



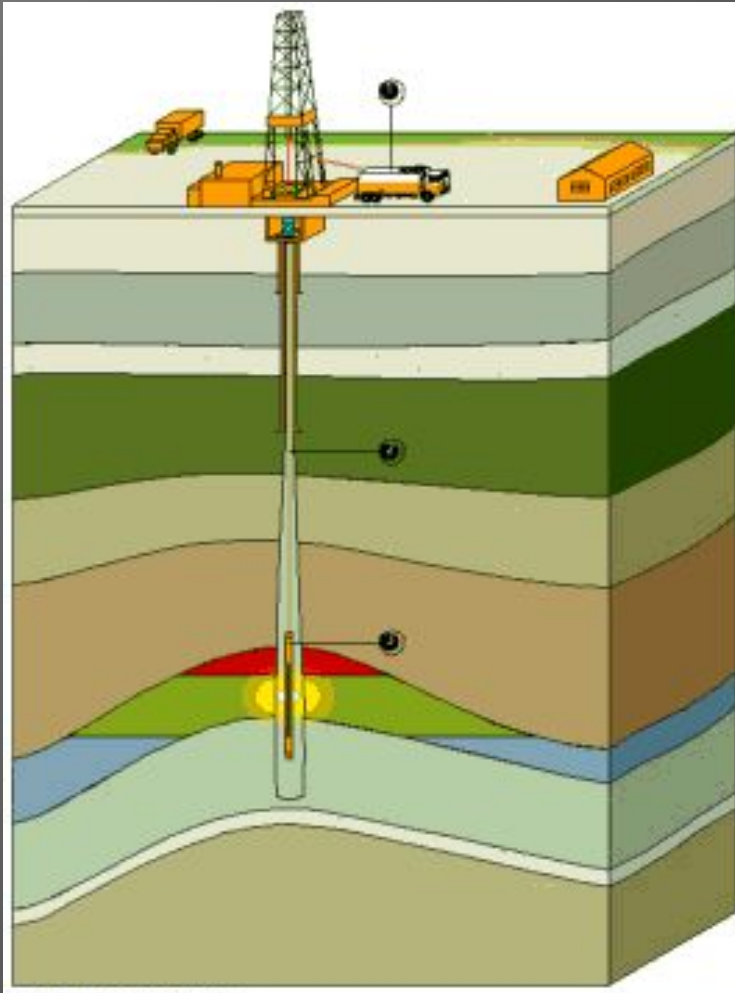
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GEOPHYSICAL WELL LOGGING

Pesterev Y.A.

Uses of Well logging



Well Logging Technology

Well logging involves measuring the physical properties of surrounding rocks with a sensor located in a borehole. The record of the measurements as a function of depth is called a well log.

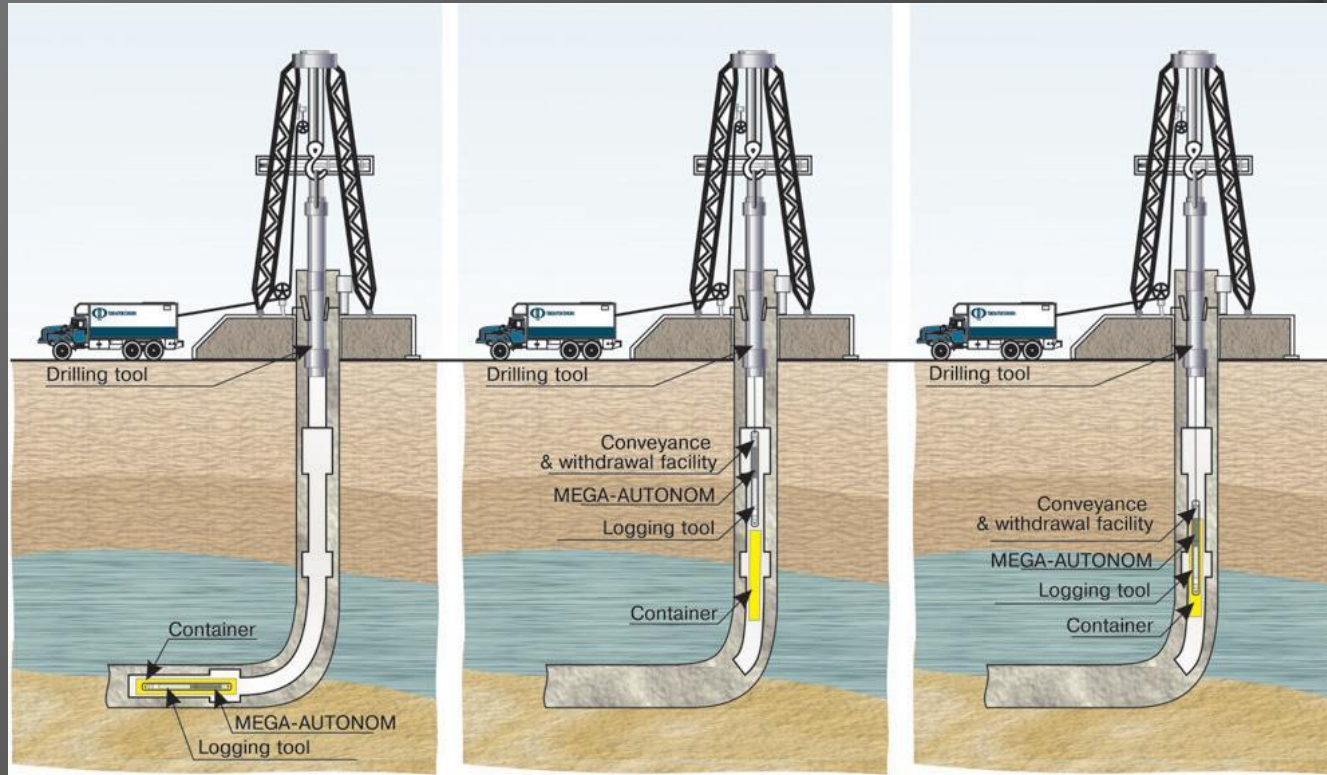
History of Well logging



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The first log (called electric coring) in the United States was in 1929 when Doll noted spontaneous potentials (SP) and that negative SP was associated with permeable formations.

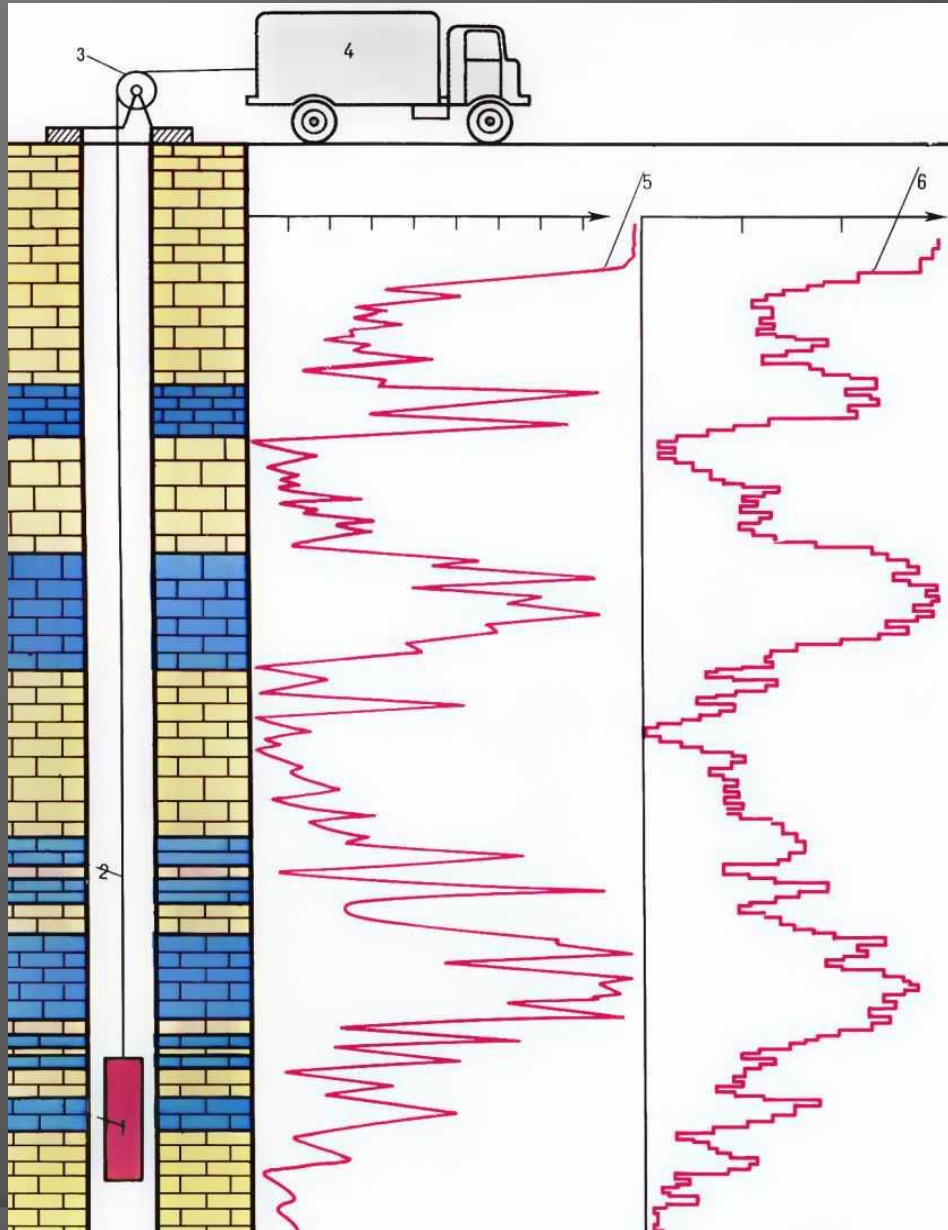


Knowledge of the subsurface comes primarily from drilling. This is at once an expensive technique and a limited one Drilling costs invariably limit the number of holes that can be drilled.

General Aspects of Well Logging



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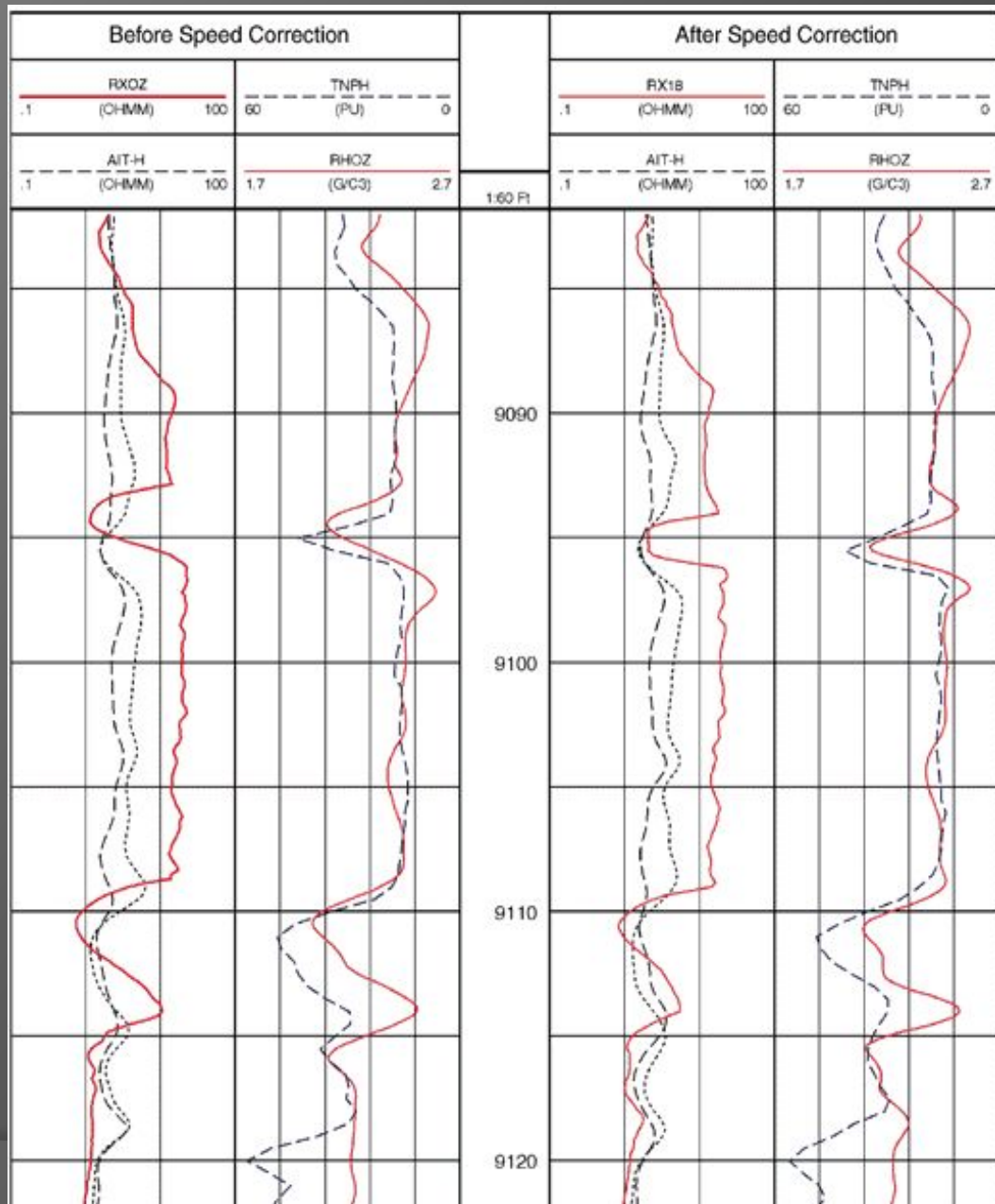
Scheme of conducting geophysical studies in the well: 1 - wellhole tool; 2 - the cable; 3 - block-balance; 4 - logging laboratory; 5 - dielectric log, characterizing the change in the phase of the electromagnetic field; 6 - the curve of acoustic logging, characterizing the change in the coefficient. porosity.

Before correction

After correction



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Deep interconnection of GIS

Variations in the computed parameters are often the result of poor depth inbound logging. This will create discrepancies in thin-layered strata and lead to incorrect interpretation of rock types

Well logging



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