CETCO ENERGY SERVICES

A Minerals Technologies Company

SUCCESS STORY

Well Intervention & Flowback Applications

CLEAR SOLUTIONS for complex fluids

Subsea Christmas Tree Horizontal Valve Leak Repairs

CHALLENGE

- Restore integrity to subsea infrastructure to facilitate plug and abandonment in compliance with NOPSEMA regulations.

SOLUTION

- Remotely Operated Vehicle (ROV) deployment of SEALMAKER™ technologies and provision of expert technicians to perform wellhead valve leak repairs, enabling successful integrity testing of subsea infrastructure.

RESULTS

- Successful subsea Valve Integrity Testing meeting Clients criteria to enable completion of Plug and Abandonment activities.

Subsea Christmas Tree Horizontal Valve Leak Repairs

CHALLENGE

A prominent operator on the North West Shelf, Australia was conducting well Plug and Abandonment activities. To comply with environmental regulations all subsea infrastructure integrity was tested. A number of Christmas Tree horizontal Valves were found to be non-compliant during this process. The challenge for CETCO Energy Services and our client was to perform pressure testing and determine leak rates on each valve, design a leak repair solution based on this information and then formulate the deployment strategy for each repair. Deployment of the leak repair solutions were via an ROV and needed to be performed in a timely

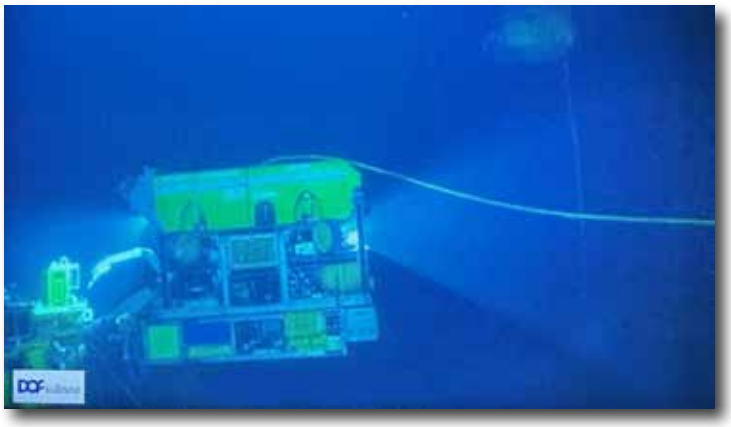
CETCO SOLUTION

CETCO collaborated with Seadraulics to supply an ROV backpack bladder system with four separate bladders to accommodate the SEALMAKER™ system requirements. Pressure testing and leak rates of valves were performed via the ROV. The SEALMAKER™ Engineer and Technician designed the repair formulation on this data and delivered the correct formulations by controlled mixing and pressure control from the bladder pack into the valves. The backpack system enabled the successful deployment of SEALMAKER™ repair|solutions on four separate wellheads restoring integrity to these wellheads.

RESULTS

Ten wells were addressed during the Plug and Abandonment campaign of which SEALMAKER™ sealant operation was required on three of these wells.

The three wells that were repaired with sealant, passed testing criteria and were closed out by final flushing of the combined cavity with 100% MEG. The 100% application success rate was conducted safely with no incidents, accidents or environmental impact and eliminating any requirement for well intervention activities.



CLEAR SOLUTIONS
for complex fluids

CETCOENERGYSALES@mineralstech.com
cetcoenergyservices.com