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LIMESTONE EVALUATION PROJECT

(Project 4-1, Canada-Newfoundland Mineral Exploration & Evaluation Program)

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The objectives of the Limestone Evaluation Project are threefold:

1. To compile the large amount of available data concerning limestone deposits in Newfoundland.
2. To evaluate potentially commercial deposits in favourable areas of the province.
3. To publish the results of the investigation.

The project was initiated in late 1971, and 1972 saw the completion of a diamond drilling project to evaluate a deposit at Aguathuna, and field investigations in various parts of the province. During 1973 a number of limestone deposits on the Port au Port Peninsula were evaluated in some detail by a field party under the direction of Mr. David Besaw.

Mr. Besaw prepared a new geological map of the Peninsula at a scale of 1:50,000, and collected 125 fresh blasted samples of stone for chemical analysis at the Geology Department, Memorial University. The 1973 investigation was confined to the St. George Group, which Besaw had divided into five distinct lithostratigraphic units on the Peninsula. One of these, the "White Hills unit" near the top of the carbonate section, was found to consist of extremely pure limestone. North of Sheaves Cove, the unit is about 150 feet thick and dips very gently to the north. A representative chemical analysis, the average of 88 fresh samples collected, is as follows:

CaO	55.13
MgO	0.18
SiO ₂	0.07
Fe ₂ O ₃	0.03
Al ₂ O ₃	0.04
S	0.01

Besaw estimated that at least 300,000,000 tons of limestone of about this purity can be quarried in the area. In addition, over 200,000,000 tons of very pure stone (less than 1 per cent MgO and 2.5 per cent total impurities) are quarryable immediately along strike to the west. Other very large, pure limestone deposits were outlined between Lower Cove and Sheaves Cove, and at Piccadilly.

The work on the Port au Port Peninsula led to renewed interest in the commercial limestone possibilities of the area. During the summer and autumn of 1973, British Newfoundland Exploration Ltd. and Lehigh Portland Cement Company of Allantown, Pennsylvania, jointly undertook an extensive diamond drilling program to further evaluate deposits north and west of Sheaves Cove with a view to the possible establishment a portland cement manufacture plant to serve export markets.

The final report, entitled "Limestone Resources of Newfoundland", is in the last stages of completion, and publication is expected in the spring of 1974.