

EXPLOMIN™ IMAGING: EXPLORATION AND MET APPLICATIONS

EXPLOMIN™ IMAGING is an add-on option to the EXPLOMIN™ package. It is an option to generate false-colour maps of selected sample texture, for inclusion in reporting. Images are generated from supplied core sections or analytical rejects.

EXPLOMIN™ IMAGING is invaluable in visually capturing and recording textures of interest. Additional technical deliverables of EXPLOMIN™ IMAGING include the generation of sample false-colour images that can be added into the EXPLOMIN™ STANDARD downhole logplot.

PARAGENESIS

This sample is from a IOCG deposit in Fiji. The host rock is fine grained equigranular rock consisting dominantly of quartz (pink), plagioclase (blue) and biotite (brown). This mineral suite and the textures suggest that it is sedimentary in origin (and thus a greywacke), not volcanic. There is minor fine grained disseminated chalcopryrite (yellow), epidote (green) and very minor trace sphalerite (white) in the greywacke.

The rock is cut by two generations of stringers/veins, both being dominantly chalcopryrite with minor calcite and epidote-apatite alteration envelopes of various thicknesses. These veins and stringers are polymetallic and consist mostly (95%) of coarse grained chalcopryrite (yellow) and intergrowths of chlorite (mud green), wollastonite, minor sphalerite and trace quartz. When well developed, calcite (blue) is also present and it is intergrown with wollastonite (red).

The irregular alteration envelope consists of epidote, apatite and amphibole; minerals normally associated with high temperature alteration and IOCG deposits. The vein/stringer margins are

poorly defined at the margin with the host rock and are also irregular but sharp in the host rock. Within the epidote alteration envelope, 97% of the quartz and feldspar is totally replaced, leaving only small fragments. About 50% of the biotite has been replaced. There is chlorite at the margin of the vein and the host rocks. Chalcopryrite and some sphalerite occur within this alteration envelope when it is well developed.

The second vein set/stringer set is perpendicular to the first and offsets the first by several millimeters in a brittle fashion.

EXPLORATION PROGRAM POINT OF INTEREST

The association of an alteration envelope with high temperature minerals including apatite is indicative of IOCG deposits and is a favorable pathfinder for this exploration program.

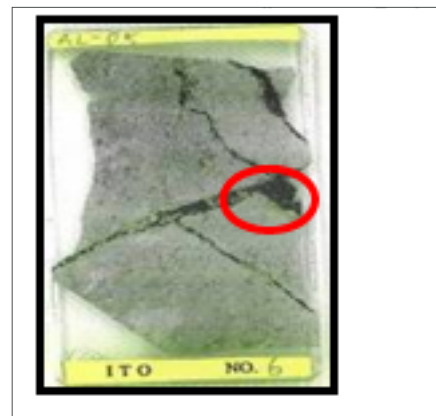
METALLURGICAL POINT OF INTEREST

Initial grinding will readily liberate the coarse chalcopryrite in the stringer/vein sets. However, a regrind circuit of some type will be required to liberate the fine-grained chalcopryrite in the harder, more competent quartz-plagioclase host rock.

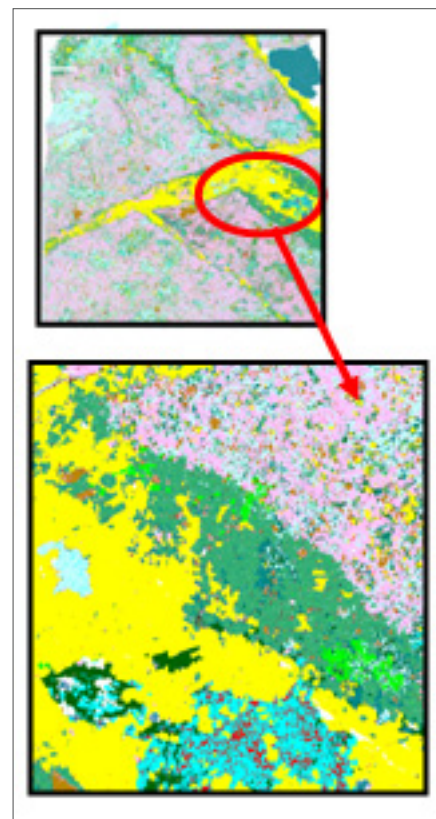
Interpretation done at additional cost.

CONTACT INFORMATION

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Thin Section (plane light)



Field Scan (false colour)

SGS

WHEN YOU NEED TO BE SURE