

Stellar Resources

ASX Announcement



1 October 2019

Heemskirk Tin Scoping Study Confirms Attractive Economics

Stellar Resources Limited (ASX: SRZ, “Stellar” or the “Company”) is pleased to report the results of its recently completed Scoping Study on the Heemskirk Tin Project.

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) over a 10 year mine-life, producing tin concentrate to be trucked to the port of Burnie for export. The Project also includes open-pit mining of the St Dizier satellite deposit and trucking to the processing plant at Heemskirk during the final year (year 11) of the project.

The Heemskirk Tin Project Scoping Study valuation resulted in a **base case pre-tax NPV_{10%} of approximately A\$83m (post-tax NPV_{10%} of approximately A\$71m), at a tin price of US\$20,000, determined to an accuracy of ±35%. The pre-tax IRR of the project is approximately 45% and a payback period is approximately 3.0 years. Capital cost required for the project is approximately A\$57m.** 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.

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.

Stellar believes it has reasonable grounds under ASIC information Sheet 214 to report the results of the Scoping Study Update. **(continued next page)**

Capital Structure

Shares: 380,328,733
Share Price (SRZ): A\$0.015
Listed Options: 59,142,857
Option Price (SRZO): A\$0.002
Unlisted Options: 15,000,000

Commodity

Tin Price: US\$16,270/t
Exchange Rate US\$ 0.68

Main Shareholders

European Investors 19.5%
Capetown SA 16.4%

Board & Management

Phillip G Harman
Non-Executive Chairman
Peter G Blight
Managing Director
Gary L Fietz
Non-Executive Director
Thomas H Whiting
Non-Executive Director
Melanie J Leydin
Company Secretary

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About Stellar:

Stellar Resources (SRZ) is an exploration and development company with assets in Tasmania. The company is rapidly advancing its high-grade Heemskirk Tin Project, located near Zeehan in Tasmania, and plans to become Australia's second largest producer of tin.



Cautionary Statements (Continued)

The mine plan on which the updated valuation is based contains 58% Indicated Mineral Resources and 42% Inferred Mineral Resources over the life of the project. The first 4 years of mining are based on 100% Indicated Mineral Resources and the 5th Year of mining is based on 89% Indicated Mineral Resources. Thereafter, the later part of the mine plan (years 6 to 10) is based on increasing amounts of Inferred Mineral Resources, reaching 100% Inferred Mineral Resource in years 9 and 10 of the project. In year 11 of the mine plan, mining is entirely from the St Dizier satellite deposit which is a 100% Indicated Mineral Resource. 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 and the payback period of the project of approximately 3.0 years is based purely on the Indicated Mineral Resource.

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 Mineral Resources or that the Production Target itself will be realised.

The Scoping Study is based on the material assumptions outlined in Appendix 1 of this announcement. These include assumptions about the availability of funding. While Stellar considers all of 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 of outcomes indicated in the Scoping Study, funding of in the order of A\$57m will likely be required for project development in addition to pre-development funding of approximately \$8m for exploration to convert the mineral resource to an ore reserve and to complete a Bankable Feasibility Study. Investors should note that there is no certainty that Stellar will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to 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.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

EXECUTIVE SUMMARY

Heemskirk is one of the best undeveloped tin projects in the world and ranks top three in the global development queue. Stellar has advanced Heemskirk well along the development path by identifying a high-grade total mineral resource of 6.6mt @ 1.1% Sn, establishing environmental guidelines for a Development Proposal and Environmental Management Plan and gaining support from the Tasmanian Government by securing Mining Leases.

The Heemskirk Tin Project Scoping Study key findings are summarized in Table 1 and mark a major step forward in advancing the project. The project has a total life of mine ore production of 3.7mt, mined and processed at a rate of ~350ktpa over an 11-year mine life. The first 10 years of mining is from the Queen Hill and Severn deposits with another year added through low cost development of the St Dizier deposit in the final year of the project.

Life of mine tin in concentrate production is estimated to be ~24,000t at a competitive all-in sustaining cash cost (AISC) of ~US\$13,100/t of contained tin. The AISC compares favorably with a Scoping Study tin price assumption of US\$20,000/t and bottom of the cycle prices of ~US\$16,000/t.

On a low pre-production capital base of A\$57m, the Heemskirk Tin Project generates a pre-tax NPV_{10%} of approximately A\$83m (post-tax NPV_{10%} of approximately A\$71m), at a tin price of US\$20,000/t, to an accuracy of ±35%. The pre-tax internal rate of return of the project is

approximately 45%. The ratio of pre-tax NPV_{10%} to pre-production capital of approximately 1.5 and the 3-year payback of capital are also attractive metrics for the Heemskirk Tin Project.

Table 1: Heemskirk Scoping Study - Key Outcomes

	Unit	Total LOM
Ore Production	(Mt)	3,695,386
Sn Grade (LOM Ave)	(%)	0.94
Tin Recovery (LOM Ave)	(%)	69.4
Tin Produced	(Tonnes)	24,000
Mine Life	(Yrs)	11
Tin Price	(US\$/t)	20,000
Exchange rate	USD:AUD	0.70
Tin Price	(A\$/t)	28,571
Gross Revenue	(A\$M)	691
Total Operating Costs (AISC)	(A\$M)	454
Total Operating Costs (AISC)	(US\$/t Tin)	13,100
Operating Cash Flow	(A\$M)	237
Operating Margin	(%)	34%
Capital Cost	(A\$M)	57
Net Cash Flow (Pre-Tax)	(A\$M)	180
Pre-Tax NPV_{10%}	(A\$M)	83
Post-Tax NPV_{10%}	(A\$M)	71
IRR (Pre-Tax)	(%)	45
Payback Period	(Yrs)	3.0
Pre-Tax NPV / Capex		1.5

Commentary

Managing Director Peter Blight said “The Scoping Study shows that Heemskirk is a very robust project with a low pre-production capital cost of \$57m and an all-in-cash operating cost of US\$13,100/t tin. The project is expected to be profitable through-out the tin price cycle and has a cost structure that is comparable to neighboring Renison Tin, Australia’s largest and longest-lived tin mine. Low initial capital cost is a function of sequential development of the underground Queen Hill and Severn deposits and adherence to just in time capital development. Prefabrication of processing plant modules offsite and rapid assembly onsite also contributes to low up-front cost. Development of the near-surface Queen Hill deposit first means that ore can be delivered to the mill within six months of commencing the decline and initial sales can occur within another three months. Having a processing plant at Heemskirk also provides an opportunity to develop the St Dizier tin deposit.

The scoping study has shown that the Heemskirk Tin Project has attractive economics and remains robust within the majority of tin price and exchange rate scenarios considered in our sensitivity analysis. The next step for Heemskirk, subject to funding, is to convert the remaining inferred mineral resource to and ore reserve and complete a Pre-Feasibility Study”.

LOCATION AND MINING LEASES

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 of the Heemskirk ML's provide exclusive access to tin and other metals for an initial period of 12 years and are due for renewal in January 2029.

Ore from the satellite St Dizier tin deposit, located 20km to the northwest of Zeehan (see Figure 1), is included in the last year of the project. The St Dizier deposit is positioned within 1km of the all-weather, sealed Heemskirk Road which connects the project to Zeehan. St Dizier is secured by ML 10M/2017, a 2km² lease with sufficient space for development of an open pit mine and waste stockpiles. ML 10M/2017 provides exclusive access to mine tin and other metallic minerals for an initial period of 6 years and is due for renewal in August 2024.

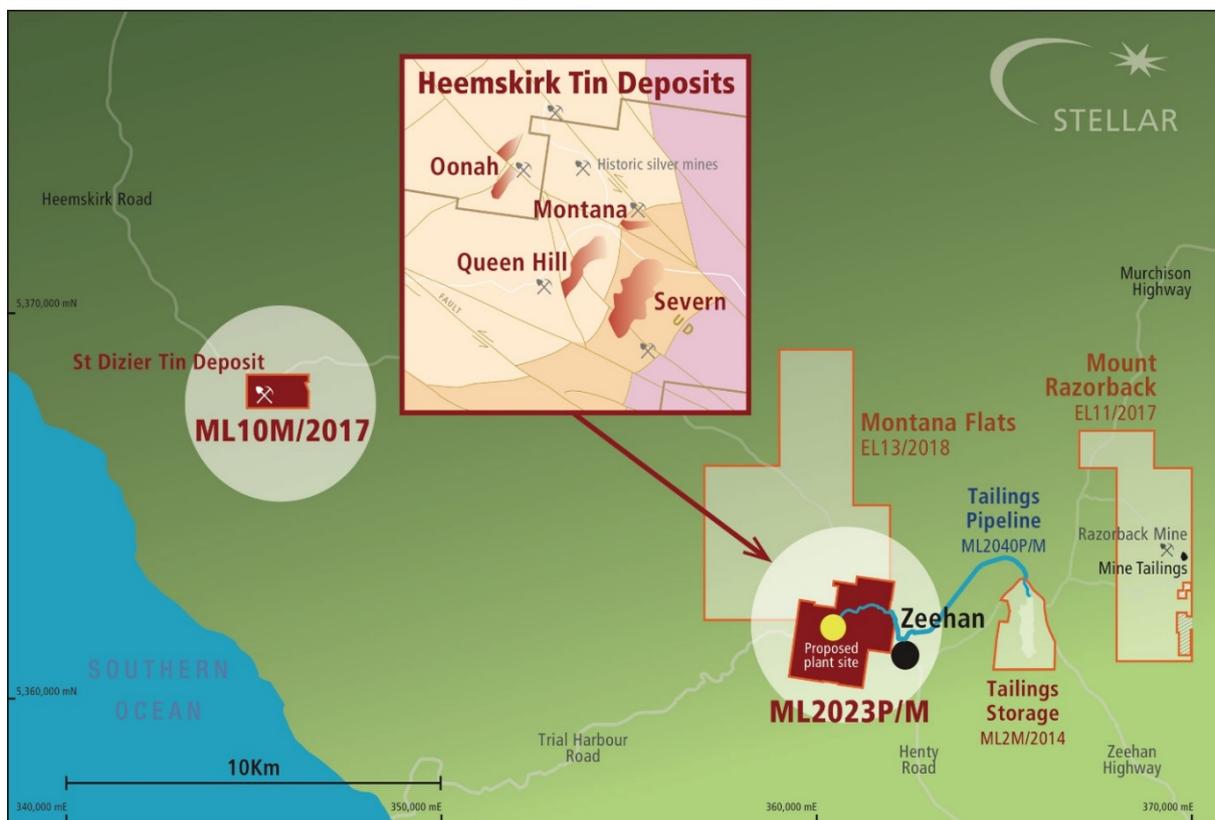


Figure 1: Location of Heemskirk Tin Project and St Dizier Mining Leases

PROJECT OUTLINE

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) over a 10 year mine-life, producing tin concentrate to be trucked to the port of Burnie for export. The project also includes open-pit mining of the St Dizier satellite tin deposit and trucking to the Heemskirk processing plant during the final year (year 11) of the project.

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

- The first 10 years of the project are based on mining the Queen Hill and Severn deposits (2 of the 4 Heemskirk deposits).
- Development of an underground mine commencing at Upper Queen Hill with access from the surface via a single decline. Access to Severn is later developed via an underground connection from the Queen Hill decline and an internal decline at Severn. A second connection from Queen Hill to Severn is also required for recovery of upper Severn later in the mine life.
- Mining is via the long hole stoping underground mining method and at a nominal production rate of 350ktpa ore mined from the Queen Hill and Severn deposits.
- Ore is treated at a processing plant to be constructed adjacent to the decline portal on the northwest 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.
- Open-pit mining from the St Dizier satellite deposit commences in the last year of the project (Year 11) at a nominal production rate of 409ktpa ore mined with a limited 1-year mine life. St Dizier ore will be trucked 20km to the Heemskirk processing plant via an existing sealed road.

GEOLOGY AND EXPLORATION

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

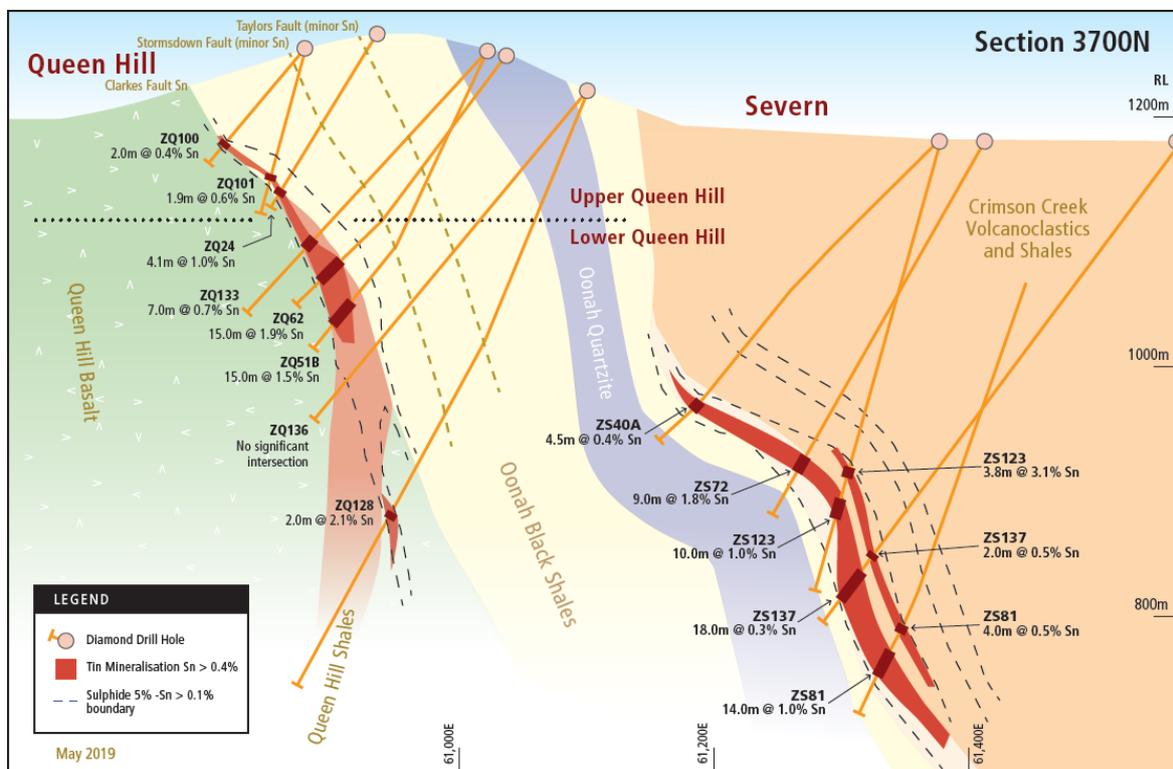


Figure 2: Schematic Geology Cross-Section 3700N, Showing Queen Hill and Severn Tin Deposits

A schematic geological W-E cross section through the Queen Hill and Severn deposits included in this scoping study is shown in Figure 2.

A total of 58 diamond drillholes (18,709m) 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 of the Heemskirk Tin deposits remains open down dip and down plunge.

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 maximum depth of 500m and are open at depth to granite source rocks assumed from geophysics to be 1km 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. The Heemskirk deposits total 71kt of contained tin or just 20% of the tin found at Renison to date.

RESOURCES

Heemskirk Mineral Resources (Queen Hill and Severn Deposits)

An updated total mineral resource for the Heemskirk tin deposits of 6.6mt @ 1.1% Sn (70,930t of contained Sn) at a cut-off grade of 0.6% Sn was defined in accordance with the JORC Code 2012 by technical consultant, Resource and Exploration Geology, in May 2019¹ (see Table 2).

Table 2: Heemskirk Tin Project Mineral Resource Statement (JORC 2012), May 2019

Classification	Deposit	Tonnage mt	Total Sn %	Contained Sn t	Cassiterite % of total Sn	Cu %	Pb %	Zn %
Indicated	Upper Queen Hill	0.32	1.0	3,230	87	0.2	2.1	1.0
	Lower Queen Hill	0.65	1.4	9,230	97	0.0	0.1	0.1
	Severn	1.15	1.0	11,500	99	0.1	0.0	0.1
Total Indicated		2.12	1.1	23,960	97	0.1	0.4	0.2
Inferred	Upper Queen Hill	0.11	1.6	1,760	94	0.2	1.9	0.7
	Lower Queen Hill	0.36	1.4	5,040	97	0.0	0.2	0.0
	Severn	2.74	0.9	24,660	99	0.0	0.0	0.0
	Montana	0.68	1.5	10,200	96	0.1	0.7	1.4
	Oonah	0.59	0.9	5,310	36	0.8	0.1	0.1
Total Inferred		4.48	1.0	46,970	90	0.1	0.2	0.3
Total Indicated + Inferred		6.60	1.1	70,930	92	0.1	0.3	0.3

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

2. block cut-off grade of 0.6% tin

3. tonnes rounded to reflect uncertainty of estimate

4. estimates prepared by Resource and Exploration Geology under JORC 2012

The May 2019 Heemskirk resource update showed a 64% increase in Indicated Mineral Resource to 2.1mt @ 1.1% Sn (23,960t of contained Sn) compared with the previous 2016 estimate. The increase in Indicated Mineral Resource arose from a reclassification of Severn mineralisation (1.15mt @ 1.0% Sn) following a program of closer spaced diamond drilling in 2017.

This scoping study is based on mining the Indicated Mineral Resources and part of the Inferred Mineral Resources from only 2 of the Heemskirk deposits; Queen Hill (Upper and Lower) and Severn. The other 2 Heemskirk tin deposits included in Table 2 below, Montana and Oonah, have not been

¹ SRZ Announcement, 16 May 2019 - Updated Heemskirk Resource Increases Indicated Category and Confidence in the Project

included in this scoping study as they have had less drilling undertaken and remain at a purely Inferred Mineral Resource level.

An isometric view of the Heemskirk tin deposits highlighting the Indicated Mineral Resource components within the Queen Hill and Severn deposits is shown in Figure 3. It should be noted that only part of the Inferred Mineral Resource component for the Severn deposit shown Figure 3 has been included in this scoping study.

There has been no material change to assumptions since the resource estimate was completed in May 2019.

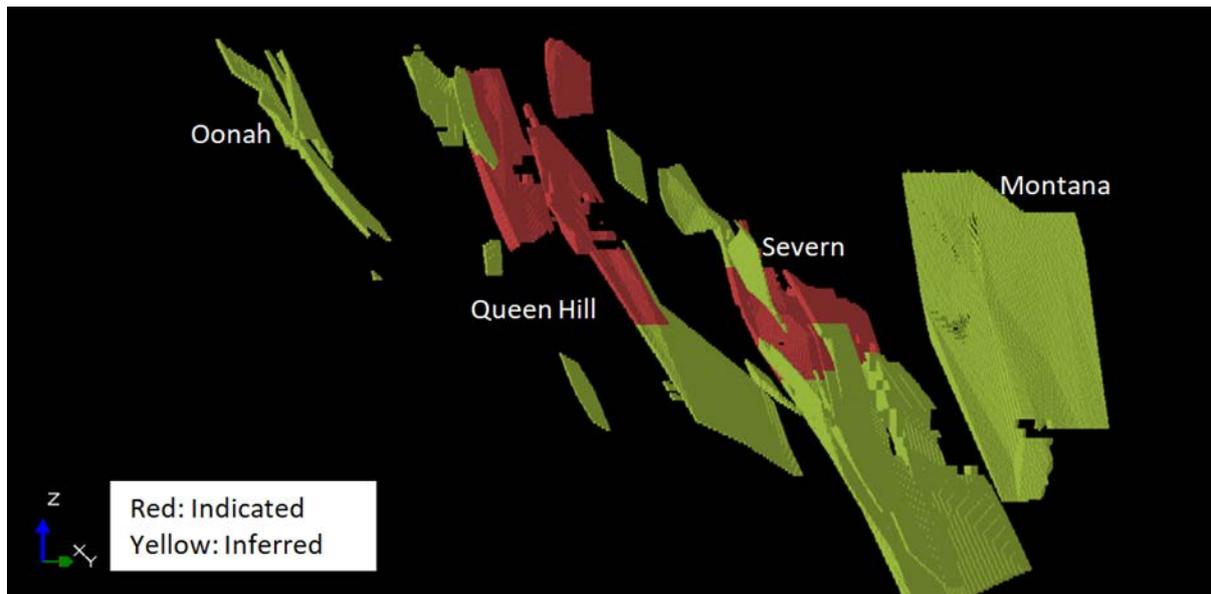


Figure 3: Heemskirk May 2019 Mineral Resource Model @ 0.6% Sn Cut-off Grade

St Dizier Mineral Resource

This scoping study includes mining from the St Dizier satellite tin deposit which will be mined as an open pit mine and processed in the Heemskirk plant during the last year of the project.

A total Indicated and Inferred Mineral Resource for St Dizier of 2.3mt @ 0.61% Sn (13,786t of contained tin) at a cut-off grade of 0.3% Sn was defined in accordance with the JORC Code 2012 by technical consultant, Resource and Exploration Geology, in March 2014² (see Table 3).

Table 3: St Dizier Mineral Resource Statement (JORC 2012), March 2014³

Classification	Tonnage	Total Sn Contained	Soluble	Cassiterite ¹	WO ₃	Fe	S
	mt	%	Sn t	Sn %	% of total Sn	%	%
Indicated	1.20	0.69	8,280	0.09	87	0.04	23.70
Inferred	1.06	0.52	5,512	0.22	58	0.05	22.22
Total Resource	2.26	0.61	13,786	0.15	75	0.04	23.00

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

2. block cut-off grade of 0.3% tin

3. tonnes rounded to reflect uncertainty of estimate

4. estimates prepared by Resource and Exploration Geology under JORC 2012

² SRZ Announcement, 6 March 2014 – Heemskirk Tin Project: New Open Pit Resource at St Dizier

³ SRZ Announcement, 22 January 2019 - St Dizier Tin Mining Lease Granted and Scoping Study Results

This scoping study is based on open-pit mining of only part of the St Dizier Indicated Mineral Resource and none of the Inferred Mineral Resource has been included in this scoping study.

There has been no material change to assumptions since the 2014 resource estimate was completed.

MINING

Heemskirk

A mining study on mining the Queen Hill and Severn deposits based on the updated May 2019 Heemskirk mineral resource was recently completed by technical consultants, Mining One. Mining One have previously undertaken mining studies on the Heemskirk deposits in 2014 and 2016 and a number of inputs developed from these previous studies were used in the 2019 mining study.

The 2019 mining study on the Queen Hill and Severn deposits included;

- Selection of an underground mining method,
- Review and verification of the 2019 Block model for mining process interrogation work,
- Update mining cut off grades,
- Running Mining Stope Optimiser (MSO) on the updated 2019 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 Life of Mine (“LOM”) schedules with priority on Indicated material and on grade with Inferred material to follow,
- Calculating mining physicals based on the revised stopes and schedule, and
- 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 either Cemented Aggregate Fill or Cemented Rockfill in most areas was selected for this scoping study.

Mining Cut-Off Grade Determination

The breakeven cut-off grades shown in Table 4 (middle column) were estimated using mill recovery and tin price information provided by Stellar. Higher mining cut-off grades shown in Table 4 (RHS column) were then selected for use in the mining study in order to give some grade elevation above breakeven cut-off grades, following a number of test MSO runs at various cut-off grades. A lower, 0.25% Sn cut-off grade was applied to development material.

Table 4: Heemskerk Tin Project – Cut-Off Grades

Area	Break Even Cut-off Grade	Cut-off grade used in MSO process
Severn	0.50 %Sn	0.70 %Sn
Upper Queen Hill	0.75 %Sn	0.80 %Sn
Lower Queen Hill	0.60 % Sn	0.70 % Sn

Mining Stope Optimisation

Mining stopes were optimized using the Datamine Mining Shape Optimiser (MSO) using the following parameters:

- Minimum stope width 2 m
- Maximum stope width 100 m
- Stope height 20 m
- Strike length 15 m
- Pillar width 5 m
- Cut-off grades As per Table 4

10% mining dilution, at a 0% Sn dilution grade, and 90% mining recovery factors were then applied to the mining stope tonnages and grades calculated by MSO.

Mine Development

Mine development designs from previous mining studies were modified and optimized to suit revised stoping areas as shown in Figure 4. This included;

- New location of decline portal selected, which will enable the quick start of mining Indicated material at Upper Queen Hill,
- Mine access via a single decline to Upper 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 provided by using two exhaust shafts connected to surface respectively for Queen Hill and Severn and an emergency escape way system designed as a second egress and fresh air intake.
- Decline dimensions of 5.5mW x 5.5mH
- Ore drives dimensions of 4.5mW x 4.5mH

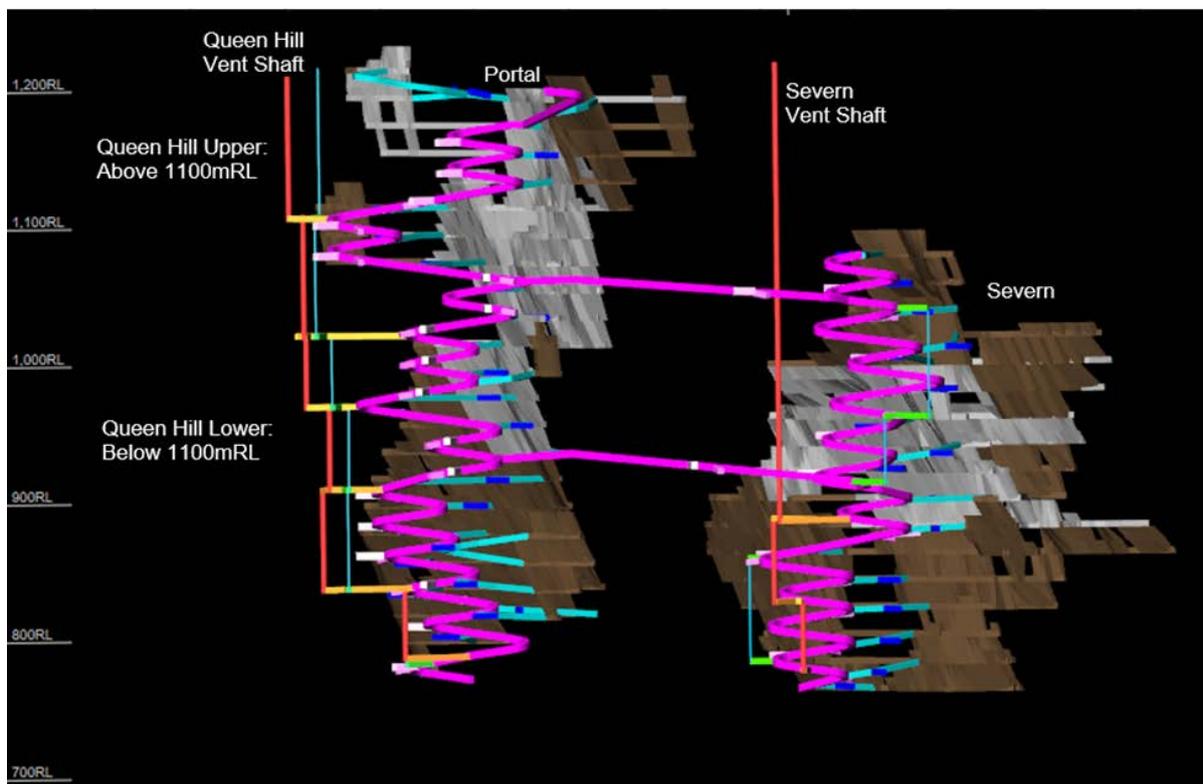


Figure 4: Conceptual Heemskirk Mine Design Showing Stopes based on Indicated Mineral Resource (Grey) and Inferred Mineral Resource (Brown)

Preliminary Mining Schedule

Mine production was scheduled for the Queen Hill and Severn deposits based on the following parameters:

- Annual ore production and processing rate of approximately 350ktpa
- Processing Plant start up 6 months from commencement of mine development
- Indicated Mineral Resource classification areas mined before Inferred Mineral Resource classification areas
- A significant amount of lower grade, higher cost Inferred Mineral Resource ore from the lower part of Severn was physically excluded from the preliminary mining schedule
- 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
- Single stope capacity: 300t/d

The preliminary mining schedule for Queen Hill and Severn includes total mineral resources of 3.29Mt @0.95% Sn after application of the mining dilution and mining recovery factors and mining cut-off grades described above. The preliminary mining schedule for Queen Hill and Severn extends for a 10-year mine life at a nominal 350ktpa annual production rate as shown in Figure 5.

Mining from the St Dizier satellite deposit has also been included in the final year (year 11) of the preliminary mining schedule as shown in Figure 5.

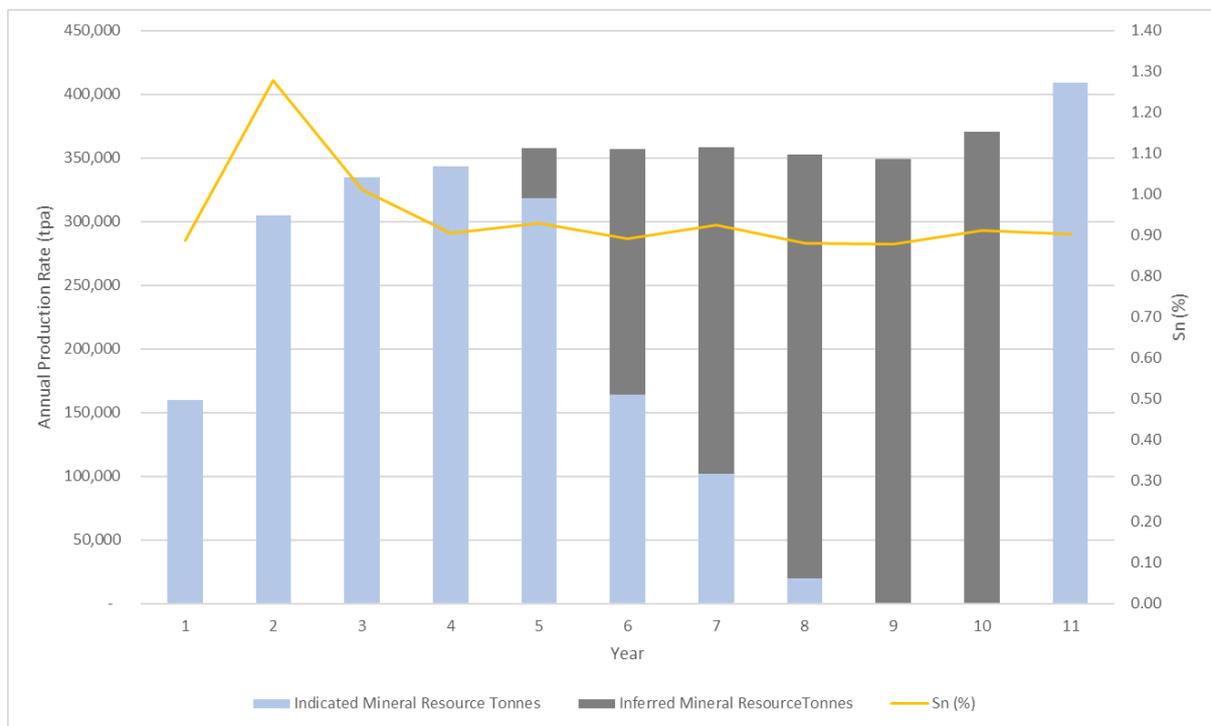


Figure 5: Heemskirk Tin Project – Preliminary Production Schedule by Resource Category

The preliminary mining schedule is based on Indicated and Inferred Mineral Resources. Over the 11-year life of the project:

- 58% of total ore mined is from Indicated Mineral Resources
- 42% of total ore mined is from Inferred Mineral Resources

The first 4 years of mining are based on 100% Indicated Mineral Resources and the 5th Year of mining is based on 89% Indicated Mineral Resources. Thereafter, the later part of the mine plan (years 6 to 10) is based on increasing amounts of Inferred Mineral Resources, reaching 100% Inferred Mineral Resources in years 9 and 10 of the project. In year 11 of the mine plan, mining is all from the St Dizier satellite deposit which is a 100% Indicated Mineral Resource. 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 and the payback period of the project of approximately 3.0 years is based purely on the Indicated Mineral Resource.

During the first 4 years of mine-life, there is a small quantity (23,674 tonnes) of Inferred Mineral Resource that is required to be mined as part of the mine development roadways needed to access Indicated Mineral Resource ore stopes. This small quantity of Inferred Mineral Resource development ore is treated as follows in the scoping study:

- The costs of mining this ore over the first 4 years are included in the study
- This ore has been entirely removed from the first 4 years of the preliminary mining schedule
- No revenue has been included in the study from this ore during the first 4 years
- This ore will be stockpiled over the first 4 years and then fed to the processing plant evenly over years 5, 6 and 7 when the ore is then shown in the preliminary mining schedule and revenue from this ore is then included

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 detailed cost model developed for owner-operated underground mines of similar scale based on Mining One's experience. The cost model is based on an owner-operated underground mine at Heemskirk with key results including:

- **Heemskirk Mining Capital Cost of A\$8.1m** (cost of decline from surface to first Upper Queen Hill ore)
- Costs of A\$13.7m for; (a) underground mobile mining equipment purchase (A\$11.9m), (b) hire costs for a Jumbo during the period that a second Jumbo is required (A\$0.5m), (c) rebuilding costs for trucks and loaders over the life of the mine (A\$0.6m), and (d) contingency added by Stellar (A\$0.6m), have been excluded from mining capital costs and instead included in Heemskirk mining operating costs as a finance lease cost based on a 10 year lease at a 10% p.a interest rate
- **Heemskirk Mining Operating Cost of A\$62/t** (inclusive of equipment finance lease cost as above. Excludes St Dizier)

St Dizier

A scoping study for the St Dizier Tin Project was announced in January 2019³ which forms the basis of the mining and other assumptions used for inclusion of St Dizier in the final year (Year 11) of this scoping study. There have been no material changes in the St Dizier Scoping Study technical and production assumptions or parameters since the January 2019 study.

METALLURGY

Heemskirk

The Heemskirk Tin Project's Queen Hill and Severn tin deposits are broadly similar with cassiterite being the principle 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 5 summarises the recovery and concentrate grade estimates from test work completed and the Life of Mine average head grades for each ore type.

Table 5: Average Head Grade, Recovery and Concentrate Grade by Deposit

Parameter	Unit	Upper Queen Hill	Lower Queen Hill	Severn	St Dizier	LOM Schedule
Head Grade	% Sn	0.98%	1.15%	0.83%	0.90%	0.94%
Recovery	%	53%	66%	80%	50%	69%
Conc Grade	% Sn	48%	48%	49%	50%	49%

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.

Stage 2 metallurgical testing involving pilot scale equipment and large samples for each of the three Heemskirk ore types will be required to support a bankable feasibility study. This test work will require additional sample from new drill holes.

St Dizier

St Dizier ore is similar in complexity to that at Upper Queen Hill. Stage 1 test work on diamond drill core from St Dizier was conducted by ALS Metallurgical Laboratory in Burnie and supervised by Worley. The test work showed the following outcomes:

- Mineralisation in the sample is quite variable and provides a wide range of responses
- High tin losses to magnetite, slime and tin float tails resulted in overall recovery of 43%
- Gravity concentrate tin grade of 55% is possible through pre-gravity sulphur removal

- 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 7. An illustrative view of the processing plant and surface infrastructure designed by Mincore is shown in Figure 8.

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 which has been used as the basis for this scoping study.

The Mincore (August 2019) 350ktpa Processing Plant and Surface Infrastructure capital cost estimate as shown in Table 6, includes; the processing plant, site infrastructure and buildings, concentrate handling, tailings handling and the 6.7km tailings pipeline.

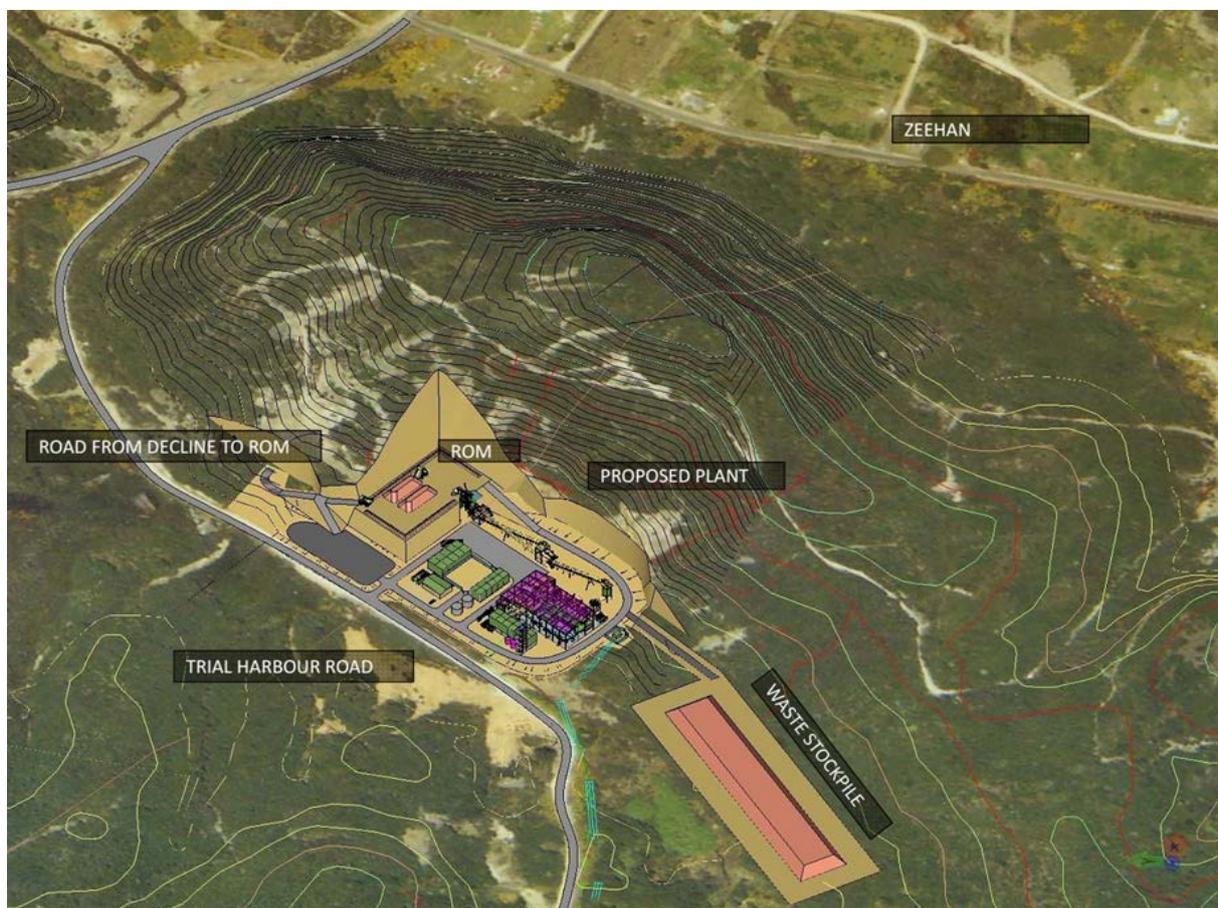


Figure 8 : Proposed Heemskirk Tin Processing Plant (Mincore)

The Mincore (August 2019) 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\$0.5m

- Workshops and Stores - The Mincore 2019 estimate was increased by A\$0.28m (to A\$0.35m), plus 10% contingency, for owner operated mining equipment maintenance
- Site laboratory - an internal estimate of A\$0.40m plus 10% contingency was included for an on-site laboratory

Table 6: 350ktpa Heemskirk Processing Plant & Surface Infrastructure Capital Cost Estimate (Mincore, August 2019)

Description	Cost (A\$)
Bulk Earthworks	264,544
Crushing and Grinding	4,082,336
Sulphide Flotation	2,579,335
Gravity Separation	4,444,552
Ton Flotation	2,037,613
Concentrate Dressing , Filtration & Handling	2,660,907
Reagent Systems	1,440,061
Power & Reticulation	4,551,508
Water Supply	439,452
Tailings Treatment and Pipeline	3,104,836
Fuel Farm	77,729
Compressed Air	219,482
Site Buildings	421,583
Mobile Plant Equipment	193,198
Plant Piping	1,198,252
Construction Equipment	1,246,493
Contingency	1,578,637
Subtotal Direct Cost	30,540,517
Engineering	3,540,594
Commissioning	1,173,951
Preliminaries & General	1,179,205
Owners Costs	1,147,589
Subtotal Indirect Cost	7,041,339
Total Base Case	37,581,856

Processing Plant Operating Cost Estimate

Mincore (August 2019) also completed an operating cost estimate for a 350ktpa Heemskirk Processing Plant based on scaling of a previous 200ktpa Heemskirk Processing Plant operating cost estimate completed by Worley Parsons in 2015. The Mincore (August 2019) operating cost estimate for a 350ktpa Heemskirk Processing Plant is shown in Table 7.

Table 7: 350ktpa Heemskirk Processing Plant Operating Cost Estimate (Mincore, August 2019)

Input	A\$/t ore	%
Labour	8.1	23%
Power	7.1	20%
Reagents & Grinding Media	12.4	35%
Maintenance	3.3	9%
Linings	2.2	6%
Other	2.5	7%
Total	35.5	100%

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 2019 Processing Plant and Surface Infrastructure sections above.

Waste rock is to be crushed on site for use as mine fill.

Tailings Storage Facility

An area has been selected for a tailings 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, minimizing the cost of construction, as shown in Figure 9.

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 tailings 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 0.6mtpa (almost twice the 0.35mtpa rate that this scoping study is based on).

GDH Engineering (July 2015) estimated the capital cost for the Tailings Facility as A\$1.4m for the initial embankment construction. Stellar has added a 10% contingency to this.

GDH 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. This cost, plus a 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).



Figure 9: Proposed Heemskirk Tailings Storage Facility Plan (Initial Stage) and Site Photograph

MINE SURFACE INFRASTRUCTURE

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 the Mincore Processing Plant and Surface Infrastructure capital cost estimate.

The following site infrastructure and building are included 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 and added to the Mincore Processing Plant and Surface Infrastructure capital cost estimate as described in that section above.

Employee accommodation is not included in the capital cost estimate for the Heemskirk Tin Project as it is assumed that Zeehan 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.

St Dizier will be operated as a contract mining site. All infrastructure to support mining including a workshop, fuel storage and transportable office will be provided by the contractor. The contractor will also be responsible for accommodating employees which is likely to be in Zeehan.

CONCENTRATE TRANSPORT

The combined concentrate from the Heemkirk processing plant is 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

A tin price of US\$20,000/t has been used as the Base Case for this scoping study.

As shown in Figure 10, the US\$20,000/t Base Case tin price selected for this study is well supported by price history with the average LME spot tin price having been; (a) US\$20,409/t for the last 10 years, (b) US\$20,046/t for the last 3 years, (c) US\$19,928/t for the last 2 years, and (d) US\$19,409/t over the last 1 year to 6 September 2019.

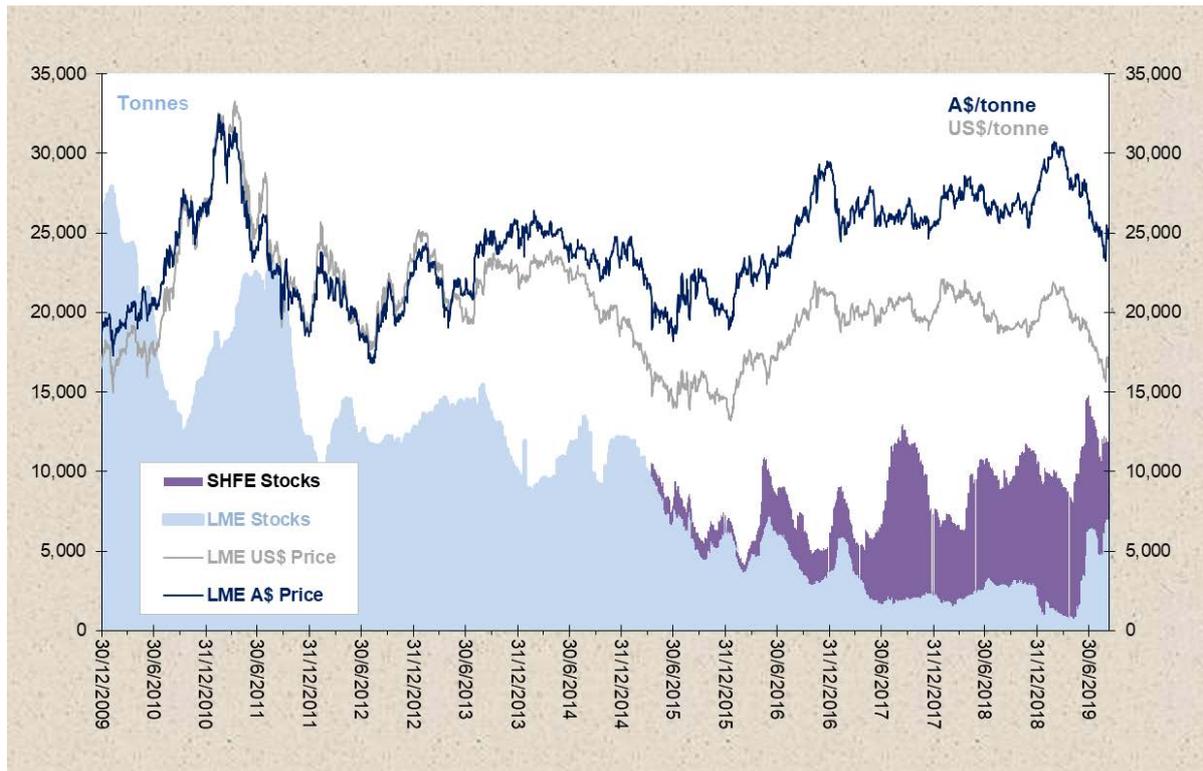


Figure 10 : LME Tin Price and Exchange Stocks

Concentrate transport costs of A\$125/tonne for; (a) trucking of concentrate from Zeehan to the port of Burnie based on indicative rates from Tasmanian transport company DeBruyn, and (b) shipping costs to smelters in Asia based on indicative rates for container shipping to an Asian tin smelter from transport company, Toll Group.

Smelter treatment charges of 6.0% 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. At the same time, hydraulic alluvial mining was undertaken near St Dizier. In the time since, both sites have undergone extensive rehabilitation including the removal of all surface structures, the capping of several mine shafts and natural revegetation.

Stellar Resources commissioned John Miedecke and Partners Pty Ltd to undertake a Stage 1 environmental review of the Heemskirk and St Dizier project areas. The Miedecke reports reviewed a number of existing studies and called for additional surveys on flora, fauna, water quality, tailing storage site suitability and acid mine drainage as outlined below:

- Flora and Fauna baseline studies were undertaken at the Heemskirk mine site, tailings storage site and at St Dizier by Phil Milner Landscape Consultant Pty Ltd. No significant occurrence of endangered species was noted during the surveys and on-going monitoring is planned.
- Water quality (acidity and metal content) and biodiversity was surveyed at Heemskirk and St Dizier and a baseline established at both sites by Acquatic Science Pty Ltd and Todd Walsh Kununnah Pty Ltd. Further monitoring is planned

- An Archaeological survey of historical mining sites was conducted in 1999 over much of the Heemskirk project site by Tasmania Department of Infrastructure, Energy and Resources. The 1999 archeological survey focused on areas of an acid mine drainage remediation works program being undertaken by the department as a means of treating contaminated subterranean mine water from historic workings which discharges into local water catchments. The survey included the majority of the Queen Hill and Oonah deposit areas and the proposed processing plant location were included in the 1999 survey. The survey did not include the Severn deposit area. The 1999 archeological survey recommended protection of a number of historical mining sites. It is not expected that the sites recommended for protection would have a material impact on the proposed development of the Queen Hill and Severn mines, processing plant and surface infrastructure as outlined in this scoping study. A more detailed archeological survey of the full project area will need to be undertaken and plans for protection of historically significant mining sites agreed with Tasmania Department of Infrastructure, Energy and Resources. This is planned to be undertaken as part of the PFS for the project.
- No significant sites requiring preservation were identified
- No significant aboriginal heritage sites are registered with Aboriginal Heritage Tasmania at Heemskirk or St Dizier. A survey to substantiate this finding is planned
- An environmental geochemical assessment of mine rock types and tailings was undertaken by Geo-Environmental Management Pty Ltd at Heemskirk and St Dizier to determine acid the generating capability of all potential waste material and how that material should be handled at surface
- Baynes Geologic Pty Ltd surveyed the proposed Heemskirk tailings storage site for suitability and concluded that it was an excellent site topographically. Subsequent flora and fauna surveys added to the merits of the site

Stage 1 surveying concluded that there are no environmental issues that would prevent development of the Heemskirk or St Dizier projects.

Stellar has registered the projects with the Tasmanian Environmental Protection Authority by lodging a notice of intent. The EPA has responded by issuing guidelines for the preparation of a Development Proposal and Environmental Management Plan for each of Heemskirk and St Dizier.

Stage 2 environmental surveying will be conducted in accordance with EPA guidelines and compiled into a DPEMP submission to the EPA and the West Coast Council in support of final mining approvals.

COMMUNITY

The Heemskirk tin deposits surround Queen Hill a prominent topographical feature (70m elevation above town) 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 above the Trial Harbour Road. The location prevents 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 operated within the town.

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. Stellar expects to confirm this assessment with vibration and seismic modelling as part of a DPEMP.



Zeehan has a population of 728 people many of whom are involved in the mining industry and would support an increase in mining activity in the area. Stellar has conducted a number of diamond drilling programs on the town side of Queen Hill with the cooperation and support of local residents. The Company also has a good relationship with the West Coast Council who would like to see a Heemskirk workforce making use of the many unoccupied dwellings in the town.

St Dizier is located in open heathland within the Mount Heemskirk Regional Reserve. The nearest residential settlements are Granville Harbour 10km to the west and Zeehan, 20km to the southeast. Access to Heemskirk Road from the St Dizier mine site will be designed to manage any interaction between mine vehicles and private vehicles.

PROJECT ECONOMICS

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, are shown in Table 8. The valuation results have an accuracy of $\pm 35\%$.

Table 8 : Heemskirk Tin Project – Summary of Technical and Financial Parameters

	Unit	Total LOM
Ore Production	(Mt)	3,695,386
Sn Grade (LOM Ave)	(%)	0.94
Tin Recovery (LOM Ave)	(%)	69.4
Tin Produced	(Tonnes)	24,000
Mine Life	(Yrs)	11
Tin Price	(US\$/t)	20,000
Exchange rate	USD:AUD	0.70
Tin Price	(A\$/t)	28,571
Gross Revenue	(A\$M)	691
Total Operating Costs (AISC)	(A\$M)	454
Total Operating Costs (AISC)	(US\$/t Tin)	13,100
Operating Cash Flow	(A\$M)	237
Operating Margin	(%)	34%
Capital Cost	(A\$M)	57
Net Cash Flow (Pre-Tax)	(A\$M)	180
Pre-Tax NPV_{10%}	(A\$M)	83
Post-Tax NPV_{10%}	(A\$M)	71
IRR (Pre-Tax)	(%)	45
Payback Period	(Yrs)	3.0
Pre-Tax NPV / Capex		1.5

At an All-In Sustaining Cost (AISC) of approximately US\$13,100/tonne of tin produced over the Life of Mine, the Heemskirk Tin Project Base Case generates an attractive expected operating margin of approximately 34% based on the US\$20,000/t tin price assumed.

The Heemskirk Tin Project Scoping Study has demonstrated **attractive economics with a Base Case pre-tax NPV_{10%} of approximately A\$83m, at a tin price of US\$20,000, determined to an accuracy of $\pm 35\%$. The pre-tax IRR of the project is approximately 45% and the payback period is approximately 3.0 years.** The project has a **Base Case post-tax NPV_{10%} of approximately A\$71m** as a result of tax shielding from A\$24.2m Stellar group accumulated losses and capital depreciation on the project. A 30% tax rate and depreciation over the life of the project have been assumed.

Capital costs required for the project have been significantly reduced to A\$57m and ore production accelerated with mine and process plant production commencing 6 months from the start of construction and concentrate sales commencing 9 months from the start of construction.

Capital Costs

A breakdown of the Capital Cost estimate is shown in Table 9. (note: Capital Costs are also stated in US\$ for comparison purposes). The accuracy of the capital cost estimate is up to $\pm 35\%$.

Table 9 : Heemskirk Tin Project – Capital Cost Summary

	(A\$M)	(US\$M)
Mining	8	6
Processing & Surface Infrastructure	34	24
Tailings	5	4
Working Capital	9	6
Contingency	1.7	1
Total Development Capital Cost	57	40

Capital costs 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\$8M Mining capital cost is the full mining cost for the first 6 months of the operation (decline construction) 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\$6m mining costs and A\$3m of processing costs during months 7 to 9 of the project while the processing plant is commissioned, and a sufficient stockpile is built to commence concentrate sales in month 10 of the project.
- Contingency – Contingency totaling A\$1.7m (4.5%) has been included in the Processing Plant & Surface Infrastructure and Tailings Capital Cost estimates. Mining One have assumed conservative mine capital development rates of 120m/month for a single heading so no additional contingency has been applied in the Mining Capital or Working Capital estimates.

Operating Costs

A breakdown of the Operating Cost estimate is shown in Table 10. The accuracy of the operating cost estimate is up to $\pm 35\%$.

Table 10: Heemskirk Tin Project – Operating Costs Summary

	Total LOM (A\$M)	Annual Ave (A\$M)	A\$/t Ore	US\$/t Sn
Mining	213	19.4	58	6,179
Ore Transport	2	0.2	1	59
Processing	128	11.7	35	3,711
Administration	8	0.8	2	243
Concentrate transport & treatment	48	4.3	13	1,380
Royalties	41	3.8	11	1,196
Sustaining Capital	13	1.3	4	375
Total All In Sustaining Cash Costs (AISC)	454	41	123	13,143

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

- Mining operating cost estimated by Mining One for Heemskirk and by Polberro Consulting for St Dizier (see Mining section)
- Ore Transport cost is only applicable to trucking of St Dizier Ore in final year of project and was estimated by Polberro Consulting (see Mining Section)
- Processing Plant and Tailings pipeline operating cost estimated by Mincore (see Processing Plant Operating Cost section)
- Administration cost estimated internally
- Concentrate transport and treatment costs (see Marketing section)
- Royalties including:
 - Mineral Resources Tasmania published mineral royalty rates of 5.35% on revenues net of realization costs
 - Vendor royalty of 1.23% on revenues net of realization costs and state royalties
- Sustaining Capital cost estimated internally based on industry rule of thumb (1.5% pa of the total development capital cost). In addition, the following deferred capital expenditure has been included as sustaining capital and included in the Total All-In Sustaining Cost (AISC); A\$2.8m in year 4 for increasing tailings storage embankment height (see Tailings section), A\$3.3m in year 10 for St Dizier mine construction (see Mining Section), and A\$0.5m for St Dizier mine remediation and closure (see Mining Section).

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. Table 11 shows the likely range of pre-tax NPV_{10%} outcomes for variations of up to +/- 20% around the Base Case tin price (US\$,20,000/t) and up to +/- 14% around the Base Case USD:AUD exchange rate (0.70).

Table 11 : Pre-Tax NPV_{10%} (A\$m) Sensitivity to Tin Price and USD:AUD Exchange Rate

AUD:USD Exchange Rate	Tin Price (US\$/t)				
	16,000	18,000	20,000	22,000	24,000
0.76	-9	23	55	88	120
0.73	2	35	69	102	136
0.70	13	48	83	118	153
0.67	26	62	99	135	172
0.64	39	78	116	154	192

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

Stellar have previously studied a larger scale 0.6mtpa Heemskirk development option. Stellar does not currently have sufficient Indicated Mineral Resources to make economic statements relating to a 0.6mtpa Heemskirk development option due to the larger mineral resource required.

Mining One studied 3 cases in the recently completed 2019 Heemskirk mining study. These included:

- Case 1 - 225ktpa Contractor Operated Case – 16 Year Mine Life with higher Total Unit Mining Cash Costs of A\$82/t due to impact of fixed costs being incurred over an additional 6 years of operation compared with Cases 2 and 3
- Case 2 - 350ktpa Contractor Operated Case – 10 Year Mine Life with Total Unit Mining Cash Costs reduced to A\$72/t due to impact of 6 years of fixed costs being removed compared with Case 1
- Case 3 (Base Case) - 350ktpa Owner Operated Case - 10 Year Mine Life as per Case 2, with Total Unit Mining Cash Costs further reduced to A\$63/t⁴ as a result of lower estimated cost structure with owner operated operations than with contractor operations, which include a contractor margin, as in Case 2. This case has been selected as the Base Case for this scoping study

⁴ A\$63/t Total Unit Mining Cost calculation includes; (a) A\$8M capitalised mining cost, (b) A\$6M mining cost included in working capital, and (c) A\$13.1M of mobile equipment.

PROJECT FUNDING

To achieve the range of outcomes indicated in the Scoping Study, funding of in the order of A\$57m will likely be required for project development in addition to pre-development funding of approximately A\$8m for exploration to convert the mineral resource to an ore reserve and to complete a Bankable Feasibility Study. Whilst there is no certainty that project development funding will be obtained on satisfactory terms, at the time required, or at all, the Stellar Directors believe that it is reasonable to assume the availability of funding for the development of the Heemskirk Tin Project for the purposes of the Scoping Study.

Stellar Directors believe that it is most likely that the abovementioned pre-development and development funding required for the Heemskirk Project may be achieved via;

1. A significant investment in the Company by a strategic investor to acquire up to 50% of the Company, with initial funds invested being used to cover the majority of pre-development costs for the project. The Directors wish to note that the Company has been in discussions with a major potential strategic investor for some time and these discussions are ongoing.
2. Debt financing is expected to fund the majority of the project development costs.
3. The remaining equity financing component of the project development costs is expected to be funded by;
 - a. The strategic investor funding its share of equity financing (up to 50%).
 - b. 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.

Factors which support this assumption, without stating that funding will be necessarily obtained, include:

- 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 track record of the Company and its Directors in raising funding through share placements - \$12.1 has been raised by the Company in 5 placements over the past 8 years.
- The current level of engagement of the Stellar board and management with potential strategic partners who may wish to invest
- The chance of attracting off-take agreement financing (a common form of financing in the tin industry) as the project moves to final feasibility

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

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 assumes a tin price of US\$20,000/t and an exchange rate of 0.70 US dollars to the Australian dollar will prevail for the life of the project. Stellar believes that these assumptions are reasonable. However, there is a risk that prices or exchange rates could move to adversely affect project economics. 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, Severn and St Dizier are based on initial Stage 1 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 flow-sheet. 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, Severn and St Dizier resources may vary from current estimates as further infill drilling is completed. This risk will be addressed in the next stages of exploration and studies which establish mineral reserves.

Environment

Stage 1 environmental surveying has been undertaken and concluded that there are no environmental issues that would prevent development of the Heemskirk or St Dizier projects. Stage 2 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 a DPMP submission to the EPA and the West Coast Council in support of final mining approvals. Until the Stage 2 environmental surveys are completed there remains a risk to the cost of waste storage or other potential environmental issues arising from the Stage 2 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

An indicative budget, subject to funding, for the completion of pre-development exploration, studies and permitting is outlined in Table 12.

The next step, subject to funding, is completion of drilling to define a ~3.3Mt resource at Queen Hill and Severn targeting a 100% Indicated Mineral Resource / 100% Probable Reserve, and a Pre-Feasibility Study (PFS) for the Heemskirk Tin Project. The indicative budget for drilling and PFS completion is ~A\$4.1M and this would take approximately 18 months to complete.

Following the completion of a successful PFS, further drilling to define ~1Mt of Proven Reserve at Queen Hill and Severn covering the first 2-3 years of mine production, and a Bankable Feasibility Study (BFS) should be completed for the Heemskirk Project. The indicative budget for drilling and BFS completion is ~A\$4.1M and this would take approximately a further 12 months to complete.

The total indicative budget for completion of all pre-development exploration and studies (including PFS and BFS) and permitting is A\$8.2m and this would take approximately 2.5 years to complete.

Project construction is expected to take 6 months to complete so the total time to commencement of production from the Heemskirk Tin Project is approximately 3 years subject to availability of funding.

Table 12 : Heemskirk Tin Project - Indicative Pre-Development Budget

Pre Feasibility Study (18 months)	(A\$)
Drilling (17 holes, 6,800m) 3.3Mt Heemskirk Probable Reserve	1,700,000
Site Overhead and Geology Costs	450,000
Metallurgical Testwork	300,000
Geotechnical, Hydrological holes and testing	200,000
Environmental baseline surveys	150,000
PFS Costs	450,000
Corporate Overhead Costs	900,000
Total PFS Cost	4,150,000
Bankable Feasibility Study (12 months)	(A\$)
Drilling (20 holes, 5600m) Heemskirk 1Mt Proven Reserve	1,400,000
Site Overhead and Geology Costs	300,000
Metallurgical Testwork	100,000
Geotechnical, Hydrological holes and testing	400,000
Environmental baseline surveys	150,000
Permitting	350,000
BFS Costs	800,000
Corporate Overhead Costs	600,000
Total BFS Cost	4,100,000
Total Pre-Development Cost	8,250,000

A further ~A\$0.5M for St Dizier exploration and studies, as outlined in the 22 January 2019 St Dizier Scoping Study announcement³, would be required to be funded from the project cashflows a few years prior to commencing St Dizier mine production planned in year 11 of the project.



Stellar Resources Tenement Map, Western Tasmania

Heemskirk Tin Project

Stellar Resources Limited is a tin exploration and development company focused on developing its flagship Heemskirk Tin Project and satellite tin deposits at Razorback and St Dizier in western Tasmania. Heemskirk has two significant competitive advantages. First, is a JORC 2012 compliant Mineral Resource of 6.6mt @ 1.1% Sn which makes it the highest grade undeveloped tin project of significance listed on the ASX. Second is its excellent location within the historic west coast mining district of Tasmania and access to significant infrastructure and services.

For further details please contact:

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 Stellar Resources Limited
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 Or visit our Website at: <http://www.stellarresources.com.au>

Competent Persons Statement

The Information in this report that relates to Mineral Resources was prepared in accordance with the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”(JORC Code), by Tim Callaghan (Principal, Resource and Exploration Geology Pty Ltd), who is a Member of the Australasian Institute of Mining and Metallurgy (“AusIMM”), has a minimum of five years’ experience in the estimation, assessment and evaluation of Mineral Resources of this style and is a Competent Person as defined in the JORC Code. This announcement accurately summarises and fairly reports his estimations and he has consented to the resource report in the form and context in which it appears. The estimated mineral resources underpinning the production target have been prepared by Tim Callaghan (Principal, Resource and Exploration Geology Pty Ltd), in accordance with the requirements of the JORC Code 2012.

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

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.

For more information of specific risks associated with forward looking statements refer to the Key Risks section of this report and to the Key Risks section in the 2015 St Dizier tin mine Scoping Study refer to the Key Risk section in the 22 January 2019 SRZ announcement “St Dizier Tin Mining Lease Granted and Scoping Study Results”.

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
Study Status	<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>
Mineral Resource estimate used for assessment of potential production Target	<p>The preliminary mining used in this study is based on Indicated and Inferred Mineral Resources. Over the 11-year life of the project:</p> <ul style="list-style-type: none"> • 58% of total ore mined is from Indicated Mineral Resources • 42% of total ore mined is from Inferred Mineral Resources <p>The first 4 years of mining are based on 100% Indicated Mineral Resources and the 5th Year of mining is based on 89% Indicated Mineral Resources. Thereafter, the later part of the mine plan (years 6 to 10) is based on increasing amounts of Inferred Mineral Resources, reaching 100% Inferred Mineral Resources in years 9 and 10 of the project. In year 11 of the mine plan, mining is all from the St Dizier satellite deposit which is a 100% Indicated Mineral Resource. 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 and the payback period of the project of approximately 3.0 years is based purely on the Indicated Mineral Resource</p> <p>See pages 10 and 11 for further details.</p>
Mining factors used in the determination of the Production Target	<p>Heemskirk (Queen Hill and Severn) Underground Mining Factors assumed are based on 2019 Mining Study by Mining One (see pages 8-11 for further details):</p> <ul style="list-style-type: none"> • Mining Cut-Off Grades <ul style="list-style-type: none"> Severn (0.70% Sn) Upper Queen Hill (0.80%) Lower Queen Hill (0.70%) • Mining recovery 90% • Mining dilution 10% (at 0% Sn dilution grade) • Minimum stope width 2 m • Maximum stope width 100 m • Stope height 20 m • Strike length 15 m • Pillar width 5 m • Decline dimensions 5.5mW x 5.5mH • Ore drives dimensions 4.5mW x 4.5mH • Jumbo development capacity 275m/Jumbo/month • Single heading max advance 120m/month • Stopping capacity 1,800t/d • Single stope capacity 300t/d • Mining costs Based on owner operated cost model

Mining factors used in the determination of the Production Target
(Continued)

St Dizier Open Pit Mining Factors assumed are based on 2015 Mining Study by Polberro Consulting (see pages 11-12 for further details):

- Open cut mining method.
- Optimised pit design with 4.7:1 waste: ore ratio (710m long x 170m wide x 90m deep pit).
- Mining recovery of 95% and 10% dilution.
- Mining cost estimates were based on industry best practice and validated against Polberro Consulting's database for West Coast Tasmania.
- Trucking costs of A\$5/t ore 20km to Heemskirk processing plant.

Processing factors used in the determination of the Production Target

Processing plant recoveries have been estimated based on Stage 1 test work with key results as follows:

- | | |
|--------------------|---|
| • Upper Queen Hill | 53% Recovery and 48% Sn Concentrate Grade |
| • Lower Queen Hill | 66% Recovery and 48% Sn Concentrate Grade |
| • Severn | 80% Recovery and 49% Sn Concentrate Grade |
| • St Dizier | 50% Recovery and 50% Sn Concentrate Grade |

350ktpa processing plant capacity based on the metallurgical flowsheet designed from Stage 1 test work by GR Engineering and later modified by Mincore.

Stage 2 metallurgical testing is required to more accurately determine processing plant recoveries.

See pages 13 to 16 for further details.

Capital Cost Estimates

Capital cost estimates were developed using a combination of first principals, quotes and industry benchmarks. See page 23 for further details.

Capital costs include:

- Mine development (Heemskirk decline and St Dizier pit development, drainage diversion and waste stockpile construction).
- Processing Plant and Surface Infrastructure construction.
- Tailings pipeline and storage facility construction.
- Rehabilitation and closure costs for St Dizier Open Pit mine.
- Working Capital (mining and processing costs for months 7-9 of the project).
- Contingency:
 - 4.5% on Process Plant and Surface Infrastructure and Tailings Construction.
 - No specific contingency included on mine development costs as Mining One have assumed conservative mine capital development rates of 120m/month for a single heading.
- 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.

Ongoing sustaining capital cost are included in operating costs based on industry rule of thumb of 1.5% 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 Cost Estimates	<p>Operating costs are estimated to production of a London Metal Exchange (LME) tin product delivered to tin smelters in Asia.</p> <p>Operating costs include:</p> <ul style="list-style-type: none"> • Mining Costs (Underground mining costs for Heemskirk deposits and Open pit mining and transport of ore 20km to a processing plant for St Dizier deposit). • Processing costs including tailings handling and disposal. • Transport and shipping of a tin concentrate for smelting in Asia. • Smelting and refining charges. • Royalties. <p>The costs presented are real costs and are exclusive of escalation.</p> <p>The operating cost has been completed based on estimates of up to $\pm 35\%$ level of accuracy.</p> <p>See page 24 for further details.</p>
Economic Evaluation	<p>Valuations are calculated using discounted cash flow (NPV) and internal rate of return methods. Payback period is also considered.</p> <p>Valuation assumptions include:</p> <ul style="list-style-type: none"> • Discount rate of 10% • Cash flows are pre-corporate tax, real, Australian dollars • Valuation date as at construction decision point • Exchange rate of 0.70 US dollars to the Australian dollar • State Government royalty of 5.35% on revenues net of realization costs • Vendor royalty of 1.23% on revenues net of realization costs and state royalties <p>See pages 22-25 for further details.</p>
Marketing	<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"> • LME tin sale price of US\$20,000/t of tin • Concentrate transport costs of A\$125/tonne concentrate • Smelting Charges (treatment and refining) of 6% of the LME tin sale price <p>See pages 18-19 for further details.</p>
Infrastructure	<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>St Dizier will be operated as a contract mining site. All infrastructure to support mining including a workshop, fuel storage and transportable office will be provided by the contractor.</p> <p>Employee accommodation is not included as it is assumed that Zeehan has sufficient surplus housing.</p> <p>See page 18 for further detail</p>

Environmental

Stage 1 environmental surveying has not identified any significant hurdles for the project. Stage 2 environmental surveying will address the requirements for the preparation of a Development Proposal and Environmental Management Plan (DPEMP).

See page 19-21 for further detail

Legal

The Heemskirk (Queen Hill and Severn) tin deposits lie 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 and other metals for an initial period of 12 years and are due for renewal in January 2029.

The proposed St Dizier mine and associated surface structures lie within ML 10M/2017. The Mining Lease was granted for an initial period of 6 years and is due to expire on 31 August 2024.

See page 4 for further detail.

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 a DPEMP by the Tasmania EPA and the West Coast Council.

APPENDIX 2 – HEEMSKIRK (QUEEN HILL AND SEVERN) 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"> 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.). 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. 	<ul style="list-style-type: none"> The Heemskirk Tin deposits have been delineated entirely by diamond drilling. Numerous drilling campaigns were completed between 1960 and 1992 by Placer, Gippsland, Minops, CRAE and Aberfoyle. Post 2010, drilling was completed by Stellar with the last drillhole ZS139A completed in 2017. Pre-2010 drilling 133 diamond drill holes for 31,485.5m Post 2010 drilling 58 holes for 18,709.21m. Logged sulphide and siderite altered zones were selected for geochemical analysis Approximately 1m samples of 2-3kg were taken from diamond saw cut drill core whilst respecting geological boundaries
Drilling Techniques	<ul style="list-style-type: none"> 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.) 	<ul style="list-style-type: none"> All drill sampling by standard wireline diamond drilling. All Post-2010 holes oriented by wire line spear. 2017 drilling oriented using Coretell Gen 4 device. Total of 9485 assay records derived from half diamond drill core includes core sizes of 4857 NQ, 2264 BQ, 1731 HQ, 102 PQ, 20 AX/EX and 238 not recorded.
Drill sample recovery	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Core reconstituted, marked up and recovery measured for most drillholes except earliest drill holes, G1, G3, G4, G11W, G15, G15W, G18, G20, G22, G24, G25, G26, G27 and G33 Recoveries generally excellent (95-100%) No relationship between recovery and grade was observed
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Geological logging has been carried out on all holes by experienced geologists and technical staff. Holes logged for lithology, weathering, alteration, structural orientations, RQD and mineralisation. All holes photographed wet and dry before cutting. Logs loaded into excel spreadsheets and uploaded into access database. Pre-2010 paper logs entered into access database by experienced geologists. Standard lithology codes used for all drillholes.

Criteria	JORC Code Explanation	Commentary
Sub-Sampling techniques and sample preparation	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Half core split by diamond saw over 0.3 – 1.0m sample intervals while respecting geological contacts. Most sample intervals are 1.0m. • Assay sample weights between 1 and 4kg are considered appropriate with respect to any coarse tin that may be present. • 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.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. • 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. CRAE analytical techniques at the Oonah deposit are not specified • Soluble Sn, Cu, Pb, Zn and Ag analysed by acid leach followed by AAS. • Pre and Post 2010 drilling campaign assay samples submitted to rigorous Independent laboratory check sampling only. • No certified reference material, blanks or duplicate samples were employed in the drilling campaigns prior to 2017. • Post 2017 drilling involved the insertion of standards, blanks and duplicates. All analyses were within acceptable limits.

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Significant intersections reviewed by company personnel. Metallurgical test work completed on some quartered core. Eight twinned holes have been included in the Heemskirk drilling program with six holes demonstrating moderate to high Sn grade variability between 20 and 50%. Two holes demonstrating extreme grade and or geological variability. Data is collected by qualified geologists and experienced field assistants and 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. 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. Negative values in the database have been adjusted to half the detection limit for statistical analysis.
Location of data points	<ul style="list-style-type: none"> 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 Specification of grid system used Quality and accuracy of topographic control. 	<ul style="list-style-type: none"> All Post 2010 drill collars surveyed by licensed surveyor using differential GPS. Pre 2010 drill collars surveyed by licensed surveyor with the exception of 13 early drill holes located to within 1m by local grid tape and compass for Queen Hill deposit. All Oonah drillholes located on local grid. Collar locations digitized from referenced historic plans (+/- 10m). All coordinates in Zeehan Mine Grid (ZMG) and GDA94 RL's as MSL +1000m Down hole surveys by downhole camera or Tropari. 2017 holes by Deviflex. The Digital Terrain Model has been generated from lands department 10m contours and adjusted with surveyed drill collar and control points.
Data Spacing and distribution	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Drillhole intersection spacing approximately 20 to 50m for the Queen Hill deposit above 930m and south of 3770m. Drillhole intersection spacing approximately 30-60m for Severn deposit above 870m RL, below 980mRL and south of 3770mN. Drillhole intersection spacing 20-50m for upper Oonah deposit Drillhole intersection spacing generally 100m for Montana and down plunge of Queen Hill, Severn and Oonah. Drill spacing is considered to be appropriate for the estimation of Indicated Mineral resources for some of Queen Hill and Severn deposits only. Drill spacing is considered to be appropriate for the estimation of Inferred Mineral Resources for the remainder of Queen Hill and Severn, and all of the Montana and Oonah Deposits.

Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Samples have been composited on 1m intercepts for the resource estimation. 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. Drill holes sampling the Montana deposit have been drilled southeast-northwest sub perpendicular to the strike of the steeply dipping deposit. Three drillholes, ZS132, ZS135 and ZS135A were drilled at a low angle to the strike of the orebody. Drill hole orientation is not considered to have introduced any material sampling bias with the exception of the two oblique holes which have resulted in localised data clustering. Drillhole ZS132 sampled only part of the hangingwall of domain 202 and is possibly not representative of what may potentially be recovered.
Sample Security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Post 2010 chain of custody is managed by Stellar from the drill site to ALS laboratories in Burnie. All samples ticketed, bagged in calico bags and delivered in labelled poly-weave bags. Pre 2010 sample security is not documented.
Audits or Reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> ML2023P/M, RL5/1997 and EL13/2018 hosting the Heemskirk Tin Project in Western Tasmania is 100% owned by Stellar Resources Ltd. 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.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgement and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Early mining activity commenced in the 1880's with the production of Ag-Pb sulphides and Cu-Sn sulphides from fissure loads. 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	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralization. 	<ul style="list-style-type: none"> 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.

Criteria	JORC Code Explanation	Commentary
Drill hole information	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> – 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 	<ul style="list-style-type: none"> • Not applicable. This announcement refers to the Resource Estimation of the Zeehan Tin Deposit and is not a report on Exploration Results. See Stellar Resources website for ASX reports on exploration results. • Drillhole collar details and all significant drillhole intercepts that intersect the interpreted mineralized zone solids are located in Appendix 1A-D of this announcement.
Data aggregation methods	<ul style="list-style-type: none"> • 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. • 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. 	<ul style="list-style-type: none"> • Exploration results are not included in this resource estimation report. • 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 <0.4% Sn) provided the average grade of any intercept that includes the 1m internal dilution is greater than 0.4% Sn. • No metal equivalents have been used.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • Exploration results are not included in this resource estimation report. • All drillholes modelled 3 dimensionally for resource estimation.
Diagrams	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • See body of the announcement for relevant plan and sectional views.
Balanced reporting	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Appendix 1A-D provides a table of all drillhole intercepts that intersect the interpreted mineralized zone solids (i.e. every intercept is included)

Criteria	JORC Code Explanation	Commentary
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Metallurgical test work completed by ALS/BRL laboratories and supervised by Worley-Parsons over a number of different campaigns on drill core samples. Deposits zoned mineralogically and metallurgically Cassiterite is the dominant tin-bearing mineral occurring as free grains and in complex mineral composites. High concentrations of stannite are located in the upper levels of the Oonah deposit. 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. 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 Zeehan Tin ores.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Resource infill drilling is planned to coincide with further technical studies as part of a Definitive Feasibility Study. The mineral deposit remains open down dip and down plunge and will be explored as access becomes available with mine development.

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"> 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. Data validation procedures used. 	<ul style="list-style-type: none"> Data provided as access database Historic data validated by checking paper logs and assay sheets Post 2010 data received electronically and loaded into database Data integrity validated with Surpac Software for EOH depth and sample overlaps and transcription errors. 1m composite statistical analysis checked for significant variations or anomalous figures. No material errors identified.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those site visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> Numerous site visits made during drilling programs since 2012. Periodic advice on infill drilling and QAQC procedures have been provided.

Criteria	JORC Code Explanation	Commentary
Geological interpretation	<ul style="list-style-type: none"> Confidence in (conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> 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. No alternative geological interpretations were attempted for this estimation. Geology model does not vary significantly from historic geology interpretations. Geology/grade contour used for mineralised domain modeling. Mineralised trends well defined from drilling and field mapping.
Dimensions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Severn north trending moderate to steeply east dipping and north plunging stratabound deposit. Comprised of several lenses of mineralisation in a broader sulphide halo. Strike extending north over 400m, width 3-50m and down dip extent over 380m. Queen Hill north trending moderate to steeply east dipping and north plunging stratabound deposit. Comprised of multiple lenses of mineralisation in a broader sulphide halo. Strike extending north over 400m, width 2-50m and down dip extent over 400m. Fracture and stratabound basemetal veining increasing towards the top of the deposit. Montana northeast trending stratabound to fissure controlled deposit extending 100m along strike and extending over 350m steeply south down dip. Width varying between 2 and 10m. Oonah west-northwest trending, steeply north dipping fissure lode. Strike of > 400m and down dip extent of 200m. Width varying between 1 and 5m.
Estimation and modelling techniques	<ul style="list-style-type: none"> 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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. Sulphur for acid mine drainage characterization). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. 	<ul style="list-style-type: none"> Block modeled estimation completed with Surpac™ software licensed to Tim Callaghan. Wire-framed solid models created from drillholes on generally 25-50m sectional interpretation. Solid models snapped to drill holes Minimum width of 3m downhole @ 0.4% Sn Internal dilution generally restricted to 3m with allowances for geological continuity Data composited on 1m intervals including Total Sn Soluble Sn, Cu, Pb, Zn, S and SG. Top cutting based on CV and grade histograms. Metal association analysis suggests good correlation between Sn, Soluble Sn, S and SG. Good correlation between Cu and soluble Sn in Queen Hill and Montana Deposits. The blockmodel extends between 3200 and 4350m in the y direction, 59,900 and 61550 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 direction and 2.5m in the y and z and directions. Variogram models are well constructed with moderate to high nugget effect (50-70%) and short range of 10 to 15m to sill for major geological domains. Search ellipse set at 100m spherical range to ensure >95% of blocks populated.

	<ul style="list-style-type: none"> Any assumptions about correlation between variables Description of how the geological interpretation was used to control the resource estimates. Discussion of basis of using or not using grade cutting or capping. 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. 	<ul style="list-style-type: none"> Ordinary kriged estimation for Sn constrained by geology solid model Inverse distance squared estimation of Sol Sn, Cu, Pb, Zn, S and SG. Sn % as Stannite derived from interpolated Cu relationship for Queen Hill and Montana due to low number of soluble Sn analyses. Sn % as Stannite for Severn derived from sol Sn interpolation. Block grades validated visually against input data and by comparing global inputs with estimate outputs. Excellent grade correlation with previous estimation.
Criteria	JORC Code Explanation	Commentary
Moisture	<ul style="list-style-type: none"> Whether the tonnages estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> The estimate based on a dry tonnage basis
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> Cut off grades have been determined from mining recoveries (90%), metallurgical recoveries (73%), estimated industry costs (\$115/t), prevailing mineral price (US\$22,000) and exchange rate estimations (\$US/\$A0.76). A block cutoff of 0.6% Sn has been applied for the reporting of the mineral resources
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. 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"> Mining studies completed by Mining One (2013, 2016) and Polberro (2015). Decline accessed underground mine A combination of Long Hole Stopping and Drift and Fill mining methods with 25m bench stopes and CAF back fill Mining loss of 10% and dilution of 10%
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Post 2010 Metallurgical test work completed by ALS Burnie and plant design by GRES/Mincore. Standard crushing grinding circuit followed by sulphide flotation, gravity separation and Sn flotation of gravity tails. Testwork suggests a 48% Sn concentrate can be achieved with a 73% recovery. It may be possible to recover stannite rich mineralisation in the Oonah deposit by sulphide flotation to produce a Cu-Sn concentrate or by a sulphide roaster. No test work has been completed on this mineralisation style.

Criteria	JORC Code Explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Historic mining centre. Baseline environmental studies and conceptual mining plan in support of ML2023P/M completed. Final Development Plan and Environmental Management Plan in progress.
Bulk density	<ul style="list-style-type: none"> 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. 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. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Bulk density derived from diamond drill core using air pycnometer the Archimedes method at various laboratories. Core is un-oxidised and free of cavities Sg of mineralised intersections determined on assay intervals SG interpolated into blockmodel using ID² algorithm. Waste rock assigned SG of 3.0 from the mean SG of samples with <0.1% Sn.
Classification	<ul style="list-style-type: none"> The basis of the classification of the Mineral Resource into varying confidence categories. 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 values, quality, quantity and distribution of the data) Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> 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. Resource estimated >50m of drilling data has been classified as Inferred Resource. The resource classification appropriately reflects the views of the Competent Person
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of the Mineral Resource estimates. 	<ul style="list-style-type: none"> No audits or reviews have been completed for this estimation
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> 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. 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. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> The geological model is robust at a global level between sections and down dip of cross sections. Broad drill spacing of inferred resources and short-range variability reduce confidence in the estimate which is reflected in the resource classification. 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. Grade and geological variance is highlighted by twinned holes and variogram models. No production data is available for reconciliation.

APPENDIX 3 – ST DIZIER - 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"> 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.). 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. 	<ul style="list-style-type: none"> The St Dizier Tin Skarn has been sampled over six diamond drilling campaigns between 1969 and 2015 by five separate companies, Placer, Minops, Cominco, Renison and Stellar. Stellar completed two campaigns in 2006 and 2015. The second campaign of 6 diamond drill holes post-dated the mineral resource estimate and made no material change to that estimate. Approximately, 1m samples for 2-3kg each were taken from the bulk of the program whilst respecting geological boundaries, derived from diamond saw cut core, for mineralized zones as per industry standard.
Drilling Techniques	<ul style="list-style-type: none"> 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.) 	<ul style="list-style-type: none"> 46 diamond HQ, NQ and BQ (or equivalent) diamond core for 7,626m Renison drill core triple tube HQ and NQ. Core not oriented
Drill sample recovery	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Core reconstituted, marked up and measured in all drilling campaigns Generally excellent recovery (95% to 100%) in unweathered skarn but poor to acceptable to acceptable (50% to 80%) in oxidized zones. No relationship between recovery and grade was observed.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Core was geologically logged by experienced geologists over all campaigns. Standard lithological codes, derived from historical mine logs, used for interpretation. RQD and recoveries were logged. Historical logs recorded on spreadsheets and loaded into access database.

Criteria	JORC Code Explanation	Commentary
Sub-Sampling techniques and sample preparation	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • No record of historical sample preparation. • Half core split by diamond saw on 1m samples while respecting geological contacts. • Bagged core delivered to ALS Burnie by Stellar staff. • Whole core crushed and pulverized to 70 micron at ALS Burnie
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Post-2006 drill holes – assayed by XRF fusion for multi-element analysis by ALS Burnie. • Pre-2006 drill holes – assayed by pressed-power XRF at a range of commercial and company laboratories including the Renison and Cominco laboratories. • No record of QAQC procedures was available for historical drilling. Most of the exploration and drilling was conducted by Placer, Renison and Cominco. All reputable mining companies that employed industry standard methods of the time.
Verification of sampling and assaying	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Duplicate assaying in independent laboratory by Renison. Placer and Cominco holes demonstrate good correlation with Renison but Minops holes underestimate Sn content. Renison data used in the resource estimate. • Verification drill holes into Central deposit by Stellar in 2006. • No twinned holes were completed, however, verification drill holes into the Central deposit by Stellar in 2006 provided good correlation. • Primary data was received electronically and stored by the consultant geologist. • All electronic data uploaded to an Access database. • Historical data loaded into separate spreadsheets and uploaded to Access database. • Data validation using Surpac™ software; basic statistical analysis and comparison with historical plans and sections. • Negative results for below detection limit assay data was entered as detection limit.

Criteria	JORC Code Explanation	Commentary
Location of data points	<ul style="list-style-type: none"> • 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 • Specification of grid system used • Quality and accuracy of topographic control. 	<ul style="list-style-type: none"> • All drill hole collars surveyed by a licensed surveyor apart from 10 Cominco drill holes. • All coordinates in GDA94. • RL's as MSL +1,000m • Down-hole surveys by down-hole camera and Topari for Renison and Cominco. • Azimuths corrected for magnetic field in magnetite zones. • Topographic DTM created from Lands Department 10m contour maps adjusted for known survey points (e.g. drill collars).
Data Spacing and distribution	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Drill spacing approximately 50m x 50m or less in the better drilled part of the Central lode. • Drill spacing approximately 100m x 100m in the Eastern Lode. • Drill spacing is considered to be appropriate for the estimation of Indicated and Inferred Mineral Resources, with the exception of the Eastern Lode. • Samples were composited to 1m intervals for the resource estimation.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The majority of diamond drill holes were drilled north to south or south to north, sub-perpendicular to the strike of mineralization. • Early Minops hole M1 was the only hole that drilled down the mineralized structure. • Drill hole orientation is not considered to have introduced any material sampling bias.
Sample Security	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • Details of sample security were not available for the historical data. • All data validated, updated, captured and stored in a customized Access database by REG in 2013. • All historical drill logs were entered into excel spreadsheets prior to downloading into the Access database. Lithology codes migrated to Stellar Resources' codes. • Data integrity validated with Surpac™ software for EOH depth and sample overlaps. • Manual check by comparing computer-generated cross-sections with historical cross-sections and plans. • Basic statistical analysis reveals several database errors including data in the wrong fields or ppm recorded as percent. All errors rectified.
Audits or Reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • No audits or reviews of sampling data and techniques completed, as most of the data is pre-1985.

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"> 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 	<ul style="list-style-type: none"> The St Dizier tin deposit is contained within ML10M/2017. ML10M/2017 provides secure tenure over the St Dizier tin deposit and the area required for proposed surface infrastructure until 2023. St Dizier is 100% owned by Stellar Resources Limited.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgement and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Alluvial mining activity occurred along the Tasman River adjacent to the St Dizier tin deposit in the 1880s Placer Prospecting explored St Dizier between 1966 and 1970 drilling 12 diamond drill holes. Minops operated the leases over St Dizier between 1970 and 1974 drilling 9 diamond drill holes. Cominco explored the St Dizier leases from 1974 to 1978 and drilled 8 diamond drill holes. RGC conducted the most comprehensive exploration program between 1978 and 1984 drilling 14 diamond drill holes and completing petrology, metallurgy and an economic scoping study.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralization. 	<ul style="list-style-type: none"> The St Dizier tin deposit occurs within an east-west trending magnetite-serpentinite-sulphide skarn. The skarn represents a metasomatically altered dolomite unit within a sequence of Late Precambrian Oonah Formation argillite and quartzite. The Oonah sequence at St Dizier forms an east-west trending roof pendant along the northern edge of the Heemskirk Granite. There are three distinct zones of tin mineralization within the skarn identified as Western Lode, Central Lode and Eastern Lode. Only the Western and Central Lodes are included in the resource estimate.
Drill hole information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No drilling results are reported in this release. The last drilling was completed in 2014.

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> No exploration results are reported in this release.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> No drill results reported in this release. Historical drilling was mostly oriented at right angles to the east-west strike and vertical dip of the tin mineralization.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See plan, cross and long sections presented in the body of the release for collar locations and examples of intercepts from historical drilling.
Balanced reporting	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No exploration results reported in this release.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No exploration results reported in this release.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Further diamond drilling around the Central Lode to better characterize the acid forming capacity of waste rock from the planned open pit. Drilling for metallurgical sample is also required. Agreement on a processing plan to produce a saleable tin concentrate. Definitive feasibility studies are required on completion of drilling and testing of core samples. Completion of a Development Proposal and Environmental Management Plan for environmental approvals.

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"> 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. Data validation procedures used. 	<ul style="list-style-type: none"> All data captured and stored in a customized Access database by Red Hill. Drop down menu validation in Access. Digital data uploaded from laboratory reports to Access database. Data integrity validated using Surpac™ software for EOH depth, sample overlaps and transcription errors. Data validated against historical plans and sections. Negative samples changed to detection limit.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those site visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> Several site visits were made during 2013 to validate location, collars, historical workings, mineralization styles and exploration potential
Geological interpretation	<ul style="list-style-type: none"> Confidence in (conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> High confidence in the simple geological model. Major mineralized domains demonstrate good sectional continuity. Mineralised Sn domains are delineated using a 0.2% Sn boundary and a minimum downhole width of 3m with some allowances for geological continuity. Internal dilution was restricted to a maximum of 3m where possible, again maintaining good geological continuity. No alternative geological interpretations were attempted. Geological model was used for mineralized domain modelling.
Dimensions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The St Dizier skarn consists of 3 tin lodes within a vertically dipping tabular sheet of magnetite-serpentine-calcsilicate skarn. The skarn extends over a strike length of 400m has a width ranging from 3m to 40m and a vertical depth extent from the surface of 200m.

Criteria	JORC Code Explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> 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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg Sulphur for acid mine drainage characterization). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables Description of how the geological interpretation was used to control the resource estimates. Discussion of basis of using or not using grade cutting or capping. 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. 	<ul style="list-style-type: none"> Estimation completed with Surpac™ software. Wire-framed solid models on east-west sections. Solid models snapped to drill holes. Domain intercepts written to database. Data composited on 1m down hole intersections and included assays for Sn, soluble Sn, S, Cu, Fe, Zn, WO₃ and As. No check assays were available at the time of the resource estimate. However, subsequent drilling of the Central lens by Stellar Resources showed good correlation with historical assays. No recovery of by-products considered. S assays were collated and subsequently used with data from a recent Stellar drilling program to determine the distribution of potentially acid forming material. Block dimensions of 20mN x 20mE x 20mRL with sub-celling to 2.5m in the x and z direction and 1.25m in the y direction. Variogram models for Sn have moderate nugget effect (10%) but short range to sill of 15m. Search ellipse of 100m to ensure most blocks interpolated. Good correlation between Sn, S, Fe and As. Moderate correlation between WO₃ and Sn. Ordinary kriged model constrained by geology solid model. 5,367,500N to 5,368,000N; 344,800E to 345,800E; and 700mRL to 1240mRL. Top-cutting of WO₃ to 0.5% in the Central South lens and soluble Sn to 0.5% on the Central North lens on the 97.5th percentile. No other domains cut. ID² interpolation of grades. Block grades validated visually against input data. Global grade compares favorably with basic statistics. Good correlation with previous polygonal estimations.
Moisture	<ul style="list-style-type: none"> Whether the tonnages estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> No moisture determinations completed. Estimate based on dry tonnage.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> Domain modelling based on a 0.2% Sn boundary which appeared to be a natural cut-off for mineralization continuity within the deposit. The resource is reported at an 0.3% Sn block cut-off grade.

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. 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"> Mining scoping study prepared by Polberro Consulting. No material changes to assumptions since completion of the study in November 2014. Datamine Studio 3™ is used for inventory estimation and actual pit design Open pit mine 710m long x 170m wide x 90m deep generated from a digital block model of the Central Indicated Resource prepared by Resource and Exploration Geology. Geotechnical assessment and Threedify Flow Pit™ software used to optimize pit geometry. Actual pit design and haul road are developed from the optimal pit shell. Mining recovery of 95% and dilution of 10% assumed in the optimization process. Actual design dilution of 17% estimated from 5m sections. Tin recovery factors of 40%, 50% and 60% also assumed in mining scenarios. Industry costs, validated by West Coast Tasmania mining experience, used to estimate operating and capital costs.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Metallurgical test work conducted by ALS Metallurgical on drill core from 3 ore zones in the Central Indicated Resource. Worley Parsons supervised ALS testing of primary comminution, magnetic separation of gangue, gravity separation of coarse Sn followed by desliming and fine tin flotation. Worley Parsons concluded that optimization of sulphur, slimes and talc rejection and concentrate leaching could result in recovery of 45% to 50% Sn at a concentrate grade of 55% Sn.
Environmental factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> JK Miedecke and Associates supervised all environmental surveying and provided liaison with and reporting to the Tasmanian EPA. Studies were undertaken on acid mine drainage, water quality and flow rates, flora and fauna, mining heritage and aboriginal heritage. Mine planning, with input from JK Miedecke and Associates, included development of surface infrastructure, surface water diversion and mine dump development. Mine rehabilitation plan assumes storage of acid generating material in the final pit. Acid generating capability of waste needs to be determined for a final mine rehabilitation plan.

Criteria	JORC Code Explanation	Commentary
Bulk density	<ul style="list-style-type: none"> 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. 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. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Bulk density determinations from mineralogical composition. An assumed SG of 3.3 was applied based on the following ore mineralogy: 30% magnetite at SG 5.2 50% serpentinite at SG 2.2 10% silicates at SG 2.6 5% siderite at SG 3.9 5% sulphides at SG 4.8 Magnetite content varies between 30% and 50% making the overall SG estimate conservative.
Classification	<ul style="list-style-type: none"> The basis of the classification of the Mineral Resource into varying confidence categories. 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 values, quality, quantity and distribution of the data) Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The resource has been classified based on confidence in the geological continuity, drill hole spacing, location of bulk samples and the ratio of acid soluble Sn to total Sn (see Long-section). Higher ratios of Sn to acid soluble Sn are likely to contribute to increased Sn recovery. The resource west of 345,220E (West and Central) are classified as Indicated Resource due to close spaced drilling. Higher grade zones of continuous mineralization east of 345,220E and west of 345,475E (Eastern) are classified as Inferred Resource. Lower grade, deeper and metallurgically difficult mineralization to the east of 345,475E was unclassified. The estimated resource and its classification appropriately reflect the view of the competent person.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of the Mineral Resource estimates. 	<ul style="list-style-type: none"> No audits or reviews have been completed for this estimation.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> 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. 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. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> Estimation of the global resource grade reconciles well with historical estimations. Typical high nugget effect for this style of mineralisation and the wide drill hole spacing result in low to moderate confidence in the relative accuracy of the estimation, particularly on a local level. There is moderate confidence in the data quality with no QAQC data for historical drilling. The statement relates to the global estimation of the St Dizier Skarn. No production data is available for this deposit.