KERR-ADDISON GOLD MINES LIMITED

B.C. Anbau Creek

821918

MAR 2 1964

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Sheet No. 2:- Ground magnetic and E.M. profiles.

Bob Chaplin had not completed these maps at the time of our telephone conversation on this matter, and it is now my feeling that, having devoted the time and expense that we have to investigating this situation, we would be foolhardy in not recording such ground as we have acquired. It is my intention to record J.J. 18, 20, 22, 23, 24, 25, 27, 29, 31 and 33. The cost of recording these claims is less than \$30.00, and since we cannot be sure of what this situation consists in the way of possible mineralization, I feel that we should keep this ground for a while at least. Insufficient ground magnetic work has been done to really establish the magnetic picture to any extent. It has been my experience that, in some cases, a single airborne anomaly will be found on the ground to be seperated into two or more anomalies.

The E.M. response was generally weak, with the strongest negative anomaly occurring at about 48 E. on the road. Again, however, I do not feel that enough work was done to properly establish the E.M. picture in this area. Such mineralization as I have seen in the Quesnel area, would not be responsive to E.M. in any case.

The anomaly would appear to be on or near a contact zone, between diorite and volcanics, and from the original geological picture, the ground appears to be well located. The magnetite content of the rocks is obviously quite close to surface. One of the samples brought in from the south end of Line C, which is shown on the map as altered volcanics, looks to me like a basic intrusive rock, and would appear to contain at least 10% magnetite. Since we should do a certain minimum of work on the ground Nick Bird staked in the Quesnel area, we can establish the merits, or demerits of the J.J. ground, very easily and at minimum cost.

Surla

William M. Sirola.

WMS/iw. Encls:

JUN 1 8 1964

KERR-ADDISON GOLD MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To. P.M. KAVANAGH. From. W.M. SIROLA.

Subject J.J. GROUP - AHBAU CREEK AREA, CARIBOO MINING Date June 17th, 1964. DIVISION (93-G).

AHBAU CREEK GROUP, B.C.

Accompanying this memorandum are Osborne's report on the geology of the immediate vicinity of Ahbau Creek, together with some geophysical and geochemical results obtained by rather unsystematic coverage of the adjacent claims, and only a slight overlap of the work onto the J.J. Group. This apparent neglect of our own claims arises from the fact that the main magnetic anomaly occurs off our ground, and secondly, from the fact that the crew were unable to cross Ahbau Creek because of heavy rain and high water. Before abandoning the project, the crew did manage to stake three claims on a minor copper occurrence on the N.E. end of the J.J. Group. Obviously, a proper assessment of the J.J. Group has not been made, but some deductions are possible :

- (1)The main magnetic anomaly occurs on the D.D. and Fan claims. The anomaly would appear to be caused by irregular areas of increased magnetite content (up to 20%), in a rock which varies in composition from a diorite to a gabbro.
- (2)Weak (4-5°), positive, E.M. anomalies occur coincidentally with magnetic highs on lines B and E. On line E, these anomalies terminate abruptly and appear to have no importance. The continuity, or lack of it, has not been established for line B.
- (3)The presence of copper mineralization can be detected by the rubeanic technique ! This was demonstrated by Osborne when he obtained positive results on the minor chalcopyrite occurrences on J.J. 52 and D.D. 14.
- (4)A quartz-monzonite dyke, mapped by Osborne on D.D. 12. coincides with relatively low magnetic readings on line D. detailed magnetic survey would probably reveal the presence of additional quartz-monzonite masses.
- (5) The self-potential traverses on lines B, C and E, indicate only one weakly anomalous zone, in the middle of line Since this weak anomaly coincides with the creek, no E. significance is attached to it.

ep. Be 5'

KERR-ADDISON GOLD MINES LIMITED

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То	<i>From</i>
Subject	Date

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- 2 -

- (6) The possibility of a sharp, negative anomaly occurs on line B at the creek, but there is a gap in the readings, and the significance of the negative is unknown.
- (7) No diagnostic magnetic anomaly occurs in the vicinity of the minor copper showing on line F.

Conclusions :

Minor copper mineralization was found to occur on the N.E. flank of a major, magnetic anomaly. The central portion of this anomaly is off the Kerr Addison claims. The limited geophysical work done thus far, indicates that sporadic, weak conductors do occur with magnetic highs, but these have no horizontal continuity.

When we have the opportunity, personnel and equipment, later on in the year, we can consider doing more detailed work on the J.J. Group. At the moment, there does not appear to be any need for urgency, and it is possible that someone will work the adjacent ground in the meantime.

We have not, as yet, received the Form B's for the J.J. Group, despite the fact that these claims were recorded on March 3rd this year. We will question the mining recorder in Quesnel on this matter.

William M. Sirola.

WMS/iw. Encls:

JUN 18 1964

REPORT ON AHBAU CREEK AREA

1. Megascopic Description of Rock Types :

(a) Diorite-Gabbro - An intrusion of diorite-gabbro dominates the geology of the area. This rock consists, primarily, of plagioclase, hornblende and magnetite. The proportions of the dominant minerals are by no means constant throughout the area. It varies from diorite to a rock with a high hornblende content which approaches a hornblende peridotite. The percentage of magnetite approaches 20% in some small areas. The only diorite having little or no magnetite is found S.W. of the gabbro-porphyry in J.J. 50 and J.J. 52.

(b) Gabbro-Porphyry - Occurs as an intrusion into the dioritegabbro which outcrops as small ridges in J.J. 50 and J.J. 52. It consists of gabbro with pyroxene phenocrysts. Grain size decreases with approach to contact with diorite-gabbro.

(c) Quartz-Monzonite - This rock occurs as small stringers and dykes in the diorite-gabbro. Only three of the intrusions are mapped. All have inclusions of the diorite-gabbro within them. Throughout the mapped area, many small, irregular quartz-monzonite and granite dykes occur. Reaction of these dykes, when they were intruded with the wallrock, has altered the hornblende of the dioritegabbro to biotite.

2. <u>Mineralization</u> :

(a) Pyrite is found throughout much of the mapped area. It is associated with the quartz-monzonite and granitic dykes.

(b) Chalcopyrite is found in two separate locations. The first is in J.J. 50 and J.J. 52, where it occurs in two environments :

In calcite veinlets.
In a small shear zone.

A map of this area is attached. The two gossans zones on the west side of the creek, through the area, have very little chalcopyrite; under the goethite pyrite is the only visible mineral.

The second showing occurs south of Ahbau Creek, in D.D. 14. An irregular gossan zone appears on the rocks. The geothite comes, primarily, from pyrite. Only minor chalcopyrite (1%) is found in this very small showing.

(c) Other mineralization in the area consists of minor pyrrhotite and arsenopyrite in the diorite-gabbro.

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3. <u>Geochemistry</u> :

Streams and interesting areas were sampled and tested for copper by means of the rubeanic acid test.

Tests # 3, 5, 22, 23, 29 and 30 gave strong + results for Cu. The rest were not interesting. Tests # 3, 5, 21 and 22 were made on soil close to the small showing in D.D. 14. Tests # 29 and 30 were made in soil close to the showing in J.J. 50 and J.J. 52.

Willy W. Osborne

Willis W. Osborne.

May 27th, 1964.

WWO/iw.









