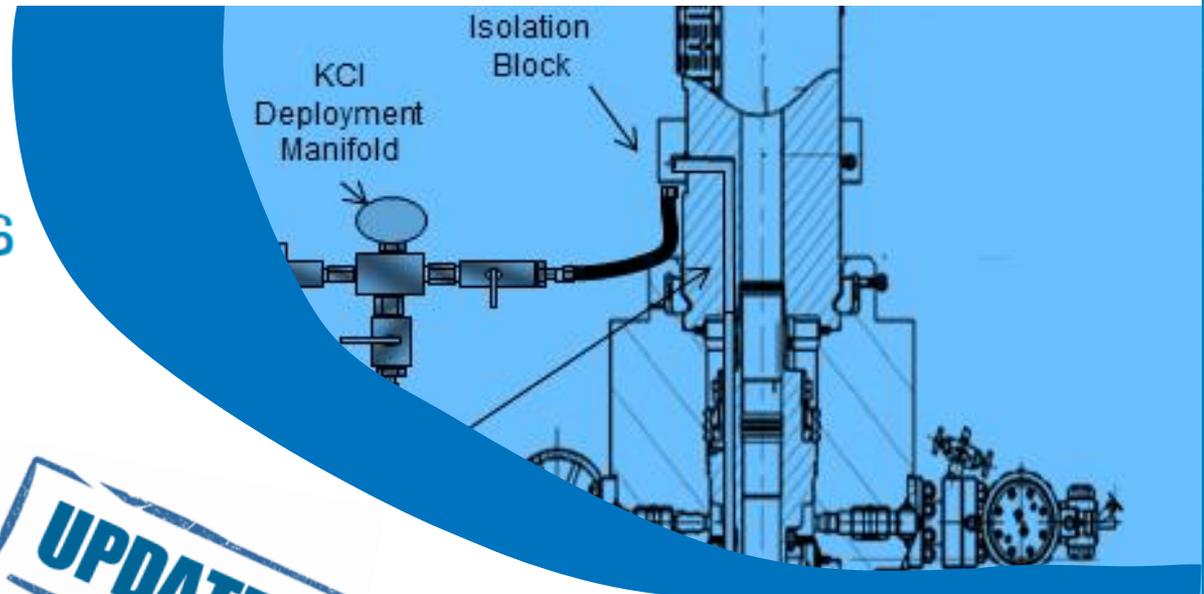




Kinetics Controls  
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# MAC-SEAL Leak Sealing Solution

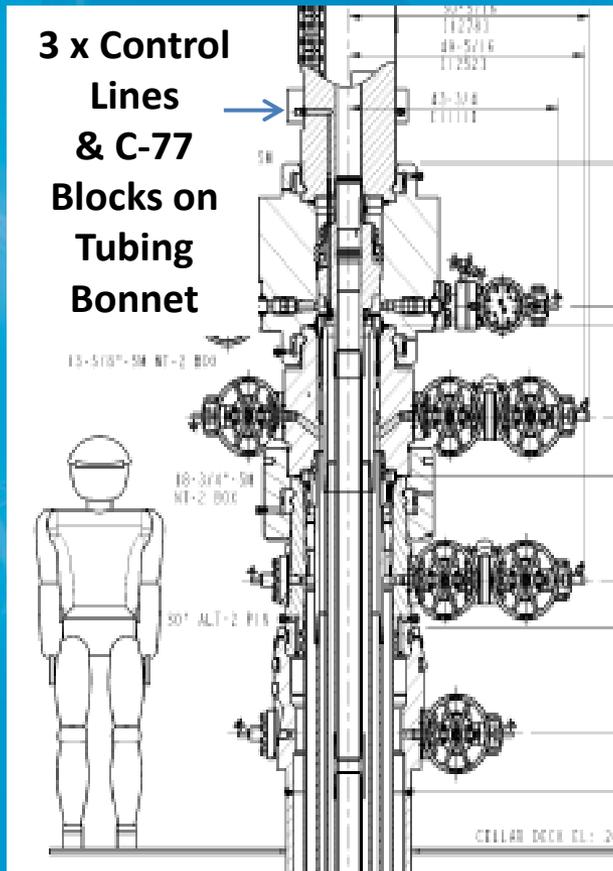


**UPDATED**

“3 Successful Control Line Isolations on a  
Single North Sea Wellhead Using Mac-Seal”



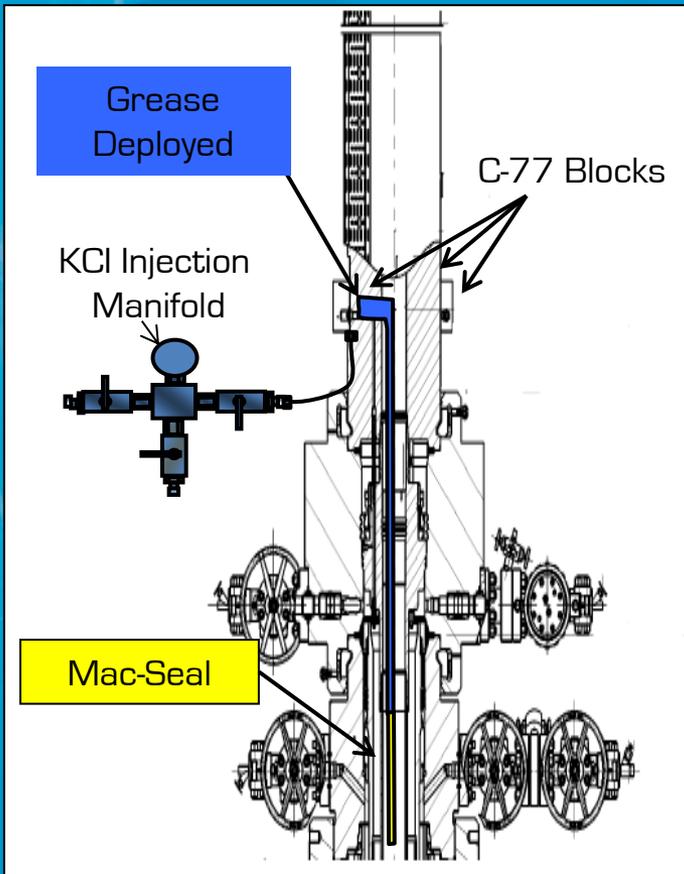
# 3 x 1/4" Control Line Isolation using Mac-Seal



## Background

- ❑ KCI were requested by a major Oil and Gas Operator in the UK to provide isolations on three severed Control Lines on one Well which operate Downhole Injection Valves.
- ❑ The 3 Control Lines were severed at 6,800ft due to High Pressure water injection flow.
- ❑ The Reservoir Pressure was 3,000psi.
- ❑ “C-77” Double Block & Bleed Valves were fitted to the Wellhead and Control Lines.
- ❑ KCI’s task was to create a second isolation and to clear the “C-77” Block Valves of sealant so that essential monitoring & Wellhead Maintenance could be carried out in the future.

# 3 x 1/4" Control Line Isolation using Mac-Seal



## Deployment Detail

- The Control Lines were flushed with Transaqua HT2 to remove any obstructions to ensure injectivity and to determine if the Lines held any pressure.
- 500ml of Mac-Seal was deployed into each Control Line creating a 140ft plug to isolate the Lines.
- A high viscous fully synthetic Grease was deployed behind the Mac-Seal to displace the sealant past all working parts of the C77 Block Valves and Tubing Bonnet Stabs.
- The Mac-Seal and the fully synthetic Grease were deployed within 2 hours and left to fully cure over-night.
- Once the three Control Lines were injected with Mac-Seal and completely cured the Lines were Pressure and Leak-Off tested.
  - A low pressure test of 500psi for 5 minutes
  - A high pressure test of 5,000psi for 10 minutes
  - All lines were vented and no pressure build up witnessed
- Pressure tests on all 3 Control Lines confirm no leaks.
- All isolations successful.

## \*Objective Achieved\*

The Isolations were successful and the Well was brought back online safely. Our customer was extremely satisfied with our Safe, Effective & Efficient Isolation.

This Value Adding, Rigless Isolation Operation saved the Well owner from a potentially time consuming and costly Workover or long term suspension.