

RECONNAISSANCE GLACIAL MAPPING IN THE MELODY LAKE - ANNA LAKE AREA

LABRADOR

by

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At the request of Brinco, the author spent a few days investigating the glacial transport in the Melody Lake* and Anna Lake* areas of northeast Labrador, more particularly, parts of map areas 13J/12W and 13K/9E. The provision of meals, accommodation, and helicopter support by Brinex and the strong arms of Clayton Lyall are gratefully acknowledged.

Numerous boulders containing significant amounts of uranium mineralization have been located in the area. The determination of the effects of glacial movement and erosion on the transport of boulders from the source in bedrock would assist exploration in the area.

Glacial striae and landform features such as transverse (rib) moraine and lineated morainal features were mapped and two till fabric analyses (in 1 to 2 m deep hand dug pits) were obtained.

Glacial directions (striae, etc.) in the vicinity of the Anna Lake were generally to the northeast. One anomalous striae was observed to trend northwest-southeast, but by itself little significance can be attached to this striae. The geomorphological features in the vicinity of this prospect appear to be "ribbed moraine"

deposited transverse to the northeast direction of glaciation.

Near Melody Hill, glaciation is generally northeasterly directed, although minor variations were observed, these most probably being the result of local topographic influence.

The implications of glaciation and glacial deposition on mineral exploration in these areas are as follows:

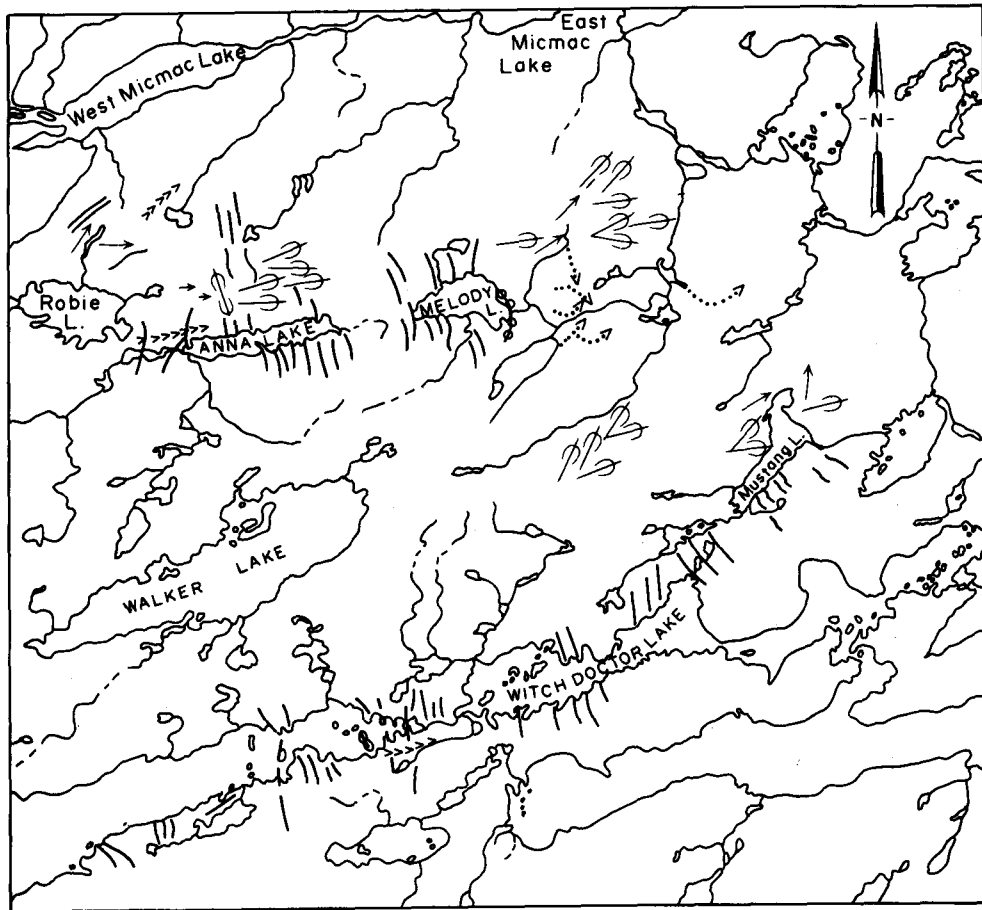
(1) The direction of glaciation is predominantly to the northeast although minor variations may be observed.

(2) Mineral exploration in this area is hampered by the lack of detailed quaternary mapping particularly as regards the distance and direction of glacial transport.

(3) The determination of the location of the mineralized boulders within the glacial "stratigraphic pile" would give an inference to the distance of transport, *i.e.* materials deposited as an ablation facies from an englacial or supraglacial position in the ablating glaciers may have been transported greater distances from the source than those materials deposited directly at or near the base of the ice.

*Unofficial geographic names, names assigned by Brinex

FIGURE 2
Preliminary Glacial Mapping of the Anna Lake-Melody
Pond Areas, Labrador
D.G. VANDERVEER, 1981



LEGEND

- Major transverse moraines
- Minor transverse moraines
- Drumlin moraines
- Drumlinoid-linear moraines
- Crag and tail hills
- Esker (direction known)
- Stoss and lee on outcrop
- Glacial striae (direction known)
- Glacial striae (direction unknown)
- Striae - 1 oldest