

Appendix 6
'Contaminant mineralogy'
(Work performed by ALS Ammtec Burnie Tas.)

BURNIE RESEARCH LABORATORY

Duggans Glass Sand **Contaminant Mineralogy** **December 2010**

Method

A sample of Duggans Glass Sand was submitted by John Glen (Burnie Research Laboratory) for assessment of contaminants. The sample (<1.7mm) was mounted on a single polished thin section by Simon Stephens (UTas, Hobart).

The sample was examined microscopically in transmitted and reflected light and any non-quartz contaminants were noted and photographed.

Discussion

The sample is composed almost exclusively of angular, coarse-grained quartz with very minor contaminants (estimated <1%) of:

- Clay-altered feldspar (liberated and in composites with quartz)
- Sericite mica inclusions in quartz
- Rare fine-grained rutile? inclusions in quartz

The original feldspar is too altered to identify. No sulphides or Fe oxides were detected.

The quartz often contains “clouds” of ultrafine-grained fluid inclusions which will contribute trace amounts of NaCl.

G.J.McArthur PhD FAusIMM MMICA MSEG
Principal Mineralogist
17.12.10

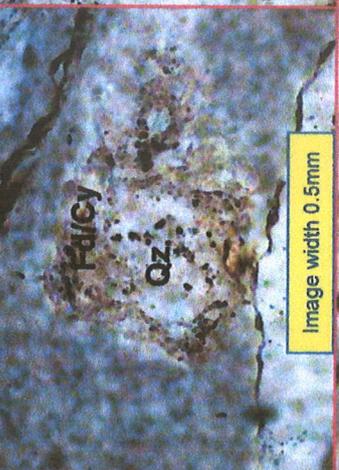
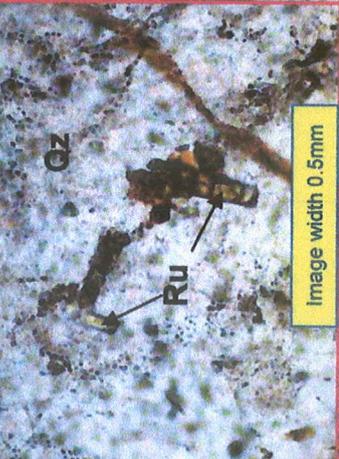
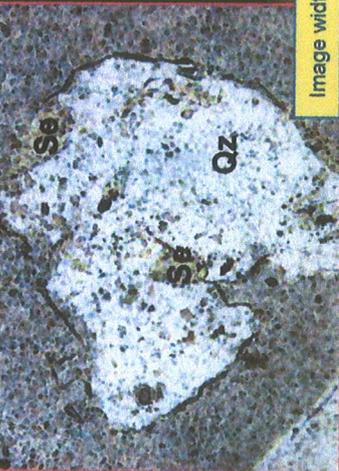
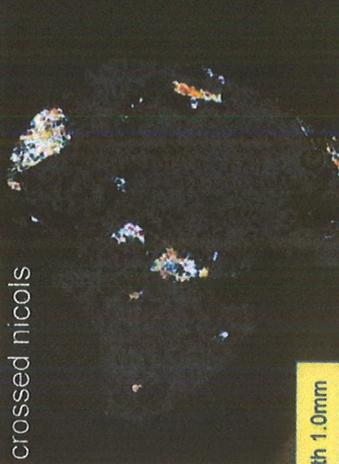
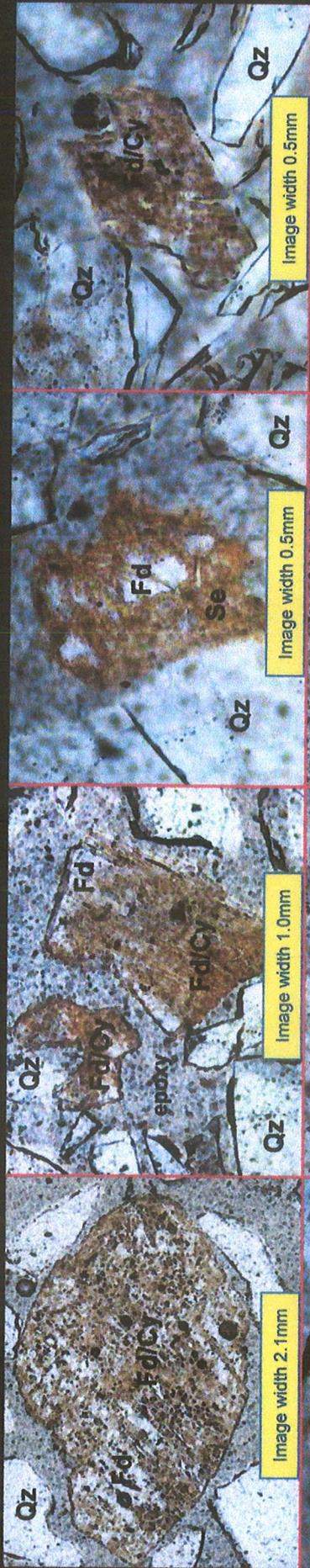


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crossed nicols

Fluid inclusions in quartz

Transmitted Light

Cy=clay
 Fd=feldspar
 Qz=quartz
 Ru=rutile?
 Se=sericite

vapour phase
 brine phase

epoxy