

Movie/Poster Abstract

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Installation of Ruff-Kote for Increasing Bonding While Cementing Casings in Brine and Storage Wells

In 1962, Continental Oil Company (Conoco) patented a process and procedure for improving the casing to cement bond of production casings. The casing joints are subjected to a commercial sand-blast to remove the mill varnish to which cement usually adheres poorly. The casing is left to rust slightly overnight. An epoxy resin is then applied to the casing to within about 4 feet of the connections with a paint roller, and crushed flintrock from a quarry in southern Kansas is then softly blown onto the casing as it is rolled on the pipe rack. The float collar and guide shoe are also sandblasted and coated.

After curing overnight on the pipe racks, the casing is ready to be run into the borehole. The epoxy resin is applied after the connections have been properly made up, torqued and pressure tested. Curing of the resin is accelerated while running casing to minimize rig time. Good centralization of the casing as it is run into the borehole will assure that the rock is not scraped off the casing.

Cement bond logs have shown that in many installations the casing to cement adherence is improved with the technology. The probability of a microannulus forming at the cement/casing interface is reduced. In addition, corrosion of the casing is reduced with the epoxy acting as a preservative. An 18-minute movie (VHS/VCR) will be presented to explain the process in great detail.