Bridge Plug

Bridge plugs enable the lower wellbore to be permanently sealed from production or temporarily isolated. Any permanent, retrievable or high expansion bridge plug can be run on a standard pyrotechnic setting tool set using the Expro slickline trigger without the need for radio silence. Another application is the standard e-line operation with surface DC power for activation.

The tool consists of three main components: electronic trigger, surface safety switches and pyrotechnic setting tool and plug.

Electronic Trigger

The electronics package controls the output from a battery pack. This initiates the pyrotechnic igniter, only when all safety barriers are overcome and downhole parameters are such that they satisfy the pre-programmed firing sequence.

Surface Safety Switches

Individual mechanical pressure and temperature switches form short circuits across the detonator to ensure surface safety. Well pressure and temperature 'open' the switches at a pre-determined depth and 'close' them on retrieval. These switches ensure that the device cannot fire on or near surface.

Explosive Set Plug and Setting Tool

Industry standard pyrotechnics, setting tools and plugs can be initiated by the Expro slickline trigger. A slickline dummy rope socket can be used to allow for fishing of stuck assemblies. A full range of setting tools are available to suit a wide range of plugs and packers.

Expro can dramatically increase the efficiency and safety of your well abandonment strategy.

Applications

- Setting of bridge plugs, retainers and packers
- Zonal isolation, water shut off, abandonment or major plug-in work
- Well barrier during well maintenance and workovers

Benefits

- Saves time using an innovative approach which is tried and tested
- No specialist retrieval tools requires
- Provides increased debris tolerance
- Cost reduction and increased efficiency in multi-zone isolation
- Records maximum pressure and temperature
- Uses industry standard tools and pyrotechnics
- No e-line rig up required
- Ideal for rigless applications