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**Measurement of the effect of uniaxial compression  
upon remanent magnetization of hematite ore**

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The Wabana and Bell Island groups of the Avalon Peninsula of Newfoundland contain oolitic hematite beds of Early Ordovician age, with a dip of  $\sim 11^\circ$  north-northwest. The effect of external stress on magnetization of hematite has rarely been studied, although it has been suggested that internal stress in hematite is an important source of its remanence stability. To study the effect of stress, the hematite ore is cut into cylinders and given a remanence in magnetic fields up to 800 mT in strength parallel or perpendicular to the cylinder axis. The samples are loaded and unloaded stepwise increasing the pressure to a maximum compression of about  $17.5 \times 10^6$  Pa. The changes in remanence as stress is varied will be measured by looking at the changes in magnetic field due to the sample using a fluxgate probe. Ore sample B6-1 has been collected and is devoid of magnetite and shows that the compression causes both permanent and reversible decreases in the remanence of a magnitude comparable to that of magnetite.