

RadiLock and RiSeal™ Spacer MaxGuard-X System



Overview

During a 13-well project, an operator opted to address ongoing cementing performance issues. The operation required achieving full cement returns to surface due to a regulatory exception allowing a shorter surface string—on the condition that the production string would be cemented to surface. However, the operator struggled to achieve consistent cement returns and reliable bonding across multiple wells.

Problem/Challenge

Despite planning for 20 barrels of cement returns to surface, the operator was only achieving 5–10 barrels using a freshwater spacer. Most wells also experienced cement fallback ranging from 80 to 100 feet, which required costly and time-consuming top-out jobs. The inconsistent returns and weak bond logs raised concerns about well integrity and long-term performance.

Solution

A service partner of Riteks introduced the combination of RadiLock 3mm Fibers and MaxGuard-X instead of the incumbent freshwater spacer. A volume of only 10 bbl of MaxGuard-X with 1 lb/bbl RadiLock was used (same as freshwater predecessor) and the operator achieved 40 barrels of cement returns to surface. 40 barrels was double the target goal and fallback was only witnessed to be 5 ft.

Result

The results were immediate and measurable. Cement returns improved dramatically, and fallback was nearly eliminated. The resulting bond logs showed strong, consistent readings across all intervals. The operator was highly satisfied with the performance gains and cost efficiency of the combination of RadiLock and MaxGuard-X demonstrating, that a technically advanced sealing spacer and LCM package can deliver substantial results without increasing operational complexity or adding substantial expense.



Picture of RadiLock Fibers
taken at a Riteks Lab

