

Cased Hole Field Transfer Unit

Improved, fast sample transfer

The Oilphase-DBR* Field Transfer Unit (FTU) is a customized field workstation designed for the transfer and validation of single-phase reservoir fluid samples into single-phase transport cylinders. Sample transfer can be performed in less than one hour with no compromise in sample quality.

To allow for fast field rig-up, a nitrogen intensifier and two air-operated high pressure pumps, for synthetic oil and water, are built into the unit. The FTU supports the Single-Phase Reservoir Sampler and sample bottle together, and offers increased reliability by requiring a minimum of new connections to be installed and tested before commencing the transfer. Dedicated hoses for all displacement fluids ensure no cross-contamination of samples, and stainless steel construction prevents contamination caused by line corrosion. High-pressure quick-connect couplings ensure easy operation with no thread galling or cross-threading and permits easy field maintenance.

Following transfer, sample validation can be confirmed by field bubblepoint measurement. This validation is performed using a constant volume cell (2 cm³) connected to a calibrated dial test gauge. This cell removes the risk of error and ensures that identical volumes are progressively removed during depressurization, producing reliable field bubblepoint determination.

Oilphase-DBR Fluid Transfer Unit Technical Specifications

Length	1.04 m [41 in]
Width	0.533 m [21 in]
Height	0.66 m [26 in]
Weight	88.9 kg [196 lbm]
Test pressure	155 MPa [22,500 psi]
Working pressure	103 MPa [15,000 psi] 69 MPa [10,000 psi], optional
Material	Stainless steel
Recommended air supply	55 scf/min at 1,035 kPa [150 psi]
Design code	API 6A

Application

- Validation and transfer of single-phase reservoir fluid samples

Benefits

- Fast sample transfer
- Fewer high-pressure connections needed for each transfer results in safer operation and increased reliability
- Maintains sample integrity

Features

- Dedicated hoses and pumps for all displacement fluids
- Mercury free
- Sample validation cell
- All stainless steel construction
- High-pressure quick-connect couplings
- High-pressure nitrogen intensifier
- Contamination-free pretransfer pressure test

Oilphase-DBR field transfer unit.

