

RUPTURED WATER OVERFLOW LINE

Workscope

A temporary repair on the 12" overflow drain line had deteriorated to the extent that the bottom section of the existing pipework had eroded away, resulting in a rupture which was releasing a continuous flow of water. Stork's composite repair team were asked to review the operating parameters and challenged to provide a solution which would enable the repair of the pipework temporarily and restrict the leak to an acceptable level until a replacement spool could be fabricated.

Solution

Stork designed a Composite Repair solution using PowerSleeve, AquaWrap, BioDur563 and Epoxy Putty and, by utilising previously trained platform personnel, it was able to react quickly.

PowerSleeve was used first to prepare half-shells 1.4m in length, cast from the existing pipework.

Preparation, normally completed by blasting to SA2 ½, was not feasible in the immediate area where heavy corrosion was visible. Therefore, to reduce the preparation requirement, the area was primed with BioDur 563 which acted as a primer and load film transfer material.

Where there was heavy pitting 5/20 Epoxy Putty was used to reinstate the pipe profile. Once cured, four layers of AquaWrap was applied to put structural strength back into the pipework.

Results & Benefits

Stork provided a one stop service, carrying out all calculations and design in-house in line with ISO 24817 and PCC2.

The project proved a cost effective and innovative solution for the client where the only alternative was to replace the line. This was not an immediate option, as both cost and time were prohibitive.

The repair was completed quickly and safely and the reaction was swift.

Stork's team were commended by the client for what was acknowledged as a difficult repair.

The line is now back in service, providing the client with the crucial time required to order a replacement spool.

Project Information:

- **When:**
February 2015
- **Location:**
North Sea Platform
- **Workscope:**
Temporary Repair to a ruptured water overflow line
- **Installation:**
Field Wetted Power Sleeve and AquaWrap
- **Materials:**
BioDur 563 , 5/20 Epoxy Putty, PowerSleeve & AquaWrap
- **Safety:**
Project delivered without incident

