



Potable Water Testing Report

Prepared for:

Voorhees Township Public Schools
329 Route 73
Voorhees, NJ 08043

Attention: Clark J. Mathes, Director of Buildings and Grounds

Project:

Water Testing for Lead
Voorhees Middle School
Voorhees, NJ

Project Date: April 17, 2017

Prepared By:

David M. Kichula, CIH

Project No. 17148

May 12, 2017

Scope of Work:

Potable water testing was conducted at the Voorhees Middle School in Voorhees, NJ. The testing protocol included inorganic lead in Drinking Water. The field investigation was performed on April 17, 2017 by Voorhees Maintenance Staff.

Procedures:

Potable Water Testing:

Water samples were collected from a representative number of sinks and fountains throughout the school. The water samples were analyzed for the primary inorganic compound lead. The samples were collected as first draw samples from the water fixtures. The samples were collected early in the morning before any use had occurred by students and staff.

The results are reported in units of microgram per liter ($\mu\text{g/L}$) and are compared to the Drinking Water Standards established by the federal Environmental Protection Agency (EPA) and adopted by the New Jersey Department of Environmental Protection (NJDEP). The testing results are summarized in Table I and the laboratory reports are enclosed in Appendix A.

The Lead and Copper Rule established an action level of 15 $\mu\text{g/l}$ for lead. This means no more than 10 percent of the collected samples can be above the action level.

Discussion:

The drinking water results are summarized in Table I. The lead levels are reported in the range of $<1 \mu\text{g/L}$ to 35.5 $\mu\text{g/L}$. All but one sample is within the Action Level of 15 $\mu\text{g/L}$. One sample collected from a water cooler in A-Wing Hallway (VMS-DW-72-A-Hall-B) is reported with levels above the action level (35.5 $\mu\text{g/L}$).

The Lead and Copper Rule specifies that no more than 10 percent of the samples collected can be above the action level. Based on the sample results we conclude that the drinking water lead levels at the Voorhees Middle School are well within the EPA standards.

Please contact us should you have any questions. We look forward to being of continued assistance. Your time and cooperation are greatly appreciated.

Sincerely;



David M. Kichula, CIH

Table I
Drinking Water Result Summary
Voorhees Middle School, Voorhees, NJ
4/17/2017

<i>Location</i>	<i>Source</i>	<i>Results µg/L</i>
1A. Theatre Hall	Water Cooler	ND
1B. Theatre Hall	Water Cooler	ND
1C. Theatre Hall	Water Cooler	ND
2. Main Office	Kitchen Cold	ND
3. A-Wing Nurse	Nurse's Sink	ND
4. Hallway	Water Cooler	4.65
5. CER Office	Kitchen Cold	ND
6. A-Wing Lounge	Kitchen Cold	ND
7A. A-Wing Hallway	Water Cooler	ND
7B. A-Wing Hallway	Water Cooler	ND
8A. A-Wing Hallway	Water Cooler	6.88
8B. A-Wing Hallway	Water Cooler	1.93
9A. D-Wing Hallway	Water Cooler	ND
10A. D-Wing Hallway	Water Cooler	ND
10C. D-Wing Hallway	Water Cooler	ND
11B. D-Wing Hallway	Water Cooler	ND
12A.B-Wing Hallway	Water Cooler	ND
12B. B-Wing Hallway	Water Cooler	ND
13. B-Wing Lounge	Kitchen Cold	ND
14. Nurse's Sink	Nurse's Sink	1.39
15. C-Wing Hallway	Water Cooler	2.08
16A. C-Wing Hallway	Water Cooler	2.92
16B. C-Wing Hallway	Water Cooler	1.47
17A. E-Wing Hallway	Water Cooler	ND
17B. E-Wing Hallway	Water Cooler	ND
18A. E-Wing Hallway	Water Cooler	ND
18B. E-Wing Hallway	Water Cooler	ND
19A. APR Hallway	Water Cooler	ND
19B. APR Hallway	Water Cooler	ND
20A. APR Hallway	Water Cooler	ND
20B. APR Hallway	Water Cooler	ND
21. Kitchen	Food Prep	ND

EPA/NJDEP Action Level – 15 ppb

Table I
Drinking Water Result Summary
ET Hamilton Elementary School, Voorhees, NJ
4/17/2017

<i>Location</i>	<i>Source</i>	<i>Results µg/L</i>
22. Kitchen	Ice Machine	ND
23. Dish Room	Cafeteria Outlet	ND
24. Old Café Lounge	Kitchen Cold	ND
25. Old Café Lounge	Ice Machine	2.53
26A. A-Hallway	Water Cooler	3.94
26B. A-Hallway	Water Cooler	35.5
27A. A-Hallway	Water Cooler	2.49
27B. A-Hallway	Water Cooler	ND
28. Boy's Locker Room	Bubbler	ND
29. Girl's Locker Room	Bubbler	ND
30A. Gym Lobby	Water Cooler	ND
30B. Gym Lobby	Water Cooler	ND
31. Cold Outlet	Water Cooler	1.46

EPA/NJDEP Action Level – 15 ppb

Appendix A
Laboratory Reports and Field Data Sheets



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 303-2500 Fax: (856) 858-4571 Email: EnvChemistry2@emsl.com

Attn:

Matthew Hines
Air Consulting Services, LLC
301 East Ward Street
Hightstown, NJ 08520

4/27/2017

Phone: (609) 371-2489
Fax: (609) 371-0827

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 4/20/2017. The results are tabulated on the attached data pages for the following client designated project:

17148 - Voorhees Middle School

The reference number for these samples is EMSL Order #011703022. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:

Phillip Worby, Environmental Chemistry
Laboratory Director



The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.
NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, CA ELAP 1877

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.EMSL.com>EnvChemistry2@emsl.com

EMSL Order: 011703022

CustomerID: AIRC54

CustomerPO:

ProjectID:

Attn: **Matthew Hines**
Air Consulting Services, LLC
301 East Ward Street
Hightstown, NJ 08520

Phone: (609) 371-2489
 Fax: (609) 371-0827
 Received: 04/20/17 12:00 PM

Project: 17148 - Voorhees Middle School

Analytical Results

Client Sample Description		1A	Collected:	4/17/2017	Lab ID:	011703022-0001		
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Theatre Hall								
Client Sample Description		1B	Collected:	4/17/2017	Lab ID:	011703022-0002		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Theatre Hall								
Client Sample Description		1C	Collected:	4/17/2017	Lab ID:	011703022-0003		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Theatre Hall								
Client Sample Description		2	Collected:	4/17/2017	Lab ID:	011703022-0004		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Main Office								
Client Sample Description		3	Collected:	4/17/2017	Lab ID:	011703022-0005		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
A-Wing Nurse								
Client Sample Description		4	Collected:	4/17/2017	Lab ID:	011703022-0006		
200.8	Lead	4.65	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Hallway								
Client Sample Description		5	Collected:	4/17/2017	Lab ID:	011703022-0007		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
CER Office								
Client Sample Description		6	Collected:	4/17/2017	Lab ID:	011703022-0008		
A-Wing Lounge								

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Analytical Results

Client Sample Description		6	Collected:	4/17/2017	Lab ID:	011703022-0008		
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
A-Wing Lounge								
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		7A	Collected:	4/17/2017	Lab ID:	011703022-0009		
A-Wing Hallway								
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		7B	Collected:	4/17/2017	Lab ID:	011703022-0010		
A-Wing Hallway								
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		8A	Collected:	4/17/2017	Lab ID:	011703022-0011		
A-Wing Hallway								
200.8	Lead	6.88	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		8B	Collected:	4/17/2017	Lab ID:	011703022-0012		
A-Wing Hallway								
200.8	Lead	1.93	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		9A	Collected:	4/17/2017	Lab ID:	011703022-0013		
D-Wing Hallway								
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		10A	Collected:	4/17/2017	Lab ID:	011703022-0014		
D-Wing Hallway								
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		10C	Collected:	4/17/2017	Lab ID:	011703022-0015		
D-Wing Hallway								
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst

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Client Sample Description		10C	Collected:	4/17/2017	Lab ID:	011703022-0015		
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
D-Wing Hallway								
Client Sample Description		11B	Collected:	4/17/2017	Lab ID:	011703022-0016		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
D-Wing Hallway								
Client Sample Description		12A	Collected:	4/17/2017	Lab ID:	011703022-0017		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
B-Hallway								
Client Sample Description		12B	Collected:	4/17/2017	Lab ID:	011703022-0018		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
B-Hallway								
Client Sample Description		13	Collected:	4/17/2017	Lab ID:	011703022-0019		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
B-Wing Lounge								
Client Sample Description		14	Collected:	4/17/2017	Lab ID:	011703022-0020		
200.8	Lead	1.39	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
B-Wing Nurse								
Client Sample Description		15	Collected:	4/17/2017	Lab ID:	011703022-0021		
200.8	Lead	2.08	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
C-Hallway								
Client Sample Description		16A	Collected:	4/17/2017	Lab ID:	011703022-0022		
C-Hallway								

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Client Sample Description		16A	Collected:	4/17/2017	Lab ID:	011703022-0022		
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	2.92	1.00	µg/L	4/21/2017	AE	4/25/2017	SM
C-Hallway								
Client Sample Description		16B	Collected:	4/17/2017	Lab ID:	011703022-0023		
200.8	Lead	1.47	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
C-Hallway								
Client Sample Description		17A	Collected:	4/17/2017	Lab ID:	011703022-0024		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
E-Hallway								
Client Sample Description		17B	Collected:	4/17/2017	Lab ID:	011703022-0025		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
E-Hallway								
Client Sample Description		18A	Collected:	4/17/2017	Lab ID:	011703022-0026		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
E-Hallway								
Client Sample Description		18B	Collected:	4/17/2017	Lab ID:	011703022-0027		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
E-Hallway								
Client Sample Description		19A	Collected:	4/17/2017	Lab ID:	011703022-0028		
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
APR Hallway								
Client Sample Description		19B	Collected:	4/17/2017	Lab ID:	011703022-0029		
APR Hallway								

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Analytical Results

Client Sample Description		19B	Collected:	4/17/2017	Lab ID:	011703022-0029		
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		20A	Collected:	4/17/2017	Lab ID:	011703022-0030		
		APR Hallway						
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		21	Collected:	4/17/2017	Lab ID:	011703022-0031		
		Kitchen						
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		22	Collected:	4/17/2017	Lab ID:	011703022-0032		
		Kitchen						
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		23	Collected:	4/17/2017	Lab ID:	011703022-0033		
		Dish Room						
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		24	Collected:	4/17/2017	Lab ID:	011703022-0034		
		Old Café Lounge						
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		25	Collected:	4/17/2017	Lab ID:	011703022-0035		
		Old Café Lounge						
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	2.53	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
Client Sample Description		26A	Collected:	4/17/2017	Lab ID:	011703022-0036		
		A-Hallway						
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst

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Analytical Results

<i>Client Sample Description</i>		<i>Collected:</i>	<i>4/17/2017</i>	<i>Lab ID:</i>	<i>011703022-0036</i>			
<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>RL</i>	<i>Units</i>	<i>Prep Date</i>	<i>Analyst</i>	<i>Analysis Date</i>	<i>Analyst</i>
200.8	Lead	3.94	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
<i>Client Sample Description</i>		<i>Collected:</i>	<i>4/17/2017</i>	<i>Lab ID:</i>	<i>011703022-0037</i>			
26A A-Hallway								
200.8	Lead	35.5	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
<i>Client Sample Description</i>		<i>Collected:</i>	<i>4/17/2017</i>	<i>Lab ID:</i>	<i>011703022-0038</i>			
26B A-Hallway								
200.8	Lead	2.49	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
<i>Client Sample Description</i>		<i>Collected:</i>	<i>4/17/2017</i>	<i>Lab ID:</i>	<i>011703022-0039</i>			
27A A-Hallway								
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
<i>Client Sample Description</i>		<i>Collected:</i>	<i>4/17/2017</i>	<i>Lab ID:</i>	<i>011703022-0040</i>			
27B A-Hallway								
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
<i>Client Sample Description</i>		<i>Collected:</i>	<i>4/17/2017</i>	<i>Lab ID:</i>	<i>011703022-0041</i>			
29 Gin's Locker Room								
200.8	Lead	ND	1.00	µg/L	4/21/2017	AE	4/24/2017	KB
<i>Client Sample Description</i>		<i>Collected:</i>	<i>4/17/2017</i>	<i>Lab ID:</i>	<i>011703022-0042</i>			
30A Gym Lobby								
200.8	Lead	ND	1.00	µg/L	4/24/2017	AE	4/24/2017	KB
<i>Client Sample Description</i>		<i>Collected:</i>	<i>4/17/2017</i>	<i>Lab ID:</i>	<i>011703022-0043</i>			
30B Gym Lobby								
200.8	Lead	ND	1.00	µg/L	4/24/2017	AE	4/25/2017	KB
<i>Client Sample Description</i>		<i>Collected:</i>	<i>4/17/2017</i>	<i>Lab ID:</i>	<i>011703022-0043</i>			
31 Cold Outlet								
200.8	Lead	ND	1.00	µg/L	4/24/2017	AE	4/25/2017	KB

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Analytical Results

Client Sample Description	31 Cold Outlet	Collected:	4/17/2017	Lab ID:	011703022-0043			
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
200.8	Lead	1.46	1.00	µg/L	4/24/2017	AE	4/25/2017	KB

Definitions:

ND - indicates that the analyte was not detected at the reporting limit
 RL - Reporting Limit (Analytical)