## GUIP38

## Case study - Focussed resistivity





The example log shown on the left was recorded in an PQ-cored borehole drilled as part of a geological and hydrogeological investigation in a faulted region in the Alsace region of France where problems of ground subsidence have been encountered. These problems are thought to be related to the interaction of groundwater with the many evaporitic horizons present in the near-surface geological section.

The very high resistivities recorded in the lower part of the borehole are caused by the presence of massive halite beds. The interbedded claystone layers, some only 10 to 20 cm in thickness, are clearly delimited.

The predominantly claystone layers above 73 m include a number of gypsum beds and themselves become richer in gypsum content moving upwards through the drilled interval.

A caliper log was also run in this borehole and has revealed several less well indurated layers that have been partially washed out during the drilling process.



Core box photograph showing a section of the massive halite beds present in the lower part of the drilled section (left).

LIM Logging vehicle on site during the logging operation (right).

