The Lotis Engineering Group, P.C.

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

December 5, 2016

Jamie Phillips
Lancaster Central School District
177 Central Avenue
Lancaster, New York 14086

Re: Lead Testing in School Drinking Water
Lancaster Transportation Department
295 Pleasant View Drive,
Lancaster, NY 14086

Dear Ms. Phillips:

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 October 22, 2016 at the Lancaster Transportation Department.

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 17 outlets were sampled inside the building. To Lotis' knowledge, these represent every outlet within the building to which students and staff have regular access.

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At the Lancaster Transportation Department, no samples exceeded the 15 parts per billion (ppb) action level set forth by the NYSDOH.

Included in this submission are the complete laboratory analytical reports and chain of custody logs.

These results 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 3Ts for Reducing Lead in Drinking Water in Schools.

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

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November 22, 2016

The Lotis Engineering Group, P.C.
6465 Transit Road - Suite 23
East Amherst, NY 14051-2232

Work Order No.: 16K0143

Re: LTD

Dear Kelly Reidy:

Microbac Laboratories, Inc. - Chicagoland Division received 18 sample(s) on 10/28/2016 3:20:03PM for the analyses presented in the following report as Work Order 16K0143.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please contact your project manager. For any feedback, please contact Robert Crookston, Managing Director, at robert.crookston@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

Ron Misiunas
Director of Laboratory Services

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WORK ORDER SAMPLE SUMMARY

Date: *Tuesday, November 22, 2016*

Client: The Lotis Engineering Group, P.C.
Project: LTD
Lab Order: 16K0143

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
16K0143-02	1A-LTD-DBR-S1	DBR=Driver's Break Rc	10/22/2016 09:11	11/2/2016 11:49:09AM
16K0143-03	2A-LTD-DBR-WF		10/22/2016 09:11	11/2/2016 11:49:09AM
16K0143-04	3A-LTD-DMR-S1	DMR=Driver's Mensroc	10/22/2016 09:12	11/2/2016 11:49:09AM
16K0143-05	4A-LTD-DMR-S2		10/22/2016 09:13	11/2/2016 11:49:09AM
16K0143-06	5A-LTD-DWR-S1	DWR=Driver's Womens	10/22/2016 09:15	11/2/2016 11:49:09AM
16K0143-07	6A-LTD-DWR-S2		10/22/2016 09:15	11/2/2016 11:49:09AM
16K0143-08	7A-LTD-WDR-S3		10/22/2016 09:16	11/2/2016 11:49:09AM
16K0143-09	8A-LTD-VLR-S1	VLR=Varsity Lockerroo	10/22/2016 09:16	11/2/2016 11:49:09AM
16K0143-10	9A-LTD-VLR-WFT	WFT=Waterfo;; Tap	10/22/2016 09:18	11/2/2016 11:49:10AM
16K0143-11	10A-LTD-VLR-S1		10/22/2016 09:19	11/2/2016 11:49:10AM
16K0143-12	11A-LTD-JVLR-S1	JVLR=Junior Varsirt Lo	10/22/2016 09:20	11/2/2016 11:49:10AM
16K0143-13	12A-LTD-GU-S	GU=Garage Utility	10/22/2016 09:21	11/2/2016 11:49:10AM
16K0143-14	13A-LTD-MMR-S1	MMR=Mechanics Mens	10/22/2016 09:22	11/2/2016 11:49:10AM
16K0143-15	14A-LTD-MSR-S1	MSR=Mechanics Show	10/22/2016 09:23	11/2/2016 11:49:10AM
16K0143-16	15A-LTD-WF	Outside MSR	10/22/2016 09:24	11/2/2016 11:49:10AM
16K0143-17	16A-LTD-MBR-S1	MBR=Mechanics Break	10/22/2016 09:33	11/2/2016 11:49:10AM
16K0143-18	17A-LTD-Con-S1	Con=Concession	10/22/2016 09:33	11/2/2016 11:49:10AM

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Analytical Results

Date: *Tuesday, November 22, 2016*

Client:	The Lotis Engineering Group, P.C.	***Work Order:***	16K0143
Client Project:	LTD	***Received:***	11/02/2016 11:49

Analyses	Certs	Result	Units	Qual	Analyzed	Tech	Method
02 1A-LTD-DBR-S1 - DBR=Driver's Break Room							*Collected: 10/22/2016 09:11*
Lead	gdmnoi	***2.77***	ug/L		11/21/2016 16:57	RPL	EPA 200.8 Rev 5.4
03 2A-LTD-DBR-WF							*Collected: 10/22/2016 09:11*
Lead	gdmnoi	***< 1.00***	ug/L		11/21/2016 16:58	RPL	EPA 200.8 Rev 5.4
04 3A-LTD-DMR-S1 - DMR=Driver's Mensroom							*Collected: 10/22/2016 09:12*
Lead	gdmnoi	***5.40***	ug/L		11/21/2016 16:59	RPL	EPA 200.8 Rev 5.4
05 4A-LTD-DMR-S2							*Collected: 10/22/2016 09:13*
Lead	gdmnoi	***13.4***	ug/L		11/21/2016 17:01	RPL	EPA 200.8 Rev 5.4
06 5A-LTD-DWR-S1 - DWR=Driver's Womensroom							*Collected: 10/22/2016 09:15*
Lead	gdmnoi	***7.78***	ug/L		11/21/2016 17:04	RPL	EPA 200.8 Rev 5.4
07 6A-LTD-DWR-S2							*Collected: 10/22/2016 09:15*
Lead	gdmnoi	***1.86***	ug/L		11/21/2016 17:05	RPL	EPA 200.8 Rev 5.4
08 7A-LTD-WDR-S3							*Collected: 10/22/2016 09:16*
Lead	gdmnoi	***5.83***	ug/L		11/21/2016 17:09	RPL	EPA 200.8 Rev 5.4
09 8A-LTD-VLR-S1 - VLR=Varsity Lockerroom							*Collected: 10/22/2016 09:16*
Lead	gdmnoi	***2.52***	ug/L		11/21/2016 17:10	RPL	EPA 200.8 Rev 5.4
10 9A-LTD-VLR-WFT - WFT=Waterfo;; Tap							*Collected: 10/22/2016 09:18*
Lead	gdmnoi	***< 1.00***	ug/L		11/21/2016 17:11	RPL	EPA 200.8 Rev 5.4
11 10A-LTD-VLR-S1							*Collected: 10/22/2016 09:19*
Lead	gdmnoi	***11.4***	ug/L		11/21/2016 17:15	RPL	EPA 200.8 Rev 5.4

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Analytical Results

Date: *Tuesday, November 22, 2016*

12	*11A-LTD-JVLR-S1 - JVLR=Junior Varsirt Lockerroom*					*Collected: 10/22/2016 09:20*	
Lead	**gdmnoi**	***2.33***	ug/L	11/21/2016 17:16	RPL	EPA 200.8 Rev 5.4	
13	*12A-LTD-GU-S - GU=Garage Utility*					*Collected: 10/22/2016 09:21*	
Lead	**gdmnoi**	***1.94***	ug/L	11/21/2016 17:17	RPL	EPA 200.8 Rev 5.4	
14	*13A-LTD-MMR-S1 - MMR=Mechanics Mensroom*					*Collected: 10/22/2016 09:22*	
Lead	**gdmnoi**	***10.0***	ug/L	11/21/2016 17:19	RPL	EPA 200.8 Rev 5.4	
15	*14A-LTD-MSR-S1 - MSR=Mechanics Showerroom*					*Collected: 10/22/2016 09:23*	
Lead	**gdmnoi**	***11.6***	ug/L	11/21/2016 17:20	RPL	EPA 200.8 Rev 5.4	
16	*15A-LTD-WF - Outside MSR*					*Collected: 10/22/2016 09:24*	
Lead	**gdmnoi**	***6.90***	ug/L	11/21/2016 17:23	RPL	EPA 200.8 Rev 5.4	
17	*16A-LTD-MBR-S1 - MBR=Mechanics Breakroom*					*Collected: 10/22/2016 09:33*	
Lead	**gdmnoi**	***11.2***	ug/L	11/21/2016 17:25	RPL	EPA 200.8 Rev 5.4	
18	*17A-LTD-Con-S1 - Con=Concession*					*Collected: 10/22/2016 09:33*	
Lead	**gdmnoi**	***1.02***	ug/L	11/21/2016 17:26	RPL	EPA 200.8 Rev 5.4	

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

B = Detected in the associated method Blank at a concentration above the routine RL
b- = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
b* = Detected in the associated method Blank at a concentration greater than half the RL
CFU = Colony forming units
D = Dilution performed on sample
DF = Dilution Factor
g = Gram
E = Value above quantitation range
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL (Metals / Organics)
LOD = Limit of Detection
LOQ = Limit of Quantitation
m3 = Meters cubed
MDL = Method Detection Limit
mg/Kg = Milligrams per Kilogram (ppm)
mg/L = Milligrams per Liter (ppm)
NA = Not Analyzed
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)
NR = Not Recovered
R = RPD outside accepted recovery limits
RL = Reporting Limit
S = Spike recovery outside recovery limits
Surr = Surrogate
U = Undetected
> = Greater than
< = Less than
% = Percent
* = Result exceeds project specific limits

ANALYTE TYPES: (AT)

A,B = Target Analyte
I = Internal Standard
M = Summation Analyte
S = Surrogate
T = Tentatively Identified Compound (TIC, concentration estimated)

QC SAMPLE IDENTIFICATIONS

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRL = Client Required Reporting Limit
PDS = Post Digestion Spike
QCS = Quality Control Standard
ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

CERTIFICATIONS (Certs)

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

[d] Illinois EPA drinking water, wastewater and solid waste analysis (#200064)
[g] Indiana SDH chemical analysis of drinking water (#C-45-03)
[i] Kansas Dept Health & Env. NELAP (#E-10397)
[m] New York State Department of Health Wadsworth (#12006)
[n] Pennsylvania Department of Environmental Protect (#68-04863)
[o] Virginia Department of General Services Division of Consolidated Laboratory Services (#7990)

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COOLER INSPECTION

Date: Tuesday, November 22, 2016

Client Name: The Lotis Engineering Group, P.C.

Date/Time Received: 10/28/2016 15:20

Work Order Number: 16K0143

Received by: Nicole Rainwater

Checklist completed by: 11/2/2016 11:49:09AM | Nicole Rainwater

Reviewed by: 11/4/2016 | KAZ

Carrier Name: Client Delivered

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 21.5° C

After-Hour Arrival?	Yes	☐	No	☑		
Shipping container/cooler in good condition?	Yes	☑	No	☐	Not Present	☐
Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	Not Present	☑
Custody seals intact on sample containers?	Yes	☐	No	☐	Not Present	☑
COC present?	Yes	☑	No	☐		
COC included sufficient client identification?	Yes	☑	No	☐		
COC included sufficient sample collector information?	Yes	☑	No	☐		
COC included a sample description?	Yes	☑	No	☐		
COC agrees with sample labels?	Yes	☑	No	☐		
COC identified the appropriate matrix?	Yes	☑	No	☐		
COC included date of collection?	Yes	☑	No	☐		
COC included time of collection?	Yes	☑	No	☐		
COC identified the appropriate number of containers?	Yes	☐	No	☑		
Samples in proper container/bottle?	Yes	☑	No	☐		
Sample containers intact?	Yes	☑	No	☐		
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
If the samples are preserved, are the preservatives identified?	Yes	☑	No	☐		

If No, adjusted by? _____

COC included the requested analyses?	Yes	☑	No	☐		
COC signed when relinquished and received?	Yes	☑	No	☐		
Samples received on ice?	Yes	☐	No	☑		
Samples properly preserved?	Yes	☑	No	☐		
Voa vials for aqueous samples have zero headspace?	Yes	☐	No	☐	No VOA vials submitted	☑

Cooler Comments:

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

Sample ID	Client Sample ID	Comments
16K0143-01	Example Sample	
16K0143-02	1A-LTD-DBR-S1	
16K0143-03	2A-LTD-DBR-WF	
16K0143-04	3A-LTD-DMR-S1	
16K0143-05	4A-LTD-DMR-S2	
16K0143-06	5A-LTD-DWR-S1	
16K0143-07	6A-LTD-DWR-S2	
16K0143-08	7A-LTD-WDR-S3	
16K0143-09	8A-LTD-VLR-S1	
16K0143-10	9A-LTD-VLR-WFT	
16K0143-11	10A-LTD-VLR-S1	
16K0143-12	11A-LTD-JVLR-S1	
16K0143-13	12A-LTD-GU-S	
16K0143-14	13A-LTD-MMR-S1	
16K0143-15	14A-LTD-MSR-S1	
16K0143-16	15A-LTD-WF	
16K0143-17	16A-LTD-MBR-S1	
16K0143-18	17A-LTD-Con-S1	

16K0143

SampleID	Matrix	SampleName	SampleAlias	Sampled	SampledBy
1	Aqueous	[redacted]			
2	Aqueous				
3	Aqueous				
4	Aqueous				
5	Aqueous				
6	Aqueous				
7	Aqueous				
8	Aqueous				
9	Aqueous				
10	Aqueous				
11	Aqueous				
12	Aqueous				
13	Aqueous				
14	Aqueous				
15	Aqueous				
16	Aqueous				
17	Aqueous				
18	Aqueous				

01 – 18

[redacted] 10/28/16 1520

to Mircobac

Rec @ Lab! Nicole Rainwater 10-28-16/1520

22.0
-0.5
21.5°C

NJ

San	Mat	SampleName	SampleAlias	Sampled	SampledBy
1	Aqu	1A-LTD-DBR-S1	DBR=Driver's Break Room	10/22/2016 09:11	Tom Fowler
2	Aqu	2A-LTD-DBR-WF		10/22/2016 09:11	Tom Fowler
3	Aqu	3A-LTD-DMR-S1	DMR=Driver's Mensroom	10/22/2016 09:12	Tom Fowler
4	Aqu	4A-LTD-DMR-S2		10/22/2016 09:13	Tom Fowler
5	Aqu	5A-LTD-DWR-S1	DWR=Driver's Womensroom	10/22/2016 09:15	Tom Fowler
6	Aqu	6A-LTD-DWR-S2		10/22/2016 09:15	Tom Fowler
7	Aqu	7A-LTD-WDR-S3		10/22/2016 09:16	Tom Fowler
8	Aqu	8A-LTD-VLR-S1	VLR=Varsity Lockerroom	10/22/2016 09:16	Tom Fowler
9	Aqu	9A-LTD-VLR-WFT	WFT=Waterfo;; Tap	10/22/2016 09:18	Tom Fowler
10	Aqu	10A-LTD-VLR-S1		10/22/2016 09:19	Tom Fowler
11	Aqu	11A-LTD-JVLR-S1	JVLR=Junior Varsirt Lockerroom	10/22/2016 09:20	Tom Fowler
12	Aqu	12A-LTD-GU-S	GU=Garage Utility	10/22/2016 09:21	Tom Fowler
13	Aqu	13A-LTD-MMR-S1	MMR=Mechanics Mensroom	10/22/2016 09:22	Tom Fowler
14	Aqu	14A-LTD-MSR-S1	MSR=Mechanics Showerroom	10/22/2016 09:23	Tom Fowler
15	Aqu	15A-LTD-WF	Outside MSR	10/22/2016 09:24	Tom Fowler
16	Aqu	16A-LTD-MBR-S1	MBR=Mechanics Breakroom	10/22/2016 09:33	Tom Fowler
17	Aqu	17A-LTD-Con-S1	Con=Concession	10/22/2016 09:33	Tom Fowler