ASSESSMENT REPORT
INITIAL EVALUATION OF THE IJR-1 CLAIMS
WHITE MARBLE DEPOSIT
PORT McNEILL AREA, VANCOUVER ISLAND BRITISH COLUMBIA

NTS 92L/7W
NANAIMO MINING DIVISION
BRITISH COLUMBIA

LATITUDE 50 DEGREES 21 MINUTES NORTH
LONGITUDE 126 DEGREES 52 MINUTES

FOR OMYA ST. ARMAND, MONTREAL QUEBEC

ACTIVITY	DATE	PERFORMED BY:
Geologic evaluation	October 2000 June 2001	Howard Brown
Sampling	June 2001	Howard Brown
Lab Analysis	August 2001	Omya Lab, Lucerne Valley CA
Report	September2001	Howard Brown

DATE SUBMITTED: September 10, 2001
REPORT REVISED October 25, 2001

TABLE OF CONTENTS

FIGURES

TABLES

ASSESSMENT REPORT
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INTRODUCTION

Six claims (IJR-1 claims) were staked for Omya (Omya St Armand) during October 2000 to cover a significant deposit of white recrystallized limestone which was noted during prospecting in the Port McNeill area of northern Vancouver Island. Howard Brown evaluated the deposit, studied the geology, and collected rock outcrop samples for analysis during October 2000 and June 2001.

LOCATION AND ACCESS

The claims are located about 38 kilometers south of Port McNeill, and about 1 kilometer east of Highway 19 and east of Nimpkish Lake. Access to the claims is very good, as they have been recently logged, and the Noomas Main hookup logging road passes thru the claims. Several branch roads provide access to the deposit area over a vertical interval of several hundred feet on several levels. Figures 1, 2, and 3 show the location of the deposit

MINING CLAIMS

A 6 unit claim block (IJR-1 claims) was staked in October 2000, to cover the deposit area. Table 1 shows the claim information. The claims are registered in the name of Omya St. Armand, 1255-2020 University St. Montreal QC H3H 2A5.

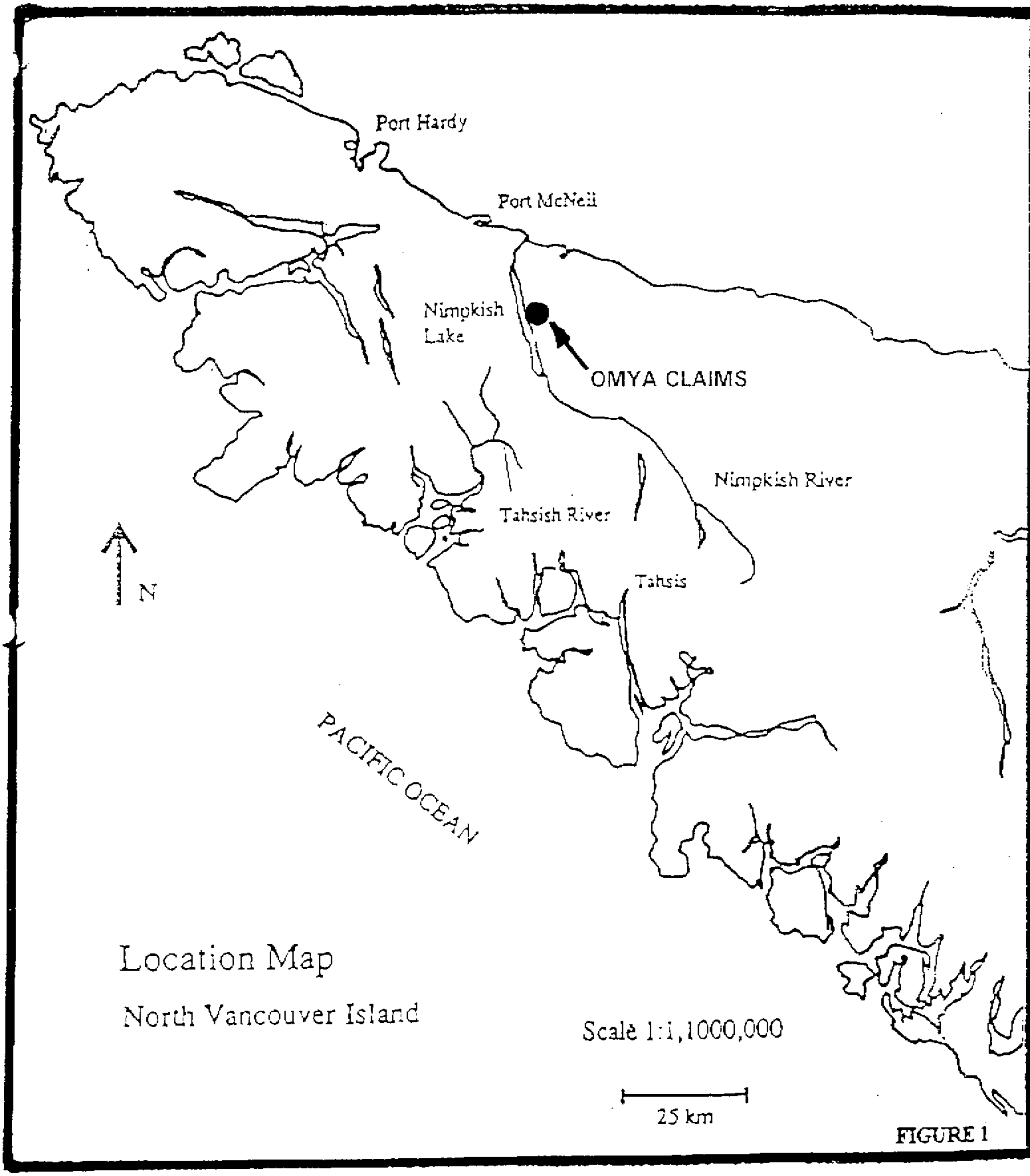
Table 1. Claim information

Claim name	Units	Tag Number	Recordation Number	Anniversary	New Anniversary
IJR-1	6 units	239644	380974	Oct 5 2001	Oct 5 2007

PHYSIOGRAPHY AND CLIMATE

The Nimpkish mineral property covers part of a rugged north south trending mountain which is immediately east of Nimpkish Lake. Drainages on the west side of the mountain is into Nimpkish Lake, while drainages on the east side of the mountain drain into the Bonanza River and Bonanza Lake.

Elevations on the claims range from about 20 meters at Nimpkish Lake to over 1400 meters along the range crest. Slopes range from moderate to very steep and rugged to inaccessible cliffs. A significant portion of the claim area has been heavily logged during the past few years, and logging in the general area continues into the present time. Areas


Port Hardy
Port McNeil
Nimpkish
Lake
OMYA CLAIMS
Nimpkish River
Tahsish River
Tahsis
N
PACIFIC OCEAN
Location Map
North Vancouver Island
Scalè 1:1,1000,000
25 km
FIGURE 1

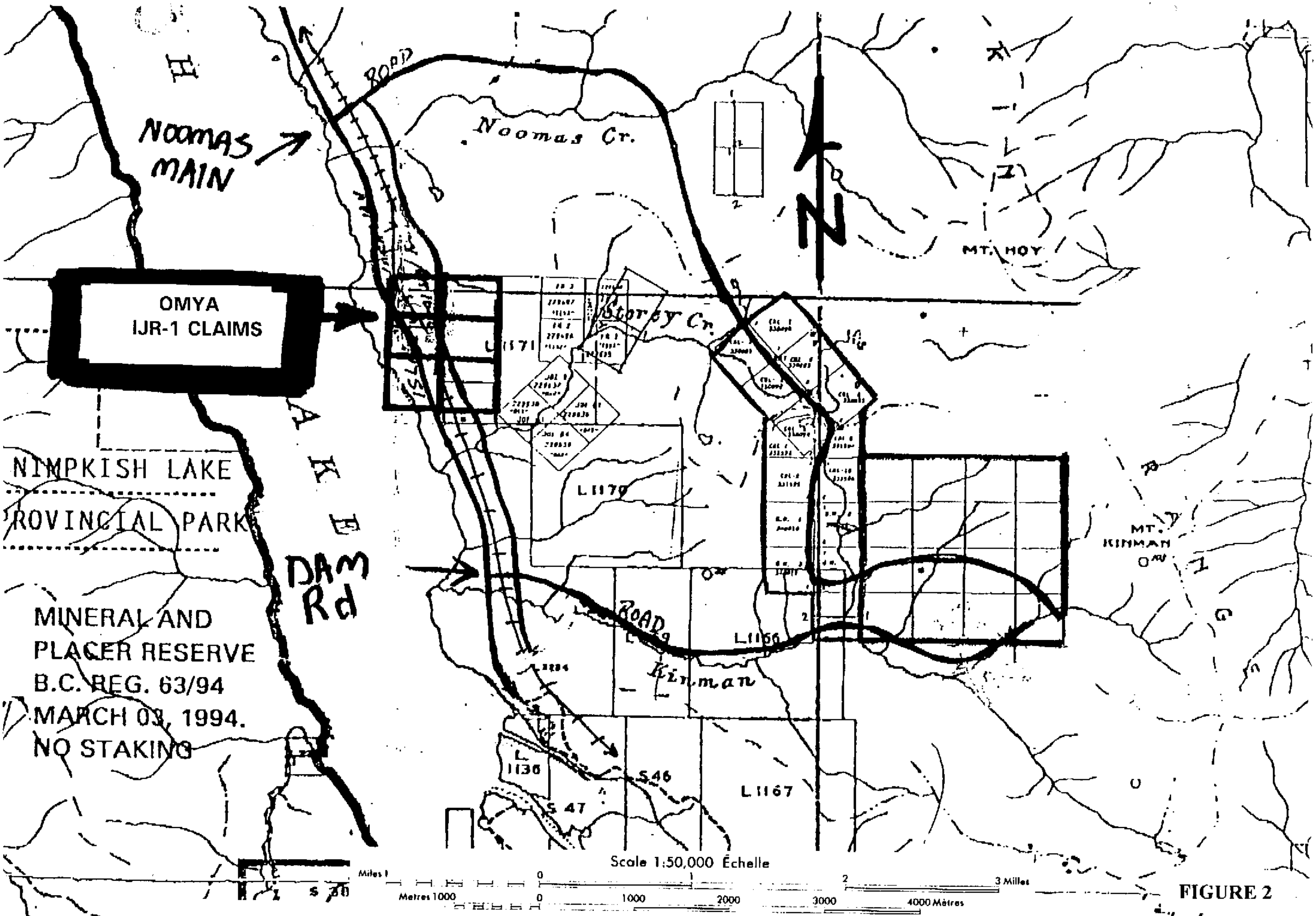


FIGURE 2

FIGURE 2. CLAIM MAP SHOWING IJR-1 CLAIM GROUP. PORTION OF NTS 92L/7 MAP SHEET SCALE 1:50,000

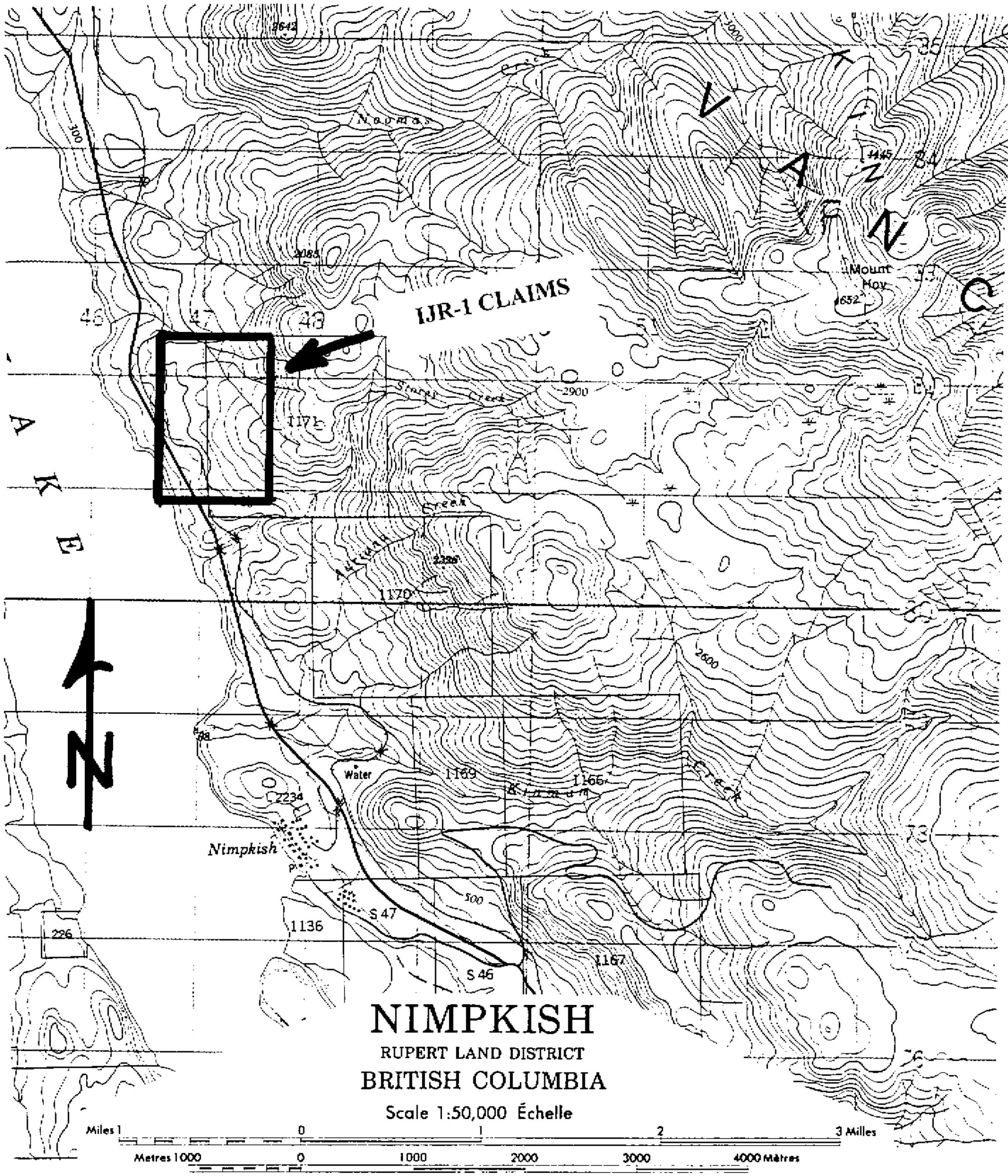


FIGURE 3. TOPOGRAPHIC MAP SHOWING CLAIMS AREA WITHIN THE NIMPKISH 1:50,000 SCALE MAP SHEET 92L/7.

FIGURE 3

logged within the past 15 years are covered by immature second growth fir. Areas which have not yet been logged are covered by thick first growth fir and cedar.

The claims are within the coastal rainforest climatic zone. Precipitation is heavy, occurring as rain during winter, spring, and summer months. Winter snow accumulates at higher elevations.

REGIONAL GEOLOGY

The northern Vancouver Island region is primarily composed of thick island arc type intermediate volcanic rock sequences, and limestone and clastic rocks of Triassic and Jurassic age, which have been intruded by Mesozoic age batholithic rocks. Figure 4 is a generalized regional geologic map.

A thick sequence of andesite and basalt of the Triassic Karmutsen Formation is overlain by limestone of the Quatsino Formation, also of Triassic age. The Quatsino is overlain by the Parsons Bay Formation, a mixed but largely fine grained clastic sedimentary sequence of latest Triassic age, which is in turn overlain by the Bonanza Group, composed of intermediate to felsic volcanic rocks of Lower Jurassic age.

All of the previous (older) rocks have been intruded by Upper Jurassic batholithic intrusive rocks of the Island intrusive series, and which range from diorite to quartz monzonite in composition. The intrusive rocks are thought to be responsible for the formation of skarns, some metalliferous deposits, and bleaching and recrystallization of susceptible limestones of the Quatsino Limestone to form white, high calcium, crystalline limestone deposits in the Bonanza Lake area.

DEPOSIT GEOLOGY

Rocks exposed in the claim area include Mesozoic rocks of the Karmutsen Formation Volcanic rock which forms the footwall, the Quatsino Limestone, divided into two members, the lower member which forms the white marble deposit, and the overlying grey limestone member, and the overlying Parsons Bay Formation and Bonanza Volcanics. The sedimentary and volcanic rocks have been intruded by plutonic rocks including Cretaceous batholithic rocks which include granitic to diorite, intrusives. Numerous basic dikes have also intruded the volcanic, carbonate and granitic rocks. Figure 6 is a generalized geologic map of the claims area.

The Mesozoic carbonate and volcanic rocks appear to have been folded into several gently undulating open folds, and several significant faults are present in the area. Contacts between the Quatsino Limestone and the footwall Karmutsen Volcanics and the overlying Parsons Bay and Bonanza Volcanics, all appear to be steeply dipping, and are interpreted as high angle faults which have juxtaposed the gently dipping stratigraphic rocks. The faults appear to have been later intruded by dikes of granitic or basic composition.

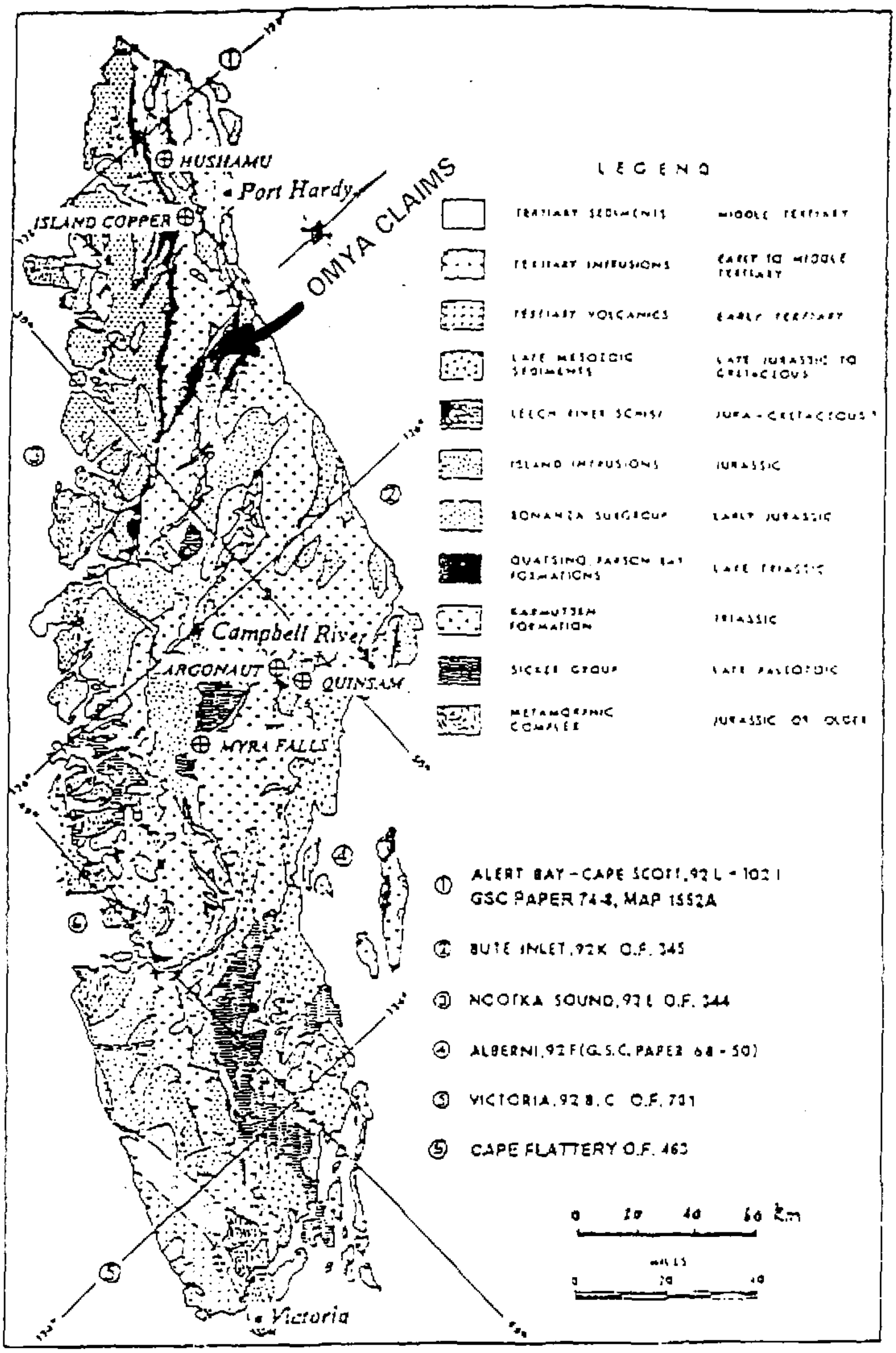


Figure 4. Geological map of Vancouver Island and index of Geological Survey of Canada mapping. After Muller, J.E., Northcote, K.E. and Carlisle, D. (1974): Geology and Mineral Deposits of Alert - Cape Scott Map-area (92L - 102I) Vancouver Island, British Columbia; *Geological Survey of Canada*, Paper 74-8, 77 pages

FIGURE 4

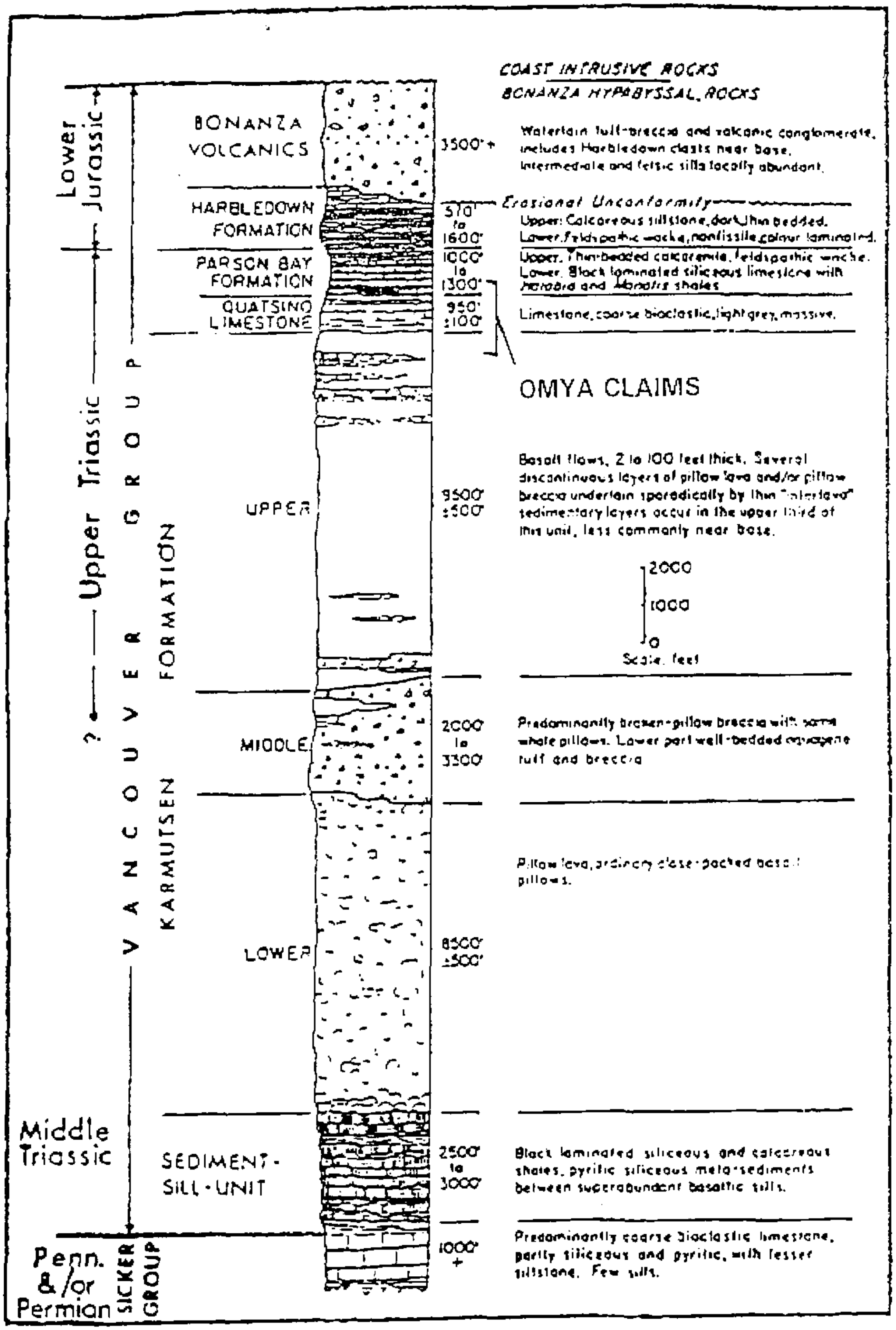


Figure 5. Major Paleozoic and Mesozoic stratigraphic units of northeastern Vancouver Island according to Donald Carlisle, *in* Muller *et al.* (1974)

FIGURE 5

TABLE 2. DESCRIPTION OF ROCK UNITS NIMPKISH CLAIMS AREA

AGE	DESCRIPTION
Triassic	**KARMUTSEN FORMATION** Buff to Greenish-grey weathering, dark green to dark grey and black, fine grained to porphyritic, massive andesite and basalt flows, sills, and dikes. Occasional pyrite present near upper contact. Upper contact ranges from conformable to unconformable and in some places is a fault, and or has been intruded.
Triassic ORE LAYERS	**QUATSINO LIMESTONE LOWER MEMBER** Thick bedded to massive, white, light grey to black weathering, light grey, off white, and white crystalline limestone, sometimes sucrossic, and medium grained calcite marble. Limestone often contains stylolites which contain pyrite. When oxidized contains occasional iron oxide stain. Unit contains occasional grey silica blebs, which may be silicified fossils. The white limestone occurs in layers 20 to 50 feet thick and is interbedded with layers of dark grey limestone. Degree of metamorphism (recrystallization) increases toward contacts with granitic intrusives.
Triassic	Thin to thick bedded, medium to dark grey limestone and marble, in layers 10 to 15 feet thick. Occurs interbedded with white limestone unit.
Triassic	**QUATSINO LIMESTONE UPPER MEMBER** Thick bedded to massive medium to very dark grey limestone and marble occasionally cherty and or silty and muddy. Occasional silica blebs (fossils), and occasional tremolite when metamorphosed to marble.
Triassic	**PARSONS BAY FORMATION** Brown, black, rusty brown and grey weathering thinly interbedded clastic sediments, including argillite, mudstone, siltstone, shale, chert and muddy limestone. Bedding planes often contain pyrite, which colors the rocks rusty brown when oxidized.
Triassic	**BONANZA VOLCANICS** Andesitic to basaltic lavas, agglomerates, tuffs and breccias.
Jurassic (?)	**INTRUSIVE** Dark green to black diabase sills, dikes and intrusives.
Jurassic	**INTRUSIVE** Coarse grained biotite quartz monzonite, and quartz diorite granitic batholithic rocks of the Island Intrusive Series.
Jurassic (?)	**SKARN** Brown weathering, garnet, epidote, chlorite, actinolite, quartz, calcite skarn. Occurs along some contacts between granite and or mafic dikes and Quatsino Limestone.
Pleistocene - Quaternary- Recent	**UNCONSOLIDATED SEDIMENTS** Alluvium, glacial deposits, talus, soil, fill, stream bed deposits, mud flows, and or other recent unconsolidated sediments.

WHITE MARBLE DEPOSIT

The white limestone deposit is formed from the lower member of the Quatsino Limestone Formation. The Quatsino forms medium to thick bedded and massively layered limestone, with interbedded grey layers. Outcrops are discontinuous, and the White layers appear to be up to 30-50 feet thick or more, and the several interbedded grey layers may be 10-20 feet thick. It is estimated that the grey layers comprise about 25% of the carbonate rock. Total thickness of the lower Quatsino is over 700 feet thick.

The Lower Quatsino Limestone has been recrystallized to medium to fine grained white to off white, and very light grey calcite marble. Numerous stylolites both oxidised and unoxidised are present, and in some areas some iron oxide is present on surface fractrures. In general, the rock in the deposit is quite similar to the metamorphosed Quatsino which forms other white limestone deposits in the area.

The deposit has been intruded by numerous east-west striking and steeply dipping mafic dikes. Many of the dikes are 5-8 feet thick, but several dikes were mapped that appear to be 50 feet thick or more. In general, the dikes do not outcrop well, and are mostly exposed only in road cuts, thus there are probably more dikes than mapped. Spacing between dikes ranges up to 100 feet, but in some places, they are closer together. Overall, the dikes may comprise 25% of the deposit.

FORMATION OF THE LIMESTONE DEPOSIT

Several processes contributed to the formation of the white, high purity limestone deposit. Limestone is a common rock type, found all over the earth, but white, high purity crystalline limestone deposits are uncommon in nature, are found only in restricted areas, and require several geologic processes over a long period of geologic time to form.

Among the processes are:

1) Deposition of originally pure limestone in high energy agitated, shallow marine environment.
2) Post depositional changes including metamorphism and/or magmatic processes to bleach and recrystallize the rock, and disperse any impurities which may have been present.
3) Structural controls including folding, faulting and orogenic processes to place the rocks in desirable structural settings.
4) Uplift and erosion.
5) Preservation thru geologic time.

Because all the geologic processes are required, deposits of high calcium white crystalline limestone are relatively uncommon in nature, and are vastly different from common limestone. Deposits of high purity, high brightness crystalline limestone suitable for high quality filler and extender applications are limited and only occur in restricted areas.

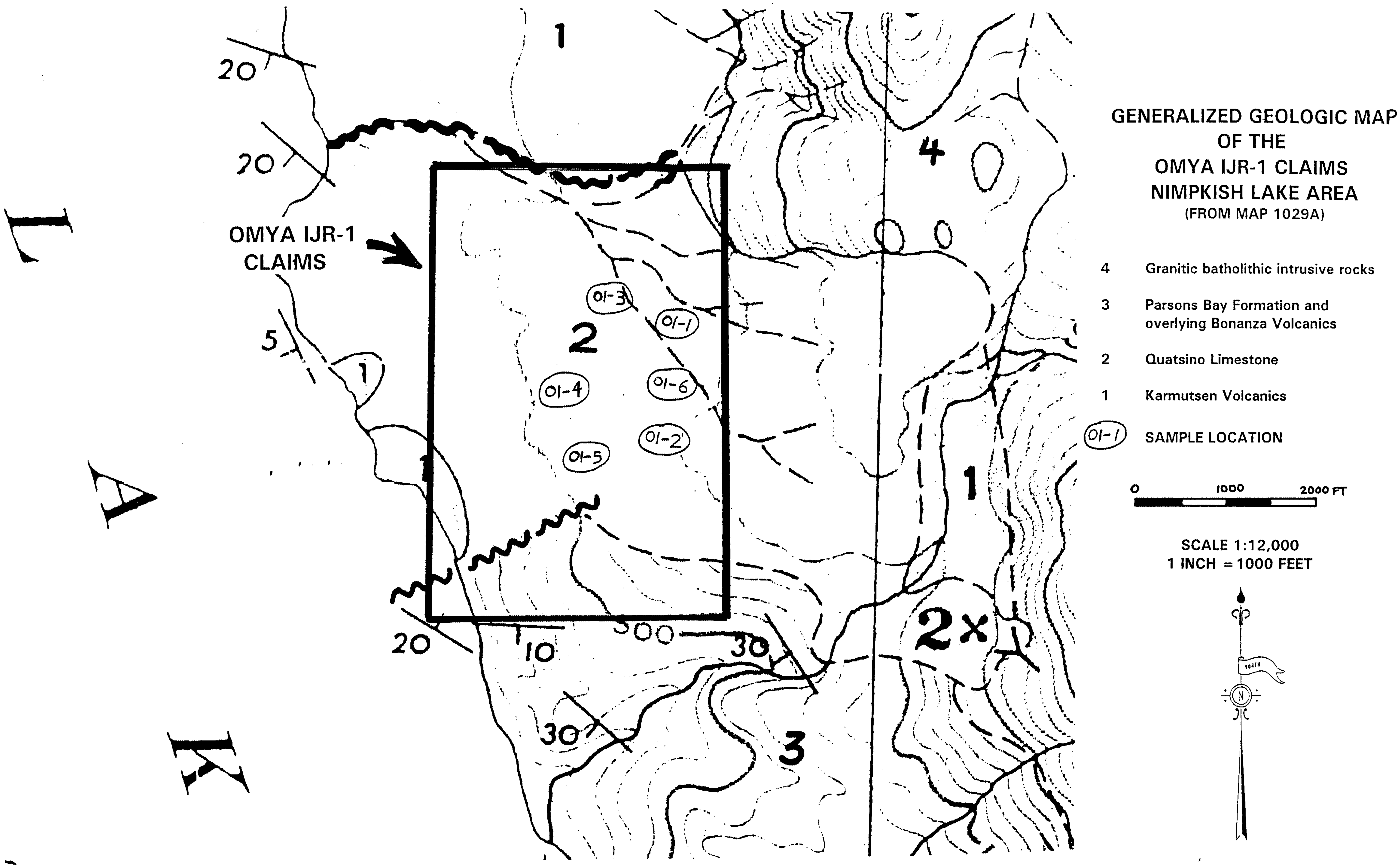


FIGURE 5. GENERALIZED GEOLOGIC MAP OF THE IJR-1 CLAIMS AREA NEAR NIMPKISH LAKE. MAP IS MODIFIED FROM MAP 1029A

FIGURE 6

USES AND SPECIFICATIONS OF HIGH BRIGHTNESS, HIGH PURITY LIMESTONE

High purity white crystalline limestones have a large number of uses and are classified as white fillers and extenders with value added characteristics. The products are finely ground, high brightness, high purity limestone, and are the whitest, purest, and most valuable per ton of all limestone products.

Desirable characteristics are high brightness (white color), low tint, uniform fine particle size, freedom from grit, and chemical purity. Color and purity are of utmost importance in virtually all applications. Limestone suitable for white fillers and extenders is limited to a minimum of 98% $CaCO_3$, and a maximum of 2% combined $MgCO_3$, SiO_2, and all other impurities combined. Brightness requirements range from low 90's to greater than 95. Tint values are generally below 3.0.

The greatest uses of fillers and extenders are paint, rubber products, putty, pottery, paper, a variety of plastics, food, flooring, PVC pipe, white ink, tooth paste, wire coating, glue, caulking compounds, resins, and polyesters. Uses in the housing industry include ceiling and wall textures, dry wall mud, joint compounds, stucco, and fiberglass roofing shingles.

As can be seen, for most uses, white fillers and extenders requires not only the most pure limestone, but also the whitest color of all limestones. The restricted nature of the deposits and the fact that products are shipped as far as 2000 miles from currently mined sources, indicates a large demand by our society for these valuable products.

SAMPLE RESULTS

Several rock outcrop samples samples were collected for analysis and brightness tests during June 2001. Sample locations are shown on Figure 6. Samples were analyzed in the Omya California Lab in Lucerne Valley California. Samples were prepared by crushing and riffle splitting to achieve the desired homogeneous sample size. Brightness and chemical tests were performed following standard protocal. Samples were ground -325 mesh fineness for brightness tests. Results are shown in Table 3.

Lab analysis indicates that brightness ranges from 88->94.5, and the tint values are less than 2.6. Acid insols range from a low of 0.26% to 1.16%. The analysis indicates the rock is very pure and lacking insoluble impurities. Lab analysis indicate overall the rock is of very good brightness and tint quality. Results generated thus far indicate the limestone is suitable for ground limestone products currently produced by Omya.

SIZE OF THE DEPOSIT

White recrystallized marble of the Quatsino is exposed in an area greater than 4500 feet X 4500 feet. From west to east the limestone extends from Nimpkish Lake, east under the highway (numerous continuous exposures in highway cuts), the logging railroad (many continuous outcrops in railroad cuts), and continues east up the hill where it is ultimately truncated by intrusive rocks.

TABLE 3. SAMPLE RESULTS IJR-1 CLAIMS NIMPKISH LAKE AREA

Miguel Guerrero
08/27/2001 03:32 PM

To: Howard Brown/PSC/PSNA@PSNA
cc: Al Brumfield/PSC/PSNA@PSNA
Subject: Nimpkish samples

Sample ID	Rx	Ry	Rz	Yi	% Acid Insol.
NIMPKISH 01-1	94.68	94.27	92.27	2.56	0.62
NIMPKISH 01-2	94.67	94.45	93.17	1.58	0.58
NIMPKISH 01-3	92.00	91.67	89.99	2.19	0.46
NIMPKISH 01-4	94.07	93.94	93.03	1.10	1.16
NIMPKISH 01-5	94.19	93.98	92.65	1.64	0.28
NIMPKISH 01-6	88.03	87.99	87.45	0.65	0.26

The carbonate outcrop is bounded by faults to the north and south. The outcrop area by the highway and the logging railroad is up to 6000 feet wide north to south, but narrows toward the eastern limit to about 1500 feet wide. For mining purposes, the portion of the limestone from the lake extending east to the logging railroad, is not accessible for mining, and thus is not considered part of the potential reserves of the deposit.

The portion of the deposit which is considered potential reserves is still quite large, and is approximately 4000 feet wide at the west limit (logging railroad), narrowing to about 1500 feet at the eastern limit. The deposit extends about 4000 feet on strike from west to east, and extends over a vertical interval of 500 feet or more.

POTENTIAL RESERVES

Because of the topography, and the geology, the deposit is essentially a triangular wedge shape, with vertical sides, and is approximately 4000 feet long (west to east), and averages 2500 feet in width, and extends over a vertical interval of at least 500 feet.

Allowing for 25% contamination from dikes, and eliminating the 25% of grey layers yields a potential in place reserve which can can be said to be quite significant. Additional study and drilling will be necessary to place the rock into the category of reserves.

SUMMARY AND RECOMMENDATION

A significant deposit of white marble was recently staked for Omya. The deposit is located 35 kilometers south of Port McNeill, and about 1 km east of the main Island Highway (Hwy 19) and accessed by good logging roads. Preliminary evaluation indicates the deposit is composed of white to off white and very light grey marble of the Quatsino Limestone formation. Several interbedded gray layers are present and may compose 25% of the rock. Numerous dikes are also present and may comprise an additional 25% of the rock.

The deposit is quite large, and is about 4000 feet long and averages 2500 feet wide, and is exposed over a vertical interval of 500 feet. Subtracting gray layers and dikes yields a very significant potential in place resource.

This reconnaisence evaluation indicates a significant deposit of white marble is preset on the IJR-1 claims (Nimpkish claims).

Future assessment work should include additional detailed mapping and sampling to further evaluate the deposit. After additional mapping and sampling are completed several core holes should be drilled to test quality and continuity of the deposit at depth.

PUBLISHED REFERENCES CITED

Gunning, H.C., 1954, Map 1029A, Geology of Nimpkish 1:50,000 sheet (92L7); Canada Department of Mines and Technical Surveys, Geological Survey of Canada, Scale 1:50,000.

Muller, J.E., Northcote, K. E., and Carlisle, D., 1974, Geology and Mineral Deposits of Alert-Cape Scott Map area (92L-1021), Vancouver Island, British Columbia; Geological society of Canada, Paper 74-8, 77 pages.

STATEMENT OF WORK PERFORMED AND COSTS

TYPE OF WORK	WHEN ACCOMPLISHED	QUANTITY (DAYS)	UNIT COST/DAY	TOTAL COST
FIELD WORK				
Geologic evaluation and sampling	October 2000 June 2001	3 Days	$400/day	$1,200.00
Lodging and meals	October 2000, June 2001	3 days	$100/day	$ 300.00
4 wd vehicle rental and fuel	October 2000 June 2001	3 days	100/day	$ 300.00
RT travel Vancouver to Port McNeill	October 2000 June 2001			$ 300.00
OFFICE COSTS				
Assessment report preparation	Sept 2001	3 days	$400/day	$1,200.00
Photo Develop and copies	Sept 2001		$80.00	$ 80.00
Shipping of samples	October 2000 June 2001		$120.00	$ 120.00
LABORATORY COSTS				
Sample preparation crush, riffle split	August 2001	6 samples	$75/hr	$ 450.00
Pulverize, sieve, dry grind, brightness and tint	August 2001	6 samples	180/hr	$1,080.00
Acid insoluble analysis sample prep and analysis	August 2001	6 samples	180/hr	$ 540.00

Lab reports preparation	October 2000 August 2001		Included in lab analysis costs	
SUBTOTAL				**$5,570.00**
+ 10% overhead				**$ 550.00**
TOTAL COSTS DIRECTLY APPLICABLE TO ASSESSMENT				**$6,120.00**

HOWARD J. BROWN, GEOLOGIST
SUMMARY OF PROFESSIONAL EXPERIENCE
July 2001

Geology Graduate of California State University, Northridge, receiving a Bachelor Degree in 1975.

More than 24 years professional experience in positions of responsibility as an Exploration and Mining Geologist and Mining Engineer in the mining industry in Western North America. Experience includes Uranium, Gold, and a large variety of Industrial Minerals.

Employed by OMYA (California) Inc. since 1979. Previously employed by Noranda Exploration, and Freeport Gold Co. (FMC).

I have participated in over 115 mineral evaluation and exploration projects in North America, ranging from local to regional in extent, from British Columbia to Southern Mexico. Projects have included all phases of conceptual model development thru reconnaisence and detailed geologic mapping, sampling, drilling, discovery and orebody delineation of economically minable deposits, of both metallic and a large number of industrial mineral deposits.

Project Permitting experiences include preparation, approval and permitting for several large scale currently active industrial mineral mines, and preparation and approval and successful implementation of detailed comprehensive phased reclamation plans for large scale multi-mine operations in several states and Canada, and thru several regulatory agencies at various Federal, State and Local levels.

Mine design and engineering experience includes all development aspects of ten (10) currently operational mines in several states, including all aspects of compliance with regulations, geotechnical analysis, geology and reserve definition, mine engineering and planning including conceptual and detailed short and long term engineering design, equipment selection, economics, and reclamation.

Mine management and production experience includes both long and short term ore production and mine development, including planning, scheduling, mine mapping, equipment selection, inventory calculations and management, cost analysis, and budget preparation.

Experience in British Columbia includes geologic mapping and evaluation of industrial mineral deposits of British Columbia and northern Vancouver Island since 1982, and participation in several drilling projects on Vancouver Island. I have evaluated more than 25 limestone deposits in British Columbia and Vancouver Island.

Author of more than 22 published papers and abstracts on a variety of geological and economic geology topics for various professional societies and technical journals.

Considered by peers to be an expert on Limestone Deposits in Western North America.