This is to confirm that the domestic water system has been sampled and tested. Below are analysis reports showing the water to meet lead drinking water standards for the State of Oregon.

<table>
<thead>
<tr>
<th>METHOD</th>
<th>Lead Result</th>
<th>Lead Limit</th>
<th>Units</th>
<th>MEET THE MONITORING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA200.8</td>
<td>0.0037</td>
<td>0.015</td>
<td>Mg/l</td>
<td>Does</td>
</tr>
</tbody>
</table>

**US Water Services Contact:** Chris Rogers  503-490-4702  chris.rogers@uswaterservices.com
Westridge Elementary School - HVAC System

<table>
<thead>
<tr>
<th>Test</th>
<th>Hot Water Boiler Loop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductivity (umhos)</td>
<td>limits: 7390 0 min</td>
</tr>
<tr>
<td>pH</td>
<td>limits: 10.38 0 min</td>
</tr>
<tr>
<td>Nitrite (ppm as NO₂)</td>
<td>limits: 2350 800 min</td>
</tr>
</tbody>
</table>

Opening Comments

The purpose of this report is to communicate the start up procedure for the hot water boiler system after boiler installation.

I added 5 gallons of 447-LM to the pot feeder and circulated into the system.

I waited for 45 minutes to make sure the inhibitor was properly mixed into the system water.

The system water for the new boiler system is in range for good protection from corrosion.

The rest of the heat loop for school was tested previously and the nitrite level was at 400 ppm which is under the minimum.

Once the boilers are opened to the rest of the heat loop system and are mixed together the system water should be tested and inhibitor added as needed to stay in range at a minimum of 800 ppm for nitrite.

Final water clarity looks very clear and clean.
Closing Comments

Please review and contact me with any question.

Take care,
Chris Rogers
DATE: 8/16/19
TO: Apollo Mechanical
FROM: US Water Services
SUBJECT: Westridge Elementary Domestic Water
        Sample Lab ID: 19-009852-001

Analysis Date: 8/17/19  Batch Number: 1907419

This is to confirm that the domestic water system has been sampled and tested. Below are analysis reports showing the water to meet bacteriological drinking water standards for the State of Oregon.

Sample Point:
Domestic Water

<table>
<thead>
<tr>
<th>METHOD</th>
<th>TOTAL COLIFORMS PRESENT/ABSENT</th>
<th>FECAL COLIFORMS/E.COLI PRESENT/ABSENT</th>
<th>DOES/DOES NOT CONFORM TO NELAC STANDARDS</th>
<th>THE RESULT DOES/DOES NOT MEET THE MONITORING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHROMO-FLOUROGENIC</td>
<td>Absent</td>
<td>Absent</td>
<td>Does</td>
<td>Does</td>
</tr>
</tbody>
</table>

US Water Services Contact:  Chris Rogers  503-490-4702  chris.rogers@uswaterservices.com

Thank you for your continued cooperation and business.
Opening Comments

The purpose of this report is to communicate the start up procedure for the hot water boiler system after boiler installation.

I met with Dallas and added 5 gallons of our US Water product BOIL OUT to the pot feeder and circulated into the system.

Boil Out is a alkaline cleaner for new boilers that:

- Removes Oil
- Removes Grease
- Removes Mill Scale
- Prepares New Boiler Surfaces for Operation

Boil Out is a specially formulated alkaline boil out. The product is designed to remove oil and grease commonly present in new boilers and piping, and to clean waterside surfaces of boilers that have become contaminated with oil or grease during service.

The phosphates in Boil Out will also react with the clean bare steel in a new boiler, and will begin the passivation process, to minimize metal loss on start up.

This will maximize the life of your new boiler, and will reduce the amount of 0x11cred water0x11d seen during initial start up.

Dallas turned on the system water pumps and continued to circulate 2.5 days and then started flushing the system with city water. I will return on 8/8/19 to confirm that all Boil Out has been flushed out. At that time I will add 447-LM Closed Loop inhibitor to the system to the proper level for corrosion protection.

Closing Comments

Please review and contact me with any question.

Take care,
Chris Rogers
Westridge Elementary School - HVAC System

<table>
<thead>
<tr>
<th>Test</th>
<th>Hot Water Boiler Loop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductivity (umhos)</td>
<td>2812</td>
</tr>
<tr>
<td>pH</td>
<td>10.76</td>
</tr>
<tr>
<td>Nitrite (ppm as NO₂)</td>
<td>400</td>
</tr>
<tr>
<td>Iron (ppm as Fe)</td>
<td>0.14</td>
</tr>
<tr>
<td>Copper (ppm as Cu)</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Opening Comments

The purpose of this report is to communicate the test results for the Hot Water Boiler system water prior to construction was performed.

The system water has had red dye added.

The Iron and Copper levels are in range at this time, however the Nitrite corrosion protection was under the minimum of 800 ppm which can lead to corrosion of the internal components.

Lake Oswego water is very corrosive. Corrosion is serious and can lead to equipment failure, equipment downtime, or the loss of heat transfer.

If left under treated the two metals can cause galvanic corrosion.

Galvanic corrosion occurs when two different metals come into contact enough to conduct electricity. The electrical differences attack the more active metal, corroding it rapidly.

US Water's final treatment for this project will insure the Nitrite level will be at or above the minimum 800 ppm for corrosion protection.

Additional recommendations would be to add a small amount of a biocide to the system as the system was open to atmosphere which can allow bacteria to enter the system.

Closing Comments

Please review and contact me with any question.

Take care,
Chris Rogers