

# CASE HISTORY.

TOTAL ELGIN-20/30C-WELL G8Y



Omega

Omega Completion Technology Ltd.

## OPERATORS CHALLENGE

Total's Elgin field is located in the Central Graben area of the UK North Sea about 149 miles (240 kilometers) east of Aberdeen.

During a recent Intervention Kill Programme on G8Y, a cement plug barrier was required in the 5.00" 23ppf tubing at a depth of 4,478 meters. The well had a 2.90" restriction which prevented easy access to the target depth. In addition the well temperature at the target depth was estimated at being circa 160 deg C.

A Slickline deployable Cement Delivery Tool was required to provide a 10ft cement plug above the 2.80" OD cement retainer.

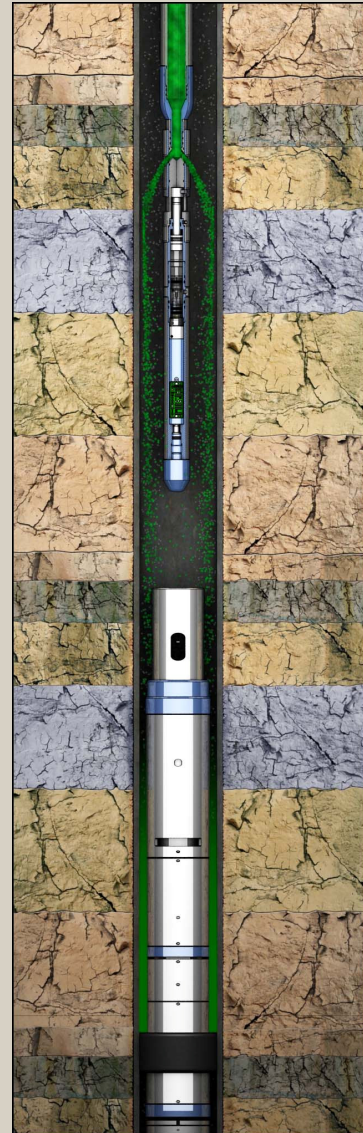
## OMEGA'S SOLUTION

A Slickline deployed electronically activated Cement Delivery Tool (CDT) was mobilized for use on the G8Y well. 6ft long Cement tubes with an OD of 2.75" OD were screwed together to provide a total cement storage length of 12ft.

Upgraded electronics were developed, tested and installed on to the Cement Delivery Tool Actuator's Electronic Cartridges to provide reliable activation at 160 deg C.

The Electronic Cartridges within the Actuator were designed to allow easy change out at the well site by the end user.

Omega Field Engineer provided operational support at the well site during the intervention campaign and Omega's Electronic Engineers at their onshore facility were to provide rapid refurbishment of utilized electronic cartridges, if additional cement runs were needed.



## WELL SCHEMATIC

2.75" OD Cement Delivery Tool – Actuator has functioned allowing the tool to release the stored cement, down and on top of the cement retainer.



Omega Completion Technology Ltd.

## OPERATIONAL SUMMARY

The CDT electronic cartridge was programmed at surface to activate after 4 hours on the initial runs.

The cement delivery tool was run to a depth of 4,476 mbrt, and held stationary until the tool functioned. At this point the cement mixture stored in the CDT 2.75" OD cement tubes was released.

Subsequent runs the electronic cartridge was setup to activate after 3.5hrs, further reducing intervention time.

A total of 10 successful Cement Delivery Tool runs were carried out. This provided a total of 22.715 US Gallons of cement deployed above the cement retainer.

This equated to 10.38 meters of cement in the 5.00" 23ppf tubing.



ELGIN FRANKLIN DEVELOPMENT

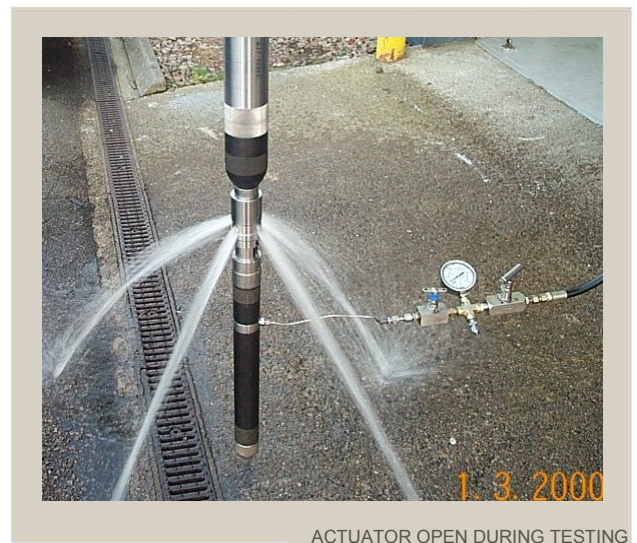
## VALUE CREATED

Total Elgin GY8 Intervention Kill Programme was successfully completed.

100% reliability was provided with the upgraded Electronic Cartridges utilized in the CDT Actuator in a deployment temperature of 158 deg C.

Zero tool failures were experienced during the deployment of the 2.75" Cement Delivery Tool.

Excellent Team Work was noted by Total on all service providers involved in the overall campaign.



ACTUATOR OPEN DURING TESTING