The Fleming chert-breccia, Labrador Trough, Labrador

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The Fleming Formation of the Lower Proterozoic Kaniapiscau Supergroup of the Labrador Trough is composed of cherts, chert breccias, and chert-quartz sandstones. The strata of the Fleming Formation are poorly bedded to locally well bedded. The rocks of the Fleming Formation overlie a cherty phosphatic unit, traditionally considered part of the underlying dolomitic Denault Formation. The cherts and chert breccias of the Fleming Formation are primary silica precipitates from the Lower Proterozoic ocean, and are best considered as precursors to banded iron formations. Some links to evaporites are evident, although selective precipitation of silica rather than wholesale evaporation of solutes is a more likely mechanism to produce rocks such as those of the Fleming Formation. The chert-quartz sandstones with floating quartz clasts are penecontemporaneously reworked portions of the silica sequence.