



Seismic Stratigraphy of Unconsolidated Sediments in the Central Strait of Georgia: Hornby Island to Roberts Bank

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MORPHOLOGY OF THE BEDROCK (COMPOSITE LATE TERTIARY AND QUATERNARY EROSIONAL SURFACE)

This time structure contour map images the base of the unconsolidated section and the top of the bedrock with a contour interval 100 ms from 0 TO 900 ms. (See heavy line on seismic section.) On average the depth in metres is about 11% less than the two way times contoured. However, there is a distortion inherent in viewing this time map as a depth map. For a thick glacial section in shallow water the thickness in metres is only about 3% less than the time in ms. In deeper water and beneath low velocity sediment, the depth to bedrock can be up to about 20% less than the time in ms, (eg. where there is 400 ms of hemipelagic cover out of 900 ms total). This is not a paleogeomorphic map in the same sense as the overlying pair. It depicts the composite erosional surface on underlying bedrock formations. The large scale feature is a broad downflexed bedrock basin with 3 to 5 degree side slopes. Northwestern troughs have been incised into this basin, making a series of disconnected deeps. Their form resembles alpine glacial valleys. The relief on this surface suggests that the level of erosion was controlled by lithologic contacts or structures such as folds and faults (NW and NE).

