

# Presentations Core & Rock Display Field Trip

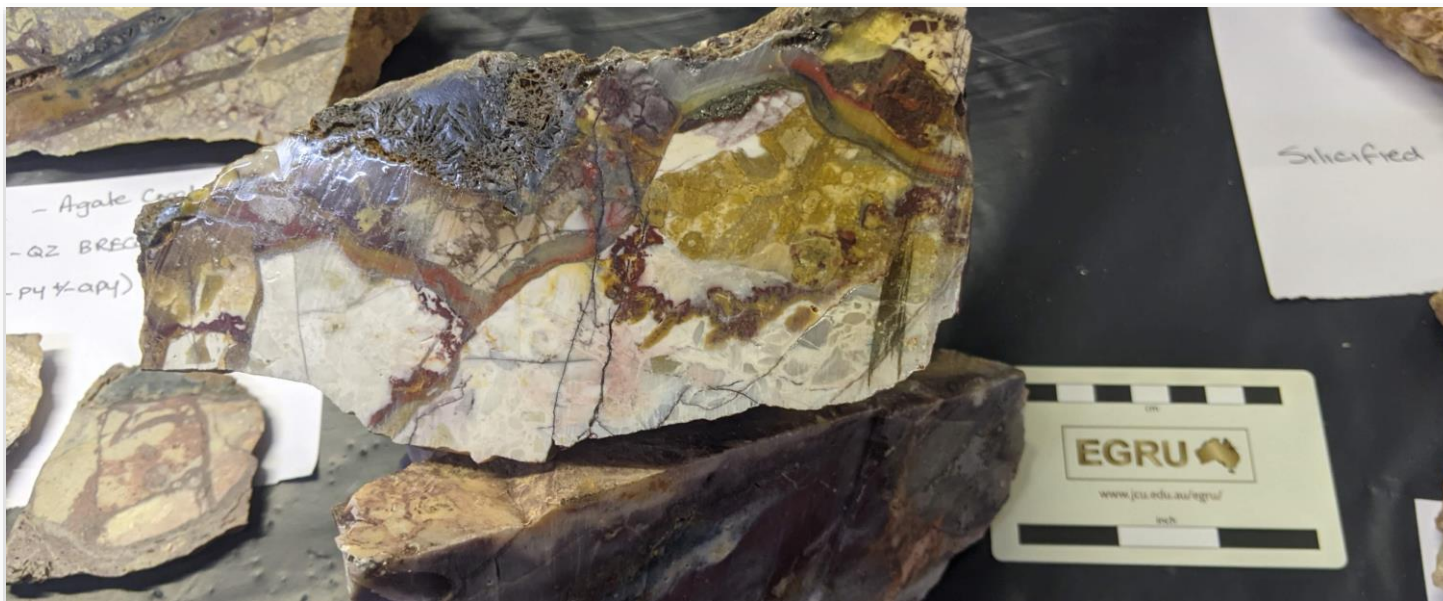


Photo Credits: Avish Kumar, Hoseong Lim, Kaylene Camuti

# Presentations & Displays

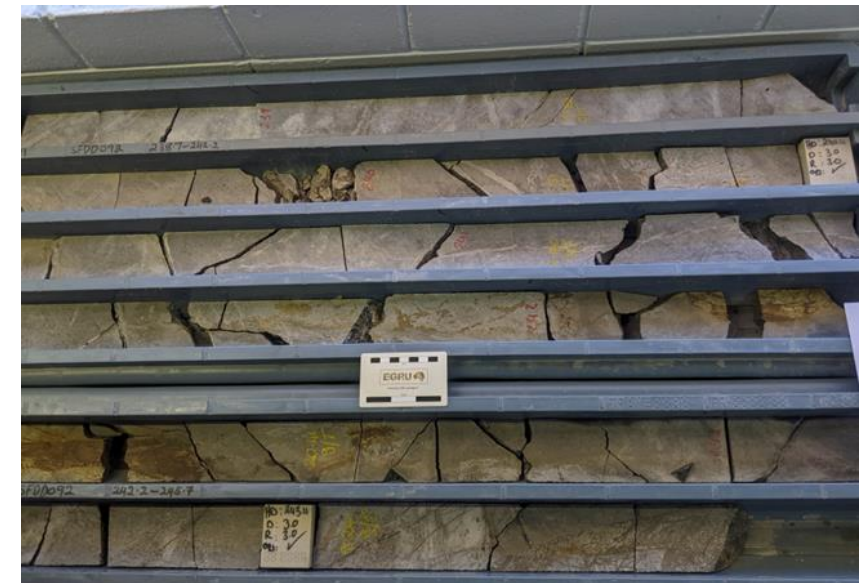


# Mount Leyshon

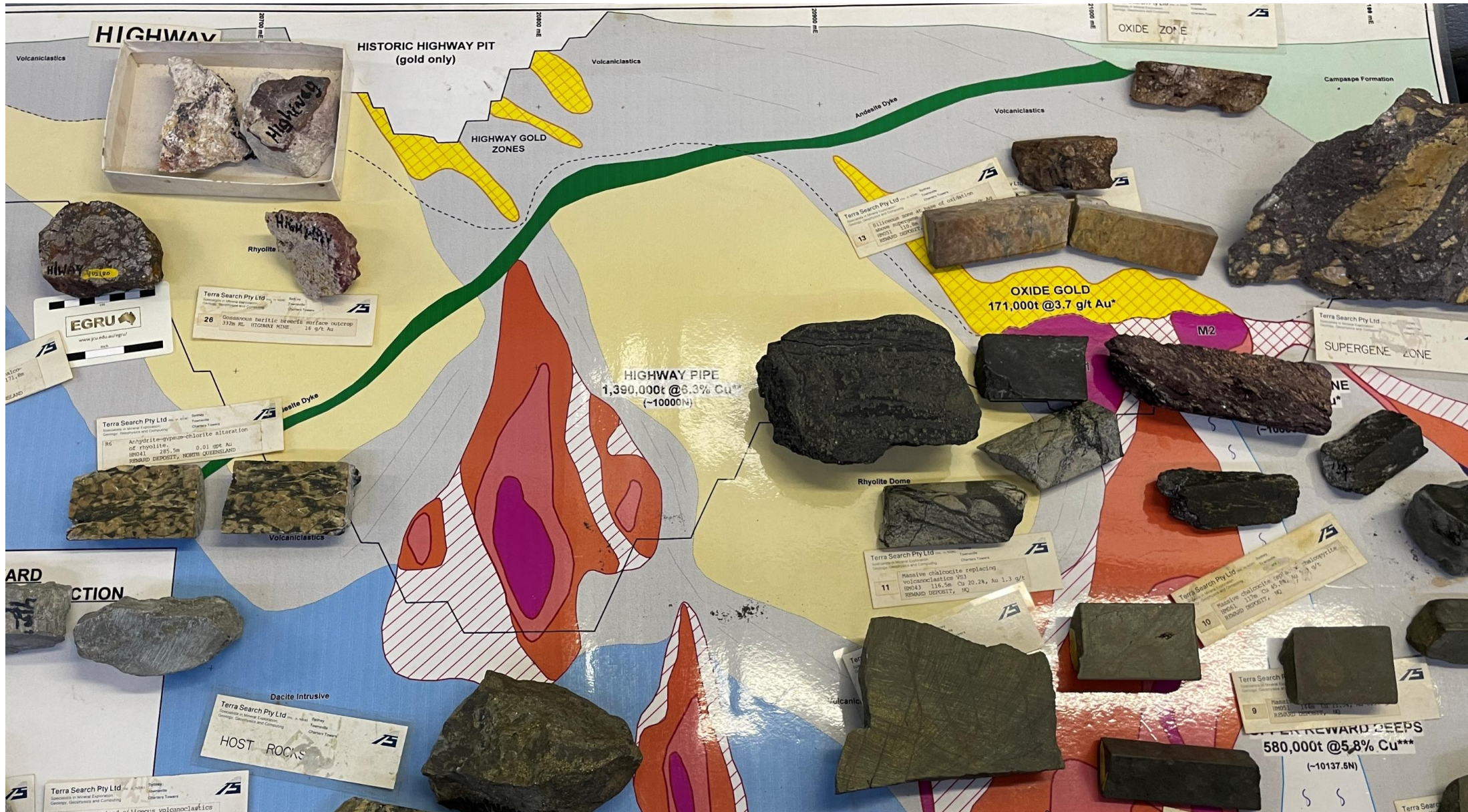


# Ravenswood

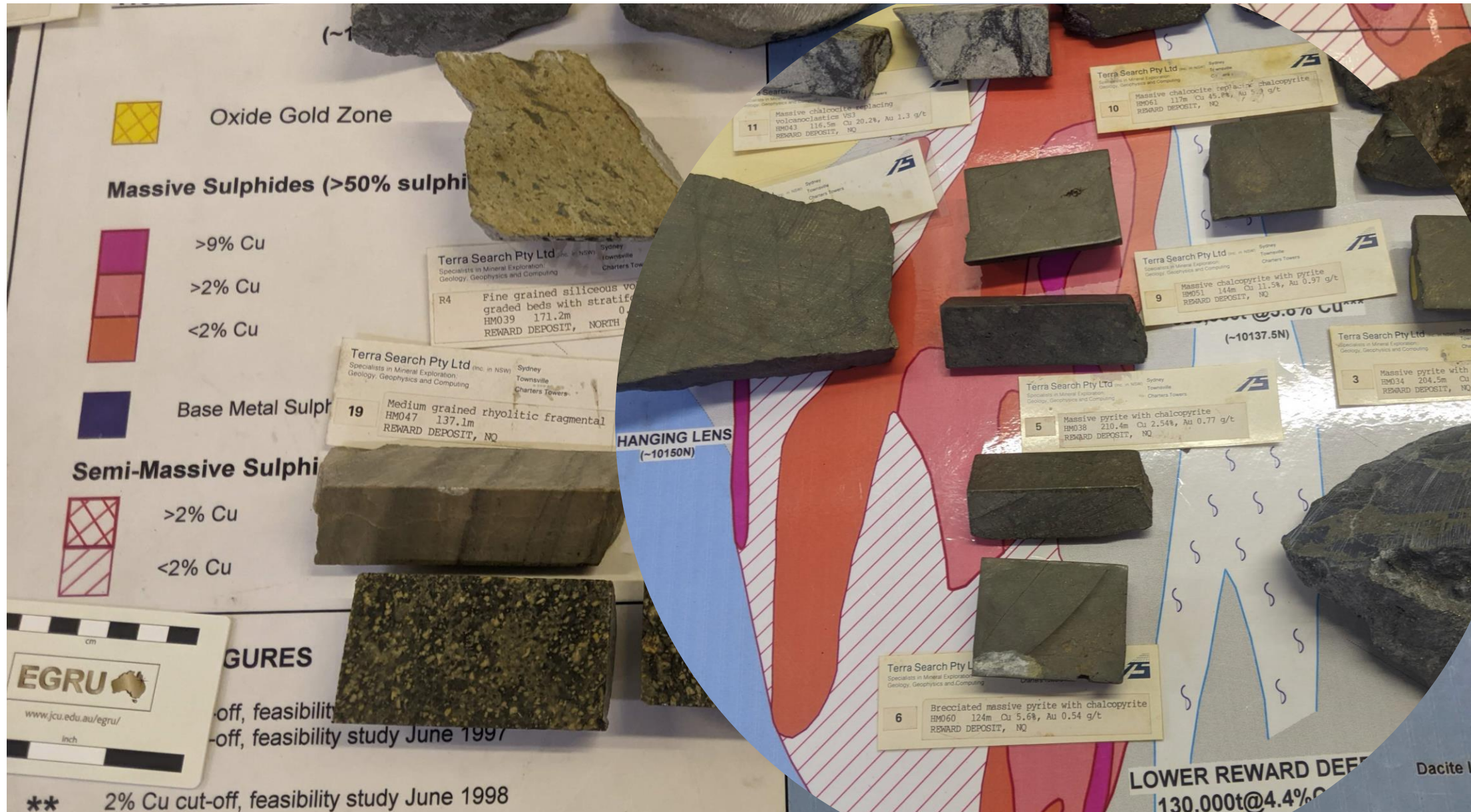
Samples: Ravenswood Gold



# Highway - Reward

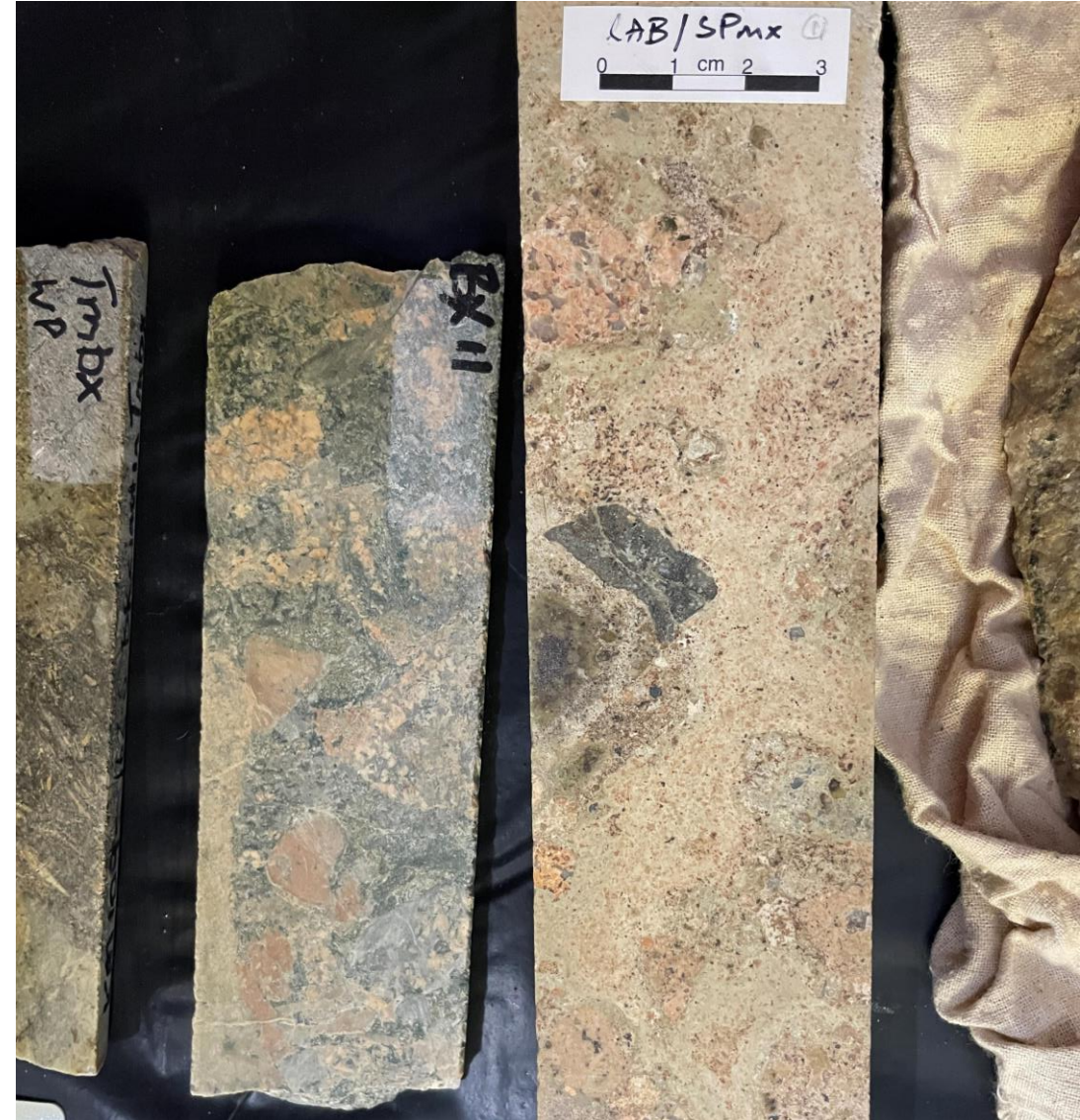
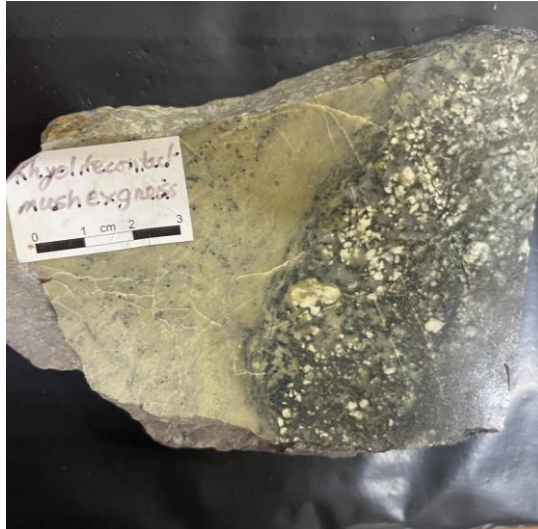


# Highway - Reward

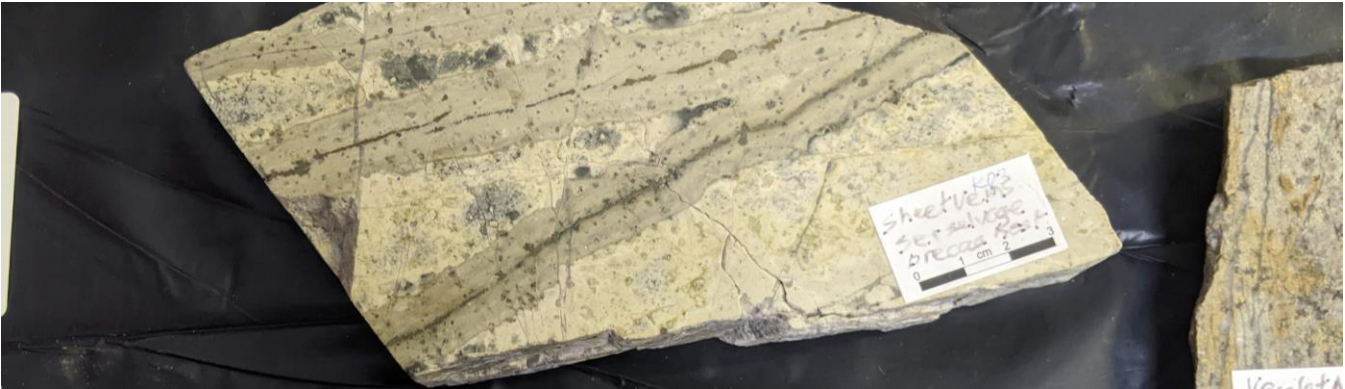
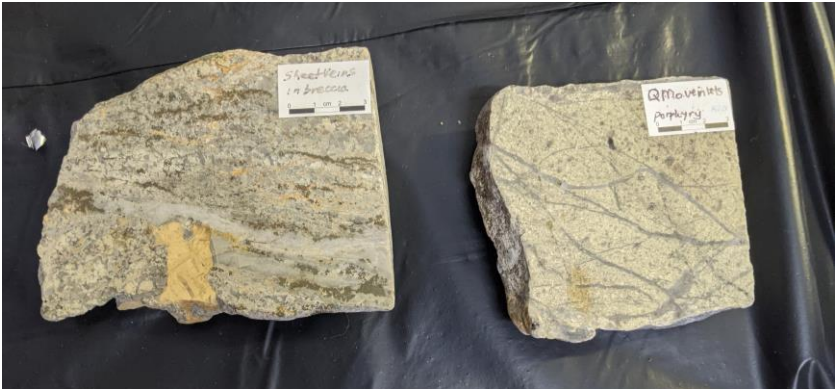
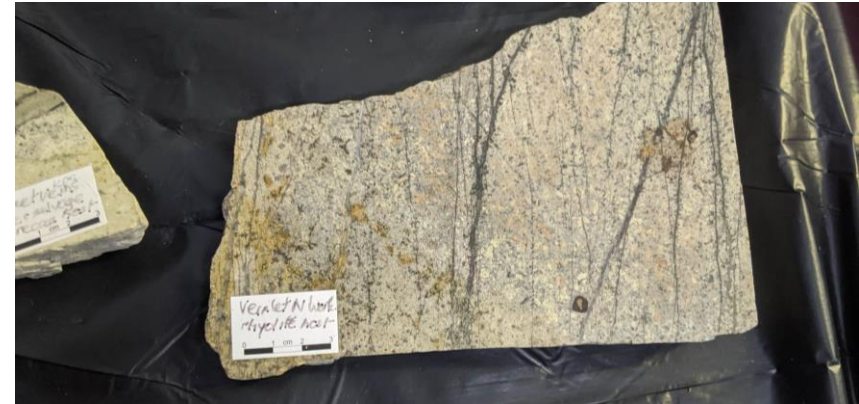


# Kidston

Samples: Gregg Morrison



# Kidston





# Mineralisation & Paragenesis of Buchanan Creek Pegmatites, Georgetown

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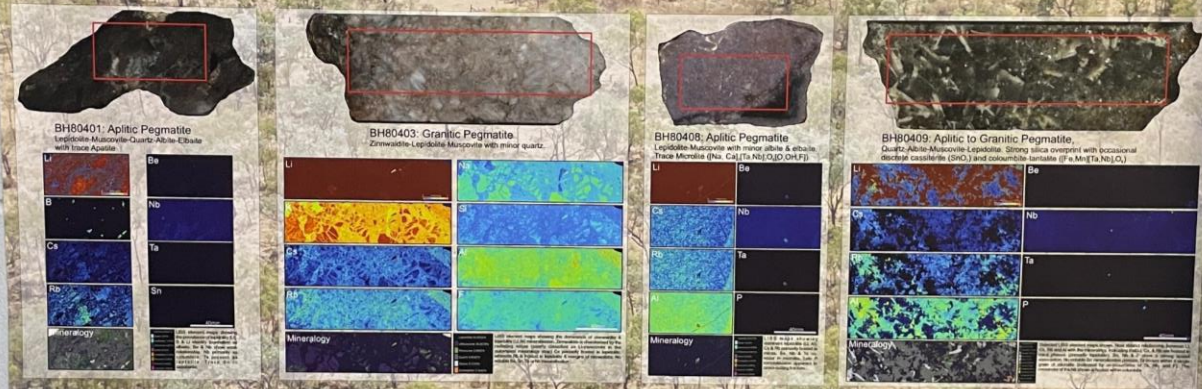
## Overview

Recent focus on critical minerals has cast renewed exploration interest in the Buchanan Creek area of the Georgetown Inlier, Queensland. Historically, the area was known for alluvial tin and tantalum production, both of which are pathfinder elements for highly-fractionated Lithium-Caesium-Tantalum (LCT) pegmatites. LCT pegmatites form over 50% of the world's lithium supply.

At Buchanan's Creek, LCT pegmatites occur as a dyke swarm spanning approximately 10x4 km, although this may also extend to Grants Gully, 6 km to the west. The pegmatites are hosted within the 1.786 Ga Lane Creek Formation metasediments and post-date the 1.67 Ga Cobald Metadolomite, and are locally overlain by Late Devonian to Early Carboniferous felsic volcanics. Preliminary Ar-Ar dating by GSQ tentatively indicates a 1.43 Ga age for the emplacement of the LCT pegmatites.

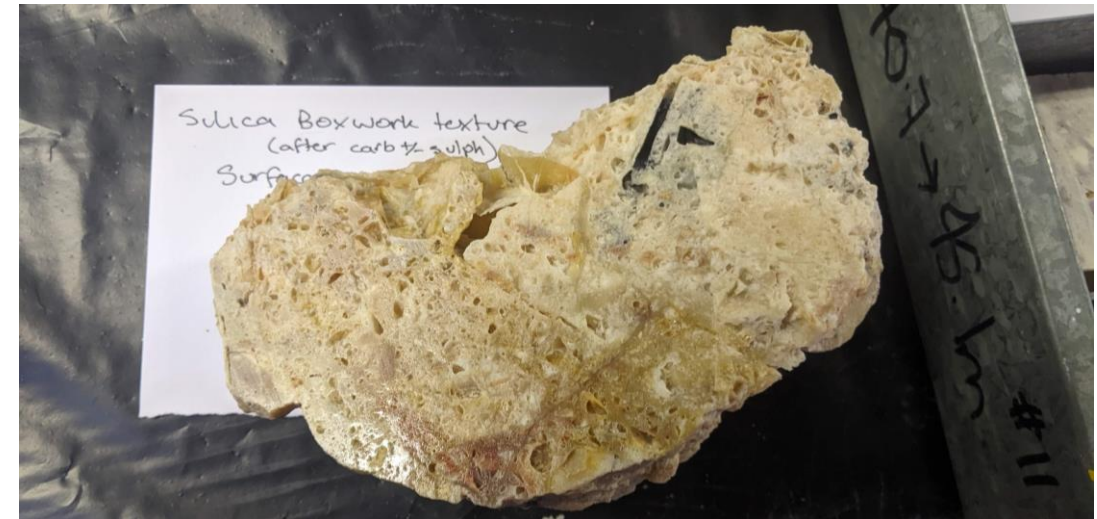
Mineralisation in the Buchanan Creek pegmatite dykes is largely hosted in the lithium mica lepidolite, and the lithium-phosphate mineral amblygonite, with localised occurrences of zinnwaldite. Tin, tantalum, and niobium occur occasionally as cassiterite, microcline, and columbite-tantalite disseminated through dykes, although are more commonly hosted in cross-cutting greisenous or quartz-sericite veins.

Shown in the core tray below are a series of hand samples representative of mineralisation styles, and drill core showing distinct paragenetic characteristics. Hand specimens (samples BH80410, BH80403, BH80408, BH80408A, & BH80409) have all been analysed by Laser Induced Breakdown Spectroscopy (LIBS) by AXT Ltd., which works well to resolve light elements such as Li, Be & B. Drill core samples (SMA2502 & SMA2601) were analysed in-house by GSQ using a Bruker Tomado M4 micro-XRF scanner.



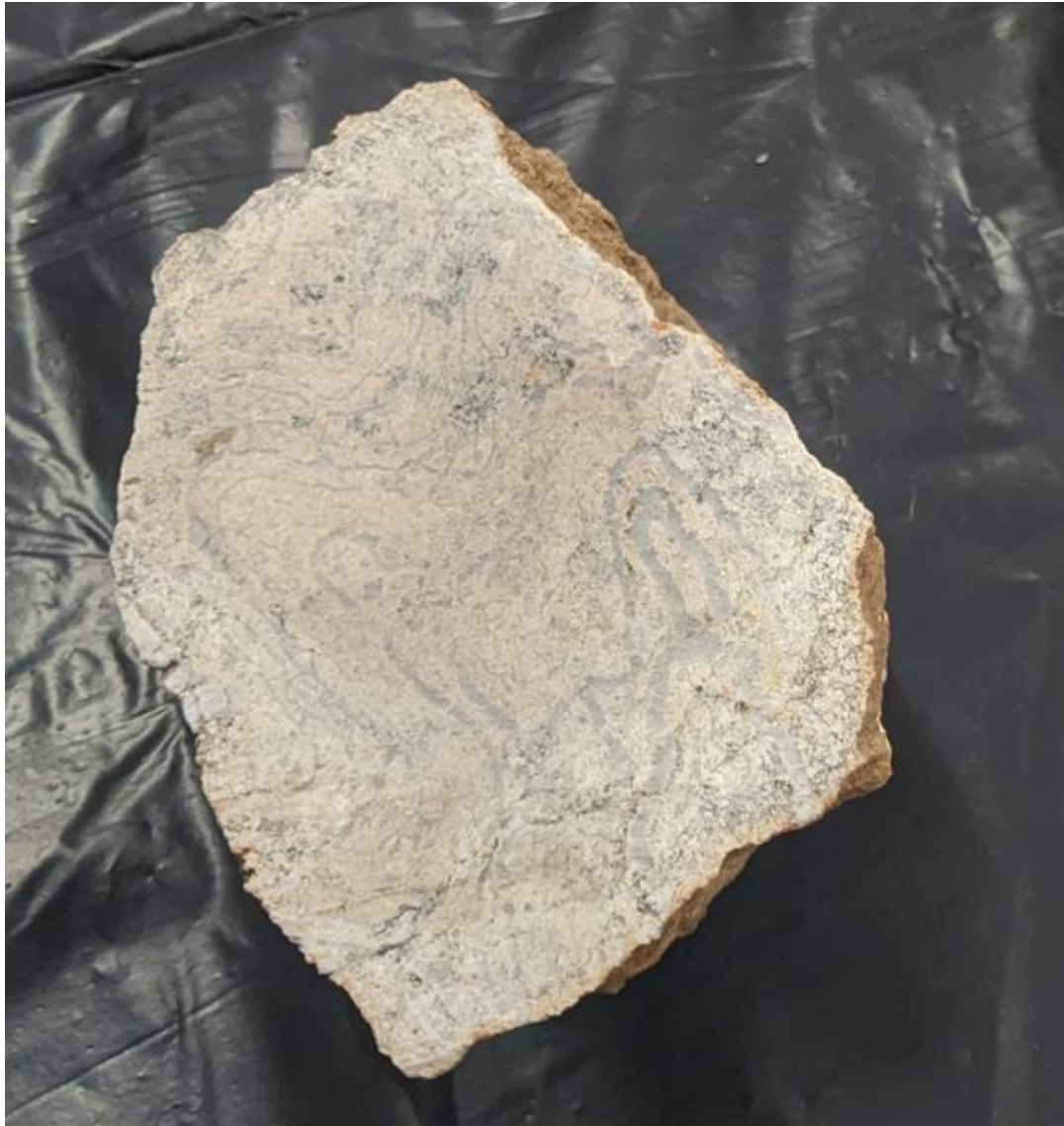
Georgetown Pegmatites

# Agate Creek



# Seventy Mile Mount

Samples: Terra Search



# Presentations & Core Viewing



# Field Trip



# Field Trip



Thank you to all who contributed  
Looking forward to 2026

