

Ref: BC-13

TO: Mr. W. SirolaDATE: October 5, 1966FROM: J. RuelleSUBJECT: REPORT ON ORCHARD GROUPSUMMARY:

The Orchard Group, comprising at present, 12 mineral claims, is situated at Orchard Lake in the Vinsulla Township of the Kamloops Mining District. Work commenced on the property on September 23rd of this year and included an SP, Magcrometer and geochem (soil) survey.

The magcrometer survey outlined a similar magnetic anomaly as was previously outlined by a government airborne magnetometer survey. Cause of the anomaly is attributed to a gabbro intrusion.

A number of SP anomalies were outlined by the survey. With the exception of one high anomaly (-892), the anomalies are believed caused by pyritized argillite. Rubenic tests carried out on soil samples collected over the high SP anomaly gave strong anomalous values.

Outcrop examination in the areas of high geochem results disclosed finely disseminated mineralization. This mineralization was first thought to be bornite or chalcocite but further examinations showed it might be largely pyrite or pyrrhotite. Samples have been sent for assaying to verify the mineralization and cause of geochem highs.

Six mineral claims were staked to cover the area of the geochem and SP anomalies. (Eastern edge of the former claim group). Of these, the three adjacent claims were recorded. If justified by assay results, the remaining three claims will be recorded.

General geology of the area indicates andesites intruded by north westerly trending gabbro dykes with a possible gabbro plug (area of magnetic high). Narrow beds of argillite and arkose are present in the andesites.

INTRODUCTION:

The Orchard Group of mineral claims was staked so as to occupy a magnetic anomaly outlined by a government airborne magnetometer survey. A magcrometer survey was conducted on the group in order that the airborne magnetic anomaly could be more sharply defined, and it's cause determined. An SP survey with a geochem follow-up was conducted in order that any mineral conductor present might be picked up.

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W.S.R.  
K.C.G.  
J.H.S.  
E.F.  
R.D.S.  
B.C.B.  
P.M.K. ✓  
G.W.M.  
R.O.M.  
C.K.W.  
J.B.S.  
G.P.R.  
K.F.L.

E.C.J.

INITIAL SURVEY LAYOUT:

A NS base line was established and EW survey lines run at 400-foot intervals along this base line. East-west survey lines were chosen that they might traverse the general rock trends approximately at right angles. The location line of claims 1 - 6 was found to lie generally along the base line. The base line was chained and flagged at 100-foot intervals. Control was maintained on survey lines by chaining with the SP cable. Stations were flagged at 100-foot along the survey lines.

Before beginning the survey, it was necessary to correct the initial claim staking. This entailed cutting trees, upon which claim tags were affixed, into legal posts.

GEOPHYSICS:

MAGCROMETER

Magcrometer (Serial No. 184) readings were taken at 100-foot intervals along the survey lines. A magcrometer anomaly corresponding generally to the airborne magnetic anomaly was outlined. Cause of the magnetic anomaly is attributed to a gabbro intrusion. Magnetite was found in the gabbro and in the intruded greenstone near the contacts.

SP

SP readings were taken at 100-foot intervals along the survey lines using the "leapfrog" method. A number of moderate anomalies (Less than 500) m.v. were outlined but have been attributed to narrow pyritized argillite beds. One exception is a high anomaly (-897 m.v.) which occurs in coarse andesite and is located at the eastern portion of the claim group.

A map outlining the anomalies is included in this report.

GEOCHEMISTRY:

Soil samples were collected at 200-foot intervals along the survey lines. Rubeanic tests gave only few anomalous values except in the area of the high SP anomaly.

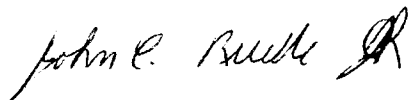
Further sampling is being conducted in this area to determine the extent of the geochem anomaly.

GEOLOGY AND MINERALIZATION:

Rocks occurring in the Orchard claim group are of the Carboniferous and Permian age and belong mainly to the Cache Creek group. They consist largely of andesite greenstones intruded by gabbro and to a lesser extent, diorite dykes.

Argillite and arkose beds, trending NW and varying from a few inches to several feet are visible in the greenstone. Extensive shearing of the greenstone was seen at several localities on the property with shearing taking place in a NW direction. A breccia zone was located near a possible gabbro plug (near magnetic high) but was only several square feet in area.

Pyritization occurs in all rock types but is more extensive in the argillite. Both coarse and fine pyrite is present in greenstones but is not generally widespread.

A handwritten signature in black ink, reading "John C. Ruelle" with a stylized flourish at the end.

John C. Ruelle