

弱度比在裂隙含流体检测中的应用

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摘要 裂隙中的流体检测对油气田勘探和开发有重要意义. 裂隙弱度比受裂隙中流体的影响, 而弱度比对速度比特别敏感, 本文对弱度比与速度比的关系进行了研究, 给出了弱度比与转换波速度比和时间比的表达式, 并将此应用到WJT气田的裂隙含气检测中. 实际资料的应用表明, 用弱度比检测裂隙中的流体是可能的, 弱度比剖面可作为裂隙含流体检测的基本剖面之一.

关键词 [裂隙](#) [弱度比](#) [速度比](#) [转换波](#)

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Application of the weakness ratio in fracture medium fluid detection

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Abstract Fluid detection in fracture medium has great significance for the oil gas prospecting and exploitation. The weakness ratio of fractures is relevant with the fluid in fractures and it is very sensitive to the velocity ratio. Through analyzing the relationship between weakness ratio and velocity ratio, this paper offered the expressions between the converted-wave velocity ratio or time ratio and weakness ratio, then an example was given in WJT gas field, Daqing oil field in China. The result indicates that it is possible to detect fluid property in fractures by using the weakness ratio, and the weakness ratio section can be applied in fractured oil and gas detecting.

Key words [Fracture](#); [Weakness ratio](#); [Velocity ratio](#); [Converted-wave](#)

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