

Title (en)
METHOD AND TOOL FOR EVALUATING A GEOLOGICAL FORMATION

Title (de)
VERFAHREN UND WERKZEUG ZUR BESTIMMUNG EINER GEOLOGISCHEN FORMATION

Title (fr)
PROCÉDÉ ET OUTIL POUR L'ÉVALUATION D'UNE FORMATION GÉOLOGIQUE

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Abstract (en)
[origin: WO2012106758A1] A method of evaluating a geological formation (20) of non-homogeneous porosity and permeability, particularly in exploration for hydrocarbon fluids, comprising the steps of: (a) inserting a formation evaluation tool (30) into a borehole (10) to a location (10a) within the geological formation (20); (b) setting the formation evaluation tool (30) into position isolating interval(s) of the borehole (10) with a packer arrangement (50) forming portion of the formation evaluation tool (30), for sample evaluation for said interval(s); (c) extracting representative samples of formation fluid from the location within the geological formation (20) for evaluation under downhole conditions using sampling means (32a, 52b, 54b) operative to extract formation fluid samples over a range of porosity and permeability encountered within the geological formation (20); and (d) analysing the formation fluid samples and measuring formation (20) permeability. A formation evaluation tool (30) for practising the method, and including an packer arrangement (50) for isolating intervals of the borehole (10) for sample acquisition and evaluation, is also disclosed. The method and tool (30) are particularly suited to geological formations comprising complex carbonate rocks such as mudstones, Wackestone, Packstone, Boundstone and crystalline carbonate rocks which typically include features such as vugs and fractures.

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• [X] US 2010319912 A1 20101223 - POP JULIAN J [US], et al
• [X] US 5799733 A 19980901 - RINGGENBERG PAUL DAVID [US], et al
• [X] US 2006248949 A1 20061109 - GREGORY GILBERT N [US], et al
• [A] US 6157893 A 20001205 - BERGER PER ERIK [NO], et al
• See references of WO 2012106758A1

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