


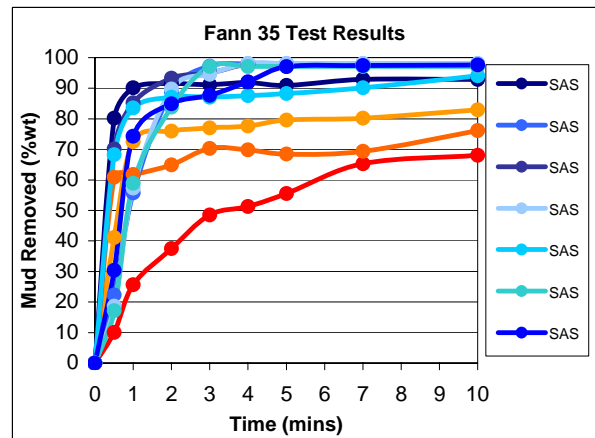


Case History

Mud Pit / Vessel Cleaning

Products:- SAS102C, SAS116B, SAS117SC, SAS135SC

Mud Pit / Vessel Cleaning		
<p>Surface Active Solutions was invited to demonstrate the efficiency of their microemulsion based products by a UK based engineering company. A typical mud holding tank was heavily contaminated with produced oil based drilling mud and cuttings. The mud holding tank was then cleaned using an automated spray system augmented by the SAS products.</p>		
		
Conventional mud tank cleaning system	Mud tank interior prior to SAS treatment	Mud tank interior post SAS treatment
<p>Note the cleaning pattern laid down by using conventional chemical treatments and the restricted area cleaned by the chemical wash solution – a number of treatment cycles are therefore required to clean the whole internal surface area.</p> <p>With the SAS microemulsion treatment less than one cycle is required removing all residues from the exposed surface. The SAS microemulsion technology also has the capability to enhance the slurrification process and mobilise the oil contaminated drilling wastes enabling the facilitated removal of compacted sludges and solids from the bottom of mud pits. The wash solution and removed solids may be separated by conventional means allowing the recycling and reuse of the microemulsion wash solution 2 – 3 times over. Following use the washing fluid may also be induced to phase separate to yield clean water for safe disposal (below 40ppm oil in water) and an organic phase minimising waste producing zero emissions at source.</p> <ul style="list-style-type: none"> • The SAS products are water soluble unlike competing organic based products. • The SAS products are typically able to remove 95 - 100% of the mud residues. • The SAS Products cleaned 8 times faster than the conventional chemical. • The volume of SAS product required was one third of that normally used. • The SAS product does not form emulsion wastes or rag layers. • The SAS product flocculates the solids and allows them to cleanly settle out from solution under gravity following the cleaning process. • Produced waste volume reduced by at least 50%. 		

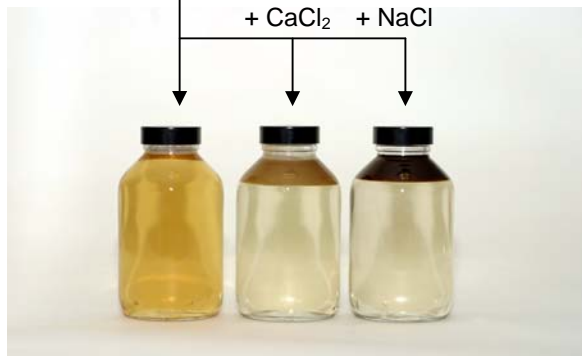


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Zero Liquid Waste Production at Source



Top:- SAS resulting wash solution compared to that of a competitor. The SAS single phase aqueous microemulsion settles out solids compared to the emulsion waste produced with rag layers for the competitor.

Bottom:- The aqueous microemulsion can be split (Right) using a number of techniques to remove the organic components and yield clean water

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