



4120 SE International Way  
Suite A 110  
Milwaukie, OR 97222

503.387.3251 PHONE  
503.908.1318 FAX

www.trcsolutions.com

November 2, 2016

Ms. Kate Hall  
**The Dallas School District**  
111 SW Ash Street  
Dallas, OR 97338

*Via email to: [kate.hall@dsd2.org](mailto:kate.hall@dsd2.org)*

**RE: Lead Water Testing  
Oakdale Heights Elementary School  
1375 SW Maple Street  
Dallas, OR 97338  
PO# 170864**

**TRC Project: 264210**

Ms. Hall:

At your request, TRC Environmental Corporation (TRC) performed lead in water testing at the Oakdale Heights Elementary School located at 1375 SW Maple Street, in Dallas, 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. DSD-04-01A, DSD-04-01B). 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

TRC identified a total of 75 water fixtures of which three (3) were determined to be “not in use” at the time sampling was conducted and are represented in Table A.1 below. Therefore TRC performed sampling of 72 fixtures within this school. Sampling was conducted on September 21, 2016 and September 22, 2016 in between the hours of 4:00 a.m. and 7:00 a.m. Of the 72 first draw samples collected, seven (7) had results greater than or equal to 20 parts per billion (ppb) for lead. The flush draw samples (B samples) for these seven (7) samples were analyzed. The seven (7) first draw results (A sample) which were at or greater than 20 ppb for lead and the flush draw sample (B sample) results for those seven (7) are noted in Table B.1 below.

As shown in Table B.1 below, the first draw sample results for samples DSD-04-02A, DSD-04-05A, DSD-04-10A, DSD-4-15A and DSD-04-48A indicate lead levels above the USEPA action limit, whereas the flush draw sample results for those five samples indicate levels below the USEPA action limit. Therefore, the results for samples DSD-04-02A, DSD-04-05A, DSD-04-10A, DSD-4-15A and DSD-04-48A indicate the outlet and or plumbing lead line all the way to the stop, to be the cause of the elevated lead levels in the water and not the associated plumbing line behind the wall. Conversely, for samples DSD-04-04A, DSD-04-04B, DSD-04-38A and DSD-04-38B relating to the kitchen soup pot and Room 12 drinking fountain, the results indicate lead levels above the USEPA action limit for the outlet and or plumbing lead line all the way to the stop as well as the associated plumbing line behind the wall.

A complete list of the analytical results noting all rooms and outlets that were sampled can be found in Appendix A.

Table A.1

<b>Not In Use Fixture Location and Description</b>
Classrooms 3 and 4 – Sink Faucet
Classroom 17 – Sink Faucet
Classroom 17 – Drinking Fountain

Table B.1

Sample #	Location and Fixture Description	Analyte	Result	USEPA Action Limit
<b>DSD-04-02A</b>	<b>Kitchen – Sink Faucet</b>	<b>Lead</b>	<b>28 ppb</b>	<b>20 ppb</b>
DSD-04-02B	Kitchen – Sink Faucet	Lead	1 ppb	20 ppb
<b>DSD-04-04A</b>	<b>Kitchen – Soup Pot</b>	<b>Lead</b>	<b>1,540 ppb</b>	<b>20 ppb</b>
<b>DSD-04-04B</b>	<b>Kitchen – Soup Pot</b>	<b>Lead</b>	<b>65 ppb</b>	<b>20 ppb</b>
<b>DSD-04-05A</b>	<b>Music Room – Sink Faucet</b>	<b>Lead</b>	<b>97 ppb</b>	<b>20 ppb</b>
DSD-04-05B	Music Room – Sink Faucet	Lead	5 ppb	20 ppb
<b>DSD-04-10A</b>	<b>Classroom 19 – Sink Faucet</b>	<b>Lead</b>	<b>64 ppb</b>	<b>20 ppb</b>
DSD-04-10B	Classroom 19 – Sink Faucet	Lead	4 ppb	20 ppb
<b>DSD-04-15A</b>	<b>Classroom 3 – Sink Faucet</b>	<b>Lead</b>	<b>20 ppb</b>	<b>20 ppb</b>
DSD-04-15B	Classroom 3 – Sink Faucet	Lead	7 ppb	20 ppb
<b>DSD-04-38A</b>	<b>Classroom 12 – Drinking Fountain</b>	<b>Lead</b>	<b>111 ppb</b>	<b>20 ppb</b>
<b>DSD-04-38B</b>	<b>Classroom 12 – Drinking Fountain</b>	<b>Lead</b>	<b>34 ppb</b>	<b>20 ppb</b>
<b>DSD-04-48A</b>	<b>Classrooms 16 and 17 – Sink Faucet</b>	<b>Lead</b>	<b>29 ppb</b>	<b>20 ppb</b>
DSD-04-48B	Classrooms 16 and 17 – Sink Faucet	Lead	10 ppb	20 ppb

ppb = parts per billion  
 USEPA = United States Environmental Protection Agency

Recommendations

TRC recommends that the District suspend the use of the water at the seven (7) fixtures listed in Table B.1 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 for the Kitchen Soup Pot and Room 12 Drinking Fountain. 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, for the Kitchen Soup Pot and Classroom 12 Drinking Fountain, TRC recommends those fixtures be suspended from use until after the associated outlet and supply line from the wall to the outlet is replaced. Once the replacements are made, TRC recommends 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.

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

# Revised - 10/5/2016

## LEAD & COPPER RULE REPORT

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

Reference Number: **16-23434**  
 Project: 264210 - Oakdale  
 Elementary School

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

Analyst: mvp  
 Date Received: 9/21/2016  
 Report Date: 9/30/2016  
 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_57327	9/21/2016	01A - Kitchen Sink Faucet	1030	LEAD	ND	ppb	20	1	200.8	4072	
16_57328	9/21/2016	02A - Kitchen Sink Faucet	1030	LEAD	28	ppb	20	1	200.8	4072	
16_57329	9/21/2016	03A - Kitchen Sink Faucet	1030	LEAD	6	ppb	20	1	200.8	4072	
16_57330	9/21/2016	04A - Kitchen Soup Pot	1030	LEAD	1540	ppb	20	1	200.8	4072	
16_57331	9/21/2016	05A - Music Rm. Sink Faucet	1030	LEAD	97	ppb	20	1	200.8	4072	
16_57332	9/21/2016	06A - Music Rm. Drinking Fountain	1030	LEAD	9	ppb	20	1	200.8	4072	
16_57333	9/21/2016	07A - Gym Drinking Fountain	1030	LEAD	1	ppb	20	1	200.8	4072	
16_57334	9/21/2016	08A - Rm. 19 Sink Faucet	1030	LEAD	10	ppb	20	1	200.8	4072	
16_57335	9/21/2016	09A - Rm. 19 Drinking Fountain	1030	LEAD	1	ppb	20	1	200.8	4072	
16_57336	9/21/2016	10A - Rm. 19 Sink Faucet	1030	LEAD	64	ppb	20	1	200.8	4072	
16_57337	9/21/2016	11A - Rm. 1 Sink Faucet	1030	LEAD	13	ppb	20	1	200.8	4072	
16_57338	9/21/2016	12A - Rm. 1 Drinking Fountain	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57339	9/21/2016	13A - Rm. 2 Sink Faucet	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57340	9/21/2016	14A - Rm. 2 Drinking Fountain	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57341	9/21/2016	15A - Rm. 3 Sink Faucet	1030	LEAD	20	ppb	20	1	200.8	4072	
16_57342	9/21/2016	16A - Rm. 3 Drinking Fountain	1030	LEAD	9	ppb	20	1	200.8	4072	
16_57343	9/21/2016	17A - Rm. 4 Sink Faucet	1030	LEAD	4	ppb	20	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.

## LEAD & COPPER RULE REPORT

Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_57344	9/21/2016	18A - Rm. 4 Drinking Fountain	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57345	9/21/2016	19A - Rm. 5 Sink Faucet	1030	LEAD	6	ppb	20	1	200.8	4072	
16_57346	9/21/2016	20A - Rm. 5 Drinking Fountain	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57347	9/21/2016	21A - Rm. 6 Sink Faucet	1030	LEAD	7	ppb	20	1	200.8	4072	
16_57348	9/21/2016	22A - Rm. 6 Drinking Fountain	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57349	9/21/2016	23A - Rm. 5/6 Sink Faucet	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57350	9/21/2016	24A - Hallway Drinking Fountain #1	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57351	9/21/2016	25A - Rm. 7 Sink Faucet	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57352	9/21/2016	26A - Rm. 7 Drinking Fountain	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57353	9/21/2016	27A - Rm. 8 Sink Faucet	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57354	9/21/2016	28A - Rm. 8 Drinking Fountain	1030	LEAD	1	ppb	20	1	200.8	4072	
16_57355	9/21/2016	29A - Rm. 8/9 Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57356	9/21/2016	30A - Rm. 9 Sink Faucet	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57357	9/21/2016	31A - Rm. 9 Drinking Fountain	1030	LEAD	1	ppb	20	1	200.8	4072	
16_57358	9/21/2016	32A - Rm. 10 Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57359	9/21/2016	33A - Rm. 10 Drinking Fountain	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57360	9/21/2016	34A - Rm. 10/11	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57361	9/21/2016	35A - Rm. 11 Sink Faucet	1030	LEAD	7	ppb	20	1	200.8	4072	
16_57362	9/21/2016	36A - Rm. 11 Drinking Fountain	1030	LEAD	4	ppb	20	1	200.8	4072	
16_57363	9/21/2016	37A - Rm. 12 Sink Faucet	1030	LEAD	15	ppb	20	1	200.8	4072	
16_57364	9/21/2016	38A - Rm. 12 Drinking Fountain	1030	LEAD	111	ppb	20	1	200.8	4072	
16_57365	9/21/2016	39A - Rm. 13 Sink Faucet	1030	LEAD	13	ppb	20	1	200.8	4072	
16_57366	9/21/2016	40A - Rm. 13 Drinking Fountain	1030	LEAD	8	ppb	20	1	200.8	4072	
16_57367	9/21/2016	41A - Rm. 14 Sink Faucet	1030	LEAD	7	ppb	20	1	200.8	4072	
16_57368	9/21/2016	42A - Rm. 14 Drinking Fountain	1030	LEAD	7	ppb	20	1	200.8	4072	
16_57369	9/21/2016	43A - Rm. 14/15 Sink Faucet	1030	LEAD	3	ppb	20	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.

## LEAD & COPPER RULE REPORT

Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_57370	9/21/2016	44A - Rm. 15 Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57371	9/21/2016	45A - Rm. 15 Drinking Fountain	1030	LEAD	6	ppb	20	1	200.8	4072	
16_57372	9/21/2016	46A - Rm. 16 Sink Faucet	1030	LEAD	5	ppb	20	1	200.8	4072	
16_57373	9/21/2016	47A - Rm. 16 Drinking Fountain	1030	LEAD	2	ppb	20	1	200.8	4072	
<b>16_57374</b>	<b>9/21/2016</b>	<b>48A - Rm. 16/17 Sink Faucet</b>	<b>1030</b>	<b>LEAD</b>	<b>29</b>	<b>ppb</b>	<b>20</b>	<b>1</b>	<b>200.8</b>	<b>4072</b>	
16_57375	9/21/2016	49A - Hallway Drinking Fountain #2	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57897	9/22/2016	50A - Rm. 18 Sink Faucet	1030	LEAD	18	ppb	20	1	200.8	4072	
16_57898	9/22/2016	51A - Rm. 18 Drink Fountain	1030	LEAD	15	ppb	20	1	200.8	4072	
16_57899	9/22/2016	52A - Library Sink Faucet (Work Room)	1030	LEAD	12	ppb	20	1	200.8	4072	
16_57900	9/22/2016	53A - Health Rm. Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57901	9/22/2016	54A - Faculty Lounge Sink Faucet	1030	LEAD	6	ppb	20	1	200.8	4072	
16_57902	9/22/2016	55A - Faculty Restroom	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57903	9/22/2016	56A - Faculty Restroom	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57904	9/22/2016	57A - Girl's Restroom	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57905	9/22/2016	58A - Girl's Restroom	1030	LEAD	1	ppb	20	1	200.8	4072	
16_57906	9/22/2016	59A - Girl's Restroom	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57907	9/22/2016	60A - Boy's Restroom	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57908	9/22/2016	61A - Boy's Restroom	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57909	9/22/2016	62A - Boy's Restroom	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57910	9/22/2016	63A - Girl's Restroom Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57911	9/22/2016	64A - Girl's Restroom Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57912	9/22/2016	65A - Girl's Restroom Sink Faucet	1030	LEAD	2	ppb	20	1	200.8	4072	
16_57913	9/22/2016	66A - Boy's Restroom Sink Faucet	1030	LEAD	7	ppb	20	1	200.8	4072	
16_57914	9/22/2016	67A - Boy's Restroom Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57915	9/22/2016	68A - Boy's Restroom Sink Faucet	1030	LEAD	7	ppb	20	1	200.8	4072	
16_57916	9/22/2016	69A - Girl's Restroom Sink Faucet	1030	LEAD	8	ppb	20	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.**



### LEAD & COPPER RULE REPORT

Lab Number	Date Collected	Site / Location	EPA #	Analyte Name	Result	Units	AL	RL	METHOD	Lab	Comments
16_57917	9/22/2016	70A - Girl's Restroom Sink Faucet	1030	LEAD	10	ppb	20	1	200.8	4072	
16_57918	9/22/2016	71A - Boy's Restroom Sink Faucet	1030	LEAD	3	ppb	20	1	200.8	4072	
16_57919	9/22/2016	72A - Boy's Restroom Sink Faucet	1030	LEAD	1	ppb	20	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.**



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: **16-25671**

Project: 264210 - Oakdale ES - B samples

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

Analyst:.mvp  
Date Received: 9/21/2016  
Report Date: 10/20/2016  
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_63026	9/21/2016	DSD-04-02B - Kitchen - Sink Faucet	1030	LEAD	1	ppb	15	1	200.8	4072	
16_63027	9/21/2016	DSD-04-04B - Kitchen - Soup Pot	1030	LEAD	65	ppb	15	1	200.8	4072	
16_63028	9/21/2016	DSD-04-05B - Music Room - Sink Faucet	1030	LEAD	5	ppb	15	1	200.8	4072	
16_63029	9/21/2016	DSD-04-10B - Classroom 19 - Sink Faucet	1030	LEAD	4	ppb	15	1	200.8	4072	
16_63030	9/21/2016	DSD-04-15B - Classroom 13 - Sink Faucet	1030	LEAD	7	ppb	15	1	200.8	4072	
16_63031	9/21/2016	DSD-04-38B - Classroom 12 - Drinking Fountain	1030	LEAD	34	ppb	15	1	200.8	4072	
16_63032	9/21/2016	DSD-04-48B - Classroom 16-17 - Sink Faucet	1030	LEAD	10	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.

## Appendix B – Location Map

# DAKDALE

