

Epilogue: What If I Don't Treat the Boiler?

Over the last several weeks, we have talked about the importance of boiler water treatment. Based on that premise, how do you make sure your programs are protecting the systems? The answer is a proper testing regimen with each service visit.

The foremost concern is oxygen, so performing a test for oxygen scavenger residuals is a must. The results would tell us whether or not the mechanical and chemical programs are working correctly. Low residuals would have us looking for a mechanical cause.

Next, you need to test the condensate. To make sure the treatment program is controlled, pH and metals (iron and copper) should be tested with each visit. High iron levels would indicate the need to evaluate the program and, possibly, to consider a filming amine program.

Finally, if uncontrolled hardness gets into the boiler system, there are going to be long-term problems. The softener effluent, condensate, and the boiler feedwater should be tested for trace hardness. Consider taking composite samples to see what happens over time; grab samples during your service visits may not tell the complete story! Also, be sure your internal treatment chemical, whether it is phosphate, polymer, or tannin, is at the proper levels.

Water treatment saves money, and proper monitoring assures results. By regularly surveying boiler systems, you will not be surprised during your "final exam"—the annual boiler inspection!