

# HEEMSKIRK TIN PROJECT

6<sup>th</sup> Annual Beer & Co Tin Conference

Melbourne 7th November 2018

ASX: SRZ

www.stellarresources.com.au

HEEMSKIRK IS TIN IN TASMANIA

# STELLAR RESOURCES LIMITED (ASX:SRZ)





EXPLORATION POTENTIAL

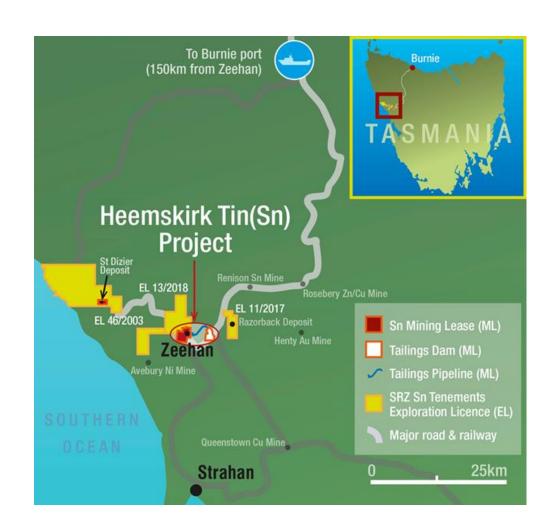
### 3

### STELLAR RESOURCES - OVERVIEW

WEST COAST TASMANIA - AUSTRALIA'S LARGEST AND MOST PRODUCTIVE TIN FIELD

# FIRST CLASS POSITION IN TASMANIA'S BEST UNDEVELOPED TIN ASSETS

- Stellar's flagship Heemskirk Tin Project is the highest grade undeveloped tin deposit of significance listed on the ASX
- Stellar owns 100% of all tin properties including Heemskirk
- Five underground metal mines, three currently operating, within 30km of Heemskirk – significant sunk capital in associated infrastructure
- Port of Burnie, 150km to the north, services all west coast mines and will provide access to world markets
- Renewable power and water are nearby and accessible
- Competitive market for services, mining and processing inputs and labour exists in Tasmania's NW
- Satellite projects at St Dizier and Mt Razorback add potential value to Heemskirk at low cost



### CORPORATE OVERVIEW

# SHARE PRICE YET TO REFLECT SOLID ACHIEVEMENTS AT HEEMSKIRK TIN

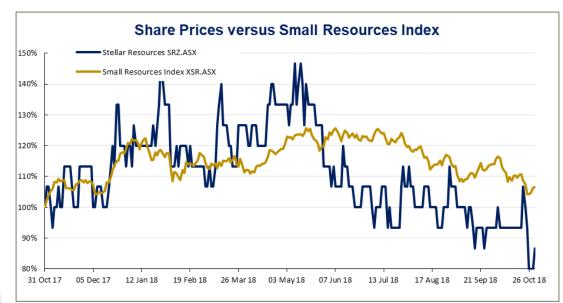
#### COMPANY OVERVIEW

- 100% owner of Heemskirk Tin Project, 150km south of Burnie, Tasmania
- Stand- out high grade resource (1.13% Sn) with vision to be a major Australian tin producer
- Metallurgical optimisation added to the project
- Fast start lowered capex and reduced time to first production

### **Financial information**

Enterprise value	A\$3.9m
Debt (30-Sep-18)	No Debt
Cash (30-Sep-18)	A\$1.0m
Market Capitalisation	A\$4.9m
Number of shares	379.7m
Share price (1-Nov-18)	A\$0.013

15m unlisted options (exercise prices A\$0.06 to A\$0.12, expiring on 20-Nov-19) and 59m A\$0.05 options expiring on 18 May 2020



# OWNERSHIP REFLECTS STRONG TIN INVESTOR SUPPORT

Capetown S.A.	16.7%
Bunnenberg Family	11.9%
Directors & Management	2.1%
Top 20 Shareholders	52.2%

HEEMSKIRK IS TIN IN TASMANIA

# STELLAR RESOURCES LIMITED (ASX:SRZ)





EXPLORATION POTENTIAL

### ADVANCING MULTIPLE DEVELOPMENT OPTIONS

WEST COAST TASMANIA - AUSTRALIA'S LARGEST AND MOST PRODUCTIVE TIN FIELD

#### HEEMSKIRK

- JORC 2012 Resource of 6.25mt @
   1.13% tin or 72,000t of contained tin
- Underground development comparable to Renison Tin situated 18km to NE
- Opportunity to stage development through sequential mining of deposits and a modular processing plant
- PFS level mining and metallurgy studies and a fast start optimization completed
- Mining Leases granted for 12 years
- Significant exploration potential around known deposits, below historical Pb/Ag mines and along major structures

#### ST DIZIER

- JORC Resource of 1.2mt @ 0.7% tin
- Similar style of mineralization to that mined at Mt Bishoff
- Potential for low cost open pit development (SR of 4:1)
- All weather road runs within 1km of St
   Dizier and connects the deposit to a
   proposed processing plant at Zeehan

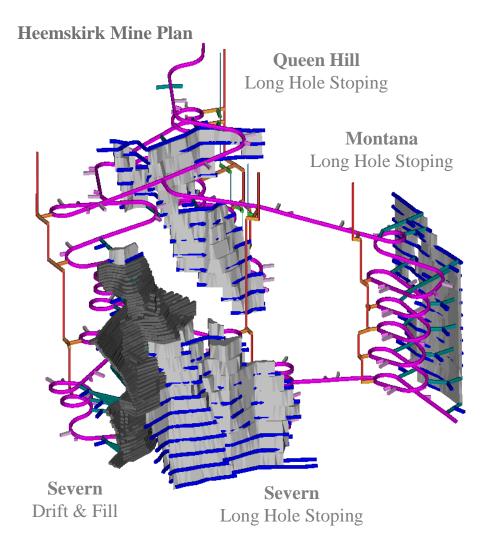
#### MT RAZORBACK

- Mt Razorback contains two small historical tin mines – Razorback and Grand Prize and a tailings dam
- Tailings have potential for upgrading to saleable product
- Historical diamond drilling and trench sampling of the Razorback pit floor have identified ore grade tin mineralization down to at least 100m
- Geological and structural setting is similar to that at Renison Tin
- 3km structure extends from Razorback to Grand Prize and contains untested tin in soil targets

### HEEMSKIRK IST ITERATION

### MAXIMISE PRODUCTION

- Simultaneous development of all three deposits
- Ore schedule based on maximizing the mining rate
- Renison flow sheet used for ore processing
- Optimisation focused on tin recovery coarser grind size, improved sulphide float and reduced impact of slimes
- Recovery for Severn now higher than the best results for Renison (ie 75%+)
- Focus shifted to lowering capital



## HEEMSKIRK 2<sup>ND</sup> ITERATION- FAST START

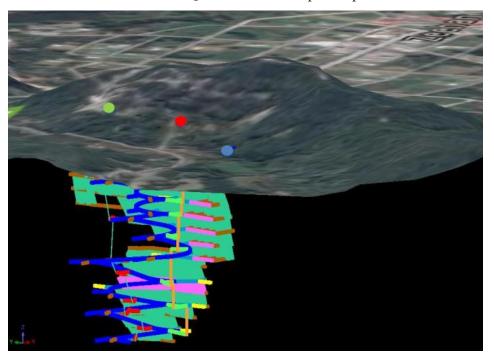
# 8

### MINIMISE CAPITAL

- Fast start focus to reduce development capital and get into production 6 months sooner
- Stage 1 Lower Queen Hill with Stage 2 development of Severn
- Higher grade (1.29% Sn) in first 3 years of production
- 57% reduction in capital cost and lower risk

- Mining schedule and costs estimated by MiningOne
- Worley Parsons assessed metallurgical performance using ALS Burnie test results
- · Worley Parsons estimated process plant costs
- Mincore revised capital cost estimates for stage 1
   of a potentially 3 stage plant

Fast Start - Lower Queen Hill Development plan



Fast Start – Processing Plant



### PROGRESS THROUGH THE EARLY HURDLES

EVOLUTION FROM MAXIMISING PRODUCTION TO MAXIMISING VALUE

Study	PFS (Prelim Feasibility)	OPFS (Optimisation)	Fast Start (Scoping)
		ncreasing NPV/Capex	
Completion	Jul-13	Nov-15	Sep-16
Development		underground mine	underground mine
Strategy	all deposits concurrently standalone processing plant	all deposits concurrently standalone processing plant	sequential development standalone processing plant
		third party processing	third party processing
Deliverables	Max throughput	Max throughput	1/3 Max throughput
	Op cost 60th percentile	Op cost down 10% on PFS	OPFS op cost
	mining study - 7yr life	optimised fill - 7 yr life	lower scale - 20yr mine life
	recovery 70%	recovery up by 4.3% to 73%	recovery 73%
	Renison - flow sheet adopted	circuits optimised	modular smaller plant
Economics	Capex - standalone plant	Capex reduced 12%	Capex 50% of OPFS
	NPV/capex = 0.5	gain on PFS: NPV/capex = 0.9	NPV/capex = 1.5
Assumptions	US\$22,000/t Sn, 0.75USD/AUD	US\$22,000/t Sn, 0.75USD/AUD	US\$22,000/t Sn, 0.75USD/AUD

Mining: MiningOne and Polberro Consulting Metallurgy: ALS Metallurgical and WorleyParsons Environmental: John Miedecke and Partners

Process Engineering: WorleyParsons, GR Engineering and Mincore

### ALL MINING LEASES GRANTED

### INCREASED TENURE PROVIDES FLEXIBILITY

- ML2023P/M, ML2040P/M and ML2M/2014 granted to wholly owned subsidiary Columbus Metals Limited
- MLs secure tin deposits and sites for the tailings pipeline route and tailings storage facility
- Term is 12 years to 1st January 2029
- Provides right to carry out mining operations in the lease area in accordance with the Mineral Resources Development Act 1995
- Right to mine tin and all other metallic minerals
- All conditions of the ML can be met through the existing activities planned by Stellar
- No minimum expenditure commitments



HEEMSKIRK IS TIN IN TASMANIA

# STELLAR RESOURCES LIMITED (ASX:SRZ)



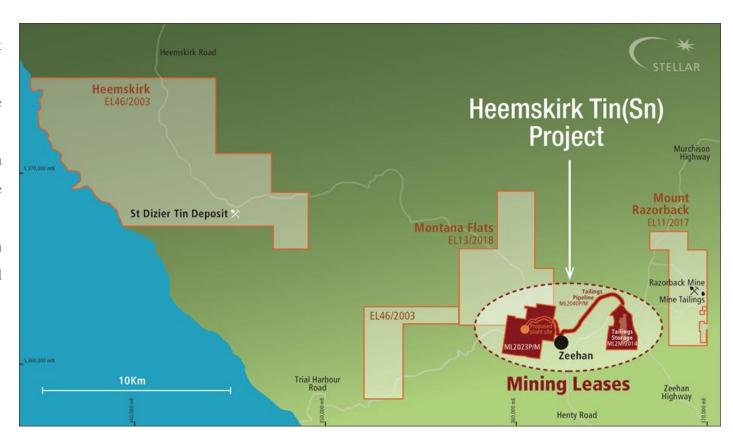




### LATERAL EXPLORATION POTENTIAL EXPANDED

6 km of strike length added to lateral exploration potential

- Stellar has acquired two significant exploration licences in 2018
- Razorback adds 3km of strike length and two historical tin mines
- Montana Flats adds a further 3km immediately north of the Heemskirk tin deposits
- The most promising tin exploration properties around
   Zeehan now held by Stellar

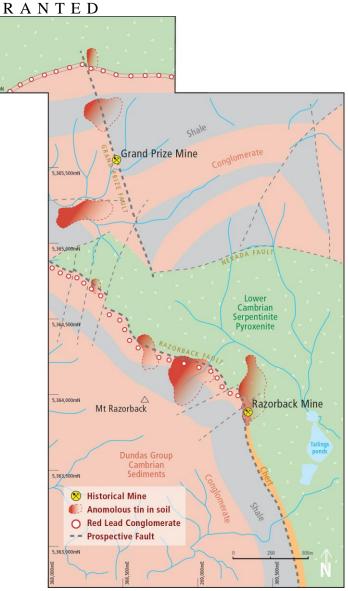


### EXPLORATION POTENTIAL AT MT RAZORBACK

EL11/2017 MT RAZORBACK GRANTED

- 10km via existing roads to Heemskirk or Renison
- Potential to recover cassiterite from tailings
- Potential to define a mineral resource below the Razorback open pit
- Exploration potential along the Razorback and Grand Prize Faults
- Untested soil geochemistry over the 3km Razorback fault
- Geology and structure similar to Renison

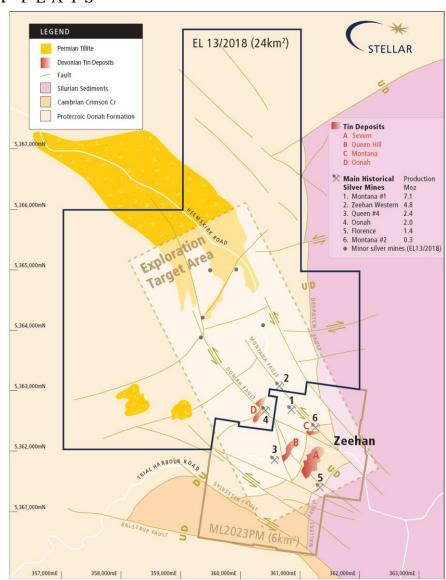




### EXPLORATION POTENTIAL AT MONTANA FLATS

### EL13/2018 MONTANA FLATS

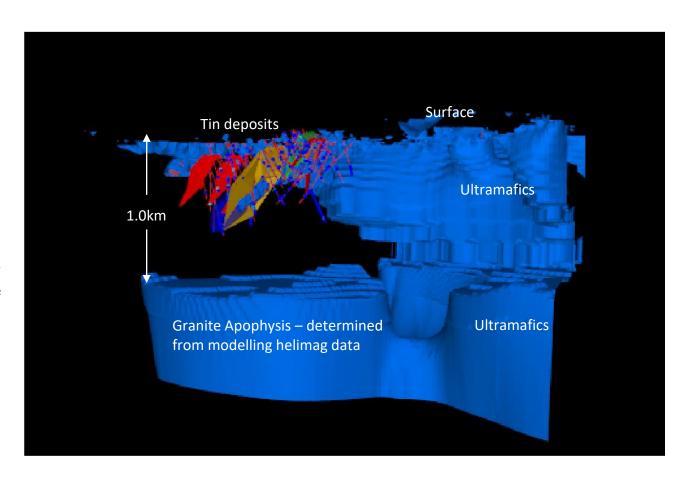
- EL13/2018 lies immediately north of the Heemskirk tin deposits
- It adds 3 km of exploration strike length along tin-mineralising fault structures
- All tin deposits and major silver deposits lie along or between the Oonah, Montana and associated faults
- Oonah tin deposit added to Stellar's portfolio
- Zeehan Western second largest silver mine in the Zeehan field added to the portfolio
- Silver miners ignored tin exploration potential around Zeehan
   Western and other silver mines remains untested



### EXPLORATION AT DEPTH REMAINS UNTESTED

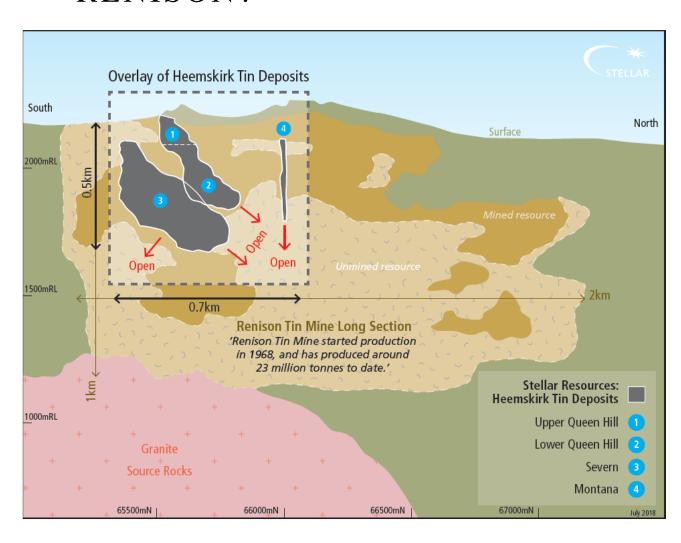
EXPLORATION COULD INCREASE HEEMSKIRK 3X

- Helimag data supports a gravity model with depth to granite source rocks > 1.0km
- No granite intersected in any historical or recent drill holes
- No drilling below a depth of 500m from surface
- Significant exploration potential in the 500m vertical zone between the granite and the deepest drill hole
- Renison has more than 6,000 drill holes and 50 years of mining to identify its resource
- Heemskirk has only 150 diamond drill holes from surface with most in the top 300m



# DARE TO DREAM – HEEMSKIRK THE NEXT RENISON?

- Renison, Australia's oldest and largest tin mine is located 18km to the NE of the Heemskirk Tin deposits
- Heemskirk and Renison share the same geology and structural setting
- Renison started with a 5 year mine life in 1968 treating 0.8mtpa ie a 4.0mt reserve
- Successful underground exploration has allowed the mine to operate for 50 years, treat 23mt of ore and still have 15mt in resources
- The Heemskirk deposits are shown superimposed on the Renison long section and at 72kt of tin represent just 20% of the tin found at Renison



HEEMSKIRK IS TIN IN TASMANIA

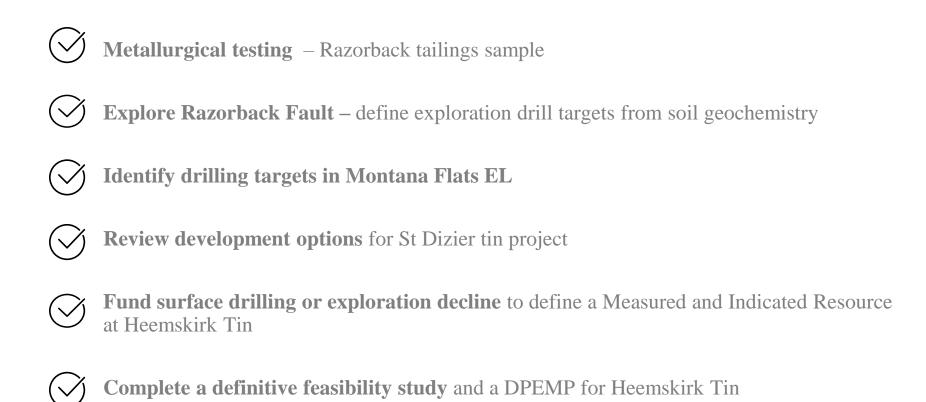
# STELLAR RESOURCES LIMITED (ASX:SRZ)







### **NEXT STEPS**





### DISCLAIMER

#### FORWARD LOOKING STATEMENT

This presentation may include forward-looking statements. Forward-looking statements include, but are not limited to statements concerning Stellar Resources Limited's planned activities and other statements that are not historical facts. When used is this report, words such as "could", "plan", "estimate", "expert", "expert", "intend", "may", "potential", "should", and similar expressions are forward-looking statements. In addition, summaries of Exploration Results and estimates of Mineral Resources and Ore Reserves could also be forward-looking statements. Although Stellar Resources Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. The entity confirms that it is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and technical parameters underpinning this announcement continue to apply and have not materially changed. Nothing in this report should be construed as either an offer to sell or a solicitation to buy or sell Stellar Resources Limited securities.

#### COMPETENT PERSONS STATEMENT - RESOURCES

The information in this report that relates to Mineral Resources was prepared in accordance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code) by Tim Callaghan of Resource and Exploration Geology. Tim Callaghan is a Member of The Australasian Institute of Mining and Metallurgy ("AusIMM"), has a minimum of five years' experience in the estimation, assessment and evaluation of Mineral Resources of this style and is the Competent Person as defined in the JORC Code. This report accurately summarises and fairly reports his estimations and he has consented to the resource report in the form and context in which it appears.

### COMPETENT PERSONS STATEMENT - EXPLORATION

The drill and exploration results reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr. R.K. Hazeldene who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Hazeldene has sufficient experience relevant to the style of mineralisation and type of deposits being considered to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr. Hazeldene consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

## **APPENDIX**

HISTORY OF HEEMSKIRK TIN PROJECT BOARD OF DIRECTORS



### PATH FROM DISCOVERY TO DEVELOPMENT

WEST COAST TASMANIA - AUSTRALIA'S LARGEST AND MOST PRODUCTIVE TIN FIELD

# EVOLUTION OF A WORLD CLASS TIN PROJECT

- QH tin deposit discovered early 1960s by Gippsland Ltd
- Aberfoyle jv with Gippsland in 1971 discovered Montana and Severn deposits
- Aberfoyle focus on pyrometallurgical (fuming) processing which was too expensive in 1980s to proceed to development
- Renison was keen to integrate Heemskirk into its operations in the 1980s but was unable to complete a deal with the owners.
- Stellar approached Aberfoyle in 2008 and acquired their 60%
- Stellar acquired the remaining 40% interest in 2012
- Stellar has undertaken several programs at Heemskirk on drilling geology, metallurgy, environment, mining and processing
- Stellar has also undertaken drilling programs and mining, metallurgy, and environment studies at St Dizier
- Work also recently commenced on the Razorback tenement acquired in late 2017



# EXPERIENCED AND MULTI-DISCIPLINARY WITH STRONG GLOBAL CONNECTIONS

### **BOARD OF DIRECTORS**



PHIL HARMAN, NON-EXECUTIVE CHAIRMAN GEOPHYSICIST

Over 30 years experience in BHP
Billiton minerals exploration
Past and present Director of
several ASX listed companies



PETER BLIGHT, MANAGING DIRECTOR GEOLOGIST

30 years experience in exploration, mining and finance sectors

Previously worked for UBS, UC

Rusal and Rio Tinto



MIGUEL LOPEZ DE LETONA, NON-EXECUTIVE DIRECTOR MANAGEMENT CONSULTANT

Experience as a management consultant and banker with leading financial institutions. Based in Belgium and advises on investment in the mining and oil and gas sectors



THOMAS WHITING,
NON-EXECUTIVE DIRECTOR
GEOPHYSICIST

Former manager of BHP Billiton exploration Chairman of Deep Exploration Technologies Cooperative Research Centre



MELANIE LEYDIN, COMPANY SECRETARY CHARTERED ACCOUNTANT

Over 25 years experience as an accountant and 15 years as a company secretary. Leydin Freyer provides accounting and company secretarial services for a number of ASX listed companies.



# STELLAR RESOURCES LIMITED

Level 17, 530 Collins Street

Melbourne VIC 3000

Phone +61 3 9618 2540

Fax +61 3 9649 7200

www.stellarresources.com.au