

Title (en)

DOWNHOLE REBOUND HARDNESS MEASUREMENT WHILE DRILLING OR WIRELINE LOGGING

Title (de)

MESSUNG DER RÜCKPRALLHÄRTE IN EINEM BOHRLOCH WÄHREND DES BOHRENS ODER WIRELINE-MESSENS

Title (fr)

MESURE DE DURETÉ PAR REBONDISSEMENT EN FOND DE TROU LORS D'UN FORAGE OU D'UNE DIAGRAPHIE PAR CÂBLE

Publication

EP 3433467 A1 20190130 (EN)

Application

EP 17770966 A 20170321

Priority

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- US 2017023367 W 20170321

Abstract (en)

[origin: WO2017165386A1] A method of obtaining a hardness profile of a formation is disclosed. A testing surface in a wellbore impacts the formation to obtain a measurement of formation hardness. A lithological property of the formation is measured and used in determining the rock strength of the formation from the formation hardness. The testing surface may be propelled at the formation a plurality of times to obtain a profile of rock hardness measurements with distance into the formation, including at a surface layer of the formation. Alternatively, the testing surface can be propelled at the formation at multiple energies to obtain formation properties at a plurality of depths into the formation, including at a surface layer of the formation. The rock strength may be used with measurements of geomechanical stress and pore pressure to build a model of the formation in order to develop the formation.

IPC 8 full level

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