

Scale Control

✘ PROBLEM

Scale is the hard crystalline deposit resulting from the precipitation of mineral compounds present in water. The major problems caused by scale formation are reduced fluids production, well plugging, reduction in pipe carrying capacity, impedance of heat transfer, increase in operational safety hazards, localization of corrosion attack and increases in operational costs.

Most scale found in oil fields forms either by direct precipitation from the water that occurs naturally in reservoir rocks, or as a result of produced water becoming oversaturated with scale components when two incompatible waters meet in production. Curing scale problems costs the industry hundreds of millions of dollars per year in lost production.

✔ SOLUTION

In selecting the best scale strategy, we design laboratory tests to take into account the means of application, the conditions prevalent where inhibition is required, the composition of the scaling water, the means for determining residual inhibitor levels and the compatibility of the chosen chemical with other chemicals present in the system. Our in-house scale modelling software allows us to understand the causes of scaling and predict scaling potential in existing fields.

Our scale inhibitors portfolio contains a range of phosphonates, phosphates, carboxylates, carboxylic acid polymers, organic chelants, Halite inhibitors and scale solvers. We designed our carefully selected portfolio to perform under field conditions and not to revert or precipitate at high concentration levels in function of process parameters.

	Properties				Performance					Application				
	Phosphonate	Polymer	Calcium Compatibility	Residual Method	Calcium Carbonate	Calcium Sulphate	Barium Sulphate	Strontium Sulphate	Halite	Continuous	Batch / Removal	Topsites	Capillary String	Gas Lift
LX-1000 series	●		●	●	●	●				●		●	●	
	●			●	●	●	●	●		●		●	●	
	●			●	●	●	●	●		●		●	●	●
	●			●		●				●		●	●	
		●	●		●	●	●	●		●		●	●	●
		●				●	●	●		●		●	●	
			●		●	●					●	●		
			●			●	●		●	●				●

