Title (en)

METHOD OF DETERMINING THE CHARACTERISTICS OF AN UNDERGROUND FORMATION PRODUCING FLUIDS

Publication

EP 0125164 B1 19861230 (FR)

Application

EP 84400781 A 19840419

Priority

FR 8307075 A 19830422

Abstract (en)

[origin: US4597290A] Disclosed is a method for determining the physical characteristics of a system made up of a well and an underground formation containing a fluid and communicating with the well. A change in the rate of flow of the fluid is produced and a measurement is made of a parameter characteristic of the pressure P of the fluid at successive time intervals DELTA t. One then compares on the one hand, the theoretical evolution of the logarithm of the derivative P'D of the dimensionless pressure as a function of the logarithm of tD/CD, the derivative P'D being with respect to tD/CD, tD representing the dimensionless time and CD the wellbore storage (compression or decompression) effect, with on the other hand, the experimental evolution of the logarithm of the derivative DELTA P' of the pressure as a function of the logarithm of the corresponding time intervals DELTA t, the derivative DELTA P' being with respect to time t. One then determines, from the comparison of said theoretical and experimental evolutions, the product kh of the permeability k by the thickness of said formation h, and the coefficient C.

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Cited by

GB2161943A; GB2167471A; FR2573473A1; US7178392B2; US6832515B2; US7024930B2; US7036579B2; US7117734B2; US7210344B2; US7263880B2

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