

## Permanent Plug Keeps P&A Project Moving

Nonexplosive tool setting for permanent bridge plug efficiently seals completion tubing for integrity test

**Peak Wells Systems uses SIM\* sealing integrity management system in slickline simultaneous operations (SIMOP) to install a nonexplosive permanent bridge plug where explosives were unavailable.**

### The customer's concerns

SAKA Indonesia Pangkah Ltd. wanted to cut and pull existing 3½-in completion tubing and then plug and abandon the 44°-deviation wellbore. Afterwards, the slot would be used to drill a new well.

### What was tried first

SAKA planned to seal the completion tubing string for an integrity test before cutting the tubing with a radial cutting torch at 2,500-ft [762-m] MD. To isolate the lower section of the completion string, SAKA intended to use an explosive-set retrievable bridge plug. However, it found that there was no explosive available in country to set the plug.

Other options for setting a retrievable plug included coiled tubing (CT) and e-line. These would be performed on the rig floor and required waiting until the rig skid was deployed to the well. Also, these options were for retrievable plugs which required two runs: setting and retrieving the plug.

### What Peak Well Systems recommended

Peak recommended setting SIM sealing integrity management system in the existing completion string before running the radial cutting torch. This bridge plug is set without explosives, avoiding issues with their availability. It uses slickline conducted under cantilever, eliminating both rig time and the need to wait for a rig skid. Slickline is also cost effective because it uses only three personnel and a small footprint on the limited-space platform. The SIM system is permanent, thus saving rig time and other costs by finishing work in one run instead of two. And no cement dump is required after setting this permanent plug.

### What SAKA achieved

Peak deployed the SIM system permanent bridge plug and set it at 2,017-ft [614.78-m] MD using slickline in a SIMOP operation under cantilever. The effective, efficient operation saved both time and expenses, as expected.



*SIM sealing integrity management system, used as permanent bridge plug.*