</b> 1		10 Aqueous 10-CAE-128-51		,			15 Aqueous 2-CPE-114-S1				8-CPE-224	11-CPE-21	12-CPE-21		23 Aqueous 14-CPE-FBR-S1

Ruelab: Near Rando

9B0845 Karen Ziolkowski 'he Lotis Engineering Group, P.C. - East Amherst N )W Lead )2/15/2019



