

Platform Well Abandonment – Cormorant Alpha

Planning for the Modular Rig-based Well Decommissioning Operations on Cormorant Alpha

May 2021



POWERING A THRIVING **FUTURE**

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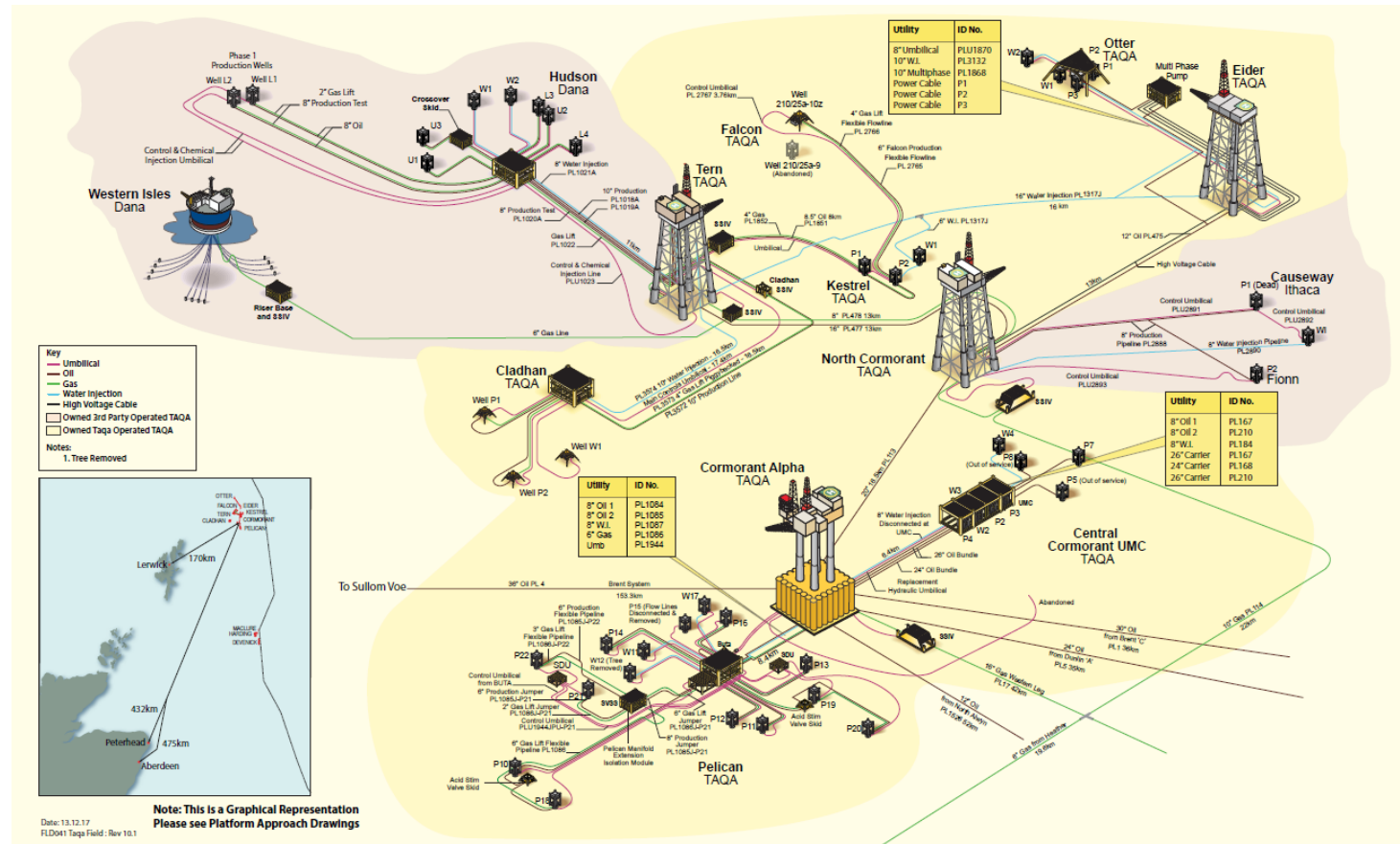


Introduction

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Background Information Cormorant Alpha

- **Field Discovery:** 1972
- **Date of Construction:** 1978
- **Last Drilling Activity:** 2007
- **Planned Activity:** Plug and abandonment (P&A) of the Cormorant Alpha platform well stock.
- **Cormorant Alpha Well Stock (22 Wells):**
 - 18 wells - require all phase of abandonment.
 - 2 wells - phase 1 complete.
 - 2 wells - phase 2 complete.



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Rig Re-Activation vs HWU vs MDR



1978



Rig Drilling
Package
after 43
years



Rig Reactivation:

- £££m
- Full overhaul required



HWU:

- Requirement for potential drilling, workover and abandonment activities



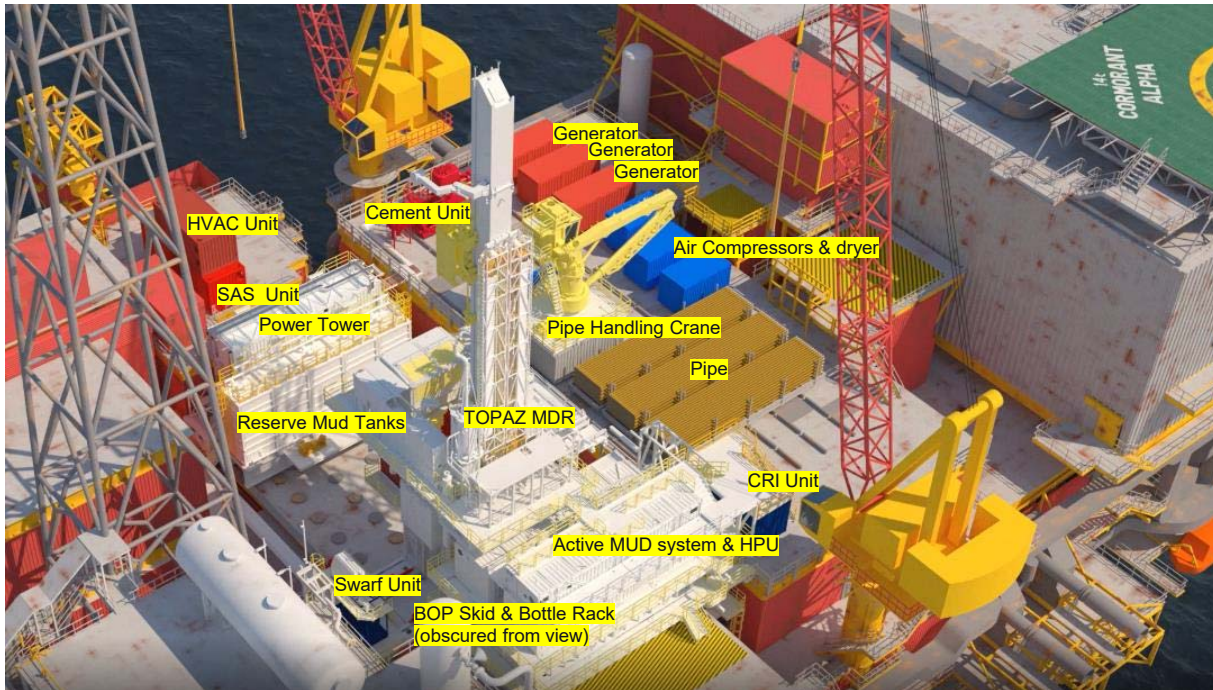
Modular Drilling Rig:

- Met all tender criteria

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Archer Topaz Modular Drilling Rig

Summary: The Archer TOPAZ MDR has been contracted to undertake the well abandonments of the Cormorant Alpha well inventory. It will be modified and adapted to operate on the installation prior to mobilisation. It will be coupled with several existing systems on the Cormorant Alpha to enhance its functionality and to make best use of the existing support infrastructure.

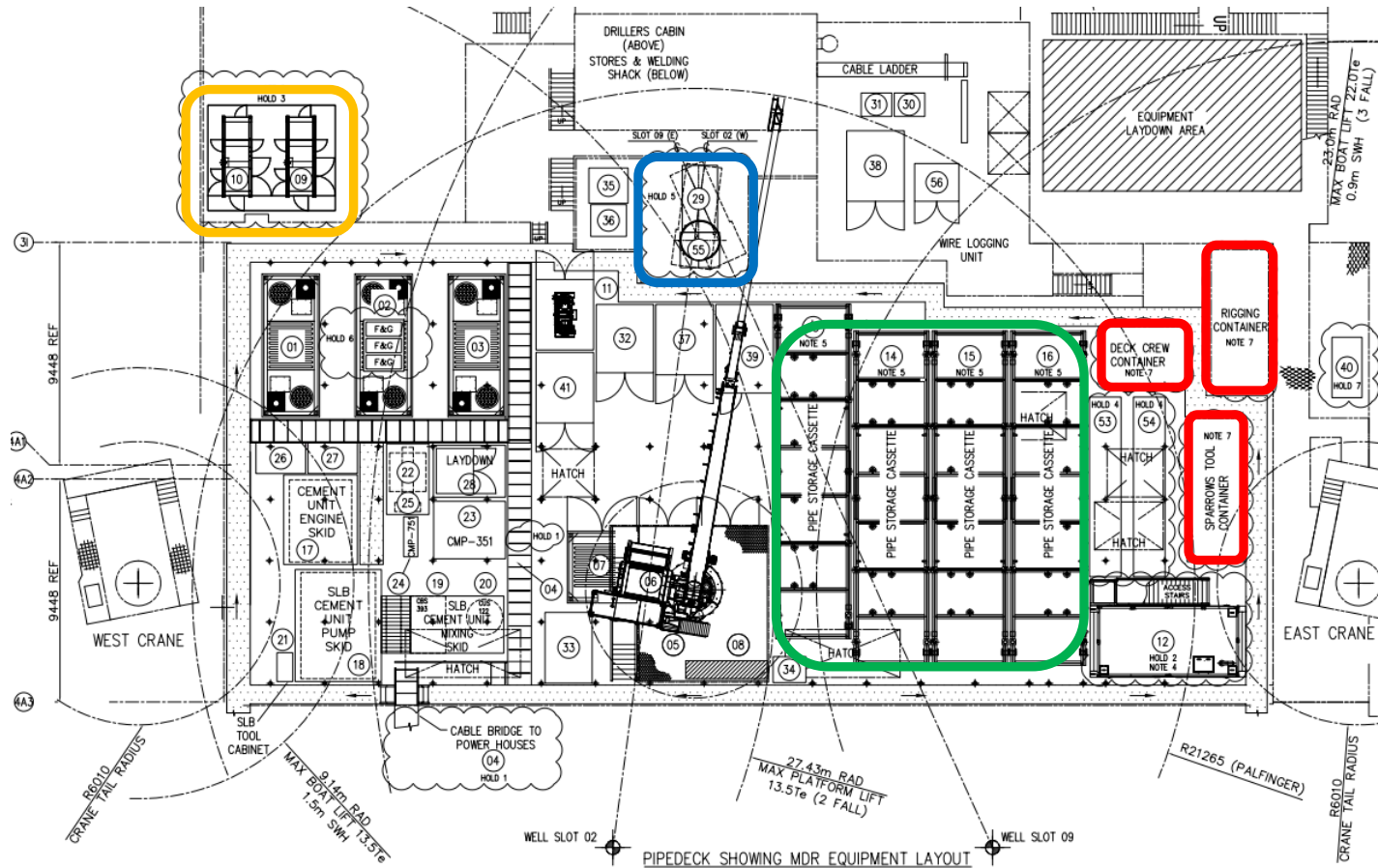




Deck Management

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Deck Management

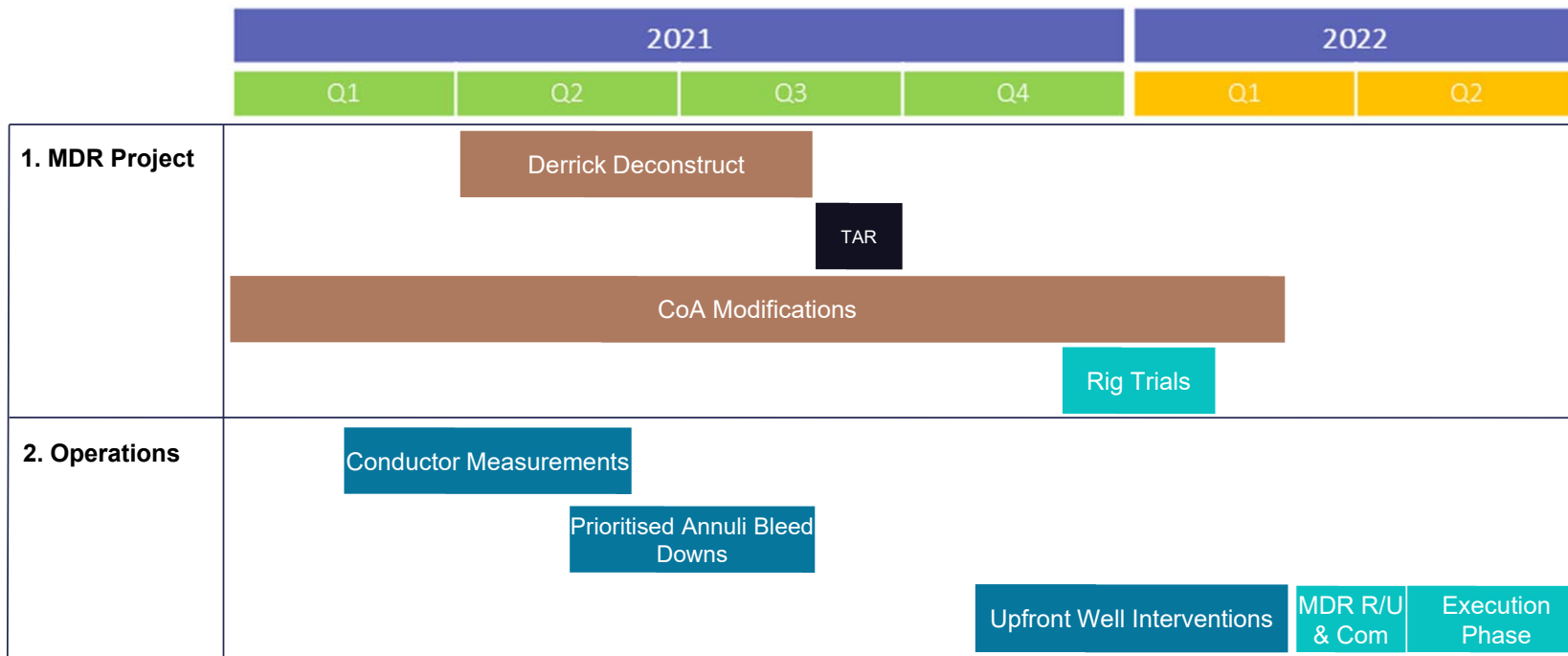




Integrated Project Schedule

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Integrated Project Schedule





Tension Table

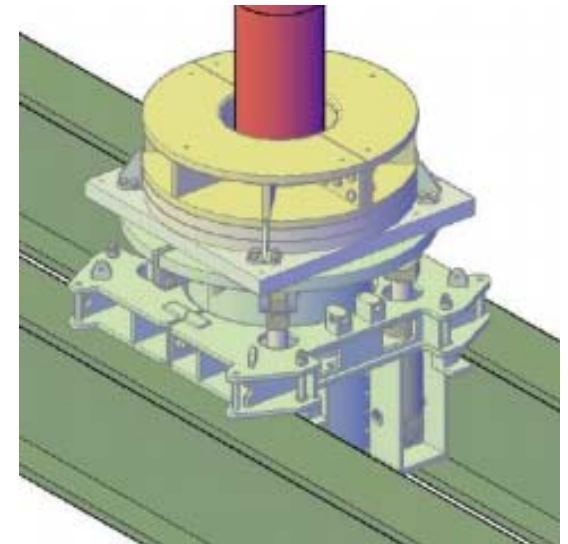
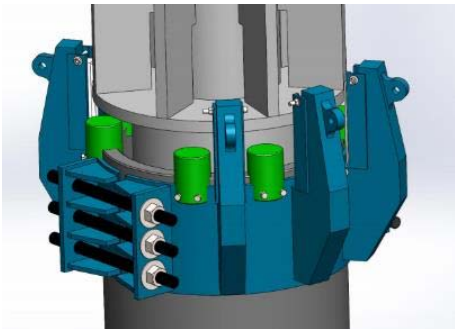
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Tension Table

Surface Casing: The surface casing is either landed out on the conductor or a clamp will be run to transfer the well load to the conductor.

Environmental Load Assessment: Sonomatic tool is being run as a screening tool to identify potential areas of corrosion and areas that may need additional support during well operations

Tension Table: Well load needs to be transferred to East-West skid rails. Commitment required to tension table prior to achieving results.





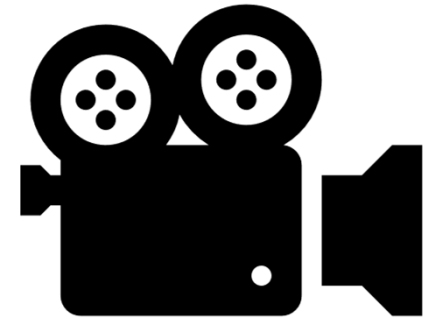
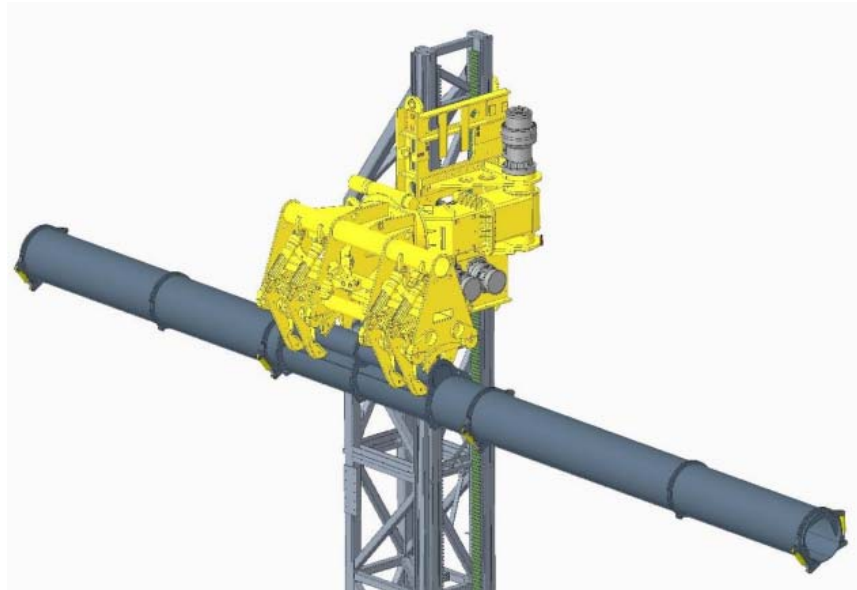
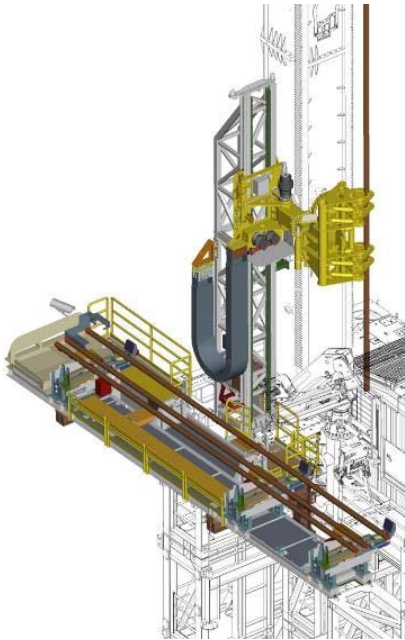
Corroded Pipe Handling Tool

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Corroded Pipe Handling Tool

Issue: A technical solution for handling pipe was sought due to concerns relating to structural failure of corroded completion tubulars recovered from the well.

Solution: The drilling contractor Archer approached the Original Equipment Manufacturer (OEM) of the MDR, Streicher, to propose an integrated solution that would support the pipe and contain any potential dropped objects.





Other Challenges

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Other Challenges

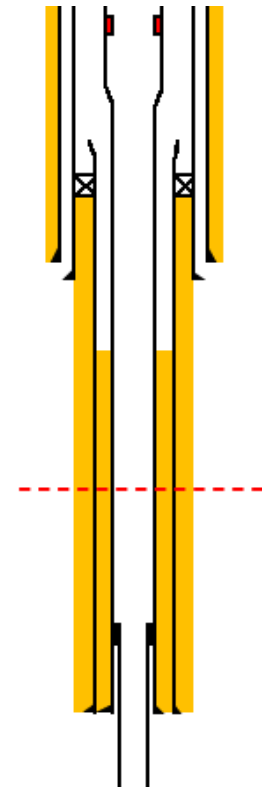
Coiled Tubing



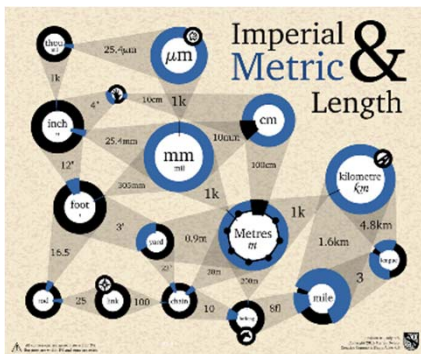
Annuli Pressures



Well Issues



Units



Historic Data

