



Sydney Mineral Exploration Discussion Group

SMEDG Meeting – 24 September 2026 Launch of SMEDG GeoMatch

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SMEDG (Sydney Mineral Exploration Discussion Group) supports, connects and promotes mineral exploration

Next event

Refreshed SMEDG website now live!
www.smedg.org.au



2027 SMEDG GEOSCIENCE HONOURS STUDENT SCHOLARSHIP applications now open!

SMEDG is committed to supporting geoscience education and the future minerals industry.

The 2027 SMEDG Geoscience Honours Student Scholarship with a total value of \$10,000 (maximum \$2,500 per recipient) is open to students from a NSW or ACT based university with projects related to economic geology (exploration and/or mining).

Further information at smedg.org.au/smedg-scholarships/



SMEDG (Sydney Mineral Exploration Discussion Group) is a not-for-profit organisation affiliated with the Australian Institute of Geoscientists (AIG). SMEDG is based in Sydney to support mineral exploration and connection and was established over 50 years ago, continuing to be run by a volunteer committee. SMEDG provides monthly technical talks with networking in Sydney, as well as the biannual Sydney Harbour Cruises, the biennial Awards Dinner, and jointly hosting the biennial Symposium, *Discoveries in the Tasmanides - Mines and Wines*.

SMEDG is committed to supporting geoscience education and the future minerals industry. The 2027 SMEDG Geoscience Honours Student Scholarship with a total value of \$10,000 (maximum \$2,500 per recipient) is open to students from a NSW or ACT based university with projects related to economic geology (exploration and/or mining).

ELIGIBILITY

The 2027 SMEDG Geoscience Honours Student Scholarship is open to students who, at the closing date for applications, are enrolled in a geoscience Honours course at a NSW or ACT based university. The total value of the annual scholarship pool is up to \$10,000, with a maximum of \$2,500 per recipient. Applications for the scholarship open in September 2026 and close on Thursday 11 March 2027. No late applications will be accepted.

USE OF SCHOLARSHIP

The objective of the Scholarship is to provide financial support for students undertaking the geoscience Honours year of a Bachelor's degree in 2027, focussing on economic geology (exploration and/or mining). The Scholarship may be used to support the student including project expenses or general living, travel and other expenses.

HOW TO APPLY

To apply for the SMEDG scholarship simply:

- ✓ Complete the 2027 SMEDG Geoscience Honours Student Scholarship Application Form (see attached)
- ✓ Provide your CV detailing your education, work history, involvement in geoscientific societies and interests (max 3 pages)
- ✓ Provide proof of enrolment in an Honours year at a NSW or ACT university with an academic transcript or evidence from your university
- ✓ Provide an abstract or overview of your Honours project including project background, aims, methodology and expected outcomes (max 500 words)
- ✓ Provide short answers to the questions 'Where do you see your future career?' and 'What are your interests and/or passions?' (max 200 words for each question).

Submit the completed form with your signature and attachments to info@met-advisory.com.au by 5pm AEDT Thursday, 11 March 2027. No late applications will be accepted.



SYDNEY MINERAL
EXPLORATION
DISCUSSION GROUP

SMEDG GEOMATCH



HONOURS & INDUSTRY FORUM

CONNECTING GEOSCIENCE STUDENTS,
SUPERVISORS **AND** THE MINERALS INDUSTRY.



THURSDAY
24 SEPTEMBER 2026



FROM
6:00 PM



CLUB YORK
95-99 YORK STREET
SYDNEY NSW

POTENTIAL PROJECTS. REAL CONNECTIONS. FUTURE OPPORTUNITIES.

MEET.
SHARE.
CONNECT.

SHAPING THE NEXT
GENERATION OF
EXPLORERS



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— SMEDG

SMEDG GeoMatch



SMEDG GeoMatch supports connection and collaboration between students, industry and academia as well as encouraging students to take up an Honours projects in economic geology at no cost to participants. Companies are encouraged to promote economic geology projects, preferably to potential Honours students and University supervisors, as well as vacation work.

Expressions of Interest are now open – Companies or universities with potential student projects can now express their interest to be included in this SMEDG GeoMatch webpage. The monthly SMEDG Technical Meeting will feature short 'pitch' presentations from companies and academics as well as a Q&A session. SMEDG GeoMatch is a free service to attend.

Companies and universities supporting SMEDG GeoMatch – A list of companies and universities supporting SMEDG GeoMatch projects and vacation work are detailed below

SMEDG GeoMatch webpage now live!
www.smedg.org.au



Sydney Mineral Exploration Discussion Group

The background of the slide is a photograph of a person wearing a high-visibility yellow and green safety vest and white work gloves. They are holding a large, rough, brownish-grey rock sample. The background is slightly blurred, showing more of the rock pile.

SMEDG GeoMatch

Past Honours Student Presentation

My journey doing Honours in Geoscience

Penelope Beltran-Rehberg



Pre-Honours...

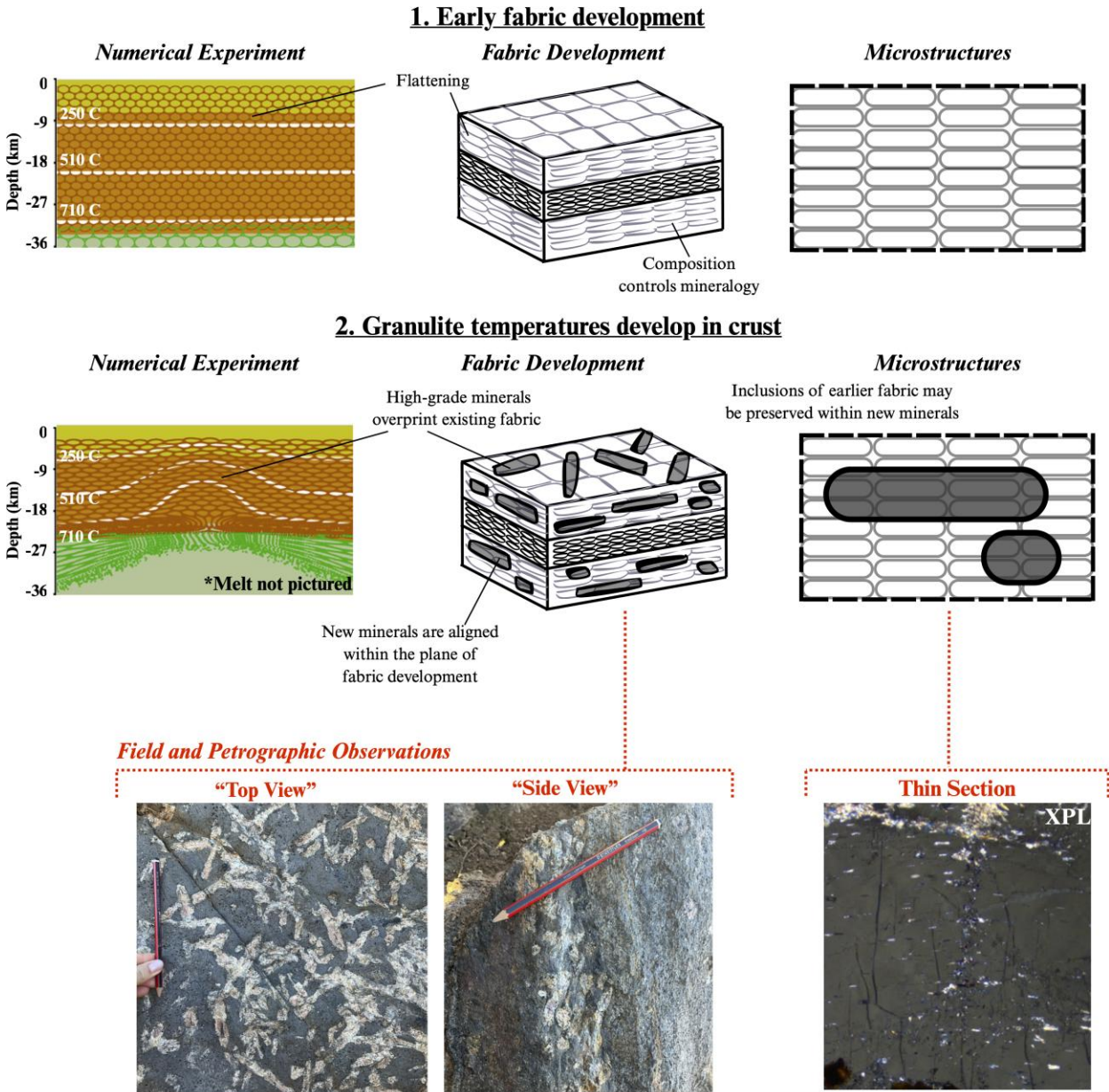
Fieldwork & Research



NExUS



Honours!



What's next?

& My advice to future Honours students...

- Honours opens doors in academia and industry
- Ask all the questions! (to your supervisors, colleagues/classmates, industry representatives, etc.)
- Don't be afraid to just give it a go 😊

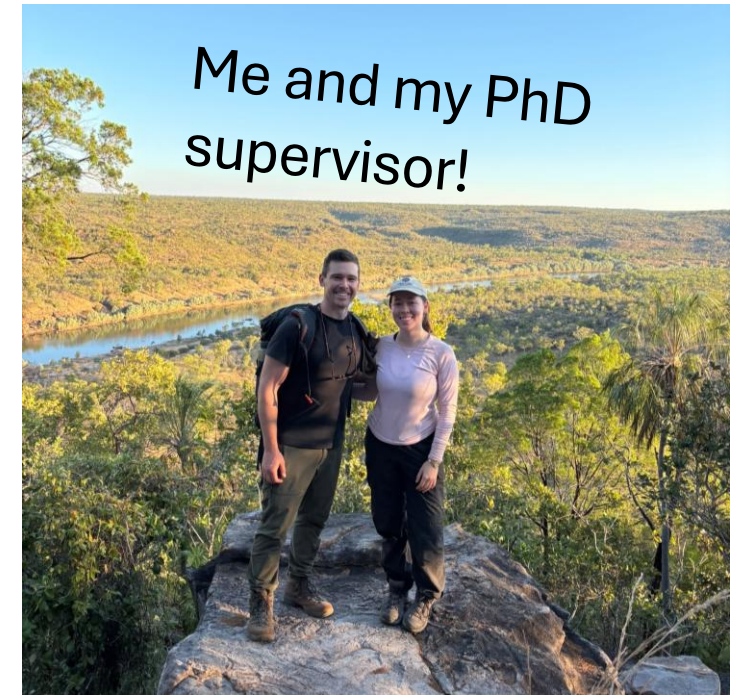


Image (above): Donaldson, M. (2012). *Kimberley rock art. Volume one, Mitchell Plateau area.*

Wildrock Publications





Sydney Mineral Exploration Discussion Group

The background of the slide is a photograph of a person wearing a high-visibility yellow and green safety vest and white work gloves. They are holding a large, rough, brownish-grey rock sample. The background is slightly blurred, showing more of the rock and the person's arm.

SMEDG GeoMatch **Company Presentations**



Sydney Mineral Exploration Discussion Group



SMEDG GeoMatch

Aurelia Metals

Aurelia Metals

Real Data, Real problems, Real Discoveries

ASX Code: AMI



WHO WE ARE

A growing Australian base metals producer – 2 Mining Districts

ASX Code: AMI	
Federation Discovery to Mining	2019 to 2024
Great Cobar Reassess to Mining	2021 to 2026 (few months)
Regional and Near Mine Exploration	Airborne Geophysical Surveys (Mag/AGG, LIDAR) Soil Geochemistry Auger, Aircore, Reverse Circulation Drilling Ground Geophysical Surveys (IP, Gravity, DHEM) Diamond Drilling (Surface, Underground)



New Cobar Mine



Peak South Mine

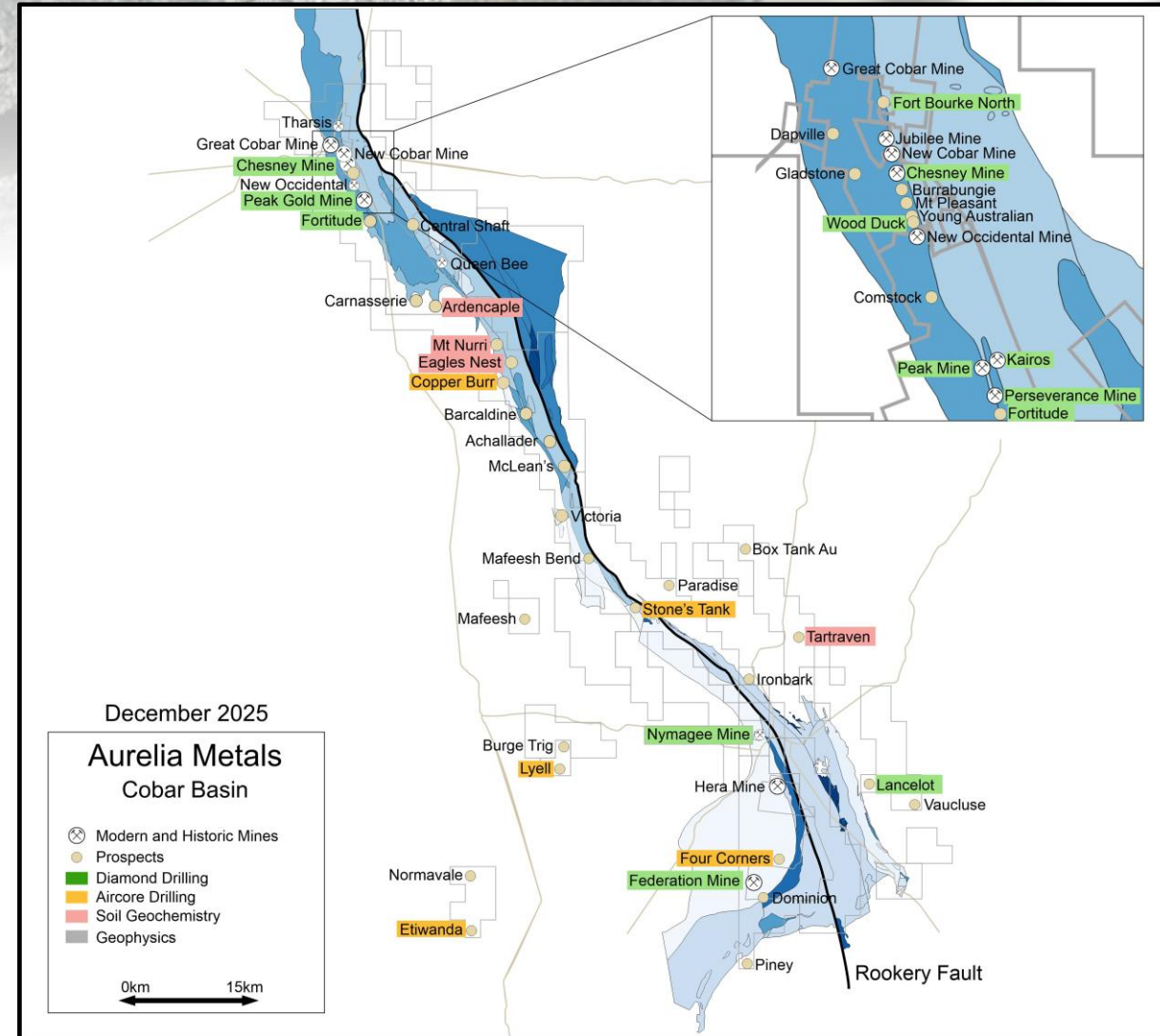
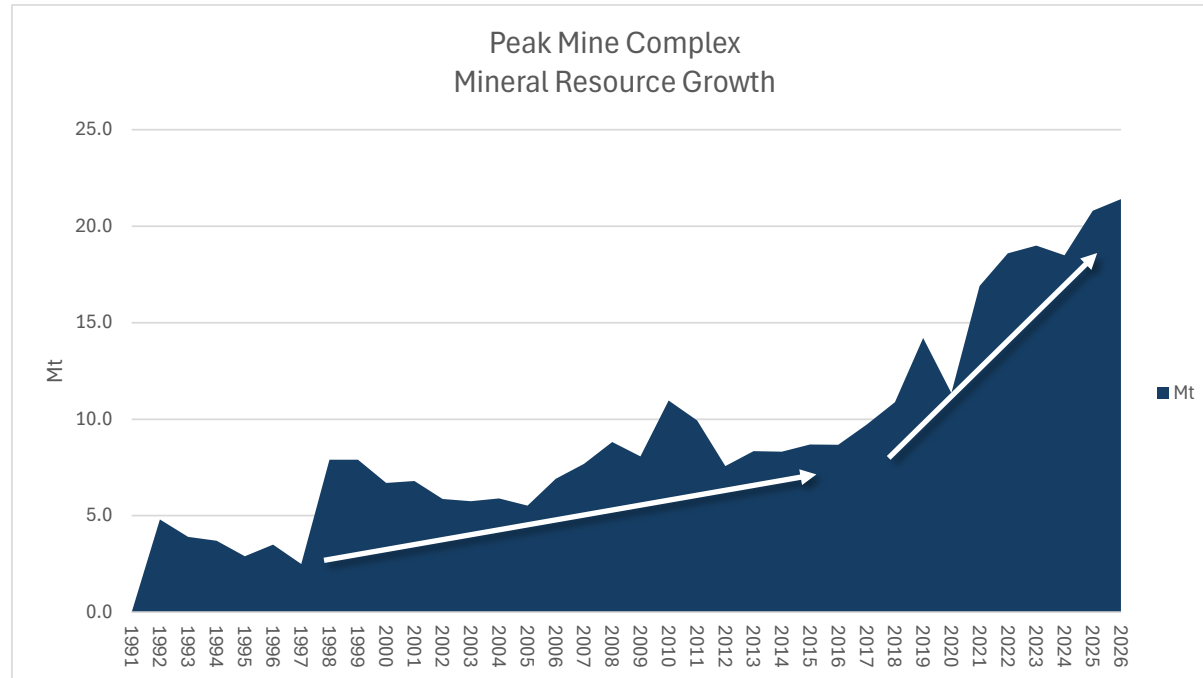


Federation Mine



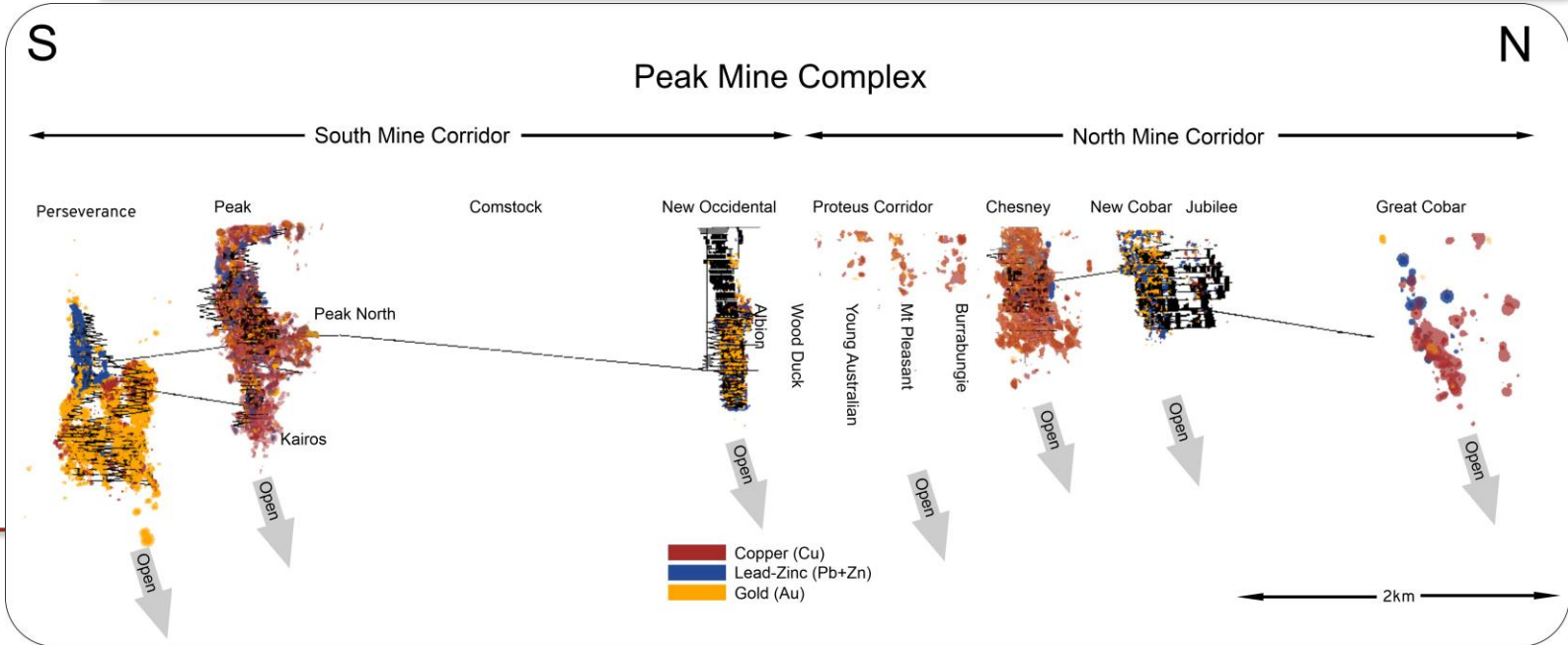
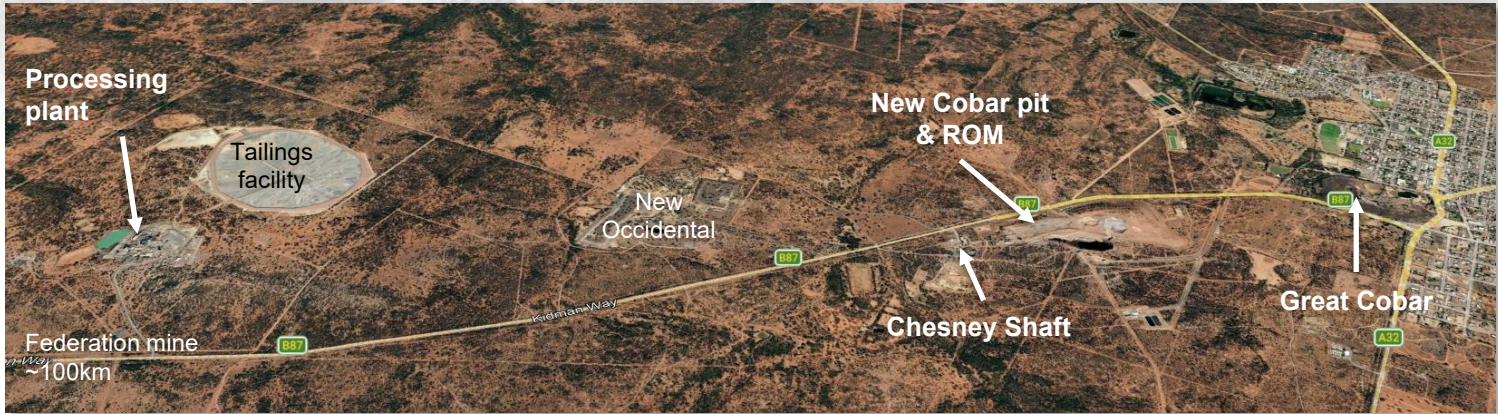
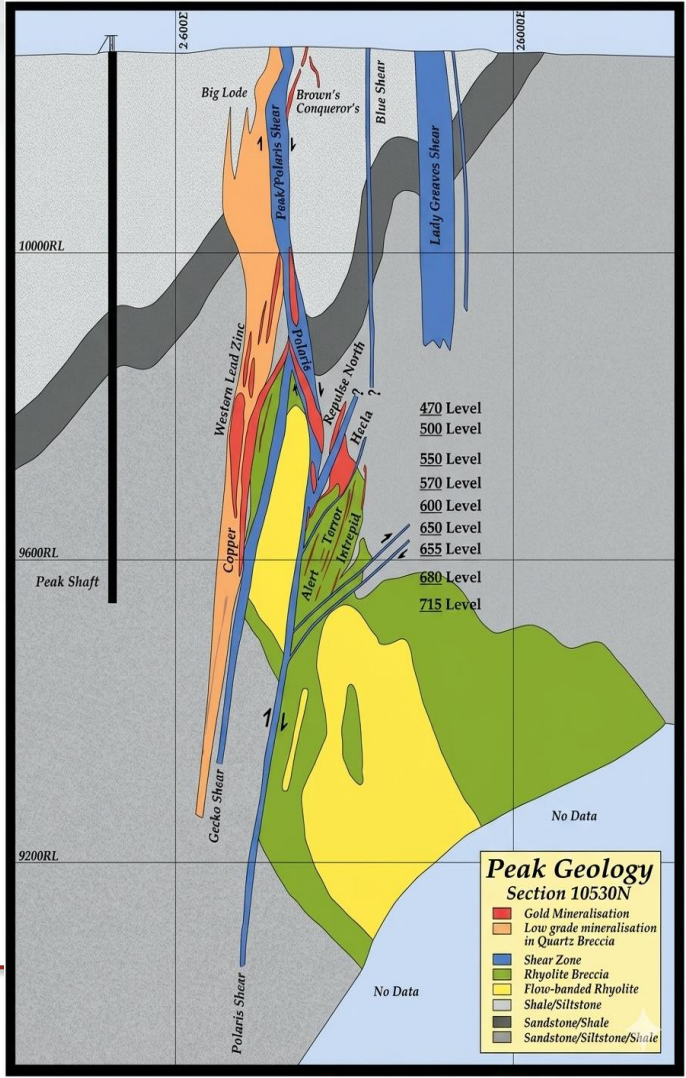
WHAT ARE WE DOING?

Strong Track Record of Growth and Discovery



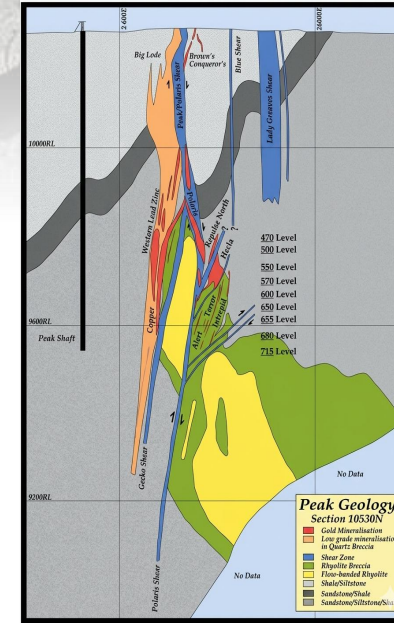
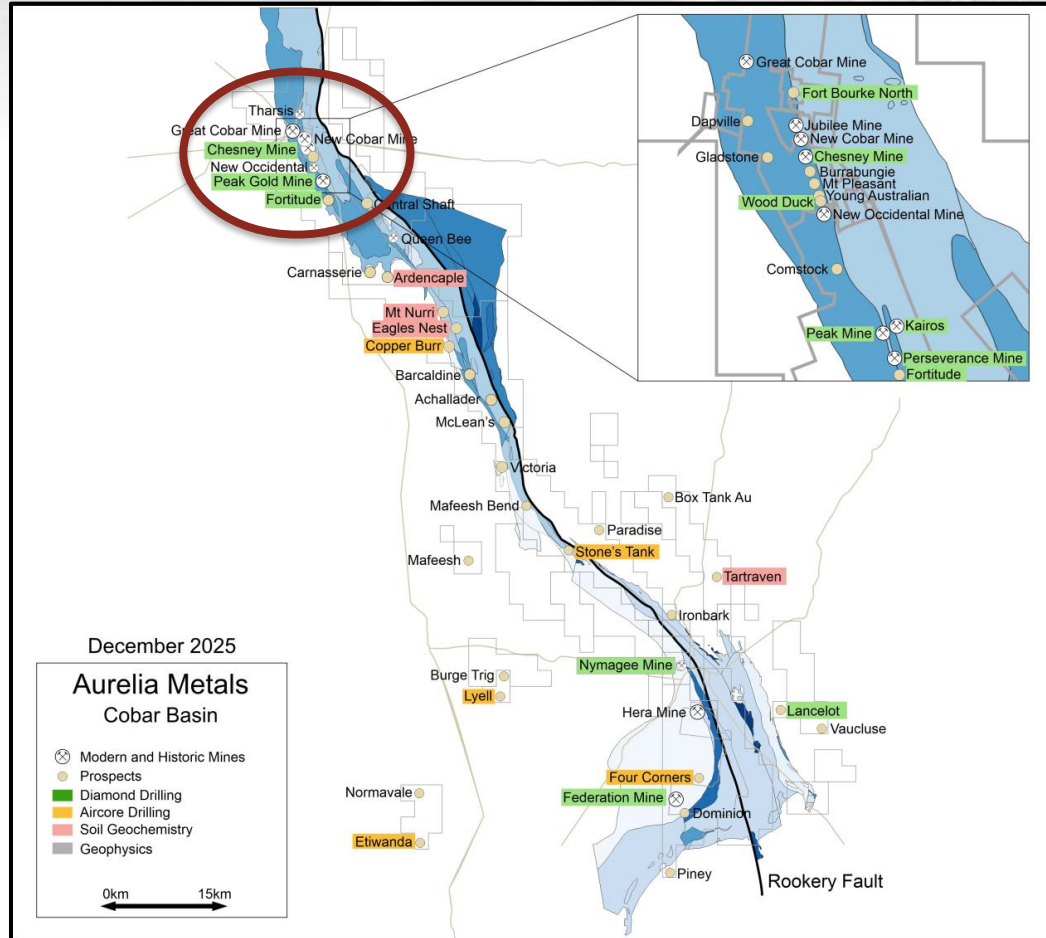
PEAK SOUTH – NEW COBAR – GREAT COBAR MINES

What's Missing?



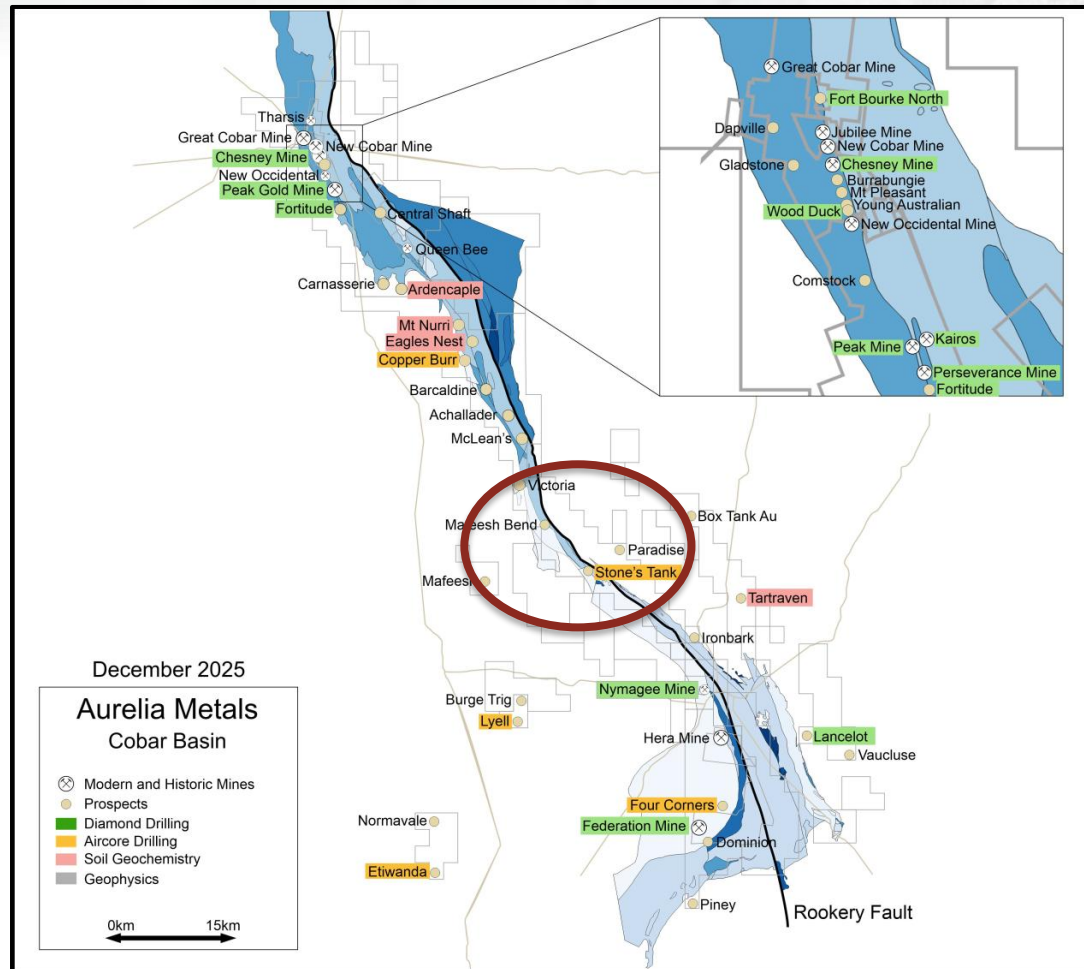
Volcanogenic architecture of the Peak Volcanics

Volcanogenic facies mapping



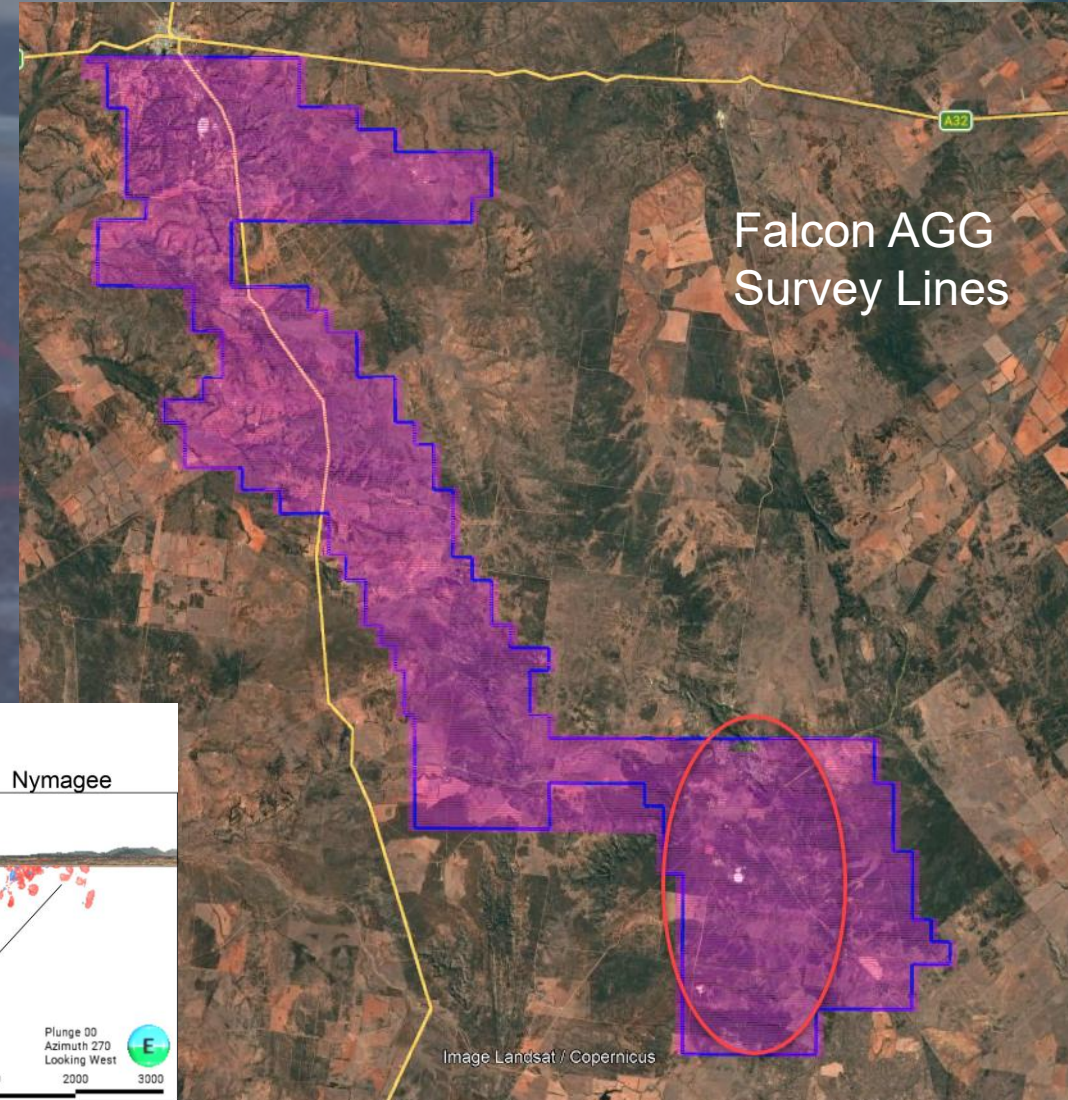
Volcanogenic architecture of the Stones Tank Volcanics

Volcanogenic facies mapping



Structural architecture of the Hera/Fed Corridor

Fault architecture and structural mapping



Nymagee District

Federation

Hera

Nymagee

Dominion

Four Corners

Enyo

Io

Thorntons

Federation
Federation West Extension
Harley Lens discovery

Nymagee
Nymagee North Extension
Metropolitan Lens discovery
Lazer Lens discovery

Plunge 00
Azimuth 270
Looking West

0 1000 2000 3000



Image Landsat / Copernicus



Sydney Mineral Exploration Discussion Group



SMEDG GeoMatch

Legacy Minerals

Legacy Minerals

Discovery and Development in NSW

SMEDG Honours Night

24 September 2026



Mt Carrington Project Overview

Large Polymetallic System in Northern NSW

47.9Mt at 1.0g/t AuEq Mineral Resource

714koz Au at ~1g/t Au | 35Moz Ag at ~80g/t Ag |
201kt Zn+Pb, 40kt Cu¹

Open discovery and Resource growth opportunity

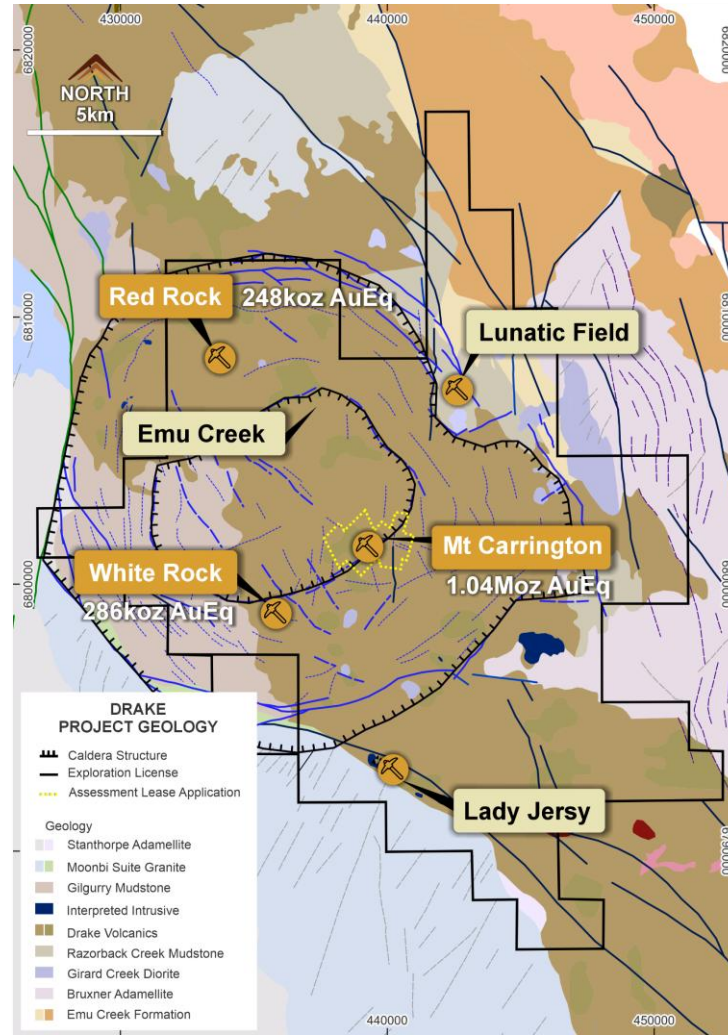
MRE less than 150m depth with no underground resources included

High-grade open pit component to resource

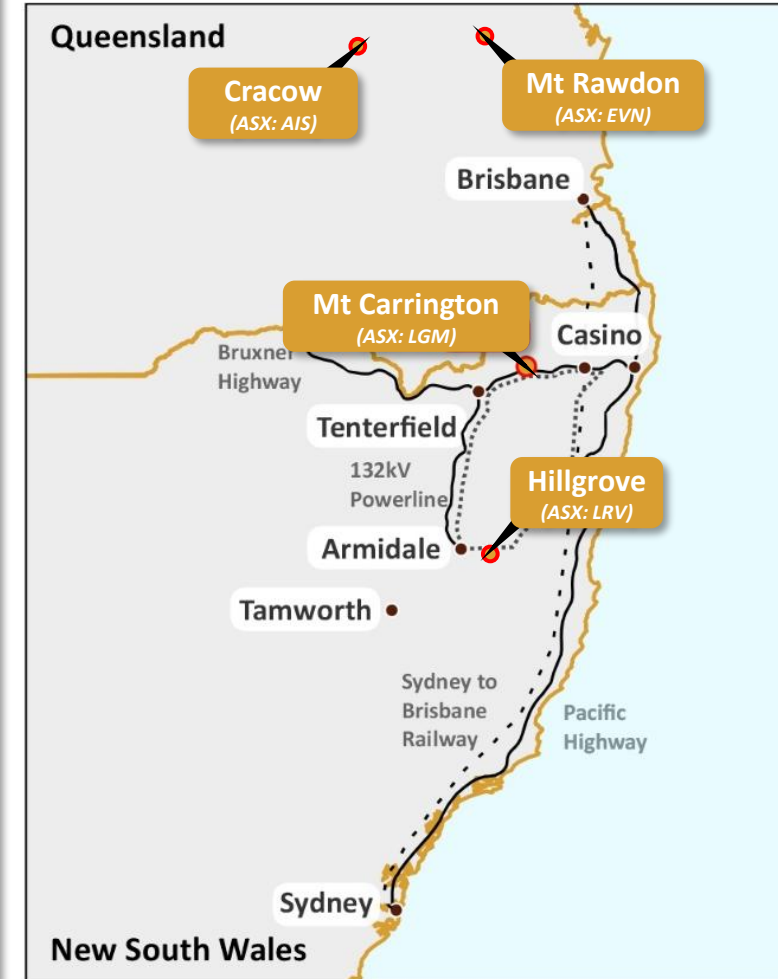
493koz AuEq at 3.1 g/t AuEq (cut-off >1.9 g/t AuEq)²

Scoping Study review underway

Optimisations of the plant, and revise pricing assumptions across resource estimates, mining and financial studies



Current Mt Carrington Mineral Resource Estimate¹



Potential Honours and Research Work

Actively targeting new, major greenfield discoveries

Ti/Zr immobile-element restratigraphy of the Drake Volcanics

1. A revamp 3D geological model of the Mt Carrington Gold-Silver deposits

Fluid inclusion microthermometry and paleodepth reconstruction across the exposed deposits.

1. Attempt to answer the boiling vs mixing question
2. Would directly rank which prospects are eroded and which are blind and preserved

Geochronology: Ar-Ar on ore-stage adularia plus U-Pb zircon on the western granite

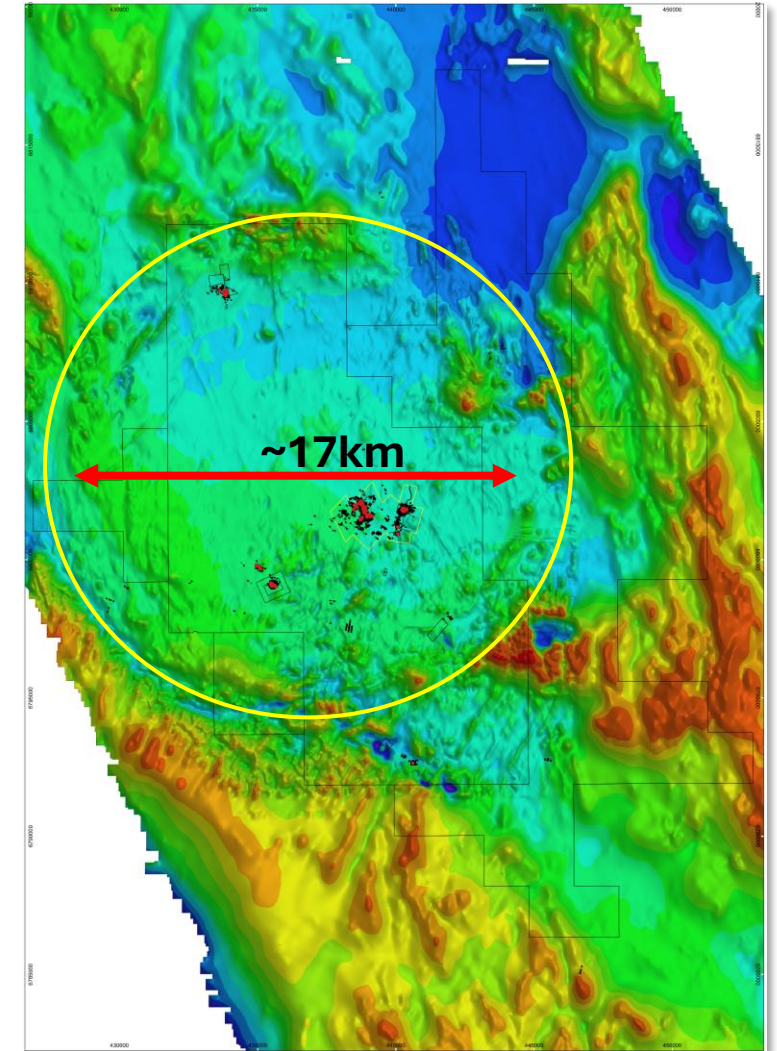
1. Refine dating of mineralisation event/s
2. Dating of the western granite would be a nice to know (potential driver of the system - Cumming trap door model)

Prospect-scale study of Mascotte

1. Geochemical characterisation of the system

Open to suggestions!

1. LGM is open to suggestions will help advance the geological understanding of the system that will lead to discoveries



Drake caldera structure (magnetics)

Why consider Legacy Minerals?



NSW Based Project

Location in Northern NSW



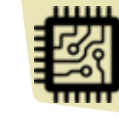
Active exploration and development studies underway

Exposure to the full 'exploration lifecycle'



Enthusiastic Management Team

Young, technically led team



Implementing new technologies

Geophysical data collection, AI, and CSIRO collaboration





Thank You

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Sydney Mineral Exploration Discussion Group



SKY METALS

SMEDG GeoMatch

Sky Metals



Sydney Mineral Exploration Discussion Group

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SMEDG GeoMatch

University Presentations

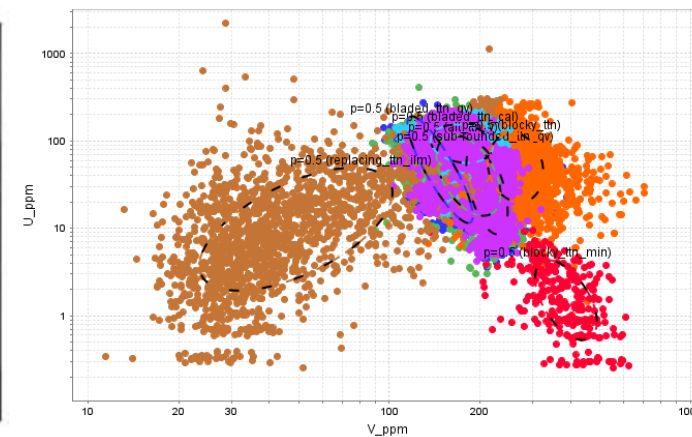
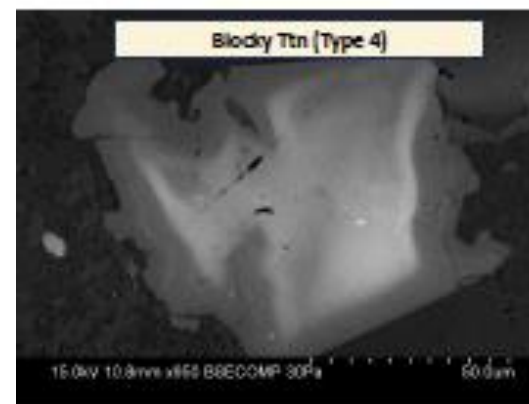


Sydney Mineral Exploration Discussion Group



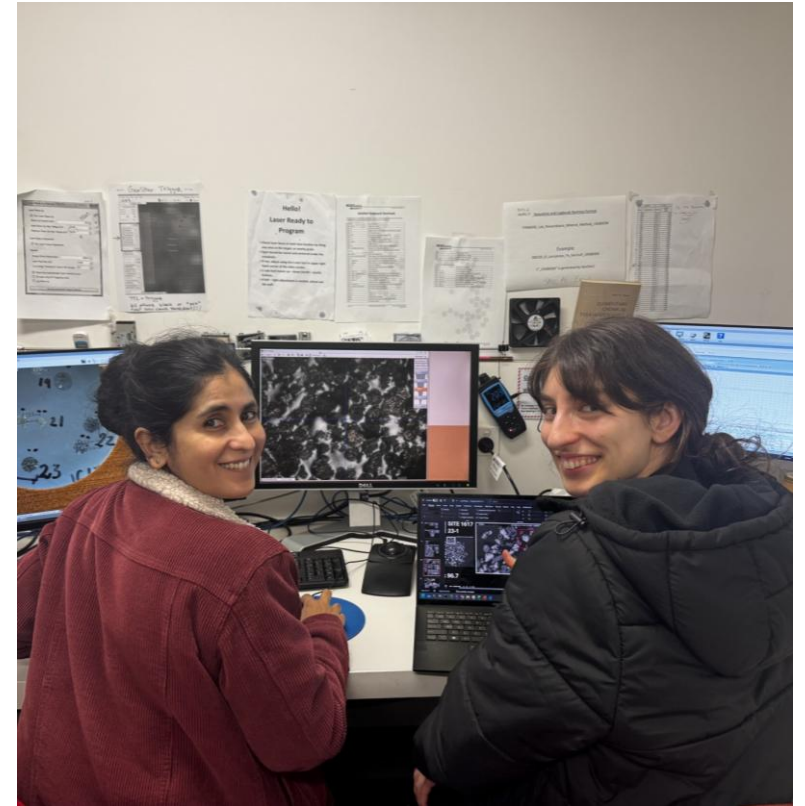
UNSW
SYDNEY

SMEDG GeoMatch
University of NSW



UNSW-BEES capabilities

- Mapping
- Petrography (transmitted and reflected light)
- In-house Electron Microscopy (including **SEM**, **nano-SEM**, **CL-SEM**, **EPMA**)
- In-house Quantitative **X-Ray Diffraction Analyses**
- In-house Whole rock portable and laboratory **X-Ray Fluorescence Analyses** and carbonate isotope analyses
- Access to **LA-ICP-MS** (collaborator rates) at UTAS/Macquarie, whole rock **MC-ICP-MS** (Melb.), **SIMS** (UWA), isotope analyses (UTAS), geochronology (UTAS, Curtin, ANU, Melb.)



Research Areas

- Economic Geology
- Mineral exploration
- Environmental geochemistry
- Igneous petrogenesis
- Sedimentary systems
- Applied Mineralogy



Research collaborations

- Within BEES – ecology-geology projects
- Within the Faculty of Science – coal fly ash and microbial extraction
- Across the Faculties – Narrabri gas field project
- UTAS, Adelaide University, Uni. of Melbourne, Curtin – current!
- GSWA, GS-NSW, GA, GSSA – current
- Mining and exploration companies (small-medium), consultancies
- Several international collaborations (China, USA, France, UK, Greece, New Zealand, Germany, Canada)

Contact us!

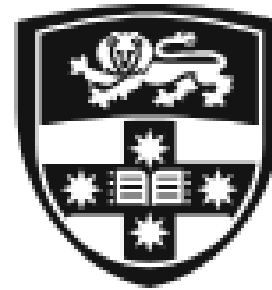


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- i.graham@unsw.edu.au

- **Indrani Mukherjee**
- 0432 354 821
- Indrani.Mukherjee@unsw.edu.au



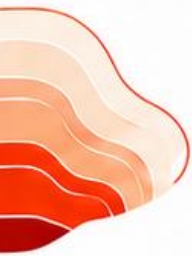
Sydney Mineral Exploration Discussion Group



THE UNIVERSITY OF
SYDNEY

SMEDG GeoMatch

University of Sydney



Sydney Festival of Geosciences

Program Overview



Morning



Afternoon



Evening

Community
and Outreach

 **DAY 1**

Thursday 5 Nov



11 am - 5 pm

**GESSS
Student Conference**

Hybrid, nationally organised

*Location: Madsen Conference
Room 449*



5:30 - 7:30 pm

**Maps are, at best,
temporary**

Country, culture, and changing
perspectives on space and time

*Location: Royal Hotel,
Darlington*

 **DAY 2**

Friday 6 Nov



11 am - 5 pm

**GESSS
Student Conference**

Hybrid, nationally organised

*Location: Madsen Conference
Room 449*



5:30 - 7:30 pm

**Geological and
Geomorphological
Evolution of Sydney**

Landscapes, coasts,
and natural hazards

*Location: Royal Hotel,
Darlington*

 **DAY 3**

Sunday 8 Nov



**Externally Organised
Field Trip**

e.g. GSA, Coastal
& Geog Soc



Free / open to
the public

Location: Cockatoo Island

 **DAY 4**

Tuesday 10 Nov



**Geosciences
at Sydney
Symposium**

Location: New Law LT 101



**Canapes and
Drinks**



INTERNATIONAL
MINING AND
RESOURCES
CONFERENCE+EXPO

VICTORIA AUSTMINE Ausimm mines money

27 - 29 OCTOBER 2026
ICC SYDNEY

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Register



NEXTGEN @ IMARC

Connecting Industry and the Future Workforce

APPLY FOR A NEXTGEN LEADERS PAS

12,000

Registrants

500+

Exhibitors

500+

Speakers

700+

Investors

120+

Countries

32

DAYS TO GO

Free for undergraduate students, \$4500 for academics and PhD students

EARTH SCIENCE WEEK



Geological Society
of Australia



THE UNIVERSITY OF
SYDNEY

Launch Event

*A new frontier in Earth resilience
is about to be revealed*



In collaboration with the
Sydney Interplanetary Rover Initiative



Wednesday 14 October



5:30 pm – 7:00 pm



Madsen Rm 449

School of Geosciences, University of Sydney





Sydney Mineral Exploration Discussion Group

Next events in 2026

- **SMEDG Meeting on 22 October - Saudi Arabia geology and exploration potential**
- **SMEDG Meeting on 26 November - Geological Survey of NSW Update**
- **SMEDG Harbour Cruise on 11 December – tickets on sale soon!**

Further information at [**smedg.org.au/events/**](https://smedg.org.au/events/)

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right partner.



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EXPLORATION SERVICES



ADMINISTRATIVE PARTNER

