



# Vertech Case Study

## Corrosion Under Insulation Inspection

### 1 Project Introduction

Vertech have been on-board the FPSO Rarua for 5 years.

Initially Vertech was engaged to provide general NDT services to assist the facility in meeting the necessary regulatory requirements.

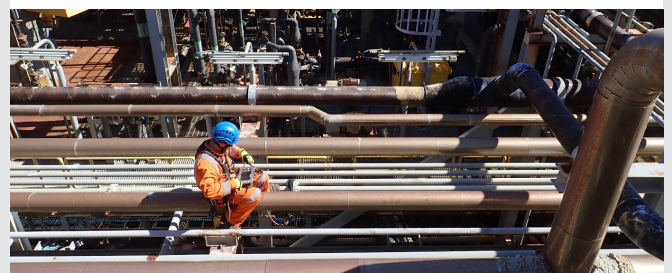
During this time both the facility and Vertech have developed allowing Vertech to expand the range of services offered.

With a growing scope and increased inspection capability Vertech has continued to provide cost effective solutions to the challenges faced in operating in an offshore environment on an aging facility.

Vertech has also been able to offer an extensive range of expertise through industry experience in both pressure systems and ship structure.

### Innovation

*One of the Vertech core values is innovation. For inspection, this means remaining current with the latest inspection technology in the industry. This ensures the selection and implementation of a particular technique is done in a way that offers the most comprehensive and cost-effective solution for the specified scope of work. In doing so, Vertech is able to develop technician capabilities, professional development of team leaders and management and strengthen client relationships.*





## 2 Corrosion Under Insulation Piping

The Raroa Operator had discovered, during routine topsides inspection, that Corrosion Under Insulation (CUI) has been occurring on-board. As the majority of the piping on the Raroa is insulated, Vertech were approached to assist the owner and operator to find a more cost effective solution to identifying CUI than the current approach of insulation removal.

Vertech then carried out a gap analysis on all the current cost effective methods of CUI detection, and presented the top 3 choices to the client. Together the decision was made to utilise the Eddyfi Lyft pulsed eddy current (PEC) system as a screening tool. A specialist team of technicians were mobilised offshore to carry out the first CUI PEC survey.

The piping targeted for PEC screening was selected by the MODEC Asset Integrity Manager and the Vertech Offshore Team Leaders. Using a combined local knowledge of the plant and relevant damage mechanisms, the first survey was a success with areas of piping being earmarked for further insulation stripping and visual/ultrasonic inspection. Due to the success for the first survey, two more surveys were planned and carried out. The second survey scope was expanded to include pressure vessels. As with the first survey, areas of CUI were found after the insulation system was stripped. Due to the ongoing CUI problem, the operator has now begun a systematic replacement of the old insulation system with a newer system allowing a greater reduction in the occurrence of CUI. This allows for a more targeted inspection and fabric maintenance program.



## 3 Vertech Contact Details

19 Walters Drive, Osborne Park  
Western Australia 6017  
Phone: +61 (8) 6168 7600  
Email: [info@vertech.com.au](mailto:info@vertech.com.au)

