

BEAVERDELL GRANITE QUARRY

(Cascade Coral)

The Beaverdell Granite Quarry is located 14 kilometres south of Beaverdell, adjacent to Highway 33. Another abandoned quarry was quarried for granite building stone. The quarry is 10.5 kilometres south of Beaverdell, adjacent to Highway 33 and the Canadian Pacific Railway.

The hostrock of the Beaverdell Granite quarry is a subcircular granitic stock centred 14 kilometres south of Beaverdell. It is mostly exposed on the northeast side of the Kettle River, in the Dominion Creek drainage, west of Boyer Creek and south of the mouth of Tuzo Creek. The stock has been dated at 49.4 +/- 0.7 Ma (Eocene). Satellite dikes and the stock itself intrude granodiorite phases of the Okanagan batholith and basal Tertiary rhyolite and conglomerate containing clasts of the Okanagan batholith, in the headwaters of the Dominion batholith.

The quarry trends northeast from Highway 33 following a 40-metre wide band of lightly jointed porphyritic granite for approximately 130 metres. This band is flanked by weakly to highly fractured granite.

The stone at the Beaverdell Granite quarry consists of pink, coarse grained (greater than 5 millimetres) porphyritic granite with phenocrysts of pink orthoclase feldspar up to 3.5 by 6 centimetres. Other minerals include plagioclase, quartz, biotite and minor hornblende. The average modal composition of the quarriable (QR or **Cascade Coral** unit is 15 per cent quartz, 55 per cent orthoclase, 20 per cent plagioclase and 10 per cent biotite and hornblende.



QUARRY FACE

The chemical composition of the granite porphyry is as follows in per cent and closely resembles the composition of the Shingle Creek porphyry.

Cascade Coral		Shingle Creek
SiO ₂	72.35	72.18
TiO ₂	0.29	0.39
Al ₂ O ₃	14.89	15.16
Fe ₂ O ₃	1.40	1.69
MnO	0.03	0.05
MgO	0.46	0.57
CaO	1.39	2.53
Na ₂ O	4.44	2.63
K ₂ O	4.74	4.80

major oxides cast to 100 per cent

Three joint sets or fractures are well developed. J1 joints are horizontal, strike 360 degrees and dip 25 to 50 degrees east. These are mostly likely the result of differential expansion/ contraction due to cooling and/or off-loading. J2 joints strike from 205 to 220 degrees and dip 50 to 75 degrees northwest. J3 joints strike from 270 to 330 and dip steeply to vertically northwest to northeast. The joint density of the possibly quarriable and quarriable units is 1 joint per 1.5 metres (Assessment Report 20569).

Fracture intensity appears to increase northwest of the quarry where 42 per cent of joints and fractures measured are spaced less than 50 centimetres apart and 67 per cent are spaced less than 100 centimetres apart. Northeast of the quarry, over 94 per cent of the joints and fractures are spaced more than 50 centimetres apart and 78 per cent are spaced wider than 100 centimetres.

The quarry measures approximately 40 metres long by 12 metres high at its face with large potential reserves extending north of the site.

In 1985 and 1986, the Geotechnical and Materials Branch of the British Columbia Department of Transportation and Highways conducted a physical dimension test on the abandoned quarry face with the following results.

Specific Gravity	2.61	
Density	2605	kg/m ³
Absorption by weight	0.50	%
Compressive Strength	55.92-65.80	MPa
Traverse Strength	7.94-10.07	MPa



From 1965 to 1967, Continental Marble & Granite Ltd. produced crushed stone for artificial stone. From 1971 to 1972, the company produced building stone. **The stone is marketed under the trade name 'Cascade Coral'.**



60-100 Large granite blocks quarried and ready to ship



The quarry was operated from the 1960s up to about 1987 by Canroc International Corporation. The company shipped the stone to its processing plant in Delta to produce monument stone, flooring tile and facing stone for interior and exterior uses.

Pacific Granistone Corporation, a subsidiary of 1885 Holdings Ltd. took over CANROC's operations and has reactivated the quarry. It expected to produce less than 100,000 tonnes in 1991 (Mineral Market Update, July, 1991).

To date, the quarry has produced approximately 90 tonnes of blocks for polished slabs and tiles, crushed and sized fragments for terrazzo, and precast concrete slab products. Quadra Stone Co. Ltd. opened 2 quarries in 1994. Margranite Industry Ltd. also produces **Cascade Coral** from the area.

Cascade Coral Granite



Contact us for more information



**Rich River Exploration Ltd. P.O. Box 183, Grindrod
British Columbia, Canada V0E-1Y0**

Phone us in confidence at: (250)-833-2203

Email: prospect@richriver.bc.ca Mobile 250-804-6189