

November 14, 2025

School District 70
3500 Argyle Street
Port Alberni, BC
V9Y 3A8

Attention: Alex Taylor

Reference: Potable Water Lead Testing – EJ Dunn Elementary School

Introduction

Island EHS Ltd has collected fourteen (14) water samples from tap at **EJ Dunn Elementary**, located at 3500 Argyle Street, Port Alberni, BC. The purpose of the sampling is to evaluate potential lead exposure risk from water consumed from the tap. The samples were collected on October 30, 2025, and we report the following.

Sampling Methodology

Sampling locations were selected by the client. All samples were taken from cold water lines.

The lead samples were collected using the methodology taken from “Guidelines on Evaluating and Mitigating lead in Drinking Water Supplies, Schools, Daycares & Other Buildings” (published April 2019 by the British Columbia Health Protection Branch), using the Random Daytime Sampling method. A 125mL First Draw sample was followed by a 125mL sample taken after a 30-second flush. This methodology was conducted to determine if a 30-second flush is sufficient to reduce the lead concentrations to below the Maximum Acceptable Concentration (MAC).

The samples were collected in an appropriate bottle supplied by an accredited laboratory. The samples were chilled and immediately submitted to the testing laboratory and tested for lead.

Samples were analyzed by the Island EHS in-house laboratory, using procedures based on methods recommended by the American Public Health Association (APHA) and the US Environmental Protection Agency (US-EPA) (EPA 200.9). Our laboratory is accredited by CALA to ISO/IEC 17025:2017 standards. Results were compared to the latest edition of the Canadian Drinking Water Quality Guidelines (CDWQG) published by Health Canada’s Water Quality and Health Bureau.

Results

Table 1: Lead concentration from tested locations for First Draw and Flushed Sampling, compared to the Maximum Allowable Concentration (MAC) for Lead (0.005 mg/L).

Sample Location	MAC ¹ (mg/L)	Random Daytime Sample (mg/L)	Comments
01-S 01-F	<0.005	0.0145 0.0162	Art Room 607
02-S 02-F	<0.005	0.0034 0.0005	Health Office
04-S 04-F	<0.005	0.0009 0.0005	Classroom 116
05-S 05-F	<0.005	0.0086 0.0026	Foods Room 502
06-S 06-F	<0.005	0.0014 0.0013	Kitchen 65
07-S 07-F	<0.005	<0.0005 <0.0005	Fountain Outside 601
08-S 08-F	<0.005	0.0033 0.0062	Sink in Office 601

¹ MAC = Maximum acceptable concentrations
Results in **RED** indicate values that exceed the CDWQG

Full analytical results can be found in Appendix A.

Locations of the samples can be found in Appendix B.

NOTE - Sample number 3 not used.

Discussion

The building is supplied by the municipal potable water distribution system. According to the BC Health Protection Branch, “Lead is usually not found in drinking water when it leaves the treatment plant. Instead lead tends to leach out of pipes and fixtures in buildings...” Until 1989, the BC Building Code did not have provisions for restricting the use of lead-containing materials in potable water lines. Under the Canadian Standards Association (CSA) B125.1 standard, plumbing, fitting and fixtures produced as recently as 2012 that were considered “lead-free” could contain as much as 8% lead by weight. Since 2012, the maximum percent of lead in fixtures that are considered “lead-free” is 0.25%.

Conclusions and Recommendations

Of the seven (7) locations from which water samples were collected by Island EHS on October 30, 2025, within EJ Dunn Elementary, located at 3500 Argyle Street, Port Alberni, BC, two (2) locations (Art Room 607 and Foods Room 502) was found to have lead concentrations which exceeded the maximum acceptable concentration (MAC) in the first draw bottles. Two (2) location (Art Room 607 and Sink in Office 601) were found to have a lead concentration above the MAC after a 30 second flush.

This indicates that there is a source of lead in the pipes and/or fixtures. For the Art Room 607 and the Sink in Office 601 sampling locations, which exceeded the maximum acceptable concentration even after a 30-second flush, additional measures should be considered.

The client may wish to consider the following suggestions to further address lead water service pipes:

- Replace as much as possible of the plumbing pipes, fixtures and fittings between the water main and the tap itself for the locations that were found to have exceedances, *or*
- Re-testing the two (2) locations which exceeded the maximum acceptable concentration even after the 30 second flush after a longer flushing period (i.e., five (5) minutes instead of thirty (30) seconds); *or*
- Disconnect the two (2) locations which exceeded the maximum acceptable concentration, even after the 30 second flush, and replace with water cooler units; *or*
- Where practicable, install in-line filters just before point of use. Ensure the filters are certified to NSF/ANSI 53 for reduction of contaminants that cause health effects. The filters must be changed on a schedule recommended by the manufacturer,
- Employ a flushing program. Run each tap that is used for consumption for at least 30 seconds, or until cold.
- Affix permanent signage directing users to alternate water sources such as water coolers or filtered water, to remind users to adequately flush the lines (“run until cold”) prior to drinking, or to indicate that the water is not potable; and
- Advise occupants to use cold water for cooking and drinking, even after flushing the pipes. Lead in pipes moves more readily into hot water than into cold water.

Following implementation of select recommendations, additional sampling should be conducted at all locations that exceeded the Guideline to ensure that levels are no longer in exceedance. As part of this testing, it is recommended that biannual testing for lead be conducted on sources where potable water is consumed. Following implementation of this recommendation and subsequent results this could be reduced to annual testing from select locations.

Limitations

This report has been prepared in accordance with established Industrial Hygiene practices. It is intended for the exclusive use of School District 70 to assist in the assessment of the drinking water quality in the sampled locations. The use of this document for any other purposes is at the sole risk of the users.

Island Environmental Health & Safety Ltd.



Tanner Robinson
Occupational Hygiene Technician
Field Work and Report



Ashlee McGiffin
Senior Occupational Hygienist
Report Review

**Appendix A:
Analytical Results**

Lead in Drinking Water Report



Island Environmental Health and Safety
 201 - 990 Hillside Avenue
 Victoria B.C, V8T 2A1
 (778)406-0933
admin@islandehs.ca

Certificate of Analysis

Client Name	School District 70	Report #	69843
Site Address	EJ Dunn Elementary	Report Date	2025-11-06
Collection Date	2025-10-30	Analysis Date	2025-11-05
Received by Lab	2025-10-31	PO	
Collected By	Tanner/Matt/Sandy	Notes	

Analysis Summary: Stagnant/Flush

Sample #	DES01	Result (mg/L)	0.0145	Stagnant
Location	Art Room 607	Result (mg/L)	0.0162	Flush
Sampling Time	6:11 AM	Comments		
Sample #	DES02	Result (mg/L)	0.0034	Stagnant
Location	Health Office	Result (mg/L)	0.0005	Flush
Sampling Time	6:06 AM	Comments		
Sample #	DES04	Result (mg/L)	0.0009	Stagnant
Location	Classroom 116	Result (mg/L)	0.0005	Flush
Sampling Time	6:15 AM	Comments		
Sample #	DES05	Result (mg/L)	0.0086	Stagnant
Location	Foods Room 502	Result (mg/L)	0.0026	Flush
Sampling Time	6:20 AM	Comments		
Sample #	DES06	Result (mg/L)	0.0014	Stagnant
Location	Kitchen 65	Result (mg/L)	0.0013	Flush
Sampling Time	6:21 AM	Comments		
Sample #	DES07	Result (mg/L)	<0.0005	Stagnant
Location	Fountain Outside 601	Result (mg/L)	<0.0005	Flush
Sampling Time	6:24 AM	Comments		

Notes

Results are compared to the latest Canadian Drinking Water Quality Guideline (CDWQG), published by Health Canada

Results in **green** are below the CDWQG limit of 0.005 mg/L

Results in **red** are at or above the CDWQG limit of 0.005 mg/L

Analysed using EPA 200.9

Lead in Drinking Water Report



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Client Name	School District 70	Report #	69843
Site Address	EJ Dunn Elementary	Report Date	2025-11-06
Collection Date	2025-10-30	Analysis Date	2025-11-05
Received by Lab	2025-10-31	PO	
Collected By	Tanner/Matt/Sandy	Notes	

Analysis Summary: Stagnant/Flush

Sample #	DES08	Result (mg/L)	0.0033	Stagnant
Location	Sink in Office 601	Result (mg/L)	0.0062	Flush
Sampling Time	6:25 AM	Comments		

Island Environmental Health & Safety Ltd.

Notes

Results are compared to the latest Canadian Drinking Water Quality Guideline (CDWQG), published by Health Canada

Results in **green** are below the CDWQG limit of 0.005 mg/L
Results in **red** are at or above the CDWQG limit of 0.005 mg/L
Analysed using EPA 200.9

Analysed using EPA 200.9

Lead in Drinking Water Report



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Victoria B.C, V8T 2A1
(778)406-0933
admin@islandehs.ca

Certificate of Analysis

Table with 4 columns: Client Name, Site Address, Collection Date, Received by Lab, Collected By, Report #, Report Date, Analysis Date, PO, Notes.

Quality Control Report

Table with 5 columns: Duplicate, LFM, LRB, LFB, Result, Unit, Limits, Pass/Fail?

Duplicate: Paired analysis of two portions of the same sample. Used to evaluate the variance in the measurement and homogeneity of the sample.
Laboratory Fortified Matrix (LFM): A client sample that has been fortified with a known amount of analyte. Used to evaluate matrix effects.
Laboratory Reagent Blank (LRB): A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Laboratory Fortified Blank (LFB): A blank matrix to which a known amount of analyte is added. Used to verify instrument calibration.

Results relate only to the items tested

This report is issued by Island EHS, accredited by CALA to ISO/IEC 17025:2017 standards for the scope of testing.



Handwritten signature of Laura Martin

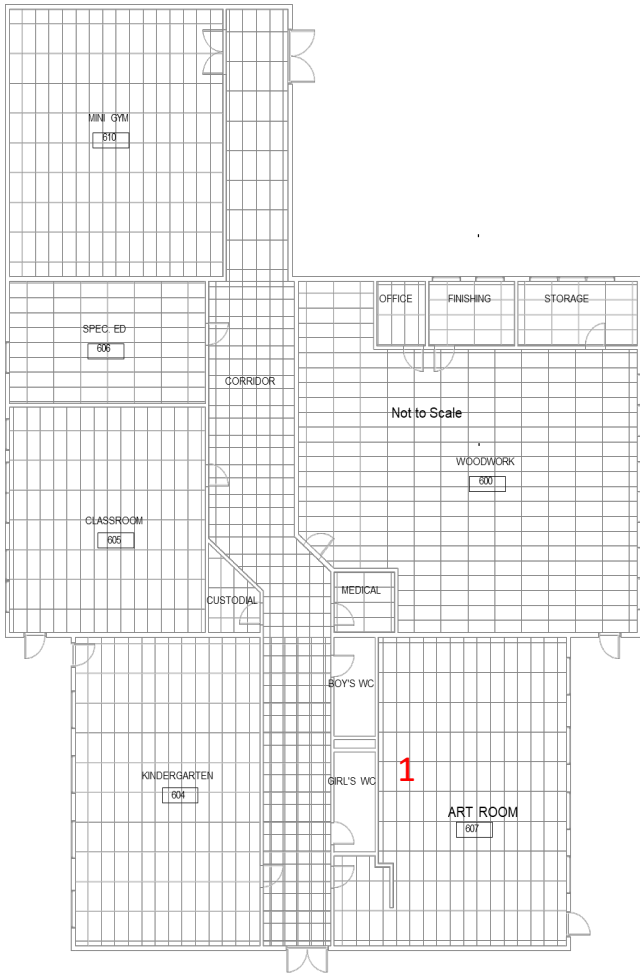
Laura Martin
Laboratory Analyst


Handwritten signature of Ashlee McGiffin

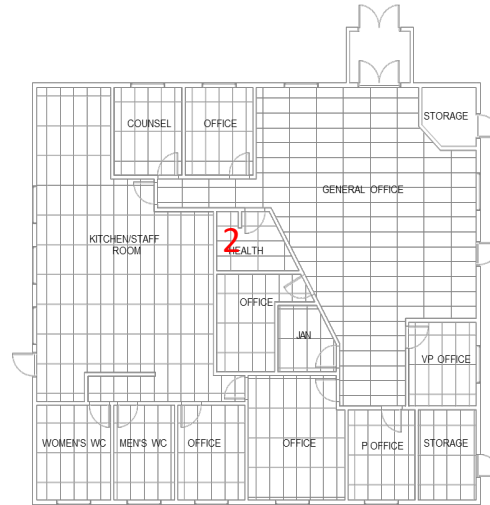
Ashlee McGiffin
Data Review


End of Report

**Appendix B:
Sample locations**



 BUILDING A - MAIN FLOOR
1:100



 BUILDING B - MAIN FLOOR
1:100

LEGEND:

XX – Water Sampling Location



Project No.
69843

Date of Issue
November 14, 2025

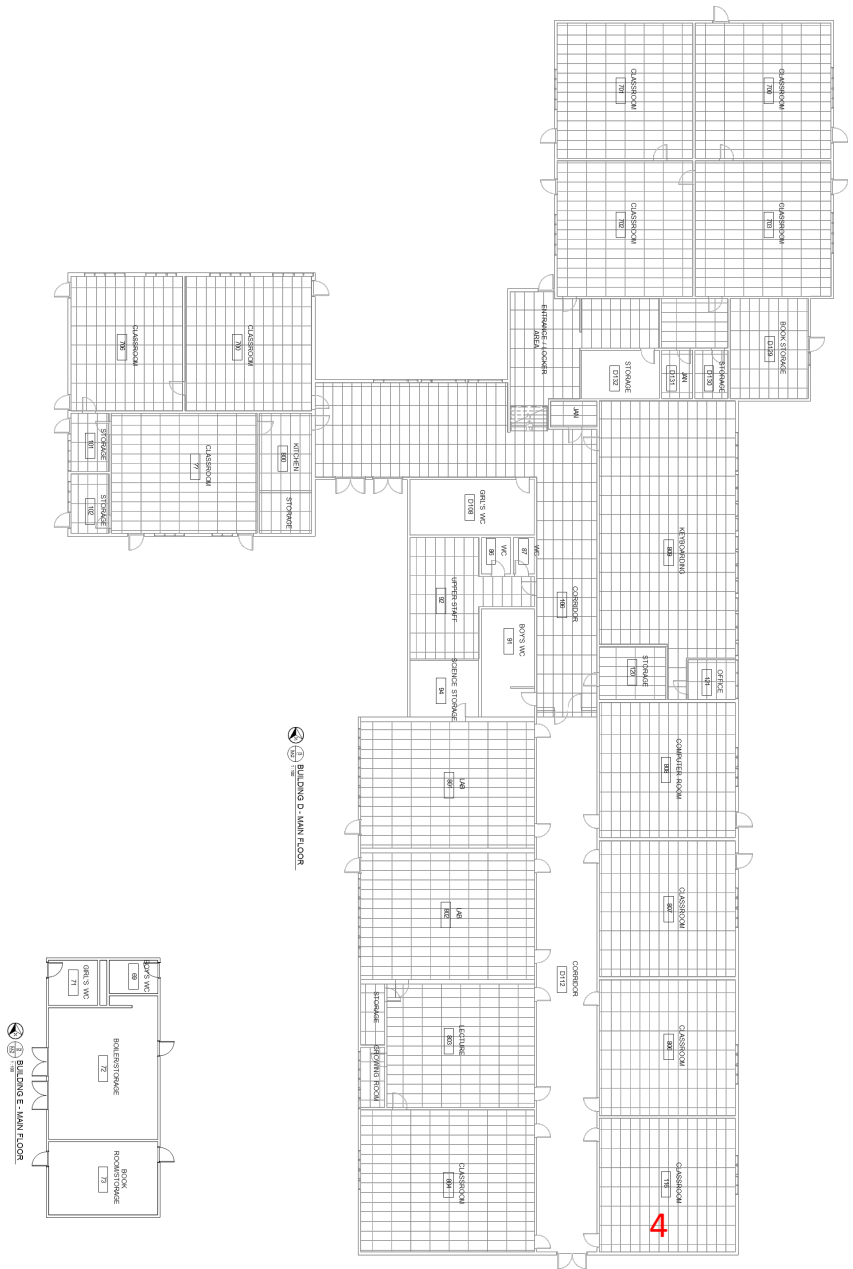
Lead in Drinking Water
Sample Locations

For: School District 70

Site: EJ Dunn Elementary
3500 Argyle Street

Not to Scale





LEGEND:

XX – Water Sampling Location



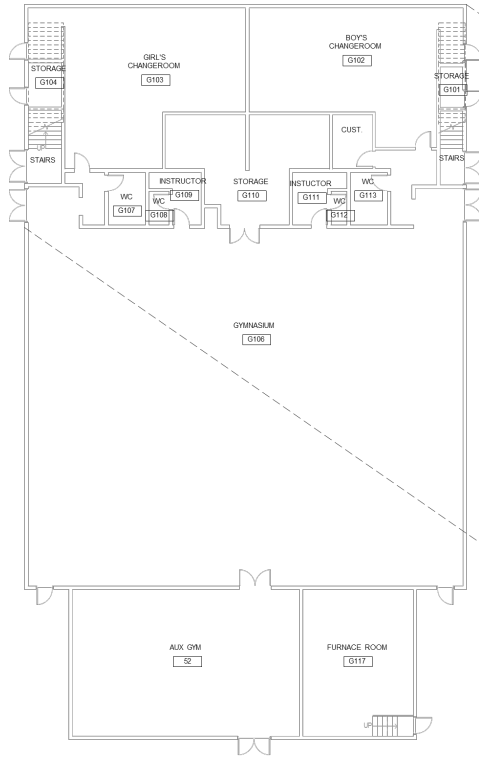
Project No. 69843	Date of Issue November 14, 2025
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Lead in Drinking Water
Sample Locations

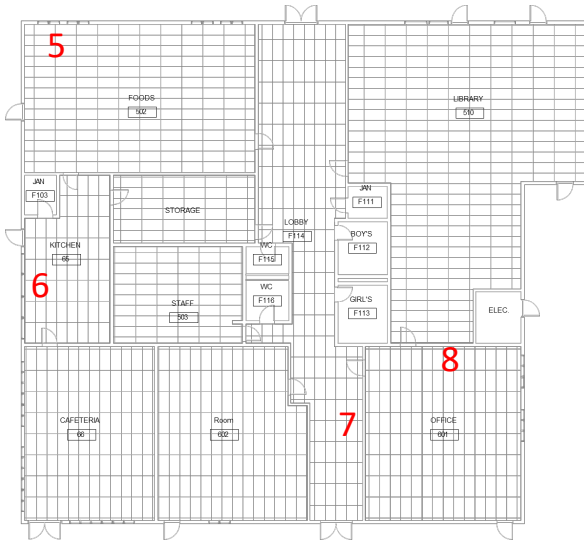
For: School District 70

Site: EJ Dunn Elementary
3500 Argyle Street

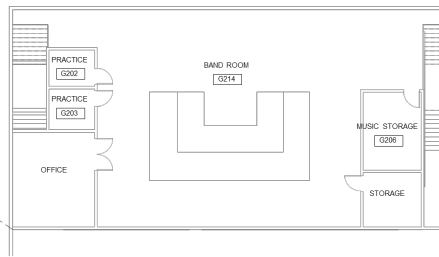
Not to Scale	
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BUILDING G - MAIN FLOOR



BUILDING F - MAIN FLOOR



BUILDING GUPPER FLOOR

LEGEND:

XX – Water Sampling Location



Project No.
69843

Date of Issue
November 14, 2025

Lead in Drinking Water
Sample Locations

For: School District 70

Site: EJ Dunn Elementary
3500 Argyle Street

Not to Scale

