



# SPE-WELL DECOMMISSIONING 2024

Platform Well P&A Using Hydraulic Workover Units

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**WellGear**

## Challenge

- North Sea Operator abandoning the last of 4 platforms in a field
- All other assets in the field P&A'd by platform rig
- From kick off rig proved unreliable with large NPT due to mechanical failures
- Operator faced considerable expenditure and downtime to reactivate the rig
- WellGear UK contacted in response to failures
- Derrick removed summer 2019



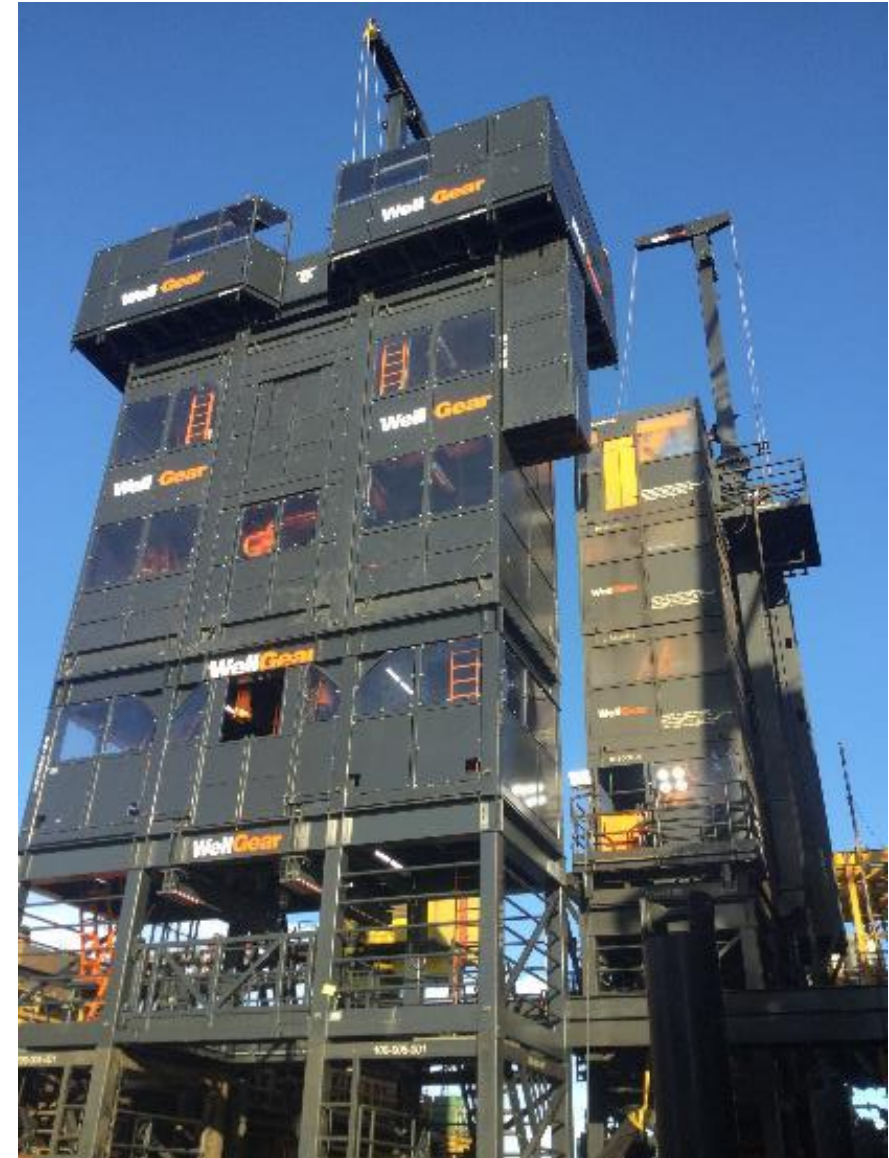
# Results

## Phase 2

- P&A'd 21 wells with an HWO unit
  - Platform rig had previously completed 9
- 16 completions pulled – multiple types and connections
- 14 wells completed with cased hole cement plug
- 6 wells completed by perf wash cement (single)
- 2 wells completed with dual perf wash cement
- 5 wells 9-5/8" casing pulled from depth
- Contingency for section milling on 2 wells
  - Not required due to good logs.
- WellGear equipment NPT < 2.5%
- Completed 14 well P&A Ops in 2020
  - Max previously achieved by a platform rig in this field was 15 wells in a year

## Phase 3

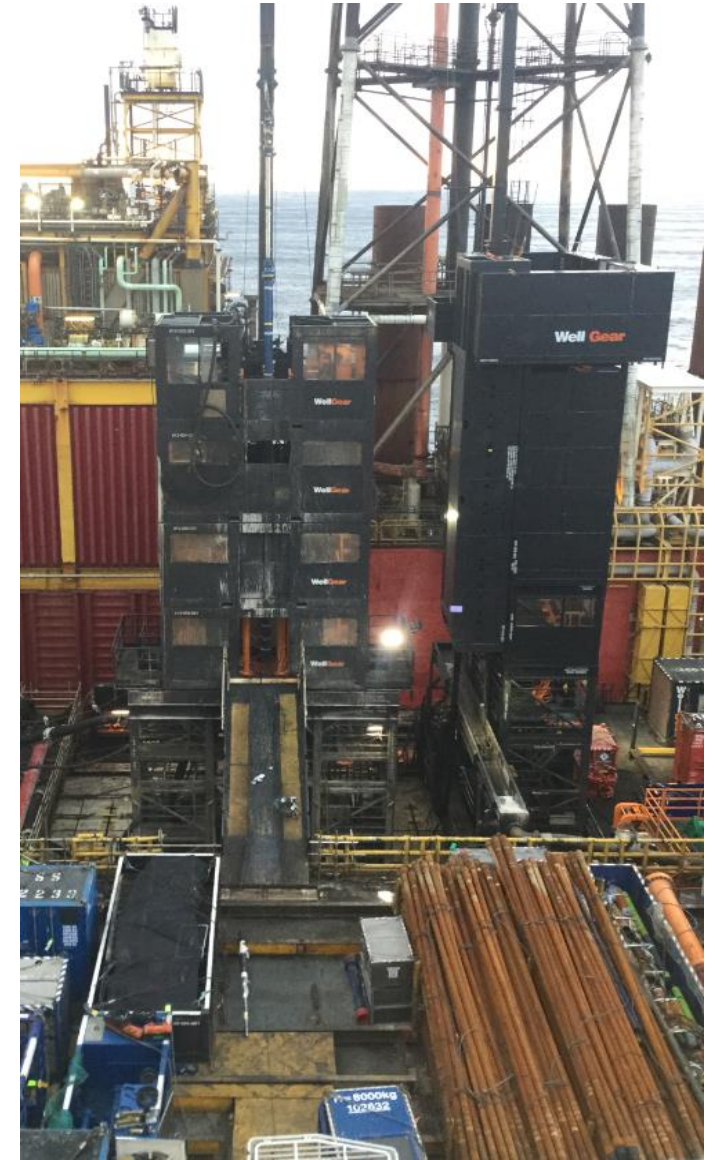
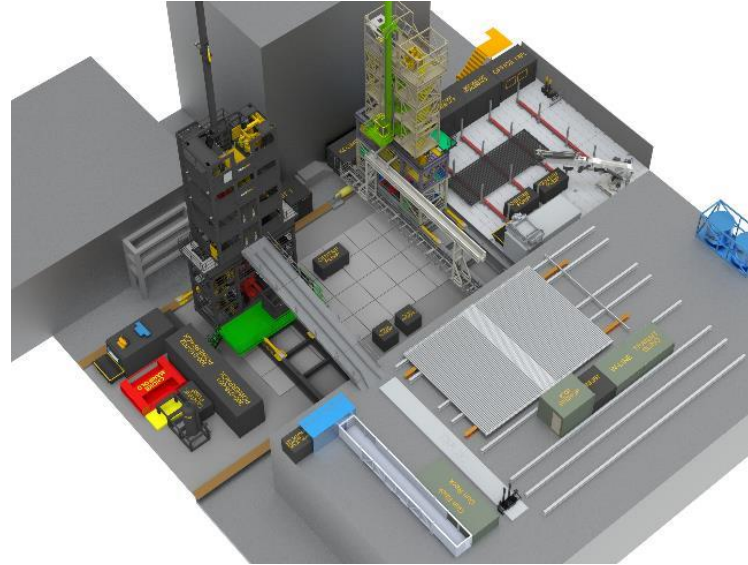
- Removal of 13-3/8" and 20" on all 38 wells
- 14 conductors removed to below upper subsea guide
- Demob September 2023



## Phase 2 – P&A

### Strategy

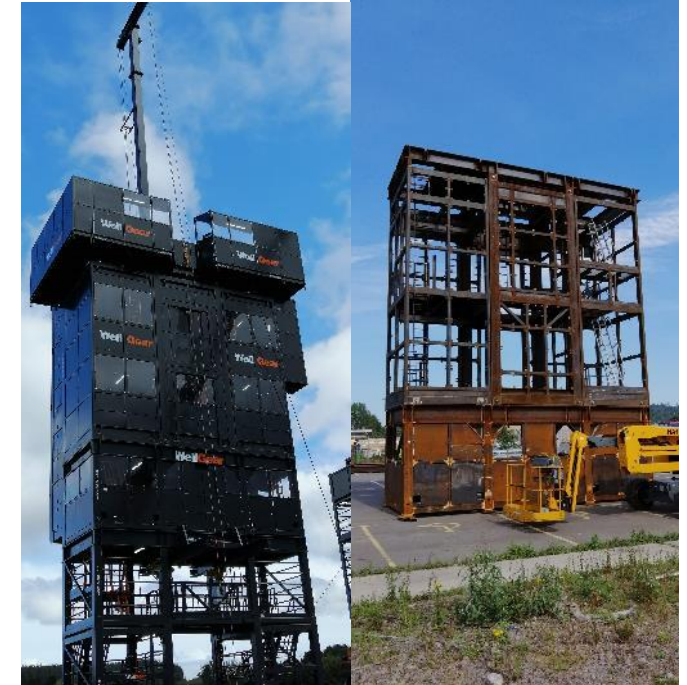
- Commenced with 340K unit
  - Struggled with 9-5/8" casing Recovery
- 460K added as a second unit
- Modular crane installed
  - Increased operational efficiency
  - Less dependency on old platform cranes
- Smart sequencing to operate two units and wireline mast
- 100 ton floating deck manufactured
- Modular crane installed
  - Increased operational efficiency
- Optimisation of fluid system to achieve high rates
- Additional laydown deck added to the platform



# Phase 3 – Casing & Conductor Recovery

## Strategy

- Manufactured a custom built unit for casing & conductor pulling
- New build unit installed for 340K
- Change out 460K unit for existing conductor pulling unit
- Designed units to integrate cutting and pinning equipment



- Demonstrated HWO as a viable option for P&A and conductor removal
- Demonstrated ability to perform PWC operations.
- Demonstrated ability to cut and recover 9-5/8" casing from depth.
- Demonstrated ability to recover complex conductors.
- Demonstrated theoretical ability to section mill.
  - Since been proved on subsequent offshore P&A project.
- Demonstrated ability to operate two units in tandem on a platform

