

## DAF UNIT

### Dissolved air flotation unit

#### APPLICATIONS

- Onshore produced water treatment
- Pretreatment removal of oil and suspended solids
- Treatment for water recycle, reuse, injection, or permitted discharge

#### BENEFITS

- Mobilizes easily by trailer
- Tolerates high-solids fluids
- Requires minimal manpower for operation

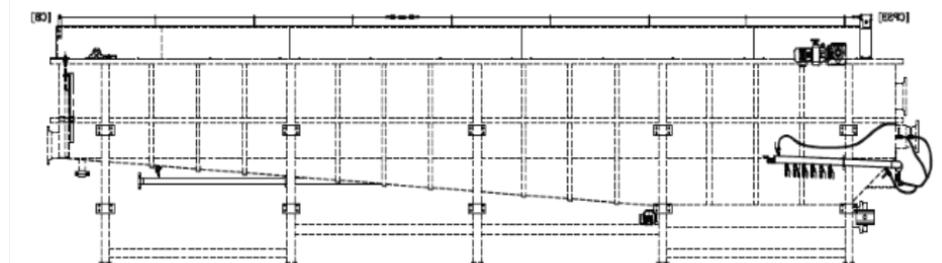
#### FEATURES

- Open flotation cell and counter-current skimmer
- Design flowrate of 25,000 bbl/d [3,975 m<sup>3</sup>/d]
- Operator-controlled sludge thickness
- ANSI recirculation pumps

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 m<sup>3</sup>/d]<sup>†</sup> 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.

<sup>†</sup> Influent quality impacts actual flowrate.



#### Unit Specifications

FRC DAF PWL-100 with upgraded pumps and white-water-generation system per Schlumberger specifications

Free surface area	205 ft <sup>2</sup> [19 m <sup>2</sup> ]
Dry weight + trailer	22,100 lbm [10,024 kg]
Wet weight + trailer	65,400 lbm [29,665 kg]
DAF dimensions (L × W × H)	36.75 ft × 7.83 ft × 8.33 ft [11.20 m × 2.39 m × 2.54 m]
Trailer Dimensions (L × W × H)	45 ft × 102 ft × 19 ft [13.7 m × 2.59 m × 0.5 m]

*Mounted on a trailer, the DAF dissolved air flotation unit is easily transported and set up for processing produced water and eliminating solids carryover.*

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