Ore Sorting Demonstrates Excellent Results with Increased Tin Head Grade at Heemskirk

HIGHLIGHTS

- Excellent results returned from tin (Sn) mineralised samples spread across the Severn Deposit using XRT (x-ray transmission) ore sorting.
- Ore sorting is used at a pre-processing stage to remove waste and provide a higher-grade material to the processing plant reducing processing costs. The technology is being used successfully at the nearby Renison Tin mine owned 50% by Metals X Limited.
- A high-grade product was generated, where the **head grade increased to 1.65% Sn from 0.70% Sn average (2.4 x uplift)** by **rejecting 64.2% of the mass** while **achieving 84.7% Sn recovery.**
- **Sn recovery** can be **further increased** by combining high and medium grade product streams, where a **95.3% Sn recovery** is achieved providing an average **1.4 x uplift** of head grade **to 0.99% Sn** with a **33.1% mass rejection.**
- Variability test work indicates ore sorting is applicable across the entire Severn Deposit. Queen Hill work program underway.
- Prefeasibility Study (PFS) currently underway will investigate how best to apply ore sorting to:
  - Reduce capital expenditure (smaller plant size) and allow for increased mining rates
  - Reduce processing costs
  - Increase metal production
  - Reduce tailings storage requirements
  - Enable application of grade streaming strategies through Life of Mine (LOM) plan.

Stellar's Managing Director Mr Simon Taylor commented:

"The ore sorting results are extremely positive with the impact of providing less material and an increased head grade into the processing plant while providing a potentially reduced capital outlay which has serious positive ramifications to the economics for developing the Heemskirk Tin Project.

"The Prefeasibility workstreams continue to advance and aim to find the best way to bring Heemskirk into production in the near term in an environmentally, operationally and capital efficient manner.

"Metallurgical work streams are progressing well and supported by the three rigs operating around Severn and Queen Hill to provide further metallurgical, geotechnical and hydrological inputs.

"We look forward to providing further updates on PFS activities, including drilling results, further ore sorting and metallurgical results, as they come to hand."

Stellar Resources Limited (ASX: SRZ, "Stellar" or the "Company") is pleased to report highly encouraging results from ore sorting testwork at the Severn deposit at its Heemskirk Tin Project ("**Heemskirk"**) in Western Tasmania. The testwork comprised six variability samples from recent Severn drilling and extends first pass work completed by Stellar in 2017 and 2018[1,2].

Heemskirk Ore Sorting Results

An ore sorting trial was undertaken at Steinert's laboratory and test facility in Perth, Western Australia in November on six (6) samples spread across the Severn orebody to provide an understanding of variability of response across the deposit. The tin mineralisation at Severn and Queen hill is characterised by a high-density contrast to surrounding material and had previously been identified as being amenable to ore sorting via XRT density scanning in previous sighter test work in 2017 and 2018.

The Severn samples, with a combined mass of 88.6kg were derived from metallurgical samples currently being tested at ALS in Burnie to assess variability characteristics on the proposed flowsheet for the Heemskirk orebodies. The samples were initially crushed to provide a 10-28mm fraction sample, with the -10mm fraction retained as fines and not sorted.

Each sample was passed through the sorting machine, being classified on density utilising the XRT sensor and being spatially defined on the belt by the 3D-laser sensor, then separated by high pressure air into a higher and lower density product stream. The process was repeated on the lower density product stream to give a mid and low-density product output. The flowsheet is shown below in Figure 1.

The obtained results were excellent with the average of all six samples delivering a **64.2% mass rejection** and an impressive **84.7% tin recovery to the high-grade (high-density) product stream**. The grade in the high-grade stream was 1.65% Sn, which is a **2.4 times grade uplift to** the composite feed grade of 0.7% Sn**.**

When including the medium grade product, **a blended stream** further increased **the tin recovery to 95.3%** whilst **achieving 33.1% mass rejection.** The **grade in the combined high and medium grade streams** was 0.99% Sn, which **is a 1.4 times uplift.**

[1] SRZ ASX Announcement 28 February 2018 - Ore Sorting Benefits Heemskirk Tin

[2] SRZ ASX Announcement 12 January 2017 - Heemskirk Tin Ore Sorting Update

The results for the six samples, and the weighted average results are shown below in Table 1.

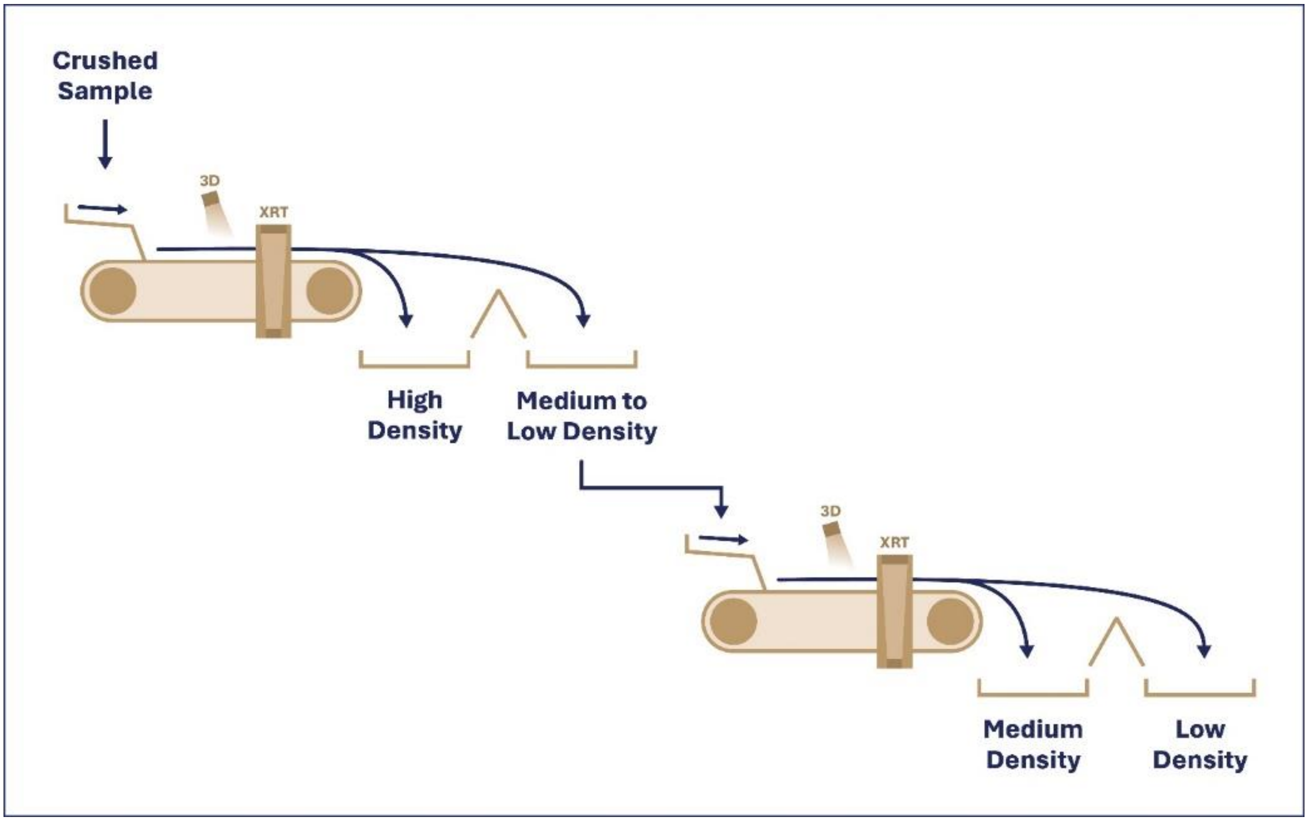

Figure 1: *Ore sorting flow sheet.*

Table 1: *Tin Recovery, mass rejection and stream grades for both the high-grade and high-grade + medium grade products.*

		High Grade Only			High Grade and Medium Grade		
Sample Number	Sample Grade (%)	Sn Recovery (%)	Mass Reject (%)	Sorted Grade (%)	Sn Recovery (%)	Mass Reject (%)	Sorted Grade (%)
SZM24001	0.85	93.9	57.3	1.88	98.7	28.3	1.17
SZM24002	0.56	82.1	71.2	1.61	94.7	37.4	0.85
SZM24003	0.85	87.4	70.7	2.54	97.0	42.6	1.44
SZM24004	0.73	78.6	56.8	1.33	93.5	23.1	0.89
SZM24005	0.56	77.6	68.7	1.39	90.5	40.8	0.86
SZM24006	0.73	91.8	52.1	1.40	98.6	16.6	0.86
Weighted average	**0.70**	**84.7**	**64.2**	**1.65**	**95.3**	**33.1**	**0.99**

Including the fines (-10mm product), which were not sorted and would likely be sent to the mill, in the material mass balance, the results were still excellent. The fines generated from these samples were 12.5% (1/8th) of the crushed sample and contained 15.4% of the tin.

The results, inclusive of the fines being added to the ore stream are shown below in Table 2.

Table 2: *Tin recovery and mass rejection (incl. unsorted fines) for both the high-grade and high-grade+medium-grade products*

		High Grade Only			High Grade and Medium Grade		
Sorted Material **Sample Number**	Sample Grade (%)	Sn Recovery (%)	Mass Reject (%)	Sorted Grade (%)	Sn Recovery (%)	Mass Reject (%)	Sorted Grade (%)
SZM24001	0.84	94.6	50.1	1.59	98.8	24.7	1.10
SZM24002	0.56	84.3	62.1	1.25	95.4	32.6	0.80
SZM24003	0.85	89.4	59.7	1.89	97.5	35.9	1.30
SZM24004	0.74	81.9	48.4	1.17	94.5	19.7	0.87
SZM24005	0.57	80.9	59.3	1.13	91.9	35.2	0.80
SZM24006	0.72	93.7	39.8	1.12	98.9	12.7	0.82
Weighted average	**0.72**	**87.0**	**56.1**	**1.43**	**96.0**	**28.9**	**0.97**

These results show a demonstrably high potential for ore sorting to make a significant difference for Heemskirk, with more than half the mined product potentially able to be rejected prior to processing whilst still recovering 87% of the metal. This could provide the ability to build a smaller lower capital cost plant or allow for larger mining rates feeding the same size plant for a higher tin output.

This result is similar to previous results reported by the Company, however, this recent test work was carried out on multiple samples across the Severn orebody and reflects a variability test. As can be seen in Table 1 and Table 2, the results vary by sample, however all samples show a positive impact of sorting. The variability observed will guide 'edge case' evaluation and future program design as part of the ongoing PFS.

A future program will provide data on a much larger sample and provide optimisation data to evaluate different 'cut points' on the sorting criteria, trading off increased mass rejection with decreased tin recovery and their impacts on operating and capital costs.

As part of the test work, tests were also undertaken using induction sensors to assess the potential for classifying conductive minerals, such as pyrrhotite. The induction sensor sort did not provide any obvious sorting classification with respect to tin grade and conductivity and further investigation into this method has not been prioritised with the focus remaining on a density classification.

The promising nature of these results, when confirmed by a larger program, will have positive impacts on the outcomes of the PFS. The ability to reduce the plant size due to lower throughput, whilst mining the same metal volume, will reduce the capital expenditure required for development. Removing waste and low-grade ore from the mined material will reduce the overall volume treated, with a commensurate reduction in both overall capital and operating costs and the flow through impact of reducing required tailings storage. Furthermore, the removal of waste provides an opportunity to consider bulk mining methods, particularly where there are multiple lodes adjacent to one another. Early development of a crushed waste stream can provide a low cost back fill material for the underground mine.

Further Work Programs and Study Progress

The PFS is progressing well following the robust updated Scoping Study[3]. Drilling, metallurgical test work and ore sorting studies are continuing in tandem with environmental baseline work and the evaluation of re-using existing infrastructure, including the Comstock site currently under a Memorandum of Understanding[4].

Further progress updates will be provided on key work programs of the PFS, which is on track for delivery in the 2H25.

– ENDS –

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

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[3] ASX Announcement 2 September 2024 – Updated Heemskirk Tin Scoping Study
[4] ASX Announcement 3 December 2024 - Stellar Signs MOU On Existing Mine Infrastructure Adjacent to Heemskirk Tin Project

Competent Persons Statement

The information in this announcement that relates to exploration results has been compiled by Dr Will Goodall who is Principal Consultant of MinAssist Pty Ltd, a metallurgical consultancy. Dr Goodall is a Member of the AUSIMM 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). Dr Goodall has reviewed the contents of this news release and consents to the inclusion in this announcement of metallurgical results in the form and context in which they appear.

Forward Looking Statements

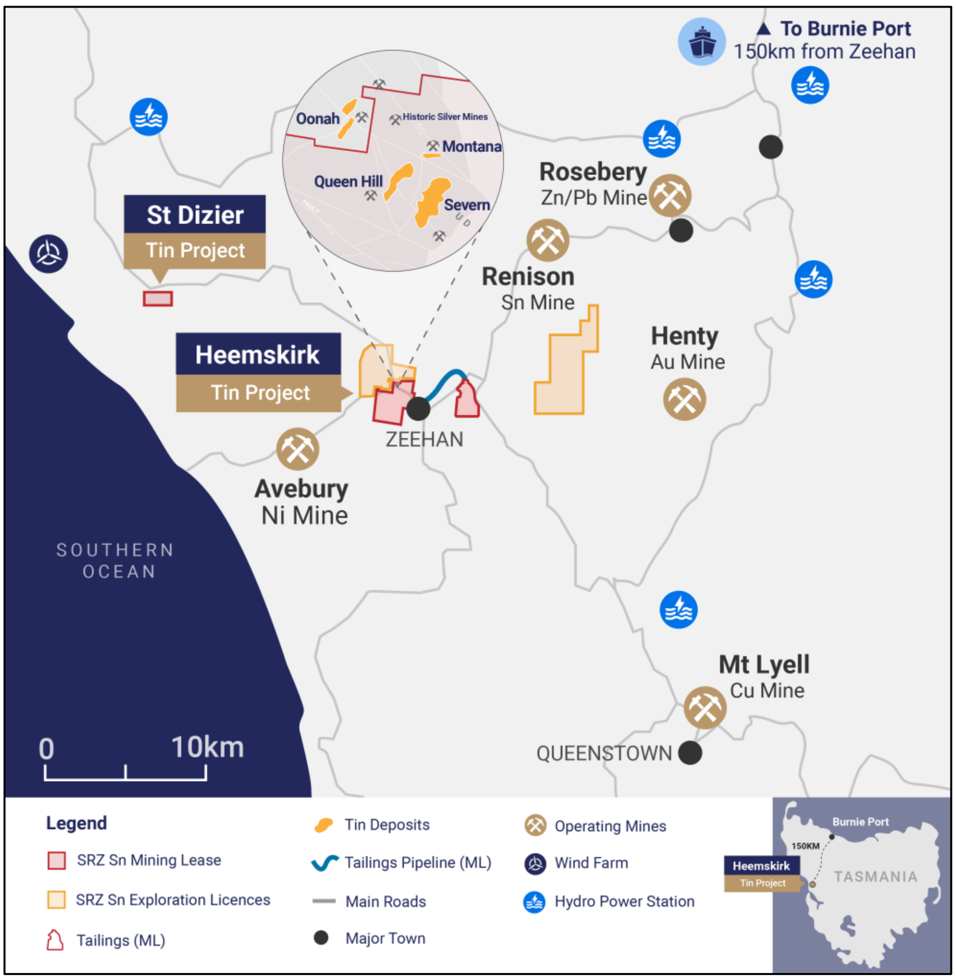
This report may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Stellar Resources Limited's planned activities and other statements that are not historical facts. When used in this report, the words such as "could", "plan", "estimate", "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.

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*.** This ranks the Heemskirk Project as the highest-grade undeveloped tin resource in Australia and third globally.

The focus for the Company is to complete exploration and resource drilling at the Heemskirk Project to further grow the resource and increase its confidence by upgrading of its resource classifications. 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 and with 3.96Mt at 1.03%Sn for 41kt of contained tin the Inferred category.

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 conductors via DHEM and FLEM surveys, providing high priority follow up targets.



Stellar Resources Heemskirk Tin Project Location

* 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 the original announcement and that all material assumptions and technical parameters underpinning the MRE quoted in the release continue to apply and have not materially changed.

Appendix 1

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	• 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 handheld XRF instruments etc.). • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • 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.	• The Zeehan Tin deposit has been delineated entirely by diamond drilling. • NQ sized ½ core was cut from 1m sections. Metallurgical Sampling and Ore Sorting Sample Selection • Six metallurgical samples were selected to be within stope designs as developed in the 2024 Updated Scoping Study (3rd Sept 2024) • Samples were selected to provide a distribution vertically and laterally and by grade over the Severn ore deposit. • Nominally every 5th sample selected for metallurgical work was then chosen to be used for ore sorting trial work as reported in this report. A total of 88.6kg of material was selected.
Drilling Techniques	• 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.)	• All drill sampling by standard wireline diamond drilling.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximize sample recovery and ensure representative nature of the samples. • 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	• Core logging captured drilled recoveries and core loss. • Recoveries generally excellent (95-100%) through mineralized sections.
Logging	• 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.	• Geological logging has been carried out on all holes by experienced geologists and technical staff. • Holes logged for lithology, weathering, alteration, structural orientations, Geotech, RQD, magnetic susceptibility and mineralisation verified with an Olympus DPO 2000 pXRF.

Criteria	JORC Code Explanation	Commentary
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography. • The total length and percentage of the relevant intersections logged.	• Photographed dry and wet prior to cutting. • Logs loaded into excel spreadsheets and uploaded into access database. • Standard lithology codes used for all drillholes.
Sub-Sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub sampling stages to maximize representivity of samples. • Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results of field duplicate/second half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled	• Half core split by diamond saw over 0.3 – 1.0m sample intervals while respecting geological contacts. Most sample intervals are 1.0m. • Core was crushed to provide a 10-26.6mm sample for ore sorting with <10mm fines preserved.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • 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. • 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.	• Six samples were processed through a Steinert (KSS Technology) sorter and sorted based on density via XRT screening into three density based classifications. • Sn, analyses on sorted samples were conducted at ALS Laboratories using a fused disc XRF technique (XRF15D). Fused disc XRF is considered a total technique, as it extracts and measures the whole of the element contained within the sample.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Sample selection was supported by MinAssist Pty Ltd as metallurgical consultant to the Company. Recommendations were made to obtain a representative distribution of the Severn mineralisation. • Results were reviewed by MinAssist Pty Ltd as metallurgical consultant to the Company.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys) trenches,	• Drill holes are sighted and initially recorded by handheld GPS (+/- 5m accuracy), with final locations picked up by a

Criteria	JORC Code Explanation	Commentary
	mine workings and other locations used in mineral resource estimation • Specification of grid system used • Quality and accuracy of topographic control.	licensed surveyor on a 3 monthly basis. The holes reported in this release are located by handheld (non-RTK) GPS • Coordinates are in MGA Z55 • A Devigyro survey tool and a DeviAlligner tool has been used.
Data Spacing and distribution	• Data spacing for reporting Exploration Results • 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. • Whether sample compositing has been applied	• Samples are between 100-200m spaced apart over the strike and depth of the deposit.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • 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.	• The majority of drill holes have been drilled local grid east west sub-perpendicular to the steeply east dipping mineralisation in the Severn and Queen Hill Deposits. • Drill hole orientation is not considered to have introduced any material sampling bias.
Sample Security	• The measures taken to ensure sample security.	• Post 2010 chain of custody is managed by Stellar from the drill site to ALS laboratories in Burnie. • All samples, bagged in pre-numbered calico bags and delivered in labelled poly-weave bags. • Pre 2010 sample security is not documented.
Audits or Reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits or reviews of sampling data and techniques have been completed.

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	• 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. • The security of tenure held at the time of reporting along with known impediments to obtaining a license to operate the area	• ML2023P/M, RL5/1997 and EL13/2018 hosting the Heemskirk Tin Project in Western Tasmania are 100% owned by Stellar Resources Ltd.
Exploration done by other parties	• Acknowledgement and appraisal of exploration by other parties.	• Early mining activity commenced in the 1880's with the production of Ag-Pb sulphides and Cu-Sn sulphides from fissure loads.

Criteria	JORC Code Explanation	Commentary
		• Modern exploration commenced by Placer in the mid 1960's with the Queen Hill deposit discovered by Gippsland in 1971. • The Aberfoyle-Gippsland JV explored the tenements until 1992 with the delineation of the Queen Hill, Severn and Montana deposits.
Geology	• Deposit type, geological setting and style of mineralization.	• 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.
Drill hole information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: – easting and northing of the drill hole collar – elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar – dip and azimuth of the hole – downhole length and interception depth – hole length • 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	• See the tables following this appendix for tabulated sample location details.
Data aggregation methods	• In reporting of Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually material and should be stated. • 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 • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Results are reported on a weight averaged basis • No metal equivalents have been used.

Criteria	JORC Code Explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. down hole length, true width not known)	• Drillholes from which material weas derived have intersected at approximately 60º to the modelled dip of mineralisation.
Diagrams	• 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.	• See figure following this appendix for locations of samples reported.
Balanced reporting	• 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	• All samples have been reported.
Other substantive exploration data	• 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.	• Deposits have been zoned mineralogically and metallurgically • Cassiterite is the dominant tin-bearing mineral occurring as free grains and in complex mineral composites. • Grain sizes vary according to ore type, with Severn having the coarsest and Upper Queen Hill having the finest. • Cassiterite liberation generally commences at a grind of 130 microns and is largely complete at 20 microns.
Further work	• The nature and scale of planned further work (e.g. test for lateral extensions or depth extensions or large scale step out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Prefeasibility level metallurgical and mining studies are occurring in conjunction with drilling. • Environmental baseline studies are underway to support the application of a Notice of Intent with the Environmental Protection Authority of Tasmania. • The mineral deposits remain open down dip and down plunge and will be explored as access becomes available with mine development.

Appendix 2 – Sample location figures and tables.

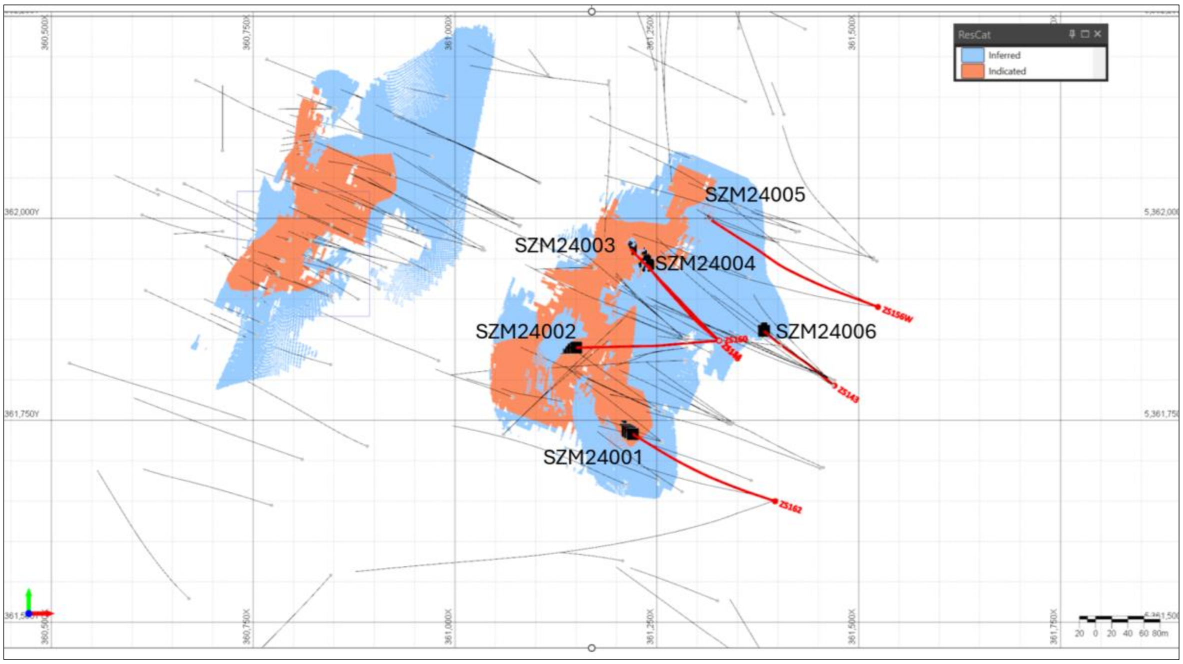


Figure 3 : Drill holes and locations of samples selected down hole for ore sorting test work.

Hole ID	Easting	Northing	RL	Total Depth	Azimuth	Dip
ZS162	361397	5361650	180	438.3	288.8	-49.2
ZS160	361327	5361849	180	348.4	265.6	-45.5
ZS148	361327	5361849	180	404.8	313.1	-61.2
ZS151	361327	5361849	180	464.9	307.9	-70.6
ZS156W	361524	5361890	177	556	291.0	-59.0
ZS143	361470	5361793	178	858.8	299.0	-77.0

Table 1: Drill hole locations from which samples were derived in this report.

Table 2: Drill hole locations from which samples were derived in this report.

Sample ID	Hole ID	From	To
SZM24001	ZS162	306	333
SZM24002	ZS160	247	277
SZM24003	ZS148	332	364.5
SZM24004	ZS151	381.3	431
SZM24005	ZS156W	490.05	534
SZM24006	ZS143	548.95	635

NB: Approximately every 5th metre was used for ore sorting test work.