

Seismic profiling investigation of a small area North of Sable Island, Scotian Shelf

Alasdair G. McKay and K. Howells

Nova Scotia Research Foundation, P.O. Box 790, Dartmouth, Nova Scotia B2Y 3Z7

It has become increasingly obvious that the Quaternary seabed geology of glaciated shelf seas is complex. An illustration of this is found in an area at the west end of the Gully, north of Sable Island, Scotian Shelf where a profiling grid at 1 km spacing was run over an area 9 km by 17 km, with Nova Scotia Research Foundation deep-tow and surface-tow seismic equipment de-

ployed from CSS Dawson. The results illustrate the importance of the simultaneous use of seismic systems operating at different acoustic frequencies. Broad relationships are defined among the sediment units - Scotian Shelf Drift, Sable Island Sand and Gravel and Emerald Silt (A and B) - but details remain too fine to be resolved by the 1 km line spacing.