

# Updated Heemskirk Tin Scoping Study Confirms Attractive Economics

## Scoping Study Parameters - Cautionary Statements

The Scoping Study referred to in this announcement has been undertaken for the purpose of ascertaining whether a business case can be made to proceed to more definitive studies on the viability of the Heemskirk Tin Project. It is a preliminary technical and economic study of the potential viability of project and is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Further exploration and evaluation work and appropriate studies are required before Stellar will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

The Scoping Study referred to in this announcement has been undertaken to determine the potential viability of the Heemskirk Project comprising a tin mine and processing plant constructed in Tasmania, Australia, and to reach a decision to proceed with more definitive studies. The Study for the Project has been prepared to an intended accuracy level of  $\pm 35\%$ . The results should not be considered a profit forecast or production forecast.

The Scoping Study is a preliminary technical and economic study of the potential viability of the Project. In accordance with the ASX Listing Rules, the Company advises it is based on low-level technical and economic assessments that are not sufficient to support the estimation of Ore Reserves. Further evaluation work including infill drilling and appropriate studies are required before Stellar will be able to estimate any Ore Reserves or to provide any assurance of an economic development case.

Approximately 97% of the total production targets are in the Indicated Mineral Resource category with 3% in the Inferred Mineral Resource category. 97% of the production target in the first 12 years is in the Indicated Mineral Resource category. The Company has concluded that it has reasonable grounds for disclosing a production target which includes an amount of Inferred Mineral Resource. However, there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work (including infill drilling) on the Heemskirk Project will result in the determination of additional Indicated Mineral Resources or that the production target itself will be realized.

The Scoping Study is based on the material assumptions outlined elsewhere in this announcement. These include assumptions about the availability of funding. While Stellar considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range outcomes indicated in the Scoping Study, additional funding will likely be required. Investors should note that there is no certainty that Stellar will be able to raise funding when needed. It is also possible that such funding may only be available on terms that dilute or otherwise affect the value of Stellar's existing shares. It is also possible that Stellar could pursue other 'value realisation' strategies such as sale, partial sale, or joint venture of the Project. If it does, this could materially reduce Stellar's proportionate ownership of the Project.

The Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a reasonable basis to expect it will be able to fund the development of the Project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

## Heemskirk Prefeasibility Study Focused on Project Optimisation Underway Following Robust Updated Scoping Study Results

### HIGHLIGHTS:

- Updated Scoping Study incorporates September 2023 Mineral Resource Estimate (MRE<sup>1</sup>), **utilising only Indicated Resource<sup>2</sup> material**, as well as updated capital and operating estimates.
- The study confirms potential for the Heemskirk Tin Project to generate solid Base Case financial returns over a **12 year mine life**, at an average production rate of **350ktpa**, producing **22,818t of tin** in concentrate over the Life of Mine (LOM).
- Competitive LOM all in sustaining costs (AISC) of approximately **US\$18,260/tonne** of recovered tin (all-inclusive to a sold product<sup>3</sup>).
- Low capital cost requirement of approximately **A\$71 million**.
- Base Case pre-tax **NPV<sub>8%</sub> of A\$122m** and pre-tax **IRR of 33%** at US\$28,000/t tin price.
- Spot Price pre-tax **NPV<sub>8%</sub> of A\$190m** and pre-tax **IRR of 46%** at US\$32,000/t tin price.
- **Low environmental impact** – underground mine, small surface footprint and 100% renewable power.
- Significant additional upside potential through re-classification of large Inferred Mineral Resource<sup>1</sup>(**3.96Mt @1.03% Sn (40,881t contained tin)**) not included in Base Case study.
- Prefeasibility Study (PFS) commenced to investigate:
  - Increased mining rates - Scoping study indicates potential for mining at over 750ktpa.
  - Optimising plant size and capacity along with potential applicability of other infrastructure within the region.
  - Incorporation of ore sorting into the process flow sheet.
  - Application of mining paste/fill as an alternate to tails deposition.
  - Converting additional Inferred Resource tonnes to the Indicated category.
- 9,500 metre drill program underway targeting conversion of Inferred Resource to a higher classification and to provide material for metallurgical and geotechnical work.
- All baseline environmental studies reinitiated and underway.
- PFS targeted for completion in second half 2025.
- Well funded with \$12.3 million cash to advance Heemskirk towards being development ready.

<sup>1</sup> SRZ ASX Announcement 4 September 2023 – Heemskirk Tin Project MRE Update

<sup>2</sup> Mining schedules utilised Indicated Resource material and only incorporated Inferred material when encountered as part of development. 97% of material used in the study is of an Indicated Resource classification

<sup>3</sup> All in sustaining cost (AISC) includes mining, processing, concentrate transport and smelting, sustaining capital and royalties

## **Stellar's Executive Chairman Mr Simon Taylor commented:**

*"We are extremely pleased with the encouraging robust economics revealed by the updated Scoping Study that focused on a base case scenario of mining and processing 350kt pa of ore.*

*"The updated capital and operating cost estimates indicate a low pre-production capital cost of \$71m and an all-in-sustaining cash operating cost of US\$18,260/t tin including smelter costs. This places Heemskirk in the lower half of peer group companies globally with an ability to survive lower tin price cycles and capture large upside from rising tin prices.*

*"The study mining schedule has been built on the Indicated Resource only with first ore to the processing plant expected to occur approximately 6 months from the start of decline development and concentrate sales should commence approximately 3 months later.*

*"Over half of the Mineral Resource at Heemskirk is in the Inferred category with large upside potential through converting further tonnes to the Indicated category to not only extend mine life but also provide an opportunity to increase mining production rates, with initial results indicated that mining at 750ktpa is achievable.*

*"The study results strongly support our decision to initiate a Prefeasibility study last month to advance Heemskirk to be development ready. This work will focus on increased mining rates, optimising plant size and adding ore sorting to our process flow sheet.*

*"The Company is fully funded to complete the ongoing work and with 2 drilling rigs currently on site we look forward to updating our investors and the market as we continue to progress the project."*

**Stellar Resources Limited (ASX: SRZ, “Stellar” or the “Company”)** is pleased to announce positive results from its updated Scoping Study on the Heemskirk Tin Project. The Study examines the potential development of the 100% owned Heemskirk Project in the mining friendly jurisdiction of Zeehan, in Western Tasmania. The Study confirms that Heemskirk shows robust economics and confirms the Company’s strategy to commence a Prefeasibility Study with workstreams underway.

The Heemskirk Tin Project is based on development of an underground mine, processing plant, tailings storage facility and surface infrastructure to mine ~ 350ktpa ore from the Queen Hill and Severn tin deposits (2 of the 4 Heemskirk deposits), producing tin concentrate to be trucked to the port of Burnie for export. The Study has been updated from the 2019 Study, incorporating the September 2023 Mineral Resource Estimate (MRE) and **utilising Indicated Resource<sup>2</sup>** for scheduling over a **12 year mine-life**, as well as updated capital and operating estimates.

The Heemskirk Tin Project Scoping Study resulted in:

- An all in sustaining cost (AISC) of ~US\$18,260/t recovered tin (all-inclusive to a sold product<sup>3</sup>).
- A base case pre-tax NPV<sub>8%</sub> of approximately A\$122M (post-tax NPV<sub>8%</sub> of approximately A\$75), at a tin price of US\$28,000, determined to an accuracy of ±35%. The pre-tax IRR of the project is approximately 33% and a payback period is approximately 3.5 years. Capital cost required for the project is approximately A\$71M.
- A spot case, at a tin price of US\$32,000, estimated a pre-tax NPV<sub>8%</sub> of approximately A\$190M (post-tax NPV<sub>8%</sub> of approximately A\$123M), determined to an accuracy of ±35%. The pre-tax IRR of the project is approximately 46% and a payback period is approximately 2.8 years.

First ore to the processing plant is expected to occur approximately 6 months from the start of decline development and concentrate sales should commence approximately 3 months later.

Incorporation of Inferred classification material into the mining schedule would result in a mine life of over 20 years at the investigated 350ktpa production rate. Review of the mining production rates indicate that mining at over 750ktpa could be achievable allowing for increased production scenarios.

The Company has commenced collection of data for incorporation into a Prefeasibility Study (PFS). The PFS will investigate:

- Increased mining rates.
- Optimising plant size and capacity along with applicability of other infrastructure within the region.
- Incorporation of ore sorting into the process flow sheet.
- Application of mining paste/fill as an alternate to tails deposition.

**Table 1: Heemskirk Scoping Study - Key Outcomes.**

	Unit	Total LOM
Ore Production	(kt)	3,894
Sn Grade (LOM Ave)	(%)	0.78
Tin Recovery (LOM Ave)	(%)	0.75
Tin Produced	(Tonnes)	22,818
Mine Life	(Yrs)	12
Tin Price	(US\$/t)	28,000
Exchange rate	USD:AUD	0.67
Tin Price	(A\$/t)	41,791
Gross Revenue	(A\$M)	877
Total Operating Costs (AISC)	(A\$M)	489
<b>Total Operating Costs (AISC)</b>	<b>(US\$/t Sn)</b>	<b>18,260</b>
Operating Cash Flow	(A\$M)	389
Operating Margin	(%)	44%
<b>Capital Cost</b>	<b>(A\$M)</b>	<b>71</b>
<b>Net Cash Flow (Pre-Tax)</b>	<b>(A\$M)</b>	<b>267</b>
<b>Pre-Tax NPV<sub>8%</sub></b>	<b>(A\$M)</b>	<b>122</b>
<b>Post-Tax NPV<sub>8%</sub></b>	<b>(A\$M)</b>	<b>75</b>
<b>IRR (Pre-Tax)</b>	<b>(%)</b>	<b>33</b>
<b>Payback Period</b>	<b>(Yrs)</b>	<b>3.5</b>
<b>Pre-Tax NPV / Capex</b>		<b>1.7</b>

**Table 2: Sensitivity of NPV (A\$M) and IRR to Tin Price.**  
(at 30/08/2024 spot LME tin price is US\$32,425/t Sn)

	Tin Price (US\$/t Sn)				
	26,000	28,000	30,000	32,000	34,000
<b>NPV Pre Tax</b>	87	122	156	190	225
<b>IRR Pre Tax</b>	26%	33%	39%	46%	52%
<b>NPV Post Tax</b>	51	75	99	123	147
<b>IRR Post Tax</b>	20%	26%	31%	36%	41%
<b>Payback</b>	4.25	3.50	3.00	2.75	2.50

at Exchange Rate AUD:USD 0.67

– ENDS –

This announcement is authorised for release to the market by the Board of Directors of Stellar Resources Limited.

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# HEEMSKIRK PROJECT

## 2024 UPDATED SCOPING STUDY

### Executive Summary

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Heemskirk is the third highest grade undeveloped tin project in the world and ranks top three in the global development queue<sup>3</sup>. Stellar has advanced Heemskirk along the development path by defining a Mineral Resource Estimate (MRE) of 7.48Mt @ 1.04% Sn<sup>4</sup> and is progressing environmental baseline and permitting processes as well as early workstreams for inclusion into a Prefeasibility Study (PFS).

The key findings from the Heemskirk Tin Project Scoping Study are summarised in Table 1 and demonstrate the economic potential of the Project. The project has a total life of mine ore production of 3.9Mt, using Indicated classified Resources, mined and processed at a rate of ~350ktpa over a 12-year mine life.

Life of mine tin in concentrate production is estimated to be ~22,818t at a competitive all-in sustaining cash cost (AISC) of ~US\$18,260/t of contained tin. The AISC compares favourably with a Scoping Study tin price assumption of US\$28,000/t and bottom of the cycle prices of ~US\$16,000/t Sn.

On a low pre-production capital base of A\$71M, the Heemskirk Tin Project generates a pre-tax NPV<sub>8%</sub> of approximately A\$122M (post-tax NPV<sub>8%</sub> of approximately A\$75M), at a tin price of US\$28,000/t, to an accuracy of ±35%. The pre-tax internal rate of return of the project is approximately 33%. The ratio of pre-tax NPV<sub>8%</sub> to pre-production capital of approximately 1.7 and the 3.5-year payback of capital are also attractive metrics for the Heemskirk Tin Project.

### Location and Mining Leases

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The Heemskirk Tin Project Scoping Study is based primarily on mining the Queen Hill and Severn Tin Deposits, which lie within ML2023P/M immediately northwest of Zeehan, on the West Coast of Tasmania. The Montana Tin Deposit, also within ML2023P/M, and the Oonah Tin Deposit in EL13/2018 are not included in this study. Figure 1 shows the proposed processing plant site within ML2023P/M (yellow dot) and its connection to the proposed tailings disposal site within ML2M/2014 via a pipeline route (blue line) secured by ML2040P/M. All the Heemskirk ML's provide exclusive access to tin and are valid to January 2029 with an ability to renew.

Ore from the satellite St Dizier Tin Deposit, located 20km to the northwest of Zeehan (see Figure 1), previously included in the 2019 Scoping Study, has not been incorporated in this study. With the increased MRE at Queen Hill and Severn, the resource at St Dizier is not

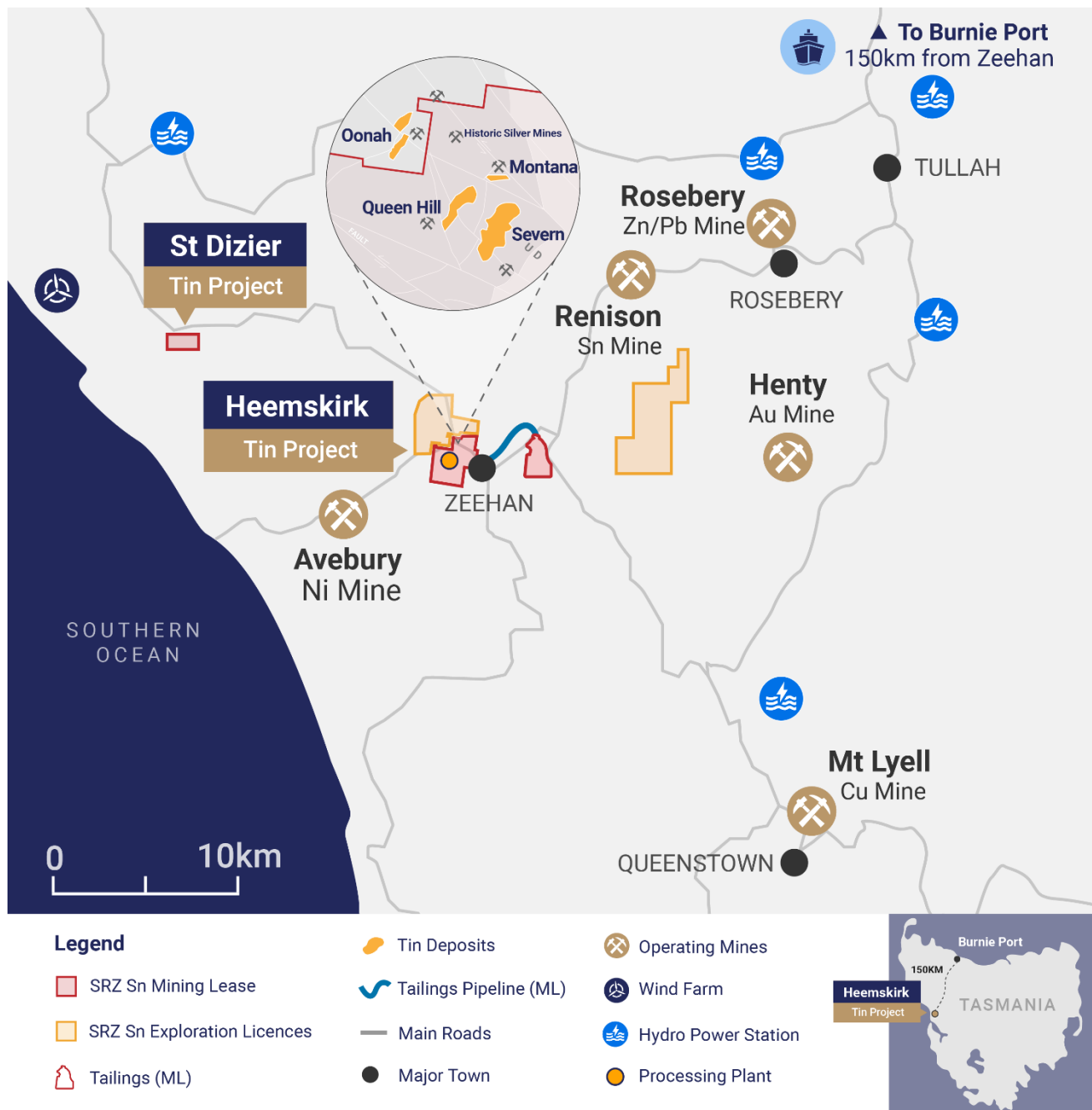
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<sup>3</sup> SRZ Corporate Presentation – 20240507 - <https://www.stellarresources.com.au/asx-announcements-weblink/>

<sup>4</sup> SRZ ASX Announcement 4 September 2023 – Heemskirk Tin Project MRE Update



required within the first 10 years of the proposed mining schedule at Heemskirk. St Dizier will have its own study and workstreams to run independently of the Heemskirk Project studies.





## Project Outline

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The Heemskirk Tin Project is based on the development of an underground mine, processing plant, tailings storage facility and surface infrastructure to mine ~350ktpa ore from the Queen Hill and Severn Tin Deposits (2 of the 4 Heemskirk deposits) over a 12 year mine-life, producing tin concentrate to be trucked to the port of Burnie for export.

The following Base Case has been selected for the Heemskirk Scoping Study:

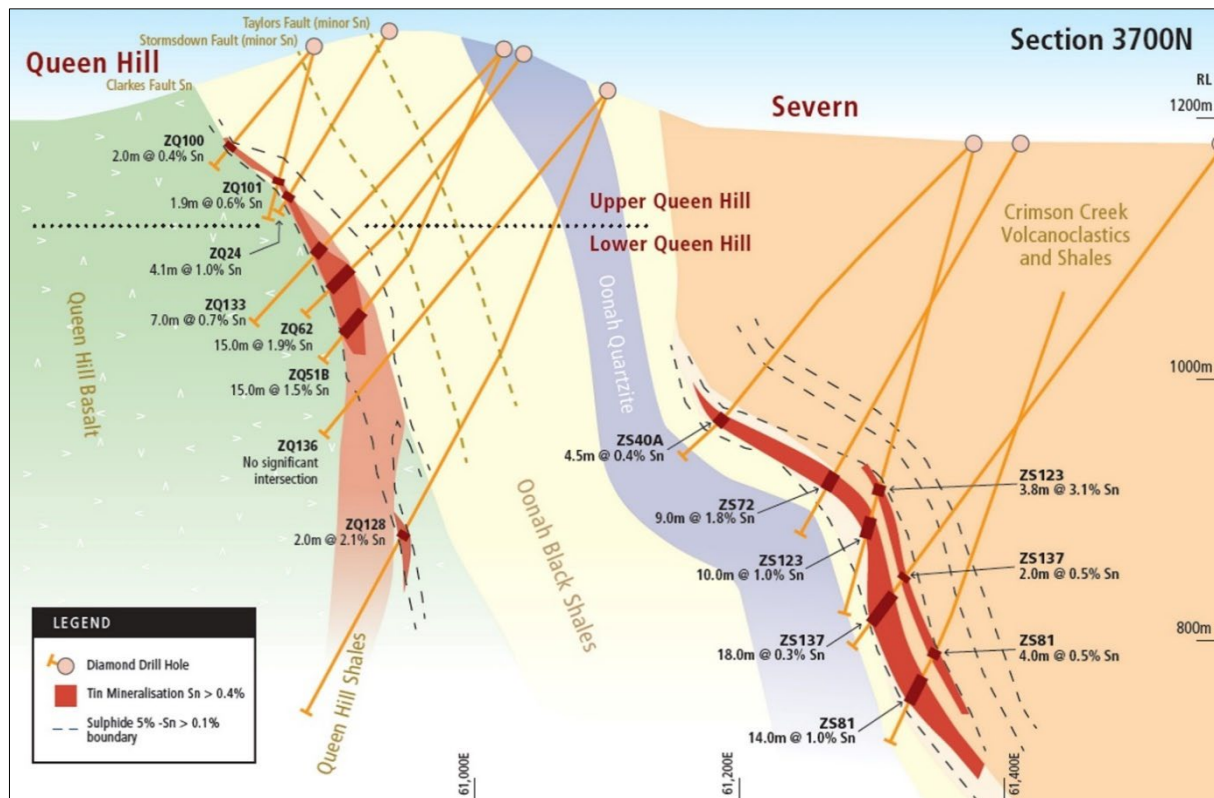
- The 12 years of the project are based on mining the Queen Hill and Severn Deposits (2 of the 4 Heemskirk deposits) utilising Indicated Resource category mineralisation for scheduling.
- Development of an underground mine commencing at Upper Queen Hill with access from surface via a single decline portal. Access to Severn is later developed via an underground connection from the Queen Hill decline and an internal decline at Severn.
- Mining is via the long hole stoping underground mining method and at a nominal production rate of 350ktpa ore mined.
- Ore is treated at a processing plant to be constructed adjacent to the decline portal on the west side of Queen Hill.
- Tin concentrate from the processing plant will be trucked to the Port of Burnie, located 150km to the north via a sealed road and exported to smelters in Asia.
- Tailings will be thickened and pumped to the proposed tailings disposal site using a 6.7km long slurry pipeline.
- Development and incorporation of resources at St Dizier, Montana or Oonah are not included as part of this study.

Upside schedules have also been developed with promising results. An Inferred Inclusive Case and an Accelerated Inferred Inclusive Case have been developed.

- The Inferred Inclusive Schedule includes a mine design on the Indicated (as per the base case) and Inferred material in the Mineral Resource for both Queen Hill and Severn deposits; and:
  - Adds 3.6 Mt to the schedule.
  - The mine life extends to 22 years.
  - The majority of the extension occurs in Severn, with an additional 2.8Mt highlighting the potential for infill and extensional drilling.
- An Accelerated Inferred Inclusive Schedule assesses the ability for the mining of the Inferred Inclusive Case to be performed at a higher rate. The schedule allowed for unconstrained output, with constraints only on individual activities (ie no capping of equipment). It demonstrated that:
  - The Inferred Inclusive Case has sufficient metal per vertical metre to produce at +600ktpa.
  - At 600ktpa, the mine life was reduced to 13 years.

## Geology and Exploration

The Heemskirk Tin deposits are granite related cassiterite and base metal stockwork and replacement style mineralisation hosted in older sediments and volcanoclastics of the Zeehan Sub Basin, Western Tasmania. Mineralisation is generally stratabound.



**Figure 2: Schematic Geological Cross-Section 3700N, Showing Queen Hill and Severn Tin Deposits.**

A schematic geological W-E cross section through the Queen Hill and Severn Deposits included in this Scoping Study is shown in Figure 2.

At the date of the September 2023 MRE, a total of 69 diamond drillholes (26,551m) have been completed by Stellar over the Heemskirk deposits since 2010. A further 133 historic diamond drillholes (31,485m) have been completed prior to 2010 by other companies over the Heemskirk deposits.

Mineralisation in all the Heemskirk Tin Deposits remains open down dip and down plunge, with Stellar currently drilling at Heemskirk to extend mineralisation and further improve the geological model.

Renison Tin, Australia's oldest and largest tin mine is located 18km to the NE of Heemskirk and shares the same ore genesis and geology. The Heemskirk deposits have been drilled to a depth of 630m through the mineralised zone and are open at depth to granite source rocks assumed from geophysics to be  $\approx 1$ km from surface. Renison started with a 4.0Mt Reserve or 5-year mine life in 1968 and successful underground exploration has increased mine life to 50 years with at least another 15 years to go.

## Resources

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### Heemskirk Mineral Resources (Queen Hill and Severn Deposits)

An updated total Mineral Resource Estimate (MRE) reported according to the 2012 JORC Code was announced in September 2023. The updated MRE for the Severn, Queen Hill and Montana deposits has been estimated by Independent Technical Consultant, Ross Corben from Geowiz Pty Ltd.

This MRE provided a 24% increase in contained tin in the Indicated Mineral Resource component from the November 2022 MRE and a 58% increase from the 2019 MRE, which was used in the previous 2019 Scoping Study.

The total MRE for the Project reported at a 0.6% cut-off is 7.48Mt @ 1.04% Sn, for 77,872t contained tin. This includes an Indicated Resource of 3.52Mt @1.05% Sn (36,991t contained tin).

This Scoping Study and upside options are based on mining the Indicated and Inferred Mineral Resources from only 2 of the Heemskirk deposits; Queen Hill (Upper and Lower) and Severn which have a combined Resource of 6.80Mt @ 0.99% Sn of which 55% is in the Indicated category.

The Montana Tin deposit included in Table 3 below, has not been included in this Scoping Study as it has had less drilling undertaken and remains at a purely Inferred Mineral Resource level.

There has been no material change to the assumptions since the resource estimate was completed in September 2023.

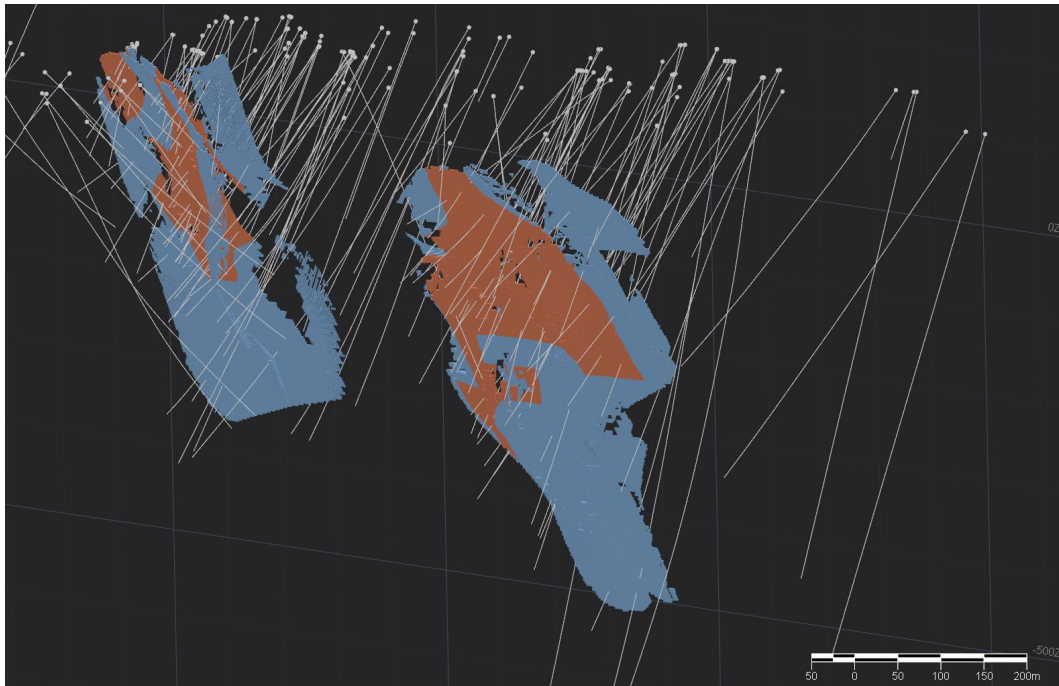
**Table 3: Heemskirk Tin Project Mineral Resource Statement (0.6% Sn cut off), September 2023<sup>5</sup>.**

By Classification	Deposit	Tonnes	Sn (%)	Contained Sn (t)	Cassiterite % of Total Sn (%)	Cu (%)	Pb (5)	Zn (%)	Resource Date
Indicated	Upper Queen Hill	0.37	1.07	3,991	88	0.14	1.84	0.72	2023
	Lower Queen Hill	0.81	1.30	10,493	97	0.04	0.29	0.35	2023
	Severn	2.33	0.96	22,507	96	0.07	0.02	0.03	2023
<b>Sub Total</b>	<b>Indicated</b>	<b>3.52</b>	<b>1.05</b>	<b>36,991</b>	<b>97</b>	<b>0.07</b>	<b>0.27</b>	<b>0.18</b>	
Inferred	Upper Queen Hill	0.14	0.92	1,332	89	0.12	1.70	0.39	2023
	Lower Queen Hill	0.77	1.16	8,873	98	0.04	0.21	0.12	2023
	Severn	2.37	0.85	20,234	99	0.05	0.02	0.04	2023
	Montana	0.68	1.54	10,443	96	0.08	0.72	1.42	2019
<b>Sub Total</b>	<b>Inferred</b>	<b>3.96</b>	<b>1.03</b>	<b>40,881</b>	<b>98</b>	<b>0.05</b>	<b>0.23</b>	<b>0.30</b>	

<b>Grand Total</b>	<b>Heemskirk Tin Project</b>	<b>7.48</b>	<b>1.04</b>	<b>77,872</b>	<b>97</b>	<b>0.06</b>	<b>0.25</b>	<b>0.25</b>	
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By Deposit	Deposit	Tonnes (Mt)	Sn (%)	Contained Sn (t)	Cassiterite % of Total Sn (%)	Cu (%)	Pb (5)	Zn (%)	Resource Date
Sub Total	Queen Hill	2.09	1.18	24,689	96	0.06	0.63	0.34	2023
Sub Total	Severn	4.71	0.91	42,741	99	0.06	0.002	0.04	2023
Sub Total	Montana	0.68	1.54	10,443	96	0.08	0.72	1.42	2019
<b>Grand Total</b>	<b>Heemskirk Tin Project</b>	<b>7.48</b>	<b>1.04</b>	<b>77,872</b>	<b>97</b>	<b>0.06</b>	<b>0.25</b>	<b>0.25</b>	

<sup>5</sup> SRZ ASX Announcement 4 September 2023 – Heemskirk Tin Project MRE Update



**Figure 3: Heemskirk September 2023 MRE Model @ 0.6% Sn Cut-off Grade. Looking to north-east. (Brown – Indicated, Blue – Inferred). Queen Hill deposit on left, Severn Deposit on right.**

## Mining

### Heemskirk

A mining study on the Queen Hill and Severn deposits, based on the updated September 2023 Heemskirk MRE, was recently completed by technical consultants, Mining One. Mining One have previously undertaken mining studies on the Project in 2014, 2016 and 2019 and the inputs developed from these previous studies were used in the 2024 mining study.

The 2024 mining study included:

- Verification and update of assumptions from previous studies.
- Review and verification of the 2024 block model for mining process interrogation work.
- Update of mining cut-off grades.
- Running Mining Stope Optimiser (MSO) on the updated 2024 resource model with previously established stoping parameters and updated cut-off grades.
- Modifying mine development designs from previous studies to suit revised stoping areas, running a number of Life of Mine (“LOM”) schedules including:
  - Indicated resources only in the schedule.
  - Inferred and Indicated material mined where it fell in the sequence.
  - Acceleration options.
- Calculating mining physicals based on the revised stopes and schedules.
- Running a mining cost model and determination of mining operating cost and capital cost estimates.

## Mining Method

A long hole stoping underground mining method with cemented rock fill in all stopes was selected for this scoping study. Subsequent study work will optimise the backfill, with paste fill being a credible option as tonnes increase through conversion of Inferred to Indicated.

## Mining Cut-Off Grade Determination

The breakeven cut-off grades as shown in Table 4 were estimated using mill recovery and tin price information provided by Stellar. A lower, 0.25% Sn cut-off grade was applied to development material.

**Table 4: Heemskirk Tin Project – Cut-Off Grade Inputs.**

	Severn	Upper Queen Hill	Lower Queen Hill
Mining Dilution	10%	10%	10%
Mill Recovery	79.5%	53%	66%
Tin Price (Sn) A\$/t: US\$/t	\$44,200 : \$28,700		
Smelting costs % of value	5.60%	5.60%	5.60%
Total Royalties	6.55%	6.55%	6.55%
Revenue (A\$) from 1t Sn payable	\$18,521	\$18,521	\$18,521
Revenue from (A\$) 1 t ore @ 1% Sn	\$275	\$183	\$228
Mining (A\$/t)	\$76.5	\$76.5	\$76.5
Milling (A\$/t)	\$44.5	\$44.5	\$44.5
Admin (A\$/t)	\$4.5	\$4.5	\$4.5
<b>Total Operating (A\$/t)</b>	<b>\$126</b>	<b>\$126</b>	<b>\$126</b>
<b>Cut-off Grade %Sn</b>	<b>0.46%</b>	<b>0.69%</b>	<b>0.56%</b>

## Mining Stope Optimisation

Mining stopes were optimised using the Datamine Mining Shape Optimiser (MSO) to provide indicative mining shapes using the following parameters:

- Minimum stope width 2m
- Stope height 20m
- Strike length 15m
- Pillar width 5m
- Cut-off grades as per Table 4



## Mine Development

Mining One reviewed the previously built development designs and made adjustments for the new Resource and stope optimisation.

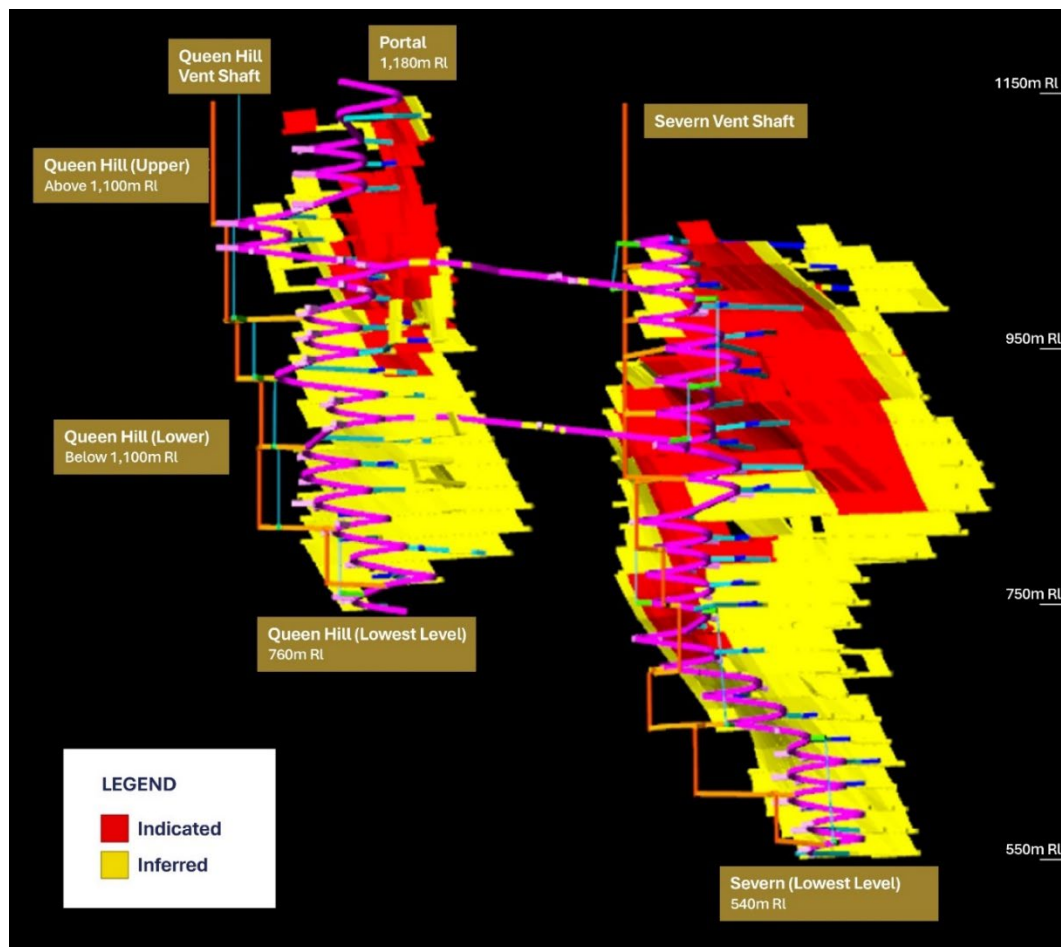
The Scoping study has mine access via a single decline portal to Queen Hill with an initial underground connection access to Severn, followed by an internal decline at Severn and a second connection from Queen Hill to Severn for recovery of upper Severn later in mine life. Mine ventilation is provided by using two exhaust shafts connected to surface respectively for Queen Hill and Severn and an emergency escape way system has been designed as a second egress and fresh air intake.

In the new study, sublevel development dimensions have been kept the same at 4.5mW x 4.5mH with decline development dimensions at 5.5mW x 5.5mH. With the extension of underground inventory, Mining One has updated the conceptual development design with features listed below (Figure 1):

- Extend development and infrastructures down to 540mRL in Severn and 760mRL in Queen Hill Lower.
- Adjusted level accesses and ore drives location for more efficient tonne-kilometre haulage.
- Maximized NPV due to lower capital development costs and early/sufficient ore feeding with high grade.

The extended development covers all the mineral resources but only extends as far as required for the Base Case, which incorporates only Indicated Resources.





**Figure 4: Conceptual Heemskirk Mine Design Showing Stopes based on Indicated Mineral Resource (Red) and Inferred Mineral Resource (Yellow).**

## Mining Schedules

A mining schedule for the scoping study was generated from the updated stoping and development design using the parameters outlined in Table 5.

**Table 5: Heemskirk Tin Project - Mining and Development Parameters.**

Area	Cut-off Grade %Sn	Mining Dilution	Mining Dilution Grade	Mining Recovery
Queen Hill Upper	0.75	10%	0% Sn	90%
Queen Hill Lower	0.60			
Severn	0.50			
Development	0.16	0%	0% Sn	100%

A 0.16% Sn grade was used as a cut-off for development material. This is based on the incremental cost of haulage to surface less backfill placement and treating material through the processing plant. As a result, some of this material may be of lower head grade. This may not form part of primary plant feed if the mill is running at capacity. It would likely be held in stockpile until spare mill capacity is available so that it does not displace higher-value primary feed tonnes.

Table 6 shows the development of the total scheduled inventory from the 2019 Scoping Study and the changes resulting from the update of MRE, and 2024 cut off grades to the 2024 mining schedules total inventory for the Base and Upside schedules case.

**Table 6: Heemskirk Tin Project – Comparison of scheduled mineralisation from 2019 and 2024 Base Case and Upside Changes with mineralised inventory with change from 2019 to 2023 MRE and with changes of Cut of Grade assumptions from 2019 to 2024.**

Study	Tonnes (kt)			Grade % Sn		
	Indicated	Inferred	Total	Indicated	Inferred	Total
<b>2019</b>	1,746	1,540	3,286	0.99	0.90	0.95
<b>2024 Base Case</b>	3,770	124	3,894	0.81	0.28	0.80
<b>2024 Upside Case</b>	4,133	3,332	7,464	0.76	0.67	0.72

Production schedules for the Queen Hill and Severn deposits were developed based on the following parameters:

- Annual ore production rates of approximately:
  - Base – 350ktpa utilising Indicated material only (unless inferred was encountered as part of development).
  - Inferred Inclusive - 350ktpa utilising all classified material.
  - Accelerated Inferred Inclusive – unconstrained ktpa output utilising all classified material.
- Priority of production by higher value i.e. grade and soonest access.
- Jumbo development capacity: 275m/Jumbo/month.
- Single heading maximum advance: 120m/month.
- Stope resources (drilling, blasting and bogging) capacity: 1,800t/d; and
- Single stope capacity: 300t/d.

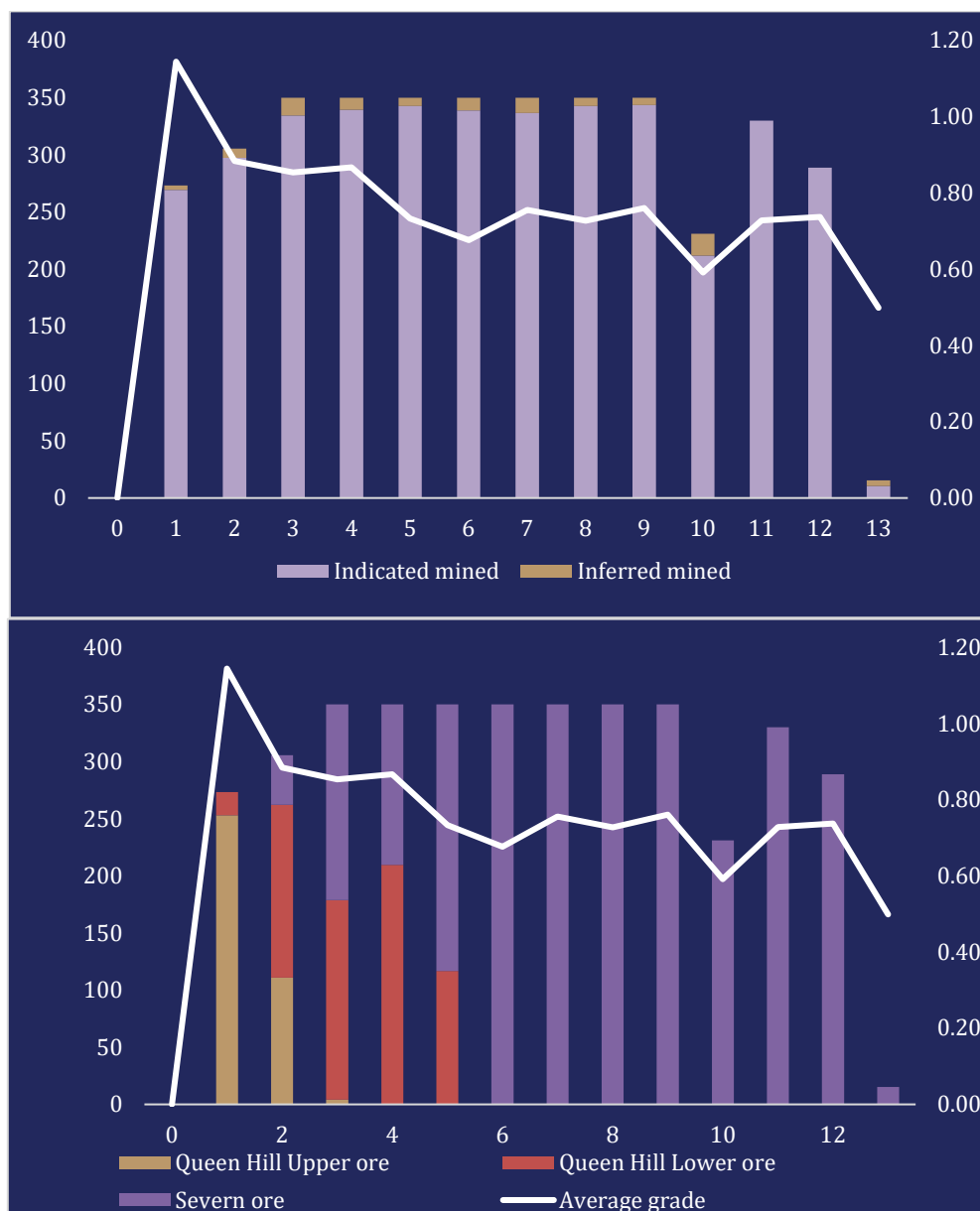
Scheduling was undertaken utilising Deswik. The schedule for the Base Case was constrained to deliver 350ktpa.

The Base Case considered a 350ktpa schedule utilising only Indicated material, unless Inferred material was encountered as part of development. This case was chosen to demonstrate that the project is robust under a conservative approach. The Base Case provides a mine life of 12 years, incorporating only 3% of Inferred material, and has been used as the primary basis for the economic modelling in following sections.

The upside Inferred Inclusive 350ktpa schedule, utilising all Indicated and Inferred material, provided a 22 year mine life. The Indicated portion of the mill feed was 55% over the LOM, however only 6% over the first five years, which covers the payback period of the mine.

With the long mine life when utilising all material, the upside Accelerated Inferred Inclusive case with a 600ktpa schedule was developed to explore the technical and economic capability of the deposit to be mined at a higher rate. This provided a 13-year mine life and demonstrated the ability for further studies to be undertaken at a higher production rate.

The Base Case mining schedule for Queen Hill and Severn includes total mining inventory of 3.89Mt @0.80% Sn after application of the modifying factors (mining dilution, recovery factors and mining cut-off grades) described above. The Base Case mining schedule for Queen Hill and Severn extends for a 12-year mine life at a nominal 350ktpa annual production rate as shown in Figure 5.



**Figure 5: Preliminary Base Case Production Schedule by classification and by deposit (350ktpa).**

During the 12 years of mine life, a small quantity (0.11Mt) of Inferred Mineral Resource is required to be mined as part of the ore drives needed to access Indicated Mineral Resource ore stopes. Given the small quantity of Inferred Mineral Resource development ore, it is incorporated into the schedule as it is encountered.

The Base Case mining inventory contains:

- 97% of total ore mined from Indicated Mineral Resources.
- 3% of total ore mined is from Inferred Mineral Resources.

The Inferred Mineral Resource is not material to the viability of the Heemskirk Project. The Heemskirk project is viable based purely on the Indicated Mineral Resource, and the payback period of approximately 3.5 years is based on a schedule purely designed on the Indicated Mineral Resource. This may well be improved in the PFS by targeting Severn earlier and deferring expenditure on Queen Hill development, primarily due to the improved metallurgical recovery of Severn.

**Cautionary Note:** There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the production target itself will be realised.

## Mining Cost Model

Outputs from the Queen Hill and Severn (Heemskirk) mining schedule were loaded into a cost model developed as part of the 2019 Scoping Study. Unit rates were indexed for inflation by approximately 23% from the 2019 costs. With the potential for significant expansion of the mine production rates over the Base Case, the cost model was amended to incorporate additional technical overheads and mining equipment to ensure optimal productivities at rates above the model developed in 2019. The 2024 cost model, differs from the 2019 model which utilised an owner operator scenario, and is based on a mining contractor rates for underground mine at Heemskirk with key results including:

- Heemskirk LOM Mining Capital Development Cost of A\$43.6M (capital development and pre-production operating development).
- Mining Related Capital Costs of A\$10.8M for:
  - Workshop, changeroom and offices for mining personnel; including civils, water, compressor etc.
  - Connection to grid power and transformer.
  - Primary vent fans.
  - Stellar Resources light vehicles.
- Total Mining related Capital cost on a LOM per tonnes basis is A\$14/t.
- Heemskirk Mining Operating Cost of A\$64/t including contract mining costs for development and stoping which includes:
  - the major mining mobile equipment costs (not a capital cost to the project).
  - operating personnel.
  - plant maintenance and operating costs.
  - mining consumables.
  - backfill costs, including cement.
  - Contractor management and supervisory personnel.
  - Heemskirk mining administrative, management and technical personnel.
  - Minor contractor fleet ownership costs.
  - Power.
  - Grade control.

## Metallurgy

### Heemskirk

The Heemskirk Tin Project's Queen Hill and Severn Tin Deposits are broadly similar with cassiterite being the principal tin mineral (97% of total tin) in association with coarser grained sulphides (pyrite and pyrrhotite), silicates and carbonates (siderite) and accessory fluorite and rutile. Minor amounts of lead and zinc sulphide occur in the Upper Queen Hill Deposit but become less common below 1100RL.

Between 2010 and 2013, Stage 1 metallurgical test work was conducted on drill core under a number of programs at ALS Metallurgical Laboratory in Burnie, Tasmania. These programs identified three ore types that largely varied on the basis of cassiterite grain size and liberation characteristics. Upper Queen Hill is the finest ore type with >50% cassiterite liberation not seen until a grind size of <53µm compared to Severn at the coarser end of the range at >50% liberation <75µm. Subsequent test work on Lower Queen Hill showed cassiterite grain size between these end members.

In 2013, GR Engineering reviewed the initial programs conducted on all ore types. Following that review, Worley Parsons supervised an optimisation testing program covering 8 diamond drill holes across the Severn deposit that led to a material upgrade in expected recovery from 74% to 80% for Severn ore. In 2015, Worley supervised a test program on diamond drill core from the Lower Queen Hill deposit and reviewed test results from Upper Queen Hill resulting in expected recoveries of 66% for Lower Queen Hill and 53% for Upper Queen Hill.

Table 7 summarises the recovery and concentrate grade estimates from test work completed and the Life of Mine average head grades for each ore type.

**Table 7: Average Head Grade, Recovery and Concentrate Grade by Deposit.**

Parameter	Unit	Upper	Lower	Severn	LOM
		Queen Hill	Queen Hill		Schedule
Head Grade	% Sn	0.99%	1.04%	0.71%	<b>0.78%</b>
<b>Recovery</b>	<b>%</b>	<b>53%</b>	<b>66%</b>	<b>80%</b>	<b>75%</b>
Conc Grade	% Sn	48%	48%	49%	<b>49%</b>

In 2017 and 2018, preliminary test work on ore sorting technology was conducted on split and broken core samples from Lower Queen Hill and Severn by Tomra and Steinert Australia using their respective technologies. The results for both technologies were encouraging and support further testing once more sample is available. Ore sorting technology is not included in the current processing flowsheet or the Scoping Study results.

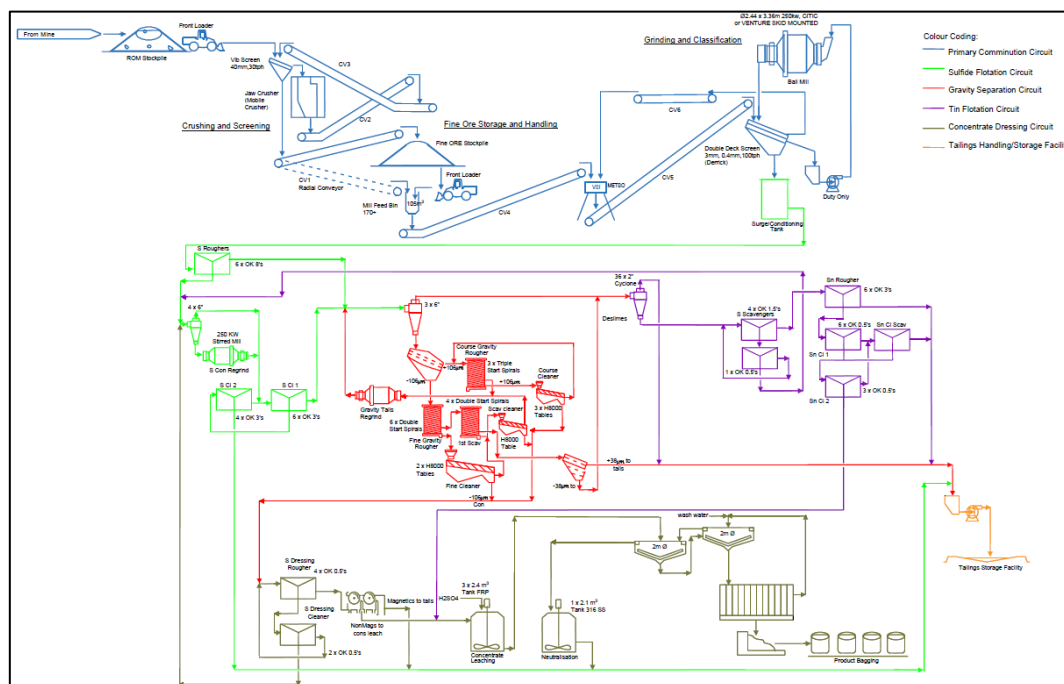
Drill core from the 2023 drill programs along with core derived from the 2024 drilling program is being utilised in further metallurgical work to assess metallurgical variability and as inputs to the upcoming Prefeasibility Study.

## Processing Plant

### Process Plant Flowsheet

Due to similarities between ore types, metallurgical test work at Heemskirk has used a modified version of the Renison Tin processing flowsheet. The Renison plant has operated for more than 50 years and under-gone several adaptations over its history to deal with changing ore-types. Such demonstrated flexibility will be a significant advantage for the Heemskirk processing plant.

The flowsheet for the Heemskirk processing plant was designed by GR Engineering and later reviewed by Mincore in July 2016 and 2024 as shown in Figure 6.



**Figure 6: Heemskirk Tin Project – Process Flow Diagram (Mincore).**

The main elements of the Heemskirk processing plant flowsheet include:

- 2 stage crushing followed by grinding (open-circuit rod mill feeding a closed-circuit ball mill).
- Primary sulphide flotation, regrind of sulphide concentrate and flotation of fine sulphide.
- Coarse and fine gravity separation using spirals and wet tables to produce a concentrate.
- Gravity middling regrind and recycle.
- Flotation of deslimed fine cassiterite.
- Sulphuric acid leach of concentrate to remove carbonate.
- Concentrate dressing using sulphide flotation and magnetic separation.



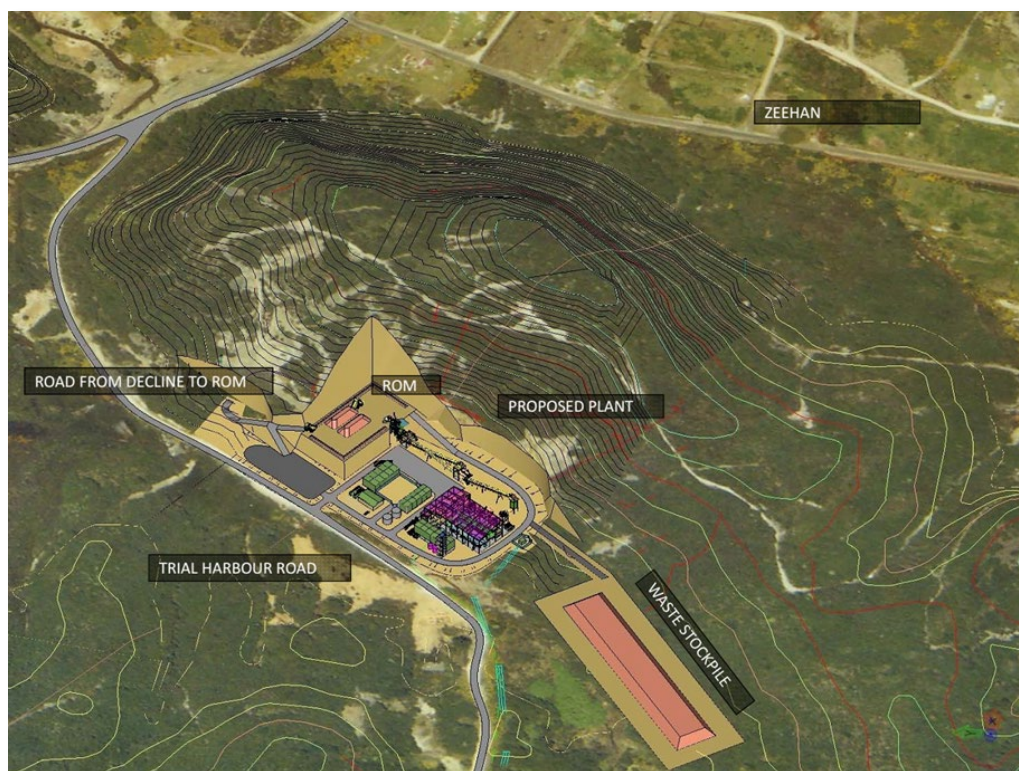
## Processing Plant and Surface Infrastructure Capital Cost Estimate

In July 2016, engineering consultants, Mincore, completed plant layout, typical equipment drawings and a +/-35% capital cost estimate for a 200ktpa Heemskirk Processing Plant and Surface Infrastructure based on the Mincore processing plant flowsheet shown in Figure 6. An illustrative view of the processing plant and surface infrastructure designed by Mincore is shown in Figure 7.

Mincore were re-engaged by Stellar in August 2019 to scale their June 2016 estimate up to a 350ktpa Heemskirk Processing Plant and Surface Infrastructure capital cost estimate.

Mincore were then re-engaged by Stellar in May 2024 to update the re-estimate of the capital cost estimate to 2024 dollars (this study). The resultant estimate provided by Mincore is considered to be a Class 5 estimate or Scoping Study under the AUSIMM guidelines. The recommended accuracy of the estimate is therefore between  $\pm 30\%$  to  $35\%$ .

The Mincore (May 2024) 350ktpa Processing Plant and Surface Infrastructure capital cost estimate as shown in Table 8, includes the processing plant, site infrastructure and buildings, concentrate handling, tailings handling and the 6.7km tailings pipeline.



**Figure 7 : Proposed Heemskirk Tin Processing Plant (Mincore).**

The Mincore (June 2024) 350ktpa Processing Plant and Surface Infrastructure capital cost estimate excluded the following items which have been estimated separately and included in the Processing Plant and Surface Infrastructure capital costs in the Project Economics section:

- HV power supply to the site - Connection to the grid via an existing transformer station is available through TasNetworks at indicative costing of A\$0.7m.
- Workshops and Stores - The Mincore 2019 estimate was increased by A\$0.28m (to A\$0.36m), plus 10% contingency, to cater for owner operated mining equipment maintenance.
- Site laboratory - an internal estimate of A\$0.52m plus 10% contingency was included for an on-site laboratory.

**Table 8: 350ktpa Heemskirk Processing Plant & Surface Infrastructure  
Capital Cost Estimate (Mincore, 2024).**

Description	Cost (A\$ 000's)
Bulk Earthworks	320
Crushing and Grinding	620
Sulphide Flotation	800
Gravity Separation	3,470
Tin Flotation	3,100
Concentrate Dressing, Filtration & Handling	980
Reagent Systems	770
Power & Reticulation	2,320
Water Supply	2,030
Tailings Treatment and Pipeline	1,150
Fuel Farm	1,290
Compressed Air	1,610
Site Buildings	810
Mobile Plant Equipment	1,730
Plant Piping	5,460
Construction Equipment	530
Contingency	3,730
<b>Subtotal Direct Cost</b>	<b>36,650</b>
Engineering	4,250
Commissioning	1,410
Preliminaries & General	1,420
Owners Costs	1,380
<b>Subtotal Indirect Cost</b>	<b>8,450</b>
<b>Total Base Case</b>	<b>45,100</b>

*Includes contingency of 1,890*

## Processing Plant Operating Cost Estimate

Mincore also completed an operating cost estimate for a 350ktpa Heemskirk Processing Plant based on scaling and updating the first principle components of a previous 200ktpa Heemskirk Processing Plant operating cost estimate completed by Worley Parsons in 2015 and updated by Mincore in 2019. The Mincore (2024) operating cost estimate for a 350ktpa Heemskirk Processing Plant is shown in Table 9.

**Table 9: 350ktpa Heemskirk Processing Plant Operating Cost Estimate (Mincore, 2024).**

Input	A\$/t ore	%
Labour	8.4	19%
Power	6.9	16%
Reagents & Grinding Media	18.8	43%
Maintenance	3.8	9%
Linings	1.7	4%
Other	3.8	9%
<b>Subtotal</b>	<b>43.5</b>	<b>100%</b>

## Tailings

### Tailings Pipeline

Tailings will be thickened to recover process water and pumped via a 6.7km slurry pipeline to the planned tailings storage facility located within ML 2M/2014. Tailings water is to be reclaimed from the tailings storage facility and pumped back via return water pipeline for use in the process. Capital and Operating cost estimates for the tailings pipeline are included in the Mincore 2024 Processing Plant and Surface Infrastructure sections above.

Waste rock is to be used as mine fill.

### Tailings Storage Facility

An area has been selected for a tailing's storage facility located in a concealed valley on crown land with no competing land use and no observed endangered flora or fauna. The site is secured by ML2M/2014 and has no observed geological structures that might make the site unsuitable. The valley is naturally shaped to contain tailings with only a relatively small embankment required to be constructed at the northern limit, minimising the cost of construction, as shown in Figure 8.

A route selection, design and capital cost estimate for the tailings pipeline and tailings storage facility construction was completed by GHD Engineering for John Miedecke and Partners in July 2015.

Initially the embankment at the northern end of the tailing's storage facility would only need to be constructed to a height of 5-10m. This would need to be increased up to 20m high over the life of the mine. Volume estimates show that the proposed tailings storage facility should have in excess of 25 years storage capacity at a process plant production rate of 600ktpa (almost twice the 350ktpa rate that this Scoping Study is based on).

GHD Engineering (July 2015) estimated the capital cost for the Tailings Facility as A\$1.4m for the initial embankment construction. Stellar has increased this amount by the same inflation factor utilised by Mincore in the process re-estimate and has added a further 10% contingency to this.

GHD Engineering (July 2015) also estimated a further cost to increase the Tailings Facility embankment height about half-way through the mine life of A\$2.8m. Stellar has increased this cost estimate by the same inflation factor utilised-by Mincore in the process re-estimate plus a further 10% contingency added by Stellar, has been included in year 4 of the project. This has been included as a sustaining capital and allocated to operating costs (see Project Economics section).

The current design for does not include any requirement for lining being incorporated into the design or costs. This will be reviewed as part of the PFS work streams and updated environmental studies.



**Figure 8: Proposed Heemskirk Tailings Storage Facility Plan (Initial Stage) and Site Photograph.**



## Mine Surface Infrastructure

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Zeehan is serviced with good all-weather roads, communication services and town water.

Adequate power is available for the project through the nearby 22kV state grid. Connection to the grid has been included in the Processing Plant & Surface Infrastructure capital cost estimate.

Process water reticulation and recycling, potable water supply and reticulation and fire water supply and reticulation has been included in the Mincore Processing Plant and Surface Infrastructure capital cost estimate.

The following site infrastructure and building are included in the Mincore Processing Plant and Surface Infrastructure capital cost estimate; site earth works, site roads, surface water catchment, administration building, workshop and stores, site ablutions, crib room, mill control room, furniture and equipment and an oil separator.

Costs for a site-laboratory and increased workshop and stores were estimated internally by Stellar and added to the Mincore Processing Plant and Surface Infrastructure capital cost estimate as described in the section above.

Employee accommodation is not included in the capital cost estimate for the Heemskirk Tin Project as it is assumed that Zeehan and nearby Queenstown has sufficient surplus housing (30% of homes are unoccupied) to accommodate the work force. The West Coast Council is supportive of using the existing housing stock in Zeehan.

## Concentrate Transport

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The combined concentrate from the Heemskirk processing plant is to be filtered to remove moisture and packed in bulk bins for road transport to Burnie. In Burnie, the concentrate is transferred to shipping containers for export to smelters in SE Asia or China.

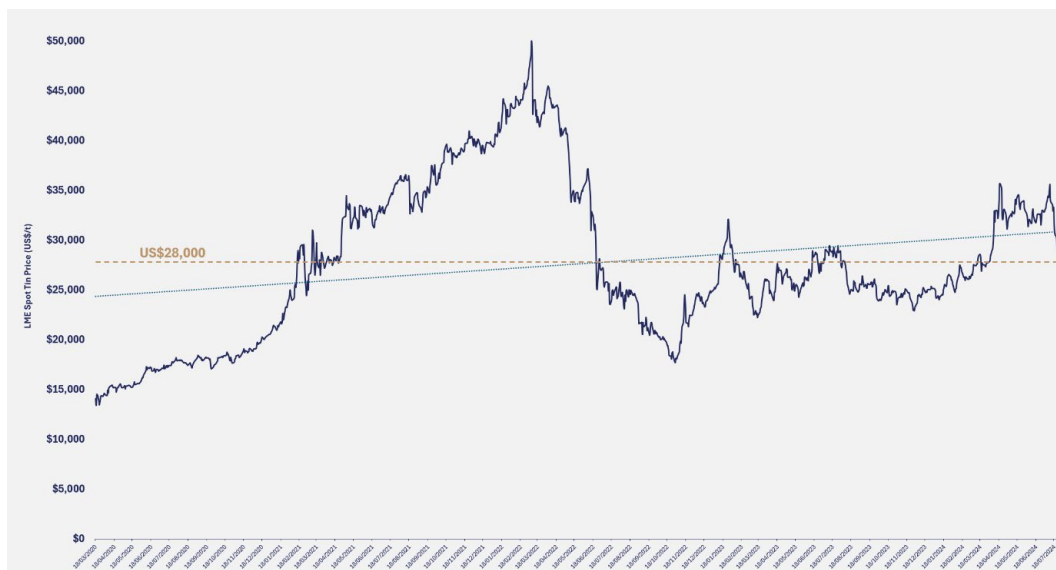
Zeehan has over 100 years of mining history and three operating mines within 30km. The port of Burnie is 150km to the north of Zeehan and has adequate services to handle containerised shipments of Heemskirk concentrate. The two towns are connected by a recently upgraded all-weather road and several trucking contractors operate on this route to service the concentrate transport requirements of the existing mines.

## Marketing

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A tin price of US\$28,000/t has been used as the Base Case for this Scoping Study.

As shown Figure 9, the US\$28,000/t Base Case tin price selected for this study is well supported by recent historical prices, which has seen the LME tin price reach a high of over US\$50,000 in March 2022. The average tin price over the last 4 years has been US\$28,674.



**Figure 9 : LME spot Tin Price<sup>6</sup>. The LME spot price as at 29/8/2024 if US\$32,605/t Sn.**

Concentrate transport costs for (a) trucking of concentrate from Zeehan to the port of Burnie, and (b) shipping costs to smelters in Asia based on indicative rates for container shipping were obtained for the 2019 scoping study. These costs have been inflated and a transport cost of \$154/t have been incorporated.

Smelter treatment charges of 8.0% of the gross revenue have been included in the economic evaluation. This is based on indicative treatment and refining terms provided by an Asian tin smelter.

## Environment

In the 1890s, the Heemskirk Project area was the site of numerous silver-lead workings with five significant underground mines. Since then, the site has undergone extensive rehabilitation including the removal of surface structures, the capping of several mine shafts and natural revegetation.

Between 2009 and 2019 Stellar Resources commissioned several environmental baseline studies to support a Notice of Intent (NoI) lodged with EPA Tasmania. These baseline studies included:

- A Preliminary Environmental Review (PER), which outlined the requirement for studies to investigate flora and fauna, aboriginal heritage, water quality, tailing storage site suitability and acid mine drainage, which were undertaken as outlined below:
  - Flora and Fauna studies were undertaken for the site of the tailing's storage facility and the mine infrastructure area. No significant occurrence of endangered species was noted during the surveys.

<sup>6</sup>[https://www.westmetall.com/en/markdaten.php?action=table&field=LME\\_Sn\\_cash](https://www.westmetall.com/en/markdaten.php?action=table&field=LME_Sn_cash)

- Water quality monitoring (acidity and metal content) and biodiversity surveys were undertaken at several sites within the Queen Hill catchment area.
- An archaeological survey of historical mine sites was conducted in 1999 over much of the Heemskirk project area by Mineral Resources Tasmania. The survey included much of the Queen Hill and Oonah deposit areas and the location of the proposed processing plant. The survey did not include the Severn deposit area. The survey recommended that several historical mine sites be protected. It is not anticipated that the sites recommended for protection would materially impact the Project. Despite this, the report recommended an archaeological survey of the full project area be undertaken.
- An Aboriginal Heritage Assessment for the proposed tailings pipeline route was undertaken in 2017. No significant aboriginal heritage sites were found along the route. Additional surveys are planned for the mine infrastructure area and the tailings storage facility.
- An environmental geochemical assessment of mine rock types and tailings was undertaken to determine the acid generating capability of all potential waste material and determine appropriate management strategies.
- A geological survey was undertaken at the site of the proposed tailings storage facility. The survey concluded that it was topographically suitable. Subsequent flora and fauna surveys added to the site's merit.

In December 2019, Stellar withdrew its Nol and environmental investigations were paused. These investigations recommenced in 2024.

Given the age of some existing studies and the impact of changed State and Federal environmental regulations, Stellar has opted to update several baseline studies and commence more detailed studies to support a new Nol. The Nol will be lodged prior to commencing the Environmental Impact Study (EIS). Works commenced or out for tender currently include:

- Surface Water Quality Monitoring
- Groundwater Monitoring
- Biodiversity & Natural Values Assessment
- Aboriginal Heritage Assessment
- European Heritage Assessment
- Noise and Vibration Assessment
- Air Quality Assessment.
- Traffic Impact Assessment
- Waste Management

Additional studies required for the EIS will likely include Greenhouse Gas Emissions & Climate Change, Socio-economic Impact Assessment, Visual Impact Assessment, Community & Stakeholder Consultation, Hazard Analysis & Risk Assessment, Mine Closure & Rehabilitation.



The majority of these investigations will not be finalised until details of the PFS have been finalised and project specific guidance has been provided by EPA Tasmania.

## Community

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The Heemskirk tin deposits surround Queen Hill, a prominent topographical feature ~70m elevation, that marks the northwest extremity of Zeehan. Housing is sparse on the town side of Queen Hill and non-existent on the northwest side of the Hill.

All surface infrastructure including the mine portal, processing plant, surface stockpiles, workshops and offices are sited on the northwest side of Queen Hill south of the Trial Harbour Road. The location will help to prevent the transmission of noise and dust emissions into the town precinct. Mine access routes are also designed to prevent any interaction between mine vehicles and private vehicles.

Underground mine development, particularly of the Severn tin deposit, will extend below the sparsely populated town side of Queen Hill. Much of this activity will occur below 200m from the surface and should have no impact on surface dwellings and which will be further confirmed in the planned noise and vibration assessment.

Zeehan has a population of approximately 700 people, many of whom are involved in the mining industry. Stellar has conducted a number of diamond drilling programs on the town side of Queen Hill with the cooperation and support of local residents.

Completion of this Scoping Study provides the initial concept plans for the mine and the point at which Community engagement and input will be sought for discussion.

## Project Economics

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### Summary

An economic evaluation of the Heemskirk Tin Project has been undertaken by Stellar based on the scoping study input assumptions described in this announcement. The base case valuation results, as at the date of the construction decision point, and payback from commencement of plant production, are shown in Table 10. The valuation results have an accuracy of  $\pm 35\%$ .

**Table 10 : Heemskirk Tin Project – Summary of Technical and Financial Parameters.**

	Unit	Total LOM
Ore Production	(kt)	3,894
Sn Grade (LOM Ave)	(%)	0.78
Tin Recovery (LOM Ave)	(%)	75
Tin Produced	(Tonnes)	22,818
Mine Life	(Yrs)	12
Tin Price	(US\$/t)	28,000
Exchange rate	USD:AUD	0.67
Tin Price	(A\$/t)	41,791
Gross Revenue	(A\$M)	877
Total Operating Costs (AISC)	(A\$M)	489
<b>Total Operating Costs (AISC)</b>	<b>(US\$/t Sn)</b>	<b>18,260</b>
Operating Cash Flow	(A\$M)	389
Operating Margin	(%)	44%
<b>Capital Cost</b>	<b>(A\$M)</b>	<b>71</b>
<b>Net Cash Flow (Pre-Tax)</b>	<b>(A\$M)</b>	<b>267</b>
<b>Pre-Tax NPV<sub>8%</sub></b>	<b>(A\$M)</b>	<b>122</b>
<b>Post-Tax NPV<sub>8%</sub></b>	<b>(A\$M)</b>	<b>75</b>
<b>IRR (Pre-Tax)</b>	<b>(%)</b>	<b>33</b>
<b>Payback Period</b>	<b>(Yrs)</b>	<b>3.5</b>
<b>Pre-Tax NPV / Capex</b>		<b>1.7</b>

At an All-In Sustaining Cost (AISC) of approximately US\$18,260/tonne of tin produced over the Life of Mine, the Heemskirk Tin Project Base Case generates an attractive expected operating margin of approximately 44% based on the US\$28,000/t tin price assumed.

The Heemskirk Tin Project Scoping Study has demonstrated attractive economics with a Base Case pre-tax NPV<sub>8%</sub> of approximately A\$122M, at a tin price of US\$28,000, determined to an accuracy of ±35%. The pre-tax IRR of the project is approximately 33% and the payback period is approximately 3.5 years. The project has a Base Case post-tax NPV<sub>8%</sub> of approximately A\$75M utilising a 30% tax rate, carried forward expenditure of \$21m at the project level and depreciation over the life of the project.

Using a 'spot-case' price of US\$32,000/t Sn results in pre-tax NPV<sub>8%</sub> of approximately A\$190M, a pre-tax IRR of approximately 46% and a payback period of approximately 2.75 years. The Projects 'spot-case' post-tax NPV<sub>8%</sub> is approximately A\$123M.

## Development Capital Costs

A breakdown of the Development Capital Cost estimate is shown in Table 11. (note: Capital Costs are also stated in US\$ for comparison purposes). The accuracy of the capital cost estimate is up to ±35%.

**Table 11 : Heemskirk Tin Project – Capital Cost Summary.**

	(A\$M)	(US\$M)
Mining	11	7
Processing & Surface Infrastructure	40	27
Tailings	6	4
Working Capital	12	8
Contingency	2	1
<b>Total Development Capital Cost</b>	<b>71</b>	<b>48</b>

The capital cost estimates for the project have been estimated using a combination of first principals, quotes and industry benchmarks as follows:

- Mining capital cost estimated by Mining One (see Mining section). The A\$11M Mining capital cost is the full mining cost for the first 5 months of the operation which has been capitalized.
- Processing Plant and Surface Infrastructure capital cost primarily estimated by Mincore (see Processing Plant and Surface Infrastructure Capital Cost Estimate section).
- Tailings capital cost – Includes tailings pipeline cost estimated by GHD Engineering and scaled by Mincore (see Processing Plant and Surface Infrastructure Capital Costs section) and tailings storage facility costs estimated by GHD Engineering with contingency added by Stellar (see Tailings section).
- Working Capital cost – working capital comprises A\$8M mining costs and A\$4M of processing costs during the first two quarters of the project from commencement of commissioning the processing plant, and a sufficient stockpile is built to commence concentrate sales and undertake shipping from the project.
- Contingency – Contingency totalling A\$2.2M (4.8%) has been included in the Processing Plant & Surface Infrastructure and Tailings Capital Cost estimates.

## Operating Costs

A breakdown of the Operating Cost estimate is shown in Table 12. The accuracy of the operating cost estimate is up to ±35%.

**Table 12: Heemskirk Tin Project – Operating Costs Summary.**

	Total LOM (A\$M)	Annual Ave (A\$M)	A\$/t Ore	A\$/t Sn	US\$/t Sn
Mining	303	25.3	78	13,288	8,903
Processing	169	14.1	43	7,406	4,962
Concentrate transport & smelting	83	7.0	21	3,657	2,450
Sustaining Capital	9	0.7	2	378	253
Royalties	57	4.8	15	2,518	1,687
<b>Total All In Sustaining Cash Costs (AISC)</b>	<b>622</b>	<b>52</b>	<b>160</b>	<b>27,247</b>	<b>18,256</b>

Operating costs estimates for the project have been estimated using a combination of first principals and industry benchmarks as follows:

- Mining costs are inclusive of sustaining mining development capital costs.
- Processing Plant and Tailings pipeline operating cost estimated by Mincore (see Processing Plant Operating Cost section).
- Administration cost estimated internally and incorporated into the mining and processing costs.
- Concentrate transport and treatment costs (see Marketing section).
- Royalties including:
  - Mineral Resources Tasmania published mineral royalty rates of 5.35% on revenues net of realisation costs.
  - Vendor royalty of 1.23% on revenues net of realisation costs and state royalties.
- Non-mining sustaining Capital cost estimated internally based on industry rule of thumb (2.0% pa of the total development capital cost). In addition, deferred capital expenditure of A\$4.0M in year 7 for increasing the tailings storage embankment height (see Tailings section), has been included as sustaining capital and included in the Total All-In Sustaining Cost (AISC).

## Sensitivity Analysis

The two most sensitive factors in the Heemskirk Tin Project Scoping Study valuation are the London Metal Exchange tin price and the USD:AUD exchange rate with project costs being denominated in Australian dollars. Table 13 shows the likely range of pre-tax NPV<sub>8%</sub> outcomes for variations of  $\approx 15\%$  below the Base Case tin price of US\$28,000/t Sn, through the current spot price of approximately US\$32,000/t Sn and up to  $\approx 7\%$  above the spot price at a USD:AUD exchange rate (0.67).

**Table 13 : NPV<sub>8%</sub> (A\$M) Sensitivity to (\$US/t) Tin Price at 0.67 AUD:USD Exchange rate.**  
(at 29/08/2024 spot LME tin price is US\$33,605/t Sn)

	Tin Price (\$/t Sn)				
USD	26,000	28,000	30,000	32,000	34,000
AUD	38,810	41,790	44,780	47,760	50,750
NPV Pre Tax	87	122	156	190	225
IRR Pre Tax	26%	33%	39%	46%	52%
NPV Post Tax	51	75	99	123	147
IRR Post Tax	20%	26%	31%	36%	41%
Payback	4.25	3.50	3.00	2.75	2.50

The projects costs are denominated in Australian dollars and the project has a sensitivity to the US dollar exchange rate. Table 14 shows the Australian dollar tin price at a range of US\$ denominated Sn prices and AUD:USD exchange rates. The Australian dollar prices have been coloured to indicate at what prices the project is uneconomic, marginal and likely viable. The Australian dollar prices for the base case and spot scenarios are highlighted in blue indicating a range of viable pricing.

**Table 14 : Australian dollar Sn price (Au\$/t). Unhighlighted cells have a Post-tax NPV>A\$30M, Yellow cells have post-tax NPV of >\$0M, Red cells have a negative NPV and would be expected to be a non-viable project. Base Case and 'spot price' price assumptions highlighted in Blue.**

	Tin Price (US\$/t Sn)					
AUD:USD Exchange Rate	24,000	26,000	28,000	30,000	32,000	34,000
0.88	27,300	29,500	31,800	34,100	36,400	38,600
0.85	28,200	30,600	32,900	35,300	37,600	40,000
0.82	29,300	31,700	34,100	36,600	39,000	41,500
0.79	30,400	32,900	35,400	38,000	40,500	43,000
0.76	31,600	34,200	36,800	39,500	42,100	44,700
0.73	32,900	35,600	38,400	41,100	43,800	46,600
0.70	34,300	37,100	40,000	42,900	45,700	48,600
0.67	35,800	38,800	41,800	44,800	47,800	50,700
0.64	37,500	40,600	43,800	46,900	50,000	53,100

The sensitivity analysis demonstrates that the project economics remain robust within the tin price and exchange rate scenarios considered, other than at the combination of the highest exchange rate and lowest commodity prices. This combination is considered relatively unlikely and would also make most operating tin producers uneconomic.

## Option Analysis

Mining One studied 3 cases in the 2024 Heemskirk mining study. These included:

- Base Case - 350ktpa Owner Operated Case, using Indicated inventory for scheduling – resulting in a 12 year mine life.
- Inferred Inclusive - 350ktpa Contract Mining Case, using all classes of inventory for scheduling – resulting in a 20+year mine life.
- Accelerated Inferred Inclusive - 600ktpa Contract Mining Case, using all classes of inventory for scheduling – resulting in a 13 year mine life using the same equipment utilisation as the lower production rates. An unconstrained schedule indicated that a mining rate of over 750ktpa could be achievable which will be investigated through the Prefeasibility Study.

## Project Funding

To achieve the range of outcomes indicated in the Scoping Study, funding of capital in the order of A\$71M will likely be required for project development in addition to pre-development funding to support further feasibility studies.

The Australian Institute of Mining and Metallurgy (AUSIMM) provide guidelines for the costs of prefeasibility and feasibility study costs as a percentage of the total capital cost of the project. On the basis of the upper range of a moderate complexity project, the guidelines provide a cost of \$0.5M and \$1.8M dollars respectively for completion of a prefeasibility and feasibility study.

Drilling and further metallurgical studies are also required and already underway.

At the end of August 2024, the Company held a strong cash position of \$12.3 million.

Based on the size of the capital requirement, it is anticipated that the funding will be sourced through a combination of traditional equity and debt instruments from existing shareholders, new equity investment and debt providers from Australia and overseas.

Stellar has formed the view that there is a reasonable basis to believe that requisite funding for development of the Project will be available when required, having considered factors including the following:

- The relatively modest Capital requirement and the quality of the mineral resources used as the basis of the Scoping Study which will be updated and reclassified as the Company progresses to more detailed feasibility studies to further de-risk the project.
- The Company's share of equity financing being raised by share placements, which the Directors believe is reasonable to assume based on the successful track record of the Company and its Directors of raising equity finance in the past.
- The Directors have raised \$14.2 million in funding through 3 share placements in the Company over the past year.
- Strong financial flows in the early years with rapid payback should support a reasonable level of debt financing if required.

- The chance of attracting off-take agreement financing (a common form of financing in the tin industry) as the project moves to final feasibility
- The high internal rate of return, short payback period and relatively low capital requirement of the project that make it attractive for investors looking for tin exposure.
- The current level of engagement of the Stellar board and management with potential strategic partners who may wish to invest.

As referred to above, there is no certainty that Stellar will be able to obtain funding when needed. It is possible that funding may dilute or otherwise affect the value of Stellar's existing shares. It is also possible that Stellar could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Stellar's proportionate ownership of the project.

## Key Risks

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Key project risks are recognised as part of the Scoping Study. These include but are not limited to the following:

### Tin Market and Exchange Rate

The study simply assumes a tin price of US\$28,000/t and an exchange rate of 0.67 US dollars to the Australian dollar will prevail for the life of the project. Stellar believes that these assumptions are a reasonable representation of recent past pricing and notes that past performance is not a predictor of future performance. There is a risk that tin prices or exchange rates could move to adversely affect project economics. In the last 5 years the US\$ 3 month LME tin price has ranged between \$13,950/t and \$47,540<sup>7</sup> and the AUD:USD exchange has ranged between 0.58 and 0.79<sup>8</sup>. The Sensitivity Analysis section shows that the project remains robust over a range of tin prices and exchange rates.

### Metallurgical Recovery

The metallurgical recoveries included in the scoping study for Upper Queen Hill, Lower Queen Hill and Severn are based on initial metallurgical test-work undertaken at a reputable laboratory which Stellar believes are reasonable assumptions. However, more test-work is required to test for variability and to optimise the process flowsheet. Until drill samples are obtained and this stage 2 metallurgical test-work is completed there is a risk to the tin recovery assumption.

### Resource Risk

There is a risk that geological and grade continuity of the Queen Hill and Severn resources may vary from current estimates as further infill drilling is completed. This risk will continue to be addressed in the current drilling programs and studies which may establish Ore Reserves.

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<sup>7</sup> Bloomberg LMSNDS03:COM 5 year chart

<sup>8</sup> Bloomberg AUDUSD:CUR 5 year chart



## Environment

Initial environmental surveying undertaken up until 2019 has been undertaken and concluded that there are no environmental issues that would prevent development of the Heemskirk project.

Updating to current standards of studies, environmental surveying, including more testing of the acid generating capacity of the various mine waste rock types, will be conducted in accordance with EPA guidelines and compiled into an environmental impact statement submission to the EPA and the West Coast Council in support of final mining approvals.

Until the environmental surveys are completed there remains a risk to the cost of waste storage, final tailing dam construction requirements or other potential environmental issues arising from the surveys resulting in potential delays in obtaining regulatory approvals.

## Funding

The Scoping Study assumes that Stellar obtains funding to; (a) progress the project to a development decision and (b) construct the project. There is no certainty that this funding will be available to Stellar in a timely manner for the project.

## Next Steps

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The next step is completion of a Prefeasibility Study, of which workstreams for the provision of metallurgical sample and geotechnical and hydrological information have already commenced. The Company anticipates to complete this in H2 2025.

Key focus points of the PFS work will include:

- Increased mining rates.
- Optimising plant size and capacity along with the applicability of other infrastructure within the region.
- Incorporation of ore sorting into the process flow sheet.
- Development of geotechnical and hydrological inputs for mine design.

Range and scope of the DFS will be based on outcomes of the PFS as well as environmental studies and outcomes.

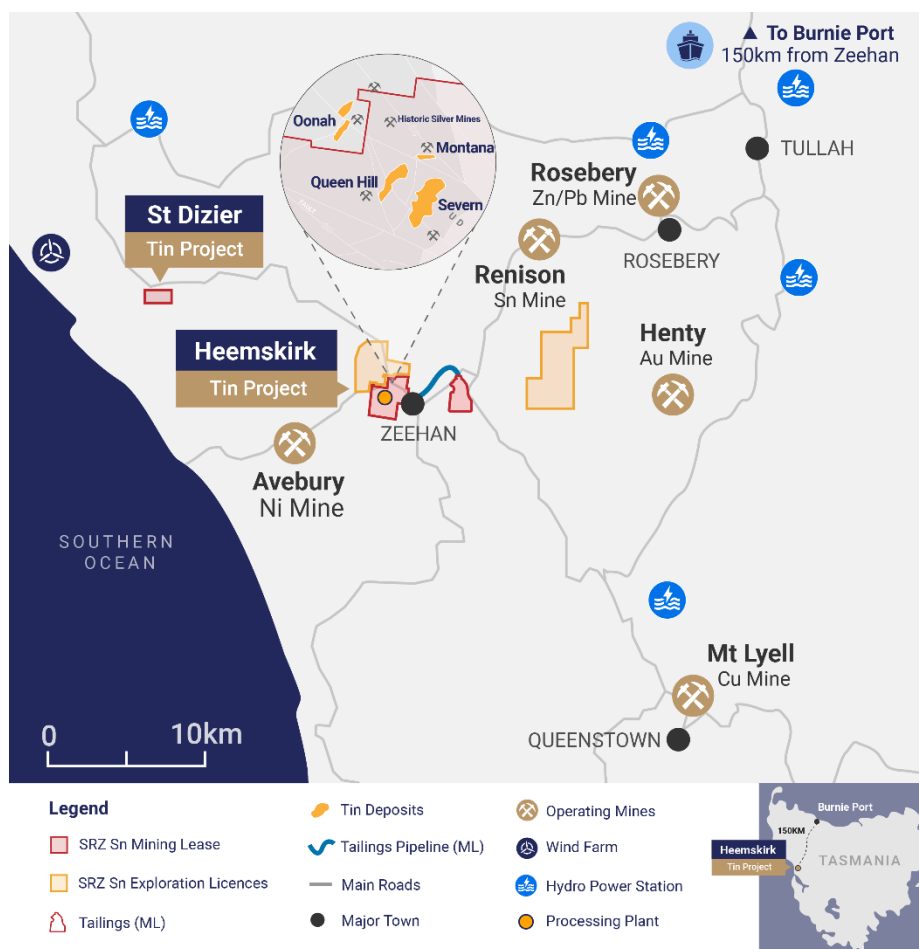
Completion of an Environmental Impact Statement and Environmental Management Plan is required to provide final permitting. Baseline work and studies have already commenced to complete this work.

## About Stellar Resources:

Stellar Resources (**ASX:SRZ**) is focused on developing its world class Heemskirk Tin Project located in the mining friendly jurisdiction of Zeehan, Western Tasmania. The Company has defined a substantial high-grade resource totalling **7.48Mt at 1.04% Sn, containing 77.87kt of tin<sup>9</sup>**. This ranks the Heemskirk Project as the highest-grade undeveloped tin resource in Australia and third globally.

The focus for the Company going forward is to complete exploration and resource drilling to grow the resource and improve the confidence by defining more tonnes in the indicated category. Drilling is also designed to help make Heemskirk development ready by providing key technical inputs for the Prefeasibility Study underway. Currently, a large proportion of the resource is classified in the indicated category totalling 3.52Mt at 1.05% Sn for 37kt of contained tin.

Stellar also made a major discovery at its North Scamander Project in September 2023, with a maiden exploration drillhole intersecting a significant new high-grade silver, tin, zinc, lead and Indium polymetallic discovery. The Company has also delineated multiple down hole conductions via DHEM and FLEM surveys, providing high-priority follow up targets.



**Figure 10 – Stellar Resources Heemskirk Tin Project Location.**

<sup>9</sup> SRZ ASX Announcement 4 September 2023 – Heemskirk Tin Project MRE Update

The Company confirms that it is not aware of any new information or data that materially affects the information included within this announcement.

## Competent Persons Statement – Heemskirk Tin Project

*The information in this announcement that relates to exploration results, exploration targets and mineral resources has been compiled by Mr. Ross Corben who is an independent consultant. Mr. Corben is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are 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 (the JORC Code). Mr. Corben has reviewed the contents of this news release and consents to the inclusion in this announcement of exploration results in the form and context in which they appear.*

## Forward Looking Statements

*This report 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 in this report, the words such as "could", "plan", "estimate", "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 announcement 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.*

# Appendix 1: Material Assumptions

In accordance with ASX Listing Rules 5.16 and 5.17 and in addition to information in JORC Code, 2012 Edition, Table 1 appended to this report, the following table of Material Assumptions is provided.

Criteria	Assumptions
<b>Study Status</b>	<p>The Production Target and financial information in this announcement is based on a scoping study. The scoping study referred to in this announcement is based on low-level technical and economic assessments and is insufficient to support the estimation of Ore Reserves or to provide assurance of an economic development case at this stage or to provide certainty that the conclusions of the scoping study will be realised.</p>
<b>Mineral Resource estimate used for assessment of potential production Target</b>	<p>The preliminary mining used in this study is based on Indicated and Inferred Mineral Resources. Over the 12-year life of the project:</p> <ul style="list-style-type: none"> <li>97% of total ore mined is from Indicated Mineral Resources</li> <li>3% of total ore mined is from Inferred Mineral Resources</li> </ul> <p>The first 4 years of mining are based on 97% Indicated Mineral Resources.</p> <p>The Inferred Mineral Resource is not a determining factor in the viability of the Heemskirk Project. The Heemskirk project is viable based purely on the Indicated Mineral Resource.</p> <p>See Mining Section on page 13 for further details.</p>
<b>Mining factors used in the determination of the Production Target</b>	<p><b>Heemskirk</b> (Queen Hill and Severn) Underground Mining Factors assumed are based on 2024 Mining Study by Mining One (see Mining Section from page 13 for further details):</p> <ul style="list-style-type: none"> <li>Mining Cut-Off Grades <ul style="list-style-type: none"> <li>Severn (0.50% Sn)</li> <li>Upper Queen Hill (0.75%)</li> <li>Lower Queen Hill (0.60%)</li> </ul> </li> <li>Mining recovery 90%</li> <li>Mining dilution 10% (at 0% Sn dilution grade)</li> <li>Minimum stope width 2 m</li> <li>Stope height 20 m</li> <li>Strike length 15 m</li> <li>Pillar width 5 m</li> <li>Decline dimensions 5.5mW x 5.5mH</li> <li>Ore drives dimensions 4.5mW x 4.5mH</li> <li>Jumbo development capacity 275m/Jumbo/month</li> <li>Single heading max advance 120m/month</li> <li>Stoping capacity 1,800t/d</li> </ul>

- Single stope capacity 300t/d
- Mining costs Based on contract mining cost model

Capital cost estimates were developed using a combination of first principals, quotes and industry benchmarks. See page 32 for further details.

Capital costs include:

- Mine development (Heemskirk decline).
- Processing Plant and Surface Infrastructure construction.
- Tailings pipeline and storage facility construction.
- Working Capital (mining and processing costs for months from commencement of mining development).
- Contingency:
  - 4.8% on Process Plant and Surface Infrastructure and Tailings Construction.
  - No specific contingency included on mine development costs.
- Indirect costs (Engineering, Commissioning, Preliminaries and General and Owners Costs) of an additional 23% of Direct Costs included for Processing Plant, Surface Infrastructure and Tailings pipeline.

## Capital Cost Estimates

Ongoing sustaining capital cost are included in operating costs based on industry rule of thumb of 2.0% pa of the total development capital cost.

The costs presented are real costs and are exclusive of escalation. Capital cost has been completed based on estimates of up to ±35% level of accuracy.

Capital costs exclude; head office costs and social responsibility costs.

Operating costs are estimated to production of a London Metal Exchange (LME) tin product delivered to tin smelters in Asia.

Operating costs include:

- Mining Costs
- Processing costs including tailings handling and disposal.
- Transport and shipping of a tin concentrate for smelting in Asia.
- Smelting and refining charges.
- Royalties.

## Operating Cost Estimates

The costs presented are real costs and are exclusive of escalation. The operating cost has been completed based on estimates of up to ±35% level of accuracy.

See page 32 for further details.

<b>Economic Evaluation</b>	<p>Valuations are calculated using discounted cash flow (NPV) and internal rate of return methods. Payback period is also considered. Valuation assumptions include:</p> <ul style="list-style-type: none"> <li>• Discount rate of 8%</li> <li>• Cash flows are pre-corporate tax, real, Australian dollars</li> <li>• Valuation date as at construction decision point</li> <li>• Pay back period from date of plant commissioning</li> <li>• Exchange rate of 0.67 US dollars to the Australian dollar</li> <li>• State Government royalty of 5.35% on revenues net of realization costs</li> <li>• Vendor royalty of 1.23% on revenues net of realisation costs and state royalties</li> </ul> <p>See pages 30 for further details.</p>
<b>Marketing</b>	<p>Concentrate produced in the Heemskirk Processing Plant is to be transported to Burnie by road, containerized and shipped to tin smelters in Southeast Asia and China. The main marketing assumptions are:</p> <ul style="list-style-type: none"> <li>• LME tin sale price of US\$28,000/t of tin</li> <li>• Concentrate transport costs of A\$154/tonne concentrate</li> <li>• Smelting Charges (treatment and refining) of 8% of the LME tin sale price</li> </ul> <p>See page 27 for further details.</p>
<b>Infrastructure</b>	<p>Heemskirk Infrastructure includes; power connection to grid, process water, potable water and fire water systems, site earth works, site roads, surface water catchment, administration building, workshop and stores, site ablutions, crib room, mill control room, furniture and equipment, oil separator, and site laboratory.</p> <p>Employee accommodation is not included as it is assumed that Zeehan has sufficient surplus housing.</p> <p>See page 27 for further detail</p>
<b>Environmental</b>	<p>Environmental surveying up until 2019 has not identified any significant hurdles for the project. Environmental surveying has recommenced and will address the requirements for the preparation of a Notice of Intent to Mine, Environmental Permitting and Planning permissions.</p> <p>See page 28 for further detail</p>
<b>Legal</b>	<p>The Heemskirk Project lies within mining lease ML2023P/M. The proposed tailings disposal site lies within mining lease ML2M/2014 and the proposed pipeline route lies within mining lease ML2040P/M. All the Heemskirk ML's provide exclusive access to tin</p>



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and other metals for an initial period of 12 years and are due for renewal in January 2029.

See page 7 for further detail.

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## Government

Stellar's Mining Leases permit the Company to carry out exploration and sampling in order to complete all studies required for a bankable feasibility study.

Stellar can apply for Mining Permits on acceptance of plans by the Tasmania EPA and the West Coast Council.

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## Appendix 2–Heemskirk Tin Project JORC Code, 2012 Edition–Table 1

### Section 1: Sampling Techniques and Data (criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and Quality of sampling (e.g. cut channels, random chips or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or hand held XRF instruments etc.).</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverized to produce 30g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or sampling types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>The Heemskirk Tin deposits have been delineated entirely by diamond drilling.</li> <li>Numerous drilling campaigns were completed between 1960 and 1992 by Aberfoyle, Gippsland and Abminco.</li> <li>Post 2010, drilling was completed by Stellar with the last drillhole ZS163 completed in 2023 being incorporated into this study.</li> <li>Severn Pre 2010: 24 diamond drill holes for 7,937m.</li> <li>Severn Post 2010: 45 diamond drill holes for 20,597m.</li> <li>Queen Hill Pre 2010: 58 diamond drill holes for 13,206m.</li> <li>Queen Hill Post 2010: 24 diamond drill holes for 5,954m.</li> <li>Logged sulphide and siderite altered zones were selected for geochemical analysis.</li> <li>Approximately 1m samples of 2-3kg were taken from diamond saw cut drill core whilst respecting geological boundaries.</li> </ul>
Drilling Techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka, sonic etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face sampling bit or other type, where core is oriented and if so by what method, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>All drill sampling by standard wireline diamond drilling. All Post 2010 holes oriented by wire line spear and post 2017 drilling oriented using Coretell Gen 4 device.</li> <li>A combination of BQ, NQ, HQ and PQ drill sizes have been utilised, with both standard tube and triple tube drilling used.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximize sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material</li> </ul>	<ul style="list-style-type: none"> <li>Core reconstituted, marked up and recovery measured for all drillholes except earliest drill holes, G1, G3, G4, G11W, G15, G15W, G18, G20, G22, G24, G25, G26, G27 and G33.</li> <li>Recoveries generally excellent (95-100%.)</li> <li>No relationship between recovery and grade was observed.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Geological logging has been carried out on all holes by experienced geologists and technical staff.</li> <li>Holes logged for lithology, weathering, alteration, structural orientations, RQD and mineralisation.</li> <li>All holes photographed wet and dry before cutting.</li> <li>Logs loaded into excel spreadsheets and uploaded into access database.</li> <li>Pre-2010 paper logs entered into access database by experienced geologists.</li> <li>Standard lithology codes used for all drillholes.</li> </ul>
Sub-Sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub sampling stages to maximize representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results of field duplicate/second half sampling.</li> </ul>	<ul style="list-style-type: none"> <li>Half core split by diamond saw over 0.3 – 1.0m sample intervals while respecting geological contacts. Most sample intervals are 1.0m.</li> <li>Assay sample weights between 1 and 4kg are considered appropriate with respect to any coarse tin that may be present.</li> <li>Half core crushed and pulverized over the Pre- and Post-2010 drilling campaigns. Post-2010 samples crushed to 70% passing 2mm and rifle split to 1kg which was then pulverized to 85% passing 75u before division of fusion disk XRF sample.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled</li> </ul>	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Pre 2010 total Sn analyses were conducted at various commercial and company laboratories by pressed powder XRF. Care is required for matrix matched standards when using this technique. Stellar has commercial suppliers develop CRM from mineralization derived from the deposit</li> <li>Post-2010 total Sn analyses were conducted at ALS Laboratories using a fused disc XRF technique, which is the current industry standard for ore-grade tin. Fused disc XRF is considered a total technique, as it extracts and measures the whole of the element contained within the sample.</li> <li>Pre 2017 Soluble Sn, Cu, Pb, Zn and Ag analysed by acid leach followed by AAS.</li> <li>Post 2019 Soluble Sn, Cu, Pb, Zn and Ag analysed by acid leach followed by ICP.</li> <li>Pre and Post 2010 drilling campaign assay samples submitted to independent laboratory check sampling.</li> <li>No certified reference material, blanks or duplicate samples were employed in the drilling campaigns prior to 2017 to Stellar's knowledge.</li> <li>Post 2017 drilling involved the insertion of standards, blanks and duplicates. All analyses were within acceptable limits.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Significant intersections reviewed by company personnel.</li> <li>Metallurgical test work completed on some quartered core.</li> <li>Eight twinned holes have been drilled at Heemskirk with six holes demonstrating moderate to high Sn grade variability between 20 and 50%. Two holes demonstrating extreme grade and or geological variability.</li> <li>Data is collected by qualified geologists and experienced field assistants and</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<p>entered into excel spreadsheets. Data is imported into Microsoft access tables resource geologists for errors. Data is regularly backed up and archival copies of the database stored in separate offices.</p> <ul style="list-style-type: none"> <li>Negative values in the database have been adjusted to half the detection limit for statistical analysis from the excel spreadsheets. Data checked by the database and resource geologists for errors. Data is regularly backed up and archival copies of the database stored in separate offices.</li> <li>Negative values in the database have been adjusted to half the detection limit for statistical analysis.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys) trenches, mine workings and other locations used in mineral resource estimation</li> <li>Specification of grid system used</li> <li>Quality and accuracy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Pre 2010 drill collars surveyed by licensed surveyor using the total station method.</li> <li>All Post 2010 drill collars surveyed by licensed surveyor using differential GPS.</li> <li>All coordinates in Zeehan Mine Grid (ZMG).</li> <li>RL's as MSL +1000m</li> <li>Pre 2017 down hole surveys by downhole camera or Tropari.</li> <li>Post 2017 down hole surveys holes by Deviflex gyro survey tools.</li> </ul> <p>The Digital Terrain Model has been generated from Tasmanian Lands Department 10m contours data and adjusted with surveyed drill collar and control points.</p>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys) trenches, mine workings and other locations used in mineral resource estimation</li> <li>Specification of grid system used</li> <li>Quality and accuracy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Pre 2010 drill collars surveyed by licensed surveyor using the total station method.</li> <li>All Post 2010 drill collars surveyed by licensed surveyor using differential GPS.</li> <li>All coordinates in Zeehan Mine Grid (ZMG).</li> <li>RL's as MSL +1000m</li> <li>Pre 2017 down hole surveys by downhole camera or Tropari.</li> <li>Post 2017 down hole surveys holes by Deviflex gyro survey tools.</li> </ul> <p>The Digital Terrain Model has been generated from Tasmanian Lands Department 10m</p>

Criteria	JORC Code Explanation	Commentary
		contours data and adjusted with surveyed drill collar and control points.
Data Spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting Exploration Results</li> <li>Whether data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied</li> </ul>	<ul style="list-style-type: none"> <li>Drillhole intersection spacing is approximately 30-60m for Severn deposit above 850m RL and above 750mRL between 3720N and 3820N.</li> <li>Drillhole intersection spacing approximately 20 to 50m for the Queen Hill deposit above 930m and south of 3770m.</li> <li>Drill spacing is considered to be appropriate for the estimation of Indicated Mineral resources for part of the Severn and Queen Hill deposits Drillhole intersection spacing is generally 60-100m for down plunge of Severn and Queen Hill deposits.</li> <li>Drill spacing is considered to be appropriate for the estimation of Inferred Mineral Resources for the remainder of the Severn and Queen Hill deposits.</li> <li>Samples have been composited on 1m intercepts inside domain intercepts for the resource estimation.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>The majority of drill holes have been drilled grid east west or west east sub-perpendicular to the steeply east dipping mineralisation in the Severn and Queen Hill deposits.</li> <li>Drill hole orientation is not considered to have introduced any material sampling bias.</li> </ul>
Sample Security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Post 2010 chain of custody is managed by Stellar from the drill site to ALS laboratories in Burnie.</li> <li>All samples are bagged in calico bags and delivered in labelled poly-weave bags.</li> <li>Pre 2010 sample security is not documented.</li> </ul>
Audits or Reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews of sampling data and techniques have been completed.</li> </ul>



## Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of tenure held at the time of reporting along with known impediments to obtaining a license to operate the area</li> </ul>	<ul style="list-style-type: none"> <li>ML2023P/M, RL5/1997 and EL13/2018 hosting the Heemskirk Tin Project in Western Tasmania is 100% owned by Stellar Resources Ltd.</li> <li>A previous JV partner holds a variable rate royalty over production from ML2023P/M commencing at 1% of NSR (net smelter revenue) above A\$25,000/t of Sn and rising to a cap of 2% at an NSR of A\$30,000/t.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgement and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Early mining activity commenced in the 1880's with the production of Ag-Pb sulphides and Cu-Sn sulphides from fissure loads.</li> <li>Modern exploration commenced by Placer in the mid 1960's with the Queen Hill deposit discovered by Gippsland in 1971.</li> <li>The Aberfoyle-Gippsland JV explored the tenements until 1992 with the delineation of the Queen Hill, Severn and Montana deposits.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralization.</li> </ul>	<ul style="list-style-type: none"> <li>The Heemskirk Tin Deposits are granite related tin-sulphide-siderite vein and replacement style deposits hosted in the Oonah Formation and Crimson Creek Formation sediments and volcanics. Numerous Pb-Zn-Ag fissure lodes are associated with the periphery of the mineralizing system. Mineralisation is essentially stratabound controlled by northeast plunging fold structures associated with northwest trending faults. Tin is believed to be sourced from a granite intrusion located over 1km from surface below the deposit.</li> </ul>
Drill hole information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable. This announcement refers to the Scoping Study of the</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p>exploration results including a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> <li>– easting and northing of the drill hole collar</li> <li>– elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar</li> <li>– dip and azimuth of the hole</li> <li>– downhole length and interception depth</li> <li>– hole length</li> </ul> <ul style="list-style-type: none"> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case</li> </ul>	<p>Heemskirk Tin Deposit and is not a report on Exploration Results. See Stellar Resources website for ASX reports on exploration results.</p>
Data aggregation methods	<ul style="list-style-type: none"> <li>• In reporting of Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cutoff grades are usually material and should be stated.</li> <li>• Where aggregate intercepts include short lengths of high grade results and longer lengths of low grade results, the procedure used for aggregation should be stated and some examples of such aggregations should be shown in detail</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are not included in this report.</li> <li>• A lower cut-off grade of 0.4% Sn has been applied for mineralised domain modelling. Domain models include internal dilution (i.e. 1m grading &lt;0.4% Sn) provided the average grade of any intercept that includes the 1m internal dilution is greater than 0.4% Sn.</li> <li>• No metal equivalents have been used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the downhole lengths are reported, there should be a clear statement to this</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are not included in this report.</li> <li>• All drillholes modelled 3 dimensionally for resource estimation.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	effect (e.g. down hole length, true width not known)	
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulated intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>See body of the announcement for relevant plan and sectional views.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/ or widths should be practiced to avoid misleading reporting of Exploration Results</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not included in this report.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey result; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical test work completed by ALS/BRL laboratories and supervised by Worley-Parsons over a number of different campaigns on drill core samples.</li> <li>Deposits zoned mineralogically and metallurgically.</li> <li>Cassiterite is the dominant tin-bearing mineral occurring as free grains and in complex mineral composites.</li> <li>Grain sizes vary according to ore type, with Severn having the coarsest and Upper Queen Hill having the finest.</li> <li>Cassiterite liberation generally commences at a grind of 130 microns and is largely complete at 20 microns.</li> <li>Based on the work undertaken by ALS metallurgy, Stellar anticipates that concentrates grading approximately 48% tin at an overall tin recovery of 73% will be obtained from the Heemskirk Tin ores.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. test for lateral extensions or depth extensions or large scale step out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions,</li> </ul>	<ul style="list-style-type: none"> <li>Prefeasibility Study including further technical studies planned for 2024 H2. The Severn and Queen Hill deposits remain open down dip and down plunge and will be explored as access becomes</li> </ul>

Criteria	JORC Code Explanation	Commentary
	including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<p>available with underground mine development.</p> <ul style="list-style-type: none"> <li>The mineral deposit remains open down dip and down plunge and will be explored as access becomes available with mine development.</li> </ul>

## Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code Explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <li>Measures taken to ensure that the data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Data provided as access database.</li> <li>Historic data validated by checking paper logs and assay sheets.</li> <li>Post 2010 data received electronically and loaded into database.</li> <li>Data integrity validated with Surpac Software for EOH depth and sample overlaps and transcription errors.</li> <li>1m composite statistical analysis checked for significant variations or anomalous figures. No material errors identified.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those site visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Two site visits were made during drilling programs since 2021.</li> <li>Periodic advice on infill drilling, QAQC procedures and drillhole database updates have been provided.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>High confidence in the global geological model. Potential for geological models to vary significantly on a local scale. Although models are considered to be appropriate for definition of Mineral Resources for feasibility studies, re-modelling prior to production with input from infill drilling, mapping, face and blast-hole sampling will be required.</li> <li>No alternative geological interpretations were attempted for this estimation. The geology model does not vary significantly from historic geology interpretations.</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>Geology/grade contour used as a guide for mineralised domain selection.</li> <li>Mineralised trends are well defined from drilling and also field mapping for some deposits.</li> <li>The Queen Hill Geological Model was condensed from 12 domains to 3. This method still conforms with previous geological interpretations and seeks to better capture all data between higher grade lenses.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>Severn deposit is a north trending moderate to steeply east dipping and north plunging stratabound deposit. Comprised of 3 main lenses of mineralisation in a broader sulphide halo. Strike extending north over 500m, width 3-50m and down dip extent over 700m. There are some mineralized intersections below the 3 main zones which have not been included in the MRE as they have only been intersected in a few holes.</li> <li>Queen Hill is a north trending moderate to steeply east dipping and north plunging stratabound deposit. Comprised of multiple mineralised structures in a broader sulphide halo. Strike extending north over 450m, width 2-30m and down plunge extent over 500m. Fracture and stratabound basemetal veining increasing towards the top of the deposit.</li> </ul>
Estimation and modelling techniques	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the</li> </ul>	<ul style="list-style-type: none"> <li>All modelling and estimation work is carried out in three dimensions via Leapfrog and Surpac software.</li> <li>Minimum width of 2m downhole @ nominal 0.4% Sn cutoff but lower grades sometimes included to continue ore zones.</li> <li>Internal dilution generally restricted to 3m with allowances for geological continuity.</li> <li>Data composited on 1m intervals including Total Sn Soluble Sn, Cu, Pb, Zn, S and SG.</li> <li>Top cutting based on CV and grade histograms.</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<p>Mineral Resource estimate takes appropriate account of such data.</p> <ul style="list-style-type: none"> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. Sulphur for acid mine drainage characterization).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis of using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if any available.</li> </ul>	<ul style="list-style-type: none"> <li>Metal association analysis suggests good correlation between Sn, Soluble Sn, S and SG.</li> <li>The block model extends between 3,200 and 4,300m in the y direction, 59,900 and 61,550 in the x direction and between 400 to 1280m RL. Block sizes were set at 10m x 10m x 10m with sub-celling to 1.25m in the x and y direction and 2.5m in the z direction.</li> <li>Variogram models are reasonably well constructed with moderate nugget effect (10-50%) and maximum ranges of 50 to 100m to sill for the six major mineralized domains.</li> <li>Dynamic search ellipsoid used with a 100m maximum range.</li> <li>Dynamic anisotropy ordinary kriged estimation for Sn constrained by geology solid model.</li> <li>Inverse distance squared estimation of Sol Sn, Cu, Pb, Zn, S and SG.</li> <li>Sn % as Stannite for Severn derived from sol Sn interpolation.</li> <li>Block grades validated visually against input data and by comparing global inputs with estimate outputs using swath plots.</li> <li>Good grade correlation with previous estimation.</li> </ul>
Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>The estimate based on a dry tonnage basis</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>Cut off grades have been determined from mining recoveries (90%), overall metallurgical recoveries (73%), estimated industry costs (\$115/t), prevailing mineral price (US\$22,000) and exchange rate estimations (\$US/\$A0.76).</li> <li>A block cutoff of 0.6% Sn has been applied for the reporting of the mineral resources</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution.</li> </ul>	<ul style="list-style-type: none"> <li>Mining studies completed by Mining One (2013, 2016, 2019) and Polberro (2015).</li> <li>Decline accessed underground mine.</li> </ul>



Criteria	JORC Code Explanation	Commentary
	It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	<ul style="list-style-type: none"> <li>• A combination of Long Hole Stopping and Drift and Fill mining methods with 25m bench stopes and CAF back fill</li> <li>• Mining loss of 10% and dilution of 10%</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>• Post 2010 Metallurgical test work completed by ALS Burnie and plant design by GRES/Mincore.</li> <li>• Standard crushing grinding circuit followed by sulphide flotation, gravity separation and Sn flotation of gravity tails.</li> <li>• Testwork suggests a 48% Sn concentrate can be achieved with a 73% recovery.</li> </ul>
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, many not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>• Historic mining centre.</li> <li>• Baseline environmental studies and conceptual mining plan in support of ML2023P/M completed.</li> <li>• Final Development Plan and Environmental Management Plan in progress.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, many not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Historic mining centre.</li> <li>Baseline environmental studies and conceptual mining plan in support of ML2023P/M completed.</li> <li>Final Development Plan and Environmental Management Plan in progress.</li> </ul>
Bulk density	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Bulk density derived from diamond drill core using air pycnometer and the Archimedes method at various laboratories.</li> <li>Core is un-oxidised and free of cavities.</li> <li>Sg of mineralised intersections determined on assay intervals inside coded domains.</li> <li>SG interpolated into block model using ID<sup>2</sup> algorithm from 695 samples taken in the mineralized zones.</li> <li>Waste rock assigned SG of 3.0 from the mean SG of samples with &lt;0.1% Sn.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>The basis of the classification of the Mineral Resource into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relevant confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal</li> </ul>	<ul style="list-style-type: none"> <li>Confidence in the geological model, data quality and interpolation is considered to be sufficient for Mineral Resource located within 50m of sample data to be classified as Indicated Resource.</li> <li>Classification of the Severn and Queen Hill Tin Deposits considers data quality and distribution, spatial continuity, confidence in the geological</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p>values, quality, quantity and distribution of the data)</p> <ul style="list-style-type: none"> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<p>interpretation and estimation confidence.</p> <ul style="list-style-type: none"> <li>The resource classification appropriately reflects the views of the Competent Person.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of the Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been completed for this estimation.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local state the relevant tonnages, which should be relevant to technical and economic evaluation.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>The geological model is robust at a global level between sections and down dip of cross sections.</li> <li>Broad drill spacing of inferred resources and short-range variability reduce confidence in the estimate which is reflected in the resource classification.</li> <li>The effects of localized brittle faulting and grade variability is likely to impact the geology model on a local level. Infill drilling, face mapping and sampling will be necessary for grade control during production.</li> <li>Grade and geological variance is highlighted by twinned holes and variogram models.</li> <li>No production data is available for reconciliation.</li> </ul>