



Red Eye®

Water-Cut Meters for Surface



UNPRECEDENTED WATER-CUT ACCURACY IN REAL TIME

Conventional flow-measurement methods deny productivity gains. Hand sampling lacks certainty and offers only a brief glimpse of well performance, leaving valuable assets vulnerable to poor water management, inefficient lift strategies, and increased HSE risk. Weatherford Red Eye water-cut meters provide reliable, instantaneous measurements that accurately assess reservoir behavior in real time.

Red Eye water-cut meters feature patented near-infrared (NIR), light-sensing technology that delivers unparalleled accuracy and flexibility. This exclusive technology is insensitive to salinity and mixture-density, producing continuous measurements across the full range of water cut from 0 to 100 percent. Red Eye meters instantaneously distinguish between water, oil, methanol, and glycol, regardless of solids, H2S, CO2, emulsions, and impurities. With real-time accuracy for any gas-volume fraction (GVF) up to 99.9 percent, Red Eye meters are the most accurate flow-measurement instruments on land or deepwater.

Installed upstream or downstream of the separation process, only Red Eye meters provide the operational flexibility and data reliability for individual well monitoring, group monitoring, well testing, and water breakthrough. This convenient and affordable solution gives the power to detect minute changes in water cut and optimize ongoing lift- and production-strategies.

OPTIMIZE WITH PRECISION

0-99.9% GVF
from heavy oil to wet gas

**0-100%
WATER CUT**
regardless of salinity
variations or impurities

70% LESS OPEX
with no hand sampling or
frequent calibration

FIELD-PROVEN RESULTS

\$3M SAVED
AUTOMATED
MONITORING FOR
20 WELLS IN A
HOSTILE LOCATION

Alberta, Canada

\$18M SAVED
INCREASED WELL-TEST
DATA FREQUENCY AND
ACCURACY

Middle East

\$52M SAVED
INCREASED WELL-TEST
ACCEPTANCE AND
ELIMINATED HAND
SAMPLING

Middle East



GET TRUE RESERVOIR INSIGHT

Red Eye water-cut meters provide vital water-cut intelligence for the ultimate gains in production strategy and efficiency. Armed with accurate, real-time data, you can instantly detect water onset, update lift strategies, and set the stage for ideal asset optimization.

Eliminates inconsistencies associated with hand sampling and intermittent data.

Tracks transient flow and slugging conditions through weighted water-cut calculations, giving greater significance to liquid slugs for representative measurements.

Reduces measurement uncertainty to as low as $\pm 0.2\%$ (abs.) through extreme sensitivity to water presence, enabling immediate detection and response.

Maintains efficient separation and retention time in test separators by monitoring water entrainment in pipelines.

SPEND LESS AND SIMPLIFY

Red Eye water-cut meters replace hand sampling and save trips to the wellsite by automating measurements with accurate, real-time measurements. This continuous data enhances reservoir insight to help you optimize production, report accurately, and reduce artificial-lift costs.

Saves 70% OPEX per well by eliminating onsite, human intervention, and frequent calibration hassles.

Offers exclusive flexibility with installation capabilities at the wellhead or downstream for individual well monitoring, group monitoring, well testing, and water-breakthrough detection.

Improves the performance of existing equipment, from separators to single-phase and multiphase flow meters.

Reduces HSE risk and limits personnel exposure to high temperatures, high pressures, and sour environments.

ADVANCE TO PRODUCTION 4.0

Reliable Red Eye water-cut data is an essential component of the ForeSite Production 4.0 ecosystem. Only Weatherford gives operators an asset-level, end-to-end production solution that maximizes production, reduces downtime, and enhances personnel efficiency.

Leverage instant intelligence with ForeSite[®] Sense featuring real-time reservoir-monitoring data that drives profitability for any well, with any form of lift, in any environment.

Be true to your well with end-to-end solutions for every form of artificial lift, including global expertise, all lift equipment, and everything you need to diagnose and restore common production issues.

Lift autonomously with ForeSite Edge, harnessing high-frequency data and modeling at the wellsite for continuous production performance.

Gain unprecedented flow intelligence with ForeSite Flow, delivering full-range multiphase insight with real-time, split-second accuracy—all without a test separator or a nuclear source.

Optimize at the asset level with the ForeSite platform helps you maximize performance throughout your wells, reservoir, and surface facilities.

REDEYE APPLICATIONS

Wellhead Monitoring

Allocate Production
Detect Water Breakthrough
Slug Tracking Behavior

Well Testing

Convert to 2-Phase Separators
Improve Multiphase Metering Performance
Enhance Separation Efficiency

Group Production Monitoring

Improve Coriolis Meter Performance
Increase Oil Sales Quality
Enhance Field Reconciliation Factor