

### Reservoir Analysis Sonde – RAS002 (RAS™)

**The RAS™ is a proprietary three-detector pulsed-neutron logging tool which uses sigma and carbon-oxygen techniques to measure reservoir fluid saturation of oil, water and gas.**

The ability to accurately monitor reservoir conditions is an ongoing challenge for operators and service companies. This knowledge is critical for maximising the lifecycle of an asset.

This technology is applied to monitor fluid contacts in the reservoir, diagnose production problems and to locate bypassed pay zones.

#### Measurement mode & applications

- Sigma – Saturation monitoring in high formation water salinity (>70,000 ppm)
- Carbon Oxygen (C/O) – Saturation monitoring independent of water salinity
- Dual Sigma and C/O
- Oxygen Activation – Water flow logging
- Inelastic Gas – Advanced gas view

#### Benefits

- Field proven technology
- Full-function pulsed-neutron tool
- Improved reservoir saturation data
- Compact-robust device making it easy for deployment and reduces the potential of failure points
- Versatile and can be configured to suit different conveyancing types and downhole conditions
- Slim-hole tool enabling access through well restrictions

#### Features

- Three detector array that includes time and energy spectra
- High-resolution Lanthanum Chloride detectors
- Shortest reservoir analysis tool string in the industry
- Advanced calibration mechanisms to assure accuracy
- Surface Read-Out (SRO) and Memory –operating modes

#### System specifications

	<b>160°C</b>	<b>320°C</b>
Temperature rating	<b>160°C</b>	<b>320°C</b>
Pressure rating	103.4 MPa	15,000 psi
Diameter	43mm	1 11/16"
Length	3573mm	140.7"
Weight	20kg	44lb
Measure point - Near	2134mm	84"
Measure point - Far	2311mm	91"
Measure point - Long	2565mm	101"
Materials	Corrosion resistant throughout	

