

RE-OPENING THE HARDY ISLAND GRANITE QUARRY, BRITISH COLUMBIA, CANADA

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The Hardy Island Granite Quarry (MINFILE No. 092F425) is about 20 kilometres southeast of Powell River. It is one of the historic Jervis Inlet Quarries, which are on Nelson Island, Kelly Island and Fox Island (White, 1986). These quarries provided stone for many of British Columbia's notable buildings in the early part of the last century, producing a classic grey, "salt and pepper" granite, which Parks (1917), in his survey of the Building Stones of Canada, referred to as "the best in BC". Products of the stone from the Hardy Island Quarry include the lions in front of the old Vancouver Courthouse, and the Ogden Point breakwater. The quarry was re-opened by Hardy Island Granite Quarries Ltd. in the summer of 1999. Since then, Hardy Island granite has been exported as far as Oregon to Alaska; some 5 500 tonnes of blocks were shipped by the end of 2000.

The stone at the Hardy Island quarry splits with unusual facility along both the rift and the grain (the primary and secondary splitting directions). This quality, together with the favourable joint orientation and spacing, allows the stone to be quarried easily. Blocks are freed either by drilling one hole halfway through the block on the rift, or two on the grain, followed by careful black

powder blasting. The gas pressure of the black powder is used to split the stone. This eliminates the need for a line of closely spaced holes. The large blocks produced by the method described above are then split to manageable sizes (usually about 10 tonnes) using plugs and feathers. Blocks are pulled apart with an excavator, moved to a storage area with a front end loader, and finally transported by barge to Vancouver. The stone is hydraulically split into 4-inch facing stone, pillar caps, coping, and other products at Bedrock Granite Sales in Coquitlam. Over half the stone produced by the quarry was exported to the United States, either as blocks or as split products.

REFERENCES

- Parks, W.A. (1917): Report on the Building and Ornamental Stones of Canada; *Canada Department of Mines*, Volume V, Report Number 452.
- White, G.V. (1986): Dimension Stone Quarries in British Columbia; in *Geological Fieldwork, 1986, British Columbia Ministry of Energy, Mines and Petroleum Resources*, Paper 1987-1, pages 309-342.