4120 SE International Way
Suite A 110
Milwaukie, OR 97222

503.387.3251 PHONE
503.908.1318 FAX

www.trcsolutions.com

February 28, 2017

Mr. John W. Gilbert
Facilities Manager
Falls City School District #57
81 E. North Main Street
Falls City, OR 97344

Via email to: john.gilbert@fallscityschools.org

RE: Lead Water Testing Report
Falls City Elementary School Building (Facility #103)
177 Prospect 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 Elementary School Building located at 177 Prospect 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 building 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. 103-01A, 103-01B). 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 twenty-nine (29) water fixtures prior to conducting the flushing and sampling activities. Sampling was conducted on August 5, 2016. Of the twenty-nine (29) 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 A.

Sample #	Location and Fixture Description	Analyte	Result	EPA Limit	FCSD Action Limit
103-07A	Room 107 Left Sink	Lead	31.8 ppb	20 ppb	>15 ppb
103-21A	Room 113 Drinking Fountain	Lead	35.8 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 both 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. 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 twenty-nine 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. Follow-up sampling was conducted on November 18, 2016. The fixtures were then allowed to set unused for 8-18 hours prior to sample collection on November 18, 2016, and analytical results indicated that both samples were below the action level.

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: **16-19600**
Project: 103 - Elementary School

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_47621	8/5/2016	103-01A - Room 111 - Drinking Fountain	1030	LEAD	9.2	ppb	15	1	200.8	4072	
16_47622	8/5/2016	103-02A - Room 111 Restroom Sink	1030	LEAD	1.0	ppb	15	1	200.8	4072	
16_47623	8/5/2016	103-03A - Hall - Drinking Fountain	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47624	8/5/2016	103-04A - Men's Restroom Sink	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47625	8/5/2016	103-05A - Women's Restroom Sink	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47626	8/5/2016	103-06A - Staff Lounge Sink	1030	LEAD	1.4	ppb	15	1	200.8	4072	
16_47627	8/5/2016	103-07A - Room 107 Sink Left	1030	LEAD	31.8	ppb	15	1	200.8	4072	
16_47628	8/5/2016	103-08A - Room 107 Sink Right	1030	LEAD	4.4	ppb	15	1	200.8	4072	
16_47629	8/5/2016	103-09A - Hall - Drinking Fountain	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47630	8/5/2016	103-10A - Kitchen Sink Left	1030	LEAD	1.1	ppb	15	1	200.8	4072	
16_47631	8/5/2016	103-11A - Kitchen Sink Left	1030	LEAD	1.0	ppb	15	1	200.8	4072	
16_47632	8/5/2016	103-12A - 1st Floor Boys' RR Sink Left	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47633	8/5/2016	103-13A - 1st Floor Boys' Restroom Sink Right	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47634	8/5/2016	103-14A - Room 110 Drinking Foutnain	1030	LEAD	6.6	ppb	15	1	200.8	4072	
16_47635	8/5/2016	103-15A - Room 109 Drinking Fountain	1030	LEAD	1.7	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.

FORM: cIOC_PBCU_OR.rpt

INORGANIC COMPOUNDS (IOC) REPORT FOR LEAD & COPPER

Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_47636	8/5/2016	103-16A - Room 108 Drinking Fountain	1030	LEAD	6.8	ppb	15	1	200.8	4072	
16_47637	8/5/2016	103-17A - 1st Floor Hall Drinking Fountain	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47638	8/5/2016	103-18A - Health Room Sink	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47639	8/5/2016	103-19A - Room 112 Drinking Fountain	1030	LEAD	1.3	ppb	15	1	200.8	4072	
16_47640	8/5/2016	103-20A - 1st Floor Hall Drinking Fountain	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47641	8/5/2016	103-21A - Room 113 Drinking Fountain	1030	LEAD	35.8	ppb	15	1	200.8	4072	
16_47642	8/5/2016	103-22A - Girls' Restroom Sink Left	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47643	8/5/2016	103-23A - Girls' Restroom Sink Right	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_47644	8/5/2016	103-24A - Room 101 Drinking Fountain	1030	LEAD	9.1	ppb	15	1	200.8	4072	
16_47645	8/5/2016	103-25A - Room 102 Eye Wash	1030	LEAD	1.0	ppb	15	1	200.8	4072	
16_47646	8/5/2016	103-26A - Room 102 Drinking Fountain	1030	LEAD	2.1	ppb	15	1	200.8	4072	
16_47647	8/5/2016	103-27A - Room 102 Sink	1030	LEAD	3.6	ppb	15	1	200.8	4072	
16_47648	8/5/2016	103-28A - Room 102 Sink	1030	LEAD	5.0	ppb	15	1	200.8	4072	
16_47649	8/5/2016	103-29A - Room 102 Sink	1030	LEAD	4.9	ppb	15	1	200.8	4072	

NOTES:

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

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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.

TRC

DRINKING WATER SAMPLE DATA SHEET & CHAIN OF CUSTODY RECORD

16-19600
47621 - 47649

Project #: 262545
School Name (#): 103- Elementary School

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

Sample #	Sample Location	Flush Time	Sample Time	Standing Time	Analysis – Pb by EPA 200.8 (250 mL Bottle)	Laboratory Sample ID
103-01A	Room 111 - drinking fountain	1527	0851		X	
01B	" "		0852		X	
02A	Room 111 Restroom - Sink	1528	0851		X	
02B	" "		0852		X	
03A	Hall - drinking fountain	1529	0853		X	
03B	" "		0854		X	
04A	Men's Restroom - Sink	1530	0855		X	
04B	" "		0856		X	
05A	Women's Restroom - Sink	1531	0855		X	
05B	" "		0856		X	
06A	Staff Lounge - Sink	1532	0857		X	
06B			0858		X	
07A	Room 107 - Sink (left)	1534	0859		X	
07B			900		X	
08A	Room 107 - Sink (right)	1534	0859		X	
08B			900		X	
09A	Hall drinking fountain	1535	901		X	
09B			902		X	
10A	Kitchen - Sink (left)	1537	903		X	
10B	" "		904		X	
11A	Kitchen - Sink (left)	1537	903		X	
11B	" "		904		X	
12A	1st Floor Boys RR - Sink (left	1540	905		X	
12B	" "		906		X	

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	8/5/16			8-5-16	
(Printed) Ron Landolt	Time: 14:20	(Printed) Thanh Pham	(Printed) DAN NGUYEN	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:
Acceptable: Yes No
Comments: Acidified 8/5/16 DN

Page 1 of 3

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

TRC

DRINKING WATER SAMPLE DATA SHEET & CHAIN OF CUSTODY RECORD

Project #: 262545
School Name (#): 103 – Elementary School

Sampled By: Ron Landolf
Date of Flush: 8/4/16 Date of Sampling: 8/5/16

Sample #	Sample Location	Flush Time	Sample Time	Standing Time	Analysis – Pb by EPA 200.8 (250 mL Bottle)	Laboratory Sample ID
103-13A	1st Floor Boys Restroom sink (right)	1540	0905		X	
13B	" "		0906		X	
14A	Room 110 - drinking fountain	1542	0907		X	
14B	" "		0908		X	
15A	Room 109 - drinking fountain	1543	0907		X	
15B			0908		X	
16A	Room 108 - drinking fountain	1545	0909		X	
16B			0910		X	
17A	1st floor Hall - drinking fountain	1546	0848		X	
17B	" "		0903		X	
18A	Health Room - sink	1548	0911		X	
18B	" "		0912		X	
19A	Room 112 - drinking fountain	1550	0913		X	
19B	" "		0914		X	
20A	1st Floor Hall - drinking fountain	1551	0848		X	
20B	" "		0903		X	
21A	Room 113 - drinking fountain	1552	0915		X	
21B			0916		X	
22A	Girl's Restroom - sink (left)	1554	0917		X	
22B	" "		0918		X	
23A	Girl's Restroom - sink (right)	1554	0917		X	
23B	" "		0918		X	
24A	Room 101 - drinking fountain	1556	0919		X	
24B			0920		X	

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Ron Landolf	Time: 14:20	(Printed) Thanh Phan	(Printed)	Time:	(Printed)

Remarks: Preserved (Nitric Acid) or Unpreserved Turnaround Time: 5-day
Please hold all B samples and invoice TRC for Analysis

Condition of Samples:
Acceptable: Yes No
Comments:

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

TRC

DRINKING WATER SAMPLE DATA SHEET & CHAIN OF CUSTODY RECORD

Project #: 262545
School Name (#): 103-Elementary School

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

Sample #	Sample Location	Flush Time	Sample Time	Standing Time	Analysis – Pb by EPA 200.8 (250 mL Bottle)	Laboratory Sample ID
103-25A	Room 102 - eye wash	1557	0921		X	
25B	" "		0922		X	
26A	Room 102 - drinking fountain	1558	0921		X	
26B	" "		0922		X	
27A	Room 102 sink	1559	0921		X	
27B	" "		0922		X	
28A	Room 102 - Sink	1600	0921		X	
28B	" "		0922		X	
29A	Room 102 - Sink	1601	0921		X	
29B	" "		0922		X	
	~~Room 102 - Sink~~				X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	
					X	

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Ron Landolt	Time: 14:20	(Printed) Thanh Phan	(Printed)	Time:	(Printed)

Remarks: Preserved (Nitric Acid) or Unpreserved Turnaround Time: 5-day
Please hold all B samples and invoice TRC for Analysis

Condition of Samples:
Acceptable: Yes No
Comments:

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

ANALYTICAL

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

LEAD & COPPER RULE REPORT

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

Reference Number: **16-28839**
Project: 262545-Phase 2 Falls City S.D.- Elementary Bldg

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:

Thanh B Phan
Lab Manager, Portland

Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_70437	11/18/2016	103-07C - Room 107 - Left Sink	1030	LEAD	ND	ppb	15	1	200.8	4072	
16_70438	11/18/2016	103-21C - Room 113 - Drinking Fountain	1030	LEAD	9	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.

FORM: clOC_PBCU_OR.rpt

DRINKING WATER SAMPLE DATA SHEET & CHAIN OF CUSTODY RECORD

Project #: 262545, Phase 2
School Name (#): Falls City S.D. – Elementary Building

Sampled By: Ron Landolt
Date of Flush: 11/17/16 Date of Sampling: 11/18/16

Sample #	Sample Location	Flush Time	Sample Time	Standing Time	Analysis – Pb EPA 200.8 (250 mL Bottle)	Laboratory Sample ID
103-07C	Room 107 – Left Sink	~17:50	8:13		(Pb) – Lead	
103-07D	" "		8:14		(Pb) – Lead	
103-21C	Room 113 – Drinking Fountain	~17:55	8:19		(Pb) – Lead	
103-21D	" "		8:20		(Pb) – Lead	

16-28839
70437 - 70438

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	11/18/16	Thanh Phan		11.21.16	Amanda Lewis UPS
(Printed) Ron Landolt	Time: 10:60	(Printed) Thanh Phan	(Printed)	Time: 1400	(Printed) Amanda Lewis 13.0°

Remarks: Preserved (Nitric Acid) or Unpreserved Turnaround Time: Normal or Rush
Please hold D sample at laboratory pending C sample analysis

Condition of Samples:
Acceptable: Yes No
Comments:

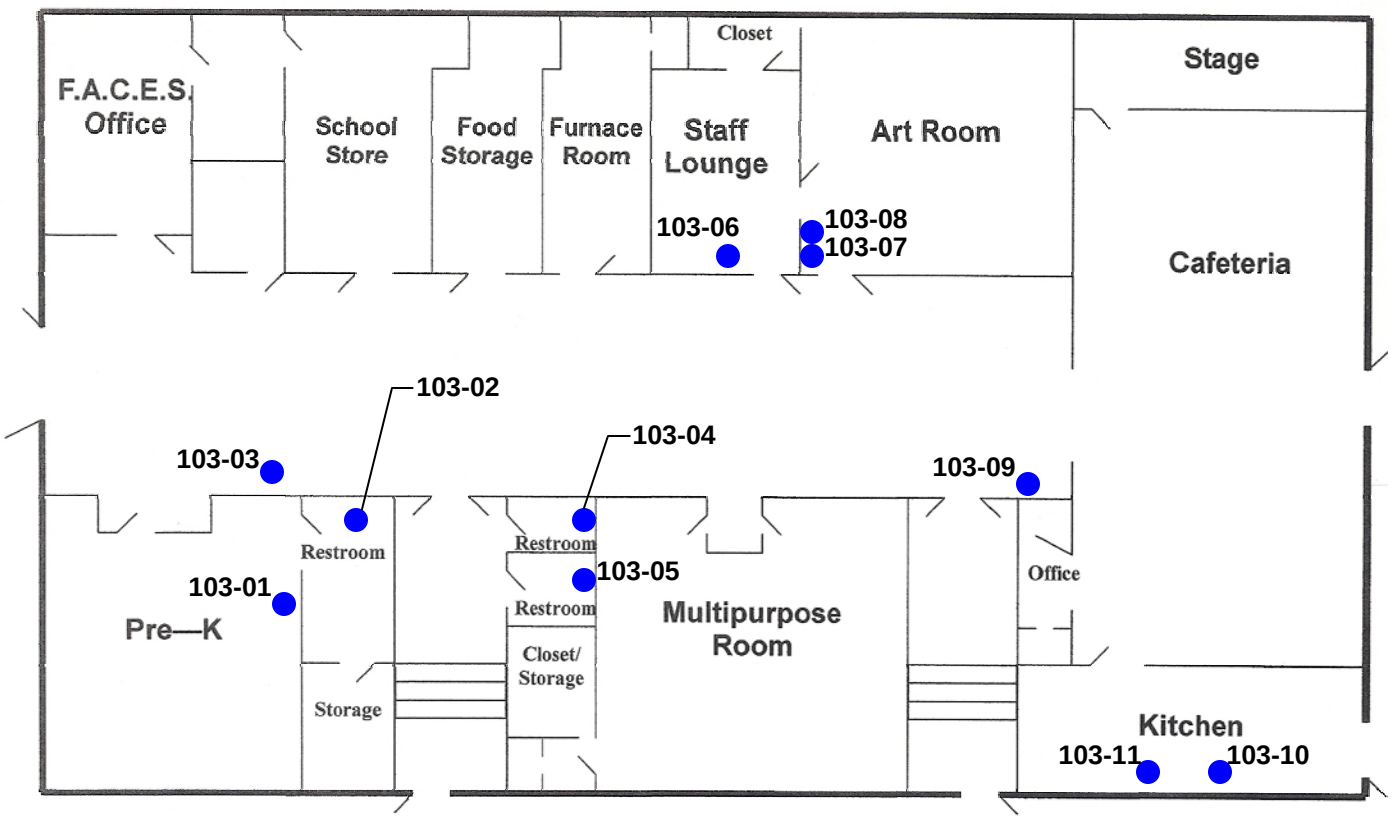
Page 1 of 1

Acidified 11/18/16 @ 11:30
CPF

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

Appendix B – Sample Location Map(s)

Elementary Bldg.



First Floor

LEGEND

● — Drinking Water Sample Location

ASBESTOS SURVEY REPORT
SAMPLE LOCATION MAP

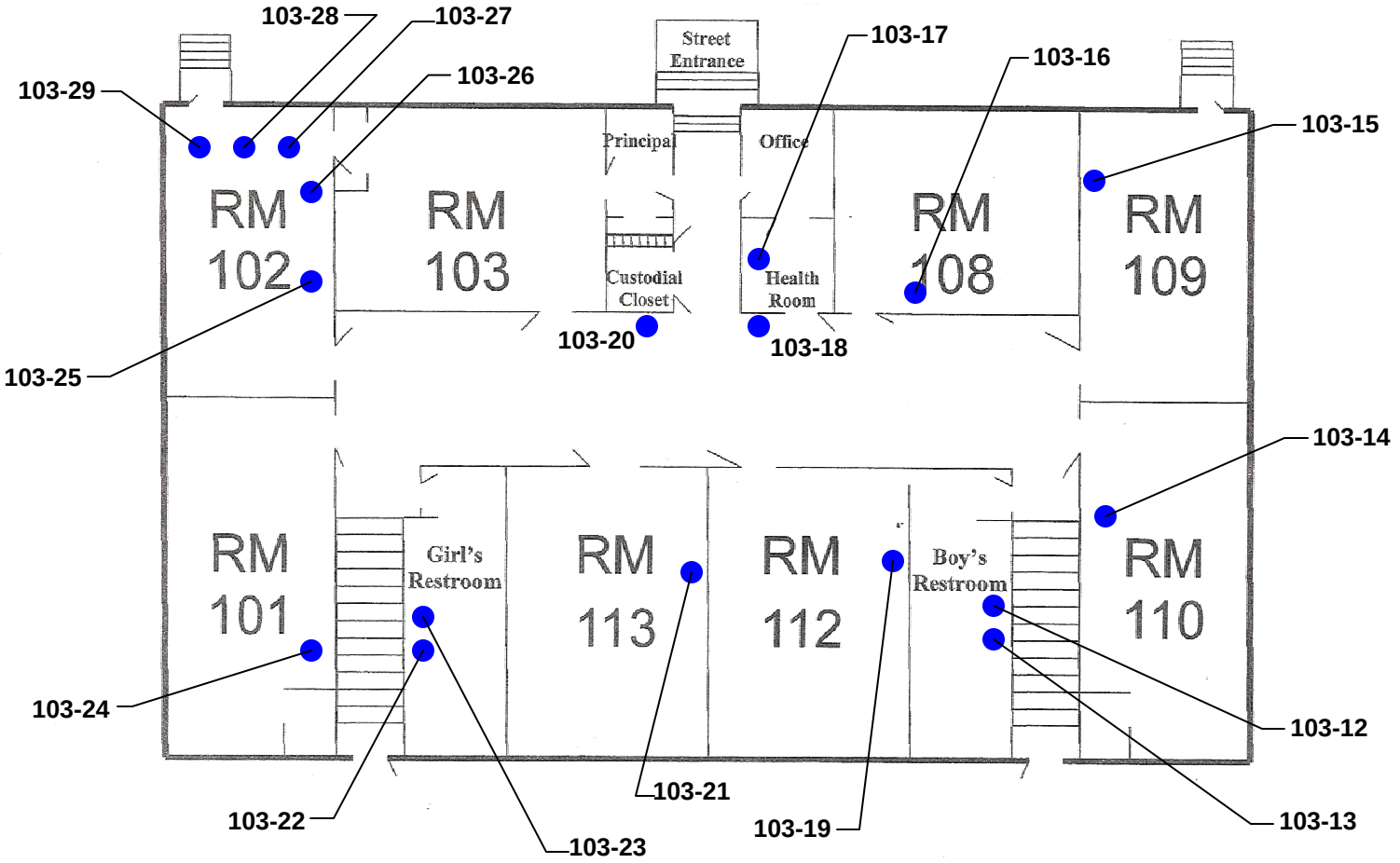
FALLS CITY SCHOOL DISTRICT – LIBRARY/SCIENCE BUILDING
111 NORTH MAIN STREET
FALLS CITY, OREGON 97344

TRC Project No.: 262545		Figure: 1
Drawn by: MC	Checked by: RL	Date: 2/28/17

TRC

4120 SE International Way, Suite A110
Milwaukie, Oregon 97222
Phone: (503) 387-3251 Fax: (503) 908-1318

Elementary Bldg.



Second Floor

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: 2
Drawn by: MC	Checked by: RL	Date: 2/28/17

TRC

4120 SE International Way, Suite A110
Milwaukie, Oregon 97222
Phone: (503) 387-3251 Fax: (503) 908-1318