

NON-CHEMICAL DISINFECTION OF SULFATE REDUCING BACTERIA

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Non-chemical bacteria control has become an important topic for discussion in the oil and gas industry. The use of ultraviolet light for non-chemical disinfection has been well established throughout various industries and target species. Ultraviolet disinfection of sulfate reducing bacteria has been recently verified in lab and oilfield operations. For this application sulfate reducing bacteria (SRB) are a particular target of interest where little data is published on the effectiveness of ultraviolet disinfection in varying water qualities.

Collimated beam tests were conducted to validate the effectiveness against *Desulfovibrio desulfuricans*. These studies verified that ultraviolet disinfection can be an effective treatment for targeting this species. This paper outlines techniques used in the laboratory as well as the operational considerations unique to this application.

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