

CASE STUDY

CONDUCTOR INTEGRITY SCOPE

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CLIENT:Wood GroupFACILITY:North Rankin Complex

VERTECH HEAD OFFICE

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Introduction

Vertech rope access technicians installed four hundred metres of tension netting within ten days, to carry out strain measurements on well conductors (critical path conductor integrity scope), on the North Rankin Alpha platform situated one hundred and forty kilometres North West of Karratha. This project presented various constraints: environment, simultaneous construction and operational requirements of gas production platform. The system, when installed, required to withstand cyclonic activity up to and above a category three, with winds in excess of one hundred and seventy two kilometres per hour, where other access methods were not suitable. This ultimately enabled this project to be completed through multiple cyclones, ensuring a critical path project could take place.

Innovations

- Engineered alternative access systems
- Cyclone rated access system (Cat 3 and above, wind gust in excess 172.8 km per hour)
- Multi discipline personnel to complete additional scope requirements.





Before commencement, North Rankin HSE and operations personnel reviewed access to the work area. It was highlighted a secondary escape route was necessary for work to be carried out in module thirty nine - to ensure the safety of personnel in an emergency. Vertech personnel carried out as required the additional scaffolding to include the secondary escape from the twelve metre level, also devising an emergency escape plan using IRATA methodology. A mock trial rescue was carried out prior to project to ensure an efficient rescue from the area.

The Installation of the alternative access provided a safe system of work for third party contractors to carry out ultra-high pressure (UHP) water blasting and strain stall measurements on well conductors. The high risk activities, UHP, require a stable platform to ensure personnel are not exposed to added hazards when carrying out coating removal. This was achieved by additional web decking over the tension net, to ensure stability for personnel working on the access system. Once strain testing was completed, the access system was completely removed within two days, prior to a forecasted category cyclone exceeding the recommended wind loading of access system.

This project was a success for means of alternative access on operational gas facilities, due to multiple factors: reduction of man hours, Vertech multi discipline technicians (IRATA, Non Destructive testing, Scaffolding, Rigging, certified web net installers, mechanical fitting) and installation of innovative access system withstanding extreme weather condition.

Team Structure Tension Netting Installation

- 1 x rope access site supervisor, web certified installer and high risk licence
- 5 x rope access, web certified installer, rigging and scaffolding high risk licence.

Client Reference

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