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EVALUATION OF MINERAL CLAIMS

KENNEDY RIVER AREA
Alberni Mining Division
British Columbia

FOR

GOLDEN SPINNAKER MINERALS CORPORATION

BY

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June 26, 1989

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SUMMARY

Golden Spinnaker Minerals Corporation holds interests in five Modified Grid mineral claims near Kennedy River 35 km northeast of Ucluelet on southwestern Vancouver Island,

Exploration work to date on the various claims ranges from minimal through detailed surface sampling, mechanical trenching and diamond drilling.

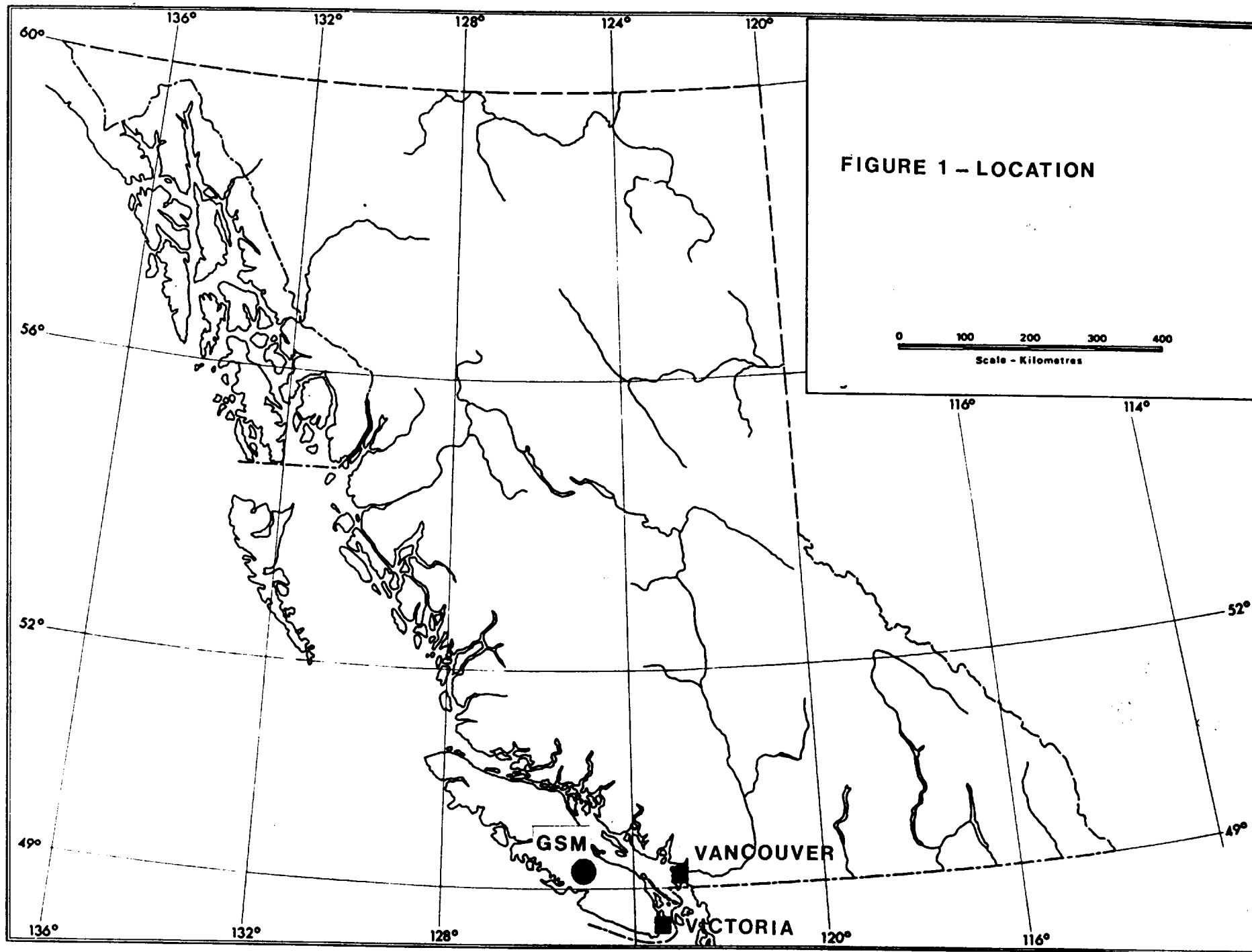
Exploration targets in the Kennedy River area are quartz veins containing appreciable gold (and silver) values and developed in shear zones proximal to regional faults which transect late Triassic volcanic rocks.

Two of the five claims, Giant Bear and Blaster, have known quartz veins with locally significant gold and silver values. Average vein widths generally do not exceed 0.5 metre and good precious metal grades will be required to make a viable deposit. Work to date indicates that such grades may exist in shoots on the two properties and additional exploratory work is warranted.

Evaluation of the present value of the various claims has been undertaken and assigned values include acquisition costs, exploration expenditures to date and the value of recommended additional exploration programs if applicable.

Estimated present value of mineral claims held by Golden Spinnaker Minerals Corporation is \$347,856.98.

N.C. Carter, Ph.D. P.Eng.
June 26, 1989



INTRODUCTION

This evaluation of the various mineral claims located near Kennedy River on Vancouver Island has been prepared at the request of Golden Spinnaker Minerals Corporation.

The report is based on a personal visit to some of the claims described herein December 7, 1989, and on progress reports of recent exploration work prepared on behalf of the Company by David Pawliuk, P.Geol. Property acquisition costs and exploration expenditures referred to in this report are as provided by Golden Spinnaker Minerals Corporation.

PROPERTY LOCATION AND ACCESS

The mineral properties in which Golden Spinnaker Minerals Corporation has an interest are situated near the southwest coast of Vancouver Island (Figure 1) at Latitude $49^{\circ}10'$ North, Longitude $125^{\circ}27'$ West in NTS map-area 92F/3W.

The mineral claims, 35 km northeast of Ucluelet, are accessible from Highway 4 by a system of logging roads west of Kennedy River (Figure 2).

MINERAL PROPERTIES

The five Modified Grid mineral claims in which Golden Spinnaker Minerals Corporation holds an interest are located in the Alberni Mining Division on Vancouver Island. The mineral claims are shown on Figure 3 and details are as follows:

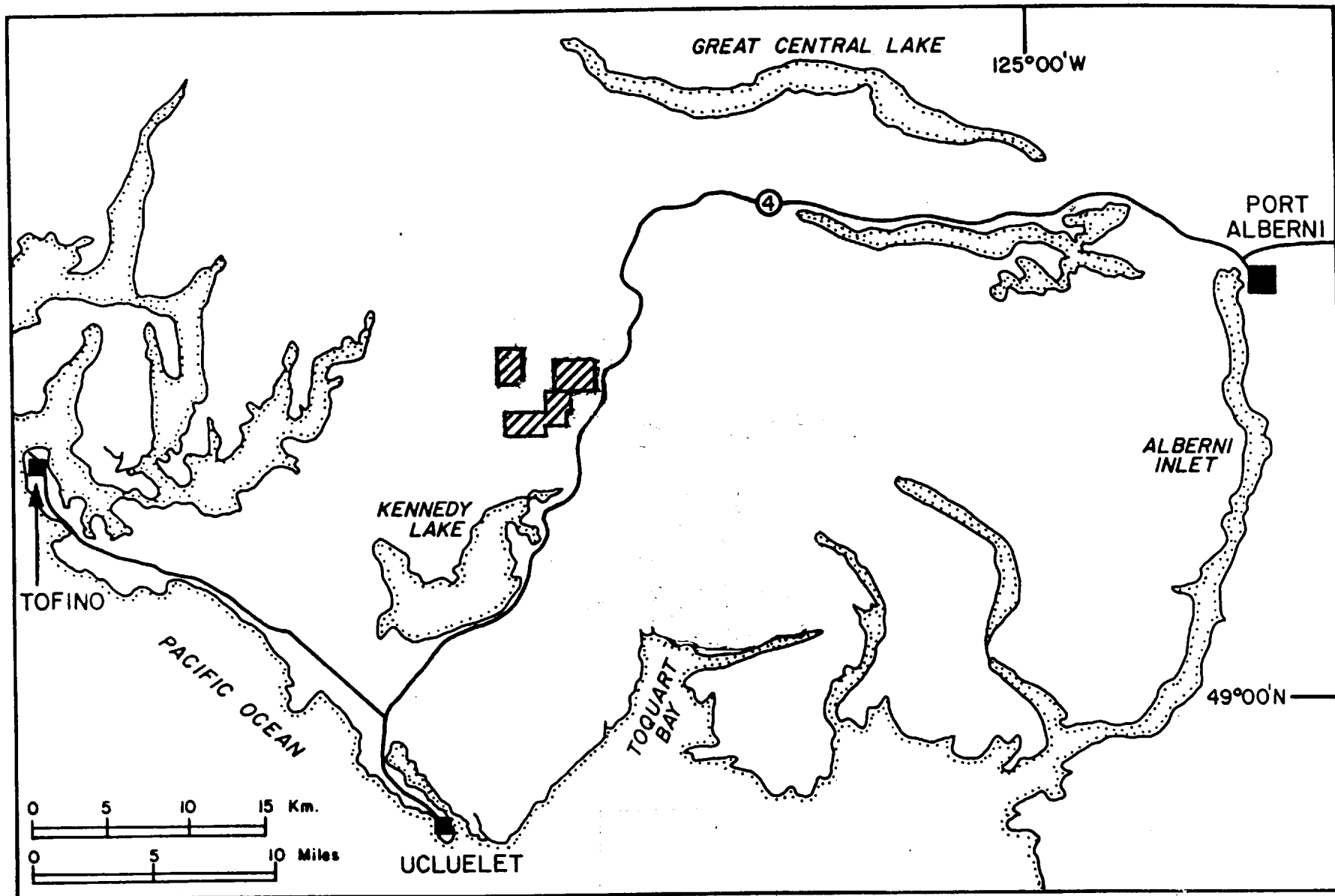


FIGURE 2 — GOLDEN SPINNAKER MINERALS PROPERTIES

<u>Claim Name</u>	<u>Record Number</u>	<u>Units</u>	<u>Date of Record</u>
Star	2861	6	March 26, 1986
Giant Bear	2862	15	" "
Blaster	2899	20	May 9, 1986
Star 1	3098	18	January 9, 1987
Giant Bear 3	3103	20	January 19, 1987

The Company holds a 100% interest in the Star, Star 1 and Giant Bear claims; the Blaster and Giant Bear 3 claims are owned jointly with Nationwide Gold Mines Corporation.

EVALUATION METHODS

Methodology used in assessing the value of Golden Spinnaker Minerals Corporation's properties follows that proposed by Roscoe (1986).

Property acquisition costs, whether by staking or purchase, are included in the value of the property provided the claims are being maintained in good standing. Exploration costs incurred on the properties are also included provided encouraging results have been obtained and additional work has been recommended. A value is also placed on recommended work programs based on assessment of previous exploration programs.

GEOLOGICAL SETTING

Vancouver Island makes up the southern part of the Insular belt, the westernmost tectonic subdivision of the Canadian Cordillera. The southern Insular belt is dominated by Paleozoic and Mesozoic volcanic-plutonic complexes overlain on the east

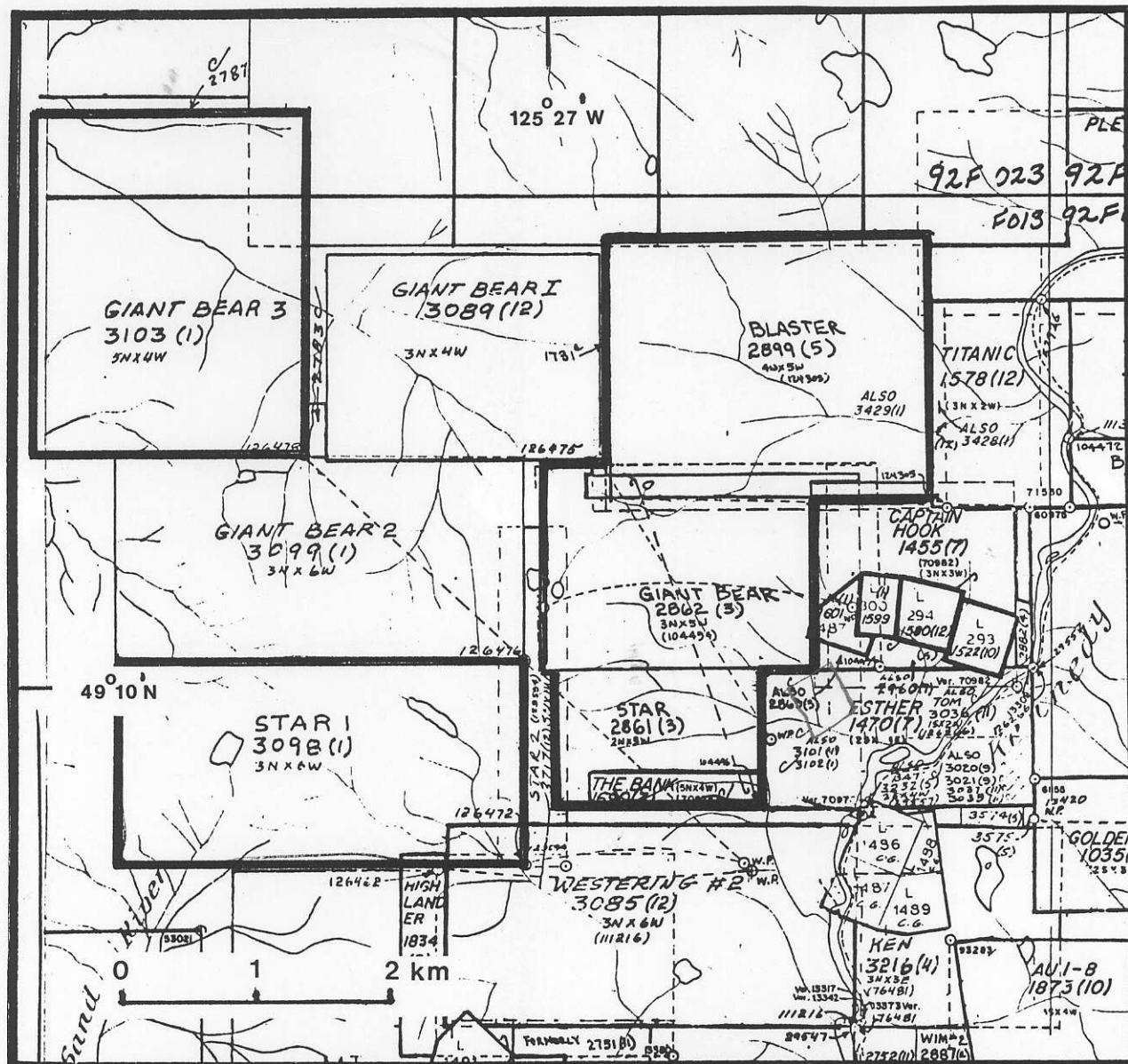


FIGURE 3 — MINERAL CLAIMS

coast of Vancouver Island by clastic sedimentary rocks of Cretaceous age. Tertiary basic volcanic rocks are prevalent in the south Island area and granitic intrusions of similar age are widespread along the west coast.

Vancouver Island hosts a variety of mineral deposits, including volcanogenic massive sulfides at Buttle Lake and near Duncan, which are hosted by late Paleozoic Sicker Group volcanic rocks. Island Copper near Port Hardy is a porphyry copper-molybdenum deposit with significant by-product gold and which is related to Mesozoic subvolcanic intrusions. Iron-copper skarns, hosted by late Triassic limestones marginal to granitic intrusions, are numerous in the central and northern Island areas.

The west coast of Vancouver Island is noted for gold-bearing vein deposits. Many of these are at least spatially related to Tertiary granitic intrusions, the most notable examples being the Zeballos camp and the Kennedy Lake and Mount Washington areas.

Oldest rocks in the Kennedy Lake - Long Beach area are Karmutsen mafic volcanic rocks of late Triassic age. A limestone-clastic sedimentary sequence lies between the Karmutsen Formation and Bonanza Group intermediate to felsic volcanics. Island granitic intrusions, comagmatic with Bonanza volcanics, underlie broad areas west and east of Kennedy Lake. These are in part gneissic rocks believed to have been derived from older Paleozoic formations. Tertiary granitic intrusions occur as elongate stocks north and south of Kennedy Lake.

Mineral deposits in the area include the Catface porphyry copper-molybdenum prospect north of Tofino which is related to a Tertiary granite and the formerly producing Brynnor iron skarn deposit several miles south of Kennedy Lake. A number of gold-bearing quartz veins occur principally in Karmutsen and Bonanza volcanics and in granitic rocks in the Kennedy Lake area and north of Tofino.

Quartz veins near Kennedy Lake occupy east, northeast and north-trending shear zones believed to be tensional features marginal to west-northwest regional faults which transect all rock types. Quartz veins within the shear zones dip north and west at moderate to steep angles. Vein widths are variable, ranging from 10 cm to 2 metres, and averaging 0.5 metre. Sulfide contents, mainly as pyrite, pyrrhotite and lesser chalcopyrite and sphalerite, range from 2 to 20%. Gold values are associated with sulfide minerals.

Shear zones and quartz veins are developed mainly in Karmutsen intermediate to basic volcanics and to a lesser degree in Island intrusion granitic rocks. Wallrocks are bleached and altered 50 cm outward from vein contacts and principal alteration minerals include silica, chlorite, carbonate and sericite.

Three of the gold-bearing veins in the Kennedy River area (Leora, Rose Marie, Tommy K) have yielded limited production totalling 396 tons grading 0.732 oz/ton gold and 0.40 oz/ton silver.

VALUATION OF MINERAL CLAIMS

Giant Bear

Golden Spinnaker Minerals Corporation holds a 100% interest in this 15 unit Modified Grid mineral claim which actually covers an area of approximately 11 mineral claim units (Figure 3). The claim adjoins the Captain Hook claim of Nationwide Gold Mines Corporation and covers the southwest extension of a significant gold-bearing structure known as the Shack vein.

Previous Work

Work carried out in 1987 and 1988 in the southeastern part of the Giant Bear claim has included geological mapping , geophysical surveys (VLF-EM, magnetometer, IP), backhoe trenching, detailed surface sampling, one 154 metre rotary hammer drill hole and nine diamond drill holes totalling 445.5 metres.

Geology and Mineralization

The following description is after Pavliuk (1988,1989):

The southeast part of the Giant Bear claim is underlain principally by late Triassic Karmutsen formation andesitic and basaltic fragmental rocks with lesser felsic and feldspar porphyry flows and sedimentary rocks including limestone and greywacke which are locally converted to skarn.

A regional west-northwest fault (Mine Creek Fault) passes through the southwest part of the adjacent Captain Hook claim (Figure 3) and the principal mineralized zone on the Captain Hook

and Giant Bear claims, the Shack vein, occupies a southwest splay shear zone off the major fault.

The southeast part of the Giant Bear claim is known to host two styles of mineralization, of which the Shack gold-silver bearing vein is one. The other is represented by a skarn zone developed in volcanic rocks and calcareous sediments near the mutual boundary of the Giant Bear and Captain Hook mineral claims. Metallic minerals include magnetite, chalcopyrite and sphalerite and limited sampling to date has yielded gold values in the 0.042 - 0.068 oz/ton range and silver values of up to 1.18 oz/ton.

The most significant mineralized structure on the Giant Bear claim is the Shack vein which has an average width of 0.4 metre and occupies a northeast striking shear zone which, as noted previously, is a splay off the regional Mine Creek Fault. The vein has sheared contacts with altered wallrocks and dips steeply north.

The light grey quartz vein contains 3-10% sulfide minerals which in decreasing order of abundance include pyrite, pyrrhotite, chalcopyrite and sphalerite. Wallrocks adjacent to the vein contain 2-10% disseminated pyrite and are silicified over a 2 metre interval outward from the vein.

The Shack vein on the Giant Bear claim extends northeasterly into the Captain Hook claim. Total known strike length on both claims is 160 metres of which slightly more than half or 90 metres is thought to be within the Giant Bear claim. The mutual claim boundary is imprecisely known; the surveyed boundary has been

destroyed by recent logging activity.

That portion of the Shack vein within the Giant Bear claim has been tested by detailed surface sampling in two areas at one metre intervals and over an 18 metre strike length. Weighted average grades of 19 samples are 0.633 oz/ton gold and 1.15 oz/ton silver over an average width of 0.46 metre.

Better grades are found near the eastern boundary of the claim where a structural discontinuity is indicated both on surface and in drill holes on the adjacent Captain Hook claim.

Eight diamond drill holes have tested the Shack vein on the Giant Bear claim over an 80 metre strike length and to a vertical depth of between 16 and 52 metres. Best grades intersected were from two holes near the eastern claim boundary which yielded 0.659 oz/ton gold, 4.80 oz/ton silver, 1.92% copper over a 1.9 metres core length and 1.213 oz/ton gold, 2.99 oz/ton silver and 1.26% copper over 0.88 metre. Other vein intersections over core lengths of 0.19 - 0.61 metre had grades of 0.005 - 0.098 oz/ton gold and 0.01 - 0.31 oz/ton silver. Wallrocks adjacent to the vein in one hole drilled near the known southwestern limits of the structure assayed 0.026 oz/ton gold and 0.02 oz/ton silver over 0.56 metre.

One hole, drilled to test a skarn zone north of the Shack vein, did not intersect significant sulfide mineralization.

One rotary hammer drill hole was drilled to test the down-dip potential of the Shack vein below two drill holes containing good gold-silver grades and referred to earlier. This hole

apparently intersected the structure at a vertical depth of 132 metres; gold and silver values were low.

Geophysical surveys to date have shown VLF-EM to be useful in identifying the fault zone hosting the gold-silver bearing quartz vein. A VLF-EM conductor representing a possible second fault structure is situated near the logging road less than 100 metres north of the Shack vein.

Magnetic surveys were found to be of limited value and IP surveys yielded mixed results.

Recommended Program

A program of bulk sampling, geological mapping and diamond drilling has been recommended for the Giant Bear claim at an estimated cost of \$224,000 (Pawliuk, 1989). The diamond drilling proposed consists of three short holes to test the VLF-EM conductor to the north of the Shack vein,

The writer concurs with this recommendation and further recommends an expanded program of diamond drilling to further test the Shack vein to depth and along strike to the southwest, ideally with holes at 15 metre spacings. This work should be undertaken prior to bulk sampling. Estimated cost of the drilling program is \$150,000.

Assigned Value

Acquisition Costs	\$2,000.00
Expenditures to Date	\$53,246.75
Recommended Program	<u>\$150,000.00</u>
Total	\$205,246.75

Blaster

Golden Spinnaker Minerals Corporation holds a 50% interest in this Modified Grid mineral claim of 20 units. Ownership is shared with Nationwide Gold Mines Limited.

Previous Work

Trenching, sampling and two VLF-EM profiles were completed on two quartz vein structures in the southeast part of the Blaster claim in late 1987 - early 1988. One of the veins was also tested by fourteen inclined diamond drill holes totalling 819 metres.

Geology and Mineralization

The following description is after Pawliuk(1988):

The Blaster claim is underlain by late Triassic Karmutsen formation andesites which have been locally intruded by quartz diorites. A regional west-northwest fault zone (Canoe Creek Fault) extends through the central part of the claim. Both the volcanic and intrusive rocks are variably sheared and brecciated along the fault zone and wallrocks are bleached and silicified over several metres outward from the fault.

Two quartz vein structures are known within and adjacent to the Canoe Creek Fault. The 0.35 - 0.75 metre wide Elite vein occupies a spaly fault 100 metres north of the major fault zone and is intermittently exposed over an east to northeast trending strike length of 75 metres. The vein, which dips steeply north, has sharp, sometimes sheared contacts with brecciated and bleached

andesite and quartz diorite wallrocks.

The quartz vein contains between 10 and 25% sulfide minerals, principally pyrite and pyrrhotite with lesser chalcopyrite, sphalerite and arsenopyrite.

Detailed surface sampling at 1 metre intervals in two exposed sections of the vein yielded weighted average grades of 0.78 oz/ton gold over an average width of 0.39 metre and along a strike length of 10 metres, and 1.28 oz/ton gold over an average width of 0.54 metre and over a strike length of 27 metres. (Pawliuk, 1988). Silver grades are generally less than 1 oz/ton.

Twelve drill holes intersected the Elite vein at vertical depths of between 15 and 45 metres below the surface exposures. Gold values were obtained from most holes drilled and ranged from 0.032 oz/ton over 0.5 metre to 0.326 oz/ton over 0.28 metre. The zone appears to be open along strike to the northeast and possibly to depth.

The Elite II vein, within the Canoe Creek Fault, is 400 metres west of the Elite vein. The vein consists of irregular quartz lenses and pods within a zone of bleached and silicified rocks. The zone is intermittently exposed over a strike length of 200 metres. Gold (and silver) values are directly related to the amount of disseminated pyrite. Sampling at 1 metre intervals over 7 metres of strike length yielded gold values of between 0.064 oz/ton over 0.30 metre and 0.508 oz/ton over 1.10 metre.

VLF-EM surveys were successful in detecting the fault zones which host the veins.

Recommended Program

Pawliuk (1988) has recommended additional work for the Blaster claim consisting of geological mapping, prospecting, VLF-EM surveys, diamond drilling and bulk sampling at an estimated cost of \$150,144.

In view of the encouraging results to date, particularly on the Elite vein, plus the obvious good potential for the discovery of additional gold-bearing zones on the claim, the writer concurs with the recommended program.

Assigned Value

Acquisition Costs	\$15,000.00
Expenditures to Date	\$94,086.46
Recommended Program	<u>\$150,144.00</u>

Total \$259,230.46

Golden Spinnaker Minerals' 50% share - \$129,615.23

Giant Bear 3

Golden Spinnaker Minerals Corporation holds a 50% interest in this Modified Grid mineral claim of 20 units northwest of the Company's other claims in the area. Ownership is shared with Nationwide Gold Mines Corporation.

Previous Work

No work has been done on this claim since its location in 1987.

Geology and Mineralization

The Giant Bear 3 claim, underlain by Karmutsen formation volcanic rocks, covers the extension of the regional west-northwest Mine Creek Fault, adjacent to which are a number of known gold-

bearing quartz veins.

Assigned Value

Acquisition Costs	\$2,200.00
Expenditures to Date	-
Recommended Program	-

Total \$2,200.00

Golden Spinnaker Minerals' 50% share - \$1,100.00

Star and Star 1 Claims

The Company holds a 100% interest in these two Modified Grid mineral claims consisting of 6 and 18 units respectively and situated in the southern part of the property holdings (Figure 3).

Previous Work

Apparently only limited work has been carried out on these claims. Both are in good standing through 1990 and it is assumed that necessary assessment work has been completed.

Geology and Mineralization

The Star claim, underlain by Karmutsen formation volcanic rocks, covers a possible extension of the northeast-southwest splay fault hosting the Shack gold-silver vein on the Captain Hook and Giant Bear claims.

The Star 1 claim is in part underlain by intermediate to felsic volcanic rocks of the Bonanza Group which are transected by a regional west-northwest fault parallel to the Mine Creek and Canoe Creek Faults.

Assigned Value

The value of the Star and Star 1 claims includes acquisition costs and assessment work filed to maintain the claims in good standing through 1990.

Acquisition Costs	\$1,095.00
Assessment Work	<u>\$10,800.00</u>
Total	\$11,895.00

REFERENCES

- Pawliuk, David J. (1988): Geology and Geophysical Surveys on the Captain Hook Mineral Claim - for Nationwide Gold Mines Corporation
- _____ (1988): Geophysical and Geochemical Surveys and Geology on the Titanic Mineral Claim - for Nationwide Gold Mines Corporation
- _____ (1988): Diamond Drilling, Geology, Geophysical and Geochemical Surveys on the Blaster Mineral Claim - for Nationwide Gold Mines Corporation and Golden Spinnaker Minerals Corporation.
- _____ (1989): Drilling, Geology and Geophysical Surveys on the Giant Bear and Captain Hook Mineral Claims - for Nationwide Gold Mines Corporation and Golden Spinnaker Minerals Corporation
- Roscoe, William E. (1986): Getting Your Money's Worth, in Northern Miner Magazine, February 1986, pp.17-21

CERTIFICATE

I, NICHOLAS C. CARTER, of Victoria, British Columbia, do hereby certify that:

1. I am a Consulting Geologist registered with the Association of Professional Engineers of British Columbia since 1966.
2. I am a graduate of the University of New Brunswick with B.Sc. (1960), Michigan Technological University with M.S. (1962) and the University of British Columbia with Ph.D. (1974).
3. I have practised my profession in eastern and western Canada and in parts of the United States for more than 25 years.
4. This report is based on progress reports and financial data provided by Golden Spinnaker Minerals Corporation and on a visit to some of the Kennedy River area claims December 7, 1988.
5. I have no interest, direct or indirect, in any of the mineral claims described herein, or in Golden Spinnaker Minerals Corporation or any of its affiliates.
6. Permission is hereby granted to Golden Spinnaker Minerals Corporation to use this report in support of any filing with regulatory agencies.

N.C. Carter, Ph.D. P.Eng.

Victoria, B.C.
June 26, 1989

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