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GEOLOGICAL REPORT
ON THE
MACKTUSH PROPERTY
Alberni Inlet
Alberni Mining Division
Vancouver Island
British Columbia

Latitude 49°08' North
Longitude 124°52' West
NTS 92F/2W

FOR
SYMC RESOURCES LTD.

BY
N.C. CARTER, PH.D. P.ENG.
January 17, 1994

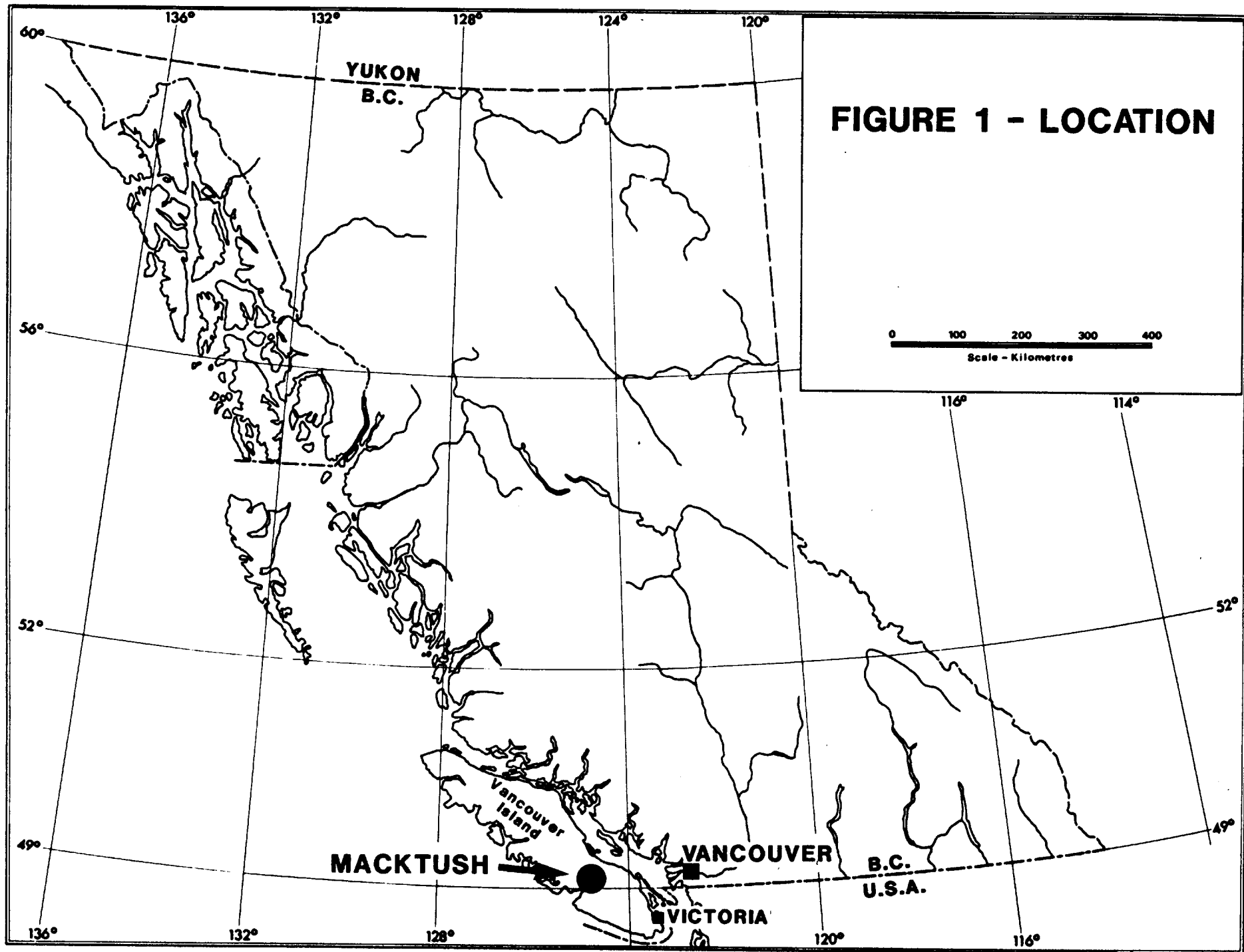
N.C. CARTER, Ph.D., P.Eng.
CONSULTING GEOLOGIST

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INTRODUCTION

SYMC Resources Ltd. owns the Macktush property which consists of 7 Modified Grid mineral claims and is situated south of Port Alberni on Vancouver Island.

This report, prepared at the request of SYMC Resources Ltd., is a revision of two earlier reports on the property dated July 16, 1990 and July 10, 1991. These reports were based on examinations of parts of the Macktush property carried out by the writer April 26 and June 20 of 1990 and June 10, 1991 and on a review of results of previous exploration work and other studies undertaken on the property since 1982. The two previous reports and the present one include a compilation of previous surface sampling and diamond drilling prepared by John Wilson, FGAC, who also supervised a survey of part of the property.

Four previous diamond drill holes were re-logged; three by John Wilson and one by the writer which included some sampling. These data have been incorporated into this report.

Recent excavator trenching, carried out in the central property area, was inspected by the writer July 28, 1993.

LOCATION AND ACCESS

The Macktush property is situated 15 km south of Port Alberni on southern Vancouver Island (Figure 1). The mineral

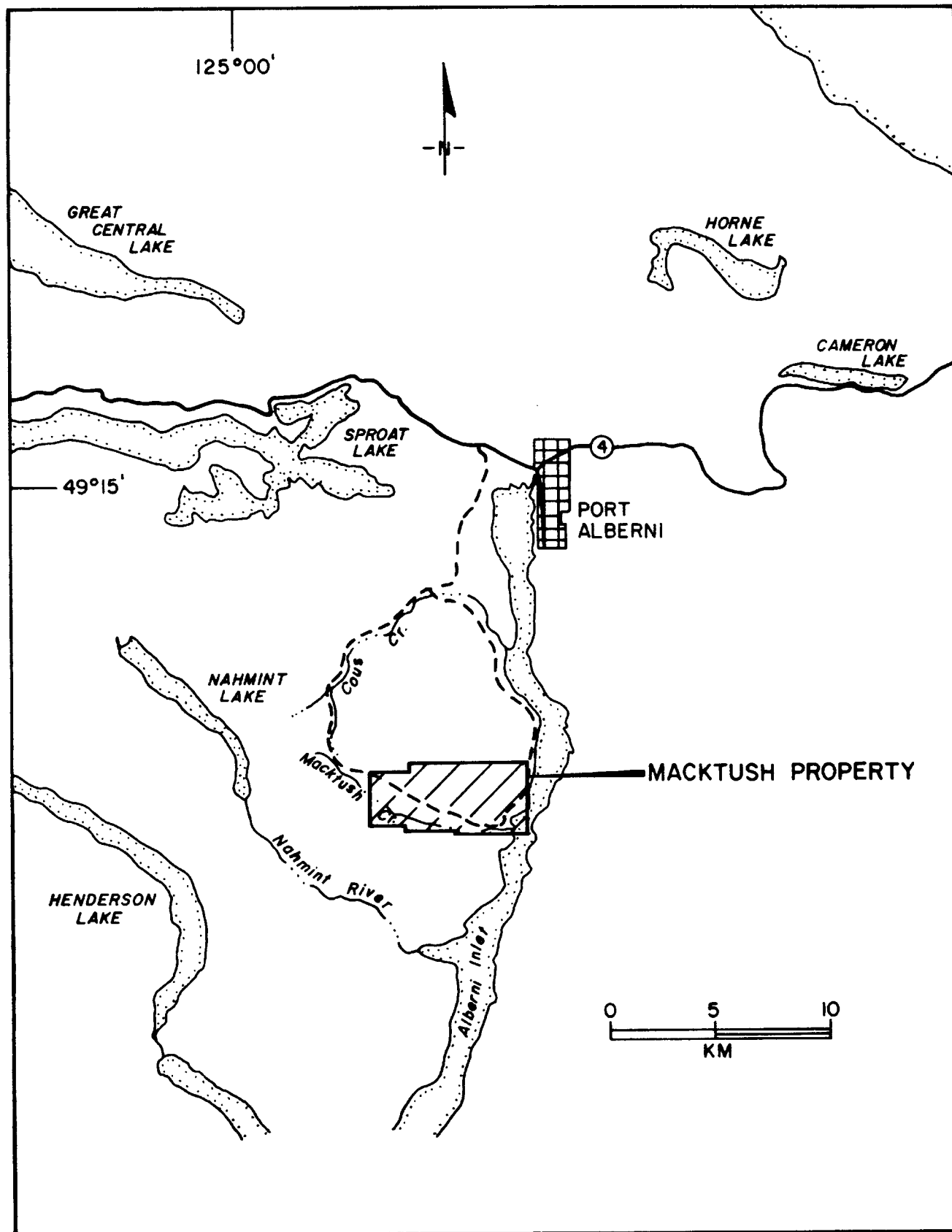


FIGURE 2 - LOCATION - MACKTUSH PROPERTY

claims are located on the west side of Alberni Inlet immediately north of Macktush Creek (Figure 2) in NTS map-area 92F/2W. The geographic centre of the property is at latitude 49°08' North and longitude 124°52' West.

Access to the property is by highway and road from Port Alberni by way of MacMillan Bloedel Limited Sproat Lake Woodlands Division Main roads along Cous and Macktush Creeks or a shore road along Alberni Inlet (Figure 2).

The mineral claims are situated in previously logged areas and access to most parts of the property is afforded by numerous logging roads.

MINERAL PROPERTY

The Macktush property consists of 7 Modified Grid (4-post) mineral claims (99 units) located in the Alberni Mining Division.

Since the preparation of the previous reports, three of the claims, COPPER 300, 400 and 500 (Figure 3) have been allowed to lapse.

No claim posts or lines on the Macktush property have been examined by the writer but the claims are believed to have been located in accordance with procedures as specified in the Mineral Tenure Act Regulations of the Province of British Columbia. According to Mineral Titles maps, some

overlapping of several of the claims is evident (Figure 3).

Details of the mineral claims are as follows:

<u>Claim Name</u>	<u>Record Number</u>	<u>Units</u>	<u>Expiry Date</u>
COPPER #100	200210	12	October 31,1996
COPPER #101	200211	9	October 31,1995
COPPER #102	200212	16	October 31,1995
COPPER #103	200213	12	October 31,1995
COPPER #104	200214	20	October 31,1995
COPPER #105	200215	20	October 31,1995
COPPER #50	200279	10	February 13,1995

PHYSICAL FEATURES

Mineral claims comprising the Macktush property cover an area of moderate to steep relief west of Alberni Inlet (Figure 3). Elevations range from sea level to 960 metres in the western property area.

Steeper slopes are found north of Macktush Creek, west of Alberni Inlet and marginal to a number of drainages flowing east to Alberni Inlet. Much of the claims area has been logged and bedrock is well exposed along logging roads, major drainages and some of the steeper slopes.

The climate is typical of the southwest coast of Vancouver Island with abundant rainfall in the fall and winter months. Mild winters allow for work on the property most months of the year.

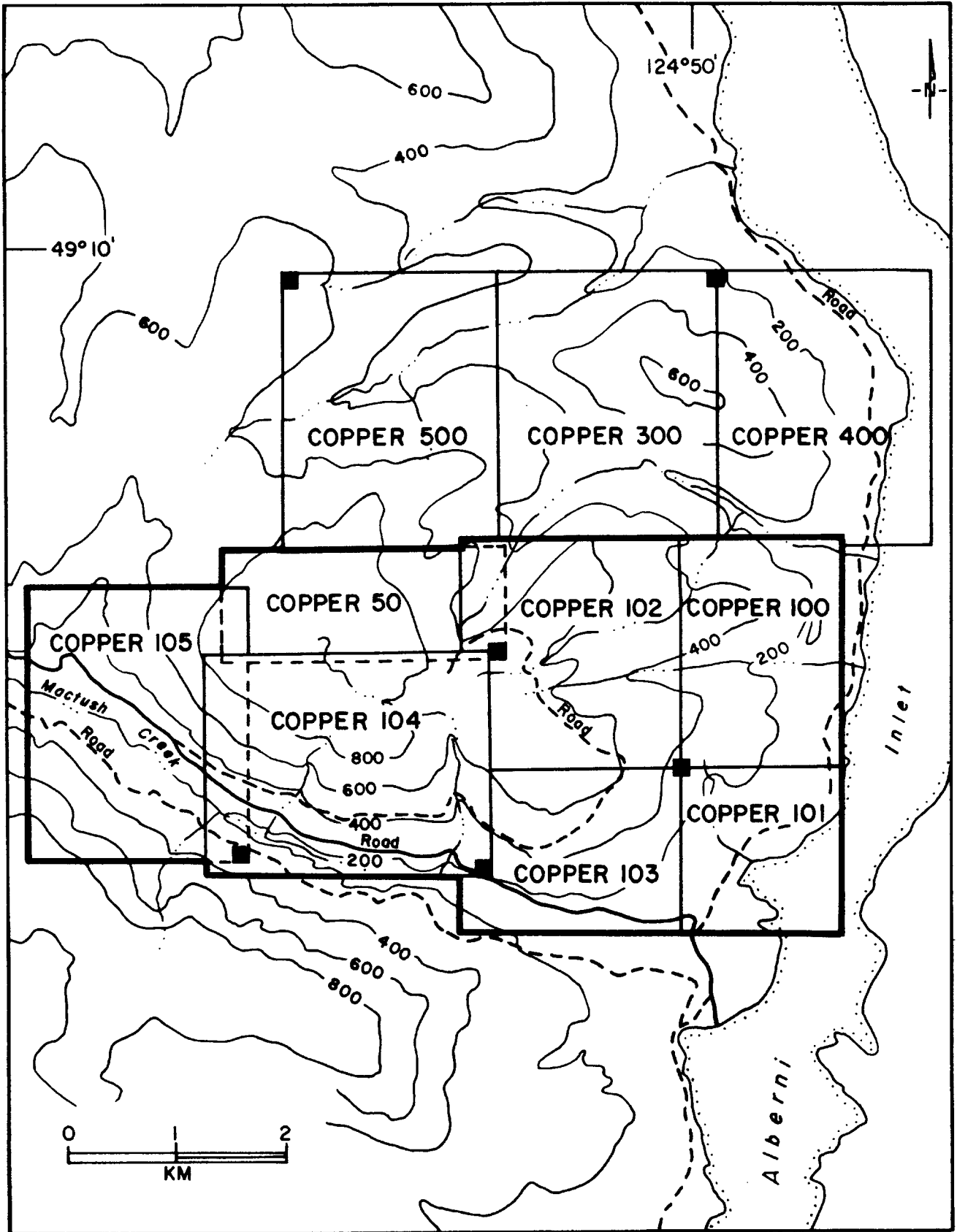


FIGURE 3 - MACKTUSH PROPERTY MINERAL CLAIMS

HISTORY

The earliest record of prospecting and mining activity west of Alberni Inlet dates back to the turn of the century when copper-gold vein occurrences near the head of the Inlet were investigated and some 1900 tonnes of material containing copper-silver-gold were mined from the Three Jays skarn deposit south of Nahmint River. Sporadic exploration work, directed to several copper and/or precious metal prospects, has continued to the present.

The current Macktush property includes a number of gold-silver-copper bearing quartz veins. The majority of these have been located by work over the past several years but at least one was explored a number of years ago by several pits and two short adits. Remains of an old cabin (now destroyed) attest to this earlier work and an old claim post with a claim tag characteristic of those in use up to the mid-1940's was observed adjacent to one of the known quartz veins. There are no records of this earlier work; references included in the B.C. Ministry of Energy Mines and Petroleum Resources Minfile (92F - Alberni, June 1990) description of the Macktush property pertain to descriptions of the regional geological setting.

The old workings on one of the vein structures were re-discovered by principals of SYMC Resources Ltd. in April of

1981. A number of 2-post mineral claims were located (abandoned and re-located as Modified Grid claims in 1983) and work through 1986 included prospecting, trenching and sampling.

SYMC Resources Ltd. was incorporated in March of 1987 and this company purchased the mineral claims comprising the Macktush property. Financing was arranged for additional exploration work in 1987 and 1988 which included a legal survey, ten diamond drill holes totalling more than 900 metres, mechanical trenching at more than 20 sites and surface sampling at 25 locations.

Preliminary metallurgical test work was carried out in 1988 (Broughton, 1988) as were initial investigations pertaining to a possible tailings impoundment area (Palmer and Skirmer, 1988) and potential mining methods. This work was undertaken in response to recommendations of the British Columbia Mine Development Steering Committee which had received a preliminary prospectus from SYMC Resources Ltd. earlier that year.

A survey of surface workings and drill hole collars on the main quartz vein structure was supervised by John Wilson, FGAC, in January of 1990 and a compilation of results of exploration work was completed by Wilson in April of that year. The writer completed a report on the property in

July, 1990 (Carter, 1990) and three 1987 diamond drill holes were re-logged by Mr. Wilson in late 1990. Additional excavator trenching was completed on two of the known quartz vein structures in early 1991.

Work in 1992 and 1993 included 160 metres of road construction, approximately 1500 cubic metres of excavator trenching and 12 hand pits.

Most of the work to date on the Macktush property has been carried out in the southwestern part of the COPPER #102 claim (Figures 3 and 5). The value of exploration work and related technical studies undertaken on the property since the initial location of mineral claims is estimated to be more than \$400,000.

REGIONAL GEOLOGY AND MINERALIZATION

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 and lesser sedimentary rocks which are overlain on the east coast of Vancouver Island by clastic sedimentary rocks of late 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 of the Island.

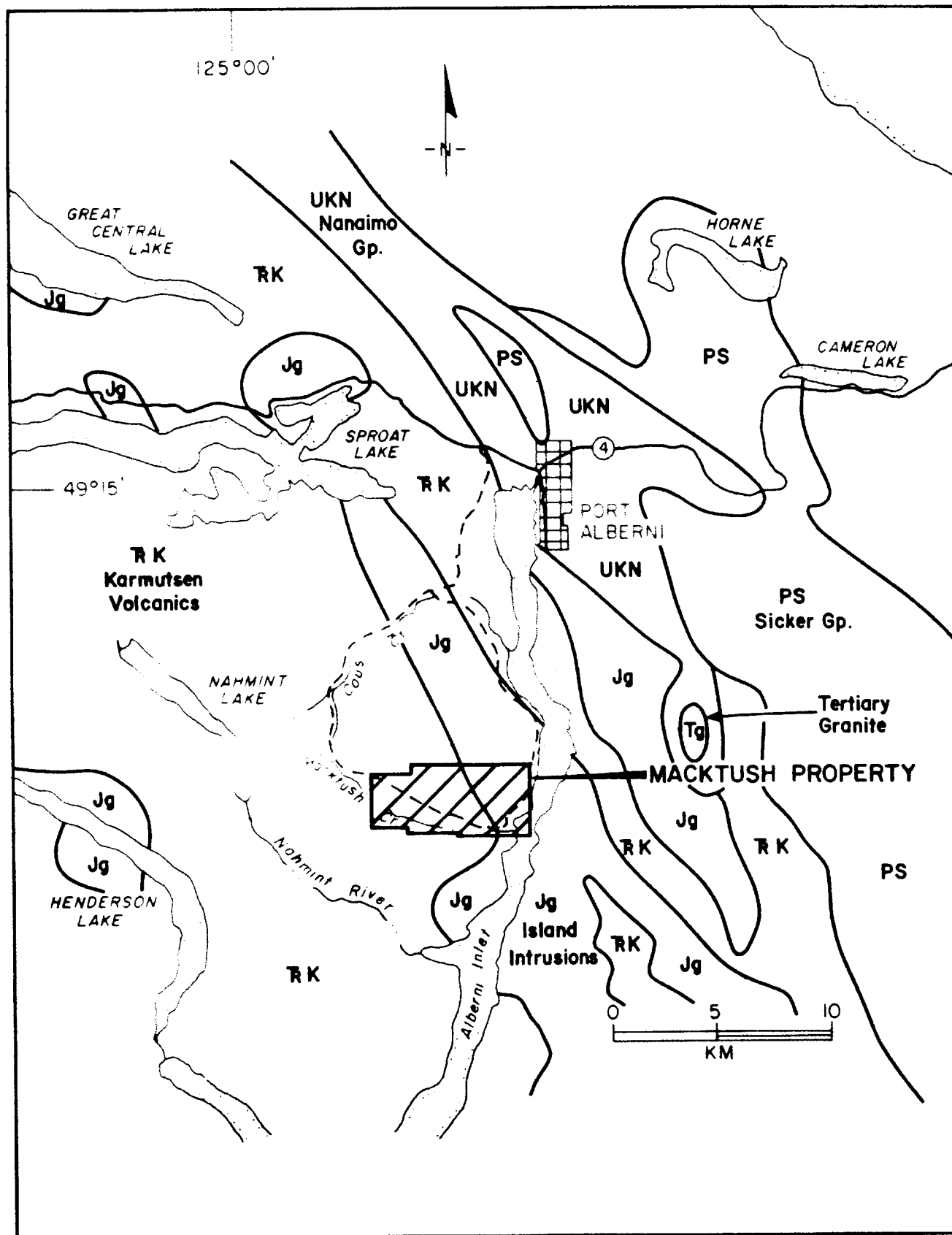


FIGURE 4 - GEOLOGICAL SETTING
 (After Muller and Carson, 1969)

Vancouver Island hosts a variety of mineral deposit types which include volcanogenic massive sulphides at Buttle Lake and near Duncan which are hosted by late Paleozoic Sicker Group volcanic rocks. The Island Copper deposit near Port Hardy is a porphyry copper-molybdenum deposit with significant by-product gold 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 and central parts of Vancouver Island are noted for gold-bearing vein deposits. Many of these are at least spatially related to Tertiary granitic intrusions and examples include the Zeballos camp and deposits in the Kennedy Lake, Alberni Inlet and Mount Washington areas.

The oldest rocks exposed near Alberni Inlet are late Paleozoic Sicker Group volcanic and sedimentary rocks which underlie the northern part of the Cowichan structural uplift (Figure 4). Three volcanic formations comprise most of the Sicker Group in this area (Massey and Friday, 1989). From oldest to youngest these include a basal pillow basalt with minor felsic units, an intermediate fragmental andesite and an upper volcanoclastic-epiclastic sequence. The youngest sequence of the Sicker Group is comprised of cherty sediments, limestones, siltstones and sandstones.

Mesozoic volcanic and sedimentary rocks overlie Sicker Group rocks and include late Triassic Karmutsen Formation andesite and basalt pillow lavas, pyroclastics and massive flows and early Jurassic Bonanza Group fragmental andesites and lesser sedimentary rocks. Where complete Mesozoic sections exist, the Karmutsen Formation and Bonanza Group are separated by Quatsino Formation calcareous and clastic sedimentary rocks.

The Mesozoic sequences underlie much of the area west of Alberni Inlet (Figure 4) where they are intruded by granodiorites and quartz diorites of the Middle Jurassic Island Intrusions.

Youngest layered rocks include late Cretaceous Nanaimo Group clastic sedimentary rocks which underlie the fault-bounded Alberni valley (Figure 4). These are intruded by hornblende-feldspar porphyry dykes and sills of probable Tertiary (Eocene?) age (Massey and Friday, 1989).

The dominant northwest structural trend of the Alberni Inlet area is reflected by the Cowichan structural uplift, the elongate nature of Island Intrusion plutons and the distribution of late Cretaceous sediments in the northwest trending Alberni valley. Regional northwest trending thrust faults mark the boundaries between Sicker Group and younger rocks east of Alberni Inlet (Massey and Friday, 1989).

Various styles of mineralization are recognized in the Alberni Inlet area (Muller and Carson, 1969; Massey and Friday, 1989). These include volcanogenic massive sulphide occurrences in the lower volcanic unit of the Sicker Group, porphyry copper and/or molybdenum mineralization associated with Island Intrusions granitic rocks and iron-copper skarn deposits and occurrences in Mesozoic sedimentary and volcanic rocks, some of which have yielded limited production in the past. The best example of one of these is the Three Jays prospect on the west side of Alberni Inlet. According to Wahl (1980), much of the copper mineralization at this prospect may be related to shear zones.

Considerable work has been done in recent years investigating similar styles of mineralization at the head of east-flowing tributaries of Cous Creek (Figure 4). Here, discontinuous massive sulphide lenses and pods containing copper, silver and gold values are developed in Karmutsen andesite flows near their contact with Island Intrusions granitic rocks and adjacent to felsic dykes of probable Tertiary age (Sookochoff, 1986; Laanela, 1987).

Other known deposit types west of Alberni Inlet include a number of copper occurrences in fracture zones in Karmutsen Formation volcanic rocks, examples of which include one prospect near Alberni Inlet 5 km north of the Macktush

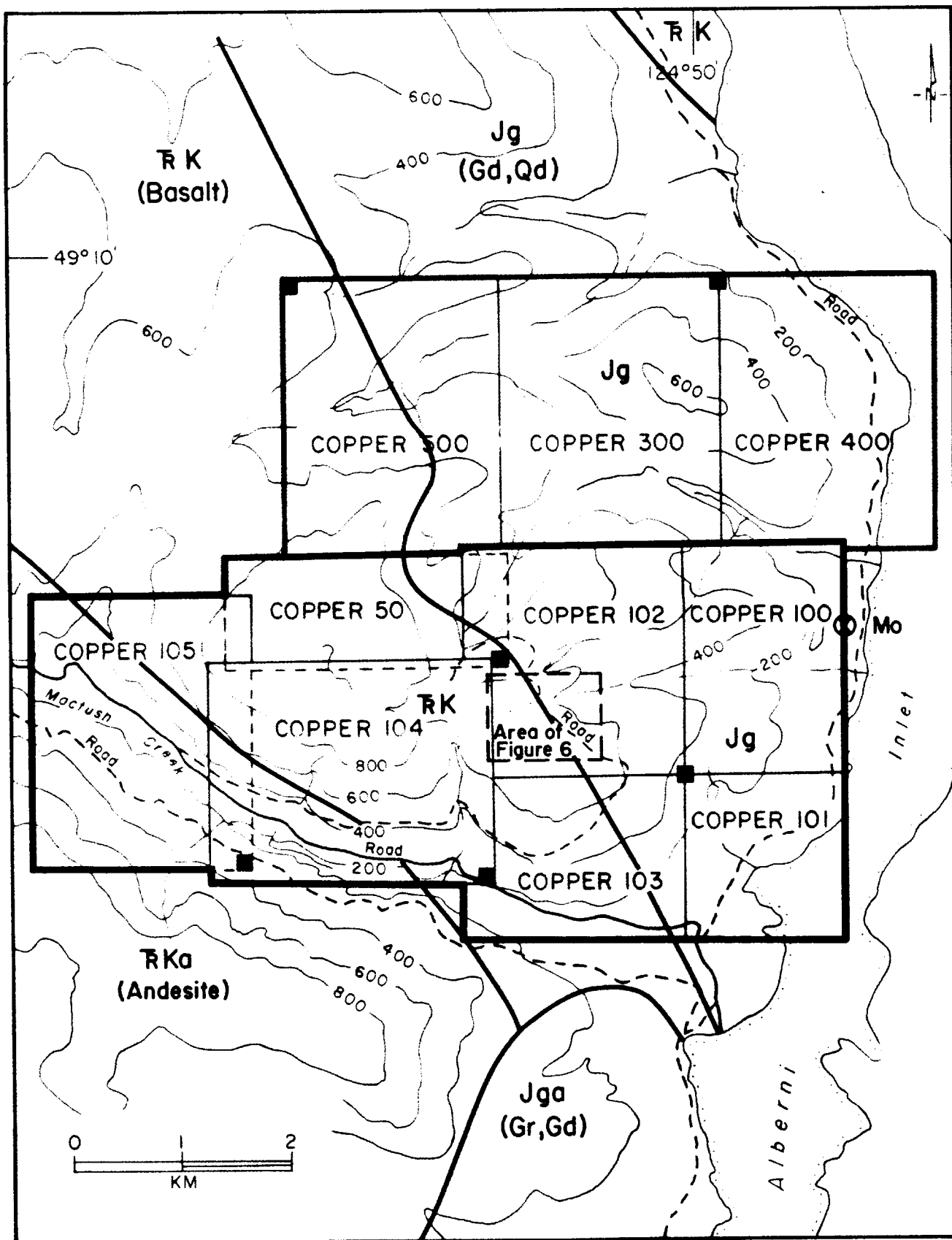


FIGURE 5 - MACKTUSH PROPERTY - GEOLOGY

property and several occurrences immediately south of Macktush Creek. The latter prospect features pyrrhotite, pyrite and chalcopyrite in shear zones and in lenses in Karmutsen volcanics from which some silver values have also been reported (Stewart, 1983).

The most common mineral deposit types in the Alberni Inlet area are gold-bearing quartz-sulphide veins and fissure zones. These are widespread in the Franklin River-China Creek area east of Alberni Inlet where they are spatially and possibly genetically related to a north trending belt of Tertiary feldspar porphyry intrusions (Carson, 1969).

Gold-bearing quartz-sulphide veins also occur in shear zones in Karmutsen Formation basalts west of Alberni Inlet. Examples include the Ferguson prospect south of Two Rivers Arm on Sproat Lake and the Raven and Dauntless prospects due west of Port Alberni and 7-10 km north of the Macktush property. Gold values at these prospects is associated with quartz veins containing chalcopyrite, pyrite and pyrrhotite (LeRiche and Hopkins, 1988).

PROPERTY GEOLOGY AND MINERALIZATION

The Macktush property is underlain by late Triassic Karmutsen Formation basaltic pillow lavas and andesites which are in contact with granodiorites and quartz diorites of the

Middle Jurassic Island Intrusions in the central property area.

As indicated on Figure 4 these granitic rocks, which underlie much of the eastern half of the property, are part of an elongate pluton which extends southeasterly from Sproat Lake through the property area and across Alberni Inlet.

According to recent mapping by Sutherland Brown and others (1986), the contact between the Karmutsen volcanics and Island Intrusions extends in a southeasterly direction through the claims just below the height of land (Figure 5). Tholeiitic pillow lavas are the dominant rock type west of the contact while andesitic varieties underlie the southwestern claims area along Macktush Creek.

Granitic rocks of the Island Intrusions, where observed by the writer in the central property area, include medium to coarse grained grey quartz diorite and granodiorite. Some potassium feldspar stringers were noted locally as were northwest trending 15 cm wide aplite dykes.

The contact between the granitic and volcanic rocks in the central property area is irregular with numerous inclusions of Karmutsen pyroxene porphyry flows and bleached andesites.

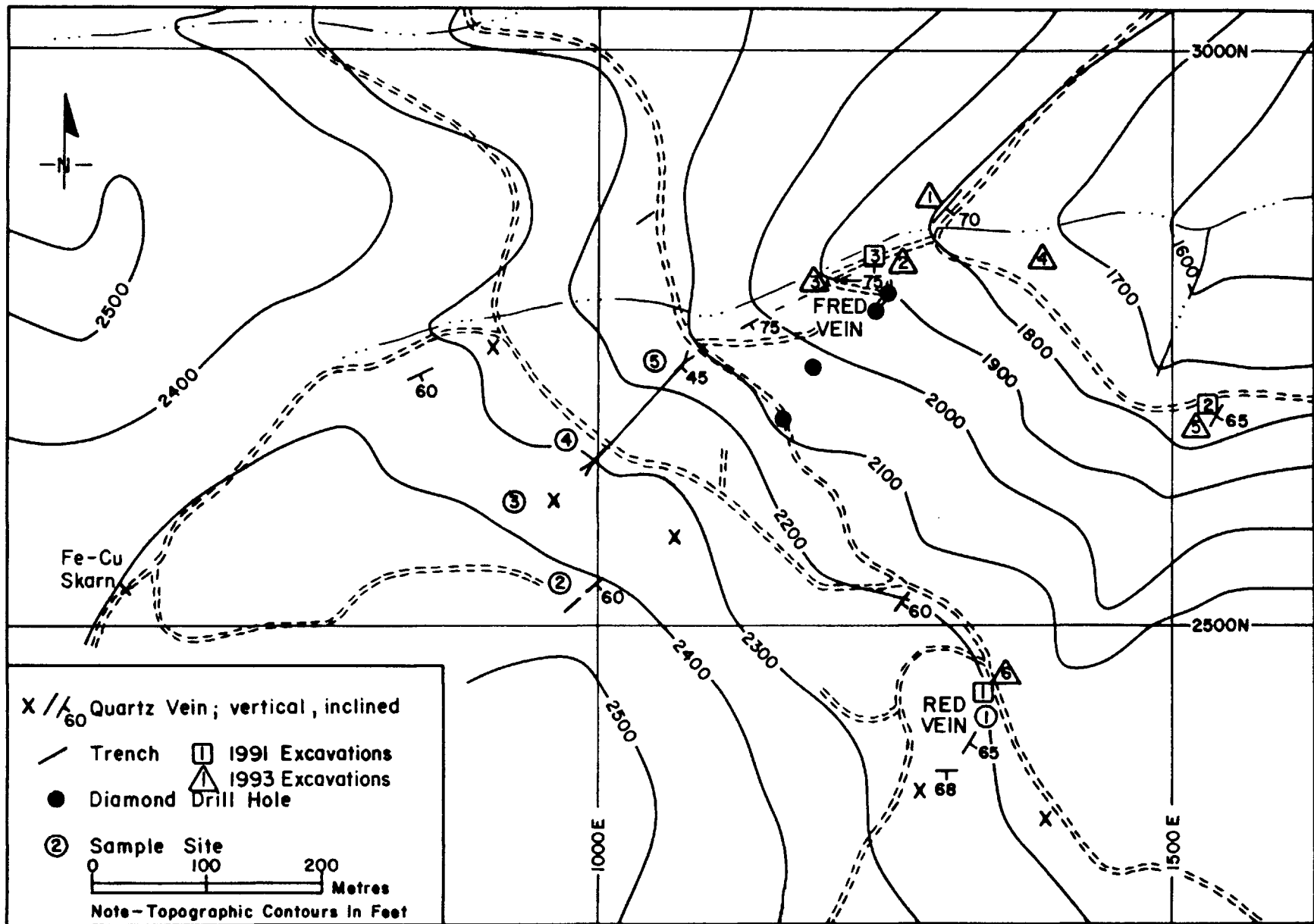
Known mineralization on the property includes a small iron-copper skarn zone in Karmutsen volcanics in the central

property area and porphyry style mineralization in at least two localities. Examples of the latter include molybdenite in quartz veinlets and fractures in Island Intrusions granodiorite exposed in road cuts along Alberni Inlet in the eastern claims (Figure 5) and disseminated chalcopyrite in K-feldspar altered diorites north of the present property boundary (Figure 5).

A number of gold-bearing quartz-sulphide veins in various parts of the claims area constitute the most significant mineralization found to date. A number of these veins occur within a 0.5 square km area in the western part of the COPPER 102 mineral claim (Figure 5) marginal to the contact between Karmutsen volcanics and Island Intrusion granitic rocks.

As indicated on Figure 6, most of the known veins strike northeasterly and dip moderately to steeply southeast. The strike direction is normal to the overall trend of the Island Intrusions contact which parallels the regional trend and the distribution of veins in this area is about equally divided between volcanic and granitic host rocks.

Vein widths range from 0.30 to several metres with an overall average of about 1.3 metre. Vein contacts are commonly sheared with 7-30 cm wide gouge zones developed in both foot- and hangingwall host rocks. Quartz stringers in wallrocks were observed marginal to several of the vein



**FIGURE 6 - PRINCIPAL MINERAL SHOWINGS -
COPPER 102 MINERAL CLAIM**

exposures. This feature is particularly evident at the northeast end of the 130 metre long trench (Figure 6) where 0.30 metre wide quartz veins within a 3-7 metre wide zone of shearing are separated by wedges of altered volcanic and granitic rocks. Narrow basic dykes parallel the northeast shear direction and cut both the veins and wallrocks. Elsewhere, inclusions of volcanic rocks are present near quartz veins hosted by granitic rocks and the southwest trench on the main quartz vein structure exposes a 1.4 metre wide quartz vein with a quartz diorite footwall and an andesitic hangingwall.

Most vein structures display multiple stages of quartz veining. Colloform banding is common as are drusy cavities. Sulphide mineralization within the veins includes fine to medium grained pyrite, pyrrhotite and chalcopyrite.

A number of the known quartz vein exposures occur along apparently persistent northeast structures. Two principal strike directions are evident including east-northeast and north-northeast. These structural directions are reflected by several drainages and prominent draws.

The Fred vein (Figure 6), the best known example of an east-northeast trending vein structure, is immediately south of a drainage of similar trend. The vein has been traced by drilling and trenching over a strike length in

excess of 200 metres.

The north-northeast trending structure containing the Red Vein (Figure 6) apparently extends several hundred metres down a draw of similar trend based on recent excavator trenching. Other exposures of quartz veins near the known southwestern limits of the Red vein may represent parts of parallel zones. The quartz veining in the long trench southeast of the Fred vein is considered to be another example of the north-northeast trending vein set.

Surface Sampling

A number of surface samples have been collected from various exposures by principals of SYMC Resources Ltd., Provincial Government geologists and the writer. Note that all of the SYMC samples shown on Figure 6 are grabs, or more properly, character samples of vein material. Sample number 20773 - 20775 refer to samples collected by the writer in June of 1990. Locations are shown on Figures 6 and 7 and analytical data are contained in Appendix I. Results for sites indicated on Figure 6 are as follows:

<u>Site</u>	<u>Number</u>	<u>Width(m)</u>	<u>Gold(oz/ton)</u>	<u>Silver(oz/ton)</u>	<u>Copper(%)</u>
1	130	Grab	0.318	0.31	0.42
	20773	1.1	0.073	0.20(ppm)	88(ppm)
2	20774	1.0	696(ppb)	0.30(ppm)	37(ppm)
3	E19511	Grab	0.192	1.56	0.57
4	E19510	Grab	0.166	1.23	0.42
5	E19509	Grab	0.074	0.76	1.12
	20775	Chips	817(ppb)	1.40(ppm)	26(ppm)

Recent excavator trenching along the trend of the Red vein 50 metres northeast of, and along strike from sample site 1 (Figure 6) has exposed a zone of shearing in granitic rocks striking 040° and dipping steeply east. The zone, exposed along the logging road over a width of more than 6 metres, features multiple, narrow quartz veins with finely disseminated pyrite.

The probable extension of the Red zone was exposed by 1991 trenching along the lower logging road 350 metres northeast of, and 130 metres vertically below, the previously described exposure (Figure 6). Here, the zone is developed in dioritic rocks over a similar 6 metre width striking 035° and dipping $60-80^{\circ}$ east. Margins of the zone are marked by one metre wide grey, clay-rich gouge zones which contain quartz veins (Wilson, 1991 - Appendix I). Dioritic rocks within the shear zone are deeply weathered and contain up to 3% disseminated pyrite. Ten chip samples, collected from a continuous line within and adjacent to the shear zone by Wilson (1991 - Appendix I), yielded low gold, silver and copper values.

More recent trenching in this area, immediately above the road and some 60 metres east, has exposed a 15 cm wide quartz vein within a 0.5 metre wide shear zone which is interpreted to be a second, parallel structure developed in the

hangingwall of the main Red zone.

The Fred vein (Figure 6), apparently the original zone discovered years ago, is exposed in two short adits (now caved) and three pits as shown on Figure 7. The width of the structure containing the vein, which strikes 060 to 080 and dips steeply south, ranges from 0.75 to more than 3 metres. Sample results for those sites indicated on Figure 7 are as follows:

<u>Site</u>	<u>Number</u>	<u>Width(m)</u>	<u>Gold(oz/ton)</u>	<u>Silver(oz/ton)</u>	<u>Copper(%)</u>
1(Vein)	101	0.91	0.303	0.12	0.01
(Wall)	102	0.46	0.173	0.71	0.05
2(Vein)	50	2.13	0.303	0.01	0.01
3(Vein)	104	3.66	0.416	2.21	0.78
4(Vein)	1003	0.76	0.218	1.43	1.34
5(Vein)	1	4.88	0.952	0.34	0.60
(Vein)	20772	1.20	0.659	8.1(ppm)	1286(ppm)

Most of the foregoing sample locations, widths (where applicable) and results are as provided by SYMC Resources Ltd. and refer to samples collected on the company's behalf between 1983 and 1987. Sample number 20772 was collected by the writer. Results of sampling by B.C. Ministry of Energy Mines and Petroleum Resources geologists at the lower adit include values of 4910 ppb gold, 3 ppm silver and 0.16% copper from a 1 metre chip sample and 7100 ppb gold, 34 ppm silver and 0.62% copper from a composite grab sample (H.P. Wilton, personal communication).

Excavator trenching in 1991 and 1993 in the area of the lower adit (Figure 7) has exposed two 0.6 and 0.3 metre wide,

parallel quartz veins, 0.6 metre apart, and containing disseminated pyrite and chalcopyrite within a 4 metre wide zone of sheared quartz diorite with numerous quartz stringers. Similar parallel veins, with comparable widths, were observed in recent trenches 30 metres northeast and 5 metres southwest of the lower adit.

Of particular significance is the presence of north-northeast trending, 15 to 30 cm wide quartz veins developed in the apparent hangingwall of the Fred vein structure and exposed in 1993 excavation site 3 (Figure 6). A similar north-northeast trending, steeply east-dipping vein, apparently in the footwall of the Fred vein structure, is exposed in 1993 excavation site 1 (Figure 6) over a strike length of 30 metres. Vein widths here range up to 2 metres and the vein contains disseminated pyrite, pyrrhotite, chalcopyrite and possibly tetrahedrite.

Diamond Drilling

As noted previously, 10 BQ-size diamond drill holes were completed on the Macktush property in 1987 and 1988. Most of the core recovered was stored on the property. Sections of three 1987 holes, drilled on the Fred vein (DDH 87-01,-03 and-08), were split and sampled under the direction of Frank C. Loring, P.Eng. Core boxes containing split core sections from holes 87-01 and 87-03 and most of hole 88-05 (not logged

or sampled until June, 1990) were stored in Port Alberni. Core from the other six holes drilled was tipped while unattended at the field site before any logging or sampling was done and unfortunately, is of little or no value in its present condition. These six holes included two shallow inclined holes on the Red vein, two inclined holes near the southwest end of the large trench and two drilled to test parts of the Fred vein (H. McMaster - SYMC Resources Ltd.-personal communication).

Diamond drill cores from four inclined holes, totalling 321 metres and drilled to test the Fred vein, are in reasonably good order. These were drilled at -45° along 330° azimuths and tested the Fred vein along its exposed strike length to vertical depths of between 20 and 40 metres. Drill hole locations are shown on Figure 7 and sections, after those originally prepared by John Wilson, FGAC, are illustrated on Figure 8. Surveyed locations of the holes are as follows:

<u>Hole Number</u>	<u>North</u>	<u>East</u>	<u>Elevation(m)</u>
DDH87-01	2679.5	1165.5	683.0
DDH87-03	2787.4	1253.4	597.8
DDH88-05	2770.8	1238.5	607.8
DDH87-08	2725.0	1188.5	644.0

Results of core sampling for the three 1987 holes were provided by SYMC Resources Ltd. The writer logged and sampled DDH88-05 and the drill log and analytical data for this hole

plus analytical data for the other three holes as provided by SYMC Resources Ltd. are contained in Appendix II.

Because of some uncertainties in establishing precise sample intervals for holes 87-01, -03 and -08, Mr. John Wilson undertook re-logging of these holes in December, 1990. Further information concerning the sample intervals was obtained from Mr. Frank C. Loring, P.Eng. Mr. Wilson's diamond drill core logging report, including drill logs for the aforementioned three holes, is contained in Appendix II.

The Fred quartz vein structure was intersected in the four holes drilled and results confirmed a southerly dip of between 60 and 80 degrees. Core lengths of vein material ranged from 1.14 metres in the most westerly hole (DDH87-01) to 3.81 metres in DDH87-03 near the known eastern limits of the structure.

Geological relationships noted by the writer in DDH88-05 are believed to be representative of the Fred vein in the area drilled and they generally confirm relationships noted in surface exposures. The hole was collared in generally fresh, medium grained, grey quartz diorite locally cut by 0.5-5 metre wide, post-mineral basic dykes with chilled margins. Some 15 metres above the quartz vein intersection, the quartz diorite features an increasing number of quartz-carbonate-pyrite stringers plus increased

silicification and argillic-carbonate alteration. Disseminated pyrite and pyrrhotite is also a feature of more intensely altered zones and inclusions of Karmutsen volcanic rocks are evident. A 2 metre length of quartz vein, intersected between 47.5 and 49.5 metres, exhibits multiple stages of veining, drusy cavities and disseminated pyrite, pyrrhotite and chalcopyrite. An 8 metre section of variably altered quartz diorite, with 0.5 metre Karmutsen volcanic inclusions and a basic dyke, follows the quartz vein intersection with the hole terminating at 60 metres in relatively unaltered quartz diorite.

Sampling of drill cores from the four holes drilled on the Fred vein yielded the following results:

<u>Hole No.</u>	<u>Interval(m)</u>	<u>Length(m)</u>	<u>Au(oz/ton)</u>	<u>Ag(oz/ton)</u>	<u>Cu(%)</u>
DDH87-01	109.58-110.72	1.14	0.174	0.06	0.03
DDH87-03	33.50-34.29	0.79	0.112	0.48	0.80
	36.58-40.39	3.81	1.290	5.04	0.95
DDH87-08	71.63-72.88	1.25	0.290	0.05	0.03
DDH88-05	47.22-48.80	1.58	0.006	0.09	0.02
			(219ppb)	(3.0ppm)	(190ppm)

Bulk Sampling

Four 6-8 kg samples were collected from the Fred vein in 1988 and submitted to Coastech Research Inc. for preliminary metallurgical testing. Average head grades of a composite sample were 0.126 oz/ton gold and 0.29 oz/ton silver. Test work on the composite sample included standard flotation, gravity concentration and cyanidation procedures.

Results of the test work indicated that good recoveries for gold, silver, and copper could be obtained by initial gravity concentration to recover free milling coarse gold followed by froth flotation to produce a sulphide concentrate containing copper and precious metals.

CONCLUSIONS

The Macktush property includes a number of gold-bearing quartz-sulphide veins. Work to date in the central property area, which includes mechanical trenching and diamond drilling, has partially defined several vein structures with apparent good gold grades over reasonable widths. Recent excavator trenching has confirmed vein continuity within part of the previously drilled area of the Fred vein and has indicated strike extension of the structure and the presence of subsidiary vein structures. Work along the trend of the Red vein has confirmed an appreciable strike length for this structure. Further work is warranted to test continuity of gold grades of these and other zones along strike and to depth.

Limited sampling of several of the veins indicates a wide variation in gold content. While this is a characteristic feature of deposits of this type, it does emphasize the need for detailed sampling to determine average grades. As noted

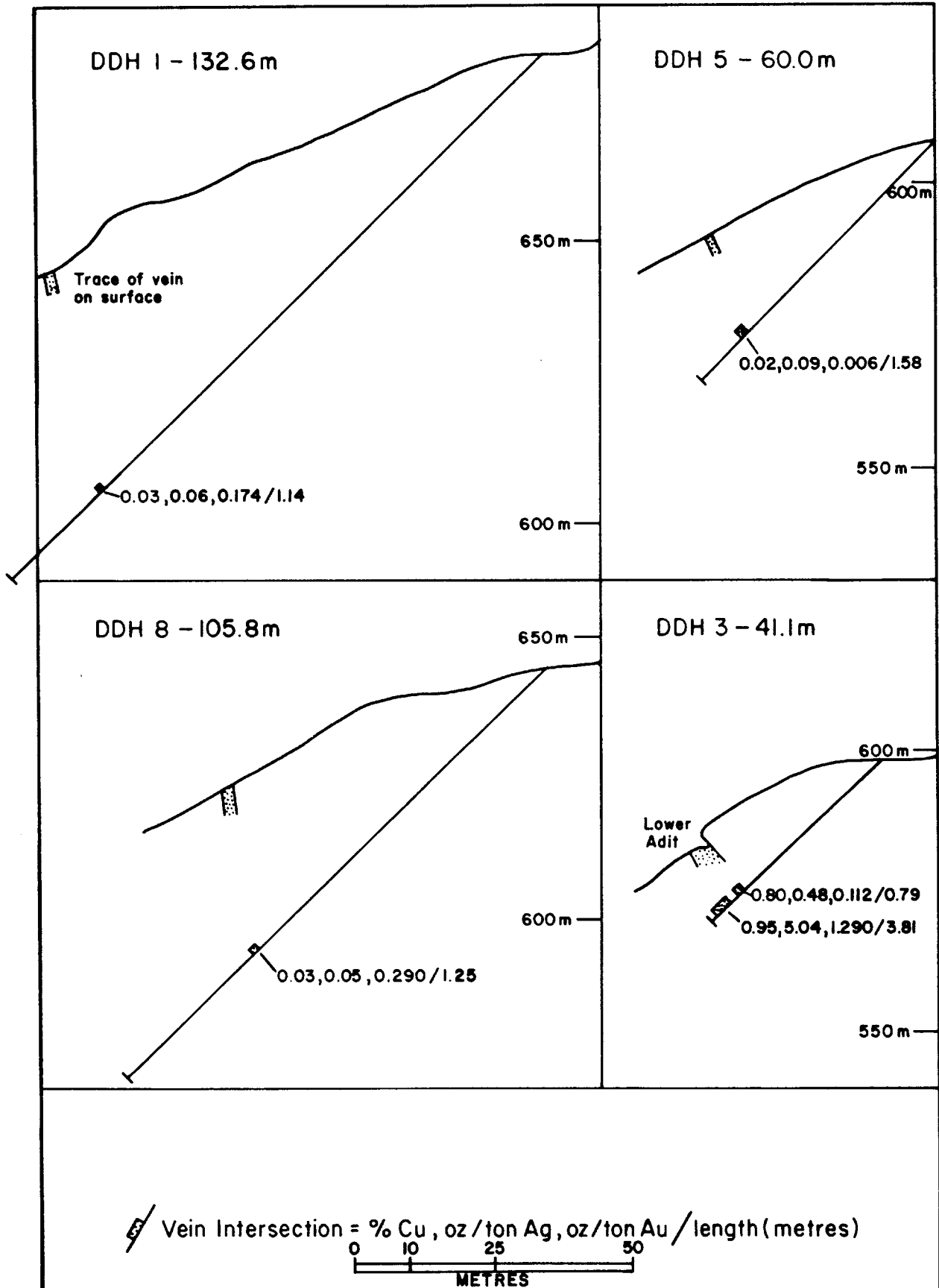
previously, most of the known quartz veins strike northeasterly, normal to the regional structural trend as reflected by the northwest trending contact between the Island Intrusions and Karmutsen Formation volcanic rocks. The quartz veins in the central property area are marginal to this contact which is considered to be prospective for the discovery of additional gold-bearing veins throughout the claims area.

Other styles of mineralization known on the Macktush property include iron-copper skarns and porphyry copper and molybdenum. Further investigation is necessary to determine the significance of these.

The Macktush property merits additional work as detailed in the succeeding section.

RECOMMENDATIONS

A two-phase work program is recommended for the Macktush property with the principal emphasis of the Phase I program being directed to detailed mapping and sampling of the known gold-bearing vein structures. To facilitate this and to determine precise locations of the vein structures, a topographic map on a scale of 1:5000 should be prepared utilising available colour air photography and the existing survey control in the area of the Fred vein. It is intended



**FIGURE 8 - DIAMOND DRILL CROSS SECTIONS
(Looking N 60°E)
FRED VEIN**

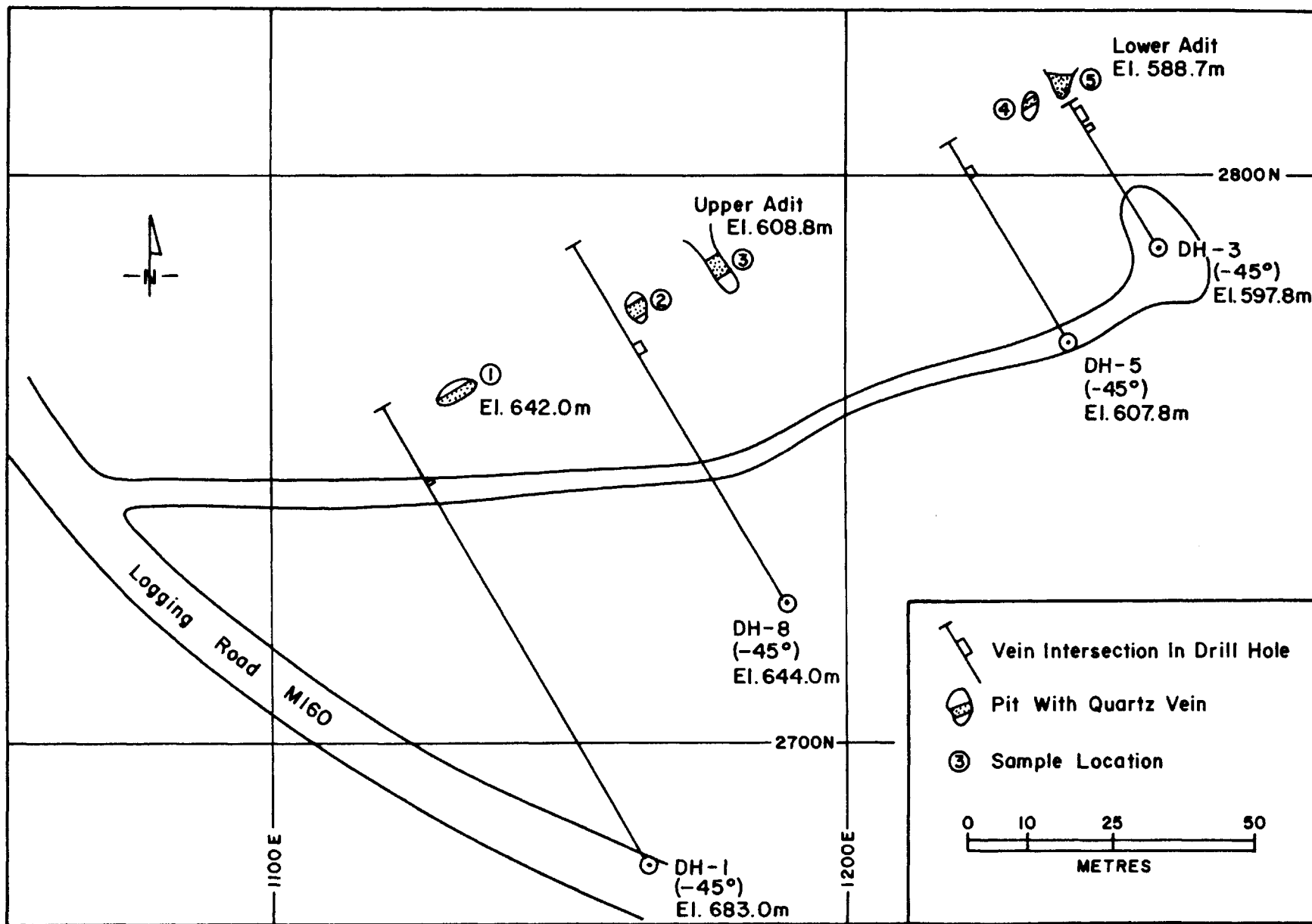


FIGURE 7 - DIAMOND DRILL HOLE PLAN - FRED VEIN

that such a map would cover the entire property area with more detailed (1:1000) coverage prepared for the area of the Fred and Red veins.

It is also recommended that a picket line grid be established with a baseline parallel to the trend of the Fred vein and cross lines at 100 metre spacings with 25 metre stations. This grid, totalling 38 km, would cover the area of the Island Intrusions - Karmutsen Formation contact over much of the COPPER 102 claim and could be used for tying in drill holes prior to a proper survey and also for conducting orientation VLF-EM and magnetometer geophysical surveys and the collection of soil samples in overburden covered areas.

The foregoing recommended work program will assist in defining areas for excavator trenching followed by diamond drilling.

Additional diamond drilling of the Fred vein structure is recommended as part of the Phase I program and should include -60° holes drilled from the four original drill sites. Four holes are also recommended to test the Red vein between the main showing and the indicated strike extension downhill to the northeast.

Phase II work would consist principally of additional excavator trenching and diamond drilling where warranted by the results of first phase work.

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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 and Geoscientists 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. The foregoing report on the Macktush Property, Alberni Mining Division, British Columbia, is based on personal examinations of parts of the property in 1990, 1991 and 1993, on a review of published and unpublished reports and maps and on information provided by SYMC Resources Ltd. which includes a compilation of previous work and re-logging of previously drilled holes by John Wilson, FGAC.
5. I hold no interest, directly or indirectly, in the mineral claims comprising the Macktush property or in the securities of SYMC Resources Ltd. nor do I expect to receive any such interest.

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

Victoria, B.C.
January 17, 1994

N.C. CARTER, Ph.D., P.Eng.
CONSULTING GEOLOGIST