# GEOVERT



RED MUD MARINE PIPELINE MARINE PIPELINE MAINTENANCE AND CORROSION MANAGEMENT

QUEENSLAND, AUSTRALIA



# CORROSION MANAGEMENT ON MARINE STRUCTURES USING COMMERCIAL CRAFTS AND ROPE ACCESS

## OVERVIEW

Queensland Alumina Ltd in Gladstone - Queensland, operate the country's largest Alumina Refinery. Bauxite is processed to extract Alumina and the residual mud pumped through four 8.5km long conveying pipes from the refinery to the residue disposal dam site.

The pipelines cross the South Trees tidal inlet where Geovert was contracted to perform various maintenance tasks on the support structure.

Tasks included various surface coating preparation and coating application to structural steel, removal and replacement of Denso corrosion systems, sea pile corrosion wrapping, handrail removal/fabrication and replacement, structural timber

replacement, corroded structural fasteners replacements, pile cap supply/replacement and various other maintenance works on the structure.

#### SOLUTION

Work on the structure was performed over tidal waters with a 5m tidal difference making consistent work flow a difficult task. Work was undertaken on a variety of fronts with differing methods utilised. Commercial vessels, structure walkway and rope access methods were undertaken to achieve efficient completion of the individual work items.

Rope access works over water were supported by rescue vessel and supervised by level 3 rope access technician to obtain the highest levels of health and safety. The tidal inlet environment allowed for only the highest levels of environmental care to be taken.

Innovative solutions in fabricating and supplying componentry to the project that exceeded the clients expectations were used. These solutions provided components at no greater initial supply cost. However they will outlast the life of the original items for decades to come, giving ongoing maintenance cost savings well into the future.

### Services related to this project

Rope Access Inspection NDT Repairs & Maintenance Corrosion Management

More information is available online at www.geovert.com