

GuideWave® CLEAR Multilayer Mapping-While-Drilling Service

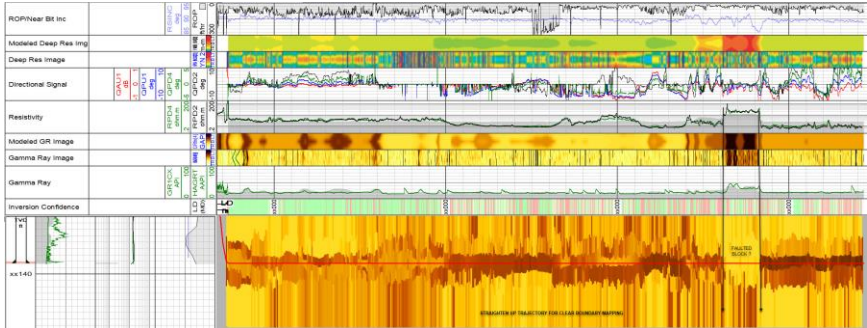
Delivers highest confidence and less uncertainty for precision steering decisions in clastic and carbonate reservoirs

Applications

- Carbonate and clastic formations
- Mapping multiple targets
- High-speed drilling environments

Features and Benefits

- Multi-layer visualization with the capability to see beyond the main target zone
- Fast Newton non-linear inversion that could sustain drilling rates to very fast drilling speeds
- Deeper search algorithm to optimize the parameters results
- Possibility to calculate resistivity and thickness of 2 (single boundary) to 10 layers
- Quality control of the results with the misfit analysis
- Cleaned-up visualization with enhanced boundary mapping shading



The GuideWave CLEAR service combines the solid geological correlation approach with an improved boundary mapping of multiple layers.

System Description

The Weatherford GuideWave CLEAR multilayer mapping-while-drilling service is based on the original concept that is the foundation of the Weatherford Well Placement services: analyze all available measurements and information to adjust a subsurface model to use as a correlation with actual data.

Having gained confidence on the understanding of the structural and geophysical scenario, the GuideWave CLEAR service provides a multi-boundary inversion with a deterministic approach that calculates the thickness and resistivity of the formations in a radius exceeding 40 ft (12.1 m) around.

In case of high uncertainty, the algorithm could be run in unconstrained mode (less determined scenario), returning the best-possible solution. A misfit algorithm also returns the level of confidence of each calculated point of inversion.

