Platinum DSA (Dirty Sandstone Acid)®

Alleviating formation damage in sandstone reservoirs

The Platinum DSA® acid system has been designed to effectively remove wellbore impairments from sandstone reservoirs, and has proven more beneficial in alleviating formation damage than other conventional acid systems. The ability to maintain greater formation integrity comes from Platinum DSA's unique blend of hydrochloric and organic acids containing a clay stabilizer, a clay dehydrator, a silt suspender, an emulsion breaker, an anti-sludge agent, a corrosion inhibitor and an iron control agent.

Platinum DSA is routinely used in the following applications:

- New well completions: Platinum DSA is used to de-stabilize and dissolve filtrates from drilling and completions operations.
- Matrix de-scaling: Platinum DSA effectively dissolves calcium and iron compounds, leaving the flow channels in a sandstone matrix clean and unobstructed.
- Emulsion Blocks: Platinum DSA contains an anti-sludge and demulsifying package to prevent and remove emulsion that may accumulate in the flow channels of the rock matrix.

Sandstone Formation

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Platinum DSA   Acid Soluble Material   Sand Grains
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Advantages

**pH Control**
The Platinum DSA acid system has a controlled reaction rate on sandstone formation materials, increasing overall penetration into the target interval, and allowing for more efficient cleanup of any formation damage.

**Clay Control**
Platinum DSA has specifically formulated additives to minimize swelling and migration of clay particles.

**Iron Retention**
The organic acid in Platinum DSA works synergistically to retain up to 100,000 ppm of iron in solution. Platinum DSA maintains a lower pH for a longer duration compared to conventional HCI/HF formulations, enabling iron to remain in solution for a greater period of time.

**Silt Suspension**
Platinum DSA has the ability to suspend and disperse silt, clay fines and drilling fluid solids.

**Calcareous Cementation Material**
Platinum DSA is less detrimental to calcareous cementation material than HCI acid. The formation does not deconsolidate and release fines.

**Wettability**
Platinum DSA maintains/restores the natural wettability of the formation through the use of surface tension reducing surfactants and mutual solvents.

For more information, please contact Trican Well Service.