Geophysical and outcrop evidence for extensive Carboniferous salt tectonics, Gulf of St. George, Nova Scotia

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Recent re-examination of geophysical data from the Gulf of St. George and the west coast of Cape Breton has revealed the presence of spectacular salt structures, ranging from embryonic salt pillows to salt walls and diapirs. These salt structures can be traced from seismic sections to onshore outcrops. Salt diapirs and their associated deformation of Carboniferous strata are exposed in coastal outcrops and can be traced inland from drill cores and as karst topography. The geometry and deformation of syn-halokinetic sediments suggests that salt withdrawal and subsequent diapirism was initiated during the early Westphalian (Port Hood Formation equivalent) and continued until the halokinesis had a fundamental effect upon the development of the sedimentary architecture of Carboniferous sediments within the Gulf of St. George and the west coast of Cape Breton.