## IDEAL BASIC INDUSTRIES, ROCK PRODUCTS TEXADA ISLAND.

Ideal Basic Industries has been operating their Rock Products limestone quarry on Texada Island since 1957. From a relatively modest beginning it has grown to become a major supplier of limestone, aggregates, and rip rap for the markets of British Columbia and the American northwest.

Texada Island is located some sixty miles north of Vancouver, B.C. in the Georgia Strait between Vancouver Island and mainland British Columbia. It is thirty miles long in a northwest, southeast direction and is four to five miles across.

The majority of the limestone is found in the northern third of the island. The portion of this limestone being quarried by Ideal is described as the lower member and possibly part of the middle member of the Triassic Marble Bay formation. The strata dip 10 to 12 degrees northeasterly and strike northwesterly. Several faults trending N 10°W have fractured and offset the formation. Dykes trending in the same direction have been intruded during at least two separate periods.

Within the quarry area, dykes appear to occupy nearly vertical fracture zones, particularly those which are 10 to 15 feet thick. These dykes trend N 15° W and are commonly resistant to erosion. Smaller dykes ranging from 1 to 3 feet, either crosscut the larger dykes at about N 45° W or run parallel to them. These dykes erode slightly below the limestone surface and show no indication of post intrusive faulting.

The limestone can be described as medium to dark grey, even textured and cryptocrystalline. Minute irregular veinlets containing minor amounts of silica and pyrite are present but are not readily apparent to the eye. This high quality chemical grade limestone is being used by pulpmills, smelters and in the manufacture of cement and chemical grade lime.

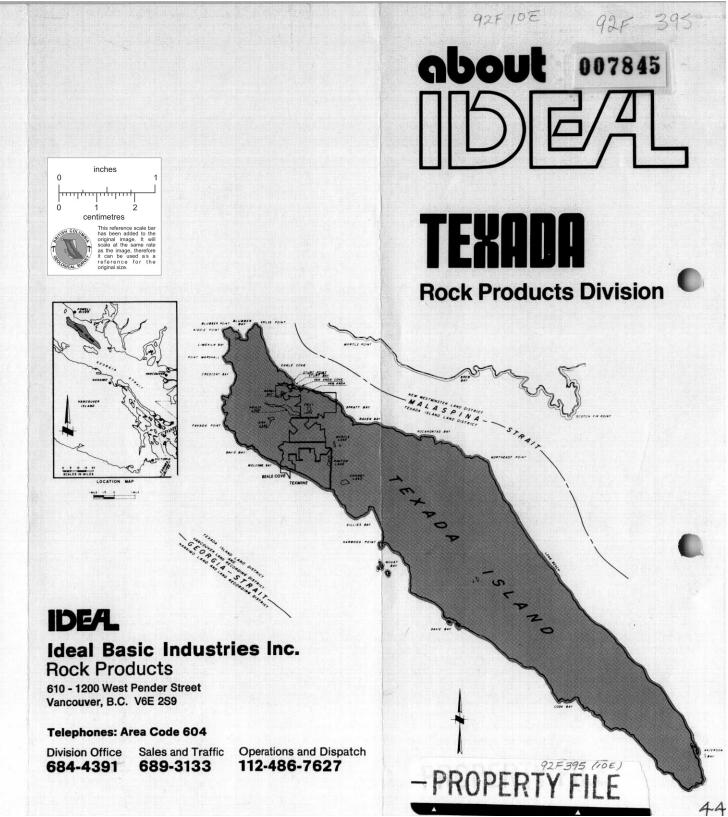
The present quarry covers an area of approximately 65 acres with a limestone depth potential of over 700 feet where it lies on the Karmutsen volcanic basement. The volcanics have a similar dip and strike generally to the limestone.

Rotary or down-the-hole drilling provides the boreholes for blasting with ANFO or high explosive. Bench heights average 33 feet. Front-end loaders and trucks feed an impact crusher in closed screening circuit at a capacity rate of 1000 tons per hour to produce a minus two inch product. This product is stockpiled and shipped to cement plants or to aggregate users on the lower mainland. Chemical grade limestone is crushed in the same system with the two inch minus product being processed further on two 8' x 20' double decked screens.

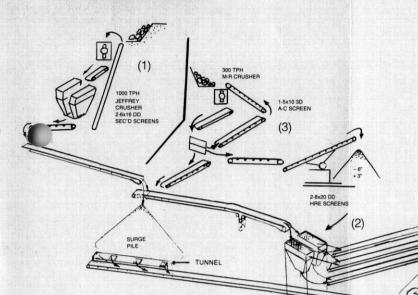
The screened products (-2)'' + 3/4, -3/4 + 5/16, and -5/16) are stockpiled for loading over a reclaim tunnel. All crushed limestone is shipped on open barges. The reclaiming and barge loading system has a capacity of 2000 tons per hour.

Waste rock is stockpiled for further treatment or direct shipment as fill. Large boulders produced during quarrying are stockpiled and segregated to supply the rip rap markets on the coast.

Company holdings both owned and leased ensure a continuing supply of limestone for construction and industry for many decades to come.



## TEXADA



This story about Ideal takes you to the timbered and rocky outpost that is Texada Island and the people of Ideal Basic Industries who work hard at contributing to the success of the company through the Rock Products Division. It will give you a bird's-eye view of what has been planned on an approved project to improve company operations at Texada. It will show you the quarry operation and how Ideal Basic people, in a Canadian environment, do their jobs in one of the island's major activities which provides income and

CHEMICAL ROCK STORAGE PILES

BELT TRIPPER

30,000 TONS

25,000 TONS 20,000 TONS

involved in a subsidiary operation because of needs for fuel, raw materials, transportation and other essentials in keeping the business going.

One such subsidiary of the cement division, the Rock Products Division located in British Columbia, offers a view of how the company gets started on a new activity because there is a basic need which can best be provided through a companyowned and managed operation.

The Rock Products Division's principal activity is serving as the source of supply for limestone needed as a raw material by the Seattle cement plant and a new Canadian cement plant in

75,000 TONS TOTAL

SURGE CHEMICAL ROCK Columbia. The limestone deposit is located on Texada Island, British Columbia, between Vancouver Island and the mainland of Canada. The bodies of water which surround the island are the Strait of Georgia on the west side and Malaspina Strait on the east side between the island and the Canadian mainland. The quarry has a capacity 3.6 million tons per year on a 2-shift basis using existing equipment.

## Water transportation

The company's operations on the north end of the island are some 75 miles north of Vancouver, and approximately 190 miles from Seattle, Washington. Because the operation is on an island, limestone must be loaded and transported via barges using a deep-water loading facility. This is advantageous because the low cost of water transportation helps to overcome problems of the distance to the market.

Another facility with a deep sea dock suitable for vessels of 75,000 tons capacity is situated one mile south of



## xada West

This drawing shows the fully integrated crushing and screening facility now in operation at Texada West. The Jeffrey crushing plant (1) was installed along with the surge pile, long belt, 100,000 ton storage, and the barge loader in 1973. Production of -2" cement grade limestone began late that same year. The addition of the screening plant (2) with its stacking conveyors, reclaim tunnel, and bypass system (tripper) was added in 1977—coming on stream early in 1978—producing sized chemical grade limestone for the lime burning industries of the west coast. Both chemical and cement grade limestone can be crushed alternatively in the Jeffrey crushing plant because of a transfer system put in above the initial surge pile.

With increasing demand in both the cement and the chemical markets pushing the capacity of the single, dual purpose, crushing plant, another crushing and screening facility (3) was constructed in 1981 to handle the chemical grade limestone. This system feeds onto the existing screening plant (2). The new plant also has the capacity of producing more and different sized products to meet present and future demands.

a good life for these company employees

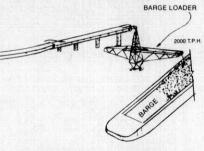
Ideal Basic Industries has a number of subsidiary operations related to the two main businesses of the company, portland cement and potash. Some of these are the natural outgrowth of business progress in which the company gradually became

the Vancouver area. Rock Products also sells high quality calcium carbonate (limestone) to the chemical industry and provides customers with riprap and rock fill materials.

1000 TPH

TUNNEL #2

The Sales and Administration office for the Rock Products Division is located in Vancouver, British



the limestone load-out. This facility produces crushed, screened and washed gravel. Also situated here is a 100 ton capacity barge loading ramp for shipping riprap.