

The PROMORE Division



PROMORE, a Core Laboratories Reservoir Management Division, provides cost-effective solutions for real-time well monitoring systems, which are critical to the successful implementation of reservoir management, production optimization, and enhanced oil recovery projects.

PROMORE's advanced surface electronics, in conjunction with our industry-unique ERD™



sensor, eliminates the need for downhole electronic components.

This combination delivers marked improvement in both reliability and high-temperature capability in extreme operating environments.

Instrumentation devices can be conveyed on tubing or casing, suspended, or integrated into the patented

CT-MORE™ Coil Tubing-Conveyed system.

Our permanent downhole monitoring systems provide Your Eyes to the Reservoir™ to improve well productivity, reduce operating costs, and understand reservoir performance on a real-time basis. The tools have been designed to deliver high reliability, while maintaining cost competitiveness, flexibility, and ease of use. PROMORE designs "fit for purpose" systems for cost-challenged, land-based environments, including conventional oil and gas, heavy oil, and offshore dry-tree wells.

To enable our clients to select the method best suited to their particular completion designs, we provide several conveyance techniques, including:

- Tubing
- Casing
- Coil tubing
- Suspended

The MORE^T Tubing-Conveyed System

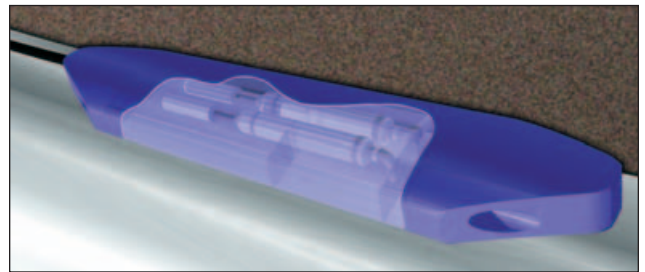
The MORE^T™ tool is conveyed on the production tubing and uses a unique combination of PROMORE's electronics-free proprietary ERD sensors with the technologically superior digital-signal-processing software known as ESIA (Encrypted Sensor Isolation Algorithm).

The MORE^T system can be used to measure single- or multi-point pressure and temperature, or it can incorporate distributed temperature (fiber optic) sensors, downhole flow meters, vibration sensors, and geophones.

The MORE^C Casing-Conveyed System

Unique to the industry, PROMORE's MORE^C™ system is installed on the outside of the production casing in custom-engineered housings. Communication to the wellbore and/or the reservoir is provided through unique pressure ports.

Continuous measurements can be obtained throughout the life of the well without any impact or interference with wellbore operations such as pump changes, stimulations, or workovers. Using the MORE^C system, pressure data collection starts with cementing operations, carries through underbalanced drilling, and remains in place for long-term production optimization and reservoir analysis.

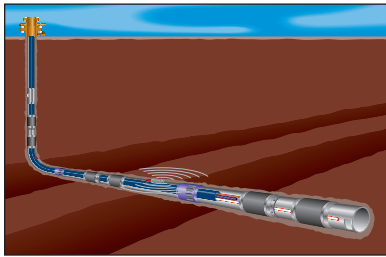


Suspended MORE^S Conveyance Technique

The suspended MORE^S™ system is conveniently deployed using a picker unit and provides a method to observe pressure and temperature in tubing or production casing. The data typically support field depletion monitoring or offset well interference testing.

ZoneBoss System

The ZoneBoss™ system provides a new approach to the monitoring, isolation, and control requirements of land-based operators. This cost-sensible system is



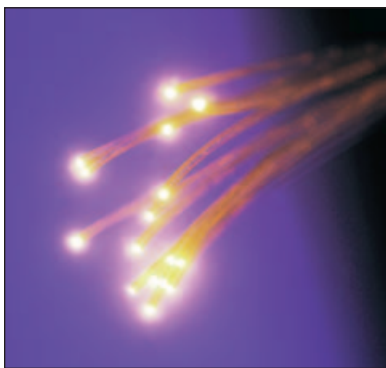
utilized in various vertical and horizontal well applications for multiple-zone testing and production, acid-gas injection, cross-flow evaluation and control, and improving EOR effectiveness.

The CT-MORE Coil Tubing-Conveyed System

The CT-MORE™ system is patented “fit-for-purpose” instrumentation that incorporates PROMORE’s ERD sensors, distributed temperature (fiber optic) sensors, or thermocouples. The system can be utilized in conventional wells or is ideally suited for deployment in extreme temperature environments, including newly emerging SAGD (steam-assisted gravity drainage) applications.

Fiber-Optic Distributed Temperature Monitoring

PROMORE’s FibreNET™ system provides the industry the widest range of deployment choices in the use of



fiber-optic distributed temperature monitoring. Sensors can be conveyed on tubing or casing, suspended, or incorporated into the CT-MORE system. Distributed temperature monitoring can also be used in conjunction with any PROMORE ERD pressure/temperature sensor or flow meter.

FibreNET monitoring allows for complete distributed temperature profiles of vertical and horizontal wells in low- to extreme-temperature environments.

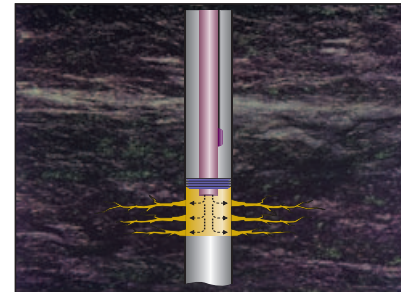
Pump Control Systems

PROMORE’s pump control systems provide operators an opportunity to increase the run life of artificial lift systems through avoidance of pump-off. In conjunction with PROMORE’s Field Instrumentation Model, operators can optimize field profits based on continual assessment of inflow performance relationships.

Real-Time Fracture Monitoring

The PROFrac™ system allows operators to optimize fracturing operations through on-the-fly measurement of bottomhole pressure.

The system has been used to improve fracture models and maximize proppant concentrations, which has reduced well stimulation costs and markedly improved well productivity.



Surface Data Acquisition

The PROVisionDSP™ data acquisition system provides the latest generation of sophisticated surface electronics. It combines a user-friendly interface with leading-edge digital signal processing (DSP), resulting in one of the most powerful stand-alone remote terminal units (RTUs) available. The system is compatible with inputs from virtually all sensor types, including PROMORE’s electronics-free ERD technology. By using a high technology digital signal processor, sample rates of several times per second can be achieved. In addition, sensors can be interpreted under adverse conditions where signal-to-noise ratios are very small.

PROMORE differentiates itself by offering its clients:

- The best reliability in the industry
- No downhole electronics
- The highest temperature rating
- Flexibility and ease of use (fit for purpose)
- The best resolution available

For More Information

For a complete overview of our products and services, visit our website at www.corelab.com