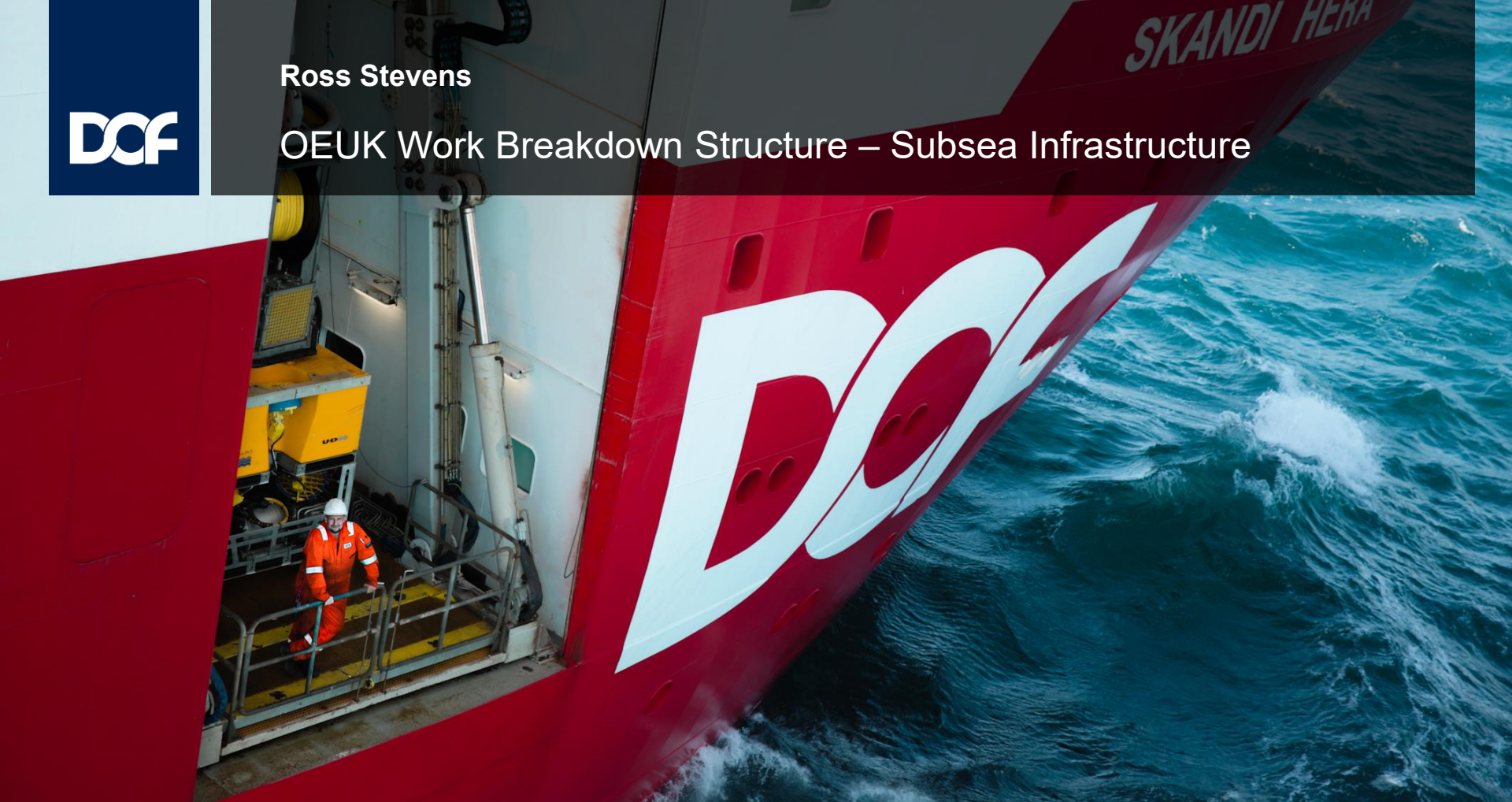




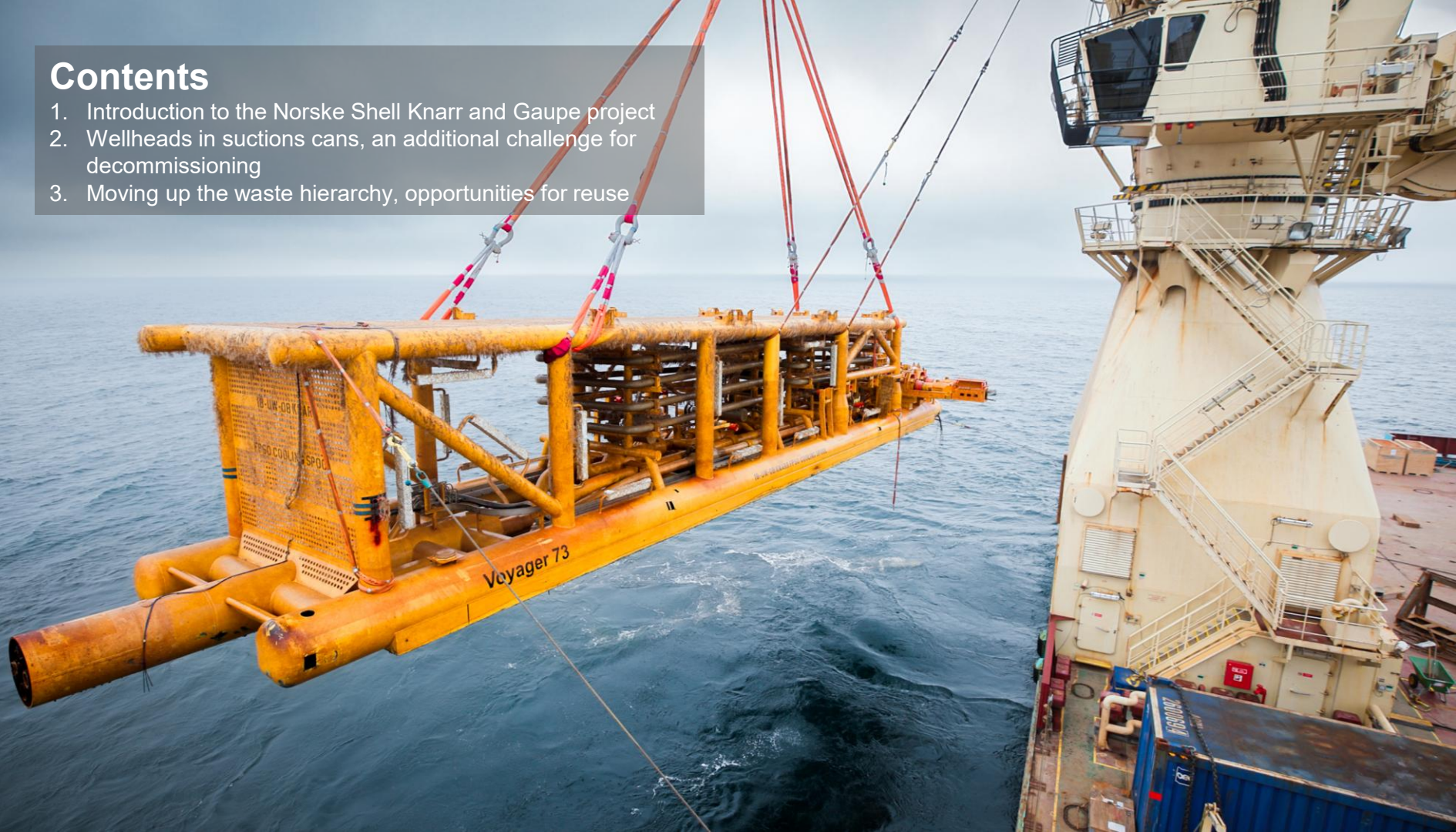
Ross Stevens

OEUK Work Breakdown Structure – Subsea Infrastructure



Contents

1. Introduction to the Norske Shell Knarr and Gaupe project
2. Wellheads in suction cans, an additional challenge for decommissioning
3. Moving up the waste hierarchy, opportunities for reuse



Knarr & Gaupe EPRD Project

Project Details



DECOMMISSIONING



Client:
NORSKE SHELL



Vessel:
**SKANDI INSTALLER
SKANDI HERA**



KNARR FIELD,
Northern Norwegian North Sea
GAUPE FIELD,
Central Norwegian North Sea



January 2025 -
August 2026



Water Depth:
400m

Knarr & Gaupe EPRD Project

Project Details

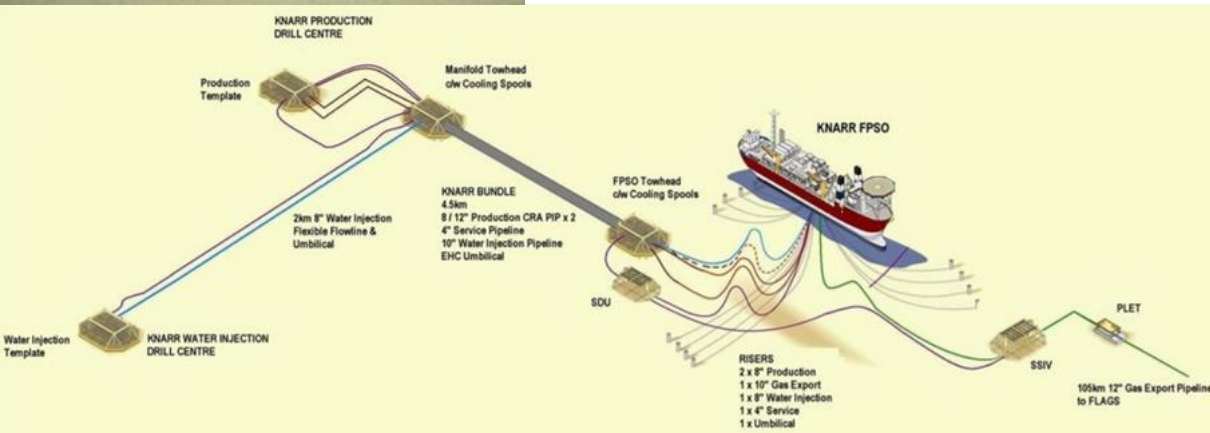


Gaupe Field:

- Circa 80m water depth
- Removal of 2 satellite wells
- ~1.000te

Knarr Field:

- Circa 400m water depth
- Full field decommissioning
- ~6.000te



Knarr & Gaupe EPRD Project

Scope of Work



Knarr Field

Recovery and waste management of:

- 2500 m3 dredging of rock
- 7 XMT's
- 44 GRP covers
- 3 Water injection wellheads
- 4 Production wellheads
- 12 FPSO hold back and hold down suction can anchors
- Cutting of bundle
- SSIV
- SDU
- Gas Export PLET
- FPSO Towhead 350T
- Template Towhead 450T
- Protection structures
- Water injection and Production manifolds
- Foundation Bottom Structures
- Flowlines
- Umbilicals
- Electrical flying leads



Knarr & Gaupe EPRD Project

Scope of Work



Gaupe Field

Recovery and waste management of:

Gaupe Field, circa 80m water depth:

- 2 XMT's
- 112 concrete mattresses
- 2 well head protection structures
- 8 steel pin piles
- 2 well heads
- Umbilicals
- 12" Pipe in Pipe pipeline



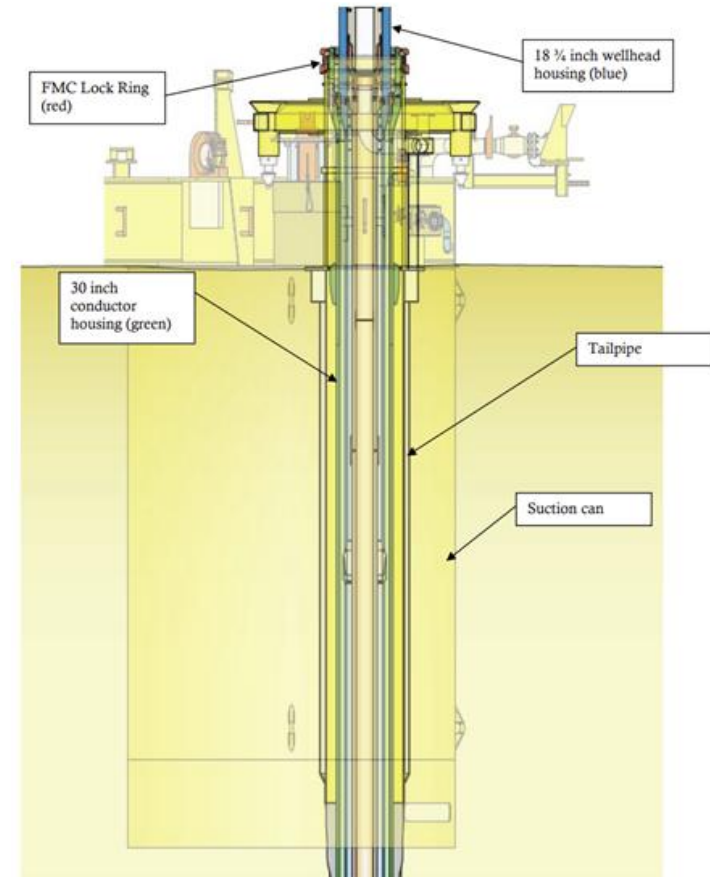
Knarr & Gaupe EPRD Project

Challenge



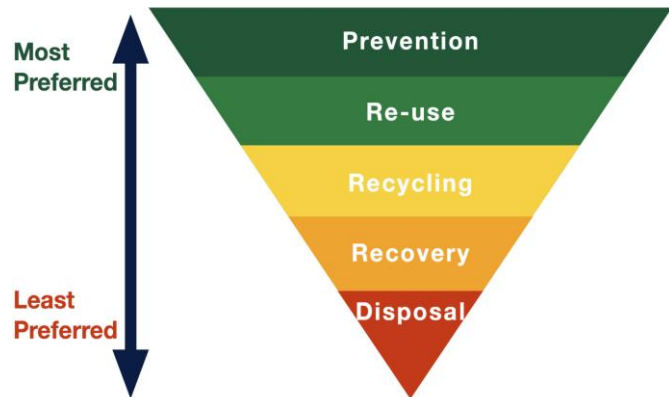
Wellheads in Suction Cans: An Additional Challenge for Decommissioning

- Where to make the cut?
- Locking rings removed
- Potential for wellhead to be 'stuck' to tailpipe
- Vent paths for suction can recovery
- Not concentric in the suction can
- Additional weight for recovery- if wellheads not recovered separately



Knarr & Gaupe EPRD Project

Waste Management





Presented by
Ross Stevens