

M&M Engineering's Boiler Tube Failure Handbook



Hole—Waterside



Locations	Water wall
Boiler Type	Power
Industry	Electric Utility

Appearance	Undercut corrosion, multi-color deposits (red, white, black). This is a View of a tube ID following cleaning.
Mechanism	Acid Phosphate Attack
Comment	Under-deposit corrosion mechanism caused by reaction of phosphate with magnetite for form maracite. Most often found in high heat areas of the boiler. Typically associated with boilers suffering phosphate hideout and using disodium phosphate or sodium hexametaphosphate.

