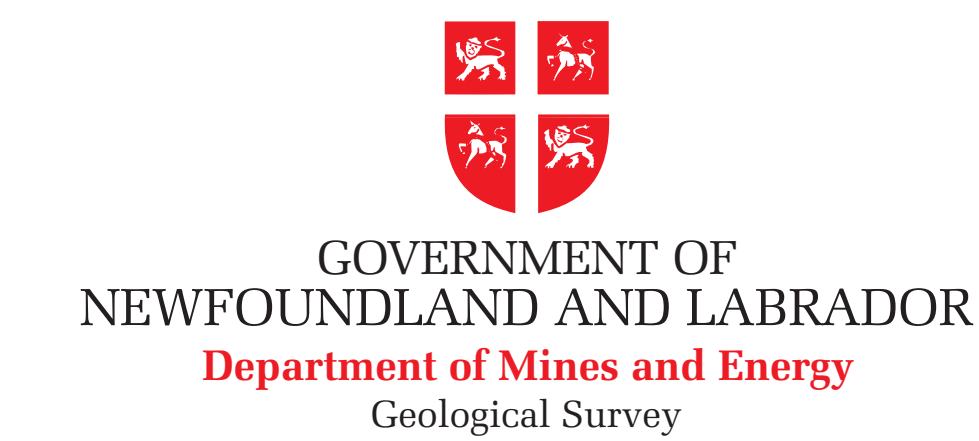


MAP 2003 - 03
TRINITY
 NEWFOUNDLAND
 Scale 1:50 000



LANDFORM CLASSIFICATION

- Where three different landforms are included in a single map unit they are each separated by a single dash (-) and their relative percentages are (60 - 30) and (5 - 15).
- Where two landforms are included in a single map unit, a double dash (//) or single slash (/) is used to separate them, and their relative percentages are (80 - 20) and (10 - 90) and (15 - 85) for a single slash.
- A higher between two landform types indicates that they are approximately equal in area. For example, T//Rc indicates that 50% veneer and rock, composed by vegetation or a thin regolith are equal in area.
- A composite symbol is used to show combinations of the above cases. For example, F(O)T indicates that about 60 - 85 percent of the area is covered by fluvial sediment, 15 - 40 percent by glacial/valley sediments, and is underlain by fill.

The stratum data reported on this map have been referenced from the Newfoundland Stratum Database (Taylor, 2001).

LANDFORM CLASSIFICATION: GENETIC

Symbol	Depositional Environment	Origin and Characteristics of Materials
F	Fluvial	Alluvium consisting of silt and clay to bouldery gravel; forms terraces and plains associated with modern stream channels, their floodplains and deltas; usually less than 1 m thick; deposited by fluvial action at or below maximum flood levels.
C	Colluvial	Colluvium consists of coarse-grained bedrock derived materials, but may include sand, silt or clay; accumulates on the lower parts, or at the base of steep rock faces; transported by gravity.
E	Aeolian	Medium to fine grained sand and silt, well sorted, poorly compacted; commonly occurs as dunes up to 10 m high; transported and deposited by wind.
G	Glaciolacustrine	Fine grained sands to coarse grained clayey gravel occur as plains, ridges (eskers), hummocks, terraces and deltas; generally greater than 1 m thick; deposited as curvilinear in an ice-contact position or proglacially.
L	Lacustrine	Silt, clay, gravel and sand occur as plains and blankets; silt and clay deposited in freshwater lakes from suspension, sand and silt by lake floor currents, gravel and sand by shoreline wave action.
M	Marine	Clay, silt, gravel and detrition; sand is present in some places; generally moderately to well sorted and commonly stratified; but may be massive; occurs as beach ridges, deltas, terraces and bars; deposited in a marine environment; gravel and sand by shoreline wave action; may include shells, clay and silt deposited from suspension and turbidity currents; gravel is generally a well-sorted lag.
T	Glacial	Includes all types of till; composed of detrition; transported and subsequently deposited by till from glacial ice with no significant sorting by water.
O	Organic	Poorly drained accumulations of peat, peat moss and other organic matter; developed in areas of poor drainage.
R	Rock	Bedrock

LANDFORM CLASSIFICATION: MORPHOLOGY

Symbol	Morphology	Description
a	apron	A relatively gentle slope at the foot of a steeper slope, commonly used to describe coluvium at the base of a rock escarpment; consists of materials derived from the usually steeper upper slope.
b	blinflat	Any deposit greater than 1.5 m thick; minor irregularities of the underlying unit are masked but the major topographic form is still evident.
c	concealed by vegetation	Vegetation that developed on either colluvium surfaces or a thin layer of angular frost-shattered and frost-heaved rock fragments overlying bedrock; includes areas of shallow (less than 1 m), discontinuous overburden.
d	drumlinoid	Elongate ridges between 1.5 and 10 m high, 20 and 300 m wide, and 200 to 5000 m long; ridges have a rounded end pointing in the up-ice direction and gently curving sides that taper in the down-ice direction; exhibit a coarse longitudinal profile; commonly with a steeper slope in the up-ice direction; consist of subglacially formed deposits shaped in a streamlined form parallel to the direction of glacial flow; commonly consists of till, although some may contain stratified drift; may have a rock core.
e	eroded and dissected	Series of closely spaced gullies or deeply incised channels; can have a dendritic pattern or may be a single straight or arcuate channel; gullies and channels may contain undercut streams.
f	fan	A gently sloping accumulation of debris deposited by a stream issuing from a valley into a landscape; has its apex at the mouth of the valley from which the stream issues; the fan shape results from the deposition of material as the stream swings back and forth across the landscape; fluvial fans are typically derived from eroded glacial and glaciolacustrine deposits; glaciolacustrine fans (deltas) are deposited in standing water rather than a terrestrial environment; coluvial fans are derived from bedrock and are usually steeper (i.e., cone shaped).
h	hummock	An apparently random assemblage of knobs, mounds, ridges and depressions without any pronounced orientation; significant form or orientation formed by glacial melting during ice stagnation and deglaciation; includes subglacial, englacial, supraglacial and stratified materials.
k	kettle	A basin or bowl-shaped closed depression or hollow in glacial drift; results from the melting of a buried or partly buried detached block or lens of glacial ice; commonly occurs in association with hummocks.
l	lineated	Elongate spindle-shaped ridges between 6 and 60 m high, 75 and 300 m wide and up to 4000 m long; ridges are commonly straight sided, taper at one or both ends, and have a flat longitudinal profile; consist of subglacially formed deposits shaped in a streamlined form parallel to the direction of glacial flow; commonly consist of till, although some may contain stratified drift; may have a rock core; includes slope lineated logs (SL).
p	plain	A comparatively flat, level, or slightly undulating tract of land; materials are either till, glaciolacustrine, alluvial, marine, lacustrine or organic sediments; bedrock features are commonly masked by the overlying sediments.
r	ridge	Narrow, elongated and commonly steep-sided feature that rises above the surrounding terrain; materials are either rock, glaciolacustrine, fluvial, marine, lacustrine, aeolian, or organic sediments; includes string logs (SL).
t	terrace	Long, narrow, level or gently inclined step-like surface, bounded along one edge by a steeply ascending slope or scarp and along the other by a steeper ascending slope or scarp; materials are either till, glaciolacustrine, fluvial or lacustrine sediments; generally formed by fluvial and glaciolacustrine erosion and marine wave scarping.
v	veneer	Any deposit less than 1.5 m thick; morphology of the underlying unit is evident.
w	weathered	A thin layer, generally less than 1 m thick, of frost heaved and frost-shattered bedrock fragments.
x	complex	Commonly used to indicate numerous reeler ridges that are closely spaced; can be used when any genetic category exhibits numerous surface expressions in a small area, and in which no single element can be defined.

LANDFORMS AND SURFICIAL GEOLOGY OF THE TRINITY MAP SHEET (NTS 2C/06)

MAP 2003-03

LANDFORM CLASSIFICATION

MORPHOLOGY (F)	GENETIC									
	Fluvial (C)	Colluvial (E)	Aeolian (G)	Glaciolacustrine (L)	Lacustrine (M)	Marine (T)	Organic (O)	Rock (R)		
apron (a)	Ca									
blinflat (b)	Fb	Cb								
concealed by vegetation (c)		Cc								
drumlinoid (d)										
eroded and dissected (e)	Fe	Ca	Ec	Ge	Le	Me	Te			Re
fan (f)	Ff	Cf								
hummock (h)										
kettle (k)										
lineated (l)										
plain (p)	Fp									
ridge (r)	Fr									
terrace (t)	Ft									
veneer (v)	Fv	Cv	Ev	Gv	Lv	Mv	Tv	Ov		Rv
weathered (w)										
complex (x)	F	C	E	G	L	M	T	O		R

SYMBOLS

- Geological boundary (assumed)
- Scarp face at edge of fluvial terrace
- Esker (flow direction known or assumed, unknown)
- Meltwater channel (small, large)
- Crestline of major moraine ridge
- Trend of ribbed or minor moraine ridges
- Beach ridges
- Crestline fill ridge
- Sand dunes
- Drumlin
- Crug and tail hill
- Flagging
- Richie Moutonnée
- Striation (direction known, unknown)
- Kettle hole (small, large)
- Sinkhole (small, large)
- Observation site

Elevation in feet above mean sea level. Contour interval 50 feet.
 NOTE: All symbols and classifications may not occur on this map.
 Geology by M.J. Batterson, Geological Survey, Department of Mines and Energy, Government of Newfoundland and Labrador.
 Digital Cartography by T.J. Sears, map editing by D.M. Taylor, Geological Survey, Department of Mines and Energy, Government of Newfoundland and Labrador.
 Copies of this map may be obtained from the Geoscience Publications and Information Section, Geological Survey, Department of Mines and Energy, P.O. Box 8733, St. John's, Newfoundland, Canada, A1B 4J8.
 E-mail: gis@geology.gov.nl.ca
 http://www.geosurvey.gov.nl.ca

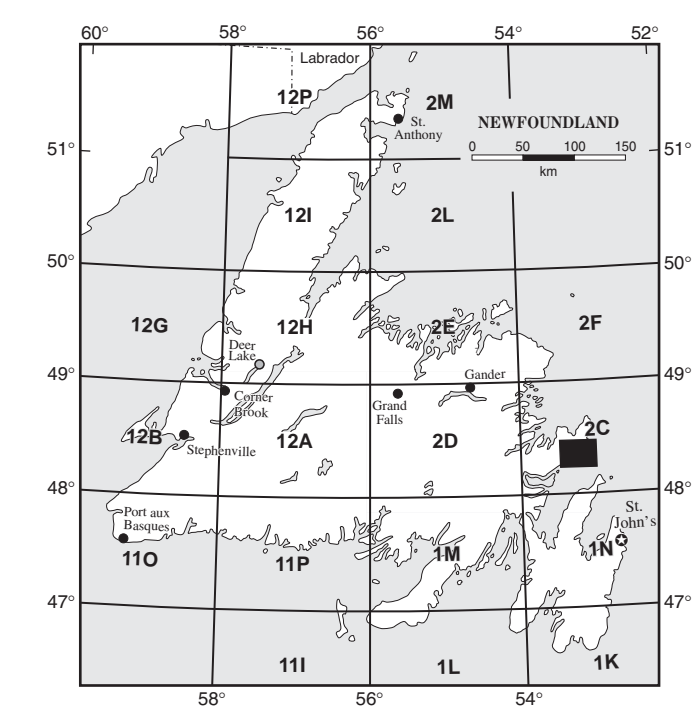
OPEN FILE 600C/06/019
 This map supersedes Map 88-139, Open File NF/1693.
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Reference
 Taylor, D.M.
 2001. Newfoundland Stratum Database. Newfoundland Department of Mines and Energy, Geological Survey Branch, Open File NF/LD 0195 (version 6).

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