

Pipe-in-pipe solution safeguards oldest Dutch oilfield NAM

AS CORROSION OF WASTEWATER PIPES IS THREATENING THE PRODUCTION IN NAM'S SCHOONEBEEK OILFIELD, A FLEXIBLE PIPE-IN-PIPE SOLUTION IS NOW ABOUT TO SAVE THE INVESTMENT.

NAM (Nederlandse Aardolie Maatschappij), a joint venture of Shell and Exxon Mobile, was able to resume oil extraction in the Dutch Schoonebeek field in 2011 after a 15-year pause. New technology, including steam injection, made it possible to bring out the especially thick oil of this oldest field in the Netherlands and extend production by an expected 25 years.



Flexible composite pipe

However, safe disposal of wastewater has since been threatened by microbe-induced corrosion of the discharge pipe. Production was interrupted in 2015 as NAM and its service partner aQuaintance started the search for a safe and reliable solution. Currently, that solution is being executed, with production expected to resume in September 2016.

Long-standing partnership

aQuaintance, a partnership between Engie (former Cofely), A. Hak and Tebodin, is NAM's partner in the execution and servicing of its onshore oil and gas activities in the Netherlands. The long-standing relationship translates into extensive knowledge of the processes and installations. Finding a solution for

Schoonebeek wastewater disposal has been a fast-track project, taking approximately one year from making the basic choice of method till resumption of production. Project Manager Mr. Ids Bakker of Tebodin: 'We are using winches to pull an 8-inch flexible composite pipe into the existing 18-inch steel discharge pipe. The inner pipe is pressure-resistant up to 80 bar. By applying it pipe-in-pipe, we are keeping execution time down to an absolute minimum.'

Shell-approved standards

Mr. Gert Versteegt, Project Engineer at NAM: 'The flexible composite pipe has been certified for this project according to the NEN3650 and API17J standards after it had been qualified according to the Shell Standards. This makes it possible to

apply the material in projects worldwide. Similarly, the installation method meets these high international standards. The pipe-in pipe installation method on such scale is the first one worldwide.'

From the start of their search, NAM and aQuaintance have had swift execution high on their list of priorities, making this a construction-driven engineering project. Ids: 'Tebodin has provided the engineering and management of the project, which has involved a lot of testing of the work method to ensure it held up against these high standards.' ■