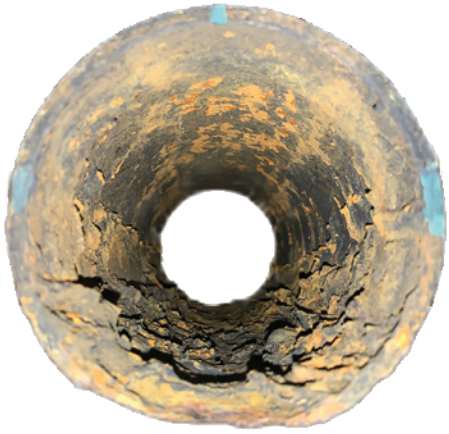
Fire Sprinkler System Pipe Sampling

ECS Consulting Group

THE PREFERRED ANALYTICAL TOOL FOR CORROSION



The preferred tool for assessing corrosion in a fire sprinkler system is a pipe sample analysis. ECS provides evaluation and analysis of corroded fire sprinkler piping to investigate both cause of the metal loss and useful remaining service life data.

The analysis requires a fire sprinkler service provider to remove a corrosion damaged section of piping. A previously removed pipe section, often due to failure, may also be submitted for analysis. Inspection of the sample identifies the type of corrosion, remaining pipe wall thickness, and pit depths found in the pipe sample.

Analysis results are accompanied by a report providing the most likely cause of corrosion and/or failures, customized remediation and prevention recommendations, and pictures of the sample.

Evaluate internal condition of fire sprinkler system piping to determine cause, extent, and severity of corrosion

Pipe Analysis Features

- Sample is sectioned and cleaned to remove solids and allow visual inspection
- Inspection and analysis determines type of corrosion, remaining pipe wall thickness and calculated corrosion rate (mils per year)
- Comprehensive analysis report includes photographs before and after media blasting

before media blasting

Pipe Analysis Benefits

- Most cost effective method of corrosion analysis for fire sprinkler systems
- Provides hard data regarding root cause and severity of corrosion activity
- Integral for pipe replacement recommendations based on wall loss measurements
- Obstruction risk posed by adherent deposits

after media blasting

Why not water samples?

One method of evaluating corrosion in fire sprinkler systems has been testing of a water sample for evidence of bacteria or other conditions that may cause accelerated corrosion rates. However, while bacteria and water chemistry can play a role in the overall corrosive conditions within a sprinkler system, oxygen corrosion has been found to be the primary driver of metal loss in these type systems. Simply pulling a water sample provides NO hard data on the current amount of metal loss that has occurred, what is causing the metal loss, or what should be done to prevent future leaks.

About ECS

ECS has been the market leader and industry expert on corrosion in fire sprinkler systems for over 10 years. We provide products and services to manage corrosion in fire sprinkler systems. Products include nitrogen generators, wet and dry system vents, and corrosion monitoring devices. Services include analytical testing, corrosion assessment and pipe replacement recommendations, project commissioning, and training.