PROSTREAM PI PROGRAMS

Paraffin Inhibitor Series



Chemstream provides a full line of paraffin inhibitors to mitigate issues associated with blockage and reduced production of oilfield wells due to its formation. Our sampling throughout the Marcellus and Utica shale has revealed a variation in "waxy" composition by region. Paraffin ($\sim C_{30}H_{62}$) has a high melting point because the molecule is longer and has more van der Waals interactions, and polyethylene (a long chain polymer, C_nH_{n+2} , n = 10000+) has a longer carbon chain, so it's melting point is higher still. Based upon previous experience in these shale formations, we have determined that paraffin/polyethylene deposition in the formation pore space will lead to decreased well production and form troublesome deposition, not only in the wellbore, but within the production equipment. What we found is Toluene and Xylene by themselves generally performed less efficiently than an optimized blend that included methanol and a hydrocarbon solvent.

Product Line Outline

Chemstream uses several strategies to combat paraffinic based problem. Our state-of-the-art oilfield lab can identify the paraffin carbon chain lengths and malleability of the obstruction and provide the proper treatment and maintenance chemical program(s).

- Crystal Modification- This series of chemicals can dissolve existing paraffin deposition and modify the crystal lattice to prevent future accumulation.
- ▲ **Microemulsion Technology** These programs change the transport capacity of the substance acting as a wetting agent to enhance the natural flow of the material.
- Microbiological- In some instances softer paraffin deposits can be consumed and removed with live cultures of bacteria.

Evaluation Process

Chemstream personnel will conduct a no cost system audit and collect/analyze deposition within the well production equipment. A detailed lab report with recommendations is provided for treatment consideration. Below are images of the crystal modification program effectively dissolving a hard paraffin deposit.



Contact us today for a free site evaluation, or more information on how we can meet your specific needs.

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