

# RAS™ Reservoir Analysis Sonde

Multimode pulsed-neutron service for robust reservoir monitoring

## Applications

- Reservoir monitoring
- Formation evaluation
- Wellbore performance and integrity
- Primary reservoir description where openhole logging is constrained

## Features and Benefits

- Shortest available three-detector PNG tool
- Improved wellsite safety
- Surface read out (SRO) and memory compatible
- Combinable with all HD products
- Sigma, carbon-oxygen, and water flow available in SRO and memory modes (mixed modes supported in memory)
- Combinable with ArrayPro and PL for a short-advanced CH-FE combination
- Long generator life

## Tool Description

The Weatherford RAS reservoir analysis sonde is a three-detector, pulsed-neutron, corrosion-resistant logging tool that measures gas, oil, and water saturation.

It features three gamma detectors. The near and the far detectors are high-resolution lanthanum-chloride detectors for Sigma and carbon-oxygen, and the long spacing sodium-iodide detector provides gas and porosity measurements. An available variant is a Sigma-only alternative, more suitable for specific markets.

Combining advanced cased-hole formation evaluation with well integrity services and production logging, the RAS adds value for zone isolation, water and fluid management, and well stability/productivity applications.

The internal temperature is recorded to nonvolatile memory, enabling maintainable temperature exposure records. The neutron generator life provides high performance, increasing ROI.



# RAS™ Reservoir Analysis Sonde

## Specifications

### Ratings and Dimensions

Outside diameter	1.69 in. (43 mm)
Length	140.7 in. (3,573 mm)
Weight	51 lb (23 kg)
Maximum temperature	320°F (160°C)
Pressure range	15,000 psi (103.4 MPa)
Materials	Corrosion-resistant materials used throughout
Measure points	Near: 80 in. (2,032 mm) Far: 87 in. (2,210 mm) Long: 95 in. (2,413 mm)

### Borehole Conditions

Borehole fluids	OBM and WBM
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### Hardware Characteristics

Source type	3-detector array includes time and energy spectra
Sensor type	High-resolution lanthanum chloride
Acquisition mode	SRO or memory

### Measurements

RAS002	Sigma, carbon-oxygen, oxygen activation, inelastic gas
RAS003	Sigma, oxygen activation, inelastic gas

