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February 28, 2017

Mr. John W. Gilbert
Facilities Manager
Falls City School District #57
111 N. Main Street
Falls City, OR 97344

Via email to: john.gilbert@fallscityschools.org

RE: Lead Water Testing Report
Falls City Library-Science Building (Facility #100)
111 N. Main Street
Falls City, Oregon 97344

TRC Project: 262545

Mr. Gilbert:

At your request, TRC Environmental Corporation (TRC) performed lead in water testing at the Falls City School District Library/Science Building located at 111 N. Main Street, in Falls City, Oregon.

Testing Procedures

Water testing was performed following the United States Environmental Protection Agency (USEPA) guidance document "3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance." The 3Ts document provides an action limit of 20 parts per billion (ppb) for lead.

Samples were collected from cold water outlets on the interior of the building(s), including drinking fountains, kitchen food preparation sinks, classroom sinks, restroom sinks, mechanical room sinks, faculty lounge sinks, office sinks, plumbed refrigerator water outlets and water bottle refill stations. Any outlets that were broken or not in use at the time sampling was performed were documented as such and were not sampled.

A map of each school was annotated with the sample locations for each outlet and each sample number and location which were recorded on a Drinking Water Sample Data Sheet & Chain of Custody. Sampling for the District was conducted during the school week on Tuesday through Friday. Samples were collected using plastic 250 mL unpreserved bottles. The unpreserved bottles were preserved by the laboratory after receipt per the analytical method. During sample collection, each bottle was marked with a school identification code followed by the sample number (Ex. 100-01A, 100-01B). Water was sampled without touching the mouth of the container to the faucet filling the bottle to approximately one inch from the top.

Two samples were collected from each of the cold water outlets being tested. The first sample collected was the first draw sample (also called an A sample). The first draw sample is the first flow of water from the outlet into the bottle and represents the water standing in the fixture that would initially be consumed. The flush sample (also called a B sample) was collected into a new sample bottle 30 seconds after the water has been allowed to continuously flow from the outlet. The flush sample represents the water from the plumbing line behind the wall and outlet. Upon completion of a sampling event, the sample bottles were packaged and the Water Sample Data Sheet & Chain of Custody Record was signed and delivered with the samples to Edge Analytical, Inc., an independent third-party, accredited laboratory.

Laboratory and Analytical Method

Analysis for lead was performed by Edge Analytical, Inc. an Oregon drinking water accredited laboratory, using the EPA Method 200.8 for analysis.

Samples Collected and Results

The District identified a total of seventeen (17) water fixtures prior to conducting the flushing and sampling activities. Sampling was conducted on August 5, 2016. Of the seventeen (17) first draw samples collected, two (2) had results above the action level of greater than 15 parts per billion (ppb) for lead. The first draw results (A sample) which were at or greater than 15 ppb for lead are noted in the table below. A complete list of the analytical results noting all rooms and outlets sampled can be found in Appendix B.

Sample #	Location and Fixture Description	Analyte	Result	EPA Limit	FCSD Action Limit
100-14A	Science Room Loft Sink (Left)	Lead	20.6 ppb	20 ppb	>15 ppb
100-16A	Science Room Loft Sink (Left Side of Right Sinks)	Lead	16.4 ppb	20 ppb	>15 ppb

ppb = parts per billion

EPA = Environmental Protection Agency

FCSD = Falls City School District

Recommendations

TRC recommended that the District suspend the use of the water at the two (2) fixtures listed in the table above and take action to lower the concentrations for lead to those fixtures by replacing the associated outlet and supply lines from the wall to the outlet and potentially the associated plumbing line behind the wall. In the interim, as recommended by the USEPA short-term control measures such as flushing the piping in the system at the fixtures noted above, every morning before the facility opens, can be conducted to remove water that has been standing in the interior pipes and or fixtures. Additionally, TRC recommended that those fixtures be suspended from use until after the associated outlet, supply line from the wall to the outlet and any necessary plumbing lines are replaced. Once the replacements are made, TRC recommended the District have the water from the new outlets re-sampled for lead to determine if the outlet, supply line and plumbing line replacement (as applicable) has resolved the issue prior to allowing these faucets to be used without the short-term control measures noted above.

A copy of the sample location map can be found in Appendix B.

Follow-up Samples Collected and Results

Two of total 17 water fixtures were determined to be above the action level at the time sampling was conducted and are represented in the table above. The District elected not to analyze the B samples, and instead proceeded directly to replacing the fixtures at these locations. TRC performed follow-up sampling of the two previously elevated fixtures within this school building once the fixtures were replaced. Sampling was conducted on November 18, 2016 and January 20, 2017. Both samples remained above the action level during the sampling event in November; however, it was reported that the fixtures were not used once they were replaced. District facilities personnel tagged these fixtures as not in use, but proceeded to utilize them the week prior to the sampling in January in order to mimic regular use. The fixtures were then allowed to set unused for 8-18 hours prior to sample collection on January 20, 2017. The samples for both fixtures were below the action level during the January 20th sampling event.

Conclusions

Based on the fixture replacement activities completed by District and follow-up sample results indicating all sample locations at this facility being below the action level, TRC offers not further recommendations at this time.

TRC appreciates the opportunity to provide you with environmental consulting services. We look forward to working with you on future endeavors. If you have any questions or comments concerning this report, please call TRC at (503) 387-3251.

Sincerely,
TRC Environmental Corporation



Jason Stone
Industrial Hygienist



Ron Landolt
NW Region BSI Practice Manager

Appendix A – Analytical Results



Burlington, WA *Corporate Laboratory (a)*
1620 S Walnut St - Burlington, WA 98233 - 800.755.9295 • 360.757.1400
Bellingham, WA *Microbiology (b)*
805 Orchard Dr Ste 4 - Bellingham, WA 98225 - 360.715.1212

Portland, OR *Microbiology/Chemistry (c)*
9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7802
Corvallis, OR *Microbiology/Chemistry (d)*
540 SW Third Street - Corvallis, OR 97333 - 541.753.4946
Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

INORGANIC COMPOUNDS (IOC) REPORT FOR LEAD & COPPER

Client Name: TRC - Milwaukie
4120 SE International Way
Suite A110
Milwaukie, OR 97222

Reference Number: **16-19596**

Project: 100 - Library/Science
Building

System Name:
System ID Number:
DWP Source Number:
Multiple Sources:
Sample Type:
Sample Purpose: Investigative or Other
County:

Analyst: bj
Date Received: 8/5/2016
Report Date: 8/12/2016
Approved By: ljh
Authorized by:


Thanh B Phan
Lab Manager, Portland

Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_47598	8/5/2016	100-01A - Library - Sink	1030	LEAD	1.9	ppb	15	1	200.8	4072	
16_47599	8/5/2016	100-02A - Library - Drinking Fountain	1030	LEAD	1	ppb	15	1	200.8	4072	
16_47600	8/5/2016	100-03A - Girls Bathroom Sink Left	1030	LEAD	8.7	ppb	15	1	200.8	4072	
16_47601	8/5/2016	100-04A - Girls Bathroom Sink Right	1030	LEAD	9.3	ppb	15	1	200.8	4072	
16_47602	8/5/2016	100-05A - Boys Bathroom Sink Left	1030	LEAD	7.7	ppb	15	1	200.8	4072	
16_47603	8/5/2016	100-06A - Boys Bathroom Sink Right	1030	LEAD	2.5	ppb	15	1	200.8	4072	
16_47604	8/5/2016	100-07A - Science Room - Sink	1030	LEAD	4.8	ppb	15	1	200.8	4072	
16_47605	8/5/2016	100-08A - Science Room - Sink	1030	LEAD	7.5	ppb	15	1	200.8	4072	
16_47606	8/5/2016	100-09A - Science Room - Sink	1030	LEAD	5.7	ppb	15	1	200.8	4072	
16_47607	8/5/2016	100-10A - Science Room - Sink	1030	LEAD	6.0	ppb	15	1	200.8	4072	
16_47608	8/5/2016	100-11A - Science Room - Sink	1030	LEAD	4.7	ppb	15	1	200.8	4072	
16_47609	8/5/2016	100-12A - Science Room - Sink	1030	LEAD	5.0	ppb	15	1	200.8	4072	
16_47610	8/5/2016	100-13A - Science Room - Eye Wash	1030	LEAD	1.5	ppb	15	1	200.8	4072	
16_47611	8/5/2016	100-14A - Science Room Left - Sink	1030	LEAD	20.6	ppb	15	1	200.8	4072	
16_47612	8/5/2016	100-15A - Science Room Left - Eye Wash	1030	LEAD	4.9	ppb	15	1	200.8	4072	
16_47613	8/5/2016	100-16A - Science Room Left - Sink	1030	LEAD	16.4	ppb	15	1	200.8	4072	

NOTES:

RL (Reporting Level): indicates the minimum reporting level.

AL Federal Action Levels are 0.015 mg/L for Lead and 1.3 mg/L for Copper under the Lead and Copper Rule for public water systems. A blank MCL value indicates a level is not currently established.

ND (Not Detected): indicates that the compound was not detected above the Reporting Level (RL).

These test results meet all the requirements of NELAP, unless otherwise stated in writing, and relate only to these samples. If you have any questions concerning this report contact Lawrence J Henderson at the above phone number.



DRINKING WATER SAMPLE DATA SHEET & CHAIN OF CUSTODY

16-19596

47598 - 47614



Project #: 262545

School Name (#): 100 - Library/Science building

Sampled By: Ron Landolt

Date of Flush: 8/14/16

Date of Sampling: 8/15/16

Sample #	Sample Location	Flush Time	Sample Time	Standing Time	Analysis - Pb by EPA 200.8 (250 mL Bottle)	Laboratory Sample ID
100-01A	Library - Sink	14:10	0751		X	
1-01B			0752		X	
02A	Library - drinking fountain	14:10	0751		X	
02B			0752		X	
03A	Girl's bathroom - sink (left)	14:12	0753		X	
03B			0754		X	
04A	Girl's bathroom - sink (right)	14:12	0753		X	
04B			0754		X	
05A	Boy's bathroom - sink (left)	14:34	0755		X	
05B			0756		X	
06A	Boy's bathroom - sink (right)	14:37	0755		X	
06B			0756		X	
07A	Science Room - sink	14:14	0758		X	
07B			0759		X	
08A	Science Room - sink	14:15	0758		X	
08B			0759		X	
09A	Science Room Sink	14:14	0758		X	
09B			0759		X	
10A	Science Room Sink	14:17	0758		X	
10B			0759		X	
11A	Science Room Sink	14:18	0758		X	
11B			0759		X	
12A	Science Room - Sink	14:19	0758		X	
12B			0759		X	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 8/15/16	Received by: (Signature) <i>[Signature]</i>		Date: 8-5-16	Received by: (Signature)
(Printed) <i>Ron Landolt</i>		Time: 14:26	(Printed) <i>Thanh Pham</i>		Time: 1700	(Printed)
Remarks: Preserved (Nitric Acid) or Unpreserved Turnaround Time: 5-day						
Please hold all B samples and invoice TRC for Analysis Due 8/12/16						
Condition of Samples: <i>ANALYZED</i>					No Acceptable: Yes	Comments: <i>ANALYZED 8/15/16 DN</i>
					Page 1 of 2	



Sampled By: Ray Landolt
Date of Flush: 8/4/16 Date of Sampling: 8/5/16



TRC Environmental Corp. – 4120 SE International Way, Suite A110, Milwaukie, OR 97222 Phone: (503) 387-3251 Fax: (503) 908-1318



Portland, OR *Microbiology/Chemistry (c)*
9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7802

Corvallis, OR *Microbiology/Chemistry (d)*
540 SW Third Street - Corvallis, OR 97333 - 541.753.4946

Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

Client Name: TRC - Milwaukie
4120 SE International Way
Suite A110
Milwaukie, OR 97222

Reference Number: **16-28835**

Project: 262545-Phase 2 Falls City
S.D.-Library/Science Bld

System Name:
System ID Number:
DWP Source Number:
Multiple Sources:
Sample Type:
Sample Purpose: Investigative or Other
County:

Analyst: mvp
Date Received: 11/18/2016
Report Date: 11/23/2016
Approved By: bj
Authorized by:

Thamph

Thanh B Phan
Lab Manager, Portland

[illegible]

RL (Reporting Level): indicates the minimum reporting level.

AL: Federal Action Levels are 0.015 mg/L for Lead and 1.3 mg/L for Copper under the Lead and Copper Rule for public water systems. A blank MCL value indicates a level is not currently established.

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Sampled By: Ben Lavelle
Date of Flush: 11/17/16

Date of Sampling: 11/18/10

[illegible]



Portland, OR *Microbiology/Chemistry (c)*
9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7802

Corvallis, OR *Microbiology/Chemistry (d)*
540 SW Third Street - Corvallis, OR 97333 - 541.753.4946

Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425


Client Name: TRC - Milwaukie
4120 SE International Way
Suite A110
Milwaukie, OR 97222

Reference Number: **17-01352**

Project: 262545- Falls City SD -
Library/Science, Phase 3

System Name:
System ID Number:
DWP Source Number:
Multiple Sources:
Sample Type:
Sample Purpose: Investigative or Other
County:

Analyst: bj
Date Received: 1/20/2017
Report Date: 1/24/2017
Approved By: anp
Authorized by:


Colin P O'Dwyer
Chemist/Microbiologist

NOTES:

RL (Reporting Level): indicates the minimum reporting level.

AL: Federal Action Levels are 0.015 mg/L for Lead and 1.3 mg/L for Copper under the Lead and Copper Rule for public water systems. A blank MCL value indicates a level is not currently established.

ND (Not Detected): indicates that the compound was not detected above the Reporting Level (RL).

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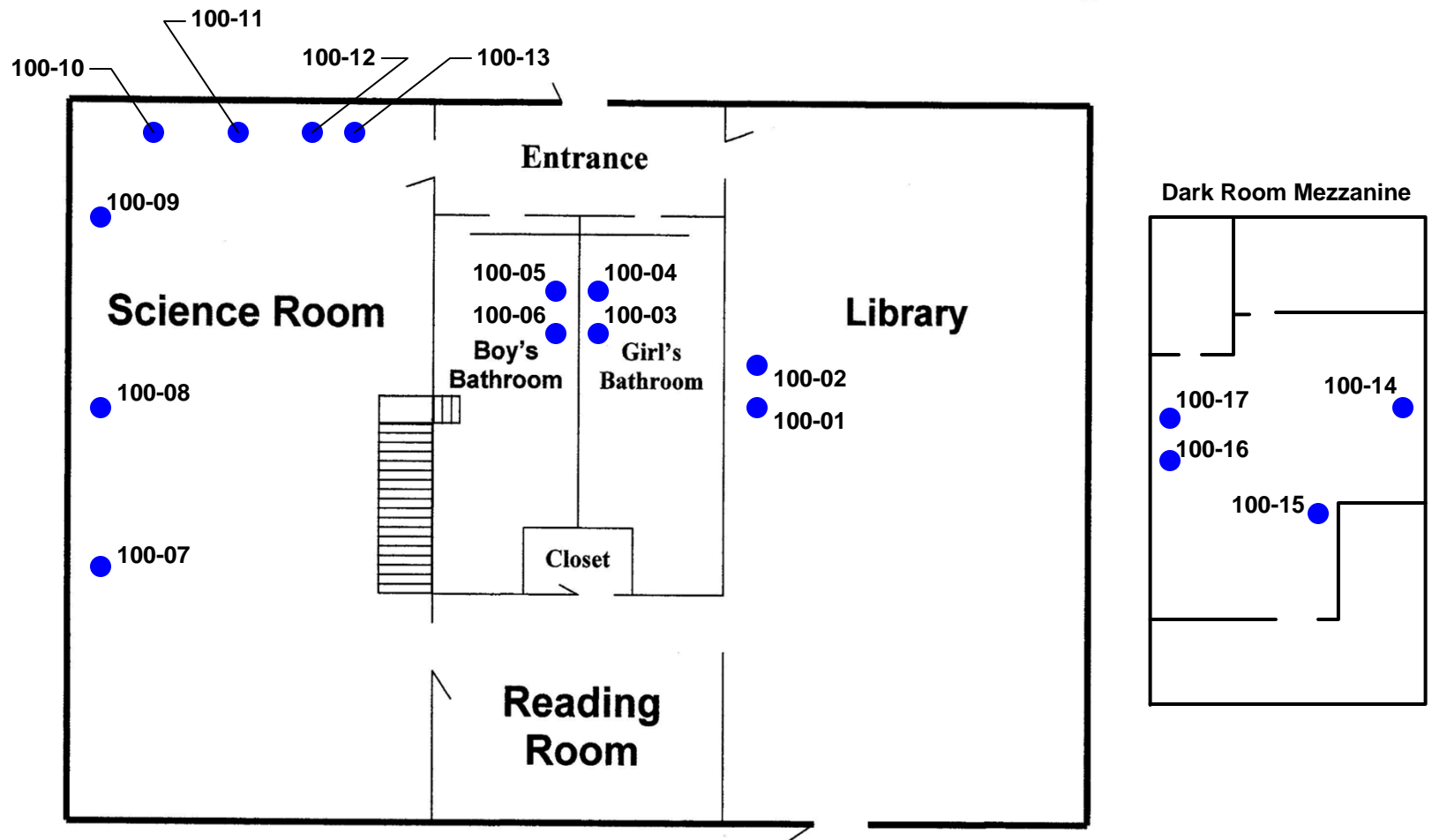
17-01352

Date of Sampling: 1/20/17

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Appendix B – Sample Location Map(s)

Library / Science Bldg.



LEGEND

● — Drinking Water Sample Location

ASBESTOS SURVEY REPORT SAMPLE LOCATION MAP

FALLS CITY SCHOOL DISTRICT – LIBRARY/SCIENCE BUILDING
111 NORTH MAIN STREET
FALLS CITY, OREGON 97344

TRC Project No.: 262545

Figure: 1.1

Drawn by: MC

Checked by: RL

Date: 2/28/17



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Milwaukie, Oregon 97222
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