





# Fugro Formation Description Logs

## Formation Description Logs

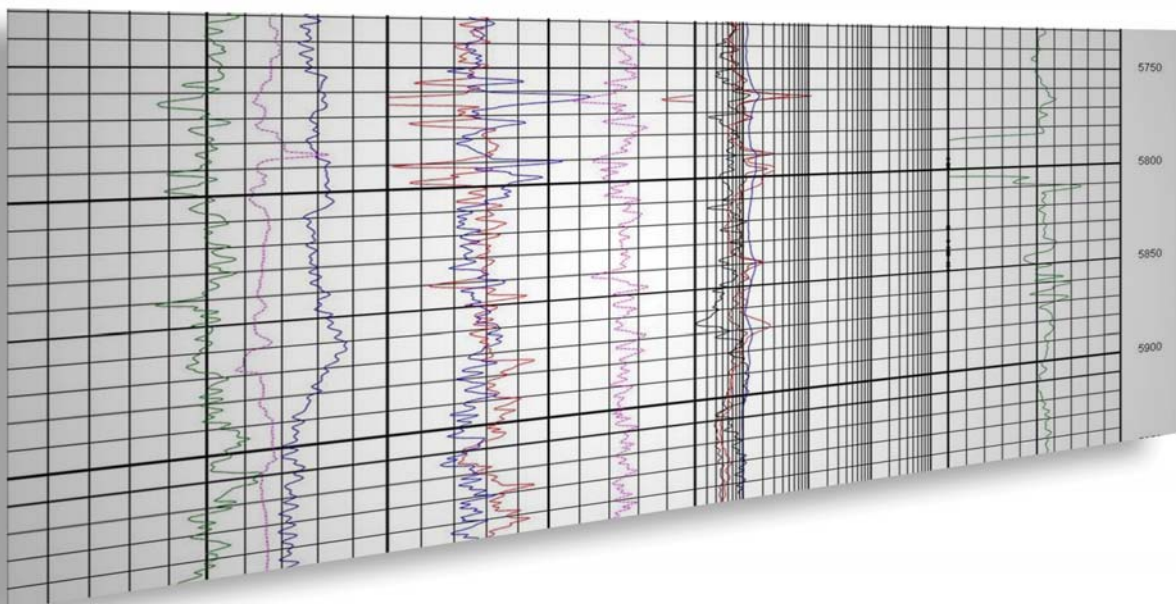
Fugro Data Solutions offers Formation Description Logs with an accurate answer, fast turn-around-time and an expert overview of each product by the Chief Petrophysicist.

The modern Oil Company needs to have accurate information to explore and exploit increasingly difficult oil reserves. Amongst the data required is an good description of the subsurface in terms of lithology and fluids.

The source of this are the logs and cores recorded and recovered in the wells, plus local knowledge.

**This is a typical modern log example over a short interval.**

**An expert is able to understand the information here but the casual user wastes time in an analysis.**





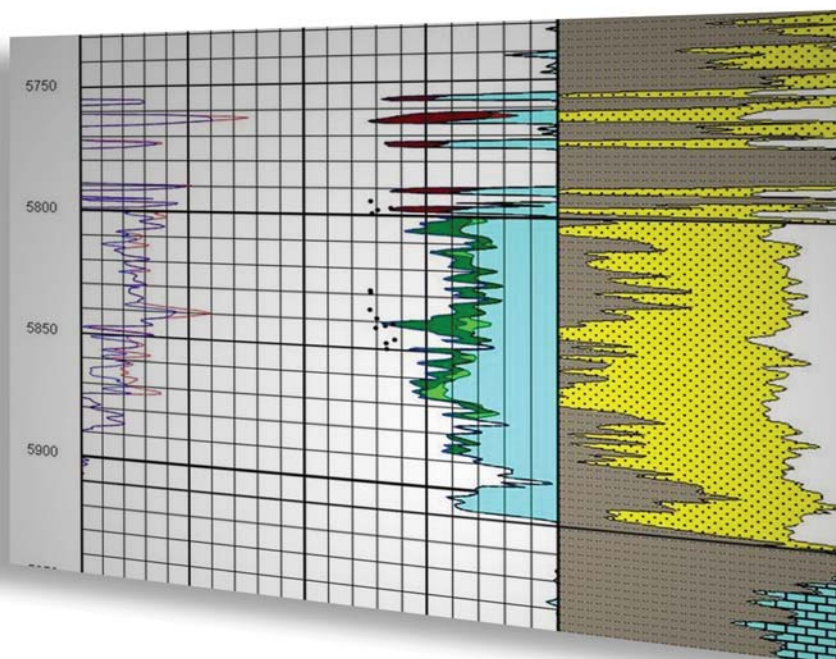
## The Solution: Formation Description Log

### A thorough analysis of all the data is made.

- The first step is environmental corrections to give the best possible data.
- The well is zoned into the relevant geological formations.
- Each zone is carefully analysed using all available data, log, core, cuttings, fluid information and so on.
- The final outputs are thoroughly quality checked for accuracy and consistency.

- Using such a clear set of information allows the Oil Company to properly understand and evaluate a prospect. With a set of these analyses in a number of wells in a field/region gives the Geoscientists the tools to create reservoir descriptions.
- The capability to create these logs often exists inside an Oil Company. FDS offers these products to compliment the in-house work and free up Geoscientists to devote their time to more profitable tasks.

**This is the corresponding analysis of the data on the opposite page. The lithology is clear, sandstone and shale; as are the fluids gas (red), oil (green) and water (blue).**



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Modern logs are relatively straightforward to analyse. Older data presents a greater challenge.

The logs exist in paper copies of varied condition. They are scanned and digitised, but still have limited curves.

With proper analysis a good interpretation is still possible.

This analysis used only basic curves guided by a knowledge of the local geology.

Formation Description Logs are often run over the reservoir section where the economic interest lies. However in exploration tasks it is useful to have the entire well described in proper terms.

These images are over 16000ft of data in two wells. The display is of the lithology, porosity and fluid contents.

This data is usually matched with the seismic section to create a full description of a prospect.

A set of these together gives a full picture of the lithologies and fluids distribution across a field/prospect.

Fugro Data Solutions offers any amount of (FDL) Formation Description Logs from a single well to any number.

The delivered product includes a log plot with raw and interpreted curves; digital data; report on the analysis with summation and parameters used.

