

Case History - PIRANHA Dissolvable Cement Retainer

One-trip Dissolvable Cement Retainer and Dissolvable Bridge Plug for Zonal Water Shut Off in North Europe

In June 2019, three water producing zones were successfully treated with one-trip dissolvable cement retainers and dissolvable bridge plugs. By setting a Chameleon dissolvable bridge plug below the problem zone and thereafter setting the one-trip Piranha cement retainer above, cement slurry was squeezed and sealed. Mill-out operation quickly cleaned out the wellbore together with minimum debris of the cement retainers and bridge plugs.



Challenge

- Tubing ID 3.958" with 3.688" downhole restriction requires cement retainer to be customized with smaller OD and longer setting range
- Debris left in hole after mill-out if setting traditional cement retainer and bridge plug
- High risk of clogging the well if non-dissolvable bridge plug parts left downhole
- Low temperature (125°F) and low salinity (KCL 450 ppm) will impair dissolvability of dissolvable tools

Solution



- PIRANHA one-trip dissolvable cement retainer and CHAMELEON™ dissolvable bridge plug with 3.5" OD to set in 3.958" tubing ID;
- Customized dissolvable metal & elastomer for low temperature;
- No tubing clogging risk after dissolving;
- One-trip dissolvable cement retainer reducing overall treating time and cost for one more CTU run.