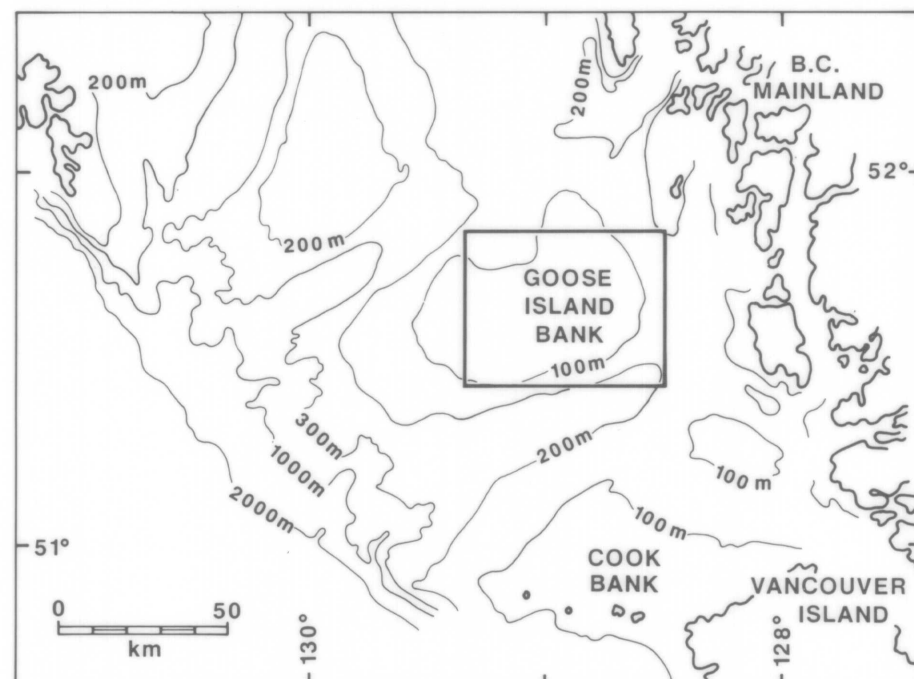


LOCATION OF QUEEN CHARLOTTE SOUND



LOCATION OF MAPPED AREA WITHIN QUEEN CHARLOTTE SOUND

DISTRIBUTION OF SURFICIAL SEDIMENT AND MAJOR BEDFORMS, GOOSE ISLAND BANK, QUEEN CHARLOTTE SOUND, CENTRAL CONTINENTAL SHELF OFF BRITISH COLUMBIA.

PROJECT 840033

(POTENTIAL GEOLOGIC HAZARDS TO DEVELOPMENT: SEA FLOOR AND SHALLOW SUB-BOTTOM OF QUEEN CHARLOTTE SOUND)

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Sediment and bedform distribution was mapped from sonographs (obtained with a 50 kHz Klein Assoc. Inc. system with K-MAPS slant range correction and water column removal) and standard echo-sounder bottom traces. Where available grab samples and underwater photographs offered ground truth for the interpretation of the sonic records. This map forms a basis for (a) assessing the mobility of the bank surface (Luternauer, in press) for development purposes and (b) identifying favorable groundfish habitats and hazards to commercial trawling gear (Luternauer et al., in press).

REFERENCES:

- Luternauer, J.L.
 in press: Character and setting of sand and gravel bedforms on the open continental shelf off western Canada; Bulletin Canadian Petroleum Geology (special publication on Shelf Sands and Sandstones).
 Luternauer, J.L., Linden, R.A., Westheim, S.J., and Thomson, R.G.
 in press: Sedimentology of Amphirite Bank, a commercially exploited groundfish habitat—southwestern continental shelf of British Columbia; Environmental Geology.

LEGEND

□ LIMITS OF SCANNED AREA ALONG SHIP'S TRACKLINE

SURFICIAL SEDIMENT:

□ Mainly sand □ Mainly gravel

BEDFORMS (Data collection: HUD 81 May 31–June 1, 1981, END 84 July 23 and July 25, 1984):

▨ Alternating gravel bands and sand patches

▨ Barchanoid dunes

LINEAR SEDIMENT WAVES

▨ Symmetry unidentified ▨ Asymmetrical

$\lambda \leq 10m^*$ $10 > \lambda > 15m^*$

$H \leq 2m^*$ $2 > H > 5m^*$

* Estimated bedform dimensions

GRAB SAMPLES (Sampling: END 83B Sept. 12, 1983):

● sG Location and sediment type

G or g = Gravel g or s = <50wt.%

S or s = Sand G or S = 50–90wt.%

G or S = >90wt.%

Sediment type at each location listed in order of increasing concentration.

BOTTOM PHOTOS (Obtained: END 83 Sept. 12, 1983):

★ 25 Site location and number

