

Venture engages Curtin University to commence the next stage of metallurgical test work on the Mount Lindsay tin-rich borates

Highlights

- ▼ **Venture Minerals has engaged Curtin University to commence the next stage of metallurgical test work on the Mount Lindsay tin-rich borates. This program will follow on from the stage 1 work successfully completed by CSIRO.**

The program will investigate the extraction of tin, boron, and iron from tin-iron borates, potentially significantly increasing the tin recovery and producing a high value boron by-product, resulting in another revenue stream to the Mount Lindsay project.

Venture believes the inclusion of tin-rich borates into the current underground feasibility studies could deliver a major economic benefit to the study, through the recovery of boron and additional tin and iron.

- ▼ **Venture's recent study work identified the potential for additional, large-scale quantities of tin and boron throughout the greater Mount Lindsay skarn system.** The tin-boron zones are in the form of borate minerals and have **not previously been assessed in any mining studies at Mount Lindsay.** The borate minerals containing a large amount of **Boron, a critical mineral in the solar panel industry**, not only occur within the current Mount Lindsay resource base, but also occur extensively throughout the numerous skarns surrounding the Company's current tin-tungsten deposits.
- ▼ **Boron is now included in the European Commission's Critical Raw Materials Act and is considered vital to the green energy transition.** In addition to boron's use in solar panels, up to **50kg of boron material is required in the construction of Electric Vehicles.** Currently Australia does not produce boron, but instead relies on supply from large producers such as Turkey, which comes with potential disruption and the risk of political instability.

Venture's Managing Director commented, *"Venture looks forward to working with Curtin University as it looks to unlock the potential the of tin-rich borates at Mount Lindsay possess. Curtin is well positioned in this space as leader of the Resources Technology and Critical Minerals Trailblazer hub which is part of the recently announced Federal Government's Trailblazer Universities Program."*

"Curtin will continue from where CSIRO's good work finished off and will look to develop a processing flowsheet in the coming months for recovering tin, boron, and iron from the tailings circuit."

"The results from the Curtin testwork will be fed back into the Mount Lindsay Underground Feasibility Study so the that the mine design can be re-optimised to deliver the final outcomes that could make Mount Lindsay a significant producer of Critical Minerals for the global market."

Venture Minerals Limited (**ASX code: VMS**) (“Venture” or the “Company”) is pleased to announce that it has engaged Curtin University to commence the next stage of metallurgical test work on the Mount Lindsay tin-rich borates. This program will follow on from the stage 1 work successfully completed by CSIRO.

The program will investigate the extraction of tin, boron, and iron from tin-iron borates, potentially significantly increasing the tin recovery and producing a high value boron by-product resulting in another revenue stream to the Mount Lindsay project (*Refer Figure 1*).

Venture believes the inclusion of tin-rich borates into the current underground feasibility studies could deliver a major economic benefit to the study through the recovery of boron and additional tin and iron from the tailings circuit of the current processing flowsheet, which has the economic advantage of already been mined and processed. The Company looks forward to delivering results from this testwork within the coming months.

Curtin University has been named the first of Australia’s Trailblazer universities to receive a share of more than \$242 million in federal government funding, to develop a research commercialisation hub to turn research outputs into breakthrough services, products and businesses. Curtin is leading the Resources Technology and Critical Minerals Trailblazer hub which is part of the recently announced Federal Government’s Trailblazer Universities Program.

Venture’s recent study work identified the potential for additional, large-scale quantities of tin and boron throughout the greater Mount Lindsay skarn system. The tin-boron zones are in the form of borate minerals and have not previously been assessed in any mining studies at Mount Lindsay. The borate minerals containing a large amount of Boron, a critical mineral in the solar panel industry, not only occur within the current Mount Lindsay resource base, but also occur extensively throughout the numerous skarns surrounding the Company’s current tin-tungsten deposits. The quantum of Boron within the Mount Lindsay deposits, and surrounding exploration Targets areas can be highlighted by the drill intersections released in Venture’s ASX Announcement dated 13 April 2023.

The Mount Lindsay deposits, and the surrounding exploration target areas are all defined as skarn style mineralisation and are closely analogous to well-known large skarn deposits in Russia and China, which contain the same borates that exist at Mount Lindsay. The CSIRO study confirmed that both China and Russia commercially extract large volumes of boron and iron from these deposits, initial testwork by CSIRO returned results suggesting the recovery of tin from the borates was commercially possible.

Boron is now included in the European Commission’s Critical Raw Materials Act and is considered vital to the green energy transition. In addition to boron’s use in solar panels, up to 50kg of boron material is required in the construction of Electric Vehicles. Currently Australia does not produce boron, but instead relies on supply from large producers such as Turkey, which comes with potential disruption and the risk of political instability.

Boron (Borates) is on the European Commission’s list of minerals to feed the green energy transition in the recently released Critical Raw Materials Act (CRMA) and is also on Japan’s Critical Minerals list¹, and importantly is not produced in Australia. Over 80% of the World’s Boron is produced by two companies Rio Tinto (Boron Mining Operations in California, USA since 1927) and Eti Maden AS (State owned Enterprise of Turkey) which produce over 50%. **loneer (ASX: INR, Market Cap of A\$590 million) is looking to develop Rhyolite Ridge Project in Nevada (INR released a JORC Total Mineral Resource of 459.5 Million Tonnes @ 0.46%² Boron on 31 October 2017)**, whilst **5E Advanced Materials (ASX: 5EA, Market Cap of A\$150 million) is commissioning the plant for the Boron Americas (Fort Cady) Complex in California (5EA released a JORC Total Mineral Resource of 120.4 Million Tonnes @ 2.02% Boron² on 3 December 2018)**, both are being touted as a replacement for the Rio Tinto USA based mine supply as the reserves diminish.

1. <https://www.csis.org/analysis/geopolitics-critical-minerals-supply-chains>

2. To convert B to B₂O₃ multiply by 3.218. To convert B₂O₃ to H₃BO₃ multiply by 1.776.

Boron Occurrences and Uses

Boron is a rare light metal which is an important industrial mineral that is only produced in a few locations globally but plays an important role in the modern world. It is one of the most versatile elements in the world, used in everything from computer screens to fertilisers to creating powerful magnets for wind turbines and electric vehicles (EV). Boron is sometimes referred to as the 5th element of decarbonisation.

There is 40-50 kilograms of boron materials in the average EV, including in permanent magnets, high-strength steel chassis, ceramic brakes, dashboard screens, body panels and thermal and acoustic insulation. The renewable energy sector uses boron in permanent magnets and fibreglass for wind turbine blades and borosilicate glass for increasing the mechanical strength and resistance to thermal shock of glass used in solar panels.

The minerals containing boron can be divided into three broad groups according to their origin and geological environments including (1) skarn minerals related to intrusives, mainly silicates and iron oxides, (2) magnesium oxides related to marine sediments and (3) hydrated sodium and calcium borates related to continental sediments and volcanic activity. Although most of the world's boron is obtained from the third group, though more specifically from evaporite borates, the source minerals for boron production in China and Russia come from those in the first two groups.

Substantial amounts of borate are produced from skarn borosilicates, mainly datolite. These minerals are liberated, concentrated, and then dissolved in acid to make a valuable product because its natural melting points exceed those of the other minerals used in common glass furnaces.

Figure 1 | Location Map of Mount Lindsay Project

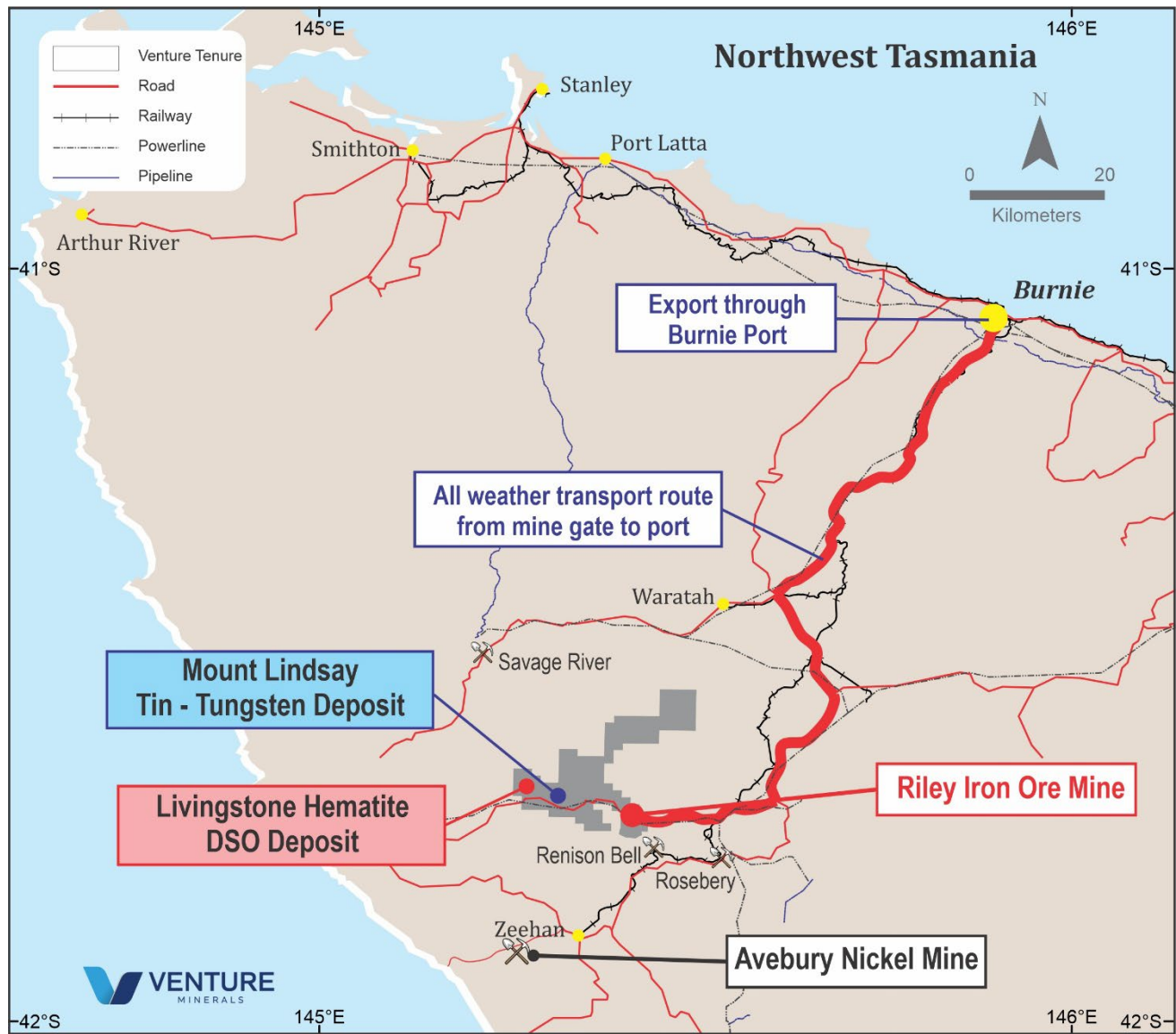
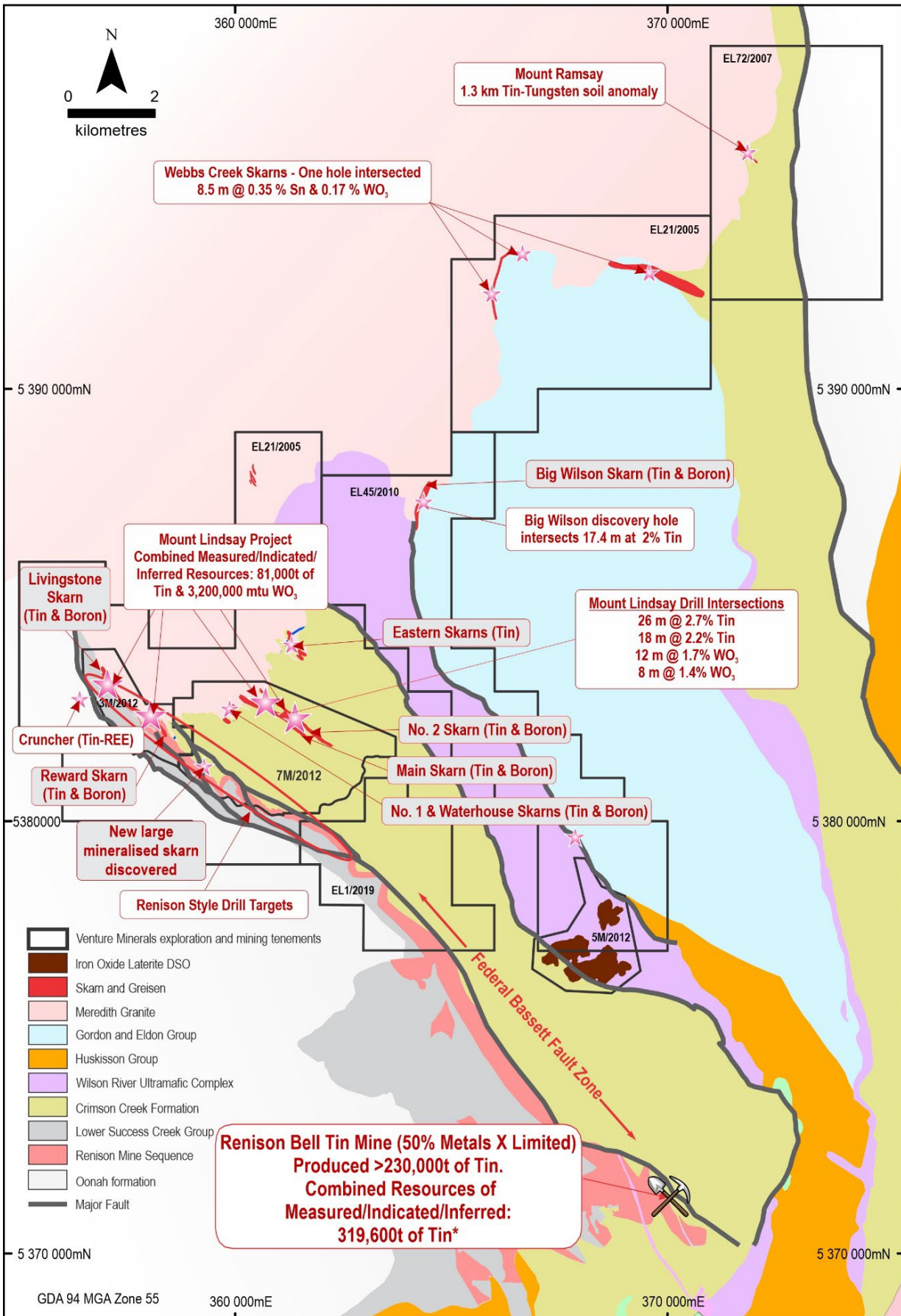


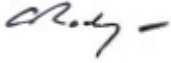
Figure 2 | Mount Lindsay Project: Geology Map showing High Grade Tin-Tungsten Targets and Tin-Boron Skarns



*See Metals X Announcement "2022 Renison Mineral Resource Update", 14 June 2022.

Authorised by the Managing Director on behalf of the Board of Venture Minerals Limited.

Yours sincerely



Andrew Radonjic
Managing Director

The information in this report that relates to Exploration Results, Exploration Targets and Minerals Resources is based on information compiled by Mr Andrew Radonjic, a fulltime employee of the company and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Andrew Radonjic has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Andrew Radonjic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About Venture Minerals

Venture Minerals Ltd (ASX: VMS) has refocused its approach to developing the Mount Lindsay Tin-Tungsten Project in northwest Tasmania, already one of the world's largest undeveloped Tin-Tungsten deposits. With the recognition of Tin as a fundamental metal to the battery revolution and Tungsten being a critical mineral, Venture has commenced an Underground Feasibility Study on Mount Lindsay that will leverage off the previously completed open-pit feasibility work, and recently included additional, potential large-scale quantities of tin and boron within the current resource base, and extensively throughout the greater Mount Lindsay skarn system. The tin-borates have not previously been assessed in any mining studies. Borate minerals contain a large amount of Boron, a critical mineral in the solar panel industry. At the neighbouring Riley Iron Ore Mine, the mine is prepared for a quick restart should the market conditions become favourable. In Western Australia, Chalice Mining (ASX: CHN) recently committed to the second stage of the JV which requires a further \$2.5 million of expenditure over the next two years to earn a further 19% interest (for a total of 70%) in Venture's South West Project. At the Company's Golden Grove North Project, SensOre (ASX:S3N) is farming in whilst Venture retains the REE rights, the earn-in includes drilling of the Vulcan High Grade REE Target. SensOre's proprietary AI technology has already highlighted lithium and copper exploration potential at Golden Grove North. The Company has a significant Nickel-Copper-PGE landholding at Kulin with two highly prospective 20-kilometre long Ni-Cu-PGE targets within the Kulin Project, whilst recent exploration has identified clay hosted REE targets

Contact details:

Andrew Radonjic
Managing Director

Venture Minerals Limited
Telephone: +61 (0) 8 6279 9428
Email: admin@ventureminerals.com.au