

Figure 6a
Column section map for the eastern Gulf of Maine area. The Fundian Moraine forms Sewell Ridge on the northern flank of Georges Basin, cross-section A-B. The Truxton Moraine occurs 40 km to the north of Sewell Ridge on Truxton Swell. Cross-section A-B at its northern end, and cross-section C-D near D, both illustrate the distal till tongue development of the Truxton Moraine and its relationship with the surficial formations. Lift-off moraines are widespread in the basinal areas of the Gulf of Maine and outcrop at the entrance to the Bay of Fundy near column section 2. The thickest deposits of till occur in the Fundian Moraine and at the approaches to the Bay of Fundy. Facies C Emerald Silt occurs south of Truxton Swell, column section 16 and cross-section A-B. Note the thin surficial cover over Browns Bank, and in the nearshore zone off southwest Nova Scotia, column sections 1.1, 12, 20, 21 and 22.

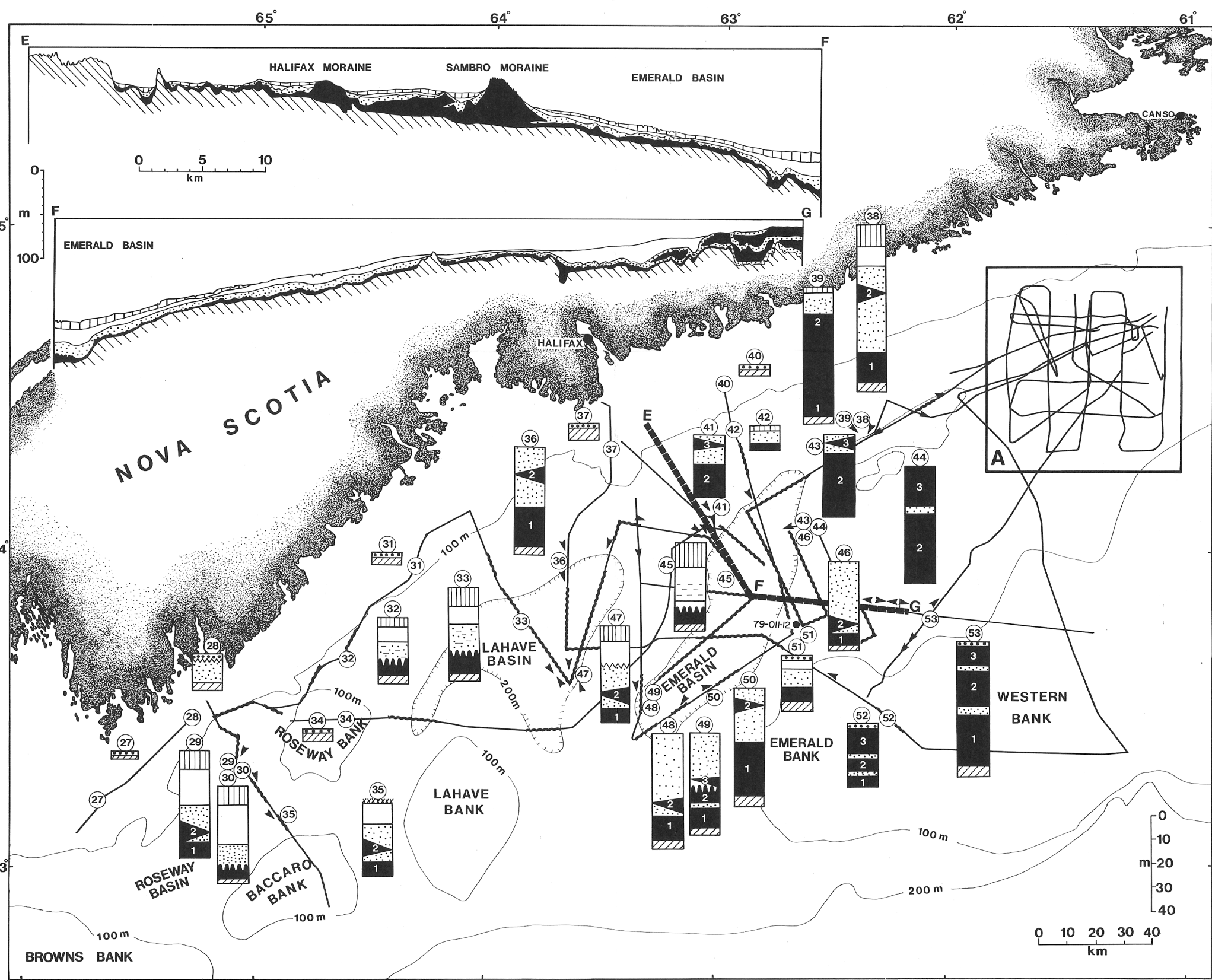


Figure 6b
Column section map of the western half of the Scotian Shelf. Study area A, the type section for the Scotian Shelf is shown in Figure 6c. Lift-off moraines occur across Roseway, LaHave and Emerald basins. Cross-section E-F-G, which extends continuously from the inner shelf across Emerald Basin to the northern edge of Western Bank, shows till tongues of the Sambro and Halifax moraines interbedded with Emerald Silt facies A at the same seismostratigraphic horizon as the till tongues on the northern edge of Western Bank. The thickest deposits of till occur in these moraines. Note the presence of thin basal transgressive sand and gravel deposits (Sable Island Sand and Gravel) above 100 m water depth, column sections 27, 31, 37, 40 and 34. Large dropstones, recognized acoustically, occur within facies A Emerald Silt only in LaHave Basin, section 32 and 33. Note the regional occurrence of till tongues which are found on the inner shelf, rim the basins of the central shelf and occur on the northern edges of the outer banks.

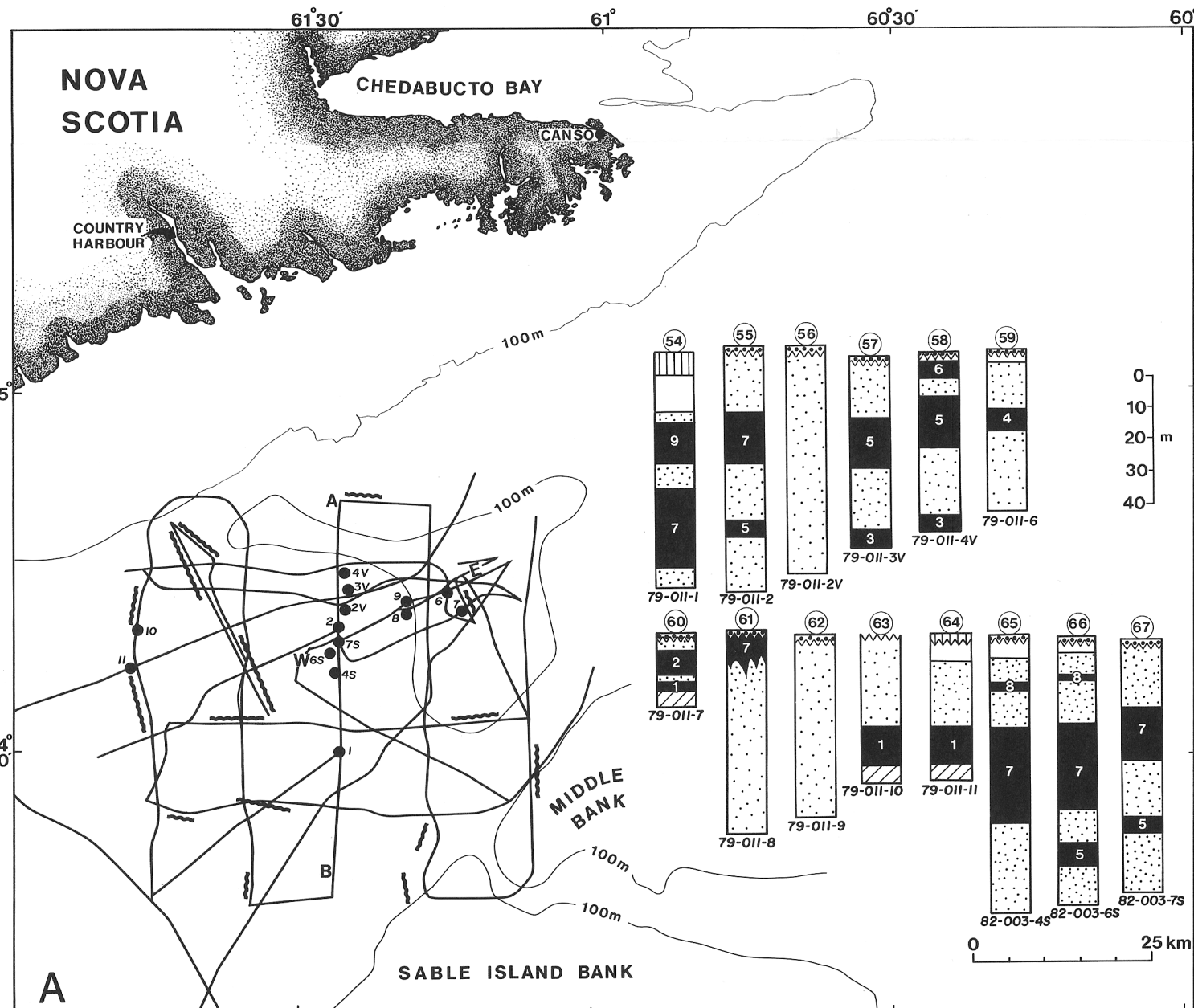


Figure 6c
Column section map of the type section area of the Scotian Shelf (area A in Fig. 6b). In this diagram all the column sections are seismostratigraphic interpretations at core locations and the core designations are abbreviated on the map. The till deposits are all interbedded with facies A Emerald Silt. With the exception of section 61, which shows relief of up to 4 m on the lower till tongue surface, all other till tongues across the Scotian Shelf exhibit nearly flat and smooth, lower and upper surfaces.

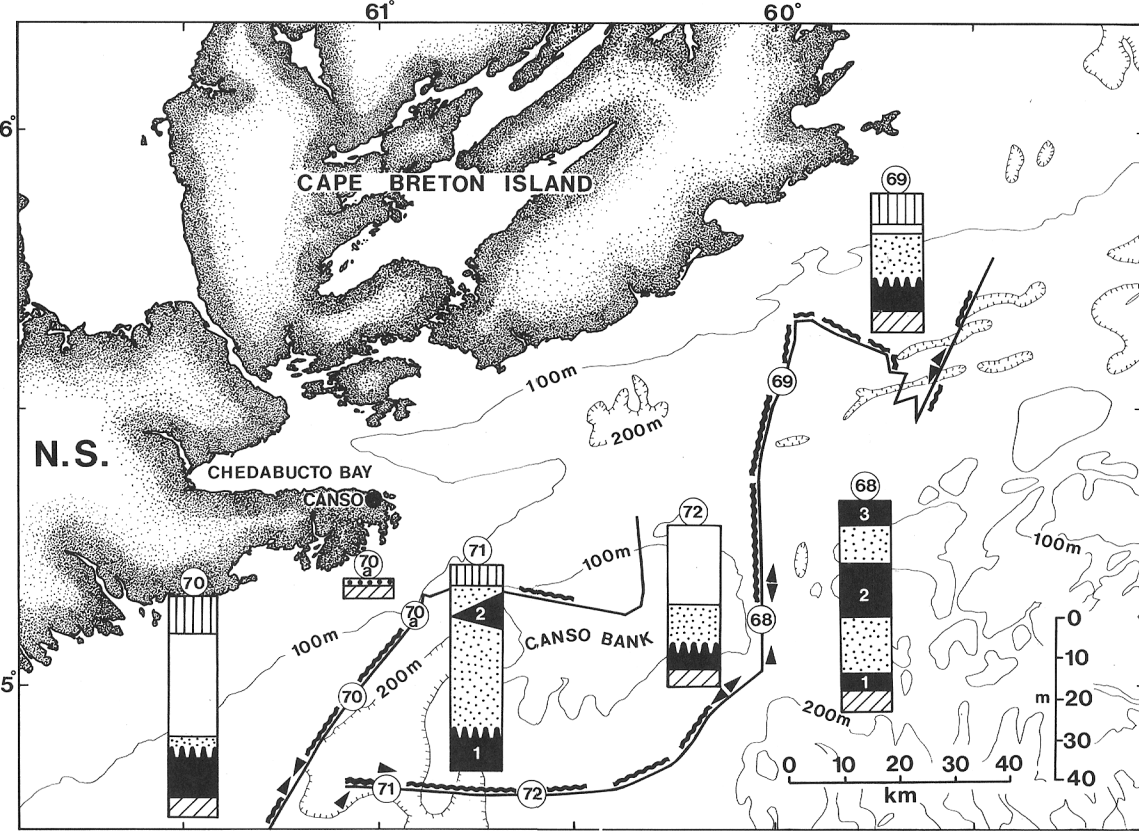


Figure 6d
Column section map for the inner part of the eastern Scotian Shelf. Note the presence of lift-off moraines in the basins and till tongues on the basin flanks.

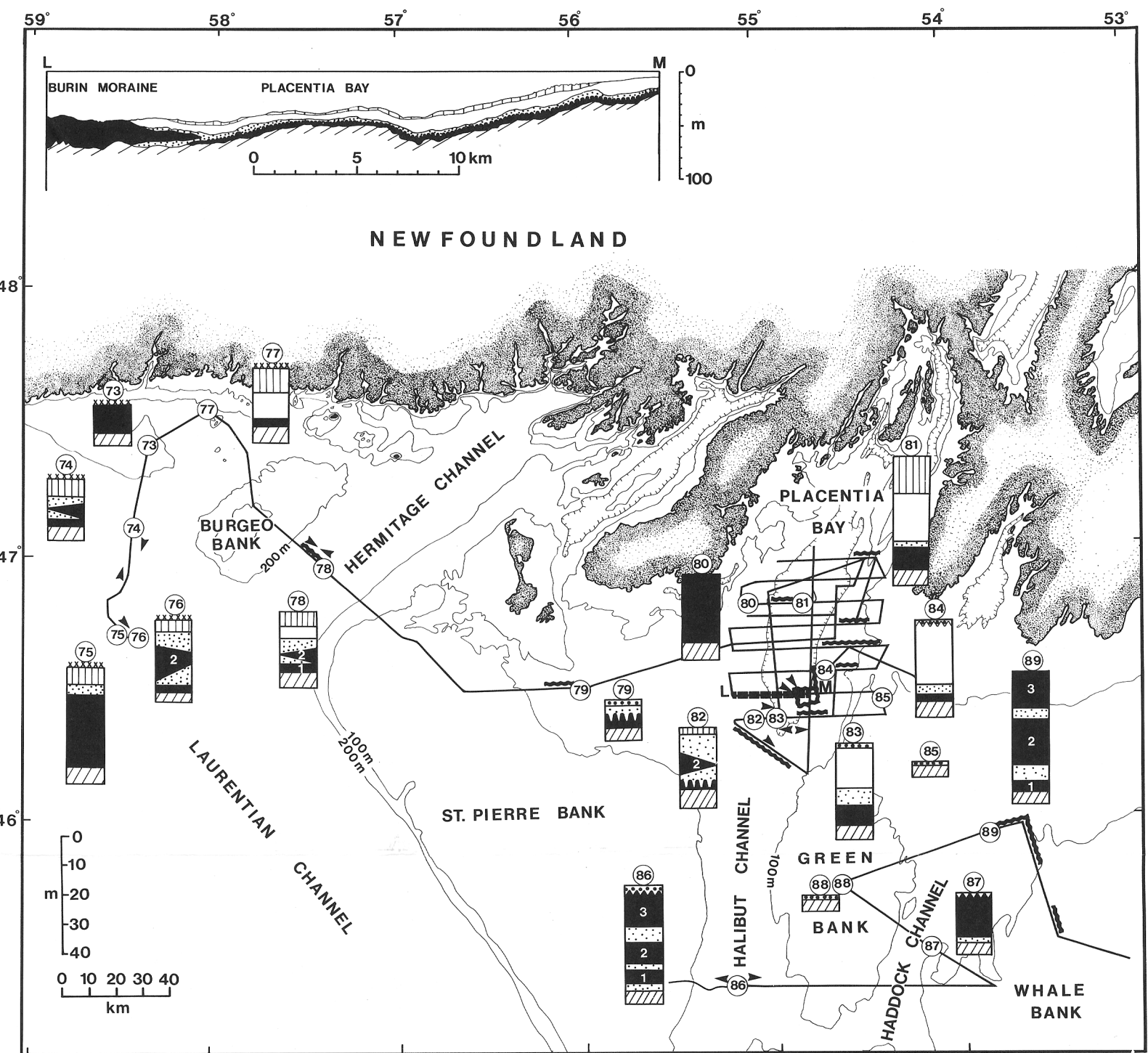


Figure 6e
Column section map for the western Grand Banks of Newfoundland and the Laurentian Channel. Column section 76 is from the distal side of the Laurentian Moraine, (Fader et al., 1982) a prominent topographic feature 30 m in height, which projects across the floor of the Laurentian Channel. The till of the moraine is interbedded at the same seismostratigraphic horizon with the Emerald Silt as is the till on the flank of the channel, section 74. The relationship is also shown in Figure 35. Placentia Bay represents one of the few areas on the Grand Banks of Newfoundland where all five surficial formations occur. Most glacial sediments were removed from the bank areas during the Late Pleistocene-Holocene transgression. Iceberg furrows occur on LaHave Clay, section 77, north of Burgeo Bank, and were probably formed by late glacial ice originating from the fiords of the south coast of Newfoundland.

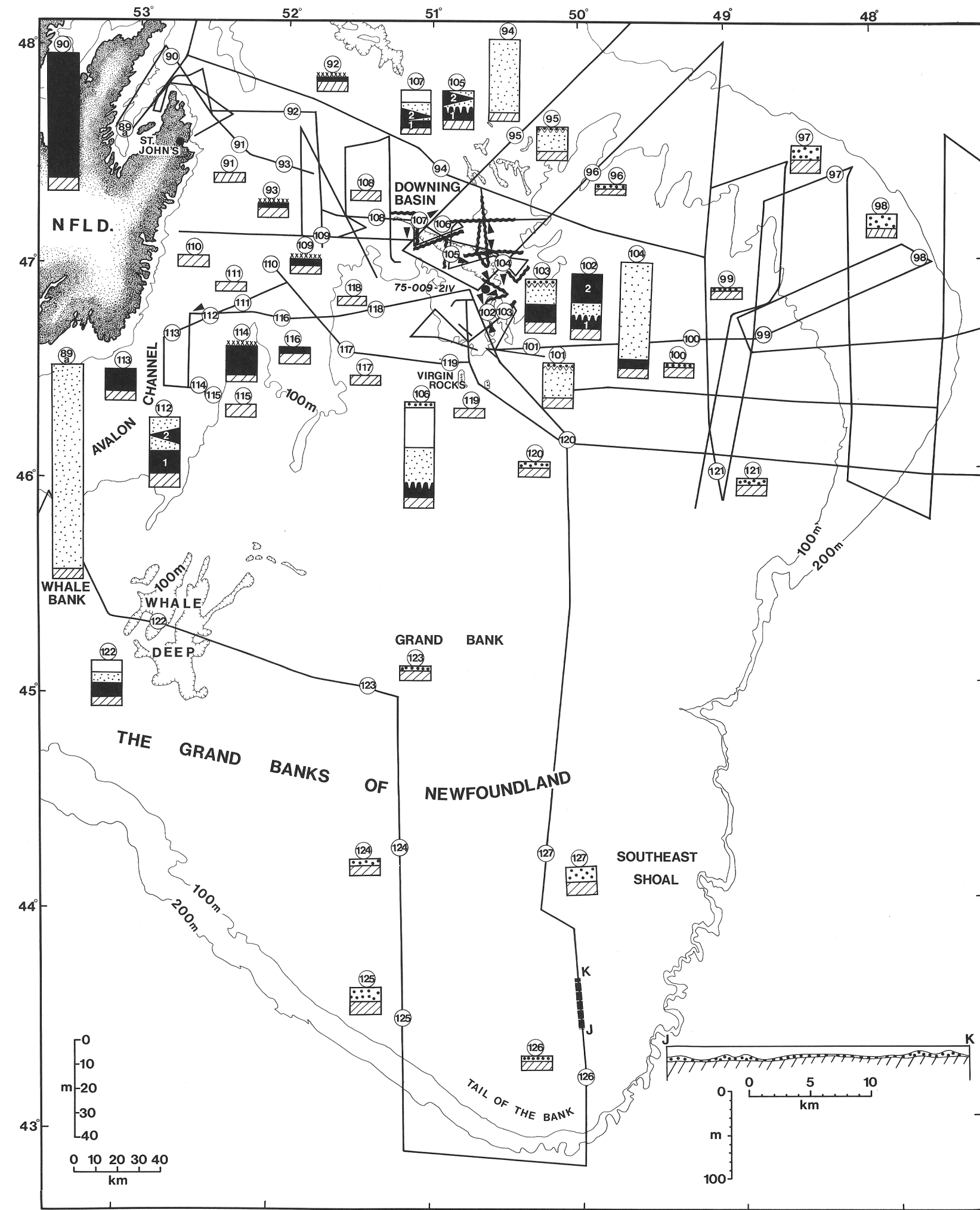


Figure 6f
Column section map for the eastern Grand Banks of Newfoundland. The thickest surficial sediments occur in the Avalon Channel, the Downing Basin area and north of Conception Bay. Over most of the Grand Banks of Newfoundland in depths shallower than 100 m the sediments are thin, generally less than 10 m (see cross-section J-K).

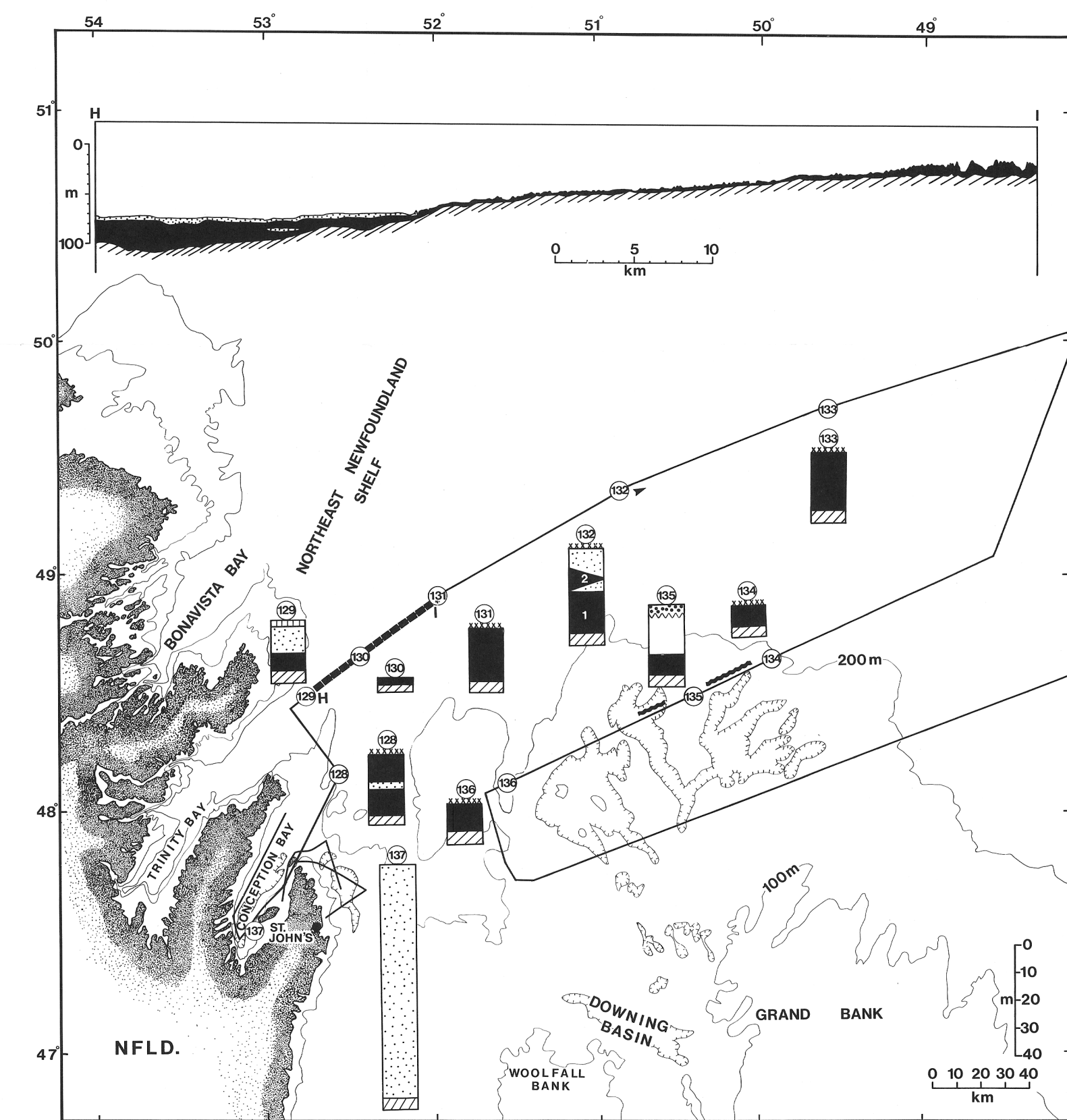


Figure 6g
Column section map for the northern Grand Banks - south Northeast Newfoundland Shelf area. The thickest glacial deposits occur in Conception Bay, off the mouth of Trinity Bay and on the outer continental shelf. Till is continuous across the shelf from Trinity Bay to the shelf edge, and its surface is covered with iceberg furrows.

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Cartography by Atlantic Geoscience Centre,
Geological Survey of Canada

Column section maps (Fig. 6a-g) from the Gulf of Maine to the Grand Banks of Newfoundland. The column sections are interpretations of Huntect DTS profiles chosen at locations to best represent the regional surficial stratigraphy as well as critical areas of geological significance. The numbers at the top of the column sections are referenced along the Huntect DTS survey tracks. Where piston cores were collected at column section sites, the core numbers appear directly below the column section. The bedrock is not subdivided for this presentation.