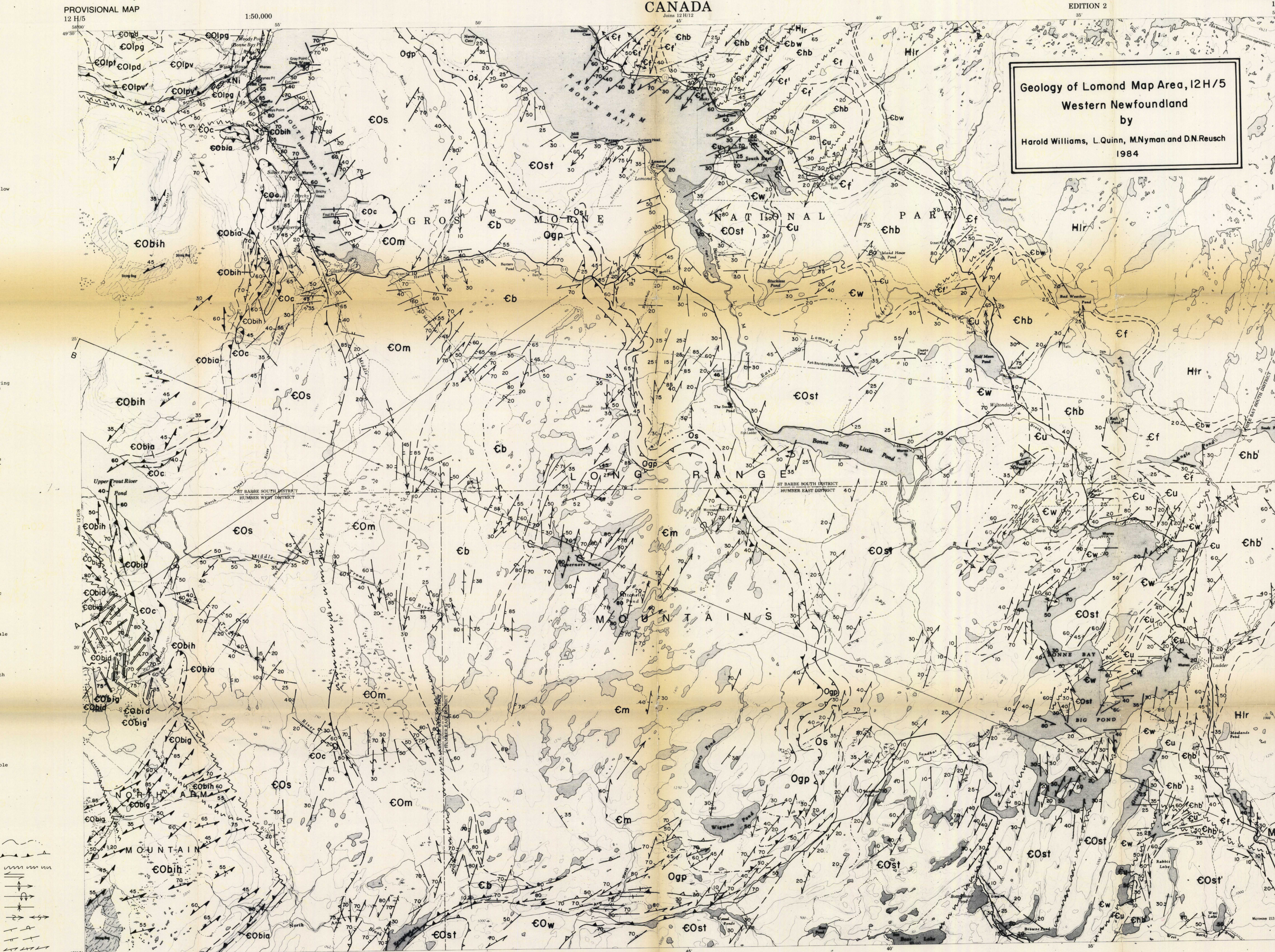
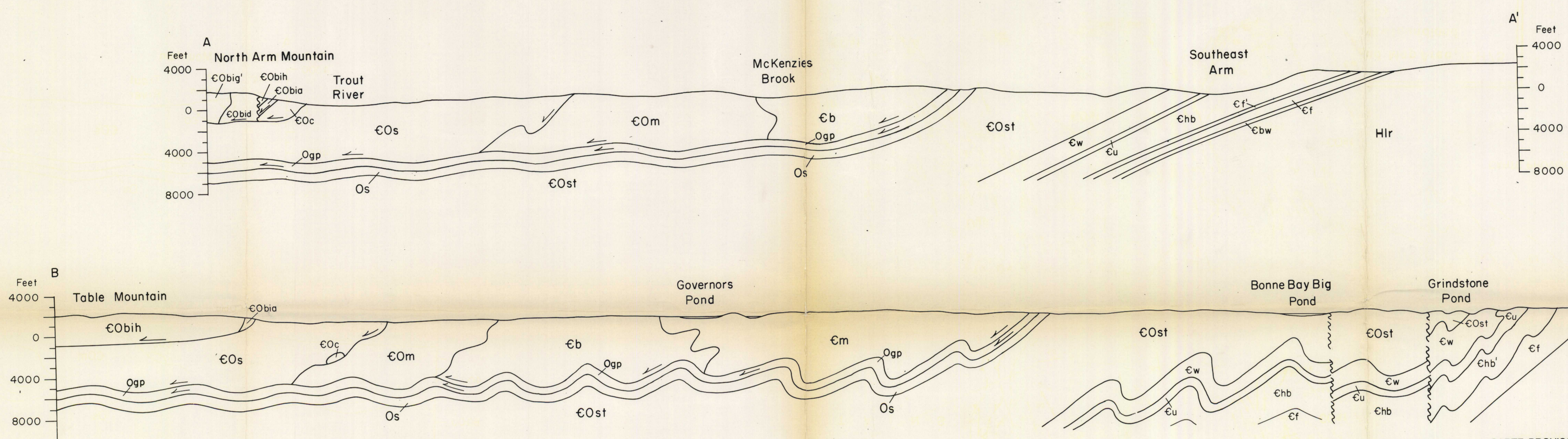


STRUCTURAL CROSS SECTIONS (Simplified)



- CARBONIFEROUS COVER ROCKS
MISSISSIPPIAN
North Brook Formation
red to grey conglomerate and sandstone, minor limestone
Humber Arm Allochthon
Bay of Islands Complex
CObid sheeted diabase dikes
COc massive gabbro, minor amphibolite
COc medium to coarse grained layered gabbro
COc hornblende, diorite and related ultramafic rocks
COc greenschist, black amphibolite, garnetiferous amphibolite, epidote, quartz feldspar gneiss
Little Port Complex
COc altered green pillow lava, massive green lava, pillow breccia, volcanic breccia and volcaniclastic rocks
COc altered diabase, brecciated to sheeted diabase, minor gabbro, chlorite and tonalite
COc tonalite, quartz diorite and trondhjemite, minor diabase and gabbro
COc gabbro, hornblende gabbro, foliated gabbro, mafic gneiss and amphibolite
Crouthers Formation
COc green and red pillow lava, pillow breccia and fragmental volcanic rocks, massive lava, minor diabase, red and grey shale and limestone
CAMBRIAN TO MIDDLE OROVICIAN
Bonnie Bay Group
Sallara Formation
COs thick bedded grey to pink weathering coarse feldspathic sandstone, graded beds with pebbly bases, minor red and green shale
McKenzie Formation
COm thin to medium bedded grey limestone, buff-weathering limestone, cream to grey siltstone and dark grey shale (locally chert) with blocks of buff-weathering limestones and grey sandstone in shale matrix
Barbara Formation
Cb thin bedded dark grey shale with thin bedded brown-weathering quartzite, thick white quartzite units, local conglomerate
Michelle Formation
Cm thick bedded grey to white quartzite, quartz greyswacke, green and purple slate
Gadde Point Melange
Ogp grey shale with sandstone blocks, black and green scaly shale with limestone and limestone breccia blocks
Wesal Group
Cw thin bedded grey limestone and buff shale, dark grey shale and limestone with local limestone breccia, limestone conglomerate with sandy limestone matrix
MIDDLE OROVICIAN
Sallara Formation
COs medium to thin bedded grey shale, grey sandstone, buff-weathering sandstone, local lily shale and limestone
UPPER CAMBRIAN TO MIDDLE OROVICIAN
St. George and Table Head Groups
COs medium to thick bedded grey limestone, dense fine grained white limestone, grey to buff dolomite, minor shaly, calc., recrystallized limestone and marble
MIDDLE TO UPPER CAMBRIAN
Wiltondale Formation
Cw thin to medium bedded buff to white dolomite and dolomitic marble, green dolomitic shale, minor black limestone
CU, grey shale, limestone and chlorite schist
Underground Formation
Cu medium to thick bedded grey limestone with thick oolitic units, grey limestone with buff limestone at base, minor shale units
LOWER CAMBRIAN
Hawke Bay Formation
Cwb thick massive to crossbedded white and pink quartzite; thin to medium bedded white, green and buff sandstone with minor conglomerate, shale and limestone; red and green quartzite, phyllite and calcareous quartzite with minor calcareous chlorite-sapphirite schist
Forteau Formation
Cf medium to thin bedded alternating grey green shale and grey to buff-weathering lily siltstone and limestone; limestone with archeocyathids at base; grey calcareous phyllite and schist in western part of area; cf, black calcareous shale and buff-weathering grey green calcareous sandstone and quartzite
Red Weather Formation
Cw medium to coarse green arkosic sandstone, quartz pebbles conglomerate, minor shale
PRECAMBRIAN (BELTIAN)
Long Range Complex
Hir pink to grey foliated granite, coarse-grained massive granite, pink gneisses, minor metabasite

Geology of Lomond Map Area, 1:50,000
Western Newfoundland
by
Harold Williams, L. Quinn, M. Nyman and D.N. Reusch
1984

DESCRIPTION NOTES
The Lomond map area displays a complete section of the major tectonic elements of western Newfoundland from Precambrian crystalline basement through Cambrian to Devonian cover sequence to the highest structural zones of the Humber Arm Allochthon. Fold axes trend northeast but the outcrop patterns of the cover sequence is largely controlled by strike-slip faults of the Precambrian Long Range Tilt to the northeast corner of the map which exhibit a variety of structures in different directions that are not recognized in the autochthonous cover sequence. In the Humber Arm Allochthon, the Precambrian Long Range Tilt is a major structural feature that is well expressed in the west-ward-plunging folds of the Bay of Islands Complex to early Devonian, complex folds and overturned beds in sedimentary rocks. These structures relate to the assembly and transport of certain of the ophiolite rocks and to the assembly and transport of the allochthon.
Later structures that affect both allochthonous and autochthonous rocks increase in intensity from north to south across the area. These are most evident in the cover rocks of the Long Range Complex as trend from east to west near Bonne Bay Big Pond. Toward the west, the rocks are affected by a single steep northeast-trending cleavage and they are displaced in general along gently west-trending structures. Toward the northeast, the rocks display steep folds, and an early cleavage is folded with the cleavage most pronounced in the Bonaventure area. The Precambrian Long Range Tilt is a major structural feature that is well expressed in the west-ward-plunging folds of the Bay of Islands Complex to early Devonian, complex folds and overturned beds in sedimentary rocks. These structures relate to the assembly and transport of certain of the ophiolite rocks and to the assembly and transport of the allochthon.
The Humber Arm Allochthon (see notes on the cover map) unconformably overlies the Long Range Complex. The unit is mainly sandy with shale interbeds near the top and contains locally abundant quartzite. The unit is 10 to 20 metres thick and is locally folded in places. The allochthonous cover sequence is 10 to 20 metres thick and is locally folded in places. The allochthonous cover sequence is 10 to 20 metres thick and is locally folded in places. The allochthonous cover sequence is 10 to 20 metres thick and is locally folded in places.
Detailed geological notes and descriptions of various units and formations are provided in this section.

LOMOND NEWFOUNDLAND

Scale 1:50,000

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