

103 I

860100

WB

GSWB	LBH	DRS	EAP
PROJECT		Proj 189	
FI NOV 9		1981 LE	
<input type="checkbox"/> PROPERTY	<input type="checkbox"/> MAPPING	<input type="checkbox"/> LEGAL	<input type="checkbox"/> MISC.
<input type="checkbox"/> L. CUTTING	<input type="checkbox"/> TECHNICAL	<input type="checkbox"/> OTHER	

# J.R. Woodcock Consultants Ltd.

806 - 602 WEST HASTINGS STREET - VANCOUVER, B.C. V6B 1P2 - PHONE (604) 685-6720

November 5, 1981

Mr. Wally Bruce  
 Dome Exploration (Canada) Ltd.  
 P.O. Box 270  
 1 First Cdn. Place  
 Toronto, Ontario  
 M5X 1H1

Re: Gossan Project

Dear Wally:

On April 1, 1981, I sent you a proposal suggesting a program of checking gossans, mainly along the eastern margin of the Coast Crystalline Complex, to see if previous workers missed some of the metal potential. Subsequently, we executed an agreement for a continuing project of this type with annual adjustments of the budget and possibly the locale for the work.

The 1981 work started early in the season in Prince Rupert-Terrace area where a few gossan targets were checked. This work was not encouraging; it will be described in a report for 1981. On two subsequent visits, in conjunction with other work, we were inhibited by the poor weather so did not get all of my targets checked.

I would like to continue this work in the Terrace area, weather permitting, in 1982. I am also contemplating other areas for similar work. Presently, I am considering some work north and south of Bella Coola, especially between the Coast Crystalline Complex on the west and Tweedsmuir Park on the east (north of Bella Coola). Field work would be preceded by compilation of the data on the known properties within the region and start with aerial reconnaissance observations with a fixed-wing aircraft. Subsequently, I would check the targets that resulted from this work. I will be more specific on this area or any other area at a later date.

.../2

In connection with checking gossans, I did have the opportunity to map four gossans in 1981 for a number of clients. One of these has potential for tin-tungsten mineralization, one is a good stockwork molybdenite bet and one is a volcanogenic area with abundant barite and minor lead-silver. The fourth is possibly a porphyry-molybdenite bet; however, I have not completed the work on it. Of the four I am definitely recommending drilling on two. All of these four properties had not been properly mapped previously.

This information is to support this thesis that many of the gossan zones have not been adequately mapped either because the mapping was done 10 or 15 years ago and without the advantages of our present state of knowledge or because the mapping was done by experienced or immature field geologists.

This proposal involves 1 to 3 men, including myself.

As the exact program is not fully outlined, it is quite difficult to present an accurate budget. However, I have made the following estimate:

Fees and Wages	\$22,000
Fixed-Wing and Helicopter	20,000
Geochemical and Assay Analyses	4,000
Food and Accommodation	3,000
Travel and Transportation	3,000
Preparation of Reports	5,000
Miscellaneous	<u>3,000</u>
Total	<u>\$60,000</u>

I hope you can fit this proposal into your budget for the coming year and I hope we can have as much luck on this project as we have had on some of our other small gossan-type projects in the last three years.

Yours very truly,



J. R. Woodcock

JRW/em

**J.R. Woodcock Consultants Ltd.**

806 - 602 WEST HASTINGS STREET - VANCOUVER, B.C. V6B 1P2 - PHONE (604) 685-6720

*Return* →

GSWB	LBH	DRS	EAP
PROJECT _____			
FILED 7 1981 LE			
<input type="checkbox"/> PROPERTY	<input type="checkbox"/> L. CUTTING	<input type="checkbox"/> TECHNICAL	<input type="checkbox"/> OTHER
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

April 1, 1981



*after 3-4 yrs 20,000 yrs*

Mr. Wally Bruce  
Dome Exploration (Canada) Ltd.  
Suite 600-365 Bay Street  
Toronto, Ontario  
M5H 2V9

*Total of 600,000*

Re: Gossan Targets in Northwestern British Columbia

Dear Wally:

Since 1965, I have been spotting and recording gossans throughout various parts of British Columbia, especially along the eastern side of the Coast Plutonic Complex. At opportune times, I have examined some of these gossans; however, the proportion that I have been able to examine remains quite small. Many of these gossans have been the object of considerable exploration for porphyry type deposits. Most have been examined to some extent; however, in many cases this included merely sampling drainages if available, or prospecting to find surface mineralization.

*problem  
re areas  
of interest*

Over this period of years, I have tried to sort and classify these gossans. In the region between Terrace and Atlin, one can find the following types;

1. Porphyry Coppers (the calc-alkalic type): Exploration for these type of deposits has been most prevalent in the southern half of British Columbia and examples include Berg, Bell Copper, Highland Valley, etc.
2. Syeno-diorite Coppers (alkalic type): The most prevalent one that fits this category in northern British Columbia is Galore Creek. In southern British Columbia there are a number including Caribou Bell and Similkameen.
3. Stockwork Molybdenite Deposits: A number of these are found at Alice Arm including the Lime Creek and the Ajax deposits.
4. Large Intrusive Breccia Pipes: In 1980, I encountered three such pipes in which the clastic rock had been previously called a pyroclastic. On only one did I originally suspect from surface mapping that it was a large cross-cutting breccia zone. These are also marked by large conspicuous gossans. One such gossan is being explored for gold; two were drilled for molybdenum in 1980.

*8 Apr 81 - Told Woodcock we would go on this providing we .../2 can make suitable deal. He will tell us terms.*

5. Solfataric Zones: In the area west of Tenajohn are the strataform pyritic zones in the young volcanics and, in places within the volcanics of Mount Edziza are cross-cutting solfataric zones. In addition, a somewhat older one occurs in the upper drainages of Ball Creek.
6. Tin Bearing Stocks: Recent exploration in the area of the British Columbia-Yukon border has indicated tin mineralization closely associated with the contacts of altered stocks. I have also mapped one large gossan area which I believe is related to an underlying stock. The impressive geochemical results indicate that it could be tin-tungsten target.
7. Carbonate Zones in Andesitic Volcanics: There are a number of large conspicuous gossans north of Alice Arm in which the rock appears to be mainly andesitic pyroclastics that have been altered to carbonate and pyrite. The reason for this alteration is not clear. Whether or not it represents the near surface expression within basic volcanics of a deeper stock is not known.
8. Kuroko Deposits: The Dolly Varden deposits at Alice Arm are kuroko deposits and the large copper-bearing pyritic zone lying to the west of them is probably a related underlying alteration zone.
9. Massive Sulfide Deposits: The stream sands at the foot of the glacier of Benson Creek (along the south side of Iskut River) sparkle with disseminated pyrite. The source of this may be the so-called massive base metal sulfide deposit that was mapped in 1980 by Skyline Explorations Ltd.
10. Strataform Disseminated Pyrite: A number of sedimentary beds, especially some of the tuffaceous ones have disseminated pyrite which is probably of a syngenetic origin and of little significance.

The gossan zones of British Columbia and especially those trending northerly from Terrace should be examined and classified as to their type. Many of these, after classification, will be readily discounted as having no economic potential; others will need to be considered as exploration targets.

One might summarily dismiss this exploration project because most of these targets have been examined previously. I believe that many of the accessible gossans were prospected by the early prospectors who, if they did not discover exposed mineralization, lost interest. Many have also been staked and mapped by major companies. However, some of the work has been misdirected. In the last two years, I have looked at a number of gossans and in two cases the properties were explored by soil geochemistry and the soil geochemical anomaly was displaced from the main target. In some places, this is due to glacial movement or downslope creep of the soil; in one case the

type of soil samples and the depth of overburden completely distorted the picture and mislead geologists from the prime target. In another area a number of gossan zones are present and previous exploration (spending in the order of half a million dollars) did not even touch the gossan with the most intense hydrothermal alteration. In an other case, I have noted a gossan where some of the pyritic rock is anomalous in silver. Such a gossan should be considered for a kuroko deposit. A small amount of preliminary mapping should indicate whether acquisition and detailed mapping is warranted.

Thus I believe that there is still great potential for systematic examination of these targets by an experienced geologist. I would like to spend some time in 1981 examining more of the gossan zones. I hope to be able to do this with helicopters based around the area and with the aid of two assistants. Helicopters are based at Terrace, Prince Rupert, Alice Arm, Stewart, Dease Lake and Atlin. In addition, in 1980 helicopters could be occasionally obtained at Tenajohn Center (Iskut), at Schaft Creek and at Bobquin Lake. One must realize that such work would at times be inhibited by lack of helicopters. However, with some pre-season enquiries this problem should be partly eliminated.

I am reluctant to commit to a full time helicopter because this would involve my full attention for the summer and would involve a budget of at least \$250,000. I believe that effective exploration could be done with smaller budgets (e.g. \$60,000) for shorter periods and continuing over a period of several years. Such an approach would eliminate the pressure of using the helicopter up to its minimums and it would enable one to intersperse the field program with knowledge gained from petrography and rock geochemistry.

I have been carrying on such a program for Riocanex with some success and will continue it in 1981. However, this reconnaissance budget has been reduced because of drilling expenses and my target region is vast.

Please give the proposal some thought and let me know if you are interested in starting such a program along a portion of the eastern margin of the Coast Range. I have the Terrace area in mind for this specific proposal.

Yours very truly,



J. R. Woodcock

JRW/em

Dec 11 '80

## Pacific Copper pays dividend

Pacific Copper Mines (TSE) has declared an initial dividend payable Feb. 11, 1981, to shareholders of record Dec. 19. Holders have the choice of taking either a cash payment of \$1 per share or the equivalent of all or part of their entitlement in common stock at a price of \$4.60 per share.

The company has mining interests in Australia and is going in for oil and gas exploration in Canada and the United States.

## Granduc-Esso results<sup>3C</sup> show gold-silver values

Granduc Mines and Esso Minerals Canada have announced that they have located precious metal values in drilling and surface sampling on the Sulphurets claims in northwestern B.C., being explored under a joint venture agreement. Hecla Mining Co. owns 35.4% of the outstanding common stock of Granduc and all of its preferred stock.

The claim units total 6,548 acres north of Stewart.

"Four separate mineralized areas spaced 4.3 miles apart were partially sampled. In the previously known Iron Cap Zone, the best four diamond drill holes cut 0.15 oz. gold and 3.06 oz. silver per tonne over 19.7 ft. Near the centre of the claims, an assessment drill hole cut 0.09 oz. gold per tonne over a core length of 78.7 ft.," a progress report from Hecla said.

"In the Sulphurets Lake area, surface sampling of a new find averaged 0.08 oz. gold per tonne over a width of 98.4 ft. At the south end of the claims surface sampling of another new find gave values averaging 0.66 oz. gold and 52.3 oz. silver per tonne over a length of 65.6 ft. One hole drilled in the vicinity did not intersect important values."

## Copperfields earnings \$8.3 million for year

Copperfields Mining Corp. reports net earnings before taxes of \$8.3 million for the year.

*This is one of largest  
gossan - alteration  
zones in B.C. It  
has been explored  
for porphyry copper  
for many years*