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CHEVRON CANADA RESOURCES LIMITED
MINERALS STAFF
CANADA

Cordilleran Au Programs

Monthly Report - October 8, 1986

L. A. Dick

1. Introduction

Only limited field work has been carried out since September 15. This has involved:

(a) property examination near Lillooett (ground held by Utah; a potential j.v. opportunity);

(b) property examinations in the Bralorne area;

(c) claim staking in the Manson Creek area;

(d) visit to the Mt. Washington epithermal Au prospect;

(e) field examination of work to date on Monashee project.

This report recommends a number of properties, representing a variety of Cordilleran gold-hosting environments, to consider for option.

2. Manson Creek area

Results of our limited field work in the Manson Creek area was reported on last month. As a follow-up, we have staked two groups of claims to cover:

(a) a gold-anomalous vein in carbonatized, sheared volcanic rocks which, from an old trench, returned two anomalous Au values of 4000 ppb and 0.3 oz./ton;

(b) a zone of strong shearing, carbonatization, silicification and quartz-barite veining.

The Manson Creek area warrants further prospecting for vein-hosted gold mineralization. Our claims cover an area of favorable stratigraphy, structure and mineralization in a district historically important as a placer Au producer and should be explored as a starting point for more detailed exploration in the area. A claims location map is shown on Figure 2.

3. Summary of property examinations and recommendations for ground acquisition

During the field season, emphasis for property examinations leading to possible acquisitions was placed on existing present- or past-producing camps. Particular

emphasis has been placed on the past-producing Bralorne-Pioneer (4 M oz. produced) and Hedley (2 M oz. produced) camps. Individual recommendations are currently being written for each of the following:

(a) Bralorne Camp

Two properties have been recommended for possible option along the mesothermal Au deposit-hosting Cadwallader and Fergusson faults. These are the Wayside and Normine properties north, and south, respectively, of the past-producing Bralorne-Pioneer deposits (Figure 3). Both properties are underlain by geology very similar to the past-producers. In particular, the "Bralorne intrusions", complex bodies of competent diorite and granite, which are the favored vein (ore) host in the known deposits, in part underlie both properties. At the Wayside, the diorite hosts a known auriferous vein/shear which has been extensively explored/exploited to shallow (± 500 feet below surface) depths in the past. There are drill indications (one intersection) that the known mineralized zone extends to depth below the lowermost workings; however, the property requires basic exploration studies before detailed work on the known mineralization is carried out. If optioned, our approach should be to determine if other mineralized zones exist, since the known mineralization is erratic, spotty and narrow.

The Normine Resources property adjoins, to the south, the property of the past-producing Pioneer deposit. In contrast to the Wayside, this large property (8 km of the Cadwallader fault are contained within the property) has not been extensively explored in the past, owing to the paucity of outcrops. Recent (last month) drilling by Normine has revealed that the important Fergusson and Cadwallader faults, along with bodies of ultramafic rocks within the respective fault zones, trend onto the Normine property. More importantly, a previously unknown body of Bralorne intrusion has been penetrated by their last drill hole. I examined the core and noted abundant, though narrow, quartz veins within quartz-carbonate-altered diorite near the contact of the diorite with a fault-controlled body of serpentinite. This is identical to the situation at Bralorne.

An ideal situation would be to option both the Wayside and the Normine properties. Both have indications of Bralorne-type mineralization but are in different stages of exploration. One (the Wayside) has been extensively (but very poorly and non-systematically) explored and has indications of some mineralization, while the other is a raw, virtually unexplored property with an identical geologic setting to an adjacent major past-producer. The Wayside has good exposure, but nevertheless has never been mapped or geochemically sampled in the detail required to discover shear-hosted veins. The Normine property requires geochemical and geophysical coverage and extensive drilling to follow the diorite/ultramafic faulted contact.

The Bralorne and Pioneer gold deposits were the major past-producers in British Columbia with extensive gold-bearing quartz vein systems which, in the case of Bralorne, were never mined out (grades at the bottom, 6000' below surface, were still in the 0.5 oz./ton range). The Wayside and Normine properties are the two most likely to host additional Bralorne-type ore bodies and both are available (and recommended) for option.

(b) Hedley camp

An acquisition recommendation for a property situated 8 km south of the past-producing Hedley skarn Au deposit (2 M oz. produced, now being re-opened as an open pit mine with reserves of ± 6 tons @ 0.15 oz./ton Au) was made in last month's report (Figure 4). The recommended area for exploration is underlain by the same section of stratigraphy as the Hedley deposits, based on recent (this summer - as yet unpublished) mapping by the B.C. Dept. of Mines. A visit to the area revealed outcropping of skarn and, importantly, of the ore-associated diorite dykes/sills of the type which appear to have localized the auriferous skarns at Hedley. Abundant arsenopyrite was noted locally in one of the dykes, an important indicator of Hedley mineralization. Property owners have been identified and initial contacts made. Initial exploration work required is basic mapping/geochemistry followed by ground mag to accurately delimit the important calcareous sediment/tuff contact. Although this ground hosts the same strata as the Hedley deposit and skarns/altered sills outcrop, no indication has been found of systematic exploration in the past. My initial examination revealed that strata on the Montello Resources property are, for the most part, steeply-dipping, indicating that if auriferous skarns were located, exploitation would likely be by underground methods. Similarly, if the strata were steeply-dipping at the time of dioritic intrusion (and coincident skarnification) the chance of developing extensive skarns in the acquisition area (Figure 4) will have been less likely. The structure in the area is complex and the attitude of the rocks at the time of alteration is not known.

It is recommended that we option the Seadrift and Mandusa properties and explore the band of calcareous sediments with the objective of rapidly evaluating whether or not skarn has been extensively developed. I believe this to be one of the most favorable acquisition opportunities in the Hedley area.

(c) Other opportunities

During the last month, contacts have been made regarding two additional properties which warrant follow-up as potential acquisitions. In contrast to Bralorne and Hedley, both are epithermal targets.

(i) Blackdome area

As reported last month, we field-investigated a large property adjoining the Blackdome epithermal vein deposit. We found no anomalous values in rock that could explain the high heavy mineral concentrate geochem values which the vendors obtained previously. However, very little outcrop occurs on the property and preliminary geologic mapping indicates that the contact between Eocene rhyolites and Miocene basalts (at which level the Eocene-hosted Blackdome deposit occurs) crosses the property. Abundant evidence in float of chalcedonic quartz and siliceous sinter indicate a favorable environment which should be followed up. An early-season geochemical survey of the potential source area for the heavy mineral concentrate anomalies could be easily carried out.

(ii) Mt. Washington - Vancouver Island

Initial drilling results by the junior company holding the property (Better Resources) on ground that has long been held as a copper prospect indicate highly anomalous (0.1 to 0.35 oz./ton) values over mineable widths within Tertiary-age breccias which cut volcaniclastic sediments (one hole returned an intersection of 52 feet of 0.174 oz./ton Au) and in a flat lying, silicified fault/shear which cuts a breccia body (best intersection 17 feet at 0.35 oz.Au/ton). Gold anomalies are extensive within the property and the company indicated they will be looking for a major partner after their initial drilling is completed. The property boasts excellent infrastructure.

I made a one day visit to this property, accompanied by L. Cathles of C.O.F.R.C. It is our feeling that the auriferous, flat-lying silicified zone was produced by fluid movement along a nearby flat, detachment surface, possibly within the uppermost part of a porphyry system. The deposit has similarities to the so-called detachment fault-related gold deposits of the western U.S.

From our observations there are possibilities for tonnage on the scale that could be of interest to Chevron. Exploration on this property has only just begun and the results to date are very encouraging. An option is recommended.

4. **Other activities**

(a) S. McAllister returned to the Lillooett area to investigate a potential farm-in from Utah Exploration.

(b) G. Wober and T. Zanger, field assistants, have been terminated for the field season.

(c) a report on the geologic setting of epithermal gold mineralization in the Vernon area is being done by consultant K. Daughtry to provide a basis for assessing a potential farm-in opportunity in the Whiteman Creek area.

L. A. Dick

L. A. DICK

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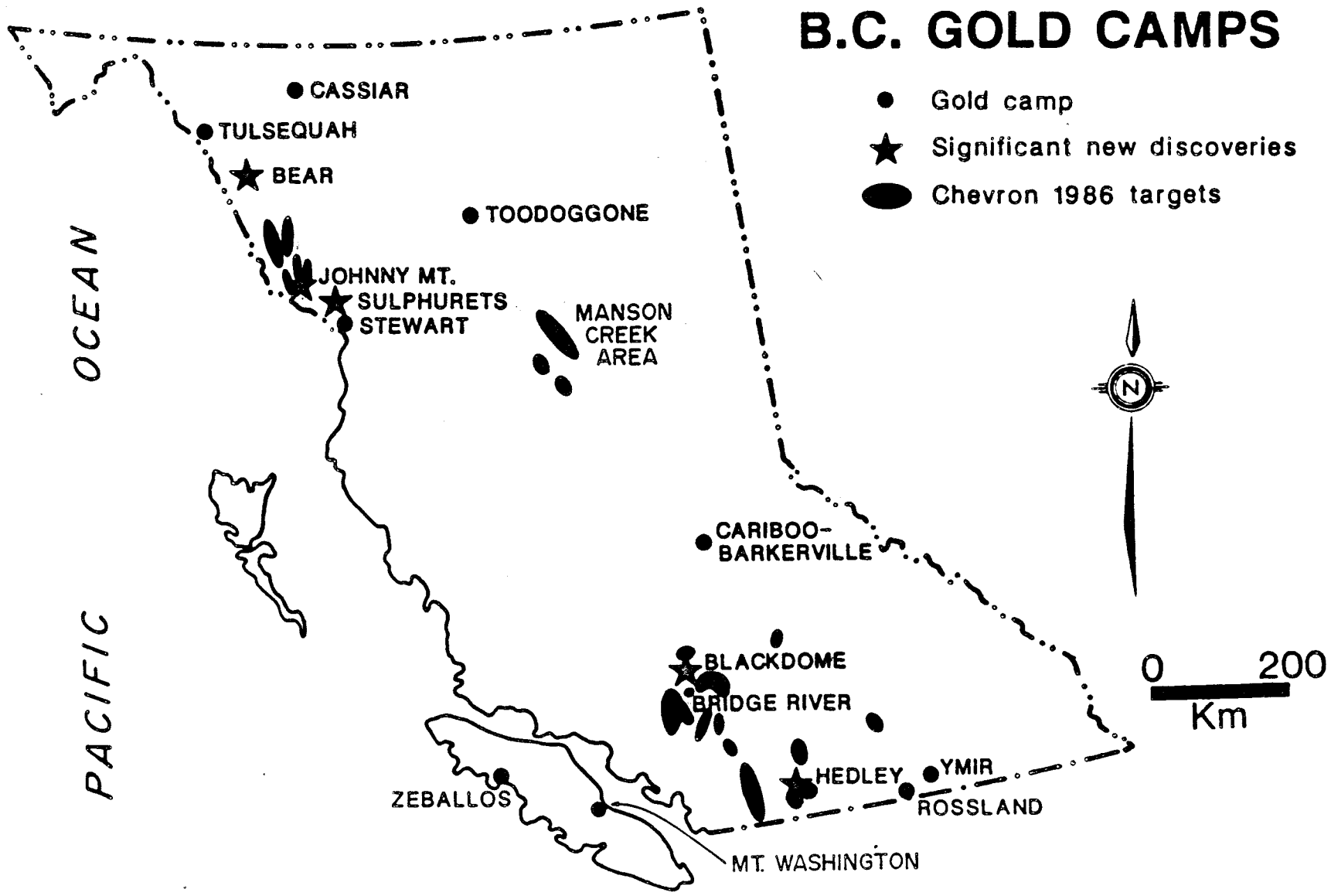
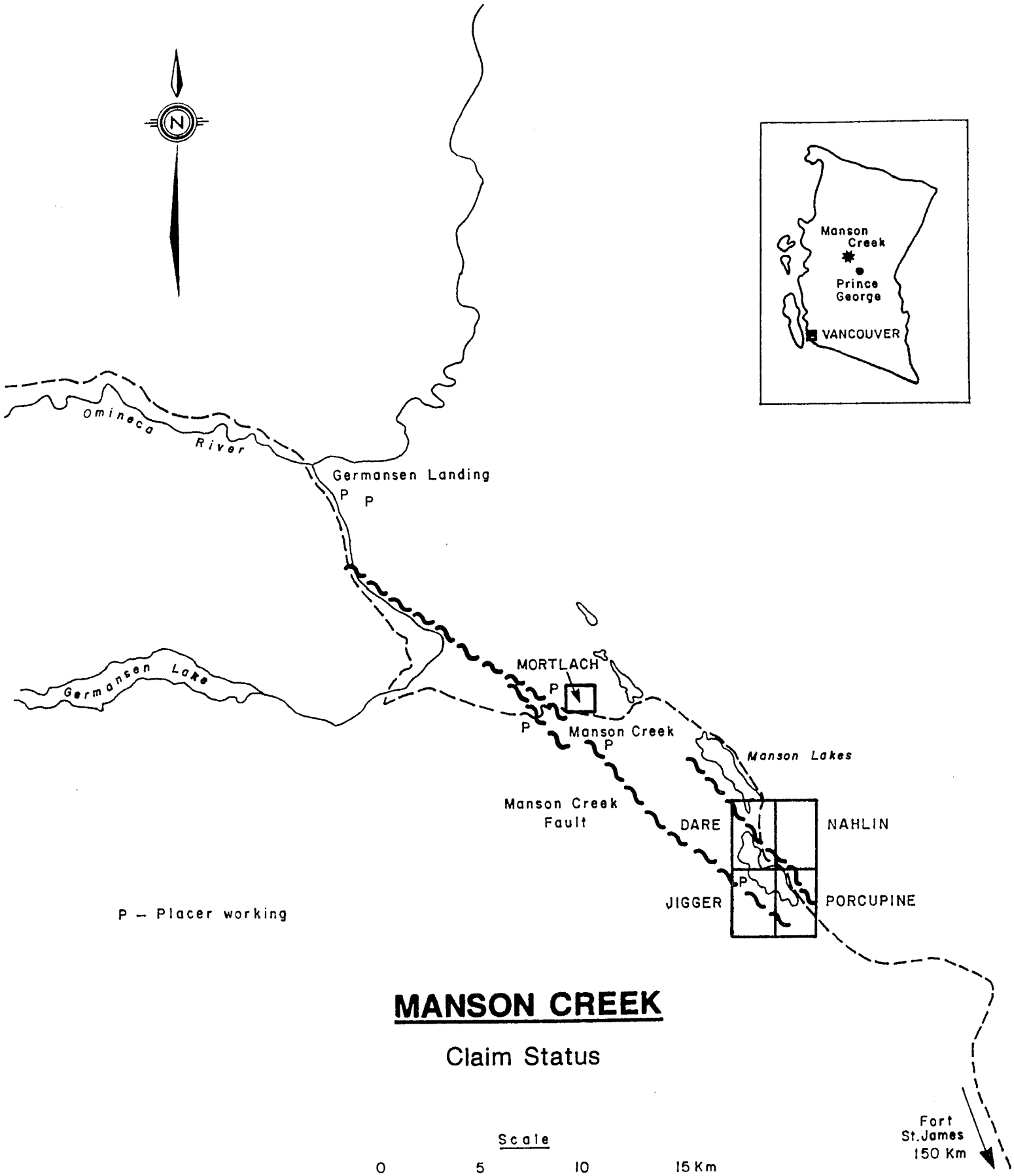

B.C. GOLD CAMPS
Gold camp
Significant new discoveries
Chevron 1986 targets
CASSIAR
TULSEQUAH
BEAR
TOODOGGONE
JOHNNY MT.
SULPHURETS
STEWART
MANSON CREEK AREA
OCEAN
PACIFIC
CARIBOO-BARKERVILLE
BLACKDOME
BRIDGE RIVER
HEDLEY
YMIR
ROSSLAND
ZEBALLOS
MT. WASHINGTON
N
0 200
Km

FIGURE 1



MANSON CREEK

Claim Status

Scale

0 5 10 15 Km

1 : 250,000

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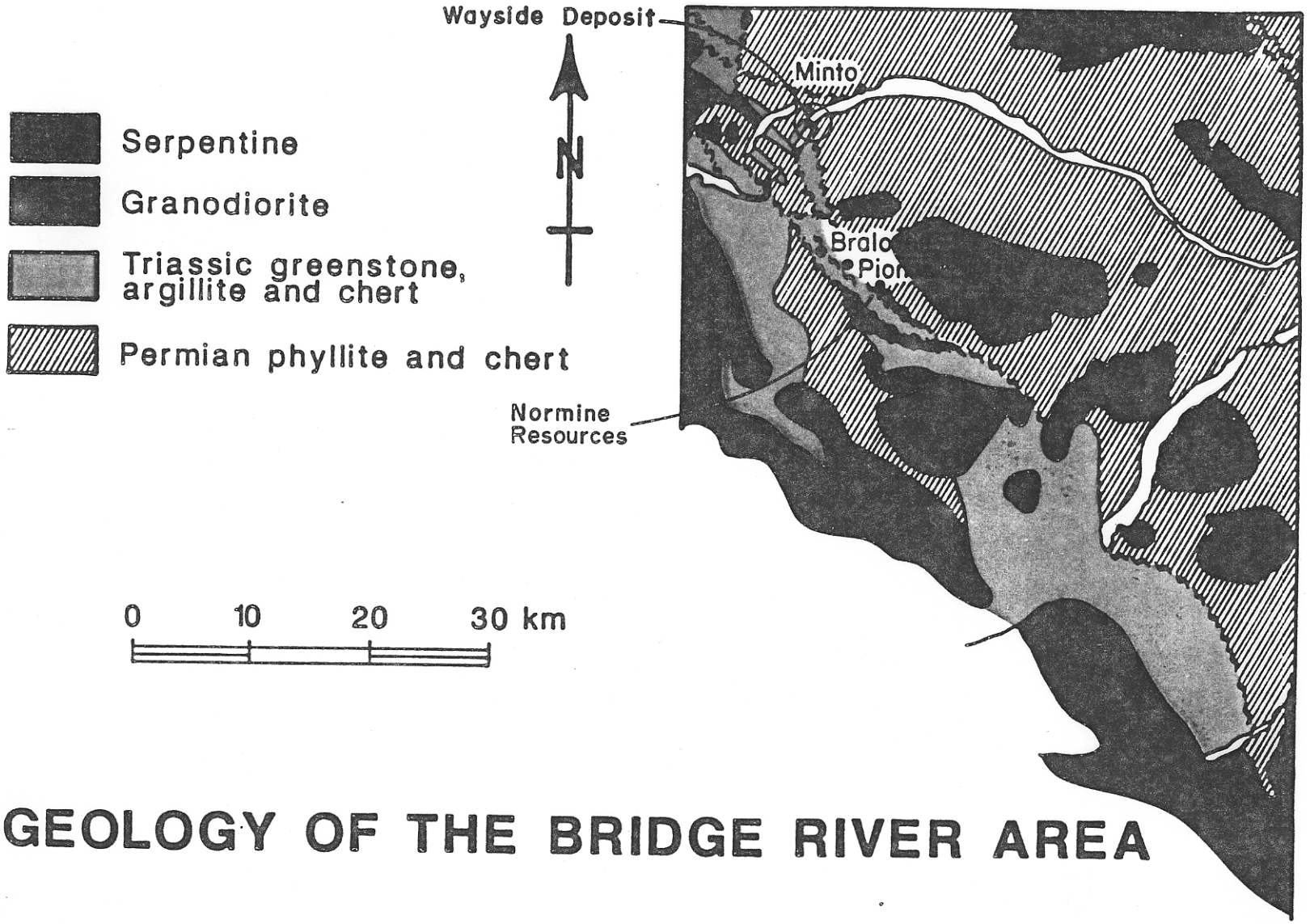
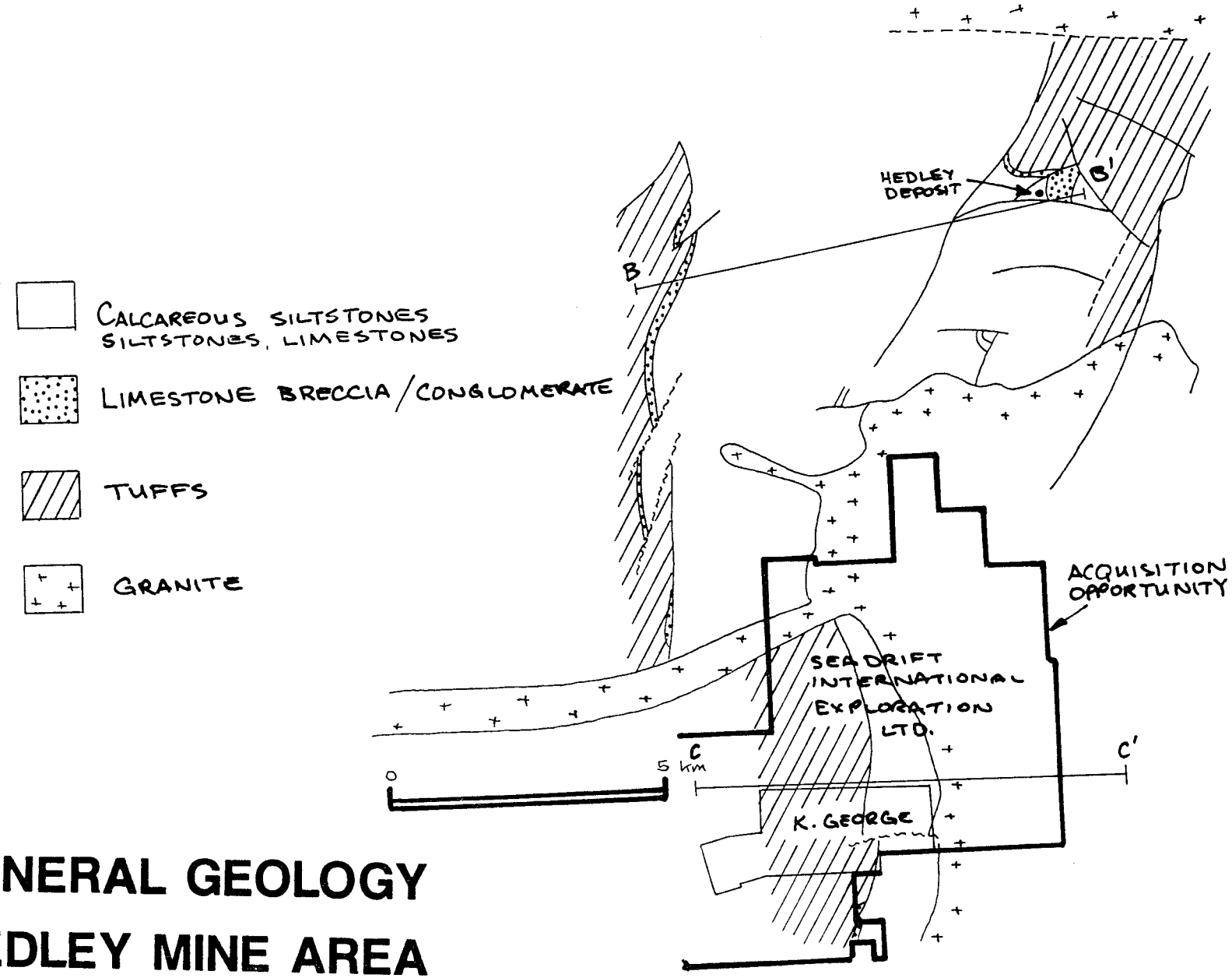
FIGURE 2



GEOLOGY OF THE BRIDGE RIVER AREA

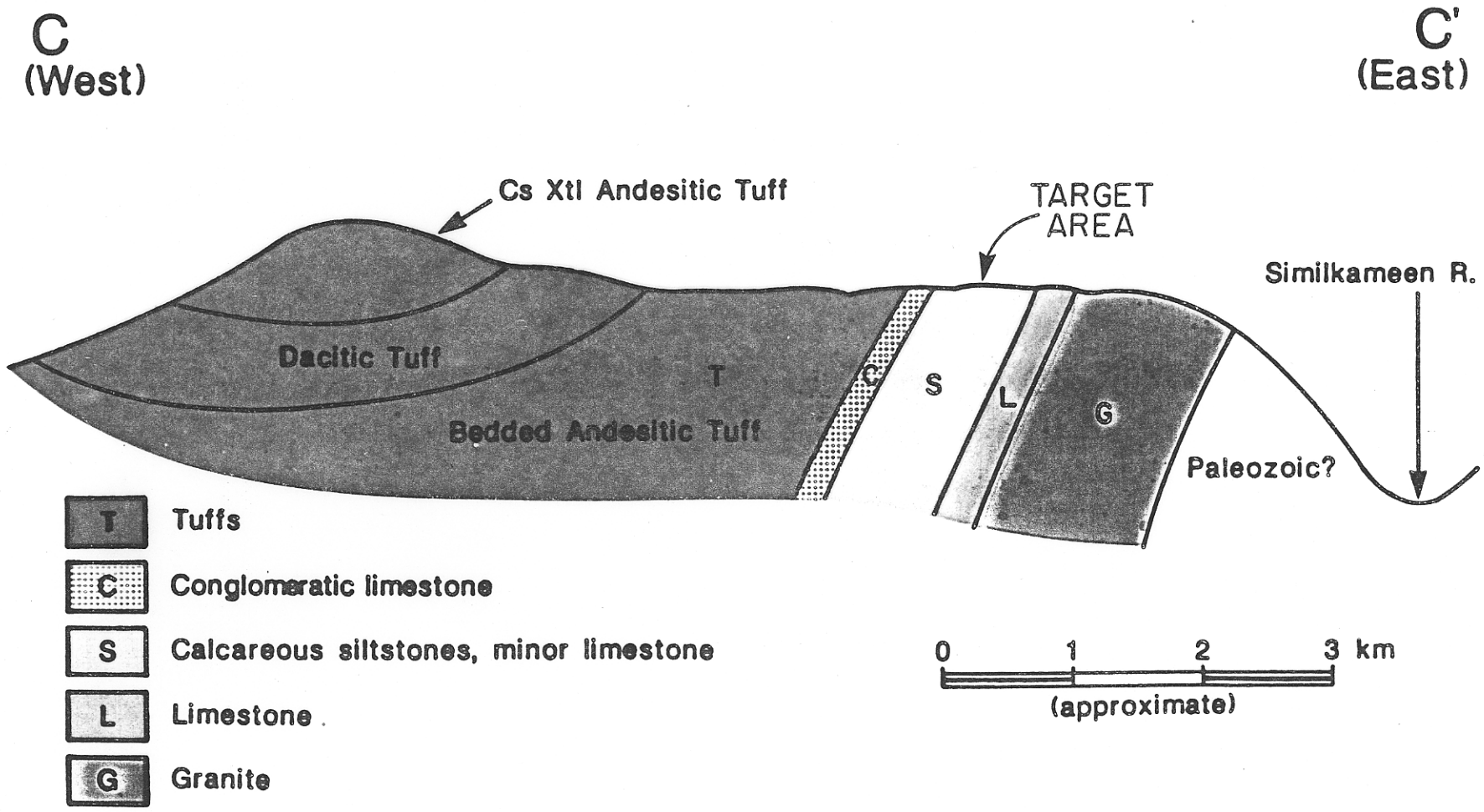
FIGURE 3



GENERAL GEOLOGY
HEDLEY MINE AREA

from G. Ray - BCDM
Aug/86

FIGURE 4

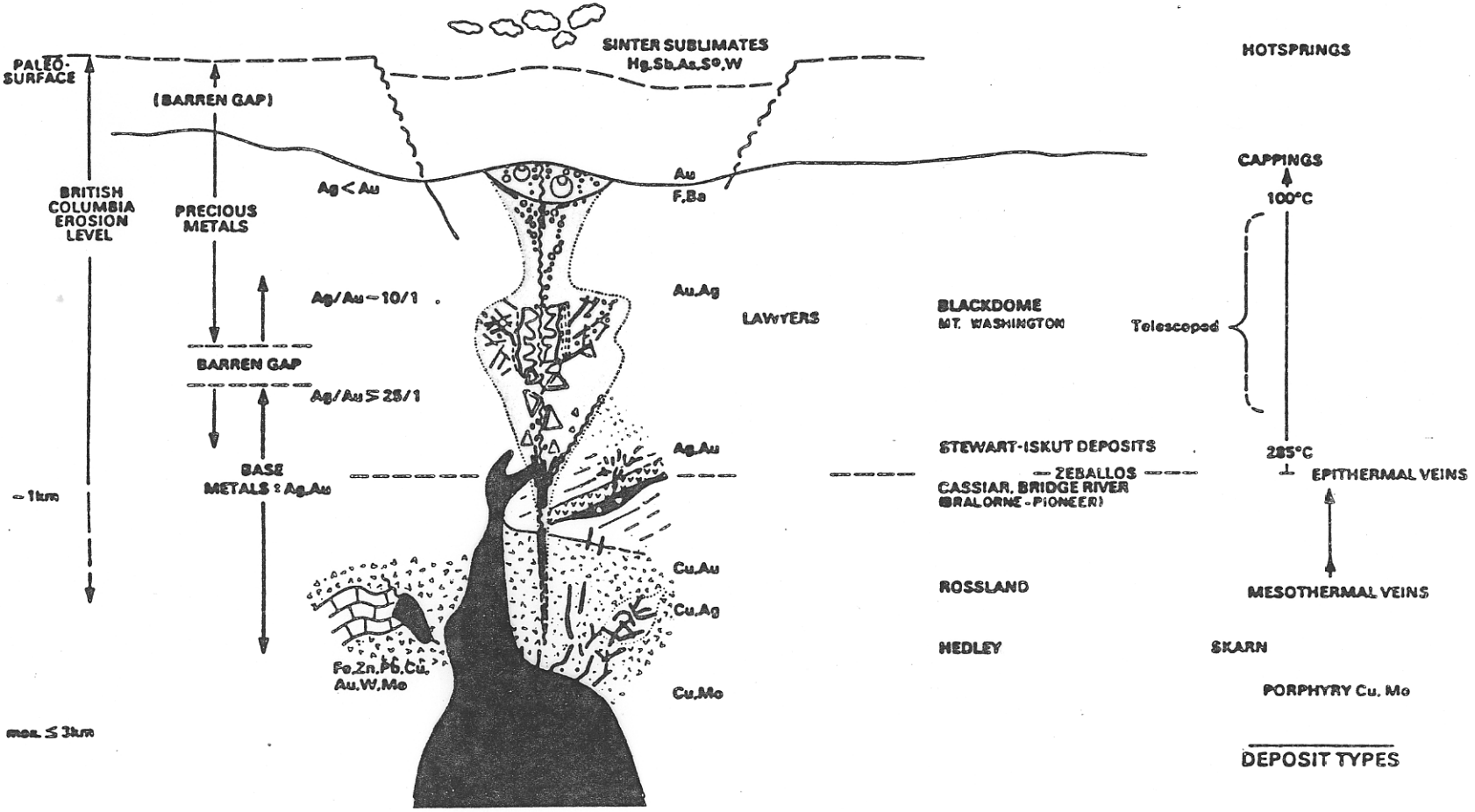


CROSS SECTION C–C', Hedley Mine Area

from G. Ray BCDM
Aug/86

FIGURE 5

BRITISH COLUMBIA EPITHERMAL MODEL



(after B.C.D.M.)

FIGURE 6