



Energy, Mines and
Resources Canada

Énergie, Mines et
Ressources Canada

Earth Sciences

Sciences de la Terre

Geological Survey of Canada
601 Booth Street
Ottawa, Ontario
K1A 0E8

Commission géologique du Canada
601, rue Booth
Ottawa (Ontario)
K1A 0E8

675946
Erikson Cr.
104P/4

Your file Votre référence

Our file Notre référence

March 4, 1983

Dr. K. Dawson
Geological Survey of Canada
100 West Pender
Vancouver, B.C.
V6B 1R8

Dear Dr. Dawson:

As explained to your assistant during a telephone conversation of March 2, a scanning electron microscope investigation of the pale pink mineral (specimen DY 2556) shows the presence of S and Sb. The possible mineral is KERMESITE ($\text{Sb}_2\text{S}_2\text{O}$). The enclosed X-ray map of Sb from a spot within the circled area (see polished section) illustrates the concentration of Sb (bright spots) and its distribution along the microfracture.

For further information and request for probe analysis feel free to contact me.

Yours sincerely,

M. Bonardi
Mineralogy Section
Central Laboratories and
Technical Services Division
Geological Survey of Canada

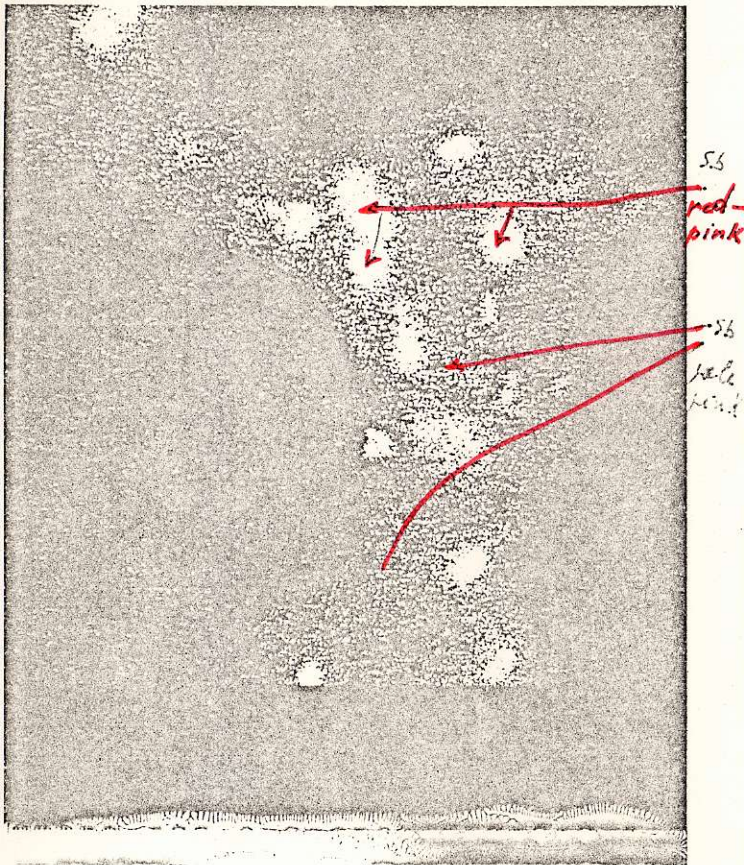
MB/jc

Canada

Pink mineral in Au-
gtz veins at Erickson:
'Angel's breath.'

Kermesite Sb_2S_2O

March 2-83



S6 X-RAY MAP

DY 2556
pale pink min. m. p12

14 February, 1983

Mr. M. Bonardi
Geological Survey of Canada
601 Booth Street
Ottawa, Ontario
K1A 0E8

Dear Mr. Bonardi:

In relation to our telephone conversation of last week I am forwarding the enclosed specimen, DY 2556, from Erickson Gold Mining Corporation's MAURA vein at Cassiar, B.C. The specimen contains pyrite, chalcopyrite, sphalerite and tetrahedrite plus an unidentified pale pink mineral(?) distributed in the quartz. It does not occur in any concentration, and may be a secondary oxide of Fe or Mn. It is uniquely associated with high-grade Au in the veins, and is used as a guide to ore by miners. I would appreciate your efforts to identify it.

Thank you very much,

Kenneth M. Dawson

KMD/bv

Encl.

cc Rick Somerville.

March 11, 1983

Mr. Rick Somerville,
AJM Exploration Ltd.,
203-1209 East 4th Street,
North Vancouver, B.C.
V7J 1G8

Dear Rick:

Enclosed is a report on the identification of the pink mineral associated with high grade gold mineralization at Erickson. The tentative identification as kermesite ($\text{Sb}_2\text{S}_2\text{O}$) is significant due to the implied Au-Sb association. The mineral may be an alteration product of stibnite (Sb_2S_3) that may, in turn, be associated with gold. The possible occurrence of stibnite should be checked out, particularly where tetrahedrite occurs in any concentration. If a Sb-Au association exists, then Sb could prove to be a good geochemical indicator.

Have you checked out your Quartzrock Ck tetrahedrite specimens for Sn yet? If it is tetrahedrite, it may have associated kermesite.

Best regards,

Kenneth M. Dawson

KMD/wc

Encl.



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March 11, 1983

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AJM Explorations Ltd.,
203-1209 East 4th Street,
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Dear Rick:

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Have you checked out your Quartz/rock Ck tetrahedrite specimens for ~~SW~~ yet? If it is tetrahedrite, it may have associated kermesite.

Best regards,

Kenneth M. Dawson

KMD/wc

Canada

March 16, 1983

Mr. M. Bonardi,
Geological Survey of Canada,
601 Booth Street,
Ottawa, Ontario
K1A 0E8

Dear Mr. Bonardi:

Thank you very much for your possible identification of the mineral kermesite. I shall be supervising a BSc. theses study of Erickson Gold this summer, and will instruct the student to collect a better specimen for positive identification.

I have enclosed a heavy mineral concentrate (DY2557) that contains an unidentified yellow fluorescent mineral. It may be powellite, zircon or apatite. I would appreciate an X-ray identification of the mineral, if possible.

Thank you very much.

Kenneth M. Dawson

KMD/wc

— identified as zircon — telephoned
late march/83
— Submitted by Bob Mallyon
location not specified