HYDROCHEMISTRY OF GROUNDWATER AT SAHABAT REGION, SABAH

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The rolling land of the Sahabat region is currently developed by FELDA agency into one of the major palm oil estates in Sabah. The estimated total water demand for both domestic and palm oil industry is about 5.90 Mld. From hydrologic evaluation of surface and ground water, the latter appears to be the main water resource available in this region.

Analyses of groundwater obtained from exploratory wells during pumping tests show that the groundwater, after proper treatment, is suitable for domestic and agricultural usage. Chemical analyses of groundwater

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samples show that there is a definite chemical contrast between groundwater from the western and eastern part of the Sahabat region. The groundwater at the western part of the region, represented by Kampong F, has proportionally higher concentrations of (Na+K) and (SO_4+Cl), with proportionally lower concentrations of (Ca+Mg) compared to the groundwater present in the east, represented by Kampongs G, H and J. The groundwater at the western side is probably derived from the Ganduman sandstone aquifer, whilst that at the eastern side is probably a mixture of groundwater from the Ganduman sandstone aquifer and groundwater from the overlying alluvium.