



THE TOTAL FLUID SOLUTIONS COMPANY

Drilling, Filtration, Reclamation Services

TSS Engineered WaterSM Division

Specializes in Filtration & Recycling of Frac Water and Produced Water for Gas Well Stimulation

Recycling well water has always made good sense because it's the most compatible water for the fracturing process. However, contaminants have remained a stumbling block to making this system cost effective and successful - until now. New processes from TSS remove iron and other contaminants that plug the proppant pack and reduce the effectiveness of chemicals used in the fracturing process. Additionally, a highly mobile skid can be deployed directly to the well site, providing cost savings and time efficiency while occupying remarkably small footprint.

Benefits

- Reduced off-site treatment costs
- Reduced hauling costs
- Immediate availability of recycled water for reuse in the frac process
- Reduced environmental impact

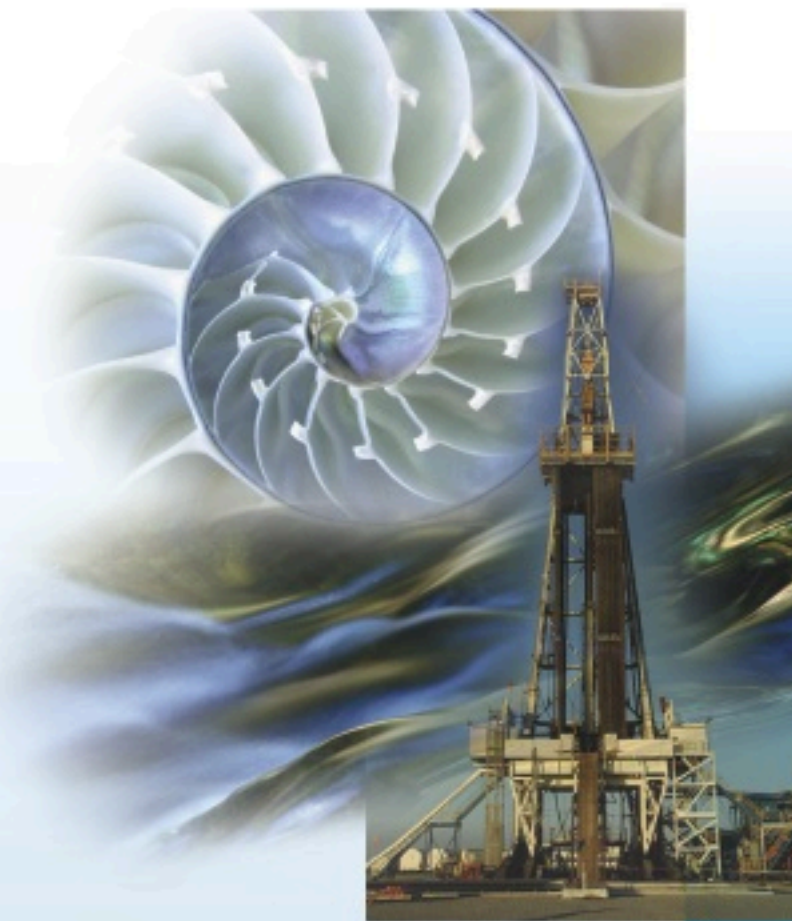
Technical Data

- Dedicated filter equipment with flow rate capacities of up to 150 BPM
- Highly mobile trailer mounted unit on skids with 10" manifolds
- Inside out flow design with a double o-ring end cap for a positive seal which allows no by-pass
- Filter element available in a choice of micron ratings.

Chemicals

TSS provides a complete line of post treatment chemicals as well as specialized chemical enhancers like:

- scale inhibitors, foaming surfactants, corrosion inhibitors, foamers, wetting agents
- environmentally acceptable biocides and more
- Treatments specifically designed for each field - to maintain a stable formation with minimal formation damage



All TSS chemicals are supported by experienced application engineers and computerized engineered models.

Current service areas include the Barnett Shale, Woodford Shale, Fayetteville Shale, Haynesville Shale, and Marcellus Shale.

Total Separation Solutions, LLC

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