

REPORT ON VISIT  
WITH DR. SOUTHERLAND-BROWN,  
B.C. Dept. of Mines.

821542

I spent the morning of Dec. 30/68 at the Department of Mines in Victoria discussing porphyry type deposits with Dr. Southerland-Brown with emphasis on the Bone Creek - Berg type deposits. I also had the opportunity to look over specimens of the Berg, Bone Creek, Lucky Ship and Glacier Gulch deposits and could draw some comparisons with those of Ramsey. Some of the points of interest are as follows:

- 1) All the deposits are associated with high level intrusions of relatively small dimensions.
- 2) Silicification is intense, particularly in the Berg and Lucky Ship but is also fairly prominent in Bone Creek.
- 3) Silicification almost obliterates original rock. Stock-works of quartz veining are prevalent.
- 4) In every case, more than one type intrusion is present. Dr. Southerland-Brown does not feel this is essential however I am not aware of a deposit of any significance that does not have at least two phases of intrusion. Rock type as host may be quartz diorite or quartz monzonite. Porphyritic quartz monzonite is present in each case.
- 5) Biotite hornfels forms a thermal aureole that may extend for several hundred feet out from the contact.

- 6) Quartz veining extends well beyond the mineralized zone as does pyrite.
- 7) Volcanic rocks are of the Hazelton group - pyroclastics predominate.
- 8) Mineralization is usually peripheral and may be annular or confined mainly to one edge of the intrusion. At Bone Creek, main mineralization is within the intrusion at north end of it.
- 9) Dykes, both greenstone (andesite) and quartz latite porphyry are present in each deposit.
- 10) Intrusive rocks are mainly biotitic where mineralization occurs.
- 11) Mineralization may occur in either the intrusive rocks or the hornfelsed volcanics or both.

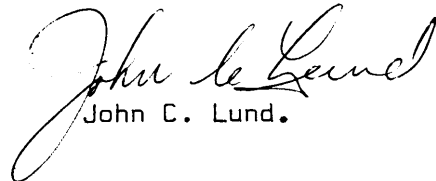
In drawing comparisons with these deposits and Ramsey Creek, I find the following:

- 1) Quartz veining is prevalent in the Ramsey property but to date the stockworks as found in the Lucky Ship and the Berg seem to be lacking.
- 2) Rock types which include the quartz latite porphyry dyke, hornfelsed volcanic rocks and quartz diorite-granodiorite are similar. A distinct quartz-monzonite intrusion other than the Groyd dyke has not as yet been found on the Ramsey property.

(continued - Page 3)

- 3) Silicification is prevalent on the Ramsey property and in places obliterates the original rock.
- 4) The Groyd Intrusion is a high level plug similar in size to those of the other deposits.
- 5) The molybdenite on Ramsey tends to be developed to the greatest extent in the volcanic rocks; in the other deposits, it tends to be best in the intrusions.

There are definite similarities between the Ramsey, Bone Creek and Berg deposits that continue to make the prospect interesting and, to my mind, worthy of further examination.

  
John C. Lund.

JCL/1k