

WHITMAN

Creating Solutions. Exceeding Expectations.

LEAD IN DRINKING WATER SAMPLING

FOR

**WANDELL SCHOOL
97 EAST ALLENDALE ROAD
SADDLE RIVER, NJ 07458**

PROJECT 22-03-24T

PERFORMED BY

WHITMAN

May 9, 2022

**LEAD IN DRINKING WATER SAMPLING
WANDELL SCHOOL
SADDLE RIVER, NEW JERSEY**

Table of Contents

1.0	PROJECT BACKGROUND.....	1
2.0	SAMPLING/SCREENING METHODOLOGY	2
2.1	Purpose	2
2.2	NJDEP Limits.....	2
3.0	LEAD IN DRINKING WATER SAMPLING RESULTS DISCUSSION	3
4.0	CONCLUSIONS	3
5.0	LIMITATIONS, EXCEPTIONS AND ASSUMPTIONS	3

ATTACHMENTS

Attachment 1 – Lead Sampling Results
Attachment 2 – Floor Plan

**LEAD IN DRINKING WATER SAMPLING
WANDELL SCHOOL
SADDLE RIVER, NEW JERSEY**

1.0 PROJECT BACKGROUND

There are three ways that lead can contaminate drinking water in school facilities, the water source, the plumbing material, or the actual drinking water outlet fixture. Most sources of drinking water (e.g. ground and surface water) have no lead, or very low levels of lead (i.e., under 5 micrograms per liter [$\mu\text{g/l}$] or parts per billion [ppb]). Once the drinking water leaves the public water supply system or treatment plant, it comes into contact with piping and plumbing materials that may contain lead. Some lead may get into the water from the distribution system – the network of pipes that carry the water to homes, businesses, and schools in the community. Some communities have lead components in their distribution systems, such as lead joints in cast iron mains, service connections, pigtails, and goosenecks. Even though a public water supplier may deliver water that meets all Federal and State public health standards for lead, there may be lead in the drinking water because of the plumbing in the school facility. Interior plumbing, soldered joints, leaded brass fittings, and various drinking water outlets that contain lead materials are the primary contributors of lead in drinking water. It is also important to note that brass plumbing components contain lead. Since 1986, all plumbing materials must be “lead free”. Although there is an increased probability that a given plumbing component installed prior to 1986 could contain more lead than the newer components, the occurrence of lead in drinking water cannot be predicted solely based upon the age of the component or the school facility. The current law allows plumbing materials up to 0.25 percent lead to be labeled as “lead free”. However, prior to January 4, 2014, “lead free” allowed up to 8 percent lead content of the wetted surfaces of plumbing products including those labeled National Sanitation Foundation (NSF) certified. The best way to determine if a school might have elevated levels of lead in its drinking water is by testing the drinking water in that school. Testing facilitates an evaluation of the plumbing materials and helps target appropriate remedial action. It is a key step in understanding the problem, if there is one, and designing an appropriate response.

2.0 SAMPLING/SCREENING METHODOLOGY

2.1 Purpose

Lead in a water sample taken from an outlet can originate from the outlet fixture (e.g. the faucet, bubbler etc.), plumbing upstream of the outlet fixture (e.g. pipe, joints, valves, fittings etc.), or it can already be in the water that is entering the facility. Sample results are then compared to assist in determining the sources of lead contamination and the appropriate corrective measures. Prior to sampling, Whitman ensured that outlets deviating from normal usage were flushed 8-48 hours prior to sampling.

Initial first draw samples are taken from drinking water outlets and food preparation outlets (e.g., bubblers, kitchen faucets) in the facility. These samples determine the lead content of water sitting in water outlets that are used for drinking or cooking within the building(s).

2.2 NJDEP Limits

If initial first draw test results reveal lead concentrations greater than 15 µg/l (ppb) in a 250 mL sample for a given outlet, follow-up flush testing is required to determine if the lead contamination results are from the fixture or from interior plumbing.

3.0 LEAD IN DRINKING WATER SAMPLING RESULTS DISCUSSION

The summary of lead sample results is presented below. Sampling conducted was in compliance with NJDEP protocol and all samples were submitted to Integrated Analytical Laboratories (NJDEP NELAP #14751) under a completed Chain of Custody Form.

Outlet ID #	Date	Time	Lead Result µg/L
WF-1	4/19/2022	8:12 am	2.88
WF-2	4/19/2022	8:14 am	Non-Detect
K1	4/19/2022	8:15 am	1.12
WF-3	4/19/2022	8:17 am	Non-Detect
TL	4/19/2022	8:18 am	1.24
WF-4	4/19/2022	8:20 am	Non-Detect
WF-5	4/19/2022	8:20 am	1.05
WF-7	4/19/2022	8:22 am	Non-Detect
WF-8	4/19/2022	8:25 am	2.34
WF-6	4/19/2022	8:26 am	1.18
NO	4/19/2022	8:28 am	1.88
BLANK	4/19/2022		Non-Detect

4.0 CONCLUSIONS

All lead results were below the 15 µg/L New Jersey Action Level.

5.0 LIMITATIONS, EXCEPTIONS AND ASSUMPTIONS

Opinions and recommendations presented in this report apply to site conditions and features as they existed at the time of Whitman's site visit, and those reasonably foreseeable. They cannot necessarily apply to conditions and features of which Whitman is unaware and has not had the opportunity to evaluate.

The conclusions presented in this report are professional opinions based solely upon Whitman's visual observations of accessible areas, testing data, and current regulatory requirements. These conclusions are intended exclusively for the purpose state herein, at the sites indicated, and for the project indicated.

No expressed or implied representation or warranty is included or intended in our reports, except that our services were performed, within the limits prescribed by our client, with the customary thoroughness and competence of our profession.

Feel free to contact me at 732-390-5858 with any questions or if further clarification is needed.

Sincerely,

A handwritten signature in blue ink, consisting of stylized, overlapping loops and a trailing flourish.

John Beaupre
Senior Vice President

Attachments

ATTACHMENT 1
LEAD SAMPLING RESULTS



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

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

Attn:

**John Beaupre
Whitman Companies, Inc.
100 Franklin Square Dr.
Suite 200
Somerset, NJ 08873**

5/6/2022

Phone: (732) 390-5858

Fax: (732) 390-9496

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 4/20/2022. The results are tabulated on the attached data pages for the following client designated project:

Wondell School 22-03-24T

The reference number for these samples is EMSL Order #012206269. 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: 012206269

CustomerID: WHIT53

CustomerPO:

ProjectID:

Attn: **John Beaupre**
Whitman Companies, Inc.
100 Franklin Square Dr.
Suite 200
Somerset, NJ 08873

Phone: (732) 390-5858
Fax: (732) 390-9496
Received: 4/20/2022 09:00 AM

Project: **Wondell School 22-03-24T****Analytical Results**

Client Sample Description WF-1 **Collected:** 4/19/2022 8:12:00 AM **Lab ID:** 012206269-0001

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	2.88	1.00 µg/L	5/3/2022 VD	5/4/2022 08:56 VD

Client Sample Description WF-2 **Collected:** 4/19/2022 8:14:00 AM **Lab ID:** 012206269-0002

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	ND	1.00 µg/L	5/3/2022 VD	5/4/2022 09:01 VD

Client Sample Description K1 **Collected:** 4/19/2022 8:15:00 AM **Lab ID:** 012206269-0003

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	1.12	1.00 µg/L	5/3/2022 VD	5/4/2022 09:03 VD

Client Sample Description WF-3 **Collected:** 4/19/2022 8:17:00 AM **Lab ID:** 012206269-0004

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	ND	1.00 µg/L	5/3/2022 VD	5/4/2022 09:04 VD

Client Sample Description TL **Collected:** 4/19/2022 8:18:00 AM **Lab ID:** 012206269-0005

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	1.24	1.00 µg/L	5/3/2022 VD	5/4/2022 09:06 VD

**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: 012206269

CustomerID: WHIT53

CustomerPO:

ProjectID:

Attn: **John Beaupre**
Whitman Companies, Inc.
100 Franklin Square Dr.
Suite 200
Somerset, NJ 08873

Phone: (732) 390-5858
 Fax: (732) 390-9496
 Received: 4/20/2022 09:00 AM

Project: **Wondell School 22-03-24T****Analytical Results**

Client Sample Description WF-4 **Collected:** 4/19/2022 8:20:00 AM **Lab ID:** 012206269-0006

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	ND	1.00 µg/L	5/3/2022 VD	5/4/2022 09:07 VD

Client Sample Description WF-5 **Collected:** 4/19/2022 8:20:00 AM **Lab ID:** 012206269-0007

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	1.05	1.00 µg/L	5/3/2022 VD	5/4/2022 09:09 VD

Client Sample Description WF-7 **Collected:** 4/19/2022 8:22:00 AM **Lab ID:** 012206269-0008

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	ND	1.00 µg/L	5/3/2022 VD	5/4/2022 09:13 VD

Client Sample Description WF-8 **Collected:** 4/19/2022 8:25:00 AM **Lab ID:** 012206269-0009

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	2.34	1.00 µg/L	5/3/2022 VD	5/4/2022 09:15 VD

Client Sample Description WF-6 **Collected:** 4/19/2022 8:26:00 AM **Lab ID:** 012206269-0010

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	1.18	1.00 µg/L	5/3/2022 VD	5/4/2022 09:20 VD

**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: 012206269

CustomerID: WHIT53

CustomerPO:

ProjectID:

Attn: **John Beaupre**
Whitman Companies, Inc.
100 Franklin Square Dr.
Suite 200
Somerset, NJ 08873

Phone: (732) 390-5858
 Fax: (732) 390-9496
 Received: 4/20/2022 09:00 AM

Project: **Wondell School 22-03-24T****Analytical Results**

Client Sample Description NO **Collected:** 4/19/2022 8:28:00 AM **Lab ID:** 012206269-0011

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	1.88	1.00 µg/L	5/3/2022 VD	5/4/2022 09:21 VD

Client Sample Description WF-9 **Collected:** 4/19/2022 8:30:00 AM **Lab ID:** 012206269-0012

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	ND	1.00 µg/L	5/3/2022 VD	5/4/2022 09:23 VD

Client Sample Description BLANK **Collected:** 4/19/2022 **Lab ID:** 012206269-0013

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
METALS					
200.8	Lead	ND	1.00 µg/L	5/3/2022 VD	5/4/2022 09:24 VD

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



EMSL ANALYTICAL, INC.

Environmental Chemistry Chain of Custody

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.
200 Rt. 130 N
Cinnaminson, NJ 08077

PHONE: (800) 220-3675
EMAIL: EnvChemistry2@EMSL.com

012206269

Customer ID:		Billing ID:	
Company Name: Whitman		Company Name: Same as Customer	
Contact Name: John Beaupre		Billing Contact:	
Street Address: 100 Franklin Square Drive		Street Address:	
City, State, Zip: Somerset, NJ 08873		City, State, Zip:	
Country: US		Country:	
Phone: (484) 274-6863		Phone:	
Email(s) for Report: jbeaupre@whitmanco.com		Email(s) for Invoice:	

Project Name/No: Wandell School 23-03-21T	Purchase Order:
EMSL LIMS Project ID:	State of Connecticut (CT) must select project location:
(If applicable, EMSL will provide)	<input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)

Samples for Compliance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, for NPDES?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Other (Specify)
Samples Collected by (Check One):	<input type="checkbox"/> EMSL <input checked="" type="checkbox"/> CLIENT	Samples Received Chilled?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Sampled By Name: J. Knoll	Sampled By Signature: Jason Knoll	State Reporting Required?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Turn-Around-Time (TAT):	Standard Turn-Around-Time: 2 Weeks	The following TAT's are subject to Lab approval. Call lab to confirm TAT before submittal:	1 Week <input type="checkbox"/> 4 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 2 Days <input type="checkbox"/> 1 Day <input type="checkbox"/>

Client Sample ID	Comp	Grab	Date / Time Collected	Matrix	Preservative	List Test(s) Needed (Write in test below, then check on sample line.)								Comments
						Test 1:	Test 2:	Test 3:	Test 4:	Test 5:	Test 6:	Test 7:	Test 8:	
WF-1		<input checked="" type="checkbox"/>	4/19/22	W	2	<input checked="" type="checkbox"/>								
WF-2		<input checked="" type="checkbox"/>	4/19/22	W	2	<input checked="" type="checkbox"/>								
K1		<input checked="" type="checkbox"/>	4/19/22	W	2	<input checked="" type="checkbox"/>								
WF-3		<input checked="" type="checkbox"/>	4/19/22	W	2	<input checked="" type="checkbox"/>								

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

Reporting Requirements:	<input type="checkbox"/> Results Only <input checked="" type="checkbox"/> Results and QC	Reduced Deliverables	<input type="checkbox"/> HZresults EDD <input type="checkbox"/> Excel <input type="checkbox"/> Other (Describe Above)
Method of Shipment:		Sample Condition Upon Receipt:	

Relinquished by: Jason Knoll	Date/Time: 4/19/22	Received by: [Signature]	Date/Time: 4.19.22
Relinquished by: Jason Knoll	Date/Time: 4/19/22	Received by: [Signature]	Date/Time: 4.19.22



Environmental Chemistry Chain of Custody

Emsl Order Number / Lab Use Only

EMSL Analytical, Inc.
200 Rt. 130 N
Cinnaminson, NJ 08077

PHONE: (800) 220-3675
EMAIL: EnvChemistry2@EMSL.com

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.)

Client Sample ID	Comp	Grab	Date / Time Collected	Matrix	Preservative	List Test(s) Needed (Write in test below, then check on sample line:)								Comments	
				W=Water S=Soil A=Air SL=Sludge O=Other	1 HCL 2 HNO3 3 H2SO4 4 ICE 5 Other Describe in Special Instructions	Test 1:	Test 2:	Test 3:	Test 4:	Test 5:	Test 6:	Test 7:	Test 8:		
TL	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4/14/22 0818	W	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
WF-4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4/14/22 0826	W	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
WF-5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4/14/22 0820	W	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
WF-7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4/14/22 0822	W	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
WF-8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4/14/22 0825	W	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
WF-6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4/14/22 0826	W	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
NO	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4/14/22 0828	W	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
WF-9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4/14/22 0830	W	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Method of Shipment: Blank				Sample Condition Upon Receipt:											
Relinquished by:				Date/Time:				Received by:				Date/Time			
Relinquished by:				Date/Time:				Received by:				Date/Time			

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.

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

ATTACHMENT 2
FLOOR PLAN

