



Why did this pipe fail?

This analysis is available for identification of the corrosion/failure mechanism, i.e. pitting corrosion, stress corrosion cracking, microbiologically influenced corrosion, galvanic corrosion, etc. of the failed sprinkler pipe. The analysis involves removing a section of the failed pipe from the fire sprinkler system and sending to a certified third party lab for testing. Material flaw/quality evaluations will be made to determine potentially related factors to the failure condition. This will include metallographic examination for microstructural flaws or abnormalities.

The methods used in the failure / corrosion analysis will typically include visual examination, examination by optical microscopy, examination by scanning electron microscopy (SEM), metallographic examinations (cross sectional examination of material microstructure), energy dispersive spectroscopy (EDS) of corrosion products/residues, microbiological activity studies, hardness survey and chemical analysis.

A formal report, with photographic documentation will be generated upon completion approximately 15 business days after the test is started.

Pipe Section Return Procedure

Note: The sample must be received by the third party within 72 hrs after it is removed from the sprinkler system.

1. Package the failed pipe section (8” – 24” in length) to preserve deposits and corrosion sites during shipping. Taping plastic bags or duct tape over the ends will help retain deposits during shipping. Mark the sample with system orientation, i.e. top, bottom, if known. Package the pipe section in a shipping box using packing materials to ensure the sample is well-cushioned to prevent being crushed or broken during shipping.
2. Complete sample identification of this document and include with pipe section return.
3. Contact Potter at 800-325-3936 for prepaid shipping information.

Includes:

- Prepaid sample shipping - (U.S. Only)
- Sample identification form
- Laboratory analysis of returned pipe samples

Stock number: 1119183

Sample Identification

NOTE: This section *MUST* be filled out completely and returned with the sample.

Person/Firm Requesting Test

Name: _____
 Company: _____
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____
 Email: _____
 (If you would like report sent via email)

Facility Pipe Sample Taken

Name: _____
 Bldg #: _____ Riser #: _____
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____

System Information

System (*circle one*): Wet/Dry FPS Age: _____ Total # of Risers: _____
 Facility Sq. Ft. (*approx.*): _____ # of Floors: _____
 Facility Type: _____
 Previous System Treatment: _____

Water Sample Information

Date sample collected: _____ Time: _____
 Location in system where obtained: _____
 Sample collected by: _____
 Company: _____
 Address: _____
 Sample description/remarks: _____

