

Insignia well integrity evaluation service

Avoid emergency interventions and unnecessary production disruptions

The Baker Hughes **Insignia™ well integrity evaluation service** provides a high-resolution assessment of a well's integrity so emergency interventions and unnecessary production disruptions can potentially be avoided. The service delivers critical data at the well site in less than one-sixth of the time compared to other characterization services—enabling operators to make earlier decisions.

By combining the **High-Resolution Vertilog™ (HRVRT™)** and **Segmented Bond Tool™ (SBT™)** services, the Insignia service is capable of quantitatively evaluating the cement bond and casing integrity by detecting channels in the cement annulus. Using multi-axial sensor technology, the Insignia service determines casing defects and provides an accurate burst calculation. This crucial data helps operators decide if a well integrity condition requires intervention to address a hydraulic-seal issue.

Equipped with accelerometers, the Insignia service provides an accurate orientation of the cement and casing evaluation data. With data from the SBT

and HRVRT services, the Insignia service delivers results in the form of a 360° map—making well integrity analysis quick and easy to interpret. The Insignia service delivers operating advantages over conventional and pulse-echo tools. The proprietary pad-mounted sensors make the service insusceptible to heavy or gas-cut borehole fluids, dense muds, emulsions, and temperature/pressure variations. The pad design enables measurements to endure sufficient eccentricity, making the service ideal for demanding deployment in highly deviated and tortuous wells. The service is deployable on wireline and other pipe-conveyance methods, including the Baker Hughes **TeleCoil™ intelligent coiled tubing service**.

For more information on how the Insignia service can help you manage the risks of unplanned intervention work and avoid unnecessary production outages, contact your local Baker Hughes representative.

Applications

- Preventive well integrity monitoring
- Evaluation of suspected well integrity issues
- Highly deviated and tortuous wells
- Casing patches and other downhole restrictions
- Mapping of perforations

Features and Benefits

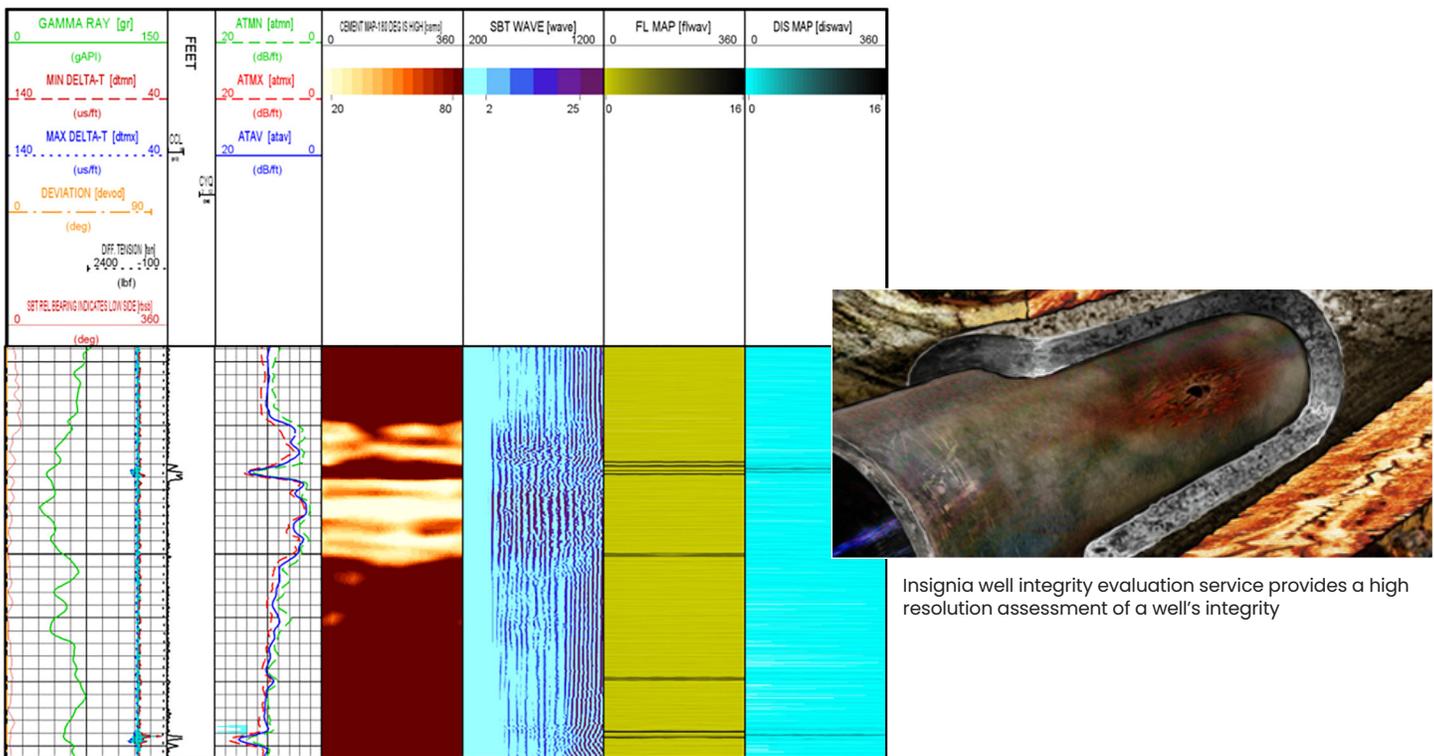
- High-speed logging
 - Acquires data in one-sixth the time compared to other characterization services
- Multi-axial sensor technology
 - Locates and evaluates depth of penetration of casing defects
 - Accurately differentiates between casing corrosion and well completion equipment
- Comprehensive well integrity evaluation
 - Accurately evaluates cement with combined high-resolution casing inspection data
 - Accurately determines burst pressure with combined cement bond data
- Deployable by all conveyance methods

Specifications

	Casing inspection	Cement evaluation
Casing size	4½ to 9⅝ -in	
Sensors	192 hall effect	18 piezoelectric
Instrument length	48.25 ft. (14.72m) ¹	
Instrument weight	791 lb (359.27 kg) ²	
Logging speed	60 ft/min (20m/min)	
Maximum pressure	15,000 psi (103.4 Mpa)	
Maximum temperature	350°F (175°C)	

¹ Length of string used in 4½-in casing

² Weight for casing of 4½-in inside diameter



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Insignia service log with combined data from the SBT and HRVRT services

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