

FourPhase and Expro delivers the first monohull riser-based CT intervention on NCS North Sea, August 2022



100% Client satisfaction feedback score

Zero HSE Incidents recorded



Challenge

An operator in the North Sea required a solution to flow wells on separate fields using a Coiled Tubing package on a vessel. The wells were plugged with sand, scale and debris and therefore required a versatile solution to manage the flowback. The expected solid particle size for the operation was between 50 - 1500 micron.

With limited space available, a compact desander unit was considered favourable. The operator planned to rig up all the CT flowback equipment onshore on a quick interface frame. The frame would include pipes, hoses, and small units and was planned to be lifted onboard as one unit to save costly vessel time.



Expro delivered a complete CT package, including a FourPhase DualFlow solids management system, installed on a quick frame onshore. The structure included all pipework for easy installation and re-use for future CT campaigns and enabled easy installation on the intervention vessel. To allow the operation to go ahead, the DualFlow was qualified according to the DNV-OS-E101 for Mobile Offshore Drilling Unit (MODUs), where the qualification applies to pressure-containing parts.

The DualFlow was remotely operated safely from a control container shared with another supplier, with flowback routed through the DualFlow when necessary.

Result

A 5K DualFlow was a part of the Expro solution, separating solids in returns on a vessel during the first-ever monohull riser-based CT intervention on NCS.

7 283kgs of solids were safely separated by FourPhase during the 10-week campaign from two different wells, with a 22 kg/hr average during the operation.

The DualFlow removed the risk associated with hazardous operations and manual handling and provided a solution with less resulting carbon emissions.

With a 2x2m footprint, minimum deck space was utilised and carried out with a 2-man crew, reducing POB and associated risks.





