

Round Table Summary: Cover



Richard Hillis

- cover session
- grand challenge

Cover Session: Summary

- brave new world of routine , cheap, real-time data from drillholes: geochemistry, mineralogy, petrophysics ...
- these data require new analytical procedures/exploration workflow
- analysis of these data needs to be underpinned by research on footprints, both in the cover and the basement
- case studies showing that by studying the material we have to drill through we can uncover broader haloes
- skillset from regolith geology through entomology, geobotany and palaeogeography



Cover Component In Uncover and If So What Should It Comprise?

- map the thickness of the cover using geophysics: eliminate false +ves
- distinguish TOFR, top saprolite etc.
- sample the basal lag unconformity
- understand processes of cover transport
- cover is prospective: mineral sands, uranium, sedex
- nem con
- Uncover document ✓
- not agonise on the content because

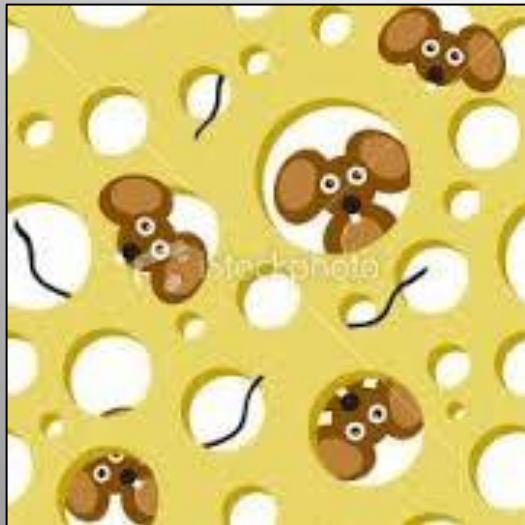


Grand Challenge: What Do We Seek to Achieve?

- providing a framework within which to obtain public money to acquire new data and support minex-relevant publicly-funded researchers
- different approach to seeking industry-funded JV/consortium



Grand Challenge



- petroleum: 10% exports
- mineral resources: 50% exports

Grand Challenge: Political Context

- industry collaborative research
- productivity focus
- philosophical dislike of 'hobbyist' research



"The universities are working in a space that industry isn't associating with. The challenge that I have, that I've fully taken up and accept is that, over the next three years, I'm either going to pull industry into the university space or, more likely, pull universities into the industry space and get universities talking to industry about what they should be researching."

Ian Macfarlane Nov 2013



Grand Challenge: Political Context

- industry collaborative research
- productivity focus
- philosophical dislike of 'hobbyist' research



- Australian Productivity Commission:
- 1974-2007 MFP in Australian mining constant
 - BUT MFP doubled once the effect of reducing grade considered
 - ~25% decline in productivity from 2000-2007 can entirely be accounted for in terms of declining grade



- 'Sending and responding to messages about climate change: the role of emotion and morality'
- 'Credit instruments in Florentine economic, social and religious life from 1570 to 1590'

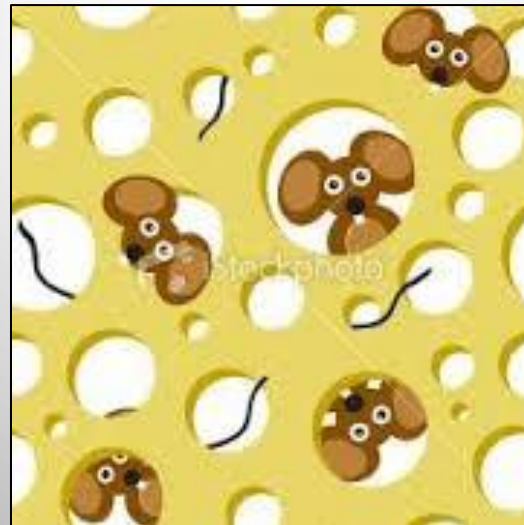
Grand Challenge

- momentum that Uncover has built: huge impact already
- Schodde/Hronsky greenfields exploration case
- quality of the publicly-funded research
- industry that is engaged
- need to move industry from engagement to leadership (AMIRA?):
differentiator and addresses the political landscape
- Uncover not in and of itself about science ... about improving the success rate of minex under covered areas
- industry set the priorities, research community advise the research strengths



Grand Challenge

- research community will burn a unique opportunity if it squabbles about:
 - what bits of cover (or other) research
 - data vs. research
 - research group A vs. research group B.
- geophysical surveys and drilling supported by relevant research
- data with the surveys, research with universities and CSIRO, leadership on the priorities from the industry



Uncover CRC?

- one of a suite of possible funding vehicles
- industry-led, provide structure for a JV/consortium and \$ leverage
- DET CRC would be strongly supportive of an Uncover CRC bid: grow the pie, not fight over its division
- agnostic on renewal bid for DET CRC in 2016/2017 and the research focus of such: belongs first to its Participants, but secondly as a possible vehicle for the community's priorities



Summing Up ...

- the cover lovers want to get NUDE, the modellers want to model, the pyrite lovers want to probe, lithospheric architects want to design ...
- there is support for all such work
- built around a regional geophysical and drilling program
- data with the surveys, research with universities and CSIRO, leadership on the priorities from the industry
- with broad support from industry (mining and service companies and MCA, MTEC, CoMs) government agencies (GA, State Surveys) and the research community, but led by industry, the case will be compelling

