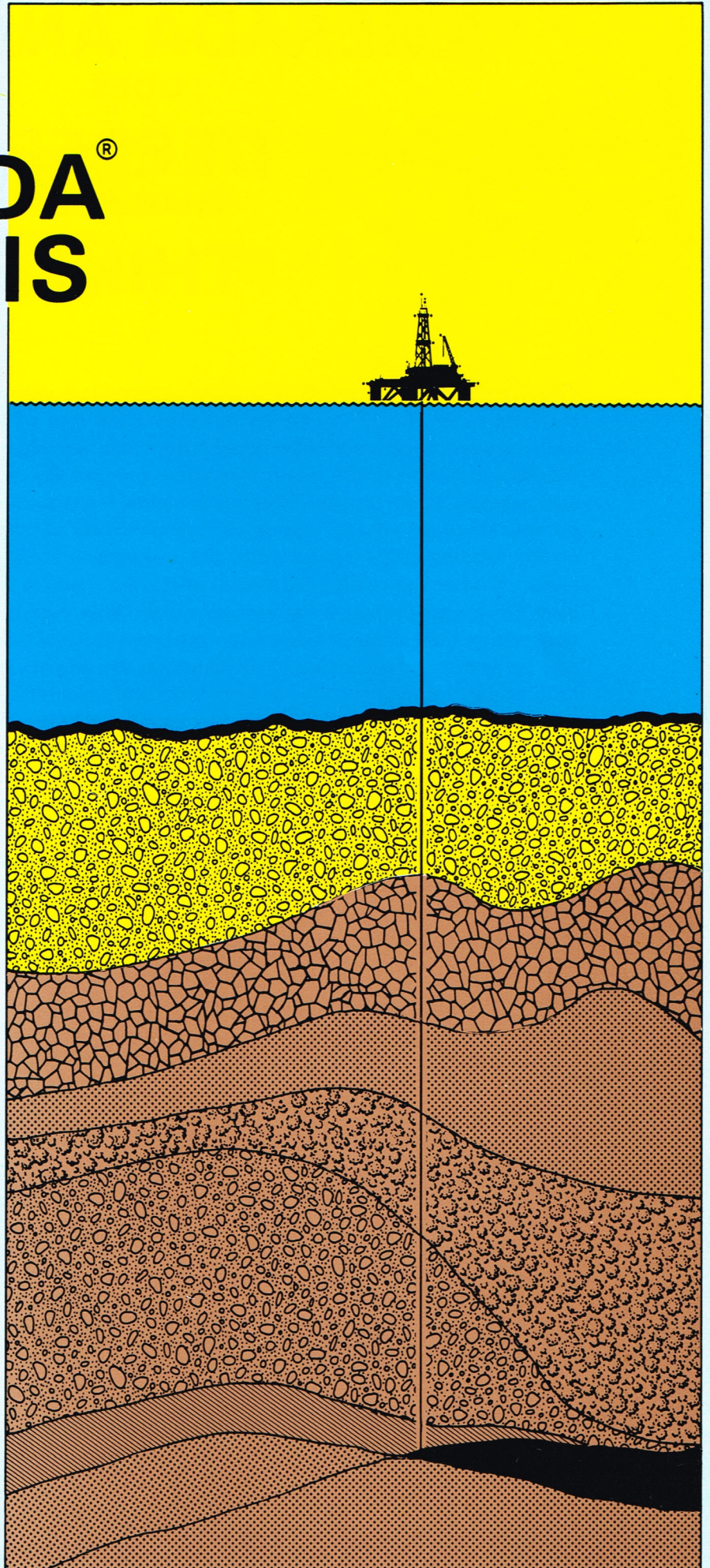


**AMERADA<sup>®</sup>**  
**ANALYSIS**  
GOES  
**DEEPER**  
THAN YOU  
**THINK**



# AMERADA ANALYSIS

GOES

DEEPER  
THAN YOU  
THINK

The Amerada(R) Bottom-hole pressure gauge is a very sensitive device, however the techniques currently in use do not make full use of its sensitivity. Through using modern electronics and microcomputers we are able to produce results having a similar resolution to the latest electronic gauges. By replacing the manual time scale and reading scale on the chart reader with transducers feeding data directly to the computer we are able to resolve each value to one micron. This corresponds to 0.15 psi on the reading scale (for an 8000 psi gauge) and 1.4 s on the time scale (for a 48 hr clock). One of the main advantages of the Amerada is that its output is continuous in both time and pressure (or temperature). This can be particularly useful to those companies interested in early time pressure analysis since the time scale resolution can be continuously varied. Also because the scales are continuous there is no lost data while the electronics are sampling and converting the next reading. By careful examination of the trace produced by an Amerada it can be clearly seen that it is very smooth and that it is not unreasonable to resolve it beyond the width of the trace. With the Amerada Analysis Package we are able to find the centre of the trace via a digitised TV picture. Because the microcomputer has a picture of the trace and its position in memory it is able to decide where the next reading is to be taken and this value is fed back into the electronics to move the microscope to the new position. Finally the combined use of automatic calibration facilities and a better mathematical model to convert the readings to pressure data gives the reservoir engineer accurate and fast results from what is a much cheaper and simpler system to operate and maintain.

**Computatest Ltd**



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