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R-SERIES RESERVOIR MONITORING SYSTEMS

R-Series high-specification pressure and temperature gauges are developed from Zenith's industry experience of artificial lift monitoring to provide **cost-effective quartz sensors giving you reliable, accurate reservoir data at high temperatures** enabling transient analysis of build-up surveys, reservoir pressure trend monitoring, and reservoir temperature monitoring.

R-SERIES RESERVOIR MONITORING SYSTEMS

Zenith R-Series reservoir monitoring systems utilise quartz transducers to give you the **best possible accuracy** required for reservoir monitoring.

The standard R-Series quartz pressure tool can be used for high-accuracy, high-resolution build-up analysis or low-drift, long-term monitoring.

Intervention of wireline or coil tubing into productive wells has always been considered as a last resort — there are inescapable inherent dangers associated with such operations. On the other hand, the need to gather up-to-date downhole data still exists as part of a properly managed reservoir monitoring programme.

Downhole pressure and temperature readings from Zenith R-Series reservoir monitoring systems provide permanent and real-time pressure/temperature surveys; on-demand data for transient pressures can be analysed to assess inflow and outflow performance whenever an event occurs.

“ The Zenith R-Series monitoring system successfully completed a three-month continuous lab test at 200°C (392°F). Customers report successful runs at over 197°C (387°F) in the field. ”

Zenith provides a number of different pressure and temperature ratings from 5,000psi, 150°C to 16,000psi, 175°C gauges. Data is transmitted to surface using an instrument line which is appropriately designed and rated for the well conditions.



R-SERIES SYSTEM BENEFITS

Optimise production:

High accuracy, resolution and low drift characteristics enable detailed reservoir analysis

» provides valuable information on the size and shape of the formation as well as its ability to produce fluids

Accurate sensors with one-second sampling enable analysis of draw-down and build-up pressure transients

R-SERIES SYSTEM FEATURES

Downhole data collection

» SD card option — simple data transfer to removable memory card

» Data display with live on-screen data charting, drive mounted or enclosure

» Data trending software

» Dedicated engineers' port to laptop or Zenith hand-held PC

» Connectivity to remote data collection or SCADA systems

High quality, modular construction—13 chrome metalwork as standard

Long service life allowing repeated deployment

Field-serviceable system with easily replaceable sub-assemblies, and a surface system which can be upgraded in the field

Communications and power supply via a dedicated instrument line

Calibration stored in the downhole tool

One-second update of all parameters

Allows cable megger test

R-SERIES SYSTEM OPTIONS

Sensors can be configured to monitor:

Annulus pressure

Tubing pressure

Annulus temperature

Tubing temperature

