

# CASE STUDY

## NRC HP AND LP FLARE TIP CHANGE

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# VERTECH

## INTRODUCTION

In 2019, a critical operation was carried out at the North Rankin Alpha site to replace the High-Pressure (HP) flare tip. Due to the complexity and location of the flare stack, a helicopter-assisted removal was selected. The operation prioritised safety, efficiency, and minimising disruption to plant operations and personnel.

## PROCESS

The use of a helicopter introduced unique engineering requirements. Vertech designed a tailored solution involving a lightweight scaffold system rated at 2.5 tonnes, fibreglass handrails, and a custom lifting davit. To ensure the concept's success, Vertech built a full-scale flare tip replica at their training facility, allowing for detailed trials alongside the client and other stakeholders.

Vertech's scope included project management, lift planning, procurement, engineering, and HAZID workshops. Rope access teams played a central role, enabling the construction and dismantling of access platforms on the flare stack, while maintaining safe access and avoiding interference with ongoing plant activities.

## OUTCOME

The project was successfully completed, with Vertech recovering lost schedule time and effectively managing environmental challenges such as poor weather. The client praised the team's adaptability, efficiency, and ability to deliver the additional flare bellows scope. Through innovation, precise planning, and strong collaboration, the flare tip replacement was completed safely and efficiently.

