

Wireless Well Solutions

Advanced Reservoir Testing™ (ART)

Want to reduce reservoir uncertainty during exploration and appraisal?

Expro's wireless downhole monitoring system uses the world-leading CaTS™ EM technology to transmit high resolution pressure and temperature data from suspended and abandoned wells.

Expro's ART system enables suspended and abandoned wells to be converted into high-value long term monitoring assets for years after the rig has left location. Dynamic reservoir pressure responses are monitored during drilling, testing and production in the field to capture cross-field interference and long term pressure build-up data. The data provides critical information about the connected volumes in order to characterise the reservoir, validate subsurface models and refine the field development plan. The system can be run on its own or as part of a DST test string and the Duplex functionality allows for optimal battery management, ensuring the right data is delivered at the right time.

Features

- Market-leading technology with 20 year proven track record in wireless EM communications
- Signal not attenuated by cement plugs, mechanical barriers or high doglegs
- High precision quartz transducer for reliable reservoir pressure measurements
- Long transmission range minimises the downhole equipment installed
- Duplex functionality with fully addressable architecture to optimise system performance
- · Deploy, set and verify in single run
- Seabed pressure transducer allows reservoir pressures to be corrected for tidal influences
- · Wireless communications across uncased sections

Cats* subsea roceiver

Value Proposition / Benefits

- · Converts throwaway wells into high value observation assets
- Data provides validation of subsurface models
- Increases depth of investigation into reservoir and provides more accurate assessment of connected volumes, far boundaries and faults beyond conventional DST
- System can help optimise development well placement and reduce appraisal well count
- Shortens time rig is on location to monitor PBU, while still recovering all critical data
- · Alternative solution to extended well testing
- Complies with local abandonment and suspension guidelines/regulations
- Optimises real-time operations and long-term development plans to reduce CO2 emissions

Applications

- Reservoir surveillance
- · Cross-field interference monitoring
- Zonal interference monitoring
- Long-term pressure build-up monitoring
- Extended well testing
- Abandoned pilot holes and sidetracks
- Multilaterals
- Inter-block equity determination / unitisation
- Greener / flare-free testing





