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The Role of Iron Redox Cycling in the Natural Acidification of Ground Water

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It has been previously demonstrated that the microbially mediated redox cycling of iron plays a prominent role in the maintenance of acidic conditions in aquatic environments affected by acid mine drainage. Similar processes seem to occur at the oxic/anoxic interface of naturally acidified ground waters that can be found in wide areas of Australia. In this presentation an attempt is made to generalise these processes in terms of the chemical weathering of iron-rich landscapes.