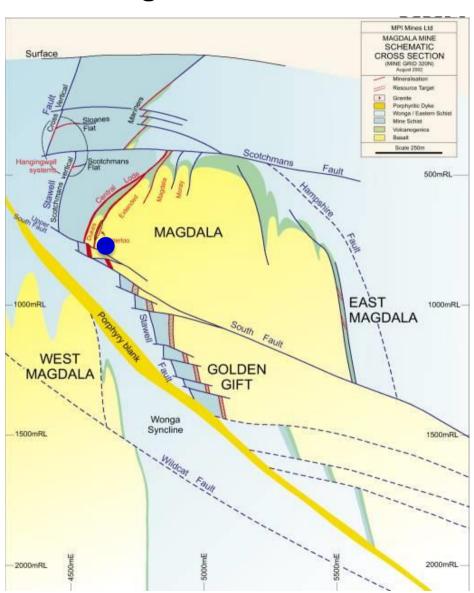
Stawell Mine 1km

Stawell gold mine ~240 km west of Melbourne,

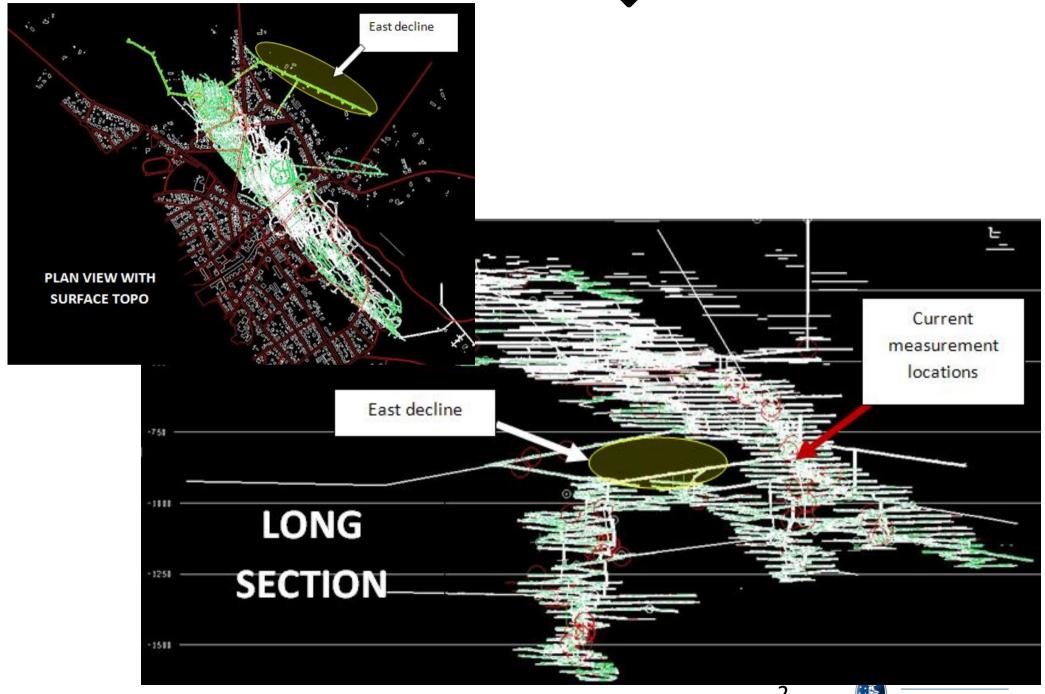


Laboratory to be placed at 1.0 km depth with a flat overburden.

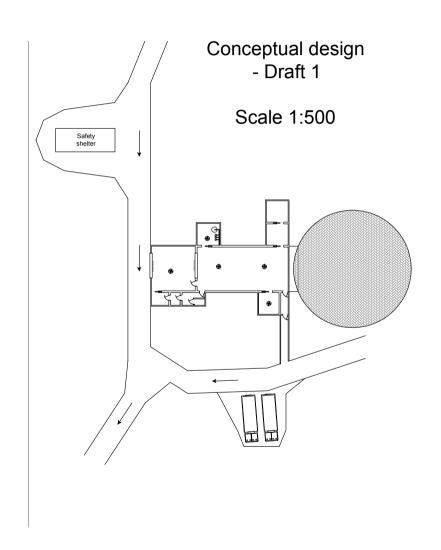
All sites served with electricity, optical fibre, reached by car/truck.

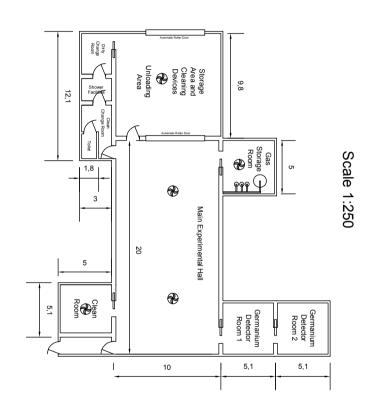


<u>Stawell M</u>ine ↓ 1km



Concept design





Conceptual design - Draft 1

Stawell Mine ↓ 1km

The first underground laboratory in the Southern hemisphere.

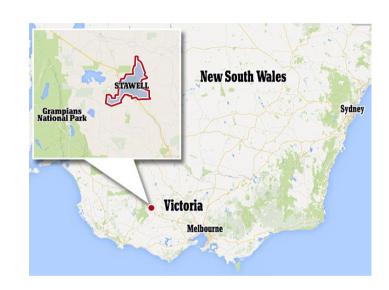
2014

Lab proposed (September)

2015

Funding secured (May) Federal (\$1.75M) & State (\$1.75M), ARC Linkage (July) \$1.28M + Stawell Shire, ANSTO, Stawell Gold Mine + Uni.'s Appointed AEMEC to do the design

Measurements by ANU, Melbourne and ANSTO for the background



2016

Start Construction (Jan/Feb)

2017

Lab ready to be used (Feb)

ANSTO low background measurements facility



Activities in Australia and Funding

We got \$300K for SABRE (Vessel, some electronics, phototubes for the vessel..)
We can ask more this year (we have 1year cycle so we may ask the money for the crystals...

Melbourne: E. Barberio, P. Urquijo, F. Nuti + 1 postdocs (to arrive soon)+ 2 students

Simulations, DAQ, readout and help with the quenching measurements. Mechanical engineering

ANU (Australia National University): A. Stuchbery, C. Simenel, G. Lane, A. Wallner + students

Quenching factor measurements, screening of the materials, pulse shape discrimination, readout They have a heavy ion accelerator, tandem, can do mass spectrometry useful for long living radioactive material.

Swinburne: J. Mould + 1 postdoc to be hired

low electronic threshold

Adelaide (will join may be next year): 2 staffs (theorists) + 1 phd (payed my the ARC Linkage)

ANSTO+ANU Background in the underground lab.