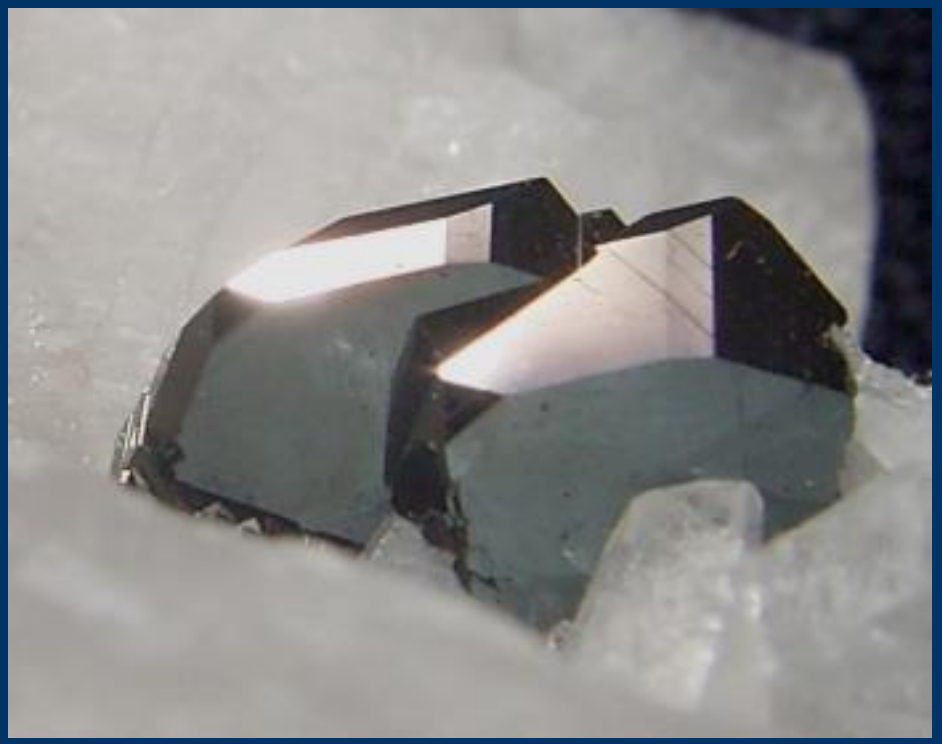
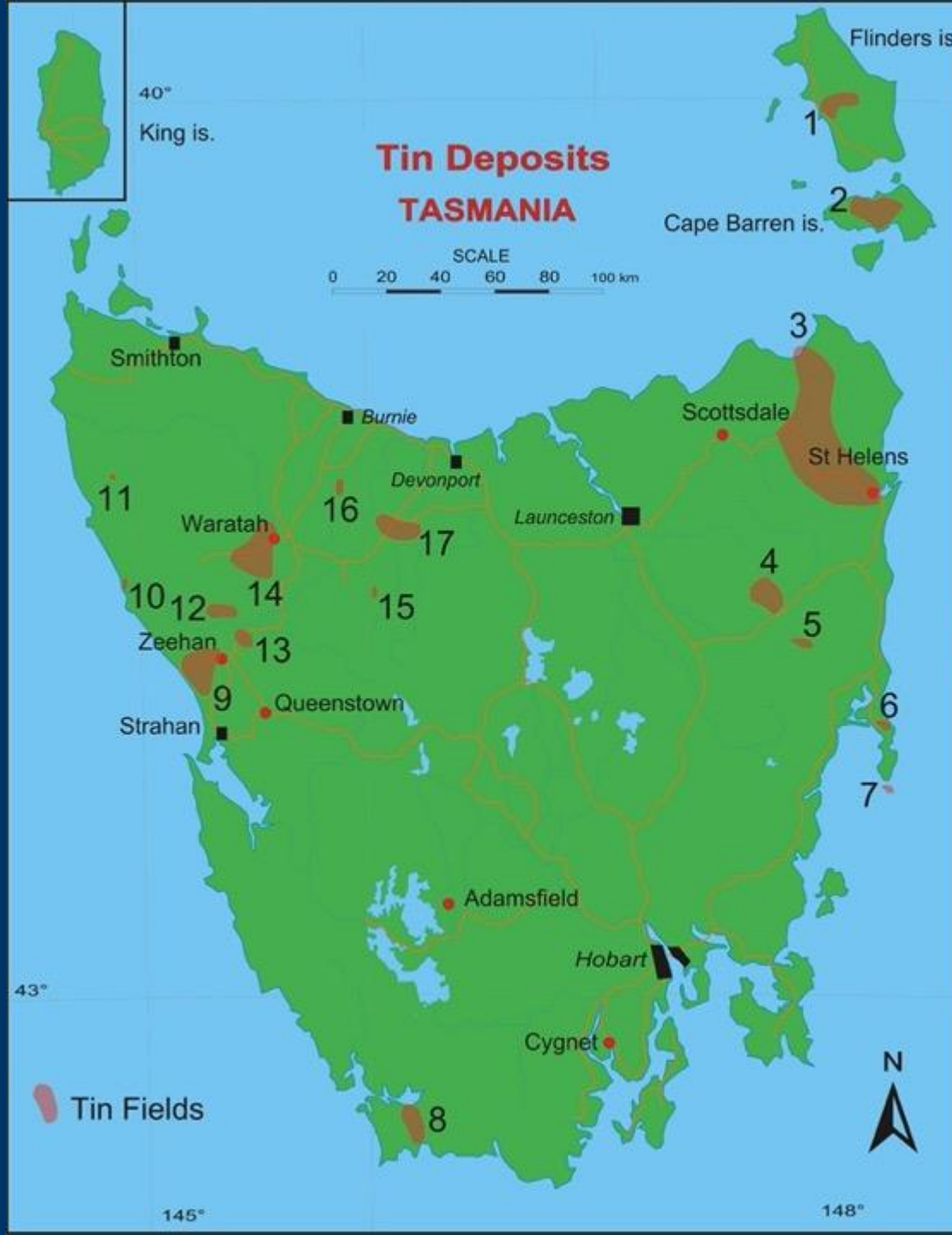
Tasmanian Tungsten Mines



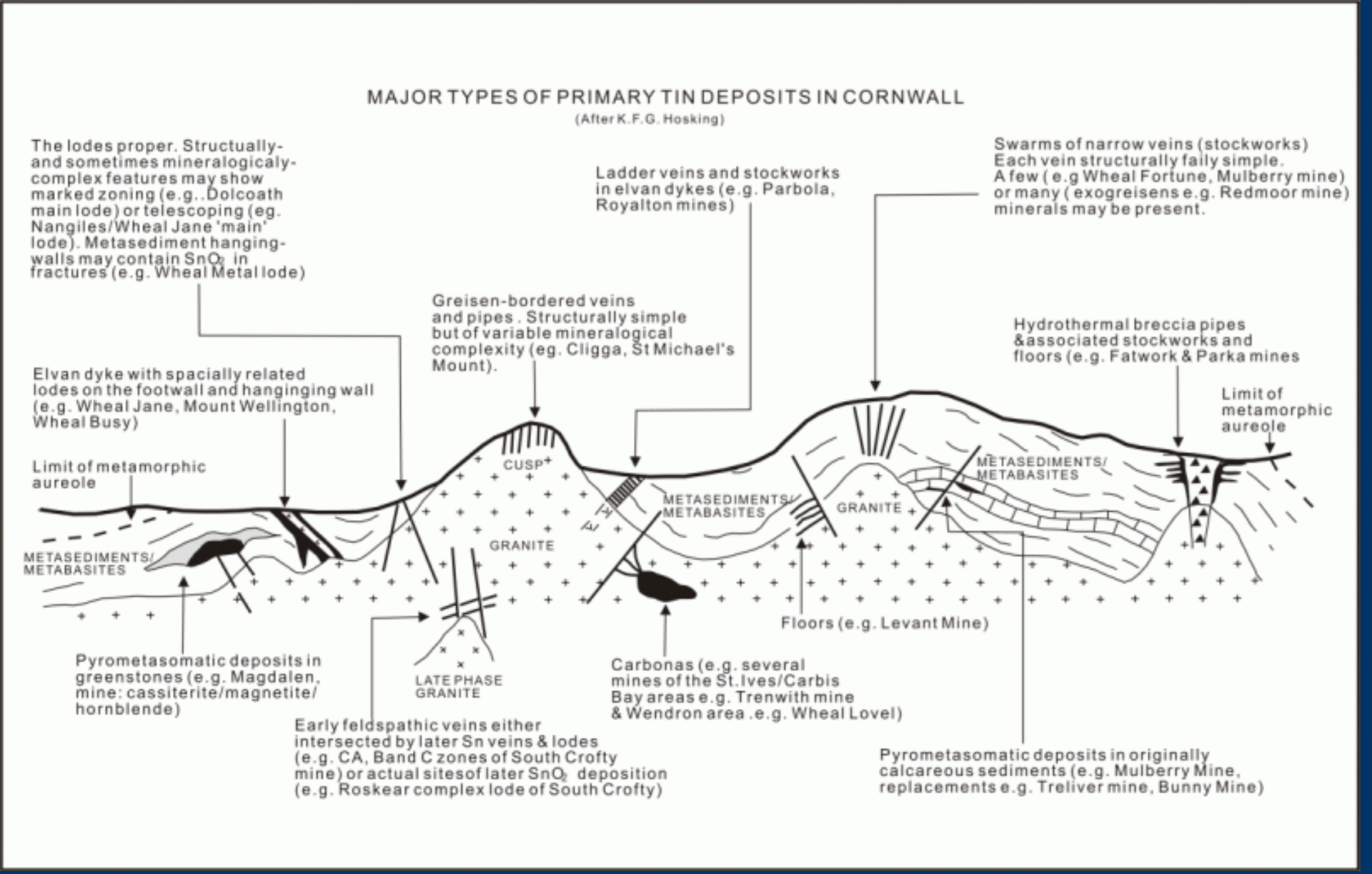
Ralph Bottrill

Western Tasmanian Tin-Tungsten Fields, related to Devonian granites



Tungsten Resources

Deposit	Resource (Mt)	Grade (wt% WO_3)
Mt Lindsay	43	0.1
Moina	26	0.1
Kara #1	10	0.4
Kara #2	16	0.1
Luina	4	0.4
Dolphin (KI)	19	0.8
Bold Head (KI)	1	0.9
Aberfoyle	2.1	0.3
Storeys Ck	1	1



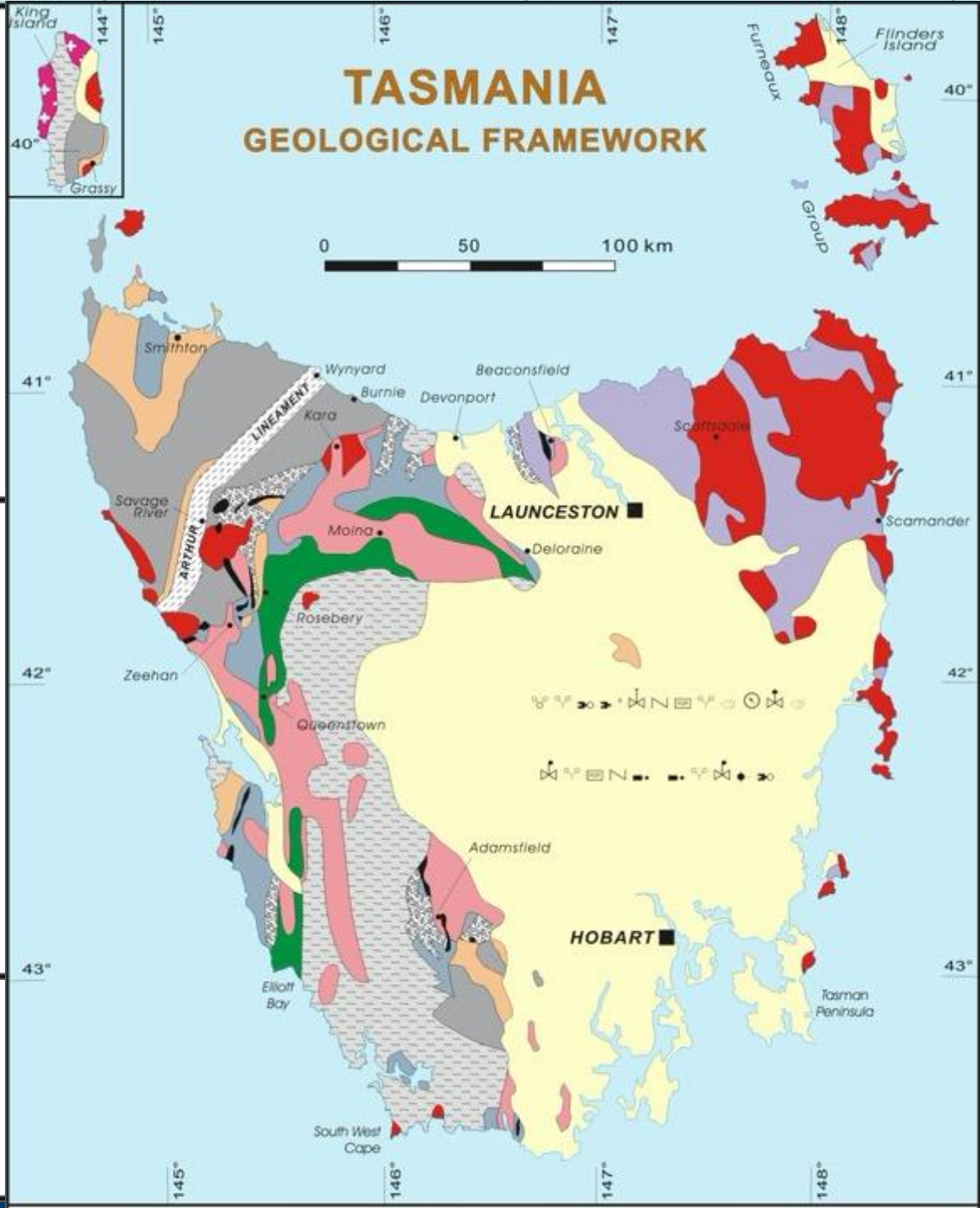
Mineralisation styles

Permo-Triassic sedimentary rocks, Jurassic dolerite and Cainozoic sediments

Devonian granitoids

Late Cambrian to Early Devonian sedimentary rocks; Mathinna Group

Figure 1



LEGEND

Middle–Late Cambrian volcano-sedimentary sequences

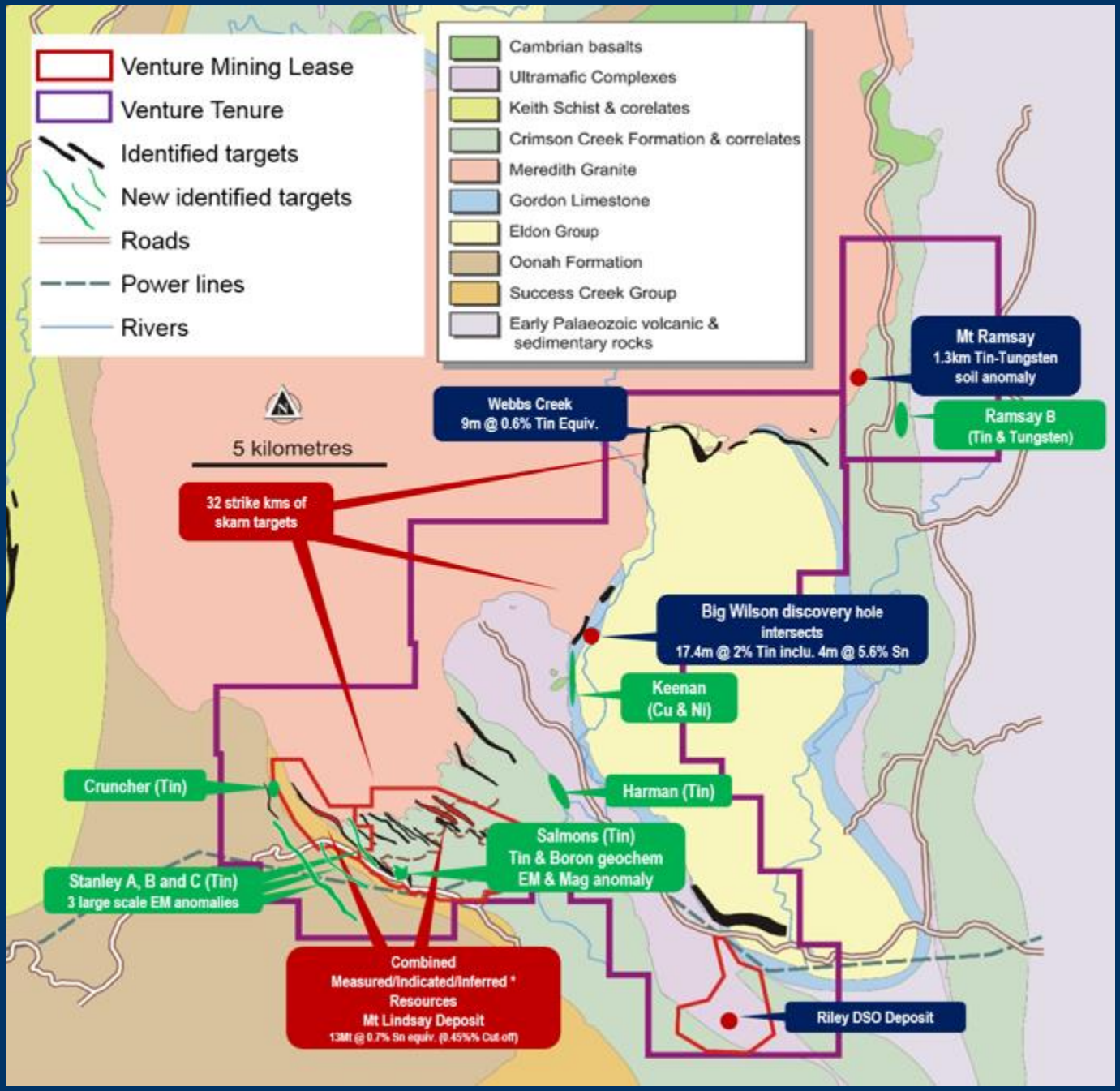
Middle–Late Cambrian Mt Read Volcanics

Early Cambrian allochthons: Ultramafic-mafic complexes (black); sedimentary rocks and basalt

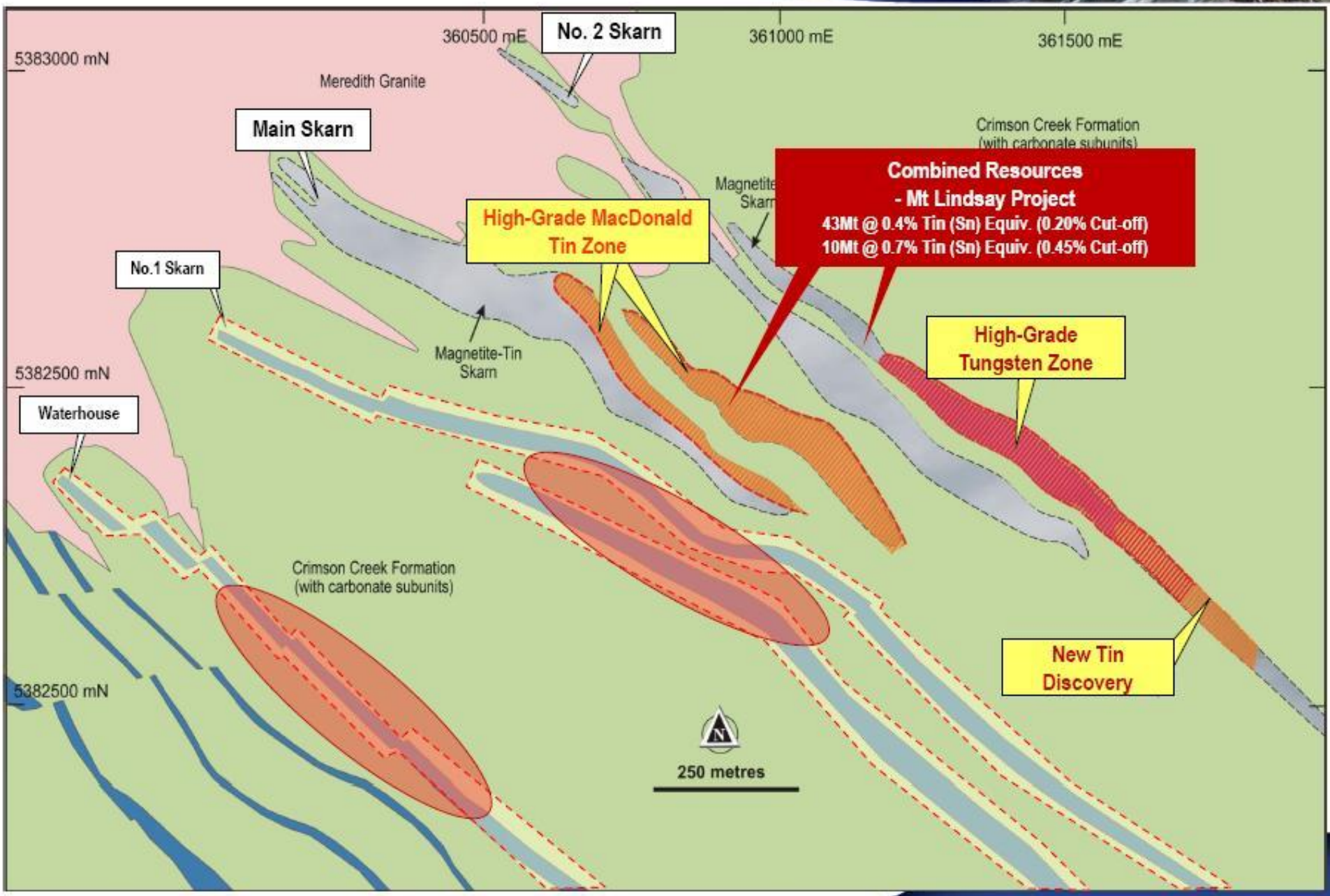
Mesoproterozoic: Metasedimentary rocks; relatively unmetamorphosed sedimentary rocks; Arthur Metamorphic Complex

Mt Lindsay deposits

Mt Lindsay represents one of the largest tungsten reserves in Australia having estimated reserves of 43 million tonnes of ore grading 0.1% tungsten. The mine is owned by Venture Minerals.

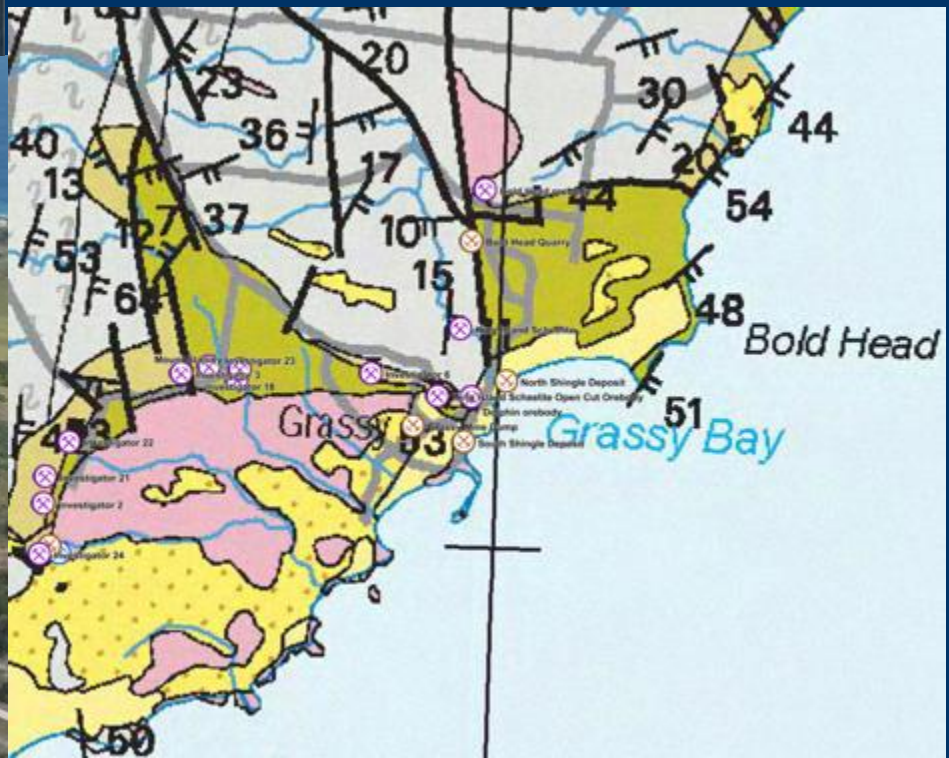


High Priority Drill Targets



Cleveland mine, Luina
Scheelite (John Haupt photos)

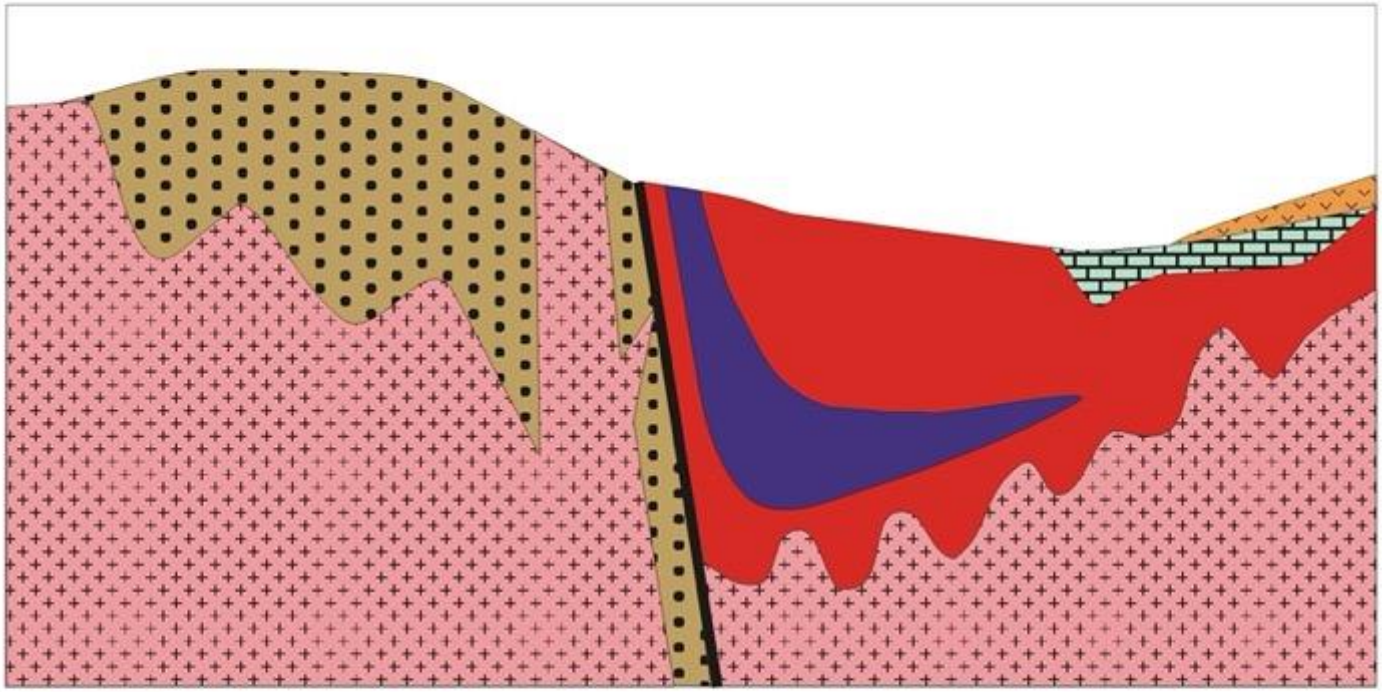
King Island
Scheelite mines



Kara mine

•Complex skarn assemblages with Be, B, W, Cu, Pb, Mn minerals etc

Schematic cross-section of the Kara 1 deposit, looking north.



Cainozoic basalt and sediments

Devonian granite

Magnetite-scheelite ore

Skarn

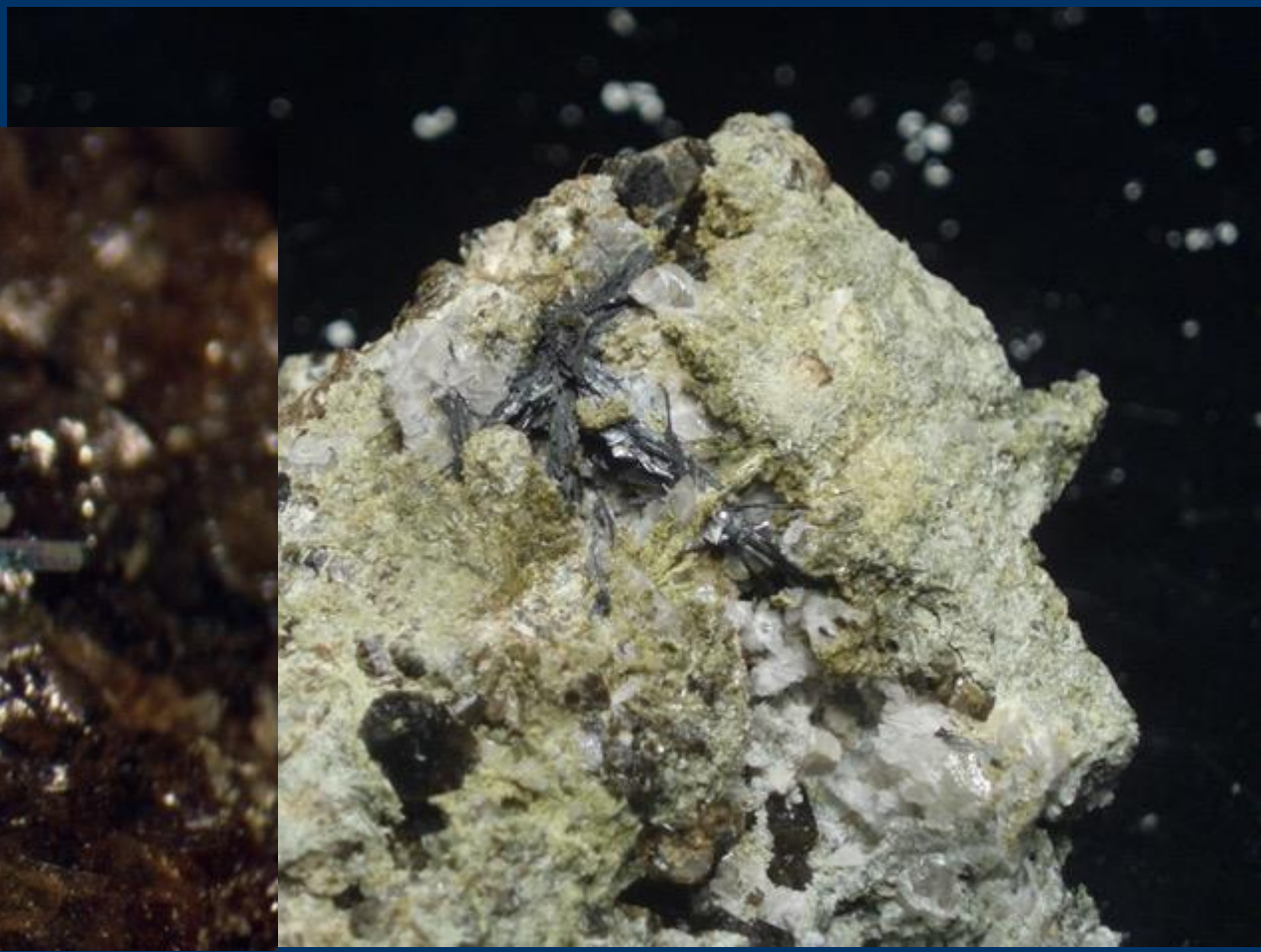
Ordovician Limestone

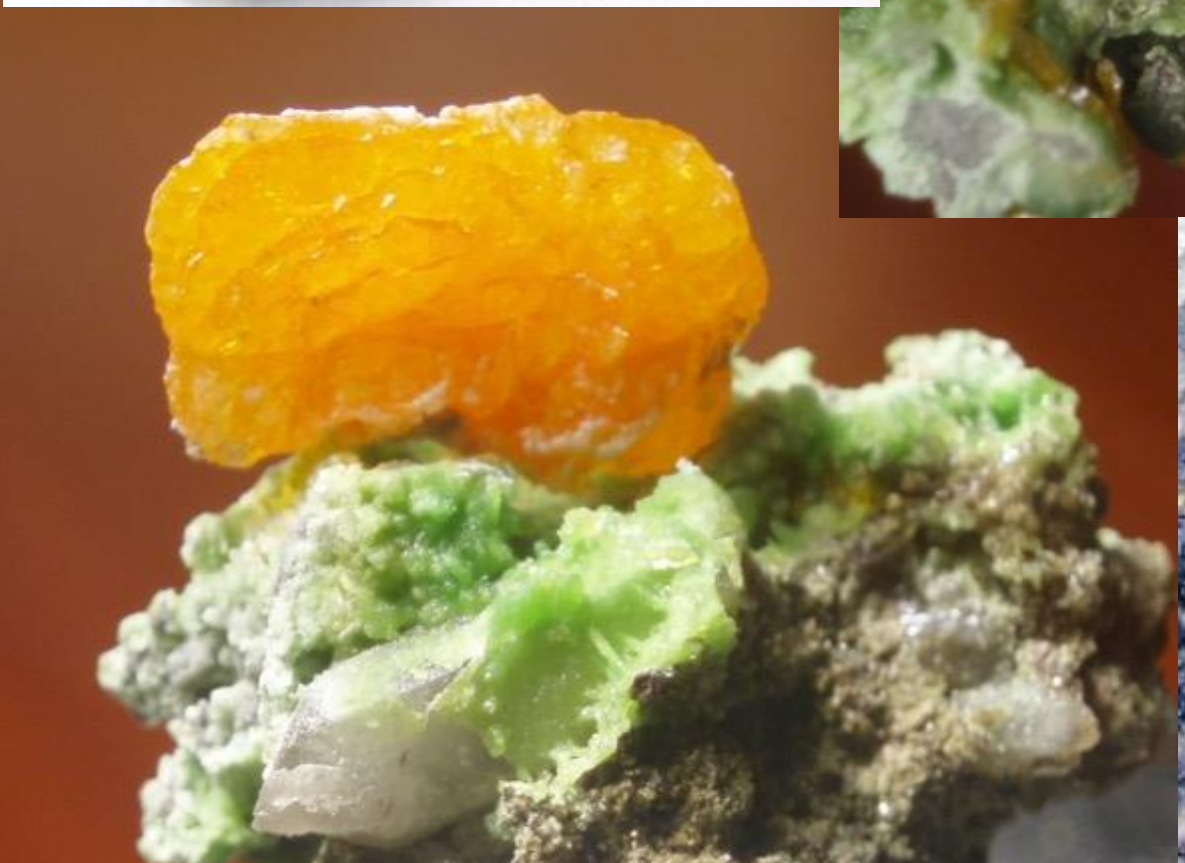
Ordovician sandstone and conglomerate

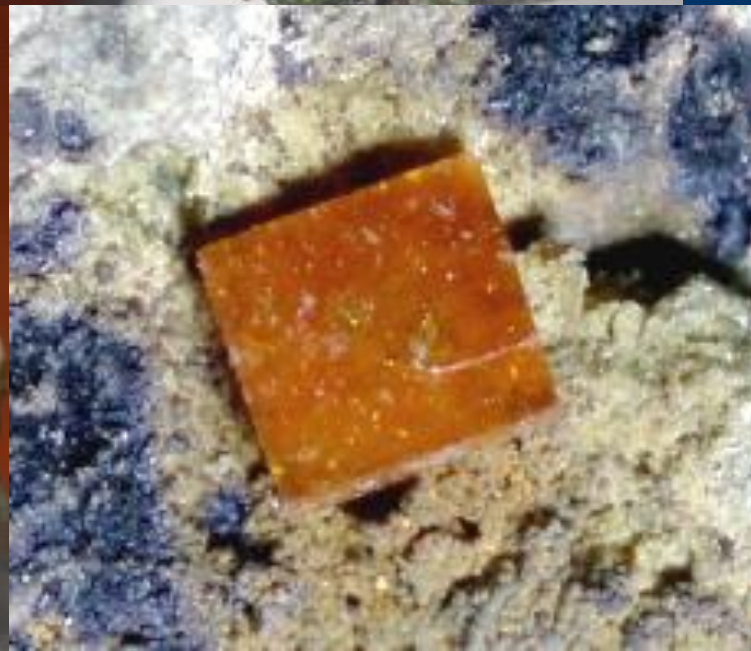
0 40m

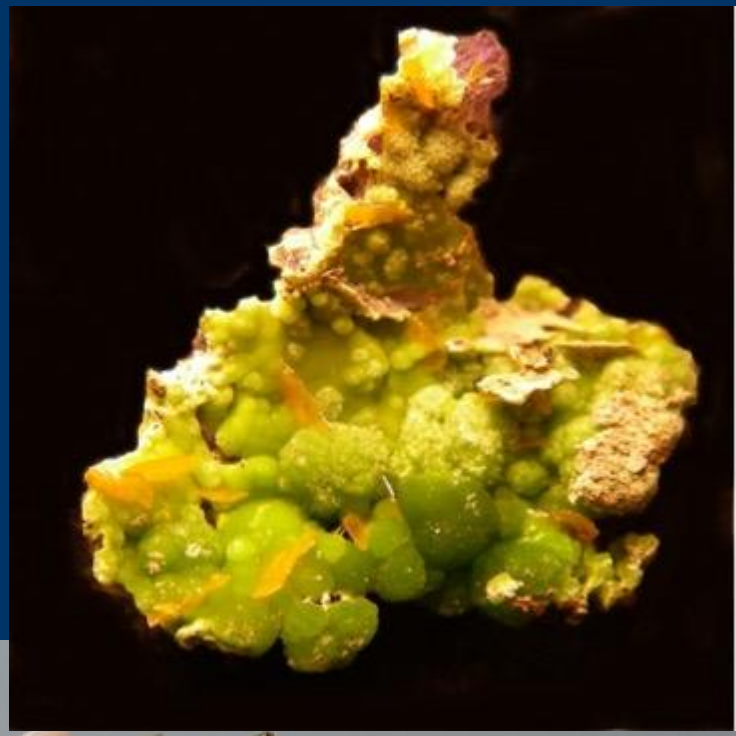
Fault

Primary sulphides: aikinite, sphalerite









Scheelite


Moina

Moina mines

Shepherd and Murphy

- Oakleigh Ck

- Oakleigh Ck

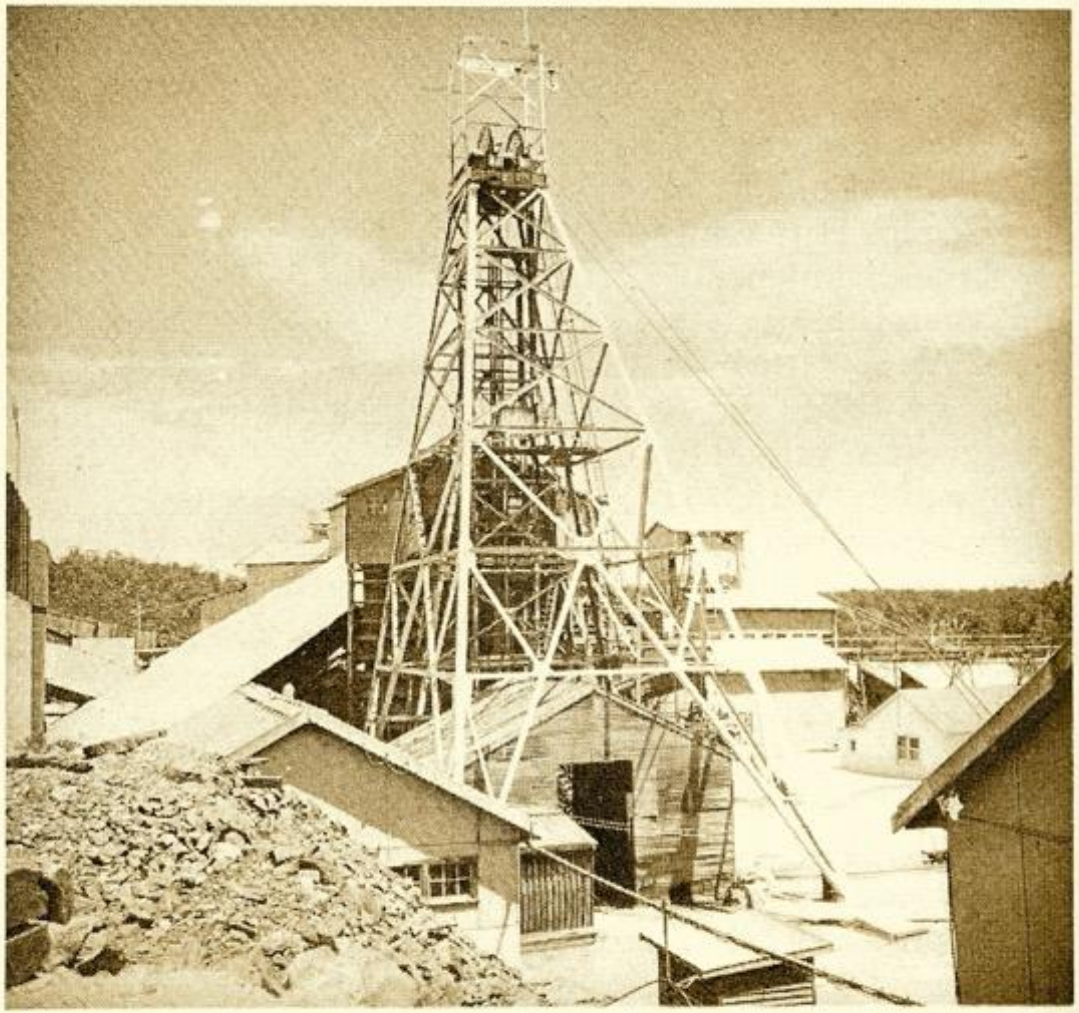


Figure 3a. **The Aberfoyle Mine. Photo by Roger Cameron.**

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Storeys Creek – Rossarden mines

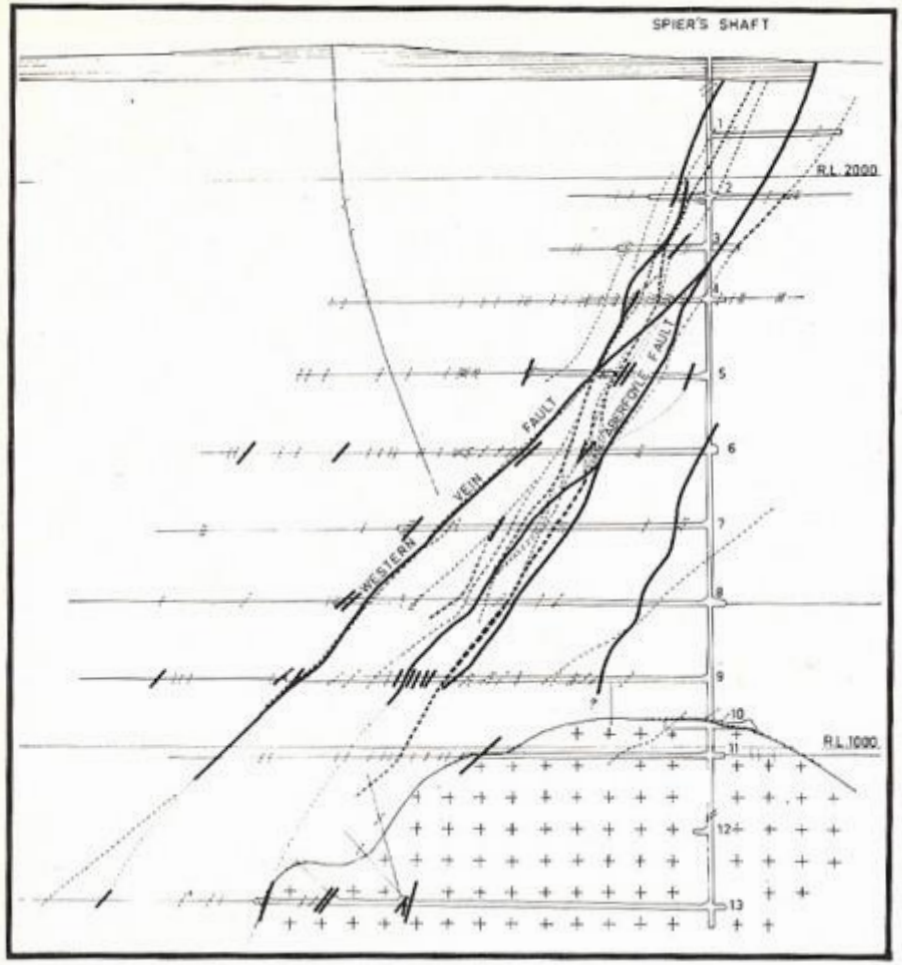


Figure 3. **Cross section through the Aberfoyle Mine, looking north, showing relationship between faults and veins (from Kingsbury, 1965).**

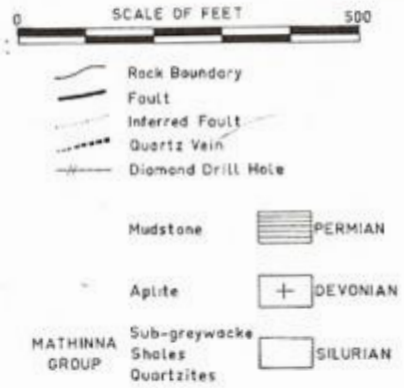


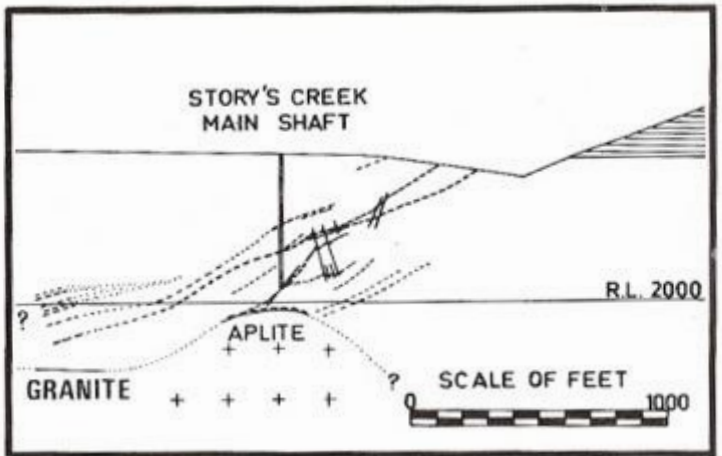
Figure 4. **Cross section through the Storey's Creek Mine, looking north west (adapted from Kingsbury, 1965).**

STOREY'S CREEK MINE

The mineralisation at the Storey's Creek Mine occurs in a slightly different mode to that in the Aberfoyle Mine.

The veins also occur in Mathinna group sediments but follow the general northwest trend of the sediments. They appear to occupy marginal low-angle thrusts and joints around the Devonian Ben Lomond Granite. The veins have a complex horsetail structure and many coalesce with depth, being about 2 m thick on the eight level and over 3 m wide on the 12 level. The vein system dips at about 30° to the south-west (Figure 4).

There is some suggestion that the mineralisation is zoned as in the Aberfoyle Mine, the proportion of wolfram increasing with depth. As in the Aberfoyle Mine the veins become barren as they approach an aplite cupola below the 12 level.



Secondary minerals: Cuprotungstite, kankite

Rossarden
cassiterite, scheelite