

ChannelView well integrity detection service

Accurately identify cement channel issues in a single trip

The Baker Hughes **ChannelView™ well integrity detection service** accurately identifies cement channels and water flow inside or behind the casing by concurrently performing cement evaluation and pulsed-neutron logging services in a single run. The combined analysis helps operators detect well integrity issues, which are typically overlooked, so necessary remedial actions can be determined with confidence.

The ChannelView service simultaneously combines the pulsed-neutron production logging technology of the **Hydrolog™** and **FlowShot™ services of the Reservoir Performance Monitor™ (RPM™) service** with the **Segmented Bond Tool™ (SBT™) cement evaluation service** in one log—reducing time spent in the well.

Quantify water flow in cement channels

Using two independent cement channel evaluations from the Hydrolog and SBT services, the ChannelView service determines if further confirmation of suspected cement channels is required with the FlowShot service.

Using stationary measurements, the FlowShot service produces high-resolution images that confirm and accurately quantify water velocity across a wide range of measurements—from 2 ft/min to 500 ft/min.

Determine water flow behind the casing

Pulsed-neutron production logging is a preferred option for detecting water flow behind the casing in cement channels since conventional production logging services only characterize flow profiles that are directly encountered by the logging instruments. The Hydrolog service acquires water velocity data by temporarily activating oxygen, which enables it to be used as a short-lived radioactive tracer. By eliminating the deployment of chemical radioactive tracers, the Hydrolog service reduces health, safety, and environment (HS&E) risks. The water velocity is precisely determined with stationary time-based oxygen activation measurements from the FlowShot service.

Applications

- Evaluate the need for squeeze activity
- Identification of water flow in cement channels and casing leaks
- Identification of water flow inside or behind casing
- Production/injection profiling in multiple string completions

Benefits

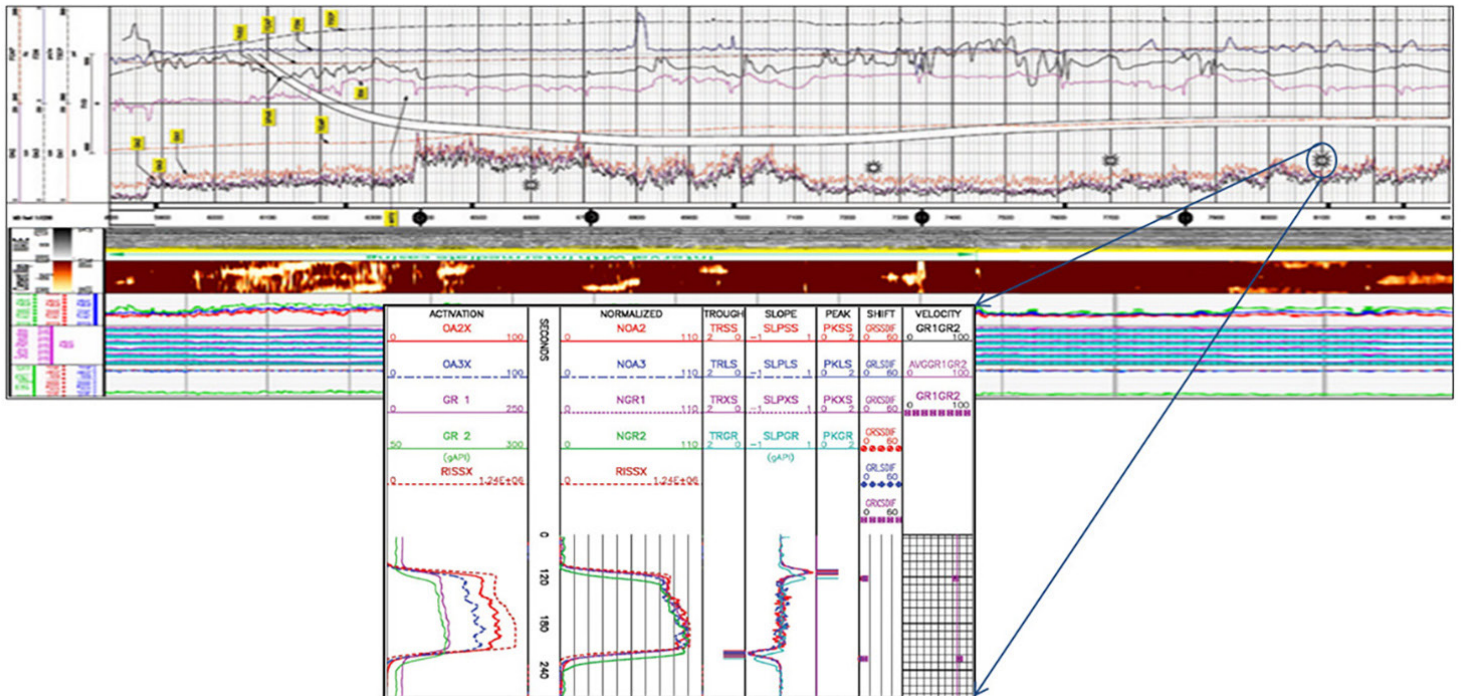
- Two independent cement channel evaluations
 - Identifies cement channels accurately
- Concurrently performs cement evaluation and pulsed-neutron production logging services in a single run
 - Reduces time in the well
- Oxygen activation based measurements
 - Eliminates deployment of chemically radioactive tracers
 - Reduces health, safety and environment (HS&E) risks

Identify cement channels

The SBT service identifies cement channels in real time. Its insensitivity to heavy or gas-cut borehole fluids, emulsions, fast formations, and tool eccentricity offers a significant operating advantage over conventional and pulse-echo tools. The ChannelView service optimizes the FlowShot service logging program by combining cement channel

data from the SBT service and water velocity data from the Hydrolog service.

For more information on how the ChannelView service can help you better identify well integrity issues in your well, contact your Baker Hughes representative today or visit BakerHughes.com.



The top plot shows the two independent cement channel evaluations from the ChannelView service. The bottom plot shows accurate water velocity measurements in the cement channels taken by the FlowShot service.