

THE MARYSTOWN - GRAND BANK - ST. LAWRENCE AREA

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In commencing a three-year program of 1:50,000 scale geological mapping and petrological-geochemical study of the Burin Peninsula from Marystown south (map sheets 1M/3, 1M/4, 1L/13, 1L/14) one week's reconnaissance investigation was spent there in October, 1974 (with graduate students S. O'Brian, S. Taylor and J. Whalen). This involved an examination and collection of about 50 samples from roadside outcrop, between Marystown and Grand Bank, as well as a one-day traverse to the Anchor Drogue fluorite occurrence. The road between Marystown and Grand Bank is more or less perpendicular to the strike of Hadrynian volcanic rocks, and thus probably provides a good cross section through most rock types in this sequence. They consist mostly of subaerial acidic volcanic rocks (ignimbrites, agglomerates and other pyroclastics) cut by a number of mafic dikes, and the well-known Grand Beach porphyry. A number of north-striking, west-dipping faults affect these volcanics, and they may be related to the similarly oriented post-Cambrian thrust faults mapped by Greene (1974) in the Marystown - Burin area. The basaltic lavas of the Precambrian section near Mooring Cove show abundant metamorphic minerals which appear to be characteristic of the greenschist/zeolite metamorphic facies. Thin-section studies of the specimens collected are in progress.

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The Anchor Drogue showing consists of a steeply-dipping ten-inch wide vein of white fluorite/barite in a pink granite similiar to the main St. Lawrence pluton. Chemical studies of this deposit, for comparison with the St. Lawrence deposits, are in progress.

Reference

Greene, B.A.

1974: Geological Mapping, Burin - Bonavista Belt; in Nfld. Min. Dev. Div. Report of Activities for 1973.