

**Private sector marine geoscience in Newfoundland and Labrador**  
(Poster)

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Terraquest Associates is a Newfoundland-based firm offering marine geoscience consulting services to private industry and government agencies. We specialize in innovative approaches to the acquisition, processing, interpretation and dissemination of geoscience data, with emphasis on an improved understanding of the seabed and related marine environmental issues. Our expertise is in the acquisition and interpretation of high resolution single-channel seismic and sidescan sonar data, as well as sedimentary analysis, from offshore and coastal zones.

IKB Technologies was incorporated in 1975 as a Newfoundland company committed to designing and improving instruments for use in the marine geophysical survey industry. The company has produced and sold (internationally) a wide range of equipment; with perhaps the most successful being the IKB SEISTEC™ high resolution seismic profiler. This surface-towed system is capable of resolving sedimentary layers as thin as 0.25 m and operating in water depths

from 1 to 100 m.

Acoustic remote sensing devices, including high resolution single-channel seismic and side-scan sonar systems, are widely used to gather data concerning the seabed. Single-channel seismic systems generate a profile of the sub-bottom geology, while side-scan sonars yield a plan view of the seafloor. Careful interpretation of these data can yield a wealth of information about sediment thickness, type and distribution, plus the location and identity of seabed features such as shell beds, iceberg scours, shipwrecks, sewer outfalls, wellheads, pipelines and telecommunication cables. Bottom sediment samples and photographs may be used locally to confirm interpretations made from geophysical data. Potential applications of these technologies include harbour surveys for construction and pollution monitoring purposes, pipeline or cable route surveys, offshore resource inventories, wellsite surveys, lake studies and environmental monitoring programs.