

# Venture Minerals Limited

RIU Explorers Conference  
Presentation

18<sup>th</sup>-20<sup>th</sup> February 2020

## FORWARD LOOKING STATEMENT

- This presentation may contain certain forward looking statements and projections regarding: estimated, resources and reserves; planned production and operating costs profiles; planned capital requirements; and planned strategies and corporate objectives.
- Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of Venture Minerals Limited. The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved;
- Venture Minerals Limited does not make any representations and provides no warranties concerning the accuracy of the projections, and disclaims any obligation to update or revise any forward looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws;

## COMPETENT PERSONS STATEMENT

- 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.
- The information in this report that relates to Mineral Resources for the Mount Lindsay and Livingstone Projects 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 2004 and 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. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.
- The information in this report that relates to Ore Reserves is based on information compiled by Mr Peter George, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr George is an independent consultant. Mr George 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 George consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## NO NEW INFORMATION OR DATA

- All material assumptions and technical parameters underpinning the Minerals Resource and Reserve estimate referred to in previous ASX announcements continue to apply and have not materially changed since last reported. The company is not aware of any new information or data that materially affects the information included in the said announcement.



- Leveraging off solid commodity prices, a favourable exchange rate and over \$45 million spent previously on its advanced mining projects in the North-West of Tasmania;
- Well positioned to recommence mining at the Riley Iron Ore Project with site preparation for ore production nearing completion;
- Mount Lindsay Tin-Tungsten Project is a well advanced EV Metal and Critical Minerals opportunity;
- New VMS (Volcanogenic Massive Sulfide) Target discovered along strike to the world class Golden Grove Zinc-Copper-Gold Mine, Western Australia;
- VMS system confirmed by maiden drilling program for Copper-Lead-Zinc at the Thor prospect in WA;
- Efficient, highly credentialed and dedicated management team.

## Summary

<b>ASX Code:</b>	VMS
<b>Shares on issue:</b>	806.9m
<b>Listed Options</b> (@\$0.035)	143.2m
<b>Unlisted Options:</b> @ A\$0.001, 0.5m @ A\$0.05, 1m @ A\$0.45, 2m @ A\$0.50, 2.5m @ A\$0.55)	26.7m
<b>Market Capitalisation</b> (@ A\$0.013)	A\$10.5m
<b>Enterprise Value</b>	A\$8.5m
<b>Cash at 31 Dec 19</b>	A\$2.0m

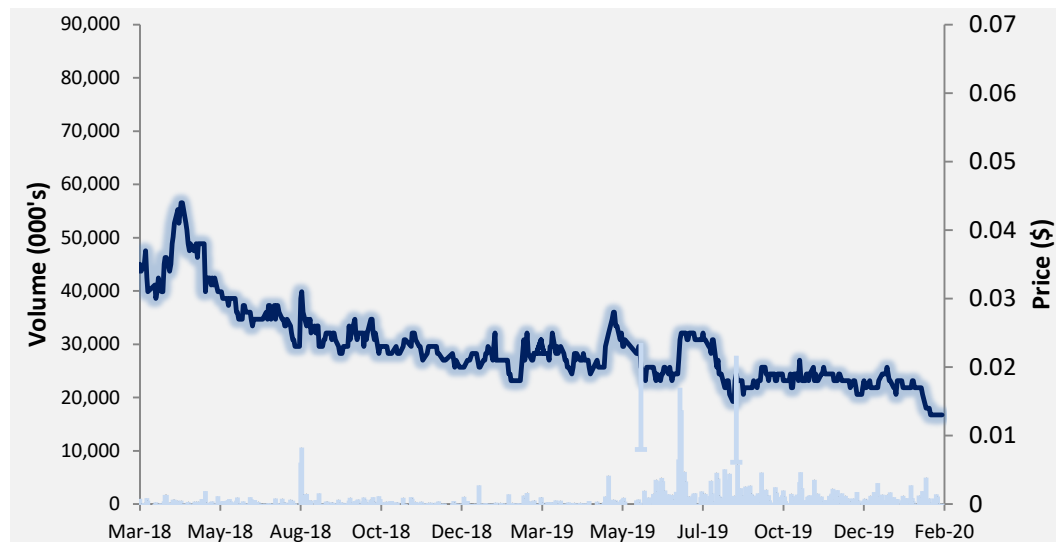
## Major Shareholders

Republic Investment Management	14.6%
Deutsche Balaton	7.3%
Elphinstone Holdings Pty Ltd	5.8%
Directors & Management	4.0%
<b>Total</b>	<b>31.7%</b>
<b>Top 20 Shareholders</b>	<b>44.0%</b>

## Capital Raising History

<b>June 2019</b>	Placement and Underwritten Accelerated rights issue of 286.3m shares at \$0.02 for \$5.7m.
<b>July 2018</b>	Two Tranche Placement of 85.1m shares at A\$0.03 for A\$2.5m;
<b>September 2017</b>	Placement of 95m shares at A\$0.02 for A\$1.9m;
<b>December 2015</b>	Rights Issue of 28.7m shares at A\$0.023 for A\$0.7m;
<b>August 2012</b>	Placement and SPP of 54.9m shares at A\$0.31 for A\$17m (incl. Elphinstone A\$6m);
<b>January 2012</b>	Option conversion of 10.1m shares at A\$0.30 for \$3m (Ingalls and Snyder);
<b>November 2010</b>	Placement (by Petra Capital) and SPP of 53.2m shares at A\$0.44 for A\$23.4m.

## VMS share price and volume



**A dedicated management team with a wealth of experience and credited with a number of discoveries both in Australia and internationally**



**Mel Ashton**  
**Non-Executive Chairman**

- Chairman of Venture Minerals Limited;
- Over 35 years experience as a Chartered Accountant, specialising in Corporate Restructuring & Finance and as a Professional Company Director;
- Held executive directorships with a number of successful ASX listed companies.



**Hamish Halliday**  
**Non-Executive Director**

- Geologist with over 20 years corporate and technical experience in the mining industry, involved in the discovery and acquisition of numerous projects over a range of commodities throughout four continents;
- Founded and held executive and non-executive directorships with a number of successful listed exploration companies including; Blackstone Minerals Limited, Renaissance Minerals, Gryphon Minerals and Adamus Resources Ltd.



**Andrew Radonjic**  
**Managing Director**

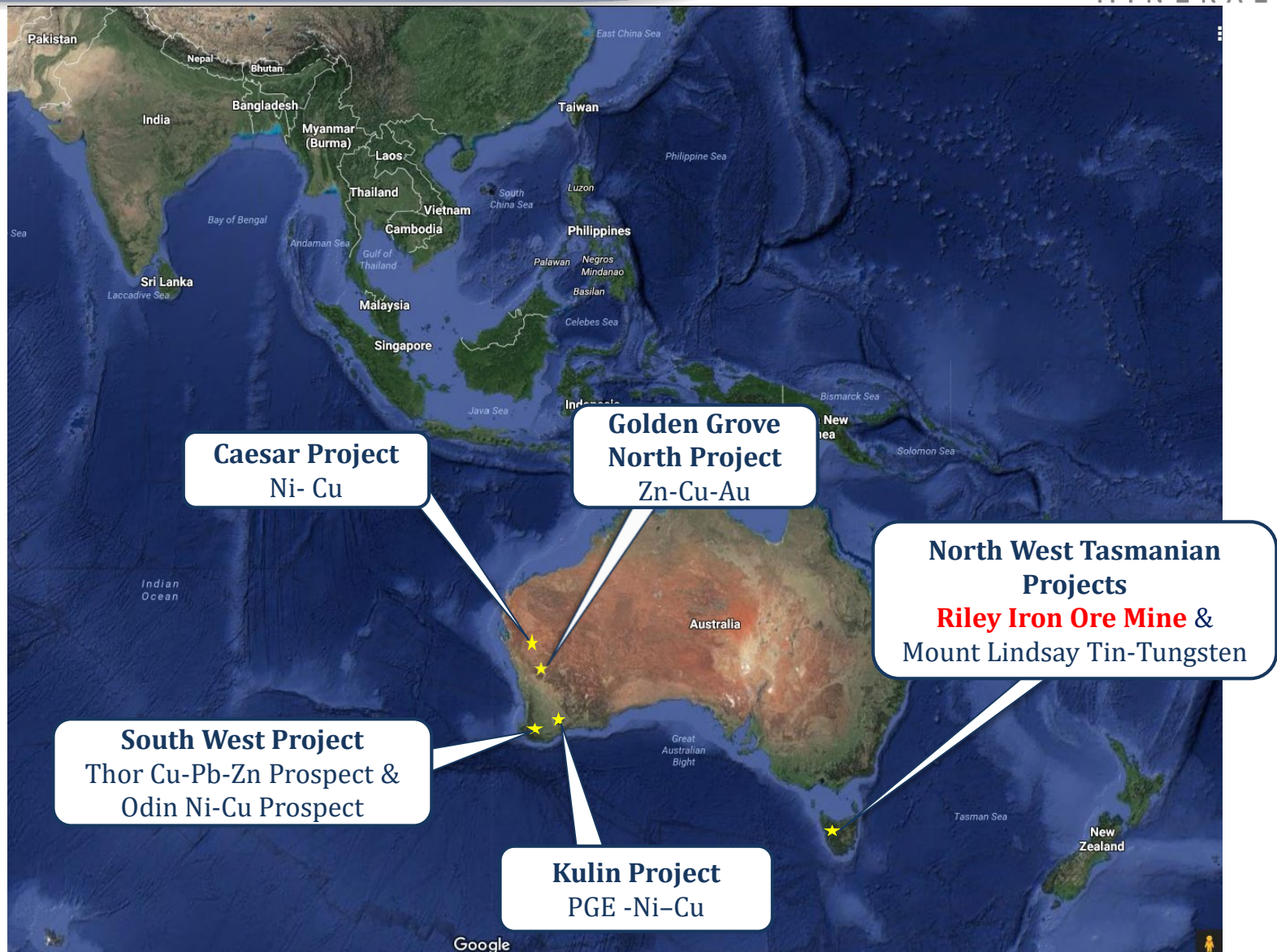
- Mine Geologist and Mineral Economist;
- >30 years experience with a focus on gold and nickel in the Eastern Goldfields of Western Australia;
- Instrumental in three significant gold discoveries north of Kalgoorlie that led to the production of over 1.5 million ounces;
- Co-lead the exploration team during the discovery of the Mount Lindsay Tin-Tungsten-Magnetite deposits, Tasmania;
- Held Managing Director role at Nickelore Limited;
- Co-founded the recent successful listing of Blackstone Minerals Limited.



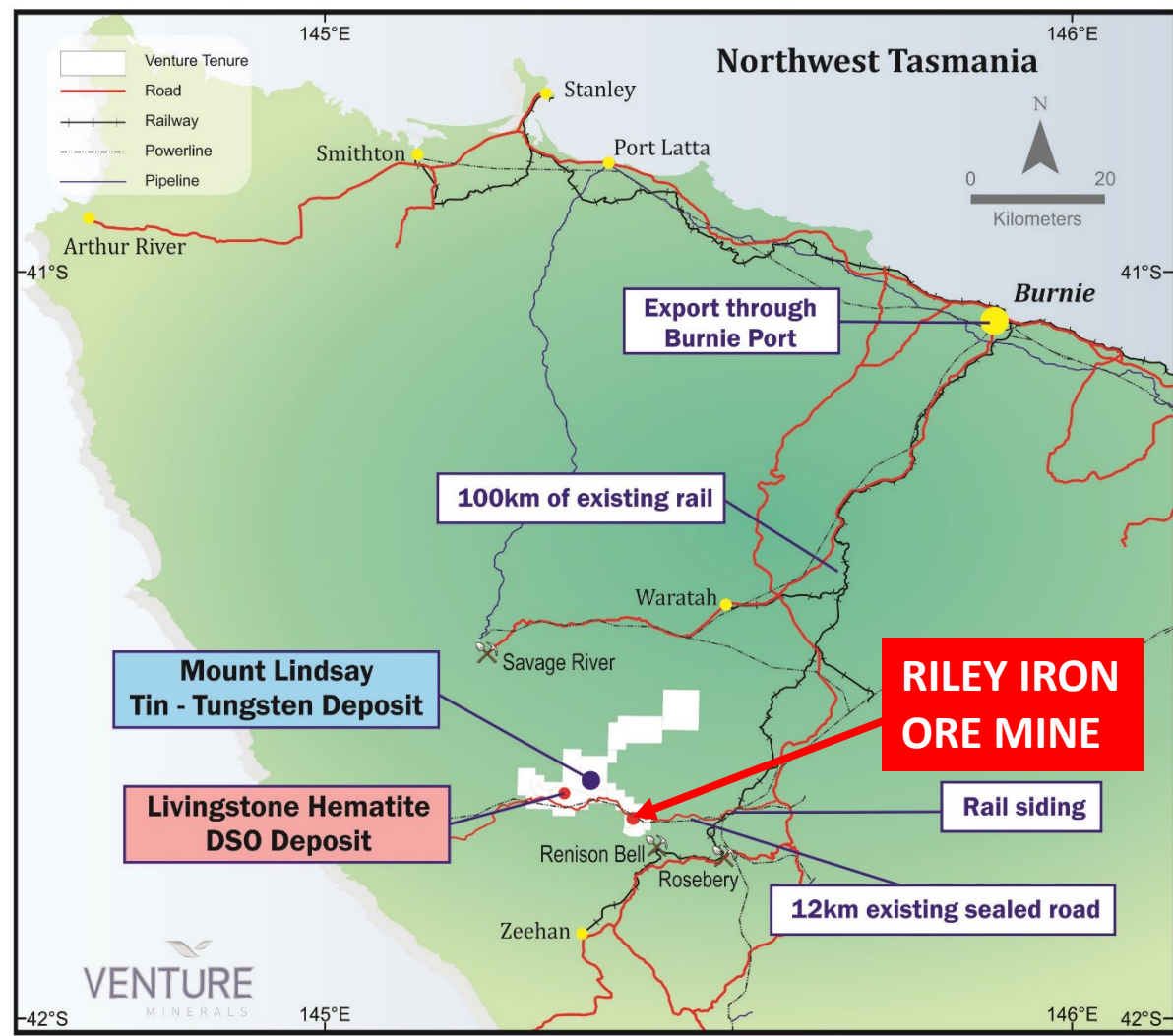
**Dr Stuart Owen**  
**Exploration Manager**

- BSc & PhD in Geology, member of the AIG and over 20 years of experience in mineral exploration which included gold and nickel;
- Senior Geologist in the exploration team that discovered and delineated the Paulsens Gold Deposit in the Ashburton region of WA;
- Exploration Manager in the Adamus team that discovered and delineated the Southern Ashanti Gold Deposits, Ghana;
- Exploration Manager for Venture during the discovery of the Mt Lindsay Tin-Tungsten-Magnetite deposits, Tasmania.





# Location of Riley & Livingstone Hematite DSO Deposits







Immediately accessible  
Ore Reserves of  
1.6mt @ 57% Fe with  
low impurities.



# Riley Iron Ore Mine

## DSO Hematite Project – Overview & History



- **Riley DSO Project - 100% owned, located in North west Tasmania;**
- Riley Iron Ore Mine:
  - Situated on a granted mining lease;
  - Reserves of 1.6Mt @ 57% Fe with low impurities\*;
  - DSO deposit is all at surface with **zero strip ratio**;
  - Located less than 2 km from a sealed road that accesses existing port facilities;
  - Positioned to recommence operations within a very short period of time.
- Development & mining activities at Riley commenced in 2013 but were subsequently suspended due to a softening iron ore outlook at the time;
- Approximately 90% of the Equipment that was previously purchased is still on hand.

\* Refer to ASX announcement on 22 August 2019

# Riley Iron Ore Mine

## DSO Hematite Project – Past 12 months



- ✓ Priority review of the Riley Iron Ore Mine, for a potential restart following a significant sustained recovery in the iron ore price;
- ✓ Off-take Agreement secured with Tier 1 Global Iron Ore trader;
- ✓ Highly experienced project team assembled to advance completion of Decision to Mine study and recommencement of operations;
- ✓ Preferred tenderer status awarded to major local civil and mining contractor;
- ✓ Riley Iron Ore Mine feasibility study completed;
- ✓ Board makes the decision to recommence mining;
- ✓ Experienced General Manager of Operations Appointed;
- ✓ Full off-take Agreement executed with Tier 1 Global Iron Ore trader.



- Riley Iron Ore Mine site preparation for ore production nearing completion with the following civil infrastructure in place;
  - Site Offices installed,
  - Run-of-Mine (ROM) Pad constructed,
  - On-site haulage roads upgraded.
- Finalising negotiations on the road and port access agreements;
- Preferred road haulage tenderer status to be awarded shortly thereafter ;
- Advanced discussions with shipping brokers;
- Work continues on additional strategies identified to further reduce operating costs.



## **Upcoming milestones include:**

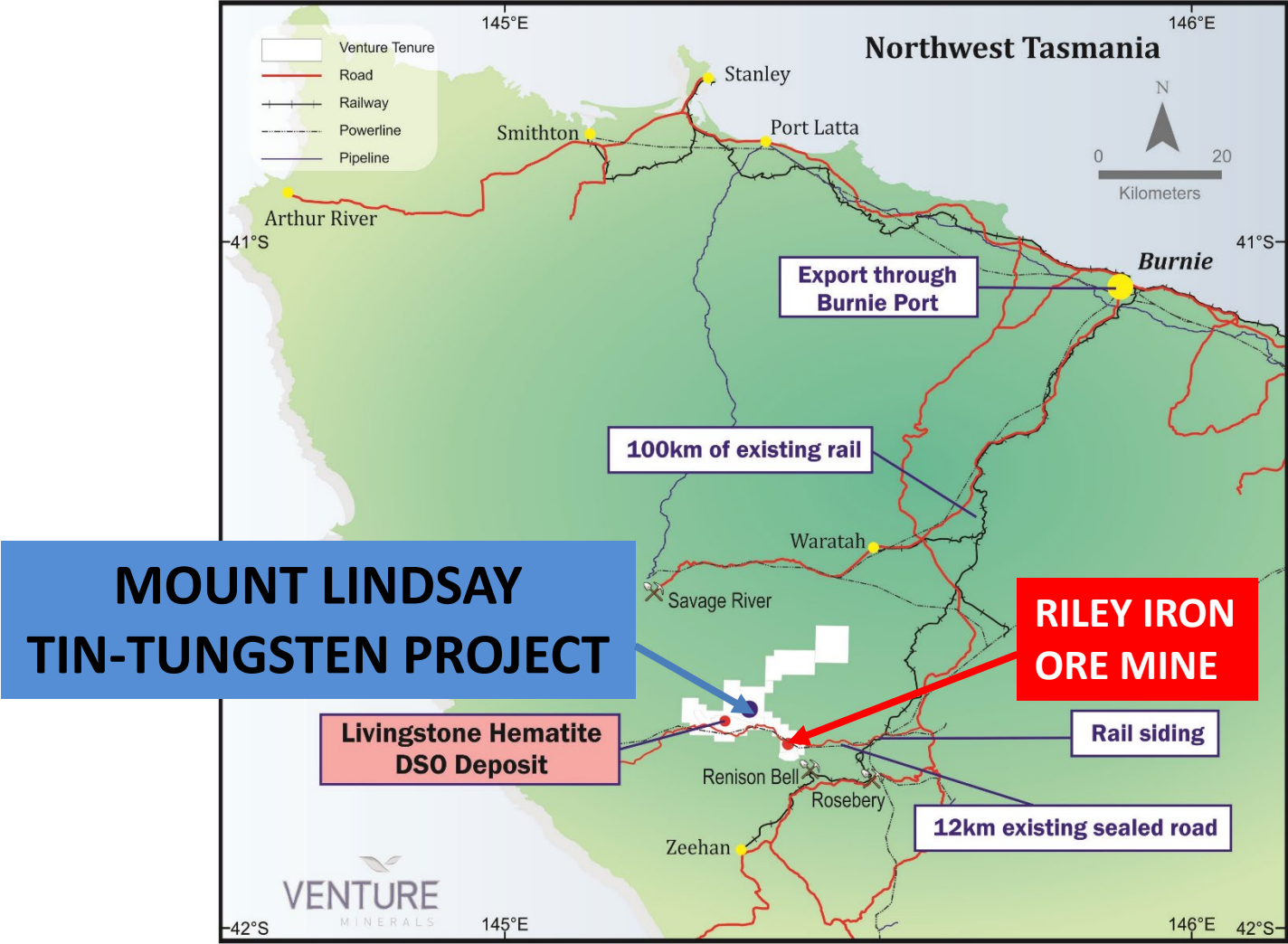
- Completion of civil infrastructure;
- Further optimization of Mining Study outcomes;
- Final decision to commence mining;
- First ore haulage;
- First ore shipment.

## **Conclusions:**

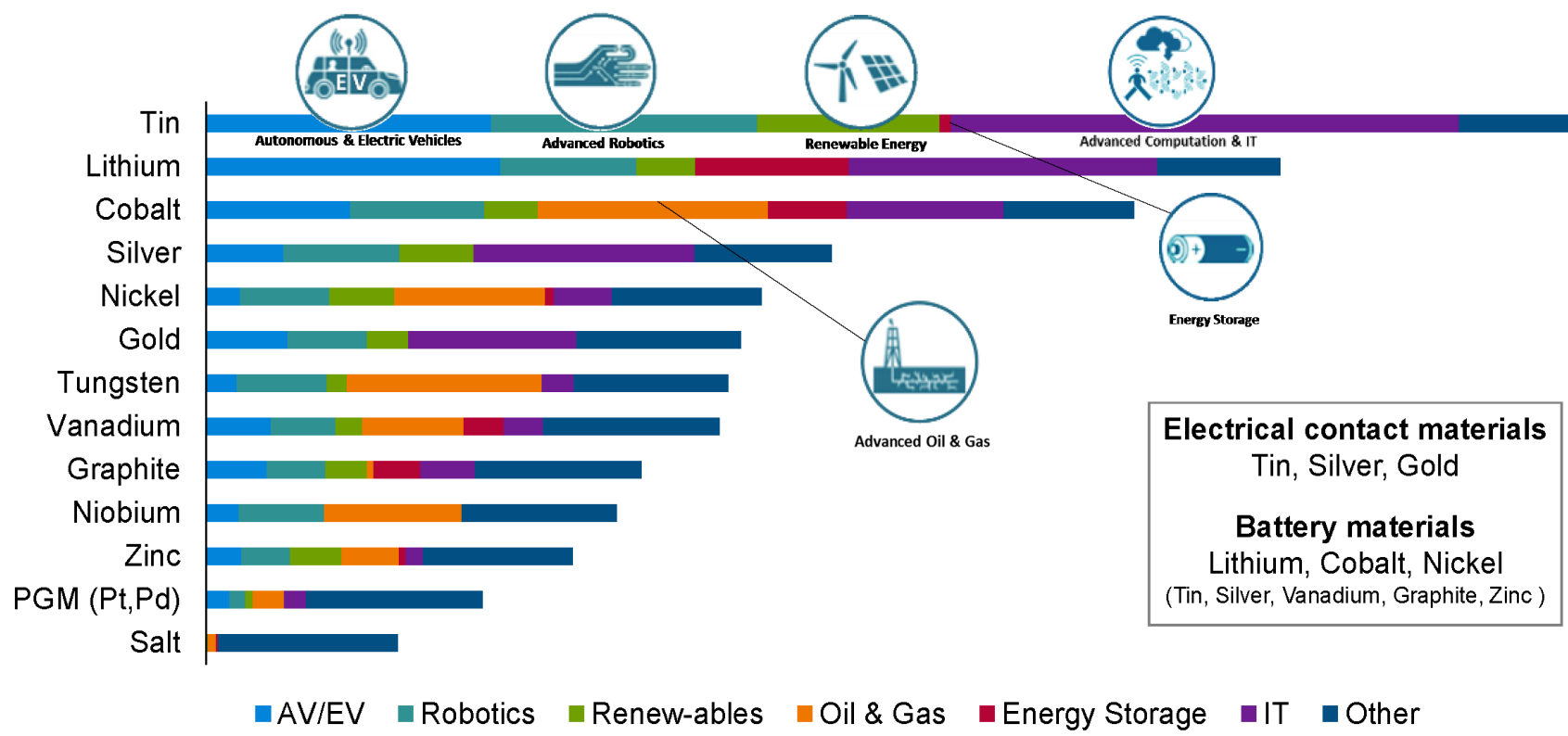
- Board commits to decision to recommence mining at Riley with Venture targeting first shipment this quarter;
- Exciting phase for the Company as it looks to move from explorer to producer.



# Location of Mount Lindsay Tin-Tungsten Deposit



## Metals most impacted by new technology







## Computing and robotics

**Tin focus:** Solder used in mobile phones, computers, tablets and electronic technologies

### Industry developments:

- Smartphone shipments worldwide are projected to add up to around 1.7 billion units in 2020 with 40% of the world's population is projected to own a smartphone by 2021;
- Plans to move to 95% lead-free solder by 2023 will drive and support future tin use in the solder sector



## Autonomous & Electric Vehicles

**Tin focus:** Lead acid batteries & anode electrode lithium ion batteries

### Industry developments:

- Norway & Netherlands to ban combustion vehicles by 2025;
- China has launched a series of quotas to become completely electric by 2030;
- New tin and tin-alloy anodes currently under development.
- Major lithium producer, FMC Corporation has recently patented lithium tin for batteries (July 2018).

## Energy Generation & Infrastructure



**Tin focus:** Solar cells, thermoelectric materials

### Industry developments:

- Measurable impacts of solar photovoltaics (PV) growth through increased use of solder ribbon (for joining solar panels) with ~7,500 tonnes of tin use in 2016. At this rate, the market demand could be set to almost double by 2030.
- A discovery by University of Groningen, Netherlands has shown that tin-based perovskite solar energy materials could more than double solar PV efficiency.

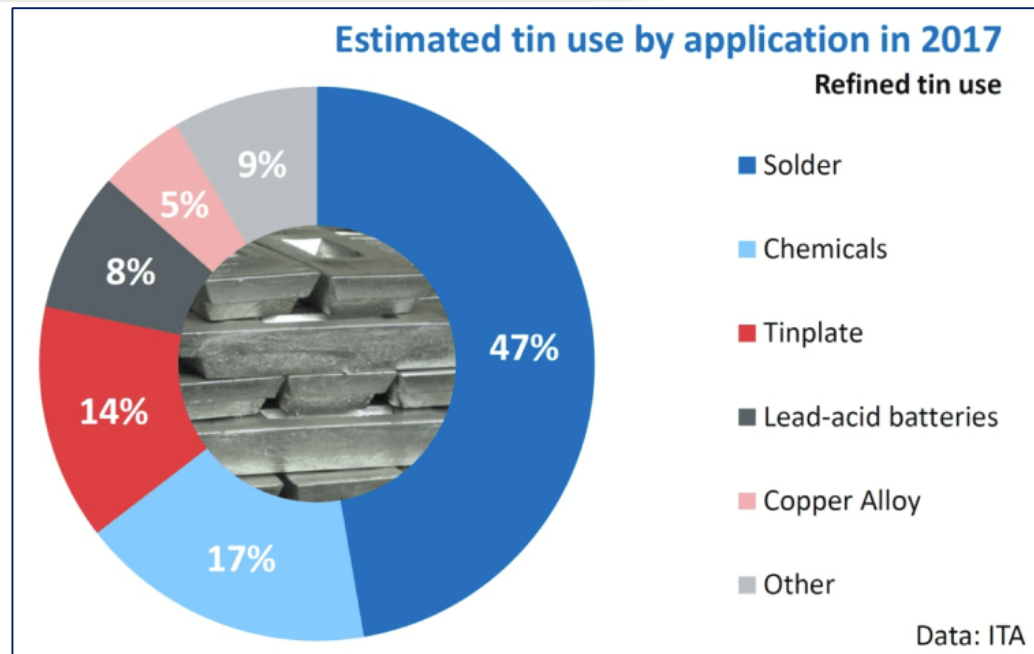
## Energy Storage



**Tin focus:** Solar storage, supercapacitors, aluminium air, fuel cells

### Industry developments:

- Improved liquid tin bismuth battery for grid-scale energy storage patented by University of Kentucky with testing currently underway;
- 'Remarkable' novel tin phosphate gel material that performs well in fuel cells and can also be a fast-charging lithium ion battery anode currently being researched by scientists.



Nearly 50% of tin consumed is in lead-free solder by the consumer electronics industry

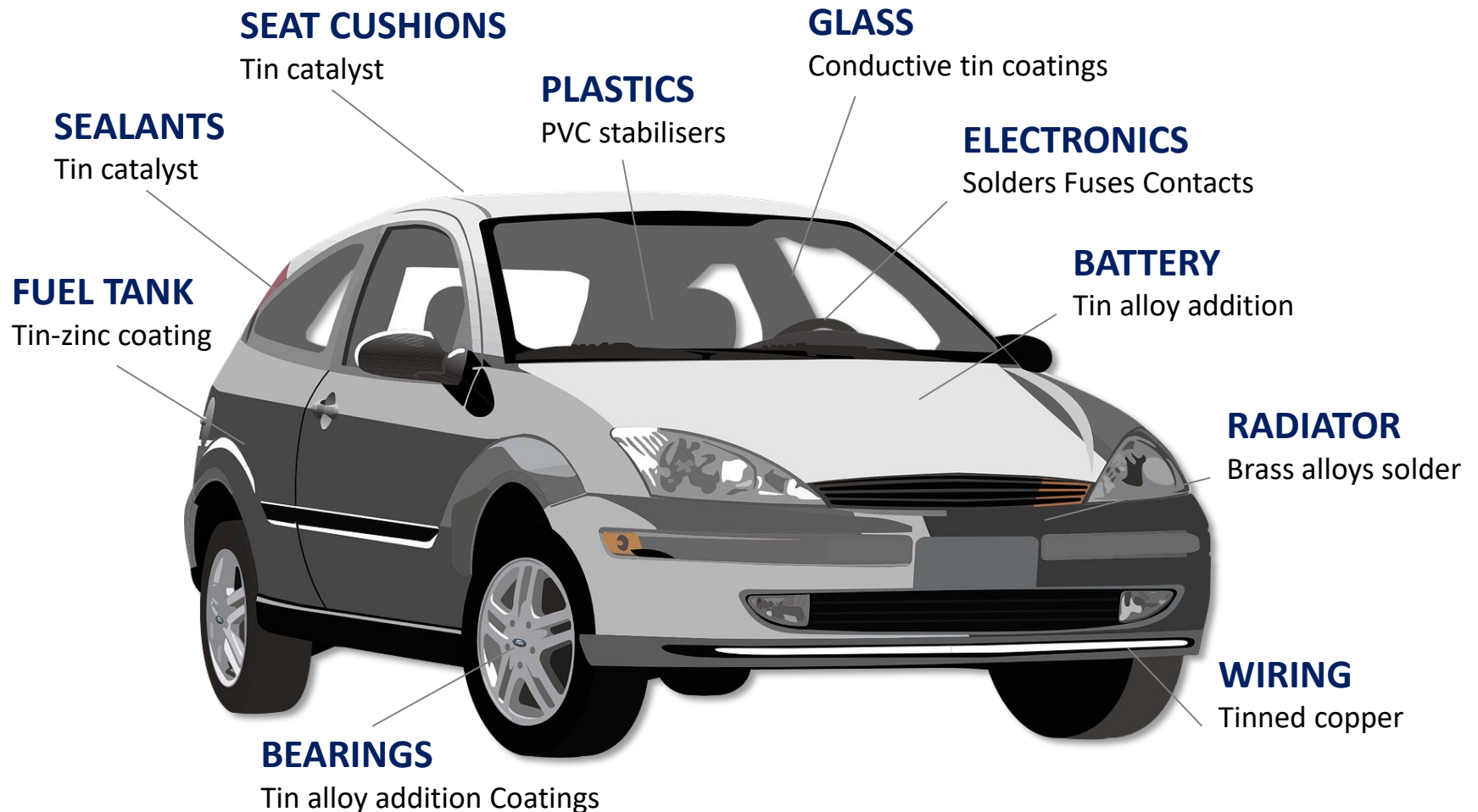
While solder drives the current market, significant growth is in chemicals & lead acid batteries

The two most significant uses of tin for EV impact is in electronics and alloys within batteries

Tin use in lead-acid batteries doubled between 2010 to 2016 and is estimated to grow 2-4% per annum till 2025.



# Tin use in conventional combustion vehicles



# Two most significant uses for EV impact

## **ELECTRONICS**

Solders Fuses Contacts

## **BATTERY**

Tin alloy addition



- Tin today at about ~US\$16,500/t or ~A\$25,000/t but has missed the dramatic rises of its EV metal peers in lithium, cobalt & graphite;
- **International Tin Association predicting surge in tin demand, driven by lithium-ion battery market of up to 60,000 tpa by 2030;**
- Visible Tin Stocks near historic lows.

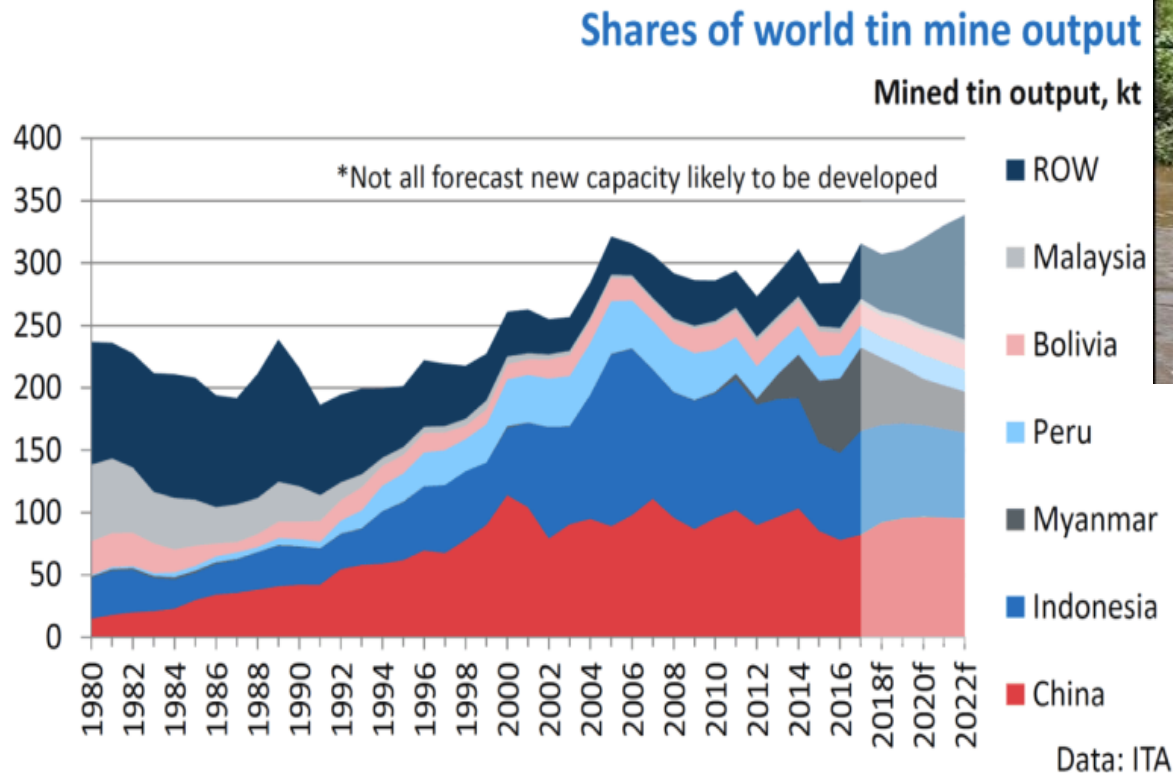
## World Supply/Demand Balances in Refined Tin '000 tonnes

	2012	2013	2014	2015	2016	2017	2018f
<b>World</b>							
World Refined Production	335.4	340.5	370.2	335.0	338.4	362.6	358.5
DLA Sales	0.0	0.0	0.0	0.0	0.0	0.0	0.8
World Refined Consumption	331.8	339.0	350.7	337.5	346.0	357.2	366.3
<b>Global Market Balance</b>	<b>3.6</b>	<b>1.5</b>	<b>19.5</b>	<b>-2.5</b>	<b>-7.6</b>	<b>5.4</b>	<b>-7.0</b>
<b>Reported stocks</b>							
LME	12.8	9.7	12.1	6.1	3.8	2.2	2.0
SHFE	0.0	0.0	0.0	0.8	2.4	4.9	5.0
Producer & Consumer	26.7	24.6	27.0	25.2	22.5	21.1	19.0
<b>Total</b>	<b>39.5</b>	<b>34.3</b>	<b>39.1</b>	<b>32.2</b>	<b>28.7</b>	<b>28.2</b>	<b>26.0</b>
<i>World Stock Ratio</i> <i>(weeks consumption)</i>	6.2	5.3	5.8	5.0	4.3	4.1	3.7

Source: International Tin Association

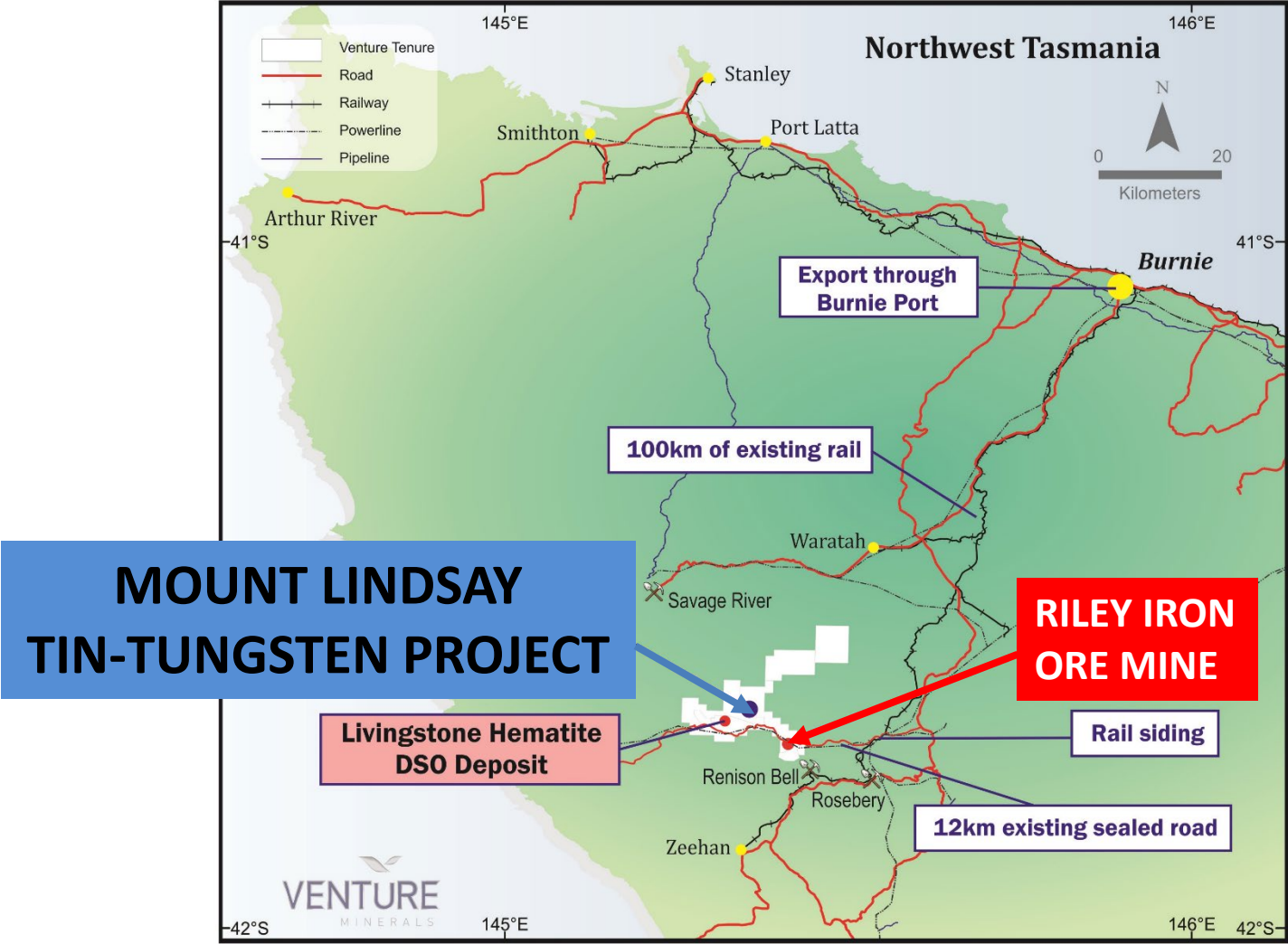


- Supply issues with most of the world's largest tin producers actually producing less;
- **Most world tin production still coming from higher risk jurisdictions;**
- **LME launches initiative to ban products not responsibly sourced by 2022.**



**Recent Bridge Collapse on  
African Tin Export Route**

# Location of Mount Lindsay Tin-Tungsten Deposit



- **EV demand drives re-assessment of the high grade tin and tungsten resource base at Mount Lindsay.**
- Uniquely positioned with Mount Lindsay being one of the largest undeveloped tin projects in the world, containing in **excess of 80,000\* tonnes of tin metal.**
- Mount Lindsay also hosts, **within the same mineralised body, a globally significant tungsten resource containing 3,200,000\* MTU (metric tonne units) of  $WO_3$ .**
- Time to explore new strategies to optimise higher grade portions at Mount Lindsay, which previously reported resources\* included **4.7Mt @ 0.4% Sn & 0.3%  $WO_3$ .**

\* Refer to ASX announcement on 17 October 2012.



# Resource Statement – Mount Lindsay Tin-Tungsten Project (as previously announced 17 October 2012)

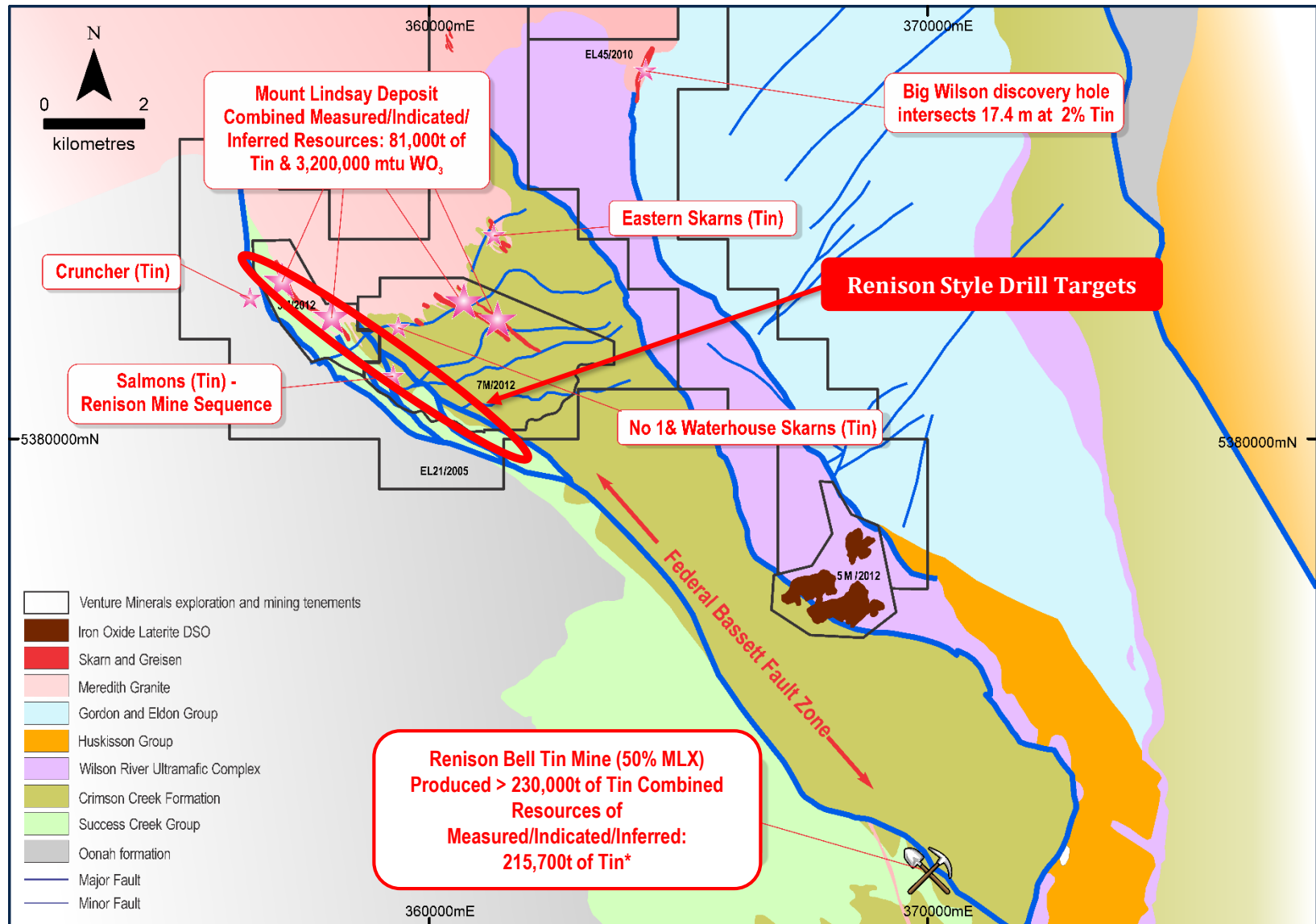
Lower Cut (Tin equiv)	Category	Tonnes	Tin Equiv. Grade	Tin Grade	Tungsten Grade (WO <sub>3</sub> )	Mass Recovery of Magnetic Iron (Fe) Grade	Copper Grade	Contained Tin Metal (tonnes)	Contained WO <sub>3</sub> (mtu)
0.2%	Measured	8.1Mt	0.6%	0.2%	0.1%	17%	0.1%	18,000	1,100,000
	Indicated	17Mt	0.4%	0.2%	0.1%	15%	0.1%	32,000	1,200,000
	Inferred	20Mt	0.4%	0.2%	0.1%	17%	0.1%	32,000	960,000
	<b>TOTAL</b>	<b>45Mt</b>	<b>0.4%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>17%</b>	<b>0.1%</b>	<b>81,000</b>	<b>3,200,000</b>
0.45%	Measured	4.3Mt	0.8%	0.3%	0.2%	18%	0.1%	12,000	980,000
	Indicated	5.2Mt	0.7%	0.3%	0.2%	15%	0.1%	14,000	810,000
	Inferred	3.9Mt	0.6%	0.3%	0.1%	9%	0.1%	12,000	520,000
	<b>TOTAL</b>	<b>13Mt</b>	<b>0.7%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>14%</b>	<b>0.1%</b>	<b>38,000</b>	<b>2,300,000</b>
0.7%	Measured	<b>2.2Mt</b>	1.1%	0.3%	0.3%	18%	0.1%	<b>8,000</b>	<b>750,000</b>
	Indicated	<b>1.9Mt</b>	1.0%	0.4%	0.3%	11%	0.1%	<b>7,000</b>	<b>480,000</b>
	Inferred	<b>0.6Mt</b>	1.0%	0.5%	0.3%	3%	0.1%	<b>3,000</b>	<b>150,000</b>
	<b>TOTAL</b>	<b>4.7Mt</b>	<b>1.1%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>13%</b>	<b>0.1%</b>	<b>18,000</b>	<b>1,400,000</b>
1.0%	Measured	<b>1.0Mt</b>	1.5%	0.5%	0.5%	19%	0.1%	<b>5,000</b>	<b>450,000</b>
	Indicated	<b>0.7Mt</b>	1.3%	0.5%	0.3%	10%	0.1%	<b>4,000</b>	<b>220,000</b>
	Inferred	<b>0.2Mt</b>	1.4%	0.7%	0.3%	<1%	<0.1%	<b>2,000</b>	<b>70,000</b>
	<b>TOTAL</b>	<b>1.9Mt</b>	<b>1.4%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>14%</b>	<b>0.1%</b>	<b>10,000</b>	<b>750,000</b>

Note: Reporting to two significant figures. Figures have been rounded and hence may not add up exactly to the given totals. Full details of the estimate are in the ASX release for the Quarterly Report on 17 October 2012. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

- Approximately 83,000m of diamond core drilling used to define JORC compliant resources with **+60% in the Measured & Indicated categories;**
- Feasibility Study completed with comprehensive metallurgical test-work, with further post feasibility test-work delivering delivered a **very high grade 75% tin concentrate;**
- **Tin is at ~US\$16,500/t** and has increased by ~25% since early 2016;
- **Tungsten's APT price is at ~US\$240/mtu** and has increased by ~40% since early 2016;
- Several High Grade Targets with drill results to follow up including Big Wilson with **17.4m @ 2% tin\*.**

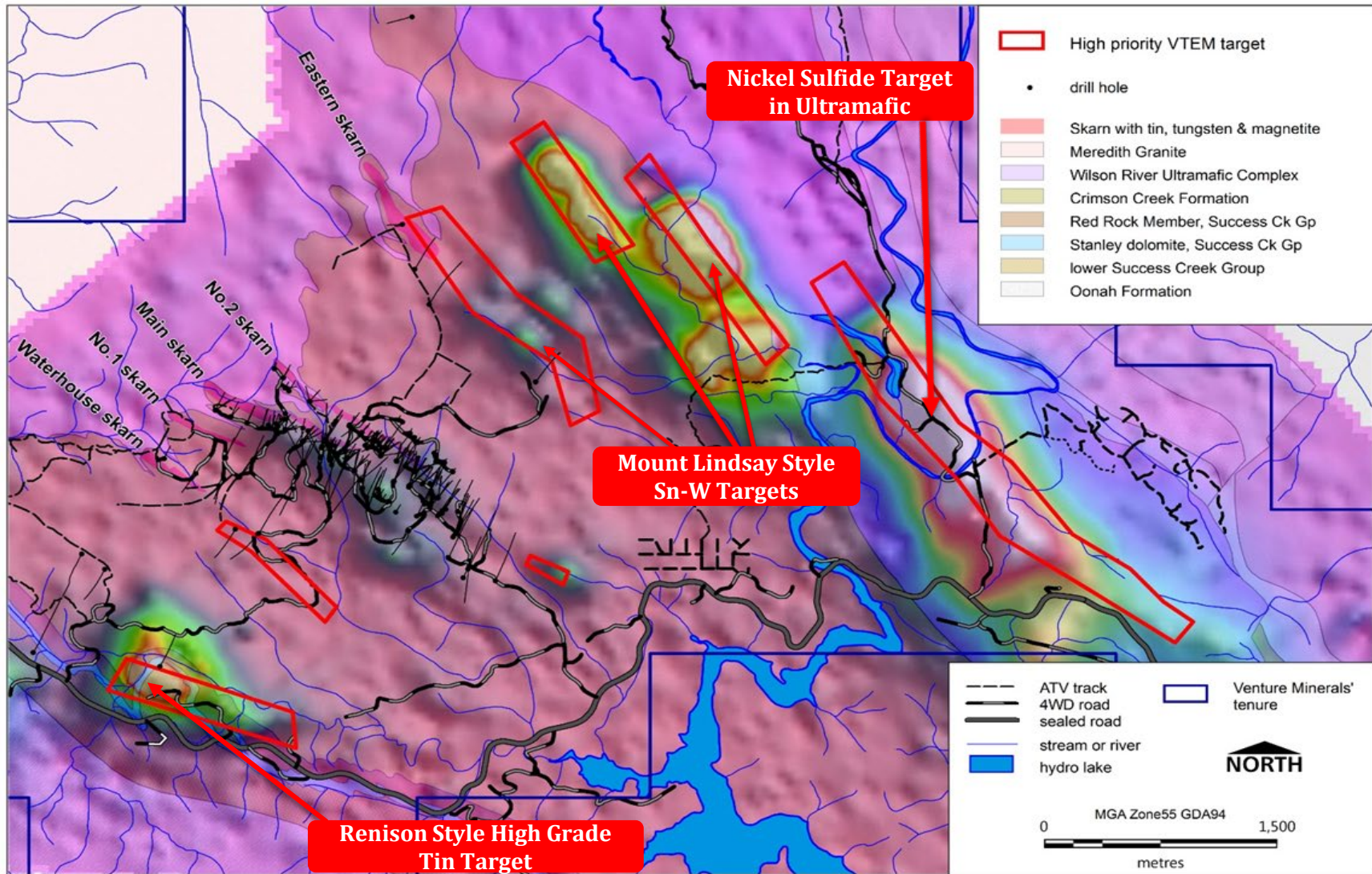
\* Refer ASX Announcement 2 August 2012.

# High Grade Tin-Tungsten Targets

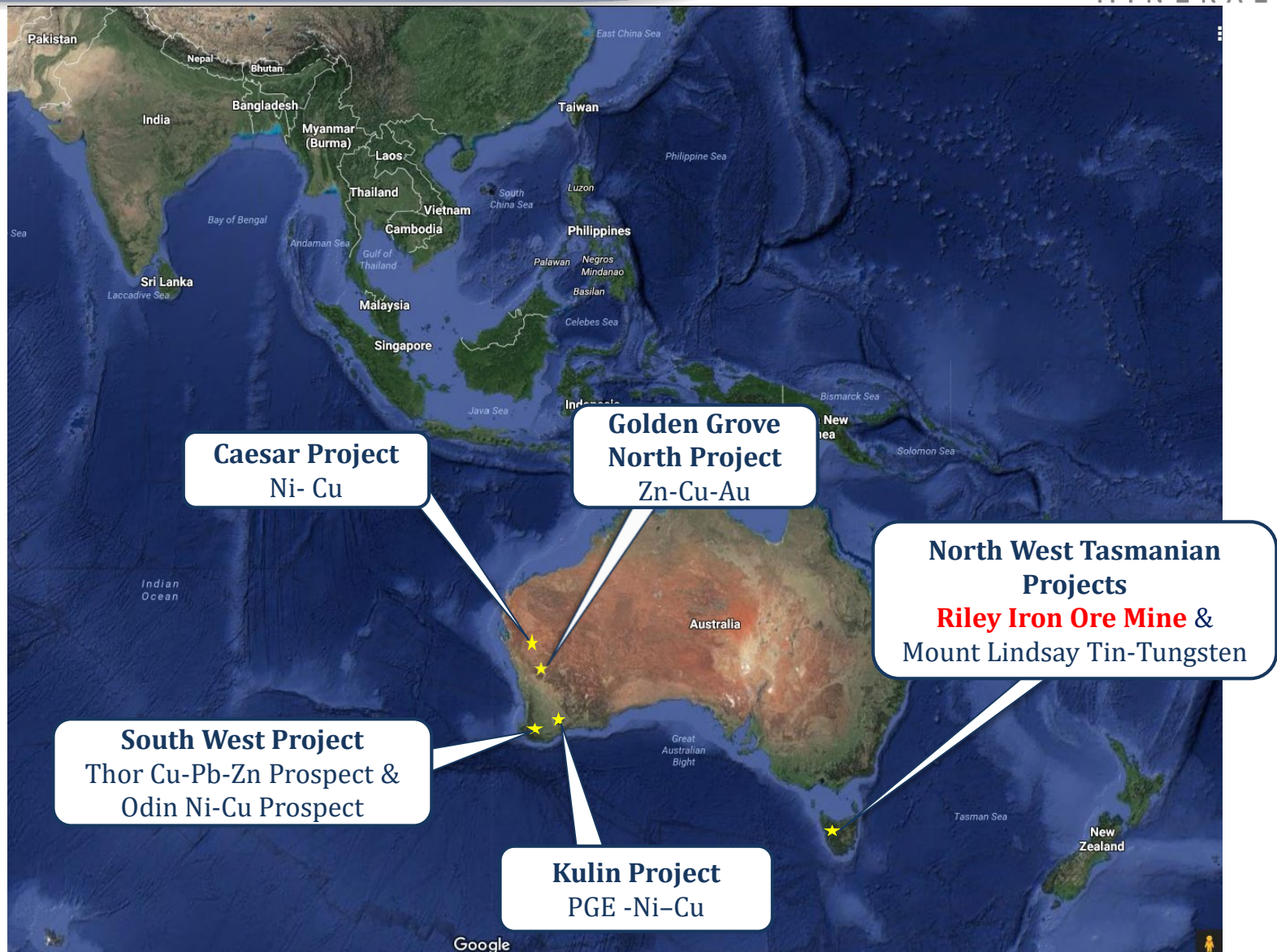


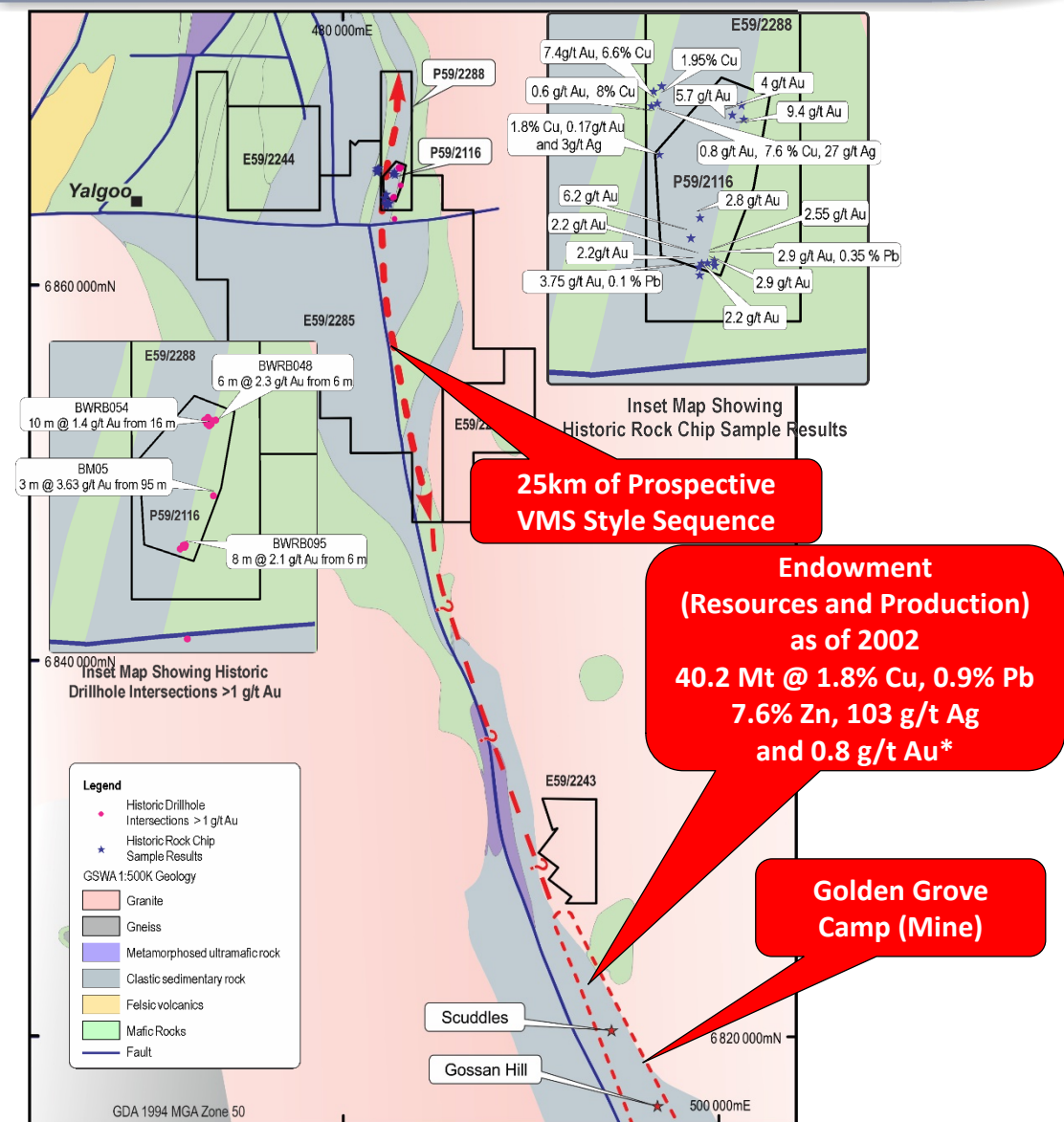


# Major EM Survey at Mount Lindsay identifies Priority Renison Style Tin Target & others





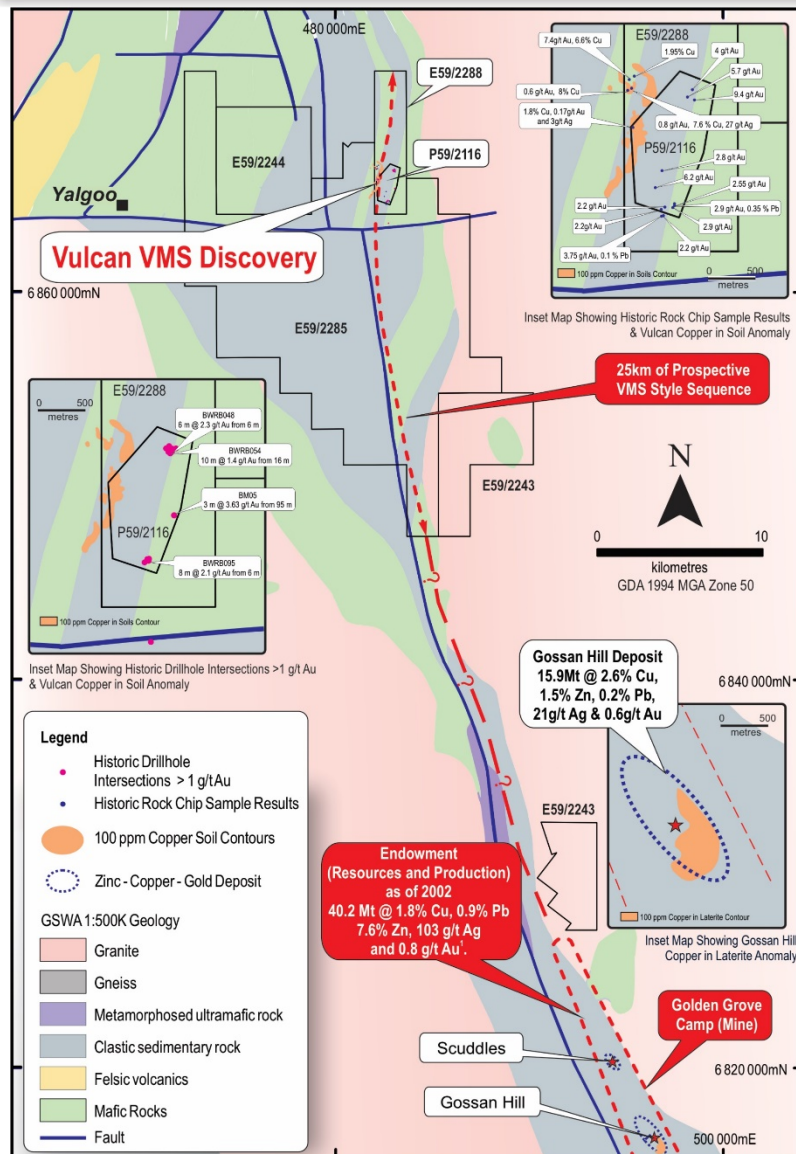




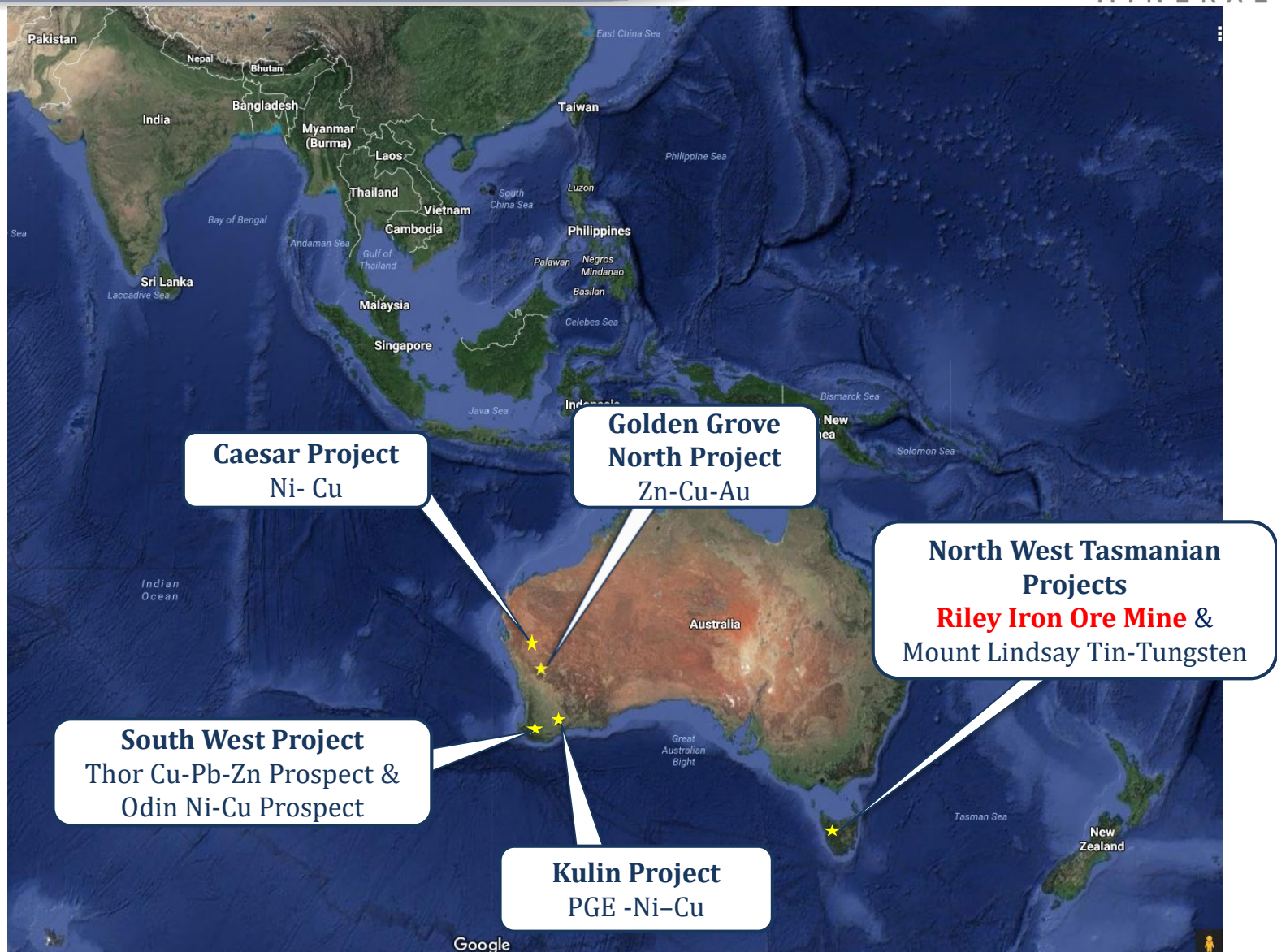
- **288 km<sup>2</sup> located less than 10 kilometres from the Golden Grove Camp (Mine);**
- **25 strike kilometres of a largely untested, prospective sequence for VMS style mineralisation;**
- **Historic shallow gold drill intersections including 8 metres @ 2.1 g/t gold from 6 m and 6 metres @ 2.3 g/t gold from 6 m\*;**
- **Historic Rock Chip results of 7.4 g/t gold & 6.6% copper and 7.6% copper & 27g/t silver\*.**



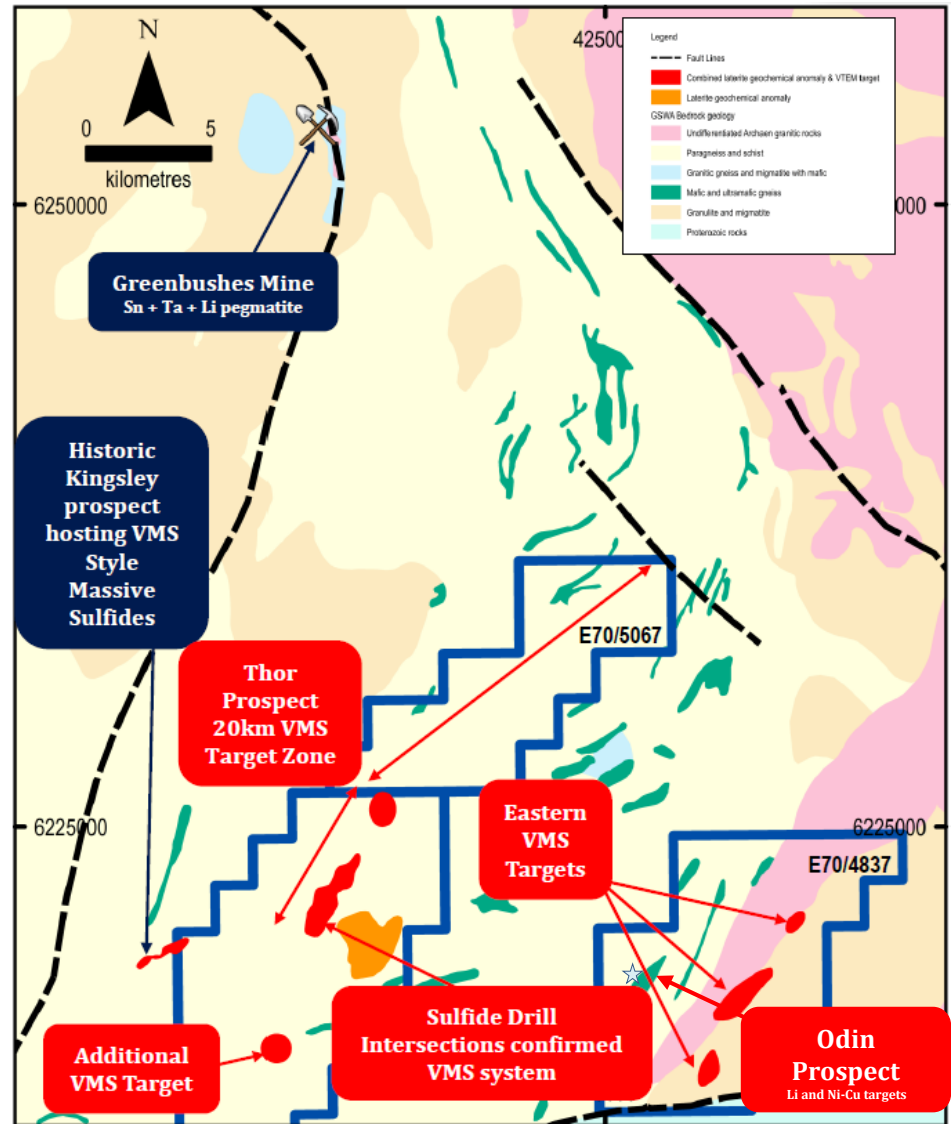
# Golden Grove North Project-Early Exploration Success with Vulcan VMS Discovery



- New Volcanic Massive Sulfide (VMS) target discovered along strike of the world class Golden Grove Zinc-Copper-Gold Mine;
- Two-Kilometre-Long VMS target identified by the following:
  - Highly anomalous Copper (Cu) in soil results analogous to the geochemical footprint of the largest of the Golden Grove deposits, Gossan Hill,
  - Surface rock chip results of up 23.8% Cu, 7.8g/t gold, 35 g/t silver & 1.2% zinc\*,
  - Copper Sulfides identified at Surface.



- Venture holds a 281 km<sup>2</sup> land holding within the Greenbushes Mineral District host to the world's largest hard rock lithium mine (produces ~40% of the world's-lithium);
- Several VMS (Volcanogenic Massive Sulfide) targets identified including the Thor Prospect;
- Substantial new Nickel-Copper target recently identified whilst drilling for Lithium at Odin.



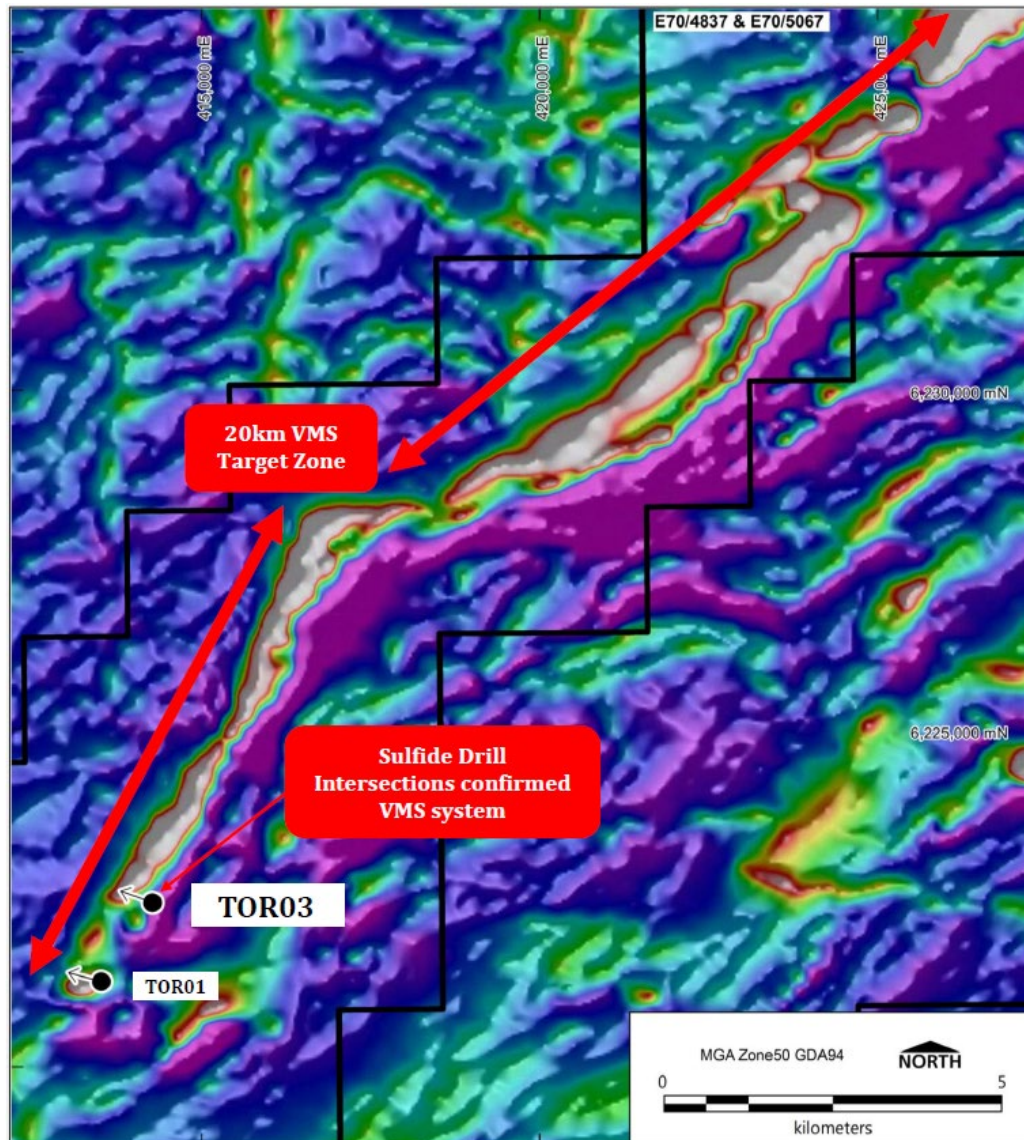


# Massive Sulfide in Core from Maiden Drilling at the Thor Prospect

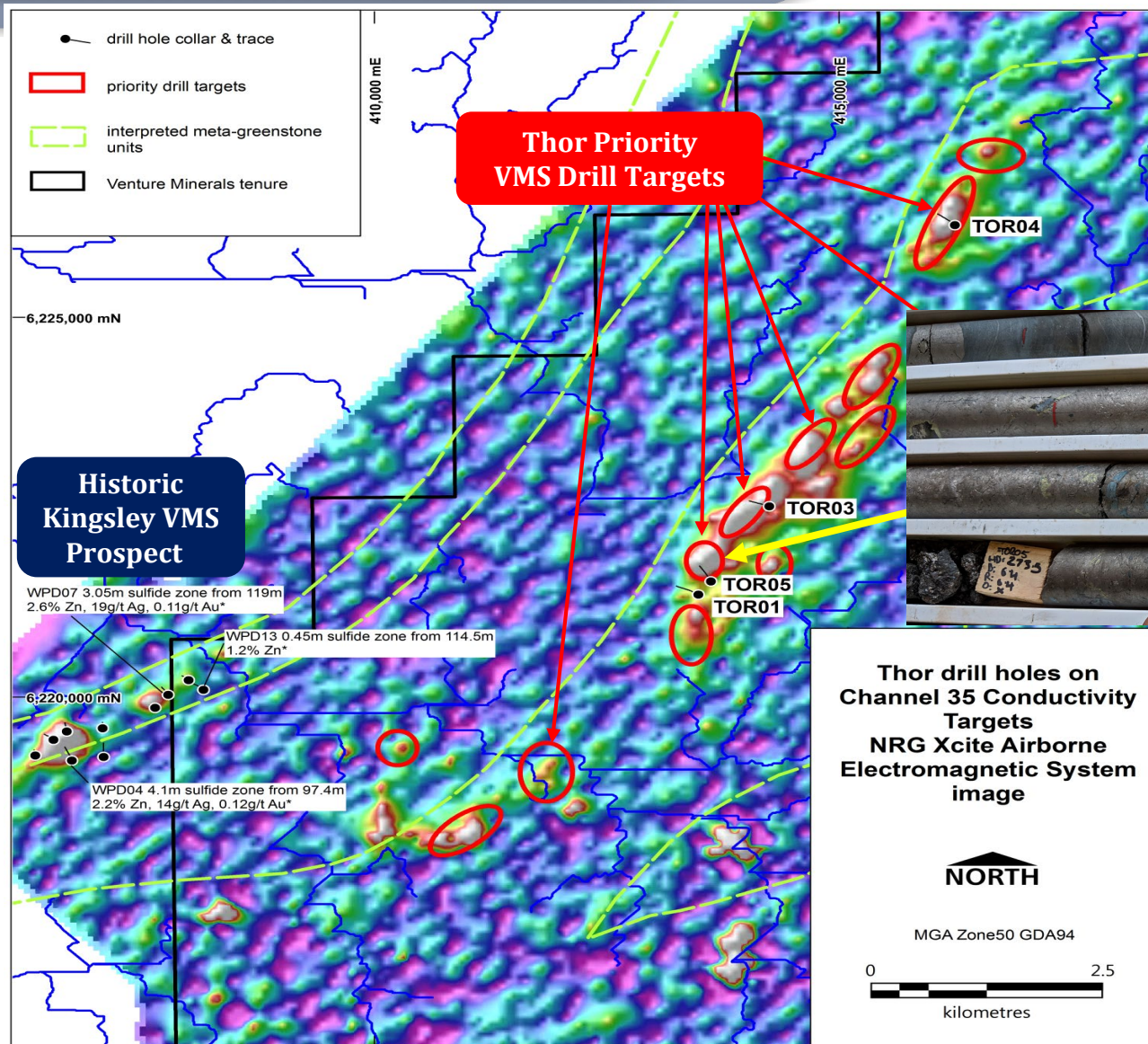




# Thor VMS Target with maiden drilling on aeromagnetic image



# Further drilling on new EM targets intersects massive sulfides with Copper & Zinc mineralisation



\*Reference GSWA Record 2017/9: Metamorphosed VMS Mineralization at Wheatley, Southwest, WA by LY Hassan



- Exciting phase as Venture looks to move from explorer to producer;
- Mount Lindsay Tin-Tungsten Project provides exposure to near term production of EV Metals and Critical Minerals;
- Golden Grove North has yielded early success with a new VMS discovery along strike to the world class Golden Grove Copper-Zinc-Gold Mine, Western Australia;
- Maiden drill program at Thor Prospect intersected massive sulfides confirming the Copper-Lead-Zinc target is a 20km long VMS style system in Western Australia;
- Venture has several mechanisms for increasing shareholder value.



Thank You  
If you have any questions,  
please see us at Booth # 43