New Galaxy Option
(Iron Mask Area)
826917
92I/9

MINOREX CONSULTING LTD.

Geological Consultants and Exploration Management

October 15, 1990

Mr. Ian D. Pirie, District Geologist
MINNOVA INC.
Third Floor, 311 Water Street
Vancouver, B.C. V6B 1B8

Dear Ian:

Re: Review and Evaluation of Exploration Data for the NEW GALAXY Property, Kamloops Mining Division, British Columbia

Further to our meeting on October 10th, I have reviewed and evaluated the exploration data for the above referenced property that was submitted to Minnova Inc. by Getchell Resources Inc. I correlated this data with the geological and geophysical (magnetics) results from my own 1976 to 1978 exploration work on this property to arrive at the following conclusions.

Firstly, I do not recommend any further work on the well-tested Galaxy or Rainbow copper-gold-silver deposits. The Galaxy copper-gold-silver deposit has reported geological resources of 3.34 to 3.5 million tons of approximately 0.638 per cent copper and 0.01 o.p.t. gold. It is doubtful whether these reserves could be expanded more than 10 to 15 per cent, given the degree of detailed drilling during its several periods of exploration. The writer supervised the drilling of the northwestern and southeastern extensions of this deposit in 1977. Those drilling results showed that this deposit occurs between the northwesterly trending and steeply-dipping Iron Mask fault and a similarly-oriented but moderately, southwesterly-dipping subsidiary fault structure.

The Rainbow No. 1 and No. 2 copper-gold-silver deposits are located on the Rainbow (formerly Nahatlatch) property. The Rainbow No. 1 deposit ranges between 2 to 3 million tons of camp grade (i.e. approximately 0.7 per cent copper, 0.015 to 0.02 o.p.t. gold, and 0.1 o.p.t. silver). It is, however, covered by the transmitting antenna array of the CFJF radio/TV station. In 1977, it was estimated to cost $ 4 million to move the antenna array before any exploration work could be undertaken (i.e. buried ground wires interfered with geophysical surveying and diamond drilling). The Rainbow No. 2 deposit was the subject of much controversy in the early 1970's when some imeginative mineralized intercepts were reported. Nevertheless, it has deeply buried, steeply dipping, fault-controlled copper-gold-silver mineralization with very large stripping ratios. Neither of these deposits could be considered economic today.

As you indicated, there is only one geophysical target on the subject property of any exploration interest. This anomaly was discovered during a recent induced polarization survey that was undertaken by Pacific Geophysical Limited, on behalf of Getchell Resources. It is located 400 to 700 metres southwest of Lockie Lake, and 1.2 to 2.4 kilometres southeast of the known Galaxy deposit. It is this anomaly that was the subject of my evaluation work.

11967–83A Avenue, Delta, British Columbia, Canada V4C 2K2
(604) 596-8474

I overlaid the chargeability and resistivity anomalies from the recent I.P. survey on the results of my 1977 geological survey of this area. You will see that there are three northwesterly-trending, linear, low-level (4.0 to 6.1 msec.) chargeability anomalies; northeast and southwest of a similarly-oriented resistivity low anomaly (66 to 100 ohm_m).

Firstly, the near-surface resistivity anomaly does not coincide with the higher chargeability results, but it does coincide with two seasonal lakes and a northwesterly-trending fault structure that is a known aquifer. According to the geophysical cross-section of Line 250 South, this anomaly is rootless and near surface, obviously reflecting a surficial aquifer and/or conductive overburden. There is, however, a second resistivity anomaly on the downdip extension of the most southwestern chargeability anomaly which may be of interest, but it also coincides with a prominent seasonal drainage and the mapped trace of the Iron Mask fault which is a well known aquifer.

Of the three linear chargeability anomalies, the central and southwestern ones have slightly higher chargeability values (i.e. 5.0 to 7.1 msec.) than the northeastern one which has chargeability values of 4.0 to 5.0 msec. According to Garratt (1987), the threshold point for chargeability anomalies appears to be 4 to 6 milliseconds, with moderate to strong anomalies from 10 to 30 milliseconds. Thus, the level of these three recently discovered anomalies are very low level to marginal.

After superimposing the chargeability results on the 1977 geological survey results it appears that the chargeabilities anomalies are more likely reflecting water-bearing fault zones than disseminated sulphide mineralization. The central anomaly and the northern end of the southwestern anomaly directly overlie the mapped trace of the Iron Mask fault. On the northwestern and southeastern ends of the southwestern anomaly there are mapped outcrops of dioritic rocks of the Iron Mask pluton and dioritic and syenitic rocks of the Cherry Creek pluton. Both rock types of these two plutons display regional alteration products of lower greenschist facies metamorphism with superimposed structurally-controlled albitization. None of the alteration patterns are indicative of local sulphide mineralization (i.e. moderate to strong albitization, biotitization, and/or potassic metasomatism). Furthermore, there is no mapped sulphide mineralization is the immediate vicinity of the strongest chargeability anomaly, southwest of the Iron Mask fault trace.

The ground magnetic results of a 1977 proton magnetometer survey over the subject area were correlated with the I.P. results. In the vicinity of the Galaxy deposit, the magnetic results show local metasomatic destruction of ubiquitous magnetite mineralization resulting in very local, "spotty" magnetic highs within a larger magnetic low anomaly. In the area of the I.P. anomaly there is no such magnetic features. The Iron Mask fault is very obvious with low magnetic relief to tho northeast and high magnetic relief to the southwest. Furthermore, the magnetite-bearing Cherry Creek plutonic rocks occur on both sides of the fault with apparent left-lateral displacement. There is, however, a southerly trending magnetic low zone trending from Lockie Lake towards the I.P. anomaly. This zone may be reflecting a southerly trending shear or fault zone within which there has been magnetite alteration, but this zone diverges from the main Iron Mask fault and it does not have any of the more obvious features of the one reflecting the Galaxy deposit.

It is known that the main Galaxy copper-gold-silver deposit is fault-bounded to the southwest by the Iron Mask fault and that the Cherry Creek monzonitic and syenitic rocks southwest of this fault are barren within 100 metres of the deposit. Thus, it could be argued that the weakly altered but barren Cherry Creek dioritic to syenitic rocks that are exposed within the southwestern chargeability anomaly may also be southwest of the Iron Mask fault and be barren despite being in close proximity to possible sulphide mineralization. Only drilling within the poorly exposed area of the central chargeability anomaly will prove or disprove this argument. There is, however, no geological or geochemical evidence and only marginal geophysical results to justify such drilling.

In summary, the known Galaxy and Rainbow copper-gold-silver deposits are of little economic interest. They have been well tested and their known geological resources do not warrant further exploration. The recently-discovered induced polarization anomaly southeast of the Galaxy deposit is located in a poorly-exposed area with no supporting geochemical evidence. Furthermore, the chargeability results are of threshold levels, more indicative of a water-charged fault zone cutting magnetite-rich Cherry Creek syenitic rocks than copper-bearing sulphide mineralization.

The present exploration results do not justify acquiring the property or conducting an extensive drilling program to test the recently-discovered geophysical anomaly.

Submitted by,

MINOREX CONSULTING LTD.

J.D. Blanchflower
Consulting Geologist

MINNOVA

Minnova Inc.
Mining Innovation
4th Floor
311 Water Street
Vancouver, British Columbia
V6B 1B8
Telephone (604) 681-3771
Telecopier (604) 681-3360

DATE Oct 16/90 TELECOPIER NO. 861 5210

DESTINATION

NAME Ross Weeks LOCATION Brenda

SENDER

NAME Ian Pirie LOCATION Minnova

MESSAGE

Attached summary/evaluation is for your info. Doug really knows the Iron Mask, probably better than anyone, and I find his arguments convincing.

Consequently I am recommending that we don't take this any further.

Ian

NUMBER OF PAGES TO FORWARD 4 BY
(INCLUDING THIS PAGE)