

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** 111 N. Main Street Falls City, OR 97344

Via email to: john.gilbert@fallscityschools.org

RE: Lead Water Testing Report

Falls City Gymnasium Building (Facility #102)

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 Gymnasium 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 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. 102-01A, 102-01B). 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.

February 28, 2017

TRC Project: 262545

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 eight (8) water fixtures prior to conducting the flushing and sampling activities. Sampling was conducted on August 5, 2016. Of the eight (8) first draw samples collected, three (3) 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
102-1A	Girl's Locker Room Sink	Lead	210 ppb	20 ppb	>15 ppb
102-7A	Women's Restroom Sink	Lead	209 ppb	20 ppb	>15 ppb
102-8A	Concession Area Sink	Lead	93 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 three (3) 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

Three of the total eight 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 three previously elevated fixtures within this school building once the fixtures were replaced. Follow-up sampling was conducted on November 18, 2016 and January 20, 2017. All three samples remained above the action level during the sampling event in November; however, it was reported that these fixtures were most likely 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

February 28, 2017

TRC Project: 262545

Appendix A – Analytical Results

February 28, 2017 TRC Project: 262545

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

Page 1 of 1

Project: 102 - Gym Building

INORGANIC COMPOUNDS (IOC) REPORT FOR LEAD & COPPER

Client Name: TRC - Milwaukie

ANALYTICAL

4120 SE International Way

Suite A110

Milwaukie, OR 97222

System Name:

System ID Number:

DWP Source Number:

Multiple Sources:

Sample Type:

Sample Purpose: Investigative or Other

County:

Analyst: bj

Reference Number: 16-19594

Date Received: 8/5/2016

Report Date: 8/12/2016

Approved By: Ijh

Authorized by:

Thanh B Phan ab Manager, Portland

Lab Number	Date Collected	Site / Location	EPA#	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_47589	8/5/2016	102-1A - Girls' Locker Room Sink	1030	LEAD	210	ppb	15	1	200.8	4072	
16_47590	8/5/2016	102-2A - Boys' Locker Room Drinking Fountain	1030	LEAD	2.5	ppb	15	1	200.8	4072	
16_47591	8/5/2016	102-3A - Boys' Locker Room Sink	1030	LEAD	7.7	ppb	15	1	200.8	4072	
16_47592	8/5/2016	102-4A - Team Room Sink	1030	LEAD	4.2	ppb	15	1	200.8	4072	
16_47593	8/5/2016	102-5A - Gym Entry Drinking Fountian	1030	LEAD	8.3	ppb	15	1	200.8	4072	
16_47594	8/5/2016	102-6A - Mens' Restroom Sink	1030	LEAD	4.7	ppb	15	1	200.8	4072	
16_47595	8/5/2016	102-7A - Womens' Restroom Sink	1030	LEAD	209	ppb	15	1	200.8	4072	
16_47596	8/5/2016	102-8A - Concessions Sink	1030	LEAD	93	ppb	15	1	200.8	4072	

NOTES:

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.

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).



DRINKING WATER SAMPLE DATA SHEET & CHAIN OF CUSTOD: 16-19594

Sampled By: Ran Landolt
Date of Flush: 8/4/16

Date of Sampling: 3/5/16

Remarks: Preserved (Ni Please hold all B sample	Row landely	(Drinted)	Relinguished by: (Signature)								0%	8	07	07	8	06	050	OSA	048	OHA				02A	の区	102-01A	Sample #
Please hold all B samples and invoice TRC for Analysis New York (Nitric Acid) or Unpreserved Turnaround Time: 5-day Please hold all B samples and invoice TRC for Analysis	13										11	Concessions - Sink		Women's Restraom-Sink		Men's Kestroom-Sint		Jum entry - disting toutes		Team Koom-Sink)	Bals boder Rosn-Sink		Boy's Locker Room-drinking tenter		Girl's Lacker Roson - Sint	Sample Location
	(Printed)	Neill										1574		1513		1512		157		1508		1507		1506		1504	Flush Time
Condition of Samples: Acceptable: Yes Comments:	B	Neimidownied by: (Signature)	V								0839	8830	1880	0830	1880	0830	4480	0829	0828	0827	0825	0824	08 25	0824	0822	0821	Sample Time
NO 1/2/2 Pol	Time:	85-16	,																								Standing Time
Page 1 of 1	(Printed)	Received by: (Signature)	X	×	X	X	X	×	×	X	X	X	X	×	X	X	X	X	×	×	X	X	X	X	X	X	Analysis – Pb by EPA 200.8 (250 mL Bottle)
£																											Laboratory Sample ID



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

Page 1 of 1

Project: 262545-Phase 2 Falls City S.D.- Gymnasium Bldg

Reference Number: 16-28838

LEAD & COPPER RULE REPORT

Client Name: TRC - Milwaukie

4120 SE International Way

Suite A110

Milwaukie, OR 97222

System Name: Analyst: mvp

System ID Number: Date Received: 11/18/2016

DWP Source Number: Report Date: 11/23/2016

Multiple Sources: Approved By: bj
Sample Type: Authorized by:

Sample Purpose: Investigative or Other

County:

Thanh B Phan Lab Manager, Portland

Lab Number	Date Collected	Site / Location	EPA#	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
6_70434	11/18/2016	102-01C - Girl's Locker Room Sink	1030	LEAD	32	ppb	15	1	200.8	4072	
6_70435	11/18/2016	102-07C - Women's Restroom Sink	1030	LEAD	48	ppb	15	1	200.8	4072	
16_70436	11/18/2016	102-08C - Concession Area Sink	1030	LEAD	35	ppb	15	1	200.8	4072	

NOTES:

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.

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).



DRINKING WATER SAMPLE DATA SHEET & CHAIN OF CUSTODY RECORD



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

Sampled By: Run land | Date of Flush: 11/1/16

Date of Sampling: u //4//4

Please hold D sample at	Remarks: Preserved (Nitri	(Printed)								102-08D	102-08C	102-07D	102-07C	102-01D	102-01C	Sample #
ple ar	Remarks: Preserved (Nitric Acid) or Unpreserved Turnaround Timer Normal by Rush						100			رد در	Concession Area Sink		Women's Restroom Sink	" "	Girl's Locker Room Sink	Sample Location
V		Relina				/0434 - /0436	16-28838				√ 17:3c		~ 17:29		· 17:25	Flush Time
	(Printed) Condition of Samples:	Relinquished by: (Signature)					∞			2.00	D 7: D	C : C : D		2:6	3000	Sample Time
No	Time: 1400	Date: 11-21-16														Standing Time
Page 1 of 1	(Printed) Aman der	Received by: (Signature)							(-)	(Ph) – Lead	1	(Ph) — Lead	(Ph) — Lead	(Ph) — I ead	(Ph) — Lead	Analysis – Pb EPA 200.8 (250 mL Bottle)
f.1	Lewis	3														Laboratory Sample ID
	2000	SAN					100									

Acidified 11/18/16 @ 11:30



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

Page 1 of 1

Project: 262545- Falls City SD -

Gymnasium, Phase 3

Reference Number: 17-01354

LEAD & COPPER RULE REPORT

Client Name: TRC - Milwaukie

4120 SE International Way

Suite A110

Milwaukie, OR 97222

System Name:

Analyst: bj

System ID Number: Date Received: 1/20/2017

DWP Source Number: Report Date: 1/24/2017

Multiple Sources: Approved By: anp Sample Type: Authorized by:

Sample Purpose: Investigative or Other

County:

Colin P O'Dwyer Chemist/Microbiologist

Lab Number	Date Collected	Site / Location	EPA#	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
7_03150	1/20/2017	102-01E - Girls' Locker Room Sink	1030	LEAD	3	ppb	15	1	200.8	4072	
7_03151	1/20/2017	102-07E - Women's Restroom Sink	1030	LEAD	15	ppb	15	1	200.8	4072	
7_03152	1/20/2017	102-08E - Concession Area Sink	1030	LEAD	8	ppb	15	1	200.8	4072	

NOTES:

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.

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).



DRINKING WATER SAMPLE DATA SHEET & CHAIN OF CUSTODY RECORD

School Name (#): Falls City S.D. - Gymnasium Project #: _ 262545, Phase 3

> Row lando it

Date of Sampling:

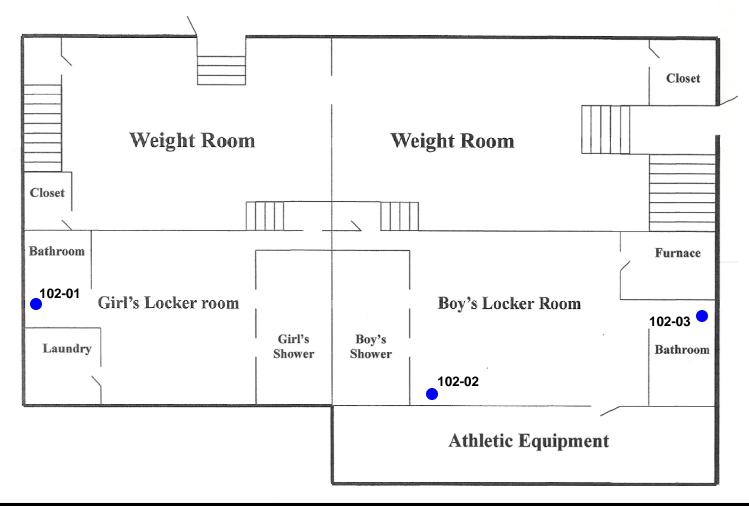
	ا ا ا ا ا ا ا ا ا ا	**
4	5	0.150
7/10	4	100

	Т	π		_	_	_	,	,	_	,	بترجند	-	_	-		-		-				
Remarks: Preserved (I Please hold F sample a	R. Grafit		Relinquished by: (Signature)											\$10 pt 1 pt	102-08F	102-08E	102-07F	102-07E	102-01F	102-01E		Sample #
Remarks: Preserved (Nitric Acid) or Unpreserved Turna Please hold F sample at laboratory pending E sample analysis	10.16	1/20/17													19 29	Concession Area Sink	,, ,,	Women's Restroom Sink	66 66	Girl's Locker Room Sink		Samp
d Turnaround Time: Normal or Rush uple analysis	£ £	Mile See	Received by: (Signature)										444444444444444444444444444444444444444			K		Sink		Sink		Sample Location
			, R																		THE LEWIS	Flirch Time
Condition of Samples: 1/5 Comments:	i		Relinquished by: (Signature)												4:39	4.37	4:37	8:36	8:33	1.5.3	Campie I inte	
	Time:		Date:																		Stationing Time	Standing Time
Page of	(Printed)	TX 1/13/17	Received by: (Signature)												(Pb) — Lead	(Pb) – Lead	(Pb) – Lead	(Pb) – Lead	(Pb) – Lead	(Pb) – Lead	(250 mL Bottle)	Analysis – Pb
		2110																			Sample ID	Laboratory
		7.2.E. SUM		 	 											-			L			

Appendix B – Sample Location Map(s)

February 28, 2017 TRC Project: 262545

Gym: Lower Floor



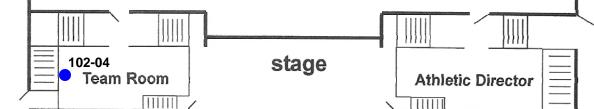
ASBESTOS SURVEY REPORT SAMPLE LOCATION MAP FALLS CITY SCHOOL DISTRICT – LIBRARY/SCIENCE BUILDING 111 NORTH MAIN STREET FALLS CITY, OREGON 97344 TRC Project No.: 262545 Drawn by: MC TRC Project No.: 262545 Checked by: RL Date: 2/28/17 Drawn by: MC ASBESTOS SURVEY REPORT SAMPLE LOCATION MAP FALLS CITY SCHOOL DISTRICT – LIBRARY/SCIENCE BUILDING 111 NORTH MAIN STREET FALLS CITY, OREGON 97344 4120 SE International Way, Suite A110 Milwaukie, Oregon 97222 Phone: (503) 387-3251 Fax: (503) 908-1318

Gym:Upper Floor Women's Restroom 102-07 Men's Restroom 102-06 102-08

Bleachers

Gym Floor

Bleachers



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



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