

Proprietary Blend Synthetic Rubber as Loss Circulation Material in Drilling Operation

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Abstract : Lost circulation has always been one of the greatest problems faced by drilling companies during drilling operations due to excessive drilling Fluids losses. Loss of circulation leads to Huge cost and non-productive time. The objective of this study is to evaluate the sealing efficiency of a proprietary blend of synthetic rubber as loss circulation material in comparison with a conventional product such as calcium carbonate, graphite, cellulosic, and nutshells. Sand Bed Tester with a different proprietary blend of synthetic rubber compositions has been used to determine the effectiveness of the LCM in preventing drilling fluids losses in a lab scale. Test results show the proprietary blend of synthetic rubber have good bridging properties and sealing Off fractures of various sizes. The finish product is environmentally friendly with lower production lead time and lower production cost compared to current conventional loss circulation materials used in current drilling operations.

Keywords : loss circulation materials, drilling operation, sealing efficiency, LCM

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