The Challenge

As part of a North Sea P&A campaign, a leading international operator required shallow plugs to be set in multiple wells to prepare for the removal of wellhead equipment. With a tight deadline for work to be completed, the plug setting was to be carried out while simultaneous rig-based drilling and slickline operations were ongoing in other wells on the same platform.

Deck space and POB allowance were extremely limited due to these ongoing operations and access for plug setting was restricted due to the well's location under the drilling rig.

Our Response

We deployed a fully managed offline solution using our unique Surface Intervention technology and multi-skilled technicians to meet the needs of this challenge.

The SIS technology is the first and only multifunctional shallow well intervention system on the market and combines heavyweight capability within a compact and mobile package. It is simple to operate, fast to deploy and ideal to assist in the end phase of well P&A activity, through plug setting and the removal of xmas tree and wellhead equipment. It can also be used to carry out inspection or remedial work of the internals of the equipment and tubulars prior to removal.

The SIS has a powerful hydraulic motor, driving a push, pull and rotate function which can rival wireline or coiled tubing capability. The package offers a combination of speed, mobility and cost savings against traditional shallow well intervention techniques.

Requiring just two technicians to operate, the SIS was independently rigged-up below deck in a restricted well bay, using a small A-frame gantry crane. The plug was set in the well first time, having reached target depth within 30 minutes, and the equipment was rigged down, all within 24 hours. The operation was then repeated on a second well a short time later, with the same success.

Our SIS and pressure control package replaced the need for conventional well intervention. Both plug-setting projects delivered significant savings to the operator, performing around 60% faster with a cost and personnel package saving of 66% compared to traditional solutions.

Case Study

Unity delivers 60%+ cost and efficiency gains across a multi-well P&A plug setting programme.