

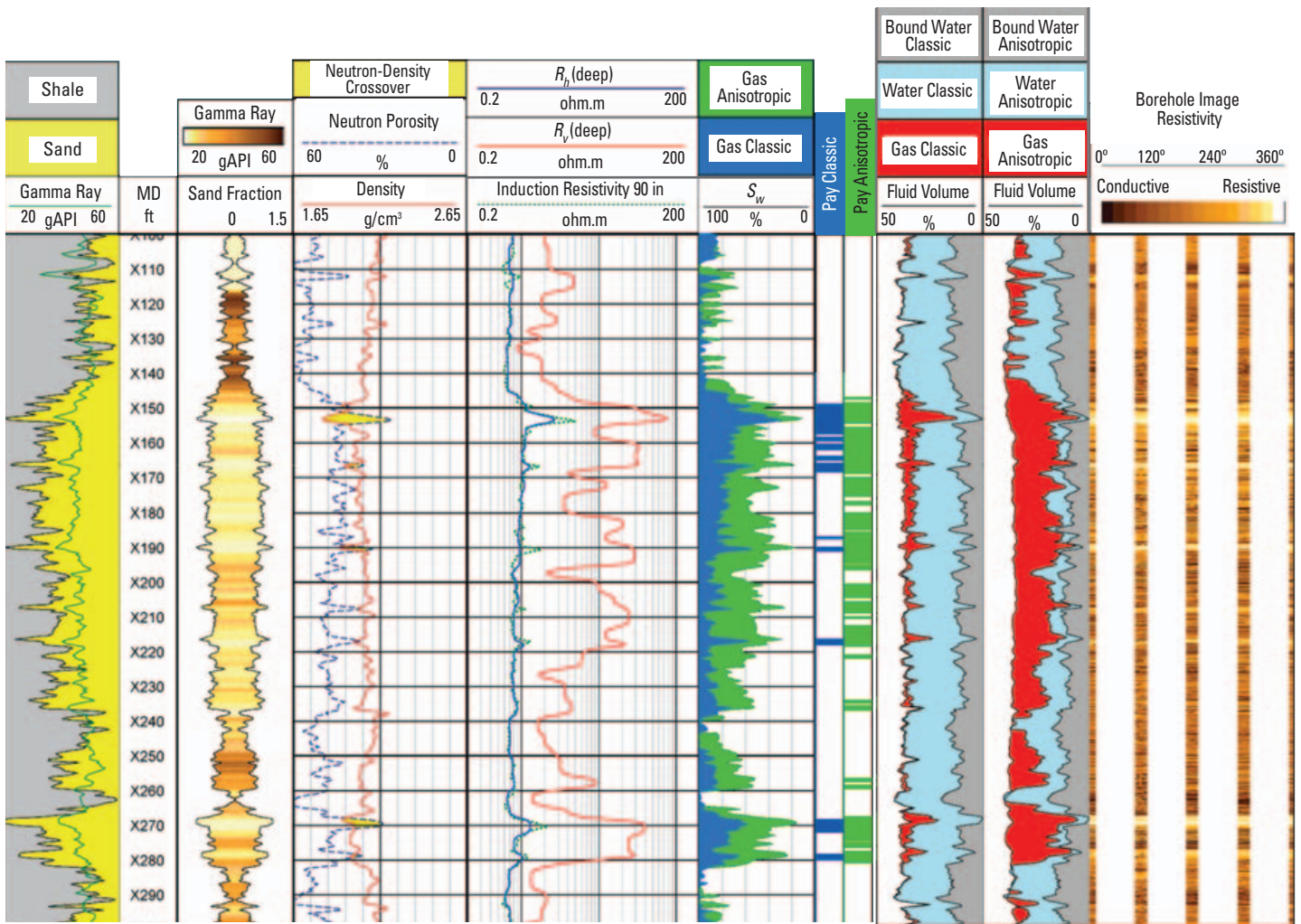
Rt Scanner

APPLICATIONS

- Determination of true resistivity, R_t
- Determination of water saturation, S_w
- Low-resistivity pay
- Laminated formations
- Structural analysis
- Thin-bed analysis
- Invasion profiling
- Reservoir delineation

Rt Scanner* triaxial induction service calculates vertical and horizontal resistivity (R_v and R_h , respectively) from direct measurements while simultaneously solving for formation dip at any well deviation. Making measurements at multiple depths of investigation in three dimensions ensures that the derived resistivities are true 3D measurements. The enhanced hydrocarbon and water saturation estimates computed from these measurements result in a more accurate reservoir model and reserves estimates, especially for laminated, anisotropic, or faulted formations.

The compact, one-piece Rt Scanner tool has six triaxial arrays, each containing three colocated coils measuring at various depths into the formation. R_v and R_h are calculated at each of the six triaxial spacings. Three single-axis receivers are used to fully characterize the borehole signal to remove it from the triaxial measurements. In addition to the resistivity measurements, formation dip and azimuth are calculated for structural interpretation.



The hydrocarbon saturation calculated from R_v and resistivity anisotropy clearly indicates the presence of hydrocarbon that otherwise would have been overlooked using classic resistivity measurement of R_h only.

Rt Scanner

Along with advanced resistivity and structural information, the Rt Scanner tool delivers standard AIT* Array Induction Imager Tool measurements for correlation with existing field logs. The tool's innovative design provides this complete resistivity information with no additional hardware. The Rt Scanner tool is also fully combinable with Platform Express* and most openhole services.

Specifications

Output	R_v , R_p , AIT logs, spontaneous potential, dip, azimuth
Max. logging speed	1,097 m/h [3,600 ft/h]
Combinability	Platform Express platform and most openhole services
Max. temperature	150 degC [302 degF]
Max. pressure	137,895 kPa [20,000 psi]
Outside diameter	9.84 cm [3.875 in]
Length	5.97 m [19.6 ft]
Weight	183 kg [404 lbm]
Max. tension [†]	111,205 N [25,000 lbf]
Max. compression [†]	26,689 N [6,000 lbf]

[†]Limits derived at 150 degC and 0 psi

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