



## Serica Energy: **Vessel-Based Abandonment Campaign**

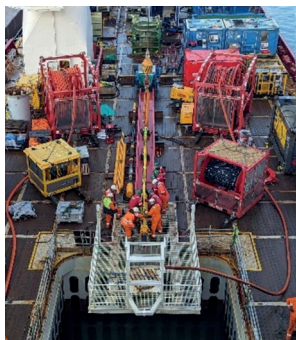
The Vessel-Based Abandonment campaign provided significant cost-savings, Serica Energy estimating at a quarter of the cost, comparable to rig-based P&A operations.

EXCEED and DEEPOCEAN provided well project management, engineering and Vessel-Based Abandonment services to engineer, plan and execute the Phase 3 decommissioning of suspended E&A wells during winter months in the Northern North Sea, on behalf of Serica Energy.

### The Mission

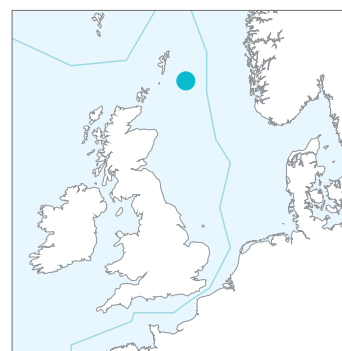
- ✓ Final well abandonment works of five E&A wells across two fields.
- ✓ One being a technically challenging Category 2.2 well, with a physical construction of 5 casing strings, a 7-inch inner casing and a significant stick-up, which ordinarily would have required well strengthening for rig-based operations.
- ✓ Stuck Drilling BHA (Bottom Hole Assembly) section to be severed at seabed level.
- ✓ Proving wellhead connector assurance for future rig-based P&A BOP interface on two legacy E&A wells.

Three wells were successfully TCP perforated, with casing annuli clean-up conducted and environmental cement plugs emplaced. The Category 2.2 well required the custom-made Claxton 7-inch SWAT tool, with the remaining Category 2.1 wells utilising the field-proven Claxton 9 5/8-inch SWAT Tool. All wellheads were successfully severed with the Claxton AWJC and recovered with the UWHRC enhancing the efficiency and safety of wellhead recovery. The drilling BHA section was cut and recovered. For the rig-based wellhead assurance, custom-made crossover units underwent trial installation operations.



***"The technical objectives via new and existing technology were all met with significant cost and emissions reductions compared to rig execution, with delivery achieved 18 months ahead of plan."***

**Alex Pirie**  
Wells Manager, Serica Energy



### LOCATION

Northern North Sea

### DURATION

< Four Months



### WELLS ABANDONED

6



### COST SAVINGS

Multi-Million Value



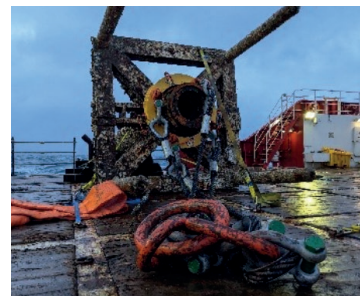
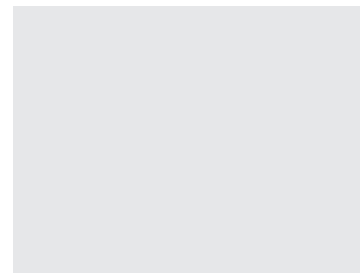
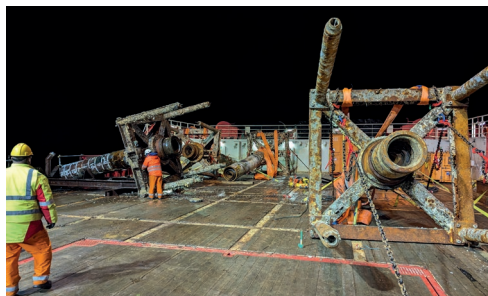
### CO<sub>2</sub> EMISSION

4, 316 Tonnes Reduction



### HSE

Zero LTI



### Great teams deliver great results

Characterised by Serica, EXCEED and DEEPOCEAN's "one team" approach, expertise and professionalism, the multi-well Vessel-Based Abandonment campaign included the placement of wellhead environmental cement barrier plugs and subsequent wellhead severance and recovery operations.

- **Claxton** developed a bespoke seven-inch Subsea Well Abandonment Tool (SWAT), utilised a world's first operation, and additionally provided AWJC (Abrasive Water Jet Cutting) wellhead severance services.
- **IKM** provided complementary cementing and fluid pumping services.
- **Ocean Science Consulting** provided Marine Mammal Observers for TCP explosive use.
- **Decom Engineering's** C1-24 Chop Saw conducted the cut of the BHA.
- **Subsea Pressure Controls** supplied a bespoke version of its Universal Wellhead Retrieval Clamp (UWHRC), which was developed in conjunction with EXCEED.

The campaign was completed safely with zero LTIs, efficiently and in full compliance with all regulatory requirements, providing unique technical solutions in accordance with the well complexities and challenges, and delivering all planned works successfully to the full satisfaction of the client.

Upon completion of works all wells were declared as Well Abandonment AB3 status.

### Stage gate process

All works engineered and planned across 4 months, under the streamlined EXCEED Decommissioning and Execution Process (DDEP), ensuring the appropriate level of work is performed based on the available information and current uncertainty of the project.

Identify

Select

Define

SG3

Readiness

Operate

Close Out

Combined Initial Gates



Enhancing  
**SAFETY**



Preserving  
**ENVIRONMENT**



Assuring  
**INTEGRITY**



Improving  
**EFFICIENCY**



Reducing  
**COSTS**



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**DEEPOCEAN**



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