



Technology in Action



SIM Retrievable Bridge Plug/SIM Running Tool

International Oil Company, Training Well Thailand

Technical Challenge:

Trial deployment of slickline set SIM plugs and Peak Latch/Seal micro coil stinger for the purpose of selective zonal isolation and treatment.

Well Type:

2-7/8" Training well.

Peak Solution:

Two 2-7/8" SIM Retrievable Bridge Plugs, SIM Running Tool, FlowThru' Check Valve, Latch/Seal stinger together with 5/8" micro coil.

The Challenge:

The purpose of the trial was to confirm that micro coil and Peak SIM Plugs could be used together to isolate a specific producing zone enabling treatment fluid to be injected into the zone. The treatment fluid could consist of stimulation fluid or water shut-off treatment.

Considerations:

The following key requirements and concerns were highlighted by the Customer:

- Ability to isolate producing zones
- Micro coil to have the ability to latch and release from the Peak SIM Plug
- Emergency release features to be in place on micro coil tools
- Check Valve to prevent back flow when releasing

Summary:

The three day onshore trial was conducted in a training well. Peak's SIM Retrievable Bridge Plug and prong were set as a barrier below the perforated interval of interest and a second SIM Retrievable Bridge Plug fitted with a Melon-Type Equalising Assembly and FlowThru' Check Valve was set just above the perforated interval.

The micro coil was run into the well to stab the stinger-latch assembly into the upper SIM Plug. Thereafter, treatment fluid was pumped through the coil into the isolated zone.

The dropball release function was checked - the ball pumped through the coil down to the stinger/latch to successfully release the micro coil from the upper SIM Plug.

Testing of the emergency release feature of the micro coil stinger assembly was also conducted - the FlowThru' Check Valve maintained pressure against the formation when the micro coil was disconnected and prevented the coil being blown up hole.

Value to Customer:

The successful trial using SIM Retrievable Bridge Plugs with micro coil will be of particular value to brownfield operators:

- A small footprint: cost effective means to isolate, stimulate and clean the producing sandface
- Ease of deployment
- Enhances performance of FloWell™ - to remove formation damage and improve well productivity
- Ascertained that the micro coil could stab into the upper SIM Plug successfully

For more information please contact: info@peakwellsystems.com

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