

REPORT ON THE KETCHAN PROPERTY

NICOLA & SIMILKAMEEN MINING DIVISIONS, BRITISH COLUMBIA

Latitude 49°44' - 49°52' N; Longitude 120°30' - 120° 40' W

NTS 92H078, 92H087, 92H088

Prepared for Copper Hill Exploration Corporation

By

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GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

27.534

SUMMARY

The Ketchan Property, owned by Copper Hill Exploration Corp., is located in the southern interior of British Columbia, about 200 kilometres east of Vancouver. The property comprises about 74 square kilometres of mineral claims that are located along a highly mineralized portion of the Nicola Volcanic Belt, a geological division that encloses several major copper and copper-gold deposits, as well as two nearby advanced prospects that recently have published large copper-gold resources.

Minfile records display 42 copper and copper-gold occurrences within and adjacent to the property. The most important of these is the Ketchan porphyry copper-gold prospect that has warranted extensive previous exploration. Past work in the area included several geophysical surveys and six drilling programs comprising 35 holes. The most significant results were obtained in the eastern part of the area, along a strongly fractured and altered zone in a large alkaline diorite stock. Widely spaced drill holes that contain significant amounts of copper and gold are enclosed within an area about 300 metres wide and more than a kilometre in length. Geophysical and topographic evidence suggest that the zone could continue for an equal distance to the southeast. A 16-hole, 2400-metre diamond drilling program is recommended for the Ketchan prospect, at an estimated cost of \$316,800.

The PAR prospect is located in the western portion of the property along the Otter Creek fault, a major structural feature of the region. Past drilling (2759 metres in 17 holes) outlined an area containing interesting copper-silver-gold values within a sub-circular zone incorporating intensely brecciated granite that follows the fault for more than a kilometre. The western portion of the breccia and the fault zone itself have never been explored, and the favourable geological indications continue to the north for at least two kilometres. An initial program of geological mapping and geophysical surveying are recommended. Diamond drilling (750 metres in 8 holes) is recommended, predicated in part on the results of the drilling. The estimated cost of the complete program is \$121,000.

A large zone of hitherto unrecognized intrusive breccia in the northern part of the property was identified during my investigation. Previous uncoordinated work by several companies has uncovered significant copper mineralization in the area. In view of the common association of major copper-gold mines and advanced prospects with intrusive breccia pipes, this area is considered to be of particular interest. A preliminary program of geological mapping and geochemical sampling is recommended. The work is estimated to cost \$10,750.

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REPORT ON THE KETCHAN PROPERTY FOR COPPER HILL EXPLORATION CORPORATION

INTRODUCTION

Copper Kill Exploration Corp. holds two groups of mineral claims in the Nicola Mining Division of British Columbia. The eastern part of the property (Central Nicola claim group) encloses a 16-kilometre-long segment of a highly mineralized volcanic belt that includes the important Ketchan prospect, a typical alkalic porphyry copper-gold occurrence. The known mineralization on the much smaller Otter Creek claim group is associated with granitic intrusive rocks that were emplaced along the major fault zone that follows Otter Creek. Although they are nearly contiguous, the claim groups are treated separately in portions of the present report. Both lie within the geological region designated as the Nicola Volcanic Belt, but the local geological settings are distinctly different, as are the targets of the proposed exploration programs.

I have visited the general area of the Ketchan property on numerous occasions since 1970, and I directed exploration work on other properties immediately to the south. More recently, I examined the Central Nicola claim group on August 28 and 29, 2004, and I carried out geological and geophysical surveying on the Otter Creek claim group intermittently since 1998.

Sources of Information

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- Preto, V.A., 1979, *Geology of the Nicola group between Merritt and Princeton*: B.C. Ministry of Energy, Mines and Petroleum Resources, Bull. 69.
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- Simpson, R.G., 1980, *Diamond drilling report on the Log 1 and 3 mineral claims, Missezula Lake area, Nicola Mining Division*: [Bethlehem Copper Corp.] Assessment Report 8309.
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DISCLAIMER

I have visited the eastern property, hereinafter referred to as the Central Nicola claim group, several times. However, I have not been involved with any part of the very extensive exploration that was carried out on these claims over the years. Most of the information that I cite in this report concerning the results of the previous work was obtained from Assessment Reports and from Minfile. The report on the drilling program carried out by Cominco Ltd. at Ketchan Lake in 1991 (Aulis, 1991) is of particular relevance to my appraisal of this important prospect. The results of the program, along with an assessment of the potential target and a recommendation for additional drilling, advanced by R.J.Aulis, Geologist, are endorsed by A.M. Pauwels, Senior Geologist, and W.J.Wolfe, Manager, Western Canada. The endorsers can be considered "Qualified Persons" under NI43-101. I have attached particular importance to this report since Aulis had access to the results of some of the earlier drilling in the vicinity that I have been unable to obtain, and because no additional work that would invalidate the conclusions reached appears to have been carried out in that part of the area.

I have personally done a considerable amount of surface exploration work on the western property (Otter Creek Group). However, my knowledge of the results of the drilling programs carried out by Tormont Mines Ltd. between 1962 and 1965 is limited to the drill logs and assay data obtained from Andrew Robertson, the former President of Tormont. The assaying was carried out by a certified B.C. laboratory and the field program was directed by a professional engineer.

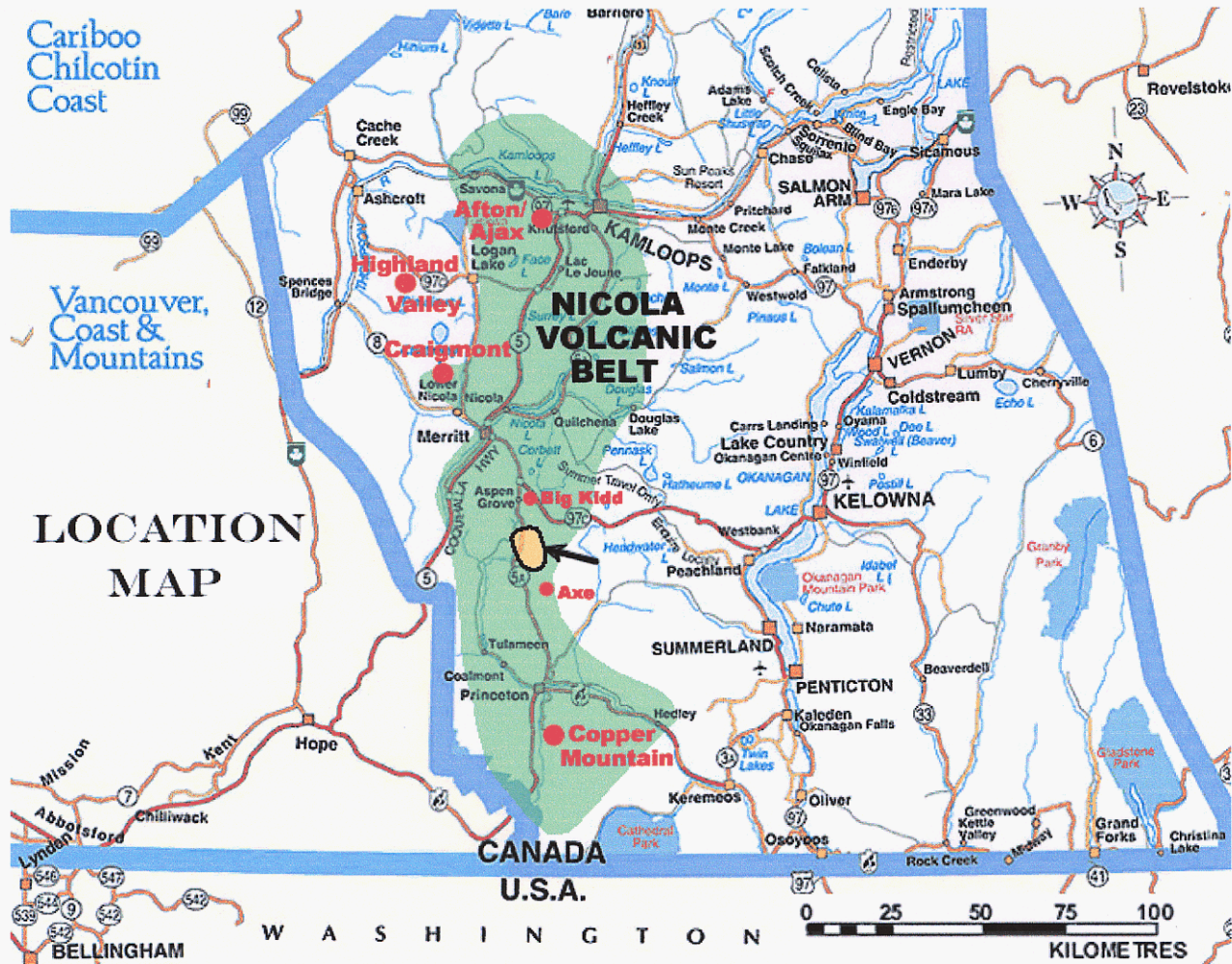
LOCATION, ACCESS, CHARACTER OF THE REGION

The Ketchan property is located midway between the towns of Merritt and Princeton in south-central British Columbia, about 200 kilometres east of Vancouver. The northern boundary of the Central Nicola claim group lies 6 kilometres south of the hamlet of Aspen Grove, and it extends south for about 14 kilometres along the eastern side of Highway 5A. The much smaller Otter Creek Group lies less than a kilometre west of the same highway, opposite the northern portion of the Central Nicola group.

All parts of the Central Nicola claim group are accessible via a network of gravel and dirt roads. The western part of the Otter Creek Group is traversed by Highway 223 (Coalmont Road), which leaves Highway 5A south of Aspen Grove.

The Central Nicola claims occupy a rolling upland area, the southern extension of the Fairweather Hills, with a maximum elevation of 1500 metres. Local relief is moderate in most of the area. However, the most southerly part of the property, in the vicinity of the old Shamrock Mine, follows the steep-sided gorge occupied by Summers Creek below the southern end of Missezula Lake; here the local relief exceeds 300 metres. Otter Creek, within the western claim group, follows a less precipitous depression between high, rolling hills.

A mixture of fairly open forest and grassland characteristic of the semi-arid environment is found throughout the region. Ranching and logging are the main economic activities. Large areas devoted to grazing are particularly apparent in the area surrounding Ketchikan Lake and on the Otter Creek claims.



The climate is characterized by hot, dry summers and cold winters. This has not proven to be a hindrance to the large open-pit mines in the region..

The property is exceptionally well located for a mining operation with respect to infrastructure, labour supply and existing townsites. I have looked for, but not identified, any potential problems relating to surface rights or to environmental issues.

PROPERTY

Title to all of the unpatented mineral claims listed below is held by Copper Hill Exploration Corp. I am not aware of any royalties, back-in rights, payments or other agreements and encumbrances to which the property is subject.

The surface rights on part of the Central Nicola claim group are owned by Douglas Lake Cattle Company, and those on most of the Otter Creek group by Quilchena Cattle Company. These lands are shown on Figure 1 along with the outlines of the claims.

The following tabulation of claims within the Ketchan Lake property is taken from the Ministry of Energy and Mines website. It is believed to be up-to-date except for the claim ownerships. A 100% interest in all of the claims has since been transferred to Copper Hill Exploration Corp. The Central Nicola claim group comprises 27 claims, containing 272 units and covering 6800 hectares. The Otter Creek claim group contains 24 units in 2 claims that cover 600 hectares.

Tenure Number	Claim Name	Owner Number	Map Number	Work Recorded To	Status	Mining Division	Area	Tag Number
389006	BLUEY-2	103413 100%	092H087	2005.08.03	Good Standing 2005.08.03	14 NICOLA	20 un	210952
389007	BOSS	103413 100%	092H087	2005.08.03	Good Standing 2005.08.03	14 NICOLA	20 un	210953
389008	BOSS-2	103413 100%	092H087	2005.08.03	Good Standing 2005.08.03	14 NICOLA	20 un	210954
389010	THOR-3	103413 100%	092H078	2005.08.03	Good Standing 2005.08.03	18 SIMILKAMEEN	20 un	210950
389011	THOR-4	103413 100%	092H078	2005.08.03	Good Standing 2005.08.03	18 SIMILKAMEEN	20 un	210951
390858	KETCHAN	103413 100%	092H078	2004.11.18	Good Standing 2004.11.18	18 SIMILKAMEEN	20 un	244124
390859	KETCHAN 1	103413 100%	092H078	2004.11.18	Good Standing 2004.11.18	18 SIMILKAMEEN	1 un	640925M
390860	KETCHAN 2	103413 100%	092H078	2004.11.18	Good Standing 2004.11.18	18 SIMILKAMEEN	1 un	640926M
390861	KETCHAN 3	103413 100%	092H078	2004.11.18	Good Standing 2004.11.18	18 SIMILKAMEEN	1 un	640927M
390862	KETCHAN 4	103413 100%	092H078	2004.11.18	Good Standing 2004.11.18	18 SIMILKAMEEN	1 un	640928M
404130	THALIA	103413 100%	092H078	2005.07.18	Good Standing 2005.07.18	14 NICOLA	20 un	206880
404131	THALIA-1	103413 100%	092H078	2005.07.17	Good Standing 2005.07.17	14 NICOLA	20 un	206881
413623	BOSS-1	103413 100%	092H088	2005.08.12	Good Standing 2005.08.12	14 NICOLA	20 un	246571
413624	BOSS-3	103413 100%	092H088	2005.08.13	Good Standing 2005.08.13	14 NICOLA	20 un	246572
413625	SHAMROCK	103413 100%	092H078	2005.08.14	Good Standing 2005.08.14	18 SIMILKAMEEN	18 un	246573
413628	DEST-1	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	18 SIMILKAMEEN	1 un	728062M
413629	DEST-2	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	18 SIMILKAMEEN	1 un	728063M
413630	DEST-3	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	14 NICOLA	1 un	728064M
413631	DEST-4	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	14 NICOLA	1 un	728065M
413632	DEST-5	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	14 NICOLA	1 un	728066M
413633	DEST-6	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	14 NICOLA	1 un	728067M
413634	DEST-7	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	14 NICOLA	1 un	728068M
413635	DEST-8	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	14 NICOLA	1 un	728069M
413636	DEST-9	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	14 NICOLA	1 un	728070M
413637	DEST-10	103413 100%	092H078	2005.08.17	Good Standing 2005.08.17	14 NICOLA	1 un	728071M
413626	THOR-1	106466 100%	092H078	2005.08.09	Good Standing 2005.08.09	18 SIMILKAMEEN	20 un	221671
413627	THOR-2	106466 100%	092H078	2005.08.09	Good Standing 2005.08.09	18 SIMILKAMEEN	20 un	221672
379320	DUNCAN	102178 100%	092H087	2005.07.28	Good Standing 2005.07.28	14 NICOLA	8 un	236889
404846	ADAM	102178 100%	092H087	2005.08.19	Good Standing 2005.08.19	14 NICOLA	16 un	208908

EXPLORATION HISTORY

Central Nicola Claim Group

This property covers a portion of a highly mineralized belt of rocks that has received a great deal of attention from prospectors and mining companies over the years. The items pertaining to the Ketchan area are listed separately.

- 1929: A small shipment from the Shamrock "mine" averaged 5.78% Cu.
- 1963: Consolidated Woodgreen carried out trenching on the Shamrock prospect and completed 3 diamond drill holes,
- 1979: Cominco Ltd. drilled 6 percussion holes in the central part of present claims, based on I.P., magnetic and geochemical surveys. Only two holes reached bedrock, both intersecting altered diorite. One hole averaged 0.141% Cu over 32 metres.
- 1985: Vanco Exploration carried out geochemical and geological mapping on central part of present claims. They also mapped and sampled the Shamrock prospect.
- 1988: Laramide Resources carried out a geochemical survey for gold in the northern part of the present claims.
- 1990: Minequest Exploration carried out 56 kilometres of I.P. surveying on central part of present claims.
- 1991: Rayrock Yellowknife Mines drilled 9 percussion holes on the Minequest property. No significant Cu or Au values are reported, but an untested copper prospect is noted.

- 1962: Plateau Metals staked the present Ketchan Lake prospect area. Later the same year, they carried out a magnetometer survey and completed 3 diamond drill holes.
- 1966: Adera Mining Ltd. optioned the property and carried out geological and geophysical surveys, along with 512 metres of diamond drilling and 512 metres of trenching. All of the records pertaining to the Adera Mining/Plateau Metals work have been lost.
- 1973: Bethlehem Copper Corporation staked the Log Group of mineral claims following a large-scale regional exploration program.
- 1974: Bethlehem Copper carried out geological mapping and geochemical sampling, followed by drilling of 10 percussion holes.
- 1975: Bethlehem Copper completed 351 metres of diamond drilling in 4 holes.
- 1980: Bethlehem Copper completed 410 metres in 2 diamond drill holes to test the results of an I.P. survey carried out earlier in the year.
- 1991: Cominco Ltd., following its takeover of Bethlehem Copper, completed 16 percussion drill holes, totalling 1067 metres.

Otter Creek Claim Group

- 1962-1965: Tormont Mines Ltd, completed 2759 metres of diamond drilling in 18 holes, ostensibly to test a skarn Cu showing west of Otter Creek.
- 1977: Andrew Robertson completed a vertical diamond drill hole to a depth of 123 metres at the site of the original showing.
- 2000-2004: W.R.Bergey carried out detailed mapping supplemented by magnetometer and EM surveys.
- 2004: Claims sold to Gary Robert Brown

GEOLOGY

Regional Geology

The property covered by the present report is located within Quesnellia, an accreted terrane in the southern part of the Intermontane Belt of the Canadian Cordillera. In the southern part of Quesnellia, the dominantly volcanic rocks of the Upper Triassic Nicola Group crop out within a north-trending belt, up to 50 kilometres in width, that extends for more than 200 kilometres from south of Princeton to north of Kamloops. The Location Map on page 3 shows a generalized outline of the belt as well as the location of the four major copper and copper-gold camps in the region (Afton/Ajax, Highland Valley, Craigmont and Copper Mountain).

The rocks of the Nicola Group were invaded by a large number of alkaline plutons that appear to be co-magmatic in part with the volcanic assemblage that they intrude. The largest of these, the Iron Mask batholith is the host for the Afton and Ajax copper-gold deposits. Large bodies of somewhat younger calc-alkaline intrusive rocks are found along the margins of the Nicola Volcanic Belt. These include the Guichon batholith that hosts the immense copper deposits of the Highland Valley and appears to be the source for the copper at the Craigmont mine along margin of the intrusion. Similar calc-alkaline granitoids of the Allison Lake suite, believed to be Late Triassic to Early Jurassic in age, are exposed throughout much of the Otter Creek claim group and also are found in the in the southwest corner of the Central Nicola claim group.

The Nicola Belt encloses several large inliers of younger sedimentary and volcanic rocks. Since these appear to be irrelevant to the matter at hand, no further description will be offered..

Regional Subdivision of the Nicola Volcanic Rocks

The Nicola volcanic assemblage was divided into three north-trending facies by Preto (1979) during his detailed study of this unit within the area between Merritt and Princeton. His partitioning was grounded on field observations that indicated that major changes in the character of the volcanic assemblage took place at two regional north-south fault zones – the Summers Creek/Kentucky-Alleyne /Quilchena fault zone [shortened hereinafter to Summers Creek] and the Allison fault. I have designated the latter “Otter Creek fault” since my work in that area suggested that the fault along Allison Creek was a much younger structure that diverged toward the northeast.

Preto (1979) believed that the sharply contrasting belts along these major fault systems was, “*too systematic and complete to be entirely due to late fault displacement unrelated in origin to Nicola volcanism,*” [but] “*probably the result of an old system of major deep-seated crustal fractures which dominated the structural framework of this region in Upper Triassic time.*” The Western Belt comprises a succession of calc-alkaline andesitic to dacitic volcanic rocks with minor amounts of limestone and chert. Alkaline basaltic and andesitic volcanic rocks dominate both the Central and Eastern Belts. However, the alkaline plutons that are coeval with the volcanic rocks appear to be confined mainly to the Central Belt. The volcanic rocks in the two eastern belts were deposited in both marine and non-marine environments. Although the

distribution pattern is fairly complex, Preto was able to divide the contrasting depositional environments into several broad units. The abrupt termination of these divisions against the bounding faults provides evidence that supports the credibility of his conclusions.

Monger (1989) carried out a geological synthesis, supported by field studies, that covered an area of nearly 5000 square kilometres. While he retained the terminology of the three Nicola volcanic facies, he denied that they had any association with regional faulting, and he eliminated the "Otter Creek" fault completely. The legend on his maps defined the Central and Eastern facies as andesitic and basaltic respectively. My recent mapping at Otter Creek suggests that Monger's conclusions regarding the major faults and their lack of relationship to the Nicola volcanic facies are erroneous.

Local Geology

The Central Nicola claim group falls entirely within the area underlain by the Central Belt of Nicola volcanic rocks, except for the small appendage to the southeast which apparently lies east of the Summers Creek fault. According to Preto (1979), "*This assemblage includes the oldest of the Nicola rocks within the area and is typified by an abundance of massive pyroxene and plagioclase-rich flows of andesitic and basaltic composition, coarse volcanic breccia, conglomerate, and lahar deposits and by lesser amounts of fine-grained pyroclastic and sedimentary rocks.*" Both subaerial and submarine varieties occur. Alkaline intrusive rocks of gabbroic and dioritic composition, along with small bodies of monzonite and syenite, are abundant throughout. At least some of these stocks are the eroded remnants of Upper Triassic volcanoes, according to Preto (1979).

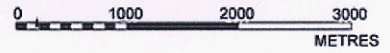
A body of intrusive breccia was identified on Bluey-2 claim in the northern part of Ketchan claim group during my recent visit. The breccia is located about a kilometre west of the south end of Bluey Lake (Figure 2). The extent of this body, or that of its associated plutonic rocks, has not been determined, but a brief reconnaissance indicated that it is at least 600 metres north-south by 400 metres east-west. Typical breccia close to the road is a heterolithic assemblage of sub-angular to well rounded clasts of quartz-poor intrusive rocks, mainly monzonite and syenite. Brick-red, pink and pale pinkish-green predominate; diorite fragments are uncommon. The clasts are mostly in the range of 0.5 to 2 cm. in diameter in a sparse matrix of granulated rock. Both coarser and finer breccias are present, including a variety composed mainly of fine-grained, brick-red intrusive rock. A similar breccia within a dioritic intrusion is found at the Big Kidd porphyry Cu-Au prospect of Christopher James Gold Corp., about 10 kilometres to the north, where it is host to a large copper-gold resource.

Ketchan Lake and Ketchan Creek are located within a south-trending paleovalley. "Valley basalt" flows of Pleistocene to Recent age were encountered beneath the alluvium during drilling of the Ketchan copper-gold prospect.

The Summers Creek fault is well defined in its northern and southern extensions. In the vicinity

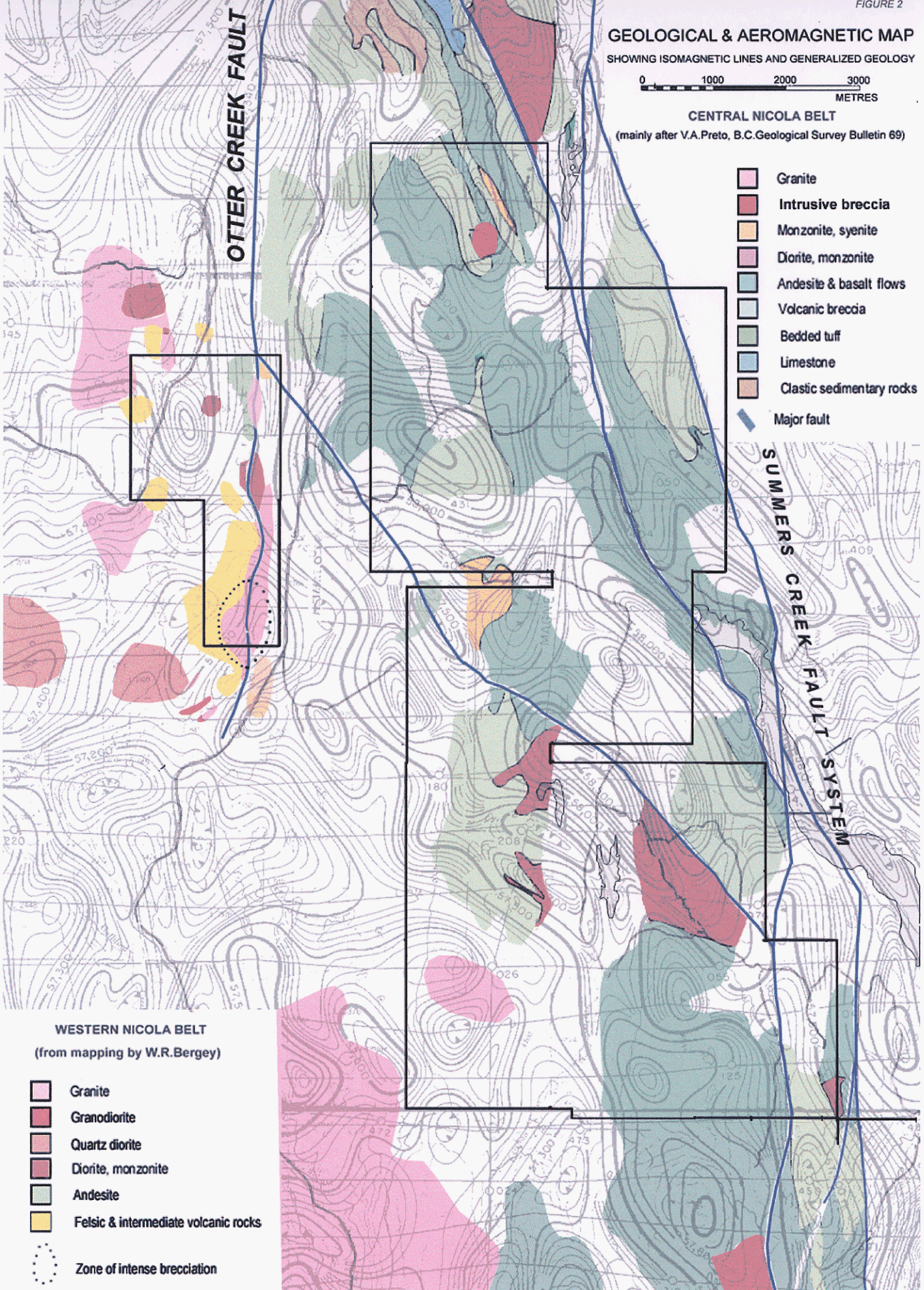
GEOLOGICAL & AEROMAGNETIC MAP

SHOWING ISOMAGNETIC LINES AND GENERALIZED GEOLOGY



CENTRAL NICOLA BELT
(mainly after V.A.Preto, B.C.Geological Survey Bulletin 69)

- Granite
- Intrusive breccia
- Monzonite, syenite
- Diorite, monzonite
- Andesite & basalt flows
- Volcanic breccia
- Bedded tuff
- Limestone
- Clastic sedimentary rocks
- Major fault



WESTERN NICOLA BELT
(from mapping by W.R.Bergey)

- Granite
- Granodiorite
- Quartz diorite
- Diorite, monzonite
- Andesite
- Felsic & intermediate volcanic rocks
- Zone of intense brecciation

of the Central Nicola claim group it splits into several branches and, in the southeast corner of the claim block, a wide zone of intense shearing has been mapped (Preto, 1979). One branch of the fault trends northwest across the Central Belt, and may connect with the Otter Creek fault. The larger bodies of diorite appear to be preferentially located along branches of the Summers Creek fault.

The geology of the Otter Creek Group is distinct from that of the Central Nicola Group. The geological transformation across the Otter Creek fault is striking. Basaltic and andesitic Nicola volcanic rocks and the associated alkaline plutons of the Central facies are found only along the eastern border of the claims east of the creek. West of the creek, most of the interior of the claims is underlain by a northeast-trending sequence of felsic to intermediate volcanic rocks and basalt is scarce or absent. Small bodies of diorite occur, but not the syenite-monzonite-diorite association that typifies the Central Belt.

Quartz-rich intrusive rocks of the Allison Lake pluton underlie most of the area south and west of the claim block and extend north along Otter Creek. These rocks are directly connected to the main mass of the pluton and do not comprise a faulted segment as indicated by Monger (1989). South of the property, the composition of the granitic rocks becomes progressively more siliceous toward the east (i.e., quartz diorite - granodiorite - granite).

A tongue of coarse-grained granite bordered by fine-grained porphyritic granite extends onto the claims in the vicinity of Otter Creek. In the southern part of Duncan Claim, these rocks and the adjacent volcanic rocks have been intensely brecciated within an ovoid zone that extends for a kilometre along the creek. Small masses of highly siliceous quartz porphyry are found in the central part of the brecciated zone. There is evidence to suggest that the introduction of the porphyry accompanied the brecciation. The Tormont drilling program tested a portion of the breccia.

The granitic body diminishes in size to the north; on Adam Claim, fine grained porphyritic granite outcrops are restricted mainly to the stream (beaver pond) borders; a zone of up to 60 metres in width is concealed along the trace of the fault. In this part of the area, the rocks adjacent to the creek tend to be highly sheared, fractured and altered. Granite associated with the Otter Creek fault also was noted near Aspen Grove, 12 kilometres to the north (Dawson, 2004).

The aeromagnetic data (Fig.2) define a linear magnetic "low" along Otter Creek that has a length of at least 30 kilometres. The anomaly terminates at the pronounced bend in the creek about one kilometre south of the claims. Basalt of the Central facies of the Nicola group and a monzonite-syenite stock, of the type that appears to be restricted to the Central Nicola Belt, are exposed east of the creek close to this point. To the south all of the outcrops are granitoid rocks related to the Allison Lake pluton. This evidence strongly suggest that the Otter Creek fault is cut off by the granite. If the radiometric age of ca.200 Ma given by Preto (1979) for the granite is correct, Otter Lake fault can be dated fairly precisely as being coeval with the deposition of at least part of the Nicola volcanic assemblage.

AEROMAGNETIC SURVEY

An airborne magnetic survey of the region was carried out by the Geological Survey of Canada in 1972 (GSC Map 6532G) -- and it has not lost any of its value over the years. Although the variations in magnetic intensity do not reflect economic mineralization directly, this survey is of considerable value in the interpretation of the geology of the region and in assisting in exploration planning. The alkaline diorite stocks that are hosts to several major mines and important prospects in the region, tend to be more magnetic than the adjacent rocks, and they almost always are clearly indicated by the aeromagnetic data. The magnetic "signature" of the deposits themselves may be enhanced by the presence of hydrothermal magnetite that accompanied ore formation.

The major faults in the region frequently are reflected by linear magnetic "lows". This is particularly true of the Otter Creek fault that defines the rift between the Central and Western Nicola volcanic domains. These "lows" are indicative of destruction of magnetite by hydrothermal solutions, and they may warrant investigation in cases where other favourable evidence for mineralization is present.

The elongated diorite stock at Ketchan Lake, which is mostly covered by overburden, is clearly defined by the magnetic survey. A similar magnetic feature is delineated in the central part of the Ketchan claims, about 4 kilometres to the northwest. This occurs in an area underlain by volcanic rocks according to Preto (1979), suggesting that the body is located at depth. The shape of the anomaly indicates a relatively shallow source. The intrusive breccia in the northern part of the claims lies at the southern end of a linear belt of magnetic anomalies parallel to the Summers Creek fault that also encompasses the Big Kidd breccia.

The broad north-trending magnetic "low" in the southeast corner of the Ketchan claim block may reflect alteration within a shear zone related to a branch of the Summers Creek fault. Gold-bearing stockwork quartz veining has been found in north-trending shear zones on the Sadim property, 4 kilometres to the south.

DEPOSIT TYPES

A search of Minfile uncovered 43 mineral prospects and showings within and adjacent to the property (Figure 3). Most of these (29) were categorized as "volcanic redbed Cu" occurrences; "alkalic porphyry Cu-Au" accounted for 8, "porphyry Cu" for 5, and there was a single "quartz-stockwork Au" prospect. The occurrences are confined mainly to the Central Volcanic Belt, but nine "redbed" showings are lined up close to the Summers Creek fault in the Eastern Belt. There were no Minfile references for the Western Belt, except for the PAR prospect that sits astride the bounding fault along Otter Creek.

Volcanic Redbed Copper

The numerous volcanic “redbed Cu” occurrences that infest the Central Nicola Belt for many kilometres along strike are representative of a deposit type that is rather uncommon worldwide, partly because they are found in a specialized geological setting. The source for the copper is basaltic volcanic rock, especially the K-rich varieties that commonly contain highly anomalous amounts of magmatic copper. Copper is leached from these rocks, either by hydrothermal solutions at moderate depth or by groundwater. Subsequently, the metal is transported and redeposited at higher concentrations in permeable zones within the volcanic rocks themselves or in adjacent sediments. The precipitation of the copper apparently requires reducing conditions, hence the customary association with “redbeds,” that are diagnostic of a reducing environment. Both of these critical conditions apply to the alkaline volcanic rocks of the Central Belt -- they tend to have a high copper content and a substantial proportion of them were deposited in a subaerial environment. Typically, a significant amount of silver is present in these deposits and the gold content is low. Hydrothermal alteration usually is inconspicuous.

The Shamrock prospect in the southeastern corner of the Ketchan Block is typical of the “redbed” type. Copper minerals, predominantly chalcocite, are found in bedding-parallel fractures in lahars close to the Summers Creek fault.

Alkalic Porphyry Copper-Gold

Alkalic porphyry Cu-Au occurrences are intermingled with those of the redbed type in this part of the region. This deposit type is hosted by alkaline intrusions composed of diorite, syenodiorite, monzonite, quartz diorite and microdiorite. The most common rock type is medium-grained diorite, similar in composition to the enclosing volcanic rocks. They are generally elongated, structurally controlled stocks and irregular bodies. Most of the alkalic diorite stocks are small, but they range in size up to that of the Iron Mask batholith, which has a length of 25 kilometres. The Ketchan Lake intrusion, more than 4 kilometres in length, is one of the largest in the central portion of the Nicola volcanic belt.

The alkalic diorite stocks, both mineralized and barren, are characterized by an elevated content of magnetite that is clearly reflected in geomagnetic surveys. Magnetite may also be deposited as part of the ore forming process, but this feature is difficult to detect within the high and variable magnetic background due to the intrusions themselves. The magnetic interpretation can be compromised when magnetite is destroyed by deep surficial weathering (e.g. Afton) or by late hydrothermal alteration (e.g. Axe prospect [?]), but these events are fairly rare.

Mineralized intrusive breccia forms portions of some of the deposits (e.g. Copper Mountain). The Cu-Ag mineralization on the Big Kidd prospect, located 8 kilometres north of the Ketchan property, is closely associated with an array of breccia pipes (Dawson, 2004).

The ore mineralogy of the alkalic porphyry deposits is typically pyrite-chalcopyrite-magnetite. Hydrothermal alteration may be intense; alteration minerals include K-feldspar, epidote, chlorite and albite.

FIGURE 3

KNOWN MINERAL OCCURRENCES
 [After Geological Survey Branch "MINFILE"]



- Prospect ○ Showing
- Volcanic Redbed Cu Type
- Alkalic Porphyry Cu-Ag type
- Porphyry Cu (MO) (Au) Type
- Au-Quartz Vein Type

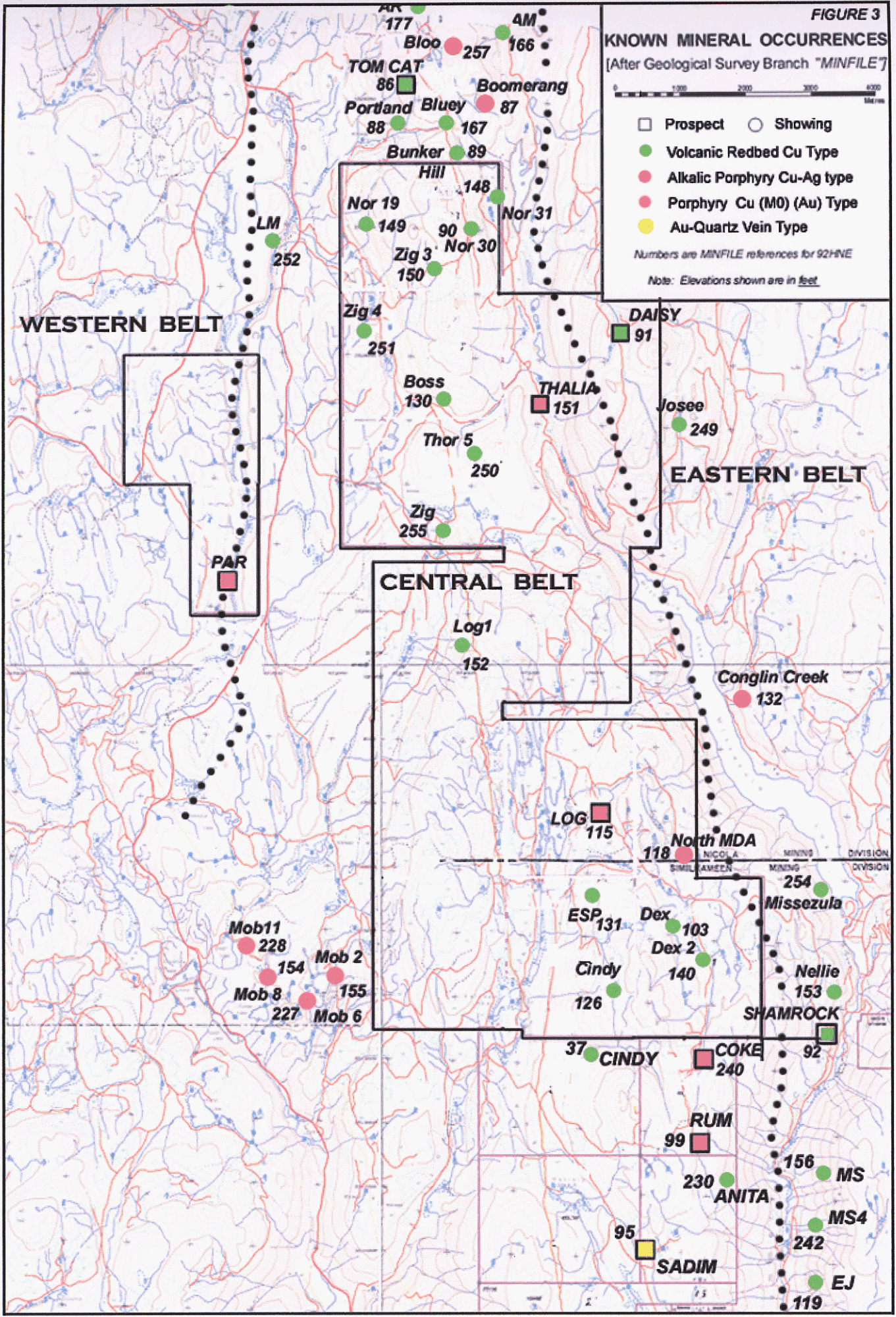
Numbers are MINFILE references for 92HNE

Note: Elevations shown are in feet

WESTERN BELT

EASTERN BELT

CENTRAL BELT



The intermingling of the two types of copper deposits in the same volcanic environment does not appear to be a coincidence. Deposits of the “redbed” type have been linked to the leaching of copper from adjacent basaltic volcanic rocks in many parts of the world. It is plausible that hydrothermal solutions generated close to volcanic centers were capable of similar leaching and redeposition of the metals at depth. (Large-scale hydrothermal leaching of copper-rich basalt is well documented in a number of cases.) The disparities in the mineralogy, alteration and morphology of the deposit types can be accounted for by the differences in the depths and temperatures at which deposition took place, and possibly by the nature of the solutions.

Major alkalic porphyry copper-gold mining camps are located at the northern and southern extremities of the Nicola volcanic belt (Afton/Ajax and Copper Mountain respectively). Important prospects of this type are found in the same suite of rocks close to the Ketchan property. Big Kidd, which lies 8 kilometres to the north of the Central Nicola claim group, has an Indicated Resource of 31.3 million tonnes of material at an average grade of 0.33 g/t Au and 0.15% Cu, and an Indicated plus Inferred Resource of 122.4 million tonnes, nominally of the same grade (Dawson, 2004). The Axe prospect, 10 kilometres to the south of Central Nicola claim group has received a great deal of attention from mining companies for the past 40 years. Estimates of a large copper-gold resource at the property have been published at various times since then, but I do not have a reliable source to quote.

Porphyry Copper

Porphyry Cu deposits, in the lexicon of Minfile, are distinguished from alkalic porphyry Cu-Au deposits in being associated with calc-alkaline intrusive rocks. Like the alkalic types they are bulk-mineable stockworks of quartz veinlets, closely spaced fractures and breccias that contain pyrite and chalcopyrite. Molybdenite is much more likely to be present than in the alkalic type and the gold content generally is much lower.

Several copper showings in granite of the Allison Lake pluton close to the southwest corner of the Ketchan claims are labeled as “porphyry Cu” by Minfile. Sparse data describe north-trending shears that contain weak copper-silver mineralization..

The PAR prospect in the Otter Creek claim block is noted as both “porphyry Cu” and “volcanic redbed Cu” in Minfile. There is no evidence to support the latter interpretation. The drill core that contained the most significant copper-silver mineralization was not preserved, and the drill logs defy interpretation. However, almost all of the known mineralization and the positive geophysical indications are found within intrusive rocks apparently related to the Allison Lake suite, and a porphyry Cu designation is a reasonable one. A detailed appraisal of the area surrounding the PAR prospect is given in a later section of this report.

It should be noted that an earlier version of Minfile identified the Par mineralization as “skarn Cu”. This was a reasonable assumption at the time, since the original discovery in the area was a local skarn-type copper showing in altered magnetite-rich volcanic rocks adjacent to the intrusion that hosts the more significant mineralization in the drill holes. [The mineralized intrusive rocks

were not identified until my recent work in the area.] Discovery of the skarn mineralization inspired the PAR diamond drilling since the most important mining operation in the region at that time was the Craigmont mine, a skarn deposit at the margin of the Guichon batholith. Like PAR, Craigmont is located in the Western Nicola Belt, about 50 kilometres to the north.

Gold-Quartz Veins

Au-quartz vein deposits are not well represented in the region. The only recorded prospect is the Sadim, which lies 3.5 kilometres south of the Ketchan claim group. A quartz stockwork was formed within a north-trending shear zone that is up to 15 metres in width. The precious metal content of the stockwork is directly related to the intensity of quartz veining, fracturing and sulphide content. The best drill section averaged 3.6 g/t Au and 25g/t Ag over 9 metres.

A wide zone of shearing within tuffs similar to those at Sadim has been mapped in the southeastern part of the Ketchan claim group.(Preto, 1979).

MINERALIZATION

Earlier sections of this report mention the proliferation of small copper showings, particularly those of the "redbed" type, including the Shamrock, from which a small production of copper was achieved. Although the presence of these showings enhances the potential of the property, since they emphasize that the area is unusually well mineralized, none of these showings has been reported on adequately for an assessment of its economic potential. A recent reappraisal of an old showing in the northern part of the Central Nicola claim block indicates that it may be of considerably greater importance than previous accounts suggested; a description of this occurrence is included in the following discussion. Extensive documented exploration work at the Ketchan prospect and, to a lesser extent, at Otter Creek (PAR) allows more detailed discussion.

Ketchan Prospect

The area of greatest current interest within the large Central Nicola claim group lies east and southeast of Ketchan Lake, in the southern part of the property. Since 1962, serious exploration work was carried out by Plateau Metals, Adera Mining, Bethlehem Copper and Cominco. This work included geological mapping, geophysical surveys and drilling (Figures 4 and 5). I have located and plotted 35 drill holes of various types. Unfortunately, no data on the geology and mineralization encountered was available for many of the holes, and core has not been located for any of the diamond drill holes.

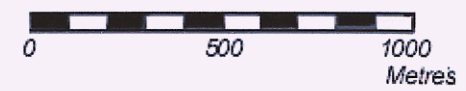
Most of the exploration work was carried out within the larger of the two elongated alkaline diorite stocks that have been delineated by airborne and ground magnetic surveys. Induced polarization surveying was carried out in 1966 and 1979. The later, more extensive, survey outlined an anomaly at least 2000 metres in east-west length and 1000 metres in width. The eastern part of the anomaly appears to reflect mineralized diorite. The western section has not been adequately tested, but reconnaissance drilling in this area, and in smaller I.P. anomalies to

FIGURE 4












COMPOSITE MAP OF
GEOLOGICAL & GEOPHYSICAL RESULTS

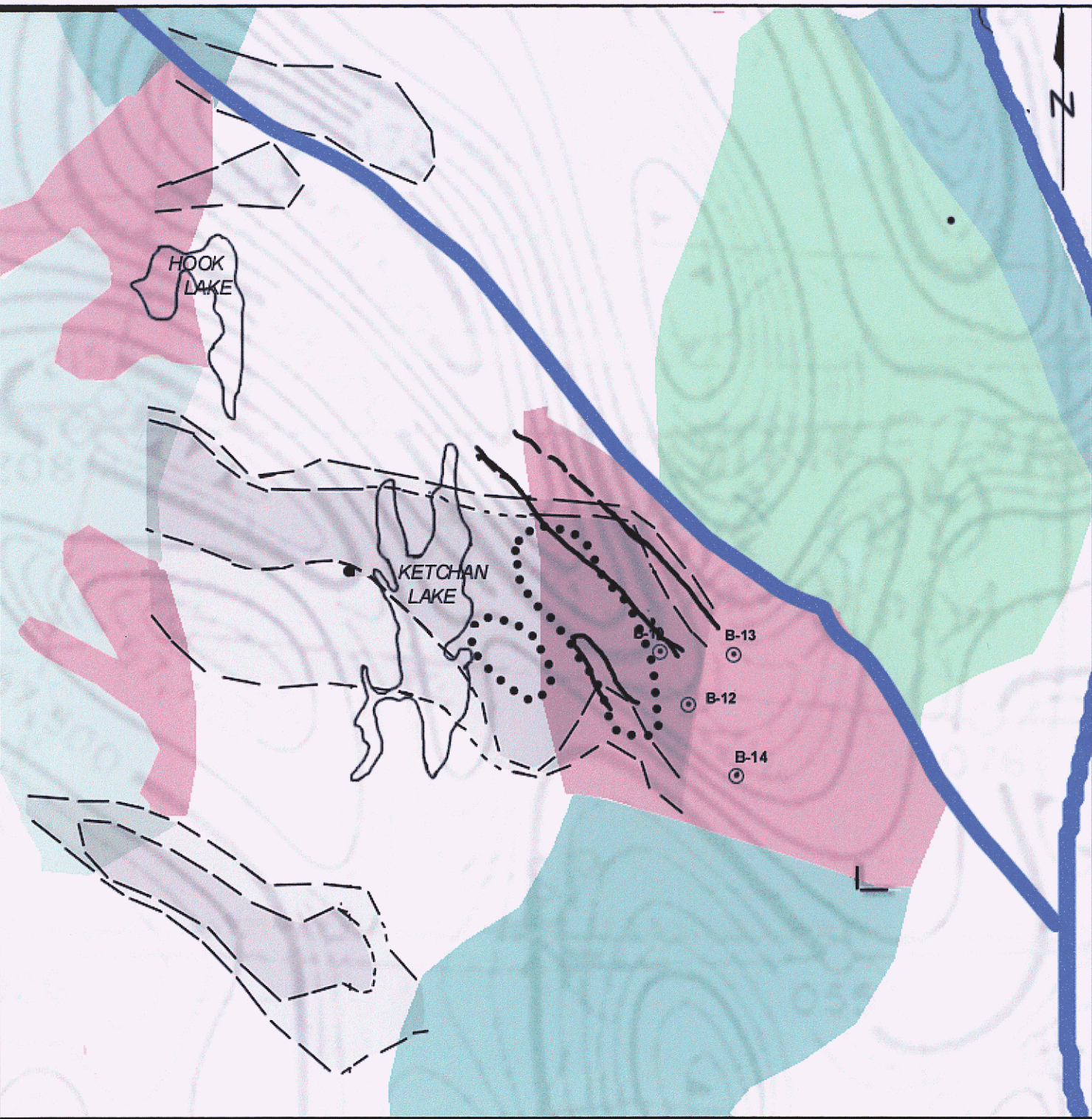
KETCHAN LAKE AREA

SCALE 1 : 20,000



EXPLANATION

-  Aeromagnetic contours
-  Ground magnetic anomaly area
-  1966 I.P. anomalies
-  1979 I.P. anomalies:
 a = strong; b = weak
-  Diorite, monzonite
-  Andesite & basalt flows
-  Volcanic breccia
-  Bedded tuff
-  Major fault
-  B-10
Significant drill hole



the north and south of the main zone, intersected graphitic sedimentary rocks within the volcanic units in some cases.. The main anomaly is open to the southeast.

The strongest part of the aeromagnetic anomaly over the larger stock lies north of Ketchan Lake. This part of the anomaly crosses a deep pre-glacial valley. Because of difficulties encountered in drilling, the test results were largely inconclusive. However, the I.P. data gave weak response in this area.

Complete drill logs and analytical data are available for only the most recent drilling – i.e., the 1991 Cominco program. Sixteen percussion holes were drilled, two of which did not reach bedrock. The most significant holes were located in the easternmost part of the drilling area – and they were among the last holes in the program. The best diamond drill holes in the 1975 Bethlehem Copper program also were located in the eastern part of the area. (This evaluation is based on a description of mineralization in the core since no assays from the diamond drilling are available to me.) The location of most of the drill holes is shown on Figure 5.

Cominco percussion holes B-10, B-12 and B-13 were mineralized throughout with pyrite and chalcopyrite, to depths of 91.5 metres. These holes are 220 to 250 metres apart.

Hole 10 averaged 0.38% Cu and 0.123 grams/tonne Au;

Hole 12 averaged 0.23% Cu and 0.135 grams/tonne Au;

Hole 13 averaged 0.13% Cu and 0.126 grams/tonne Au.

The top 46 metres of hole B-14, located 300 metres southeast of B-12, averaged 0.11% Cu and negligible amounts of gold. (Gold in this hole was determined by a geochemical procedure, unlike the standard assay procedure used for the previous holes.)

The logs of diamond drill holes put down by Bethlehem Copper in 1975 indicate that significant mineralization was encountered in holes 75-1 and 75-3 (Anderson, 1975). These holes were located close to the original discovery in the area, one of the few places where altered and mineralized rock is exposed along the zone. Earlier drill holes and trenches were located nearby, but most of the original surface exposures have been obscured by recent road construction.

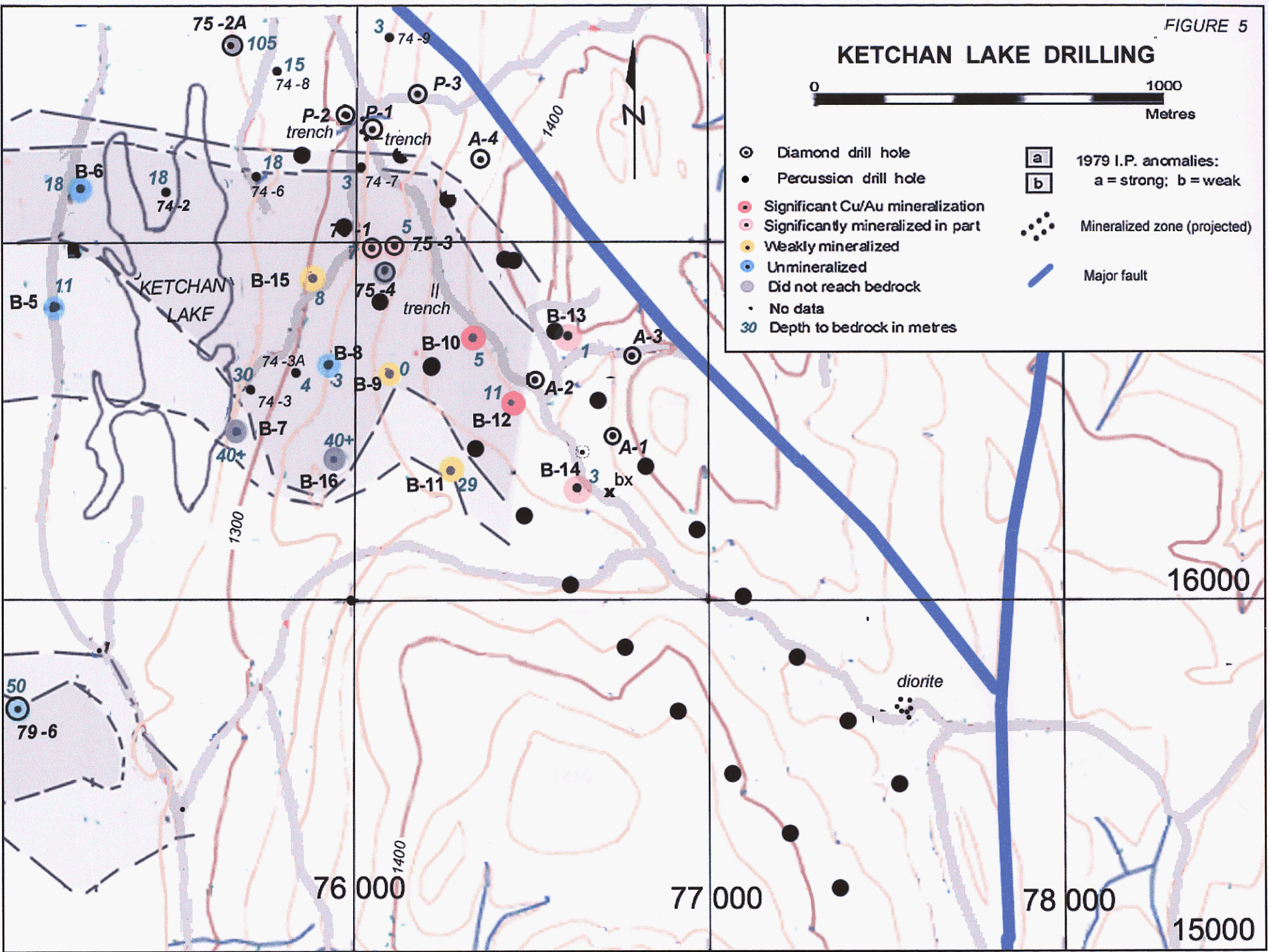
On the basis of the results of the Cominco drilling, and on the results of earlier drilling that were available to him, Aulis (1991) concluded that, "*Present drill hole spacing within the IP anomaly strongly suggests the possibility of a porphyry copper-gold deposit of significant size (> 80 million tonnes).*" He apparently included holes PC-74-7 and L-75-3 in extending his resource area to the northwest. However, he probably did not have data on diamond drill holes A-1, A-2 and A-3 that are located east of B-12. The Cominco report (Aulis, 1991) recommended that a follow-up diamond drilling program be undertaken. This was to consist of 12 holes, each to a depth of 150 metres oriented along the anomaly. He also recommended that detailed geological mapping be carried out prior to the initiation of the program. The details of the recommended drilling are not included in the report. There is no record of further exploration work in the area prior to the arrival of the present owners of the claims.

FIGURE 5

KETCHAN LAKE DRILLING



- ⊙ Diamond drill hole
- Percussion drill hole
- Significant Cu/Au mineralization
- Significantly mineralized in part
- Weakly mineralized
- Unmineralized
- Did not reach bedrock
- No data
- 30 Depth to bedrock in metres
- [a] 1979 I.P. anomalies: a = strong; b = weak
- [b]
- Mineralized zone (projected)
- Major fault



The I.P. survey did not extend beyond Hole B-12, but the aeromagnetic anomaly that reflects the alkalic intrusion extends to the southeast for another 1500 metres before terminating at, or close to, a major branch of the Summers Creek fault. I have shown a prospective mineralized zone on Figure 5 based on IP data and drilling results in the northeastern section and by the aeromagnetic data in the southeastern extension. The projection follows passes through the saddle between higher portions of the ridge to the north and south and follows a shallow depression toward the southeast. The location of the interpreted zone is constrained by outcrops of unmineralized diorite to the north and by volcanic rocks to the south. I was unable to locate any outcrops within the zone itself.

Mineralization along the zone appears to be both fracture controlled and finely disseminated. All of the accounts emphasize the very fine grain size of the chalcopyrite. The alteration is dominantly propylitic (epidote-chlorite-calcite), but some of the pink feldspar noted in the logs could indicate potassic alteration as well. The rock types logged in diamond drill hole 75-1 alternated between pink to gray "breccia" and fine-grained brick-red to gray "intrusive." Brecciated zones also are prominent in hole 75-3 but the rock types are not specified. Several fault zones were noted in both holes, and both terminated in "badly faulted ground."

The rock types in the mineralized zone appear to change toward the southeast. The logs of the cuttings from the Cominco drilling indicate a mixture of pink and green or gray chips in hole B-10 and almost exclusively pale green chips in B-12 and B-14.

My observations indicate that there is an abrupt change from unaltered (and unweathered) diorite on the northeast margin of the mineralized zone to fractured and altered material that weathers readily and is much more easily eroded. This fractured zone is sub-parallel to the major fault that has been mapped along the northeastern contact of the host intrusion. The extensive faulting noted in the diamond drill holes and the apparent sharp contact between altered and unaltered diorite suggest that the mineralization follows a wide zone of faulting, and that the topography to the southeast reflects this. Diamond drill hole 75-2A was abandoned in a faulted zone in soft, weathered rock, about 650 metres to the northwest of 75-1 and along the same trend.

PAR/Otter Creek Prospect

Diamond drilling by Tormont Mines Ltd. from 1962 to 1965 was virtually the only serious exploration effort in the area, the property having been tied up by non-performers from that time until 2000. My recent work has been mainly aimed at placing the drilling results into geological perspective and in extending the target for economic mineralization beyond the immediate drilling area.

The Tormont program comprised 2759 metres of drilling in 17 holes. The work was based on a copper showing in a geological setting that suggested skarn-type mineralization, although no nearby intrusive rock had been identified. The core was not preserved, and the drill logs are all but indecipherable. Fortunately, the assay results appear to be complete and reliable and the drill holes could be accurately located in plan (Figure 6).

The initial holes were drilled in the vicinity of the discovery showings, without notable success. Somewhat fortuitously, significant disseminated copper-gold-silver mineralization was encountered two years later in the sixth hole, 2000 metres east of the surface indications. Nevertheless, the remainder of the drilling followed a pattern designed to test the down-dip extension of a putative skarn zone that dipped at a low angle to the east.

My recent mapping indicates that the original magnetite-rich skarn mineralization was deposited in andesitic tuff marginal to granitic intrusive rocks related to the Allison Lake pluton. The core of the local intrusion is a coarsely porphyritic granite that occupies a portion of the Otter Creek valley. Fine-grained porphyritic granite lies between this and the showings. A distinctive quartz porphyry, characterized by abundant large quartz "eyes" in an extremely fine-grained groundmass, intrudes the granitic rocks and the adjacent volcanics. The quartz porphyry is found in small exposures throughout the drilling area and to the north, where it is found close to the Otter Creek fault. The only large outcrop area is located close to Otter Creek. The drilling logs indicate that the porphyry extends through the fault at this point. The granitic rocks and the immediately adjacent volcanic rocks in the drilling area have been subjected to intense brecciation within an ovoid zone, with a maximum dimension of about a kilometre along Otter Creek. The quartz porphyry alone appears to have escaped brecciation, and may well have accompanied the process.

The best drill holes in the Tormont program are centrally located within the brecciated area, and they appear to be associated with the largest exposed body of quartz porphyry, although the porphyry itself is not mineralized except for sparse pyrite. Only two drill holes, H-27 and H-30, were drilled beneath Otter Creek and both of these collared in quartz porphyry and continued in this rock through the assumed trace of the fault. H-31 was the only hole to test the eastern side of the fault. It was abandoned in "caving ground, with heavy water inflow" at the presumed location of the fault.

A number of holes surrounding, and north of, the main porphyry outcrop contained disseminated pyrite-chalcopyrite mineralization throughout most of their lengths according to the logs. However, the selection of samples was somewhat erratic, and only short sections of core were assayed in most cases. The following are the most significant assays, from south to north.

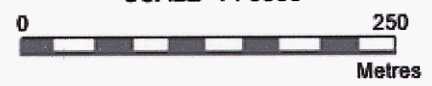
Hole 26	1.4% Cu, 5g/t Ag, <0.1g.t Au / 6 metres; 0.3% Cu, 5 g/t Ag, 1 g/t Au / 9 metres.
Hole 27	0.9% Cu, 41 g/t Ag, < 0.1 g/t Au / 20 metres; <u>incl.</u> 1.9% Cu, 64 g/t Ag / 6.7m.
Hole 29	0.5% Cu, 12 g/t Ag, 0.25 g/t Au / 34 metres [entire hole except for quartz porphyry]
Hole 31	0.37% Cu, 34 g/t Ag, 0.6 g/t Au / 1.5 metres [<u>last core before hole lost in fault</u>]

No drilling was done east of the Otter Creek fault, where outcrops are scarce, except in Hole 31. The fault itself was not tested; Holes 27 and 30 were located east of Otter Creek, but both holes started in quartz porphyry, which occupies the fault zone in this part of the area. (The best Cu-Ag in the core drilling was intersected in Hole 27 immediately west of the porphyry.) A short section of significant Cu-Ag-Au mineralization was found in Hole 31 adjacent to the faulted zone.

FIGURE 6

**PAR DRILLING AREA
OTTER CREEK CLAIM GROUP**

SCALE 1 : 5000

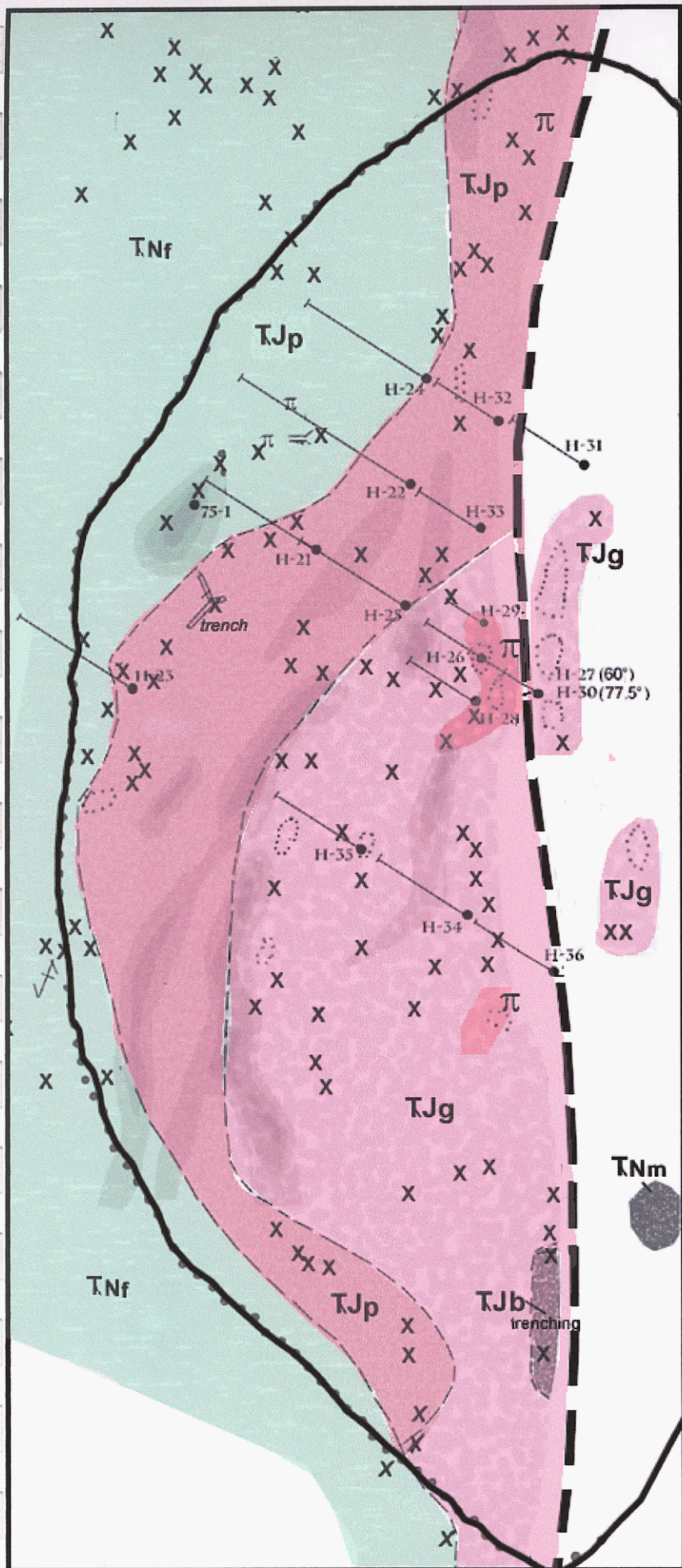


EXPLANATION

- TRIASSIC AND / OR JURASSIC**
- TJb** Fine-grained mafic intrusive rock
 - π** Quartz porphyry; mainly small bodies shown as π
 - TJp** Mainly quart-feldspar porphyry
 - TJg** Coarse-grained granite with large quartz phenocrysts

- TRIASSIC**
- NICOLA GROUP**
- Western volcanic facies**
- TNf** Felsic and intermediate volcanic rocks
- Central volcanic facies**
- TNm** Mafic volcanic rocks

- X** Small outcrop
- ⋯** Outcrop area
- Filtered VLF-EM data
- Diamond drill hole
- Otter Creek Fault
- Outline of zone of intense brecciation



[Geology by W.R.Bergey, P.Eng.]

North of the drilling area, on the Adam claim, exposures of granitic intrusive rocks are confined mainly to the immediate vicinity of Otter Creek. The porphyry as well as adjacent volcanic rocks along the margins of the beaver ponds tend to be highly fractured or sheared, and commonly are altered and limonite-stained. The flooded area has a fairly uniform average width of 50 metres.

Several VLF-EM anomalies were detected. These generally trend north to north-northeast, and they have lengths of up to 400 metres. Some of the shorter zones can be correlated known mineralization (e.g. the local anomaly in the vicinity of skarn mineralization in the discovery area) but the much more continuous anomalies farther south have no obvious cause, although "specks and seams" of graphite were reported from Hole 34.

VLF-EM anomalies also were detected within porphyritic granite and adjacent volcanic rocks north of the drilling area. They tend to be located close to small exposures of quartz porphyry along with ferruginous breccia of recent origin.

Zig 3 Breccia

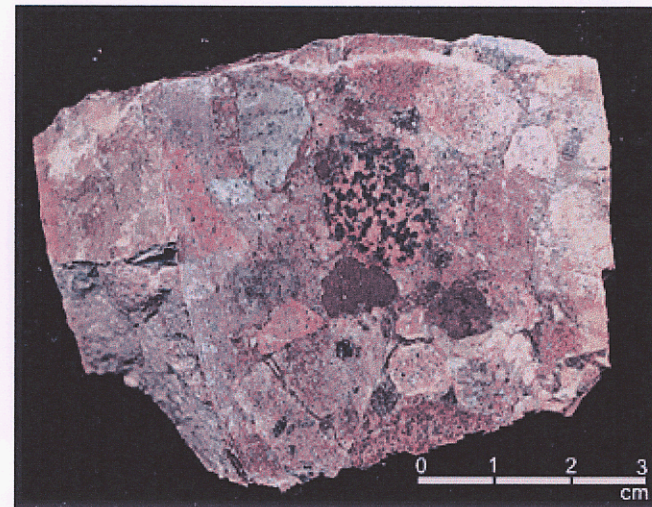
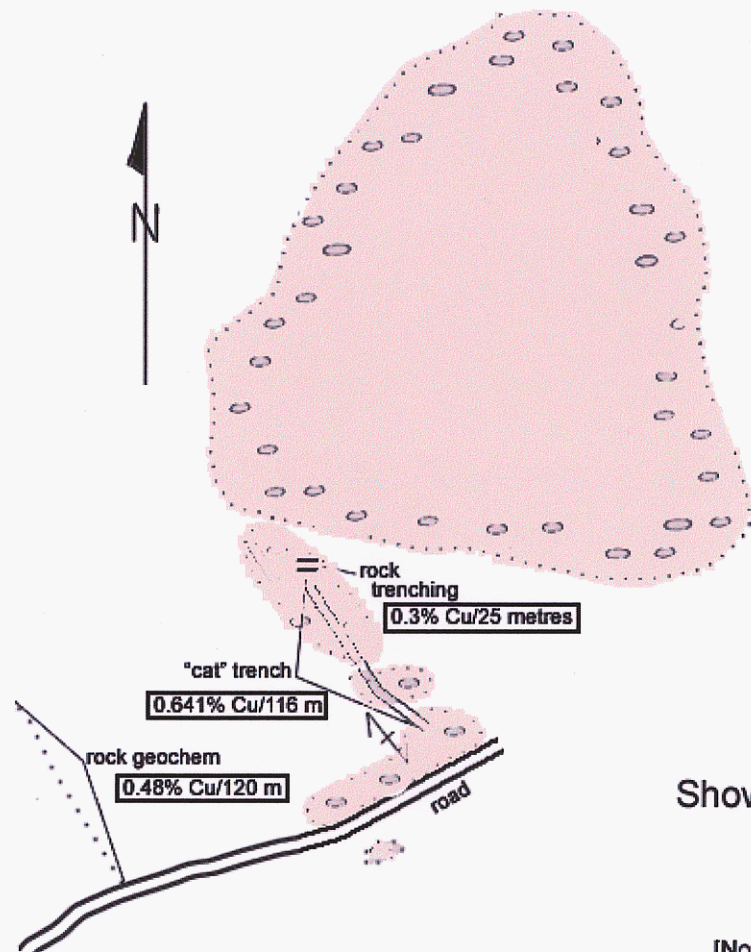
Gary Brown, President of Copper Hill Exploration, collected several obviously well mineralized samples along a road cut in the northern portion of the Ketchan claim group that assayed from 1% to more than 5% copper. On my later field examination I identified the rocks in the vicinity as an intrusive breccia, a type of rock that frequently accompanies copper-gold mineralization in the region. Mapping in the vicinity indicated that this favourable material, although previously unmapped, covers an area of at least 600 metres by 400 metres. – and probably is much more extensive. [Air-photo interpretation suggests that the breccia and associated intrusive rocks covers more than five square kilometres.] The mineralized rocks continue upslope to the northwest of the roadcut for several hundred metres, a zone that has been trenched extensively (Figure 7)...

It was discovered subsequently that previous work in the immediate area was carried out by Vanco Explorations (Lisle, 1985) and by Rayrock Yellowknife (Gourlay, 1991), *inter alia*. The designation "Zig 3" is the name given to a showing described in Minfile (092HNE150). That showing is stated to consist of, "*native copper and chalcocite in augite plagioclase porphyritic andesite and red volcanic breccia.*" Despite the discrepancies, the location and description of the trenching *vis-à-vis* the showings along the road strongly suggest that Zig 3 mineralization is contained within intrusive breccia. Map 5b, that accompanies Lisle (1985), confirmed this.

The nature of the intrusive breccia has been described above under "Property Geology." The rocks within the road cut have been sheared at 320°. They commonly contains patches of malachite, but my cursory examination did not reveal any chalcocite or native copper. Under the microscope, the breccia in the mineralized area contains disseminated pyrite and extremely fine-grained chalcopyrite. Magnetite is common in some breccia clasts and rare in others. I did not observe any evidence of magnetite along fractures.

Rock sampling in the area by Vanco Explorations was carried out along the "cat" trench that extends north-northeast from the mineralized roadcut, but not along the cut itself. Six samples

FIGURE 7



SKETCH OF ZIG 3 PROSPECT AREA
Showing trenching and intrusive breccia outcrops



[Note: Assays were taken from assessment reports and are not verified.
See text of report for descriptions.]

taken over a length of 116 metres averaged 0.64% Cu. Five samples taken along the same trend about 200 metres to the east averaged 0.48% Cu (Lisle, 1985 [Fig. 5b]). Vanco Explorations also carried out reconnaissance geochemical sampling and geological mapping on their Climax Claim, which covered the northern three quarters of the present Bluey 2 Claim. In his discussion of the program results Lisle (1985) states, "*A number of rock samples collected from the central area and near the southern boundary of the Climax claim contain gold ranging up to 35 ppb. This area is partly coincident with high copper and silver and warrants detailed investigation.*"

Rayrock Yellowknife resampled a rock trench of unknown provenance during their exploration of an area that coincides with the northern and central parts of the Ketchan property. An assay value of 0.3% copper across 25 metres is shown at a locality near the northern border of the Zig 3 claim on Figure 4. This obviously corresponds to the "rock" trench shown on my sketch. No description is given.

I collected a large sample of breccia, free of obvious copper mineralization, from the central part of the "cat" trench. This sample assayed 0.34% Cu, 0.006 g/t Au and 1 g/t Ag, a result that is line with the my microscopic examination of a few weakly mineralized specimens. A nearby sample of malachite-stained material nearby assayed 2.6% Cu and 97 g/t Ag.

CONCLUSIONS

The Ketchan Lake property is located within a highly mineralized area, a portion of a regional belt that contains several very large copper and copper-gold deposits. Two nearby mining properties have significant resources of copper-gold mineralization in settings similar to those at the Ketchan and Zig 3 prospects discussed in the present report.

The drill-indicated mineralization on the Ketchan prospect is typical of "Alkalic Porphyry Cu-Au" type found within dioritic intrusive rocks that are appear to be coeval with the enclosing Nicola volcanic rocks. Seven widely-spaced mineralized holes, from three previous programs, are located along a linear trend within a large body of diorite. The mineralized zone enclosing these holes is more than 1000 metres in length and possibly 200 metres in width. The zone parallels a major fault that may have controlled the emplacement of the intrusion. A Cominco Ltd. assessment report (Aulis, 1991) suggested the possibility of a porphyry copper-gold deposit of greater than 80 million tonnes in the area surrounding the mineralized drill holes. Ground geophysical surveys have not been carried out east of the drilling area, but the aeromagnetic data and the topographic expression suggest that the zone is prospective for as much as 1500 metres to the southeast.

The Zig 3 Breccia prospect is at a very early stage of exploration. However, a recent discovery of highly favourable intrusive breccia was made in an area that has been trenched and sampled in several uncoordinated projects. Significant copper values within a 200 metre-square-area are reported in assessment reports. The results appear to have received little follow-up, despite recommendations by Lisle (1985) based on rock geochemical sampling, perhaps due to the

perceived unfavourable nature of the “volcanic” rocks mapped in the area. Intrusive breccia of the type noted, although uncommon, frequently is found in association with ore deposits and advanced prospects of the alkalic porphyry Cu-Au type. Of particular significance is the Big Kidd prospect, 10 kilometres to the north; this intrusive breccia-related deposit has an indicated/inferred resource of 122 million tonnes of copper-gold mineralization (Dawson, 2004).

The copper-silver-gold mineralization in the Otter-Creek claim group to the west is associated with brecciated granite and porphyry of the calcalkaline Allison Lake suite. The area of interest lies along the Otter Creek fault, a major geological feature that appears to be related in origin to the Nicola volcanism. A considerable amount of diamond drilling at the PAR prospect (2759 metres in 17 holes) was designed to test a non-existent deposit type. Significant mineralization was encountered in several drill holes close to the fault, but the drilling failed to test the fault itself. The area west of Otter Creek also is virtually unexplored. Recent geological work indicated that the favourable porphyritic granite extends to the north along Otter Creek for at least three kilometres. The fault zone is concealed by ponds and swamps across a width of at least 50 metres within this area, but the rocks adjacent to the creek are extensively sheared and altered.

RECOMMENDATIONS & FIELD BUDGET

The Ketchan prospect is by far the most valuable one, and it is recommended that it receive the bulk of the exploration expenditure. Extensive drilling, as well as geological and geophysical surveys, have been done at Ketchan and an exploration target is reasonably well defined. Accordingly, a program of diamond drilling is recommended to test this target, along with sufficient geological mapping by the supervising engineer to assist in the selection of appropriate drill sites. Additional drilling also is warranted for the Otter Creek prospect, but its inception should await the completion of additional geological and geophysical surveys that would provide better definition of the targets. The Zig 3 Breccia prospect is in the early stages of exploration and my recommendations are confined to detailed geological mapping and geochemical sampling .

Ketchan Prospect

A diamond drilling program within the zone partially outlined by the IP survey and the results of previous drilling was recommended in the Cominco assessment report (Aulis, 1991). I concur with his recommendation, which was based on more evidence than I possess, but I believe that drilling also should be undertaken to the northwest and southeast along the same trend. I have not included a recommendation for a second phase, which will depend on the results of the drilling.

Diamond drilling within area previously drilled: 12 holes @ 150 metres – 1800 metres.
Diamond drilling along the zone to the southeast: 4 holes @ 150 metres – 600 metres.
Total diamond drilling: 2400 metres

The cost estimate is based on a per metre cost inclusive of diamond drill contract, project support, consulting, food & lodging, analyses and report preparation = \$132.00.

Estimated cost for the recommended 16-hole, 2400-metre program: \$316,800.

Otter Creek Prospect

Phase I

- a) Geological mapping, magnetometer & VLF-EM surveying: 20 days.
- b) IP surveying: 10 kilometres.

Phase II

- a) Diamond drilling in Otter Creek fault near previous drilling: 2 holes @ 150 metres - 300 metres
 - b) Diamond drill testing of VLF-EM anomalies: 2 holes @ 50 metres - 100 metres
 - c) Diamond drill testing of Otter Creek North Zone* 2 holes @ 100 metres - 200 metres
 - d) Diamond drill testing of area east of previous drilling* 2 holes @ 150 metres - 300 metres
- [*contingent on the results of Phase I]

Cost estimate:

Phase Ia: 15 days @ \$800./day = \$12,000.

Phase Ib: 10 kilometres @ \$1000/KM 10,000

Total Phase I = \$22,000.

Phase IIa: 300 metres @ \$132/metre = \$39,600

Phase IIb: 100 metres @ \$132/metre = 13,200

Phase IIc: 100 metres @ \$132/metre = 26,400

Phase IId: 150 metres @ \$132/metre = 19,800

Total Phase II = \$99,000

Estimated cost for the Otter Creek Prospect: \$121,000

Zig 3 Breccia Prospect

Only a single phase is recommended at this time since the follow-up will depend entirely on the results of geological mapping and geochemical sampling.

Geological mapping, sampling, supervision, report writing: 10 days.

Soil and rock-chip geochemical sampling: 10 days.

Cost estimate

Geological work: 10 days @ \$500/day = \$5000.

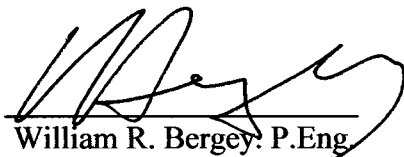
Geochemical sampling: 15 days @ \$250./day = 3750.

Assaying, geochemical analyses = 2000.

Estimated cost for Zig 3 Breccia Prospect: \$10,750.

Estimated total budget for the Ketchan Property: \$448,550.

Respectfully submitted,



William R. Bergey: P.Eng

CERTIFICATE of AUTHOR

I, **William Richard Bergey, P.Eng.**, do hereby certify that:

1. I am a Consulting Geologist with office at: 25789 8th Avenue, Aldergrove, B.C., Canada V4W 2J8.
2. I graduated with an Honours Bachelor of Arts degree in Geology from McMaster University in 1947. I was enrolled as a graduate student in geology at the University of Toronto (1949-1950), and in geophysics at Colorado School of Mines (1952-1954).
3. I am a member of the Association of Professional Engineers, Geologists and Geophysicists of the Province of B.C., and I am a Senior Fellow of the Geological Society of America.
4. I have worked as a geologist in the mining industry for a total of 55 years since my graduation.
5. I have read the definition of "qualified person" set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfill the requirements to be a "qualified person" under NI 43-101.
6. I am responsible for the preparation of all sections of the technical report titled *Report on the Ketchan Property*, dated September 15, 2004 (the "Technical Report") I examined the eastern portion of the Ketchan Property (designated as the Central Nicola claim group) on August 28 and 29, 2004. I have visited the western portion (Otter Lake claim group) many times in the past 5 years.
7. I have had prior involvement with the property that is the subject of the Technical Report. The nature of my involvement was in the compilation of the data from previous work on the Central Nicola claim group. The sources included government maps and reports, as well as property information from Assessment Reports and MINFILE. I also carried out geological mapping and geophysical surveys on the Otter Creek claim group.
8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
9. I am independent of the issuer applying all the tests in section 1.5 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication of the Technical Report in the public company files on their websites accessible by the public.

Dated this 15th Day of September, 2004.


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