

# APPLICATION ON BRITANNIA



## Facts about Britannia

The Britannia natural gas/condensate field development is one of the largest and most significant ever undertaken in the UK. Under a unique agreement, Chevron UK Ltd and Conoco (UK) Ltd established a separate company, Britannia Operator Ltd (BOL), to act as operator of the field.

**Location:** 210 kilometres north-east of Aberdeen

**Water depth:** 146m

**Discovered:** Drilled respectively by Venture 1 drilling rig in 1975, and Ocean Kokuei in 1977

**Field life:** Approx. 30 years

**Size of reservoir:** 112 km<sup>2</sup>

**Peak production capacity:** 740 million standard cubic feet of sales gas, and in excess of 50,000 barrels condensate per day

**Export - Gas and gas liquids:** by new 27" 186km (116 mile) pipeline, installed during 1997, to St Fergus, Scotland, for processing at the SAGE terminal -  
**Condensate:** by new 14" 44km (27 mile) pipeline, installed during 1997, to the BP Forties Pipeline System via the Unity Platform

The Britannia platform is fairly new but has suffered very badly from corrosion in bolted systems. Aware that remedial action needed to be taken, the rig operators contacted Enviropeel in 2000 with a view to a trial application. Despite considerable work by Enviropeel engineers, with the assistance of DNV, it has taken more than two years to win the approval of the rig operators for use of the Zone 2 equipment on the platform.

## APPLICATION

Two two-man Enviropeel application teams were sent to Aberdeen and flown out to the platform where, despite the lateness of the season, they were to encapsulate as many flanges and valves as possible in the areas designated by the operators, using wind breaks and waterproof barriers where required. Movement of the equipment around the platform was accomplished without difficulty and good spray access to the bolted systems, although not always easy, was achieved in all cases. Surface preparation of the flanges was accomplished by hand using scrapers and wire brushes with a final wipe over to remove residual particles. The Zone-2 equipment performed exceptionally well, with a virtual 24 hr continuous operational cycle. Progress was hampered to a certain extent by poor weather conditions. VCI foam was used to protect all void areas and sealed with Enviropeel.

## COMMENT

There was much favourable comment from the commissioning engineers, they were very happy with the application and the high standard of the teams and equipment. A rolling programme of applications to cover the entire rig commences in 2004.



Above: valves and flanges prior to preparation.  
Below: valves and flanges prepared by hand and ready for application.



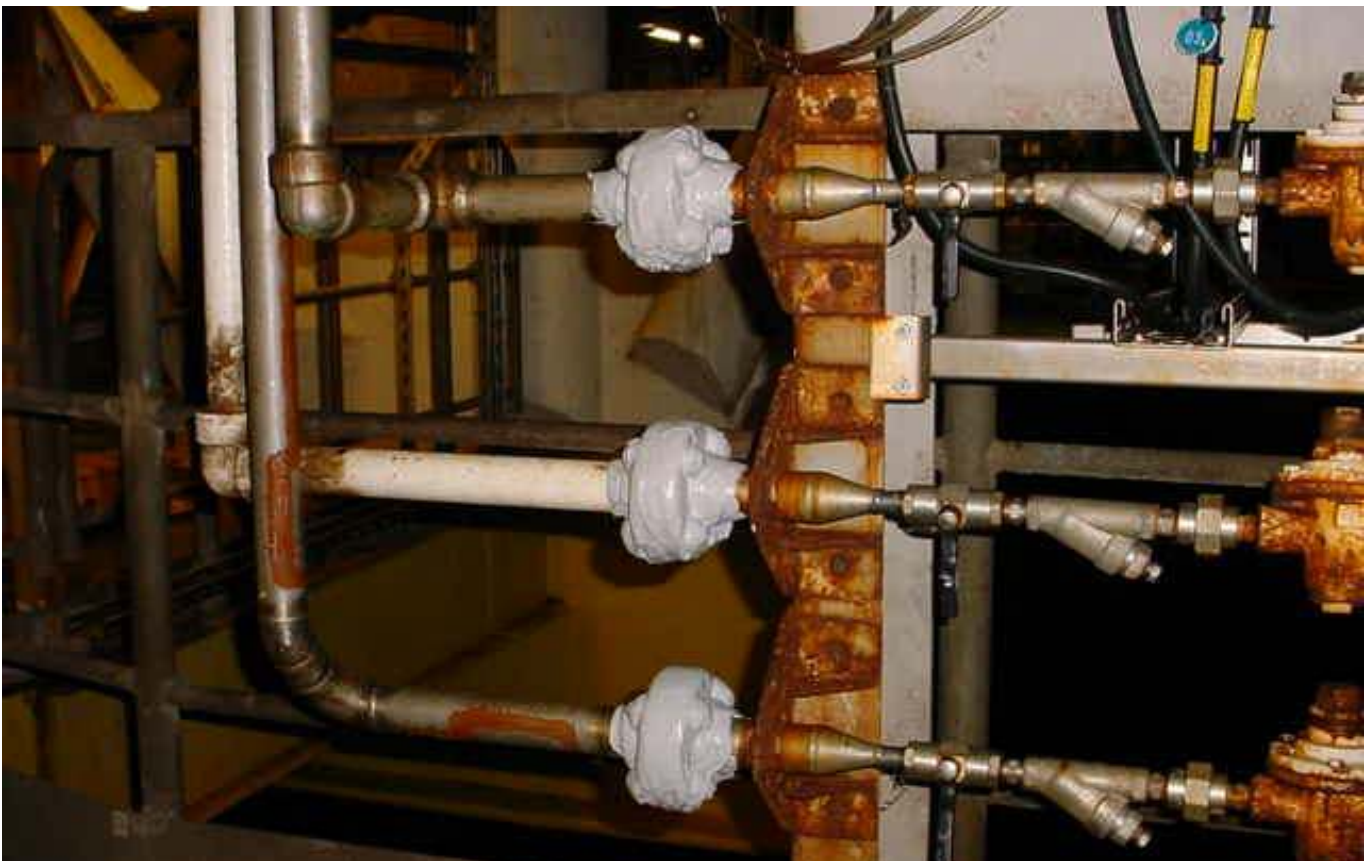


Early stages of application.





A variety of flanges that have been coated with E170 Grey.





More flanges and valves that have been coated with E170 Grey.

