

OPEN FILE  
DOSSIER PUBLIC  
**2320**  
GEOLOGICAL SURVEY  
COMMISSION GEOLOGIQUE  
OTTAWA



LEGEND

Sand Ridge; arc indicates wavelength along track; numerator denotes ridge amplitude from trough to crest in metres; denominator denotes total thickness of sand from crest of sand ridge to underlying reflective surface in metres

**Sand ribbon**

Wave-formed ripples in gravel and/or megaripples

Incised area of sand ridge. These rippled areas consist of coarse sand and gravel with broken shell debris in the troughs of the bedforms; the ripples have a wavelength of 1-3 m and amplitudes of 0.5 - 1 m; the ripples generally tend to be straight crested but bifurcate as well (Fader and Miller, 1986)

☐ Broad incised area (as above); along-track extent shown

- Boulder or boulder field; interpreted from sidescan sonar records; boulders range in diameter from 0.5 - 7.0 m

++ Shipwreck

# Trawl marks; made by trawl doors scraping along seabed

Shell communities or bioherms; lenticular to circular patches composed of bivalves, sea cucumbers, and other unidentified benthic communities

Hyperbolic reflections; interpreted from high resolution seismic profiles; may represent buried boulders

W-shaped bedforms; composed of sand, overlying gravel; may be isolated or connected; individual arches range from 20 to 100 metres wide, and often confine ripples formed in gravel (Fader and Miller, 1986)

X Iceberg furrow

Water depth, in metres

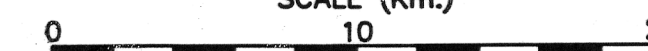
○ 94 1200 Navigation fix, annotation in Julian day, time  
Cruise - Hudson 85-005 from 94 140 to 95 1550  
and 97 1630 to 104 0200

N.B. Orientation of bedforms and surficial features is not implied

Specified references to bedform definitions are from:  
Fader, G.B.J. and Miller, R.O., A reconnaissance study of the surficial and shallow bedrock geology of the southeastern Grand Banks of Newfoundland, in *Current Research, Part B*, Geological Survey of Canada, Paper 86-1B, 1986, 591-604.

Other bedform definitions refer to:  
Amos, C.L. and King, E.L., Bedforms of the Canadian eastern seaboard: a comparison with  
global occurrences, *Marine Geology*, 57, 1984, 167-208

SCALE (Km.)



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**BEDFORMS & SURFICIAL FEATURES  
SOUTHERN GRAND BANK  
MAP AREA 14948-SF**

DATE: MAY, 1990	GEOLOGIST: R.O. MILLER, G.B.J. FADER, M. DOUMA
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PROJECTION : TRANSVERSE MERCATOR CM -47W SCALE : 1 : 250000

ENCLOSURE: 1/14	DRAWN BY: MD	EOR PROJECT NO : 89-31
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