H2: Pb-Pbstep-leaching as a possible means of dating mineralisation, metamorphism and deformation

Project review outcomes and the extent to which these have been addressed

- The generic issue of integration
  - suggested the roll-out of the garnet work to other projects (e.g., Mt Isa); however, neither H2 nor other projects had budgeted for such work
  - involve others in providing samples for the development work associated with Pb-Pb step leaching of sulfides and magnetite
- Concerns that the project length is less than the term of a PhD candidature
  - these remain as, despite partial support for Kate's PhD stipend, project costs (circa $15,000 p.a.) are currently being derived from H2, due to end next year
- Communication of technical capabilities to the rest of the CRC
  - updates in quarterly (and annual) reports, conference presentations and soon, publications (in preparation)
- Look for opportunities for wider application and development of networks to other potential projects
  - the commencement of Kate's PhD project has improved networking between H2 and other projects

Status of deliverables and milestones according to Project Plan. Is the project on track?

- The garnet project
  - further experiments have been conducted (based on feedback both from the December review, and reports from the examiners of Maurizio's thesis). Consequently this work has been extended and only now nears completion
  - publications are behind schedule. One, describing the technique, is almost completed and others are planned (e.g., summary of Broken Hill results)
- The ore mineral project (additional to original scope of H2)
  - Kate Bassano commenced her PhD in May of this year. She is conducting experiments to determine whether or not PbSL can successfully be applied to chalcopyrite, pyrite and magnetite to date ore deposition (or resetting) events
- Trace element facility
  - the lab refurbishment, laser and optics are in place, the cell is being completed, but negotiations continue regarding the delivery of the instrument

Recommendations for the future. Opportunities for improved integration and how this may be accomplished

- Need to further test the garnet work
  - While we have sense of what will/won't work well, the proof will be in rolling out this technology to other projects. Is there funding to support such high risk work?

- Careful selection of chalcopyrite, pyrite and magnetite samples
  - Rather than focus on minerals from a specific setting (as in the garnet project) we are keen to acquire (pure?) separates of these three minerals from a spectrum of different ore deposit types/styles. We would be delighted to receive such samples from any member of the *pmd**CRC