

# Omega Case History

## Cement Dump Bailer Total Elgin-20/30C-Well G8Y.

### 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 4,478meters. 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°C.

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

### Omega's Solution

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

Upgraded electronics were developed, tested and installed on to the Cement Dump Bailer's Electronics Cartridge to provide reliable activation at 160°C.

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

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

### Operational Summary

The CDB electronic cartridge was programmed at surface to activate after 4 hours on the initial runs. The Cement Dump Bailer 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 CDB 2.75" OD cement tubes was released.

Subsequent runs had the electronic cartridge configured to activate after 3.5hrs, further reducing intervention time. A total of 10 successful Cement Dump Bailer 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.

### Value Created

- Total Elgin GY8 Intervention Kill Programme was successfully completed.
- 100% reliability was provided with the upgraded Electronic Cartridges utilized in the CDB Actuator in a deployment temperature of 158°C.
- Zero tool failures were experienced during the deployment of the 2.75" Cement Dump Bailer.
- Excellent Team Work was noted by Total on all service providers involved in the overall campaign.

