



20-21 Wagaraw Road – Bldg. 35E, Fair Lawn, NJ 07410
PH (973) 636-9145 / FAX (973) 636-9144
Email: info@envirovisionconsultants.com

CLIENT: Linden School District	Project Number 22-224
PROJECT: Lead in Drinking Water	McManus Middle School
ADDRESS: 300 Edgewood Rd, Linden NJ 07036	Report Date: July 1, 2022
<u>Field Technician: Jordan Prysko</u>	

As per your request, EnviroVision Consultants, Inc. was contracted by the Linden Public School District to conduct Lead (Pb) in water sampling at the McManus Middle School on June 11, 2022. The sample location(s), in addition to unique sample location codes were determined/assigned by school district personnel. The school district performed the proper flushing of outlets prior to sampling and EnviroVision was instructed to collect only first draw samples for this sampling event. The school district's corresponding flushing logs should be attached to this report.

The facility was closed at the time of sampling in order to prevent occupants from utilizing any water outlets. After flushing, the water in the facility must remain motionless in the plumbing fixtures for a minimum of 8 hours, but no more than 48 hours. Cold water samples were collected in pre-cleaned high-density polyethylene (HDPE) 250mL wide mouth bottles.

The samples were analyzed at EMSL Analytical, Inc. in Cinnaminson, New Jersey *(NJDEP#03036), accredited in accordance with NELAC (National Environmental Laboratory Accreditation Conference). The analytical method utilized was inductively coupled plasma mass spectrometry ICP-MS (EPA 200.8).

Nineteen water samples were collected from the McManus Middle. In addition, a blank sample was collected and analyzed, as required, for Quality Assurance purposes.

Results: Fifteen of the samples analyzed were either "None Detected" or less than the EPA established threshold for lead in drinking water. However, four of the samples were above the allowable limit established by The United States Environmental Protection Agency (US EPA) of 15 parts per billion (ppb) or ug/L. When a water outlet/faucet meets or exceeds the USEPA threshold, EnviroVision recommends that the outlet/faucet be put out of service until the system can be further evaluated and proper remedial action is achieved.



MCMANUS MIDDLE SCHOOL - LEAD(Pb) in Water Result(s) of Concern

Outlet ID/Sample Number	Location	Results
M-CT-04	Kitchen (coffee maker)	72.3 ppb, ug/L
M-CT-05	Kitchen next to Stove	111 ppb, ug/L
M-WF-09	Hall by 112 (fountain)	19.3 ppb, ug/L
M-EC-12	Rm 236 (sink)	75.0 ppb, ug/L

Note* 1ppb = 1ug/L

Due to the elevated level in the above-mentioned outlet, we recommend that some or all of the following steps be taken at this time.

- Closure of the affected water outlet(s) until the system can be further evaluated and proper remedial action is achieved.
- Removal and replacement with non-lead containing fixtures.
- Installation of filtration systems.
- Development of a Flushing Program for those taps high in lead and turbidity (this may include automatic flushing systems).
- Contact the local water utility company to obtain information about their corrosion control procedures and how it might affect the District's control plans.
- Permanent closure of outlet(s).

Once the remedial action(s) are complete, follow up testing is required to ensure alterations/replacement to plumbing fixtures has lowered the amount of lead to acceptable levels.

Should you have any questions, or if we could be of any further assistance, please feel free to contact our office. EnviroVision looks forward to providing you with the service and attention to detail you have come to expect from us.

Sincerely,
EnviroVision Consultants, Inc.

Cathy DiNardo

Cathy DiNardo, Project Manager
Attached: Lab results, associated 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:

**Frederick Larson
EnviroVision Consultants, Inc
20-21 Wagaraw Rd
Bldg 35E
Fair Lawn, NJ 07410**

7/1/2022

Phone: (973) 636-9145

Fax: (973) 636-9144

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 6/15/2022. The results are tabulated on the attached data pages for the following client designated project:

22-224 McManus Middle School

The reference number for these samples is EMSL Order #012209512. 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:

Owen McKenna, 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: 012209512

CustomerID: RAMA51

CustomerPO:

ProjectID:

Attn: **Frederick Larson**
EnviroVision Consultants, Inc
20-21 Wagaraw Rd
Bldg 35E
Fair Lawn, NJ 07410

Phone: (973) 636-9145
 Fax: (973) 636-9144
 Received: 6/15/2022 09:00 AM

Project: 22-224 McManus Middle School

Analytical Results

Client Sample Description		01 M-NS-01 Nurse Room (Sink)	Collected:	6/11/2022 11:30:00 AM	Lab ID:	012209512-0001	
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst	
METALS							
200.8	Lead	1.77	1.00 µg/L	6/27/2022	KG	6/28/2022 19:21	KG
Client Sample Description		02 M-KS-02 Kitchen (Sink)	Collected:	6/11/2022 11:33:00 AM	Lab ID:	012209512-0002	
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst	
METALS							
200.8	Lead	3.04	1.00 µg/L	6/27/2022	KG	6/28/2022 19:26	KG
Client Sample Description		03 M-KS-03 Kitchen (Sink)	Collected:	6/11/2022 11:34:00 AM	Lab ID:	012209512-0003	
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst	
METALS							
200.8	Lead	ND	1.00 µg/L	6/27/2022	KG	6/28/2022 19:27	KG
Client Sample Description		04 M-CT-04 Kitchen (Coffee Marker)	Collected:	6/11/2022 11:40:00 AM	Lab ID:	012209512-0004	
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst	
METALS							
200.8	Lead	72.3	1.00 µg/L	6/21/2022	VD	6/22/2022 22:30	JW
Client Sample Description		05 M-CT-05 Next to Stove	Collected:	6/11/2022 11:40:00 AM	Lab ID:	012209512-0005	
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst	
METALS							
200.8	Lead	111 D	5.00 µg/L	6/21/2022	VD	6/23/2022 12:01	JW

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 Fax: (973) 636-9144
 Received: 6/15/2022 09:00 AM

Project: 22-224 McManus Middle School

Analytical Results

Client Sample Description		06 M-WC-06 Cafeteria (Watercooler)	Collected:		6/11/2022 11:45:00 AM	Lab ID:		012209512-0006
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	10.1	1.00 µg/L		6/27/2022	KG	6/28/2022 19:29	KG
Client Sample Description		07 M-KS-05 Cafeteria (Watercooler)	Collected:		6/11/2022 11:47:00 AM	Lab ID:		012209512-0007
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	ND	1.00 µg/L		6/27/2022	KG	6/28/2022 19:34	KG
Client Sample Description		08 M-WC-07 Hall by 118 (Watercooler)	Collected:		6/11/2022 11:49:00 AM	Lab ID:		012209512-0008
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	ND	1.00 µg/L		6/27/2022	KG	6/28/2022 19:35	KG
Client Sample Description		09 M-WF-08 Hall by 112 (Fountain)	Collected:		6/11/2022 11:51:00 AM	Lab ID:		012209512-0009
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	14.1	1.00 µg/L		6/27/2022	KG	6/28/2022 19:37	KG
Client Sample Description		10 M-WF-09 Hall by 112 (Fountain)	Collected:		6/11/2022 11:53:00 AM	Lab ID:		012209512-0010
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	19.3	1.00 µg/L		6/27/2022	KG	6/28/2022 19:38	KG

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Fair Lawn, NJ 07410

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Analytical Results

Client Sample Description		11 M-WC-10 Hall across office (Watercooler)	Collected:		6/11/2022 11:56:00 AM	Lab ID:		012209512-0011
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	3.09	1.00 µg/L		6/27/2022	KG	6/28/2022 19:40	KG

Client Sample Description		12 M-WC-11 Hall by 104 (Watercooler)	Collected:		6/11/2022 11:58:00 AM	Lab ID:		012209512-0012
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	2.73	1.00 µg/L		6/27/2022	KG	6/28/2022 19:41	KG

Client Sample Description		13 M-WF-11A Girls Locker Room (Fountain)	Collected:		6/11/2022 12:03:00 PM	Lab ID:		012209512-0013
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	4.36	1.00 µg/L		6/27/2022	KG	6/28/2022 19:43	KG

Client Sample Description		14 M-EC-12 Room 236 (Sink)	Collected:		6/11/2022 12:06:00 PM	Lab ID:		012209512-0014
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	75.0	1.00 µg/L		6/27/2022	KG	6/28/2022 19:47	KG

Client Sample Description		15 M-EC-13 Room 236 (Sink)	Collected:		6/11/2022 12:08:00 PM	Lab ID:		012209512-0015
Method	Parameter	Result	RL Units		Prep Date & Analyst		Analysis Date & Analyst	
METALS								
200.8	Lead	3.54	1.00 µg/L		6/27/2022	KG	6/28/2022 19:52	KG

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 Received: 6/15/2022 09:00 AM

Project: 22-224 McManus Middle School

Analytical Results

Client Sample Description		16 M-EC-14 Room 236 (Sink)	Collected:		6/11/2022 12:10:00 PM	Lab ID:		012209512-0016
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst		
METALS								
200.8	Lead	3.33	1.00 µg/L	6/27/2022	KG	6/28/2022 19:54	KG	
Client Sample Description		17 M-WC-15 Hall by 222 (Watercooler)	Collected:		6/11/2022 12/12/2022	Lab ID:		012209512-0017
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst		
METALS								
200.8	Lead	ND	1.00 µg/L	6/27/2022	KG	6/28/2022 19:55	KG	
Client Sample Description		18 M-WF-16 Hall by 206 (Fountain)	Collected:		6/11/2022 12:14:00 PM	Lab ID:		012209512-0018
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst		
METALS								
200.8	Lead	9.00	1.00 µg/L	6/27/2022	KG	6/28/2022 19:57	KG	
Client Sample Description		19 M-WF-17 Hall by 206 (Fountain)	Collected:		6/11/2022 12:15:00 PM	Lab ID:		012209512-0019
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst		
METALS								
200.8	Lead	8.28	1.00 µg/L	6/27/2022	KG	6/28/2022 19:58	KG	
Client Sample Description		20 M-BLANK	Collected:		6/11/2022 12:17:00 PM	Lab ID:		012209512-0020
Method	Parameter	Result	RL Units	Prep Date & Analyst		Analysis Date & Analyst		
METALS								
200.8	Lead	ND	1.00 µg/L	6/27/2022	KG	6/28/2022 20:00	KG	



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Definitions:

MDL - method detection limit

J - Result was below the reporting limit, but at or above the MDL

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit (Analytical)

D - Dilution Sample required a dilution which was used to calculate final results



EMBL ANALYTICAL, INC.
TESTING • LABS • PRODUCTS • TRAINING

Lead Chain of Custody

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077


PHONE: (800) 220-3675

EMAIL: CinnamonsonLeadLab@omsi.com

012209512-~~0000~~

Customer Information	Customer ID: RAMA51			Billing Information	Billing ID: RAMA51		
	Company Name: EnviroVision Consultants, Inc.				Company Name: EnviroVision Consultants, Inc.		
	Contact Name: Frederick Larson				Billing Contact: Frederick Larson		
	Street Address: 20-21 Wagaraw Rd, Bldg 35E				Street Address: 20-21 Wagaraw Rd, Bldg 35E		
	City, State, Zip: Fair Lawn, NJ, 07410		Country: US		City, State, Zip: Fair Lawn, NJ, 07410		Country: US
	Phone: 973-636-9145				Phone: 973-636-9145		
	Email(s) for Report: info@envirovisionconsultants.com				Email(s) for Invoice: info@envirovisionconsultants.com		

Project Information									
Project Name/No: 22-224 McManus Middle School							Purchase Order:		
EMSL LIMS Project ID: (If applicable, EMSL will provide)					US State where samples collected: NJ		State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)		
Sampled By Name: Jordan Ryse			Sampled By Signature: [Signature]			No of Samples in Shipment:			
Turn-Around-Time (TAT)									
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 8 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 32 Hour	<input type="checkbox"/> 48 Hour	<input type="checkbox"/> 72 Hour	<input type="checkbox"/> 96 Hour	<input type="checkbox"/> 1 Week	<input checked="" type="checkbox"/> 2 Week	
Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.									

MATRIX	METHOD	INSTRUMENT	REPORTING LIMIT	SELECTION
CHIPS <input type="checkbox"/> % by wt. <input type="checkbox"/> ppm (mg/kg) <input type="checkbox"/> mg/liter *Reporting Limit based on a minimum 0.25g sample weight. **Not appropriate for Ceramic Tiles - XRF is recommended	SW 846-7000B	Flame Atomic Absorption	0.006% (80ppm)	<input type="checkbox"/>
	SW 846-8010D*	ICP-OES	0.0004% (4ppm)	<input type="checkbox"/>
	NIOSH 7082	Flame Atomic Absorption	4µg/liter	<input type="checkbox"/>
AIR	NIOSH 7300M / NIOSH 7303M	ICP-OES	0.5µg/filter	<input type="checkbox"/>
	NIOSH 7300M / NIOSH 7303M	ICP-MS	0.05µg/filter	<input type="checkbox"/>
WIPE <input type="checkbox"/> ASTM <input type="checkbox"/> NON-ASTM	SW 846-7000B	Flame Atomic Absorption	10µg/wipe	<input type="checkbox"/>
If no box is checked, non-ASTM Wipe is assumed	SW 846-8010D	ICP-OES	1.0µg/wipe	<input type="checkbox"/>
TCCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW 846-1311 / SW 846-8010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW 846-1312 / SW 846-8010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
TTLC	22 CCR App II, 7000B	Flame Atomic Absorption	40mg/kg (ppm)	<input type="checkbox"/>
	22 CCR App II, SW 846-8010D*	ICP-OES	2mg/kg (ppm)	<input type="checkbox"/>
STLC	22 CCR App II, 7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW 846-8010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW 846-7000B	Flame Atomic Absorption	40mg/kg (ppm)	<input type="checkbox"/>
	SW 846-8010D*	ICP-OES	2mg/kg (ppm)	<input type="checkbox"/>
Wastewater	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
Unpreserved <input type="checkbox"/>	EPA 200 7	ICP-OES	0.020 mg/L (ppm)	<input type="checkbox"/>
Preserved with HNO3 <input type="checkbox"/> PH<2	EPA 200 5	ICP-OES	0.003 mg/L (ppm)	<input type="checkbox"/>
Drinking Water	EPA 200 8	ICP-MS	0.001 mg/L (ppm)	<input checked="" type="checkbox"/>
Unpreserved <input checked="" type="checkbox"/> 				
Preserved with HNO3 <input type="checkbox"/> PH<2				
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	<input type="checkbox"/>
Other: <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Number	Sample Location	Volume / Area	Date / Time Sampled
M-NS-01	Nurse Room (Sink)	250mL	6/11/20 1130
M-KS-02	Kitchen (Sink)	↓	6/11/20 1133
M- KS -03	Kitchen (Sink)		6/11/20 1134
M-CT-04	Kitchen (coffee maker)		6/11/20 1140
M-G-05	next to stove		6/11/20 1140

Method of Shipment:		Sample Condition Upon Receipt:	
Reinquired by: J. Ryser	Date/Time:	Received by: <i>APR COURIER</i>	Date/Time: 6/14/22 8:40
Reinquired by:	Date/Time:	Received by: <i>Ehler</i>	Date/Time: 6/15/22 9:2

Controlled Document - COC-25 Lead R17 05/09/2022

*8010C Available Upon Request

☒ **AGREE TO ELECTRONIC SIGNATURE** (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

Page 1 of 2

EMSL Order Number / Lab Use Only

Cinnaminson, NJ 08077

EMAIL: CinnaminsonLeadLab@gmail.com

012209512

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Controlled Document - COC-25 Lead R17 05/09/2022

☒ **AGREE TO ELECTRONIC SIGNATURE** (By checking, I consent to signing this Chain of Custody document by electronic signature)

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