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GEOPHYSICAL WELL LOGGING

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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.

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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







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







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DEPTH



			DETAIL HOM AND	ATRY (CLAMA)	RH07(0/00)
			M 150450. 1	AT10 (OHMM) 226-	TNPH (V/V)
			0100.1 GR (GAPI)		TCMR (V/V)
			0	AT30 (OHMM) 100 0.25	BFV (V/V)
		Блок телеметрии		AT60 (CHMM) 100, 225	DTCO (USM)
		Benyuni Toyonuli	1	ATRT (OHMI) 100.	Free Fluid
		электрод	1	HMN (CHMM)	
		соединение	1	HMNO (OHIMI) 	
			1:1000	Mudcate	
		Электронный блок			
and the second sec					-
	13 M		200		-
		Секция рычагов с измерительными электродами			
					1 32
			2850		SLD.
		слок гидравлики			
					- Constanting
		Нижний токовый электрод			-31