



PearlStreet

OIL & GAS/PETROCHEMICAL CASE STUDY

INVESTIGATING PIPELINE FAILURES

SERVICES: Engineering & Materials Consulting, Inspection, Mechanical Testing

THE PROBLEM

Pipeline failed, causing a large environmental impact

THE CHALLENGE

To understand why the pipeline failed to mitigate risk of further failure

PEARLSTREET'S INVOLVEMENT

PearlStreet was chosen to investigate the failure due to an excellent track record of failure investigation and its broad range of capabilities.



APPROACH

The investigation was divided into the following sections:

- Inspection
- Coating Analysis
- Corrosion and Cathodic Protection Analyses
- Fractography
- Metallography
- Mechanical Testing
- Stress Analysis

The output of each investigation was used to perform a root cause failure analysis.

BENEFITS

- Efficient and effective investigation involving only one service provider with all the required capabilities
- Sensitive investigation with close liaison between asset owner and service provider
- Ability to demonstrate independent investigation to regulators