

Supplementary materials

Trapping processes of natural hydrogen in subsurface: The case of the emblematic H₂ field of Bourakebougou (Mali).

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Break outs formations

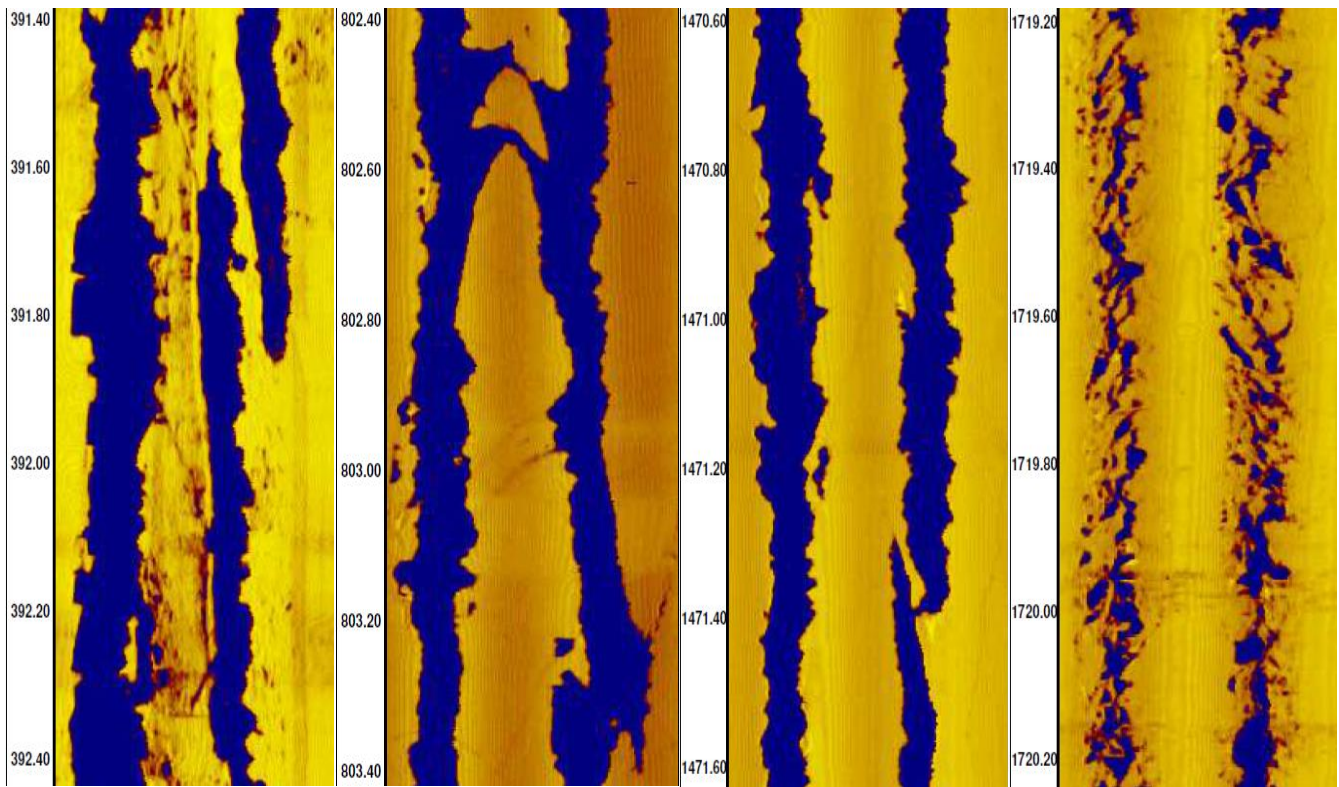


Fig. A1 - Acoustical borehole imagery (ABI) showing breakouts (N70-250°) in the deepest well of the study area Bougou-6. They are well developed in the dolerite and the granitic formations (Basement). These breakouts allow us to measure the orientation of the stress in the region. In a vertical borehole, when we look at the horizontal section, the breakouts are oriented in the direction of the minimum horizontal stress. So, we get a minimum stress of N70-250° and a maximum of N160-380° which is consistent with the direction of convergence between Africa and Europe today.

Mineralogical characterization of the dolerites

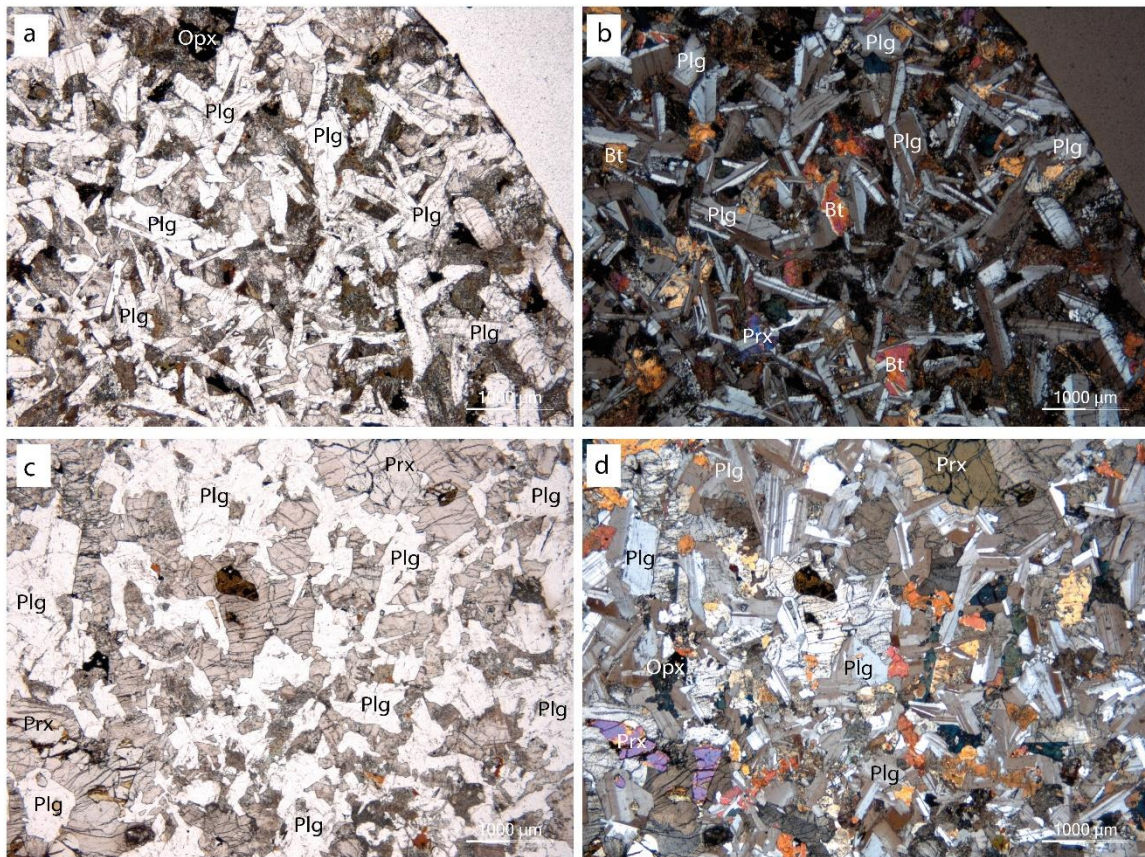


Fig. B1 - Dolerite caprock observed by optical microscopy under (A, C) polarized and non-analyzed light, (B, D) polarized and analyzed light. (a) and (b) are samples from Bougou-6 at 55m, (c) and (d) are samples from Bougou-6 at 211m.

Mineralogical characterization of the silty-clay layer

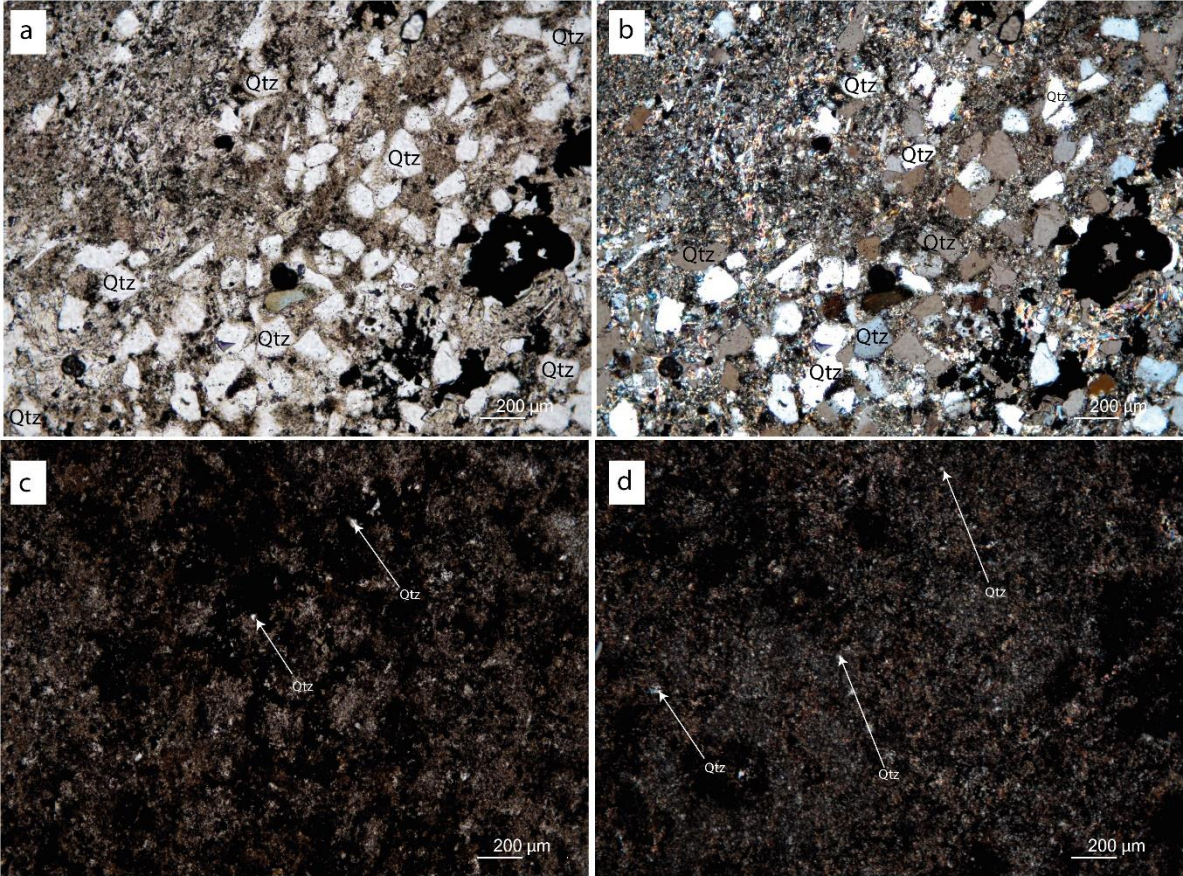


Fig. C1 - Silty-shale layer observed by optical microscopy under (A, B) polarized and non-analysed light, (C, D) polarized and analyzed light. (a) and (b) are samples from Bougou-7 at 35m, (c) and (d) are samples from Bougou-8 at 40m.