# STELLAR

# HEEMSKIRK TIN PROJECT

Tin Seminar Sydney 6<sup>th</sup> November 2017 Melbourne 8<sup>th</sup> November 2017 ASX: SRZ www.stellarresources.com.au HEEMSKIRK IS TIN IN TASMANIA

# THE AGENDA FOR TODAY



HEEMSKIRK TIN'S COMPETITIVE ADVANTAGES



TIMELINE FOCUSED ON A DRILL-OUT OF RESOURCES IN SUPPORT OF A DEFINITIVE FEASIBILITY STUDY



MINING LEASE GRANT ADDS TO PROJECT MOMENTUM



DARE TO DREAM CAN HEEMSKIRK BECOME ANOTHER RENISON?



HISTORY ADDING VALUE THROUGH OPTIMISATION OF THE DEVELOPMENT STRATEGY

# PATH FROM DISCOVERY TO DEVELOPMENT

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

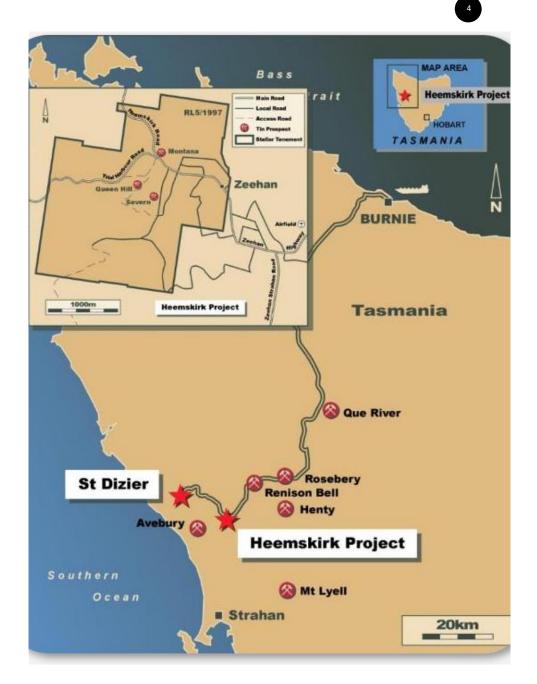
# EVOLUTION OF A WORLD CLASS TIN PROJECT

- QH tin deposit discovered early 1960s by Gippsland Ltd
- Aberfoyle jv with Gippsland in 1971 discovered Montana and Severn deposits
- Tin deposits located within Tasmania's most productive mineral field
- Renison, Australia's oldest and largest tin mine is located 18km away to the NE of the Heemskirk project
- Stellar listed on ASX in 2005
- Stellar acquired Aberfoyle's 60% interest for \$1.2m in 2008
- Remaining 40% interest acquired from Gippsland Ltd in 2012 for \$3.5m
- A\$12m spent to date on drilling, geology, metallurgy, environment, mining and processing studies



## WEST COAST TASMANIA IS A WORLD-CLASS TIN JURISDICTION BEST LOCATION FOR A NEW MINE

- Significant mining district Many historical and current operating mines across various commodities
  - Supportive local community and skilled work force – Competitive market amongst mining and processing suppliers
  - Established road and rail to port Water readily available and power infrastructure in place
  - Low political risk Tasmanian government supportive of Heemskirk
  - Low environmental risk Project located outside of environmentally sensitive areas



# JORC 2012 CONFIRMS RESOURCE QUALITY

- 6.35mt @ 1.13% Sn or 72,000t of contained Sn
- 97% of contained Sn is in the form of cassiterite the most readily recoverable Sn mineral
- 64% of Indicated Resource in Lower Queen Hill first deposit in development queue
- LQH Indicated Resource of 0.82mt @ 1.42% Sn is particularly high grade
- All Sn deposits at Zeehan are open at depth and have significant exploration potential
- Next step is infill drilling



Cassiterite - SnO<sub>2</sub>

# SIGNIFICANT PROJECT MILESTONE THAT INCREASES TENURE AND SECURITY OVER THE RIGHT TO MINE TIN

- ML 2023P/M granted to wholly owned subsidiary Columbus Metals Limited
- 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 schedule of activities planned by Stellar
- No minimum expenditure commitments
- Tailings pipeline ML 2040P/M under application



## DEVELOPMENT STRATEGY OPTIMISED SEVERAL STUDIES COMPLETED FINAL FEASIBILITY REMAINING

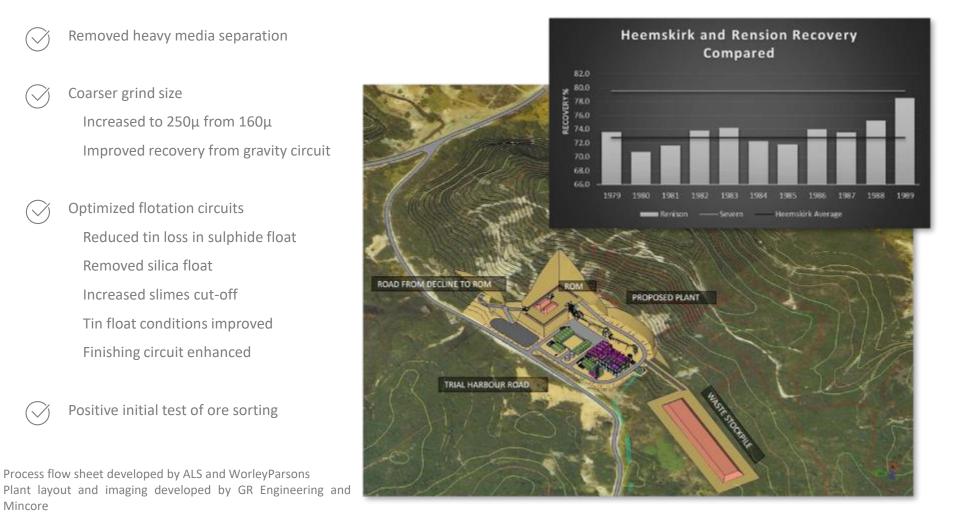
Study	PFS (Prelim Feasibility)	OPFS (Optimisation)	Fast Start (Scoping)
Completion	Jul-13	Nov-15	Sep-16
Development Strategy	underground mine all deposits concurrently standalone processing plant	underground mine all deposits concurrently standalone processing plant third party processing	underground mine sequential development standalone processing plant third party processing
Deliverables	Max throughput Op cost 60th percentile mining study - 7yr life recovery 70% Renison - flow sheet adopted	Max throughput Op cost down 10% on PFS optimised fill - 7 yr life recovery up by 4.3% to 73% circuits optimised	1/3 Max throughput OPFS op cost Iower scale - 20yr mine life recovery 73% modular smaller plant
Economics	Capex - standalone plant NPV/capex = 0.5	Capex reduced 12% gain on PFS: NPV/capex = 0.9	Capex 50% of OPFS 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 **Process Engineering:** WorleyParsons, GR Engineering and Mincore **Environmental:** John Miedecke and Partners



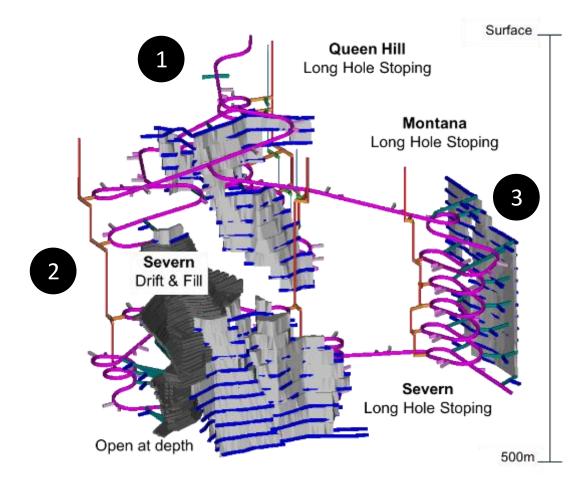
# **RECOVERY GAINS UPGRADED VALUATION**

METALLURGICAL OPTIMISATION LED TO SMALLER PRIMARY GRIND AND ELIMINATION OF HEAVY MEDIA SEPARATION AND SILICA FLOAT CIRCUITS



## FAST START SEQUENCIAL DEVELOPMENT

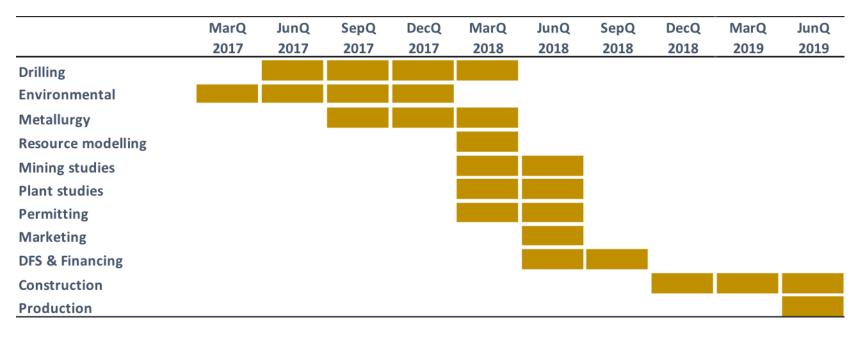
Underground Mine - 1. Lower Queen Hill 2. Severn 3. Montana



## WHAT IS STILL TO BE DONE? STELLAR TO EMBARK ON A DFS FOR THE HEEMSKIRK PROJECT ON COMPLETION OF DRILLING

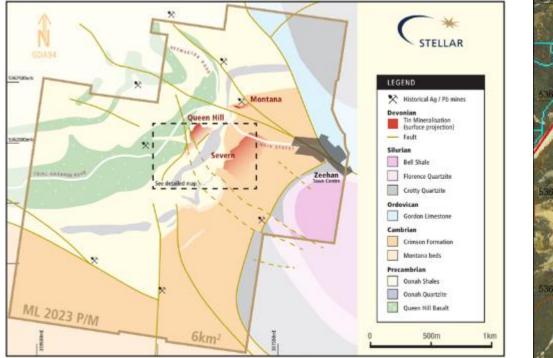
- drilling progresses
- Drilling to provide infill for the two largest deposits Queen Development Proposal and Environmental Management Plan Hill and Severn
- April 2017 drilling commenced news-flow to follow as Mineral Resource update on completion of drilling will allow the DFS process to commence
  - to follow DFS in 2018

### DFS TIMELINE FROM MARCH QUARTER 2017



## DRILLING PROGRAM UNDERWAY

FOCUS ON LARGEST DEPOSITS SEVERN AND QUEEN HILL



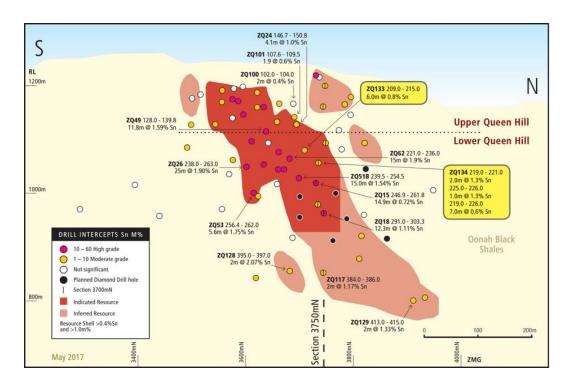


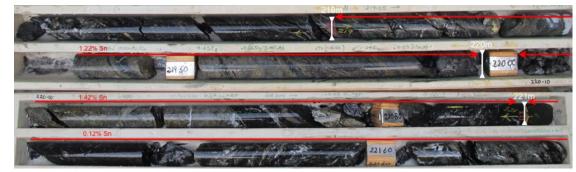
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# INITIAL DRILLING ON LOWER QUEEN HILL

ZQ133 – 6.0m @ 0.8% tin

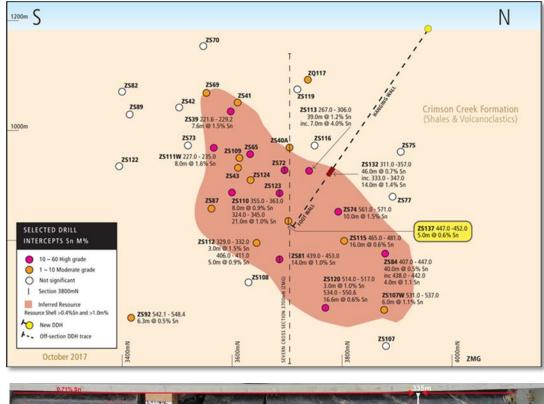
- ZQ134 2.0m @ 1.3% tin within 6.0m of 0.6% tin
- Confirmation of geological model cassiterite tin associated with pyrite/siderite/quartz alteration in a fault zone between black shales and volcanics
  - Base metal zonation above tin mineralisation means high in system
- Infill drill holes also providing sample for initial comminution testing





# DRILLING FOCUS NOW ON SEVERN

- ZS132 intersected 14m @ 1.4% tin from 333m to 347m
- Drill direction at right angles to historical drilling to test vein orientation
- High-grade veins parallel and at high angle to the deposit strike
- ZS137 intersected three tin zones: 2m @ 0.7% tin,
  3m @ 0.5% tin and 5m @ 0.6% tin
- Multiple tin zones show continuity with historical drill results above and below ZS137
- Cassiterite occurs in veins and as void infill

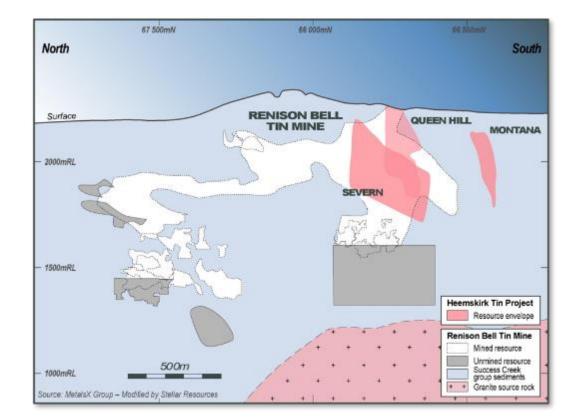




## DARE TO DREAM - THE NEXT RENISON?

### COMPARISON WITH RENISON SHOWS THAT KNOWN DEPOSITS AT HEEMSKIRK ARE JUST THE START-MINERALISATION AT RENISON OVER 1200m VERTICALLY FROM SURFACE

- Australia's oldest and largest Sn mine is located 18km away to the NE of the Heemskirk Sn project
- Same geology and structural setting for Heemsksirk and Renison
- Renison started with a 5 year mine life in 1965 producing 5ktpa Sn – i.e. an ore reserve of 25kt
- Renison has now produced over 250kt Sn in the 50 years since it started and has 166kt Sn in resources
- New ore is being discovered at Renison today between the north and south deposits
- The Heemskirk deposits are shown superimposed on the Renison long section and at 72kt Sn represent just 20% of the Sn found at Renison



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## 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", "expect", "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

JORC 2012 RESOURCE STATEMENT CORPORATE OVERVIEW BOARD OF DIRECTORS

# JORC 2012 CONFIRMS RESOURCE QUALITY

Classification	Deposit	Tonnage	Total Sn	Contained	d Cassiterite <sup>1</sup>	Cu	Pb	Zn	S	SG
		mt	%	Snt	% of total Sn	%	%	%	%	mg/l
Indicated	Upper Queen Hill	0.47	1.15	5,000	91	0.12	1.3	0.81	13.80	3.72
	Lower Queen Hill	0.82	1.42	12,000	99	0.03	0.22	0.23	17.91	3.45
Total Indicated		1.29	1.32	17,000	96	0.06	0.61	0.44	16.55	3.55
Inferred	Lower Queen Hill	0.35	1.50	5000	98	0.04	0.14	0.09	16.9	3.31
	Severn	4.03	0.97	39000	99	0.06	0.03	0.05	8.34	3.18
	Montana	0.68	1.56	11000	96	0.07	0.72	1.18	17.8	3.68
Total Inferred		5.06	1.09	55000	98	0.06	0.13	0.25	10.23	3.26
Total Indicated	+ Inferred	6.35	1.13	72,000	97	0.06	0.23	0.29	11.48	3.32

1.cassiterite = (total Sn% - soluble Sn%)/total Sn%

2. block cut-off grade of 0.6% tin

3. tonnes rounded to reflect uncertainty of estimate

4. estimates prepared by Resource and Exploration Geology

## 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**

Share price (1-Nov-17)	A\$0.16
Number of shares	379.7m
Market capitalisation	A\$6.1m
Cash (30-Sep-17)	A\$2.2m
Debt (30-Sep-17)	No Debt
Enterprise value	A\$3.9m

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%

## EXPERIENCED AND MULTI-DISCIPLINARY WITH STRONG GLOBAL CONNECTIONS BOARD OF DIRECTORS



#### PHIL HARMAN, NON-EXECUTIVE CHAIRMAIN 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

# STELLAR

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