We specialize in determining how and why equipment, metals, alloys, and nonmetals fail. Other, related investigations determine the fitness for service and mechanical integrity of equipment that has deteriorated due to:

- corrosion,
- fracture,
- mechanical damage,
- exposure to fire,
- abuse,
- improper manufacture or application.

David Hendrix has provided litigation support and expert witness testimony on a variety of causes involving equipment mechanical and corrosion related failure, product reliability, fitness for service, and testing and inspection of equipment and components. Case support has included researching material and corrosion properties, performing literature searches, laboratory testing, failure analysis of equipment and components, and advising on industry practices regarding equipment reliability and inspection standards of care. Support has been divided between defense and plaintiff causes.

Representative Cases

- Failures of above ground storage tanks.
- Corrosion failure of tank trailers.
- Failure of a "jack-up" offshore drilling rig.
- Mechanical integrity best practices.
- Failure of a boat steering mechanism.
- Failure of a floating dock due to an environmental release.
- Corrosion of process equipment due to chloride contamination.
- Corrosion under fireproofing.

In these and other cases, support has included conducting laboratory tests to simulate corrosion damage, performing reviews of other expert reports, helping with case preparation, and forming opinions on the technical merits of a case.