

Millions saved on maintenance

Inline Pressurised Pulse-induced Wave Oil Flushing.

Oil flushing of the hydraulic “Emergency Shut Down” system during full gas production

Ocean Team has developed a method of oil flushing for hydraulic and lube oil systems in “live” systems. This means that production can continue as usual while flushing is performed, avoiding major production losses. We call our method: “In-line Pressurised Pulse-Induced Wave Oil Flushing”. Like many other innovative ideas, the patented system was developed on the basis of customer requirements.

A gas production platform in the North Sea was experiencing problems with leaking solenoid valves in the hydraulic emergency shut down system (ESD). ESD is the heart of the whole operation and, with reduced reliability, catastrophe loomed large.

Repairs were going on day and night along with mechanical cleaning and replacement of gaskets in all 235 ESD valves. We were called to the platform, took oil samples, analysed them and ascertained that the leakages in the hydraulic solenoid valves were caused by impurities. Closing down gas production in order to clean the system by means of the conventional method of oil flushing was completely out of question as this would mean loss of production for 1-2 months.

A better solution had to be found!

Consequently, Ocean Team developed a pulsed oil flushing system which creates turbulent flows within the piping, thus dislodging dirt. The fluid is subsequently filtered in a bypass pipe system which is temporarily connected at various points in the pipe system.

The result is an annual two-figure million saving in the customer’s maintenance budget thanks to completely clean pipes and fully functional ESD valves. An even bigger saving was obtained because it was possible to carry out cleaning in a “live” system under full production of gas on a platform in the North Sea.

