The Schlumberger dissolved air flotation (DAF) trailer-mounted unit is a low-built air flotation system designed for high-solids loading. Schlumberger uses the DAF unit in the oil field to remove solids and oil from produced and flowback waters, preparing the treated water for recycle, reuse, injection, or permitted discharge. The DAF unit processes on average 25,000 bbl/d [3,975 m³/d]† of oil-and-solids-laden water, producing a supernatant that can potentially stand alone as a fracturing-grade-quality water or as a feed source for water polishing systems. Application is dependent on the customer’s delivered fracturing-grade-water quality requirements.

The DAF is trailer mounted and designed for over-the-road transportation. Produced water is introduced into the DAF tank and processed in a flow-through manner—produced water comes in one side and exits on the opposite side. Our DAF design uses a skimmer assembly that rotates against the hydraulic flow of the water. This design shortens sludge-skimming distance and eliminates solids carryover. Sludge produced by the DAF is pumpable and can be further processed for disposal in accordance with regulatory agencies.

† Influent quality impacts actual flowrate.