The effect of major faults and folds in hard rock groundwater potential mapping: an example from Langat Basin, Selangor

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Together with other factors, geological factors such as lithology, bedding, fractures (lineaments), faults and folds play a very significant role in the movement and accumulation of groundwater in hard rock terrain. However, in most cases of groundwater potential mapping, only the role of lithology and lineaments are considered together with other non-geological factors. This paper will demonstrate the effect of faults and folds in groundwater potential mapping by using remote sensing and the geographic information system integration method. By incorporating faults and folds in the study, zones of groundwater potential become more focussed and well defined as compared to the result when only lithology and lineaments are considered. It is hoped that the derived ground water potential zonation map will be useful for further work in groundwater exploration of a selected area.

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