Stellar Resources Ouarterly Report



Stellar Resources (SRZ) is an exploration and development company with assets in Tasmania and South Australia. 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.

 As at 31 December 2014

 Market cap:
 A\$9.0m (3.0c)

 Cash (31 December):
 \$3.0 million

 Shares:
 300,227,775

Main ShareholdersJP Morgan Nominees26.0%Capetown SA20.8%Resource Capital Fund12.0%

Board & Management Phillip G Harman Non-Executive Chairman Peter G Blight Managing Director Miguel Lopez de Letona Non-Executive Director Markus Elsasser Non-Executive Director Thomas H Whiting Non-Executive Director Christina R Kemp Company Secretary

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For the period ended 31 December 2014

Highlights

- Better targeting criteria for high grade tin zones in the Severn deposit.
- Mineralogical analysis implies Severn tin mineralisation likely to continue well below 500m depth of drilling.
- Severn tin recovery and concentrate quality further improved using a large "global composite" to optimise the flow-sheet.
- St Dizier open pit design completed for the scoping study.
- Tasmanian EPA review of Heemskirk and St Dizier development plans progressing.

Corporate

Stellar held cash of \$3.0 million as at 31 December 2014. Quarterly expenditure declined to \$500,000.

Targets for next Quarter

- Completion of metallurgical optimisation of the Severn deposit.
- Completion of geological review and determination of drilling priorities.
- Completion of St Dizier scoping study.
- Update of PFS for optimisation results.



HEEMSKIRK TIN PROJECT (100% Owned)

Overview

During the quarter, the project was advanced on a number of fronts. Four areas of particular focus were:

- re-logging and petrographic study of Severn and Queen Hill drill core to determine whether particular structural features influence the distribution of high grade tin mineralisation,
- metallurgical testing to optimise the process flow sheet using a "global composite" sample of the Severn deposit,
- scoping study mine plan and metallurgical testing of the St Dizier tin deposit,
- review of Heemskirk and St Dizier environmental impacts by State Development, Environment Protection Authority and West Coast Council.

Geological Review

Core from a number of Queen Hill and Severn diamond holes was re-logged and sampled for microscopic examination. The purpose was to determine the relationship between geological structure and tin mineralisation (cassiterite), with a particular focus on high grade intersections in ZS113 (7m @ 4.0% tin) and ZS110 (7m @ 1.9% tin). Figure 1 shows drill traces for these holes.



Figure 1: Simplified geology plan and drill traces for ZS110 and ZS113



Targeting high grade tin

In holes ZS110 and ZS113, a NW-SE shear often intersects bedding at a high angle. From this relationship it can be interpreted that the hole was drilled through a fold hinge or zone of dilation into which mineralising fluids have accumulated. Figure 2 shows an example of a likely hinge zone with a vertical shear zone cutting bedding in sediments at close to right angles. A late stage tourmaline-cassiterite vein cuts across the sediment into the shear zone.



Figure 2: Tourmaline-cassiterite vein cutting vertical axial plane shear (LHS) and bedded volcano-clastic sediments (RHS) (ZS110, 342.8m, 0.4%Sn)

There appears to be many forms and several generations of cassiterite associated with NW-SE shear zones and later stage vein sets. Higher grade cassiterite is often developed in vughy zones within the shear zones where slow cooling of mineralised fluids has permitted voids to be filled with crystalline growths. Figure 3 shows the development of crystalline cassiterite and quartz in a matrix of siderite within a vugh.





Figure 3: Vugh filling crystalline cassiterite (LHS) and quartz (RHS) in a siderite matrix (green-grey mineral) (ZS110, 351.4m, 2.1% Sn)

Targeting deposit extensions

Several types of breccia have been identified. These generally reflect the explosive introduction of fluids into host sediments at Severn and Queen Hill. They often occur near mineralisation and reflect different pulses of hydrothermal fluids. Understanding the nature and direction of breccias appears to be an important targeting tool for drilling. In Figure 4, a fluidised injection breccia (on the left) cuts an earlier high-grade zone of cassiterite-pyrite mineralisation (on the right).



Figure 4: Fluidised injection breccia (LHS) cutting cassiterite + Pyrite (RHS) (ZS113W, 275m, 5% Sn).



Another important observation is that the hydrothermal mineral assemblage changes with depth indicating increasing proximity to the granite source rocks. Figure 5, shows the appearance of high-temperature lepidolite (a lithium rich mica) for the first time at a depth of 500 metres below surface. This observation supports the genetic model for tin mineralisation and suggests that more tin will be found at depth. So far no drill hole has intersected granite and geophysical surveys suggest that the deepest holes are still 500 metres above a possible granite cupola – the probable source of hydrothermal fluids.

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Figure 5: Tourmaline-lepidolite-cassiterite texture – (ZS120, 535.3m, 1.5% Sn)

On-going petrographic studies should build on the significant progress made to date. In addition, a review of faults and their influence on the distribution of tin mineralisation is also underway. The geological review is expected to be completed in the March quarter and will allow selection and prioritisation of drill targets.

Metallurgy Optimisation

The Severn metallurgical testing program has focused on optimisation of the PFS process flow-sheet using a large "global composite" sample representing typical Severn mineralogy, composition and tin grade. This has provided a number of important improvements to metallurgical performance and flow-sheet simplifications in addition to generating more robust information with respect to optimum process design criteria and processing conditions.



Key outcomes of the program to date, relative to the PFS, include:

- Elimination of the heavy media circuit on cost benefit analysis simplifies the flow-sheet and removes a source of tin loss.
- Coarser primary grind following grind size optimisation reduced tin loss to fines and lowered cost of primary mill.
- Optimised sulphide float- significantly reduced tin loss to sulphide waste stream.
- Improvements to gravity circuit and previously mentioned upstream gains 10% increase in tin recovered by gravity.
- Improved concentrate dressing circuit increased quality of gravity concentrate.
- Elimination of the silica float circuit on cost benefit analysis simplification of the flowsheet.

Optimisation testing of the tin float circuit, the final stage of the metallurgy program, is well advanced. On the completion of testing, a more detailed summary of achievements will be released.

Tailings Dam

A Mining Lease Application (MLA) over the tailings dam site is under review by State Development (SD). On approval of an MLA, surveys to support a Development Plan and Environmental Management Plan (DPEMP) can be undertaken.

Notice of Intent

The Tasmanian Environment Protection Authority (EPA), State Development and the West Coast Council are working through the notice of intent for Heemskirk and St Dizier. Site visits were conducted during the quarter and feedback on the requirements of a DPEMP is expected.

St Dizier

Polberro Consulting has completed an optimised open pit design and surface works layout for the 1.2 million tonne St Dizier Indicated Resource. The plan assumes that ore will be trucked to Zeehan for processing in the Heemskirk plant.

Metallurgical test-work is on-going. Magnetic and gravity separation are complete. Work is now focused on dressing the gravity concentrate and testing the tin float circuit.

The St Dizier scoping study is expected to be completed in the March quarter, after the metallurgical test work is finished.



EXPLORATION

Tin

EL1/2004 Ramsay (TAS) (Stellar 100%)

Further stream sediment sampling and panning is planned to follow-up a 2% tin stream sediment sample from a 2014 program. The high grade tin in sediment sample comes from the northern edge of the Meredith granite in a zone of quartz-tourmaline greisen.



Figure 6: Cassiterite grain (under transmitted light) from stream sediment sample (grain size is 1mm)

Nickel

EL40/2010 Heazlewood Hill (TAS) (Stellar 100%)

EL40/2010 contains the southern end of the Heazlewood Ultramafic Complex and remains prospective for Avebury-style nickel mineralisation. Stellar is seeking a joint venture partner to advance exploration on this tenement.

Copper/Gold

EL's 4573, 4882, 5125 and 5126 (SA) (Stellar 100%)

Stellar is seeking a joint venture partner to explore the iron ore copper gold potential of these central Gawler Range tenements.

Uranium

EL 5426 Midgee (SA) (Stellar 100%)

UraniumSA Limited has the right to earn a 73% interest in 40% of the tenement by identifying a JORC compliant resource. Land access remains a barrier to further exploration.



EL 5307 Cowell (SA) (Stellar 100%)

Stellar is looking for a joint venture partner to explore graphite, uranium and copper gold targets that were identified on the licence.

CORPORATE

Cash Position

As at 31 December 2014, Stellar Resources held cash and term deposits of \$3.0 million. Expenditure declined to \$500,000 in the December quarter.

TIN MARKET

The tin price has remained relatively stable near the bottom of its 12 month trading range at US\$19,500/t over the quarter (Figure 7). As such, it has performed well against declining prices for commodities facing excess supply such as iron ore, copper and oil. The tin market has also absorbed a 10,000 tonne increase in production from Myanmar with no material rise in LME stocks.

Tin demand growth performed strongly in 2014 with an estimated increase of 4%-5% driven by rising solder use in the electronics industry and a substantial rise in orders from the tin chemicals sector. These trends are expected to develop further in 2015 underpinning an increased market deficit and a positive outlook for the LME price.



LME Tin Price versus Stocks

Figure 7: London Metal Exchange tin spot price versus LME traded stocks



According to monthly Department of Trade figures, Indonesian tin exports declined by 17% from 91,613 tonnes in 2013 to 75,926 tonnes in 2014 (Figure 8). The tightening of export restrictions in November 2014 should see a further reduction in 2015 from the world's largest tin exporting country.



Indonesian Monthly Refined Tin Exports (tonnes, Dec'13 to Dec'14)



Project	Licence Number	Tenement	Location	Interest held (%)
Heemskirk Tin	RL5/1997	Zeehan	Tasmania	100%
	EL46/2003	Heemskirk	Tasmania	100%
Exploration				
Tin	EL1/2004	Ramsay River	Tasmania	100%
	EL6/2014	Stonehenge	Tasmania	100%
Uranium	EL5307	Cowell	South Australia	100%
	EL5426	Midgee	South Australia	$100\%^{1}$
Iron Ore	EL5355	Tarcoola	South Australia	100%
	EL4389	Hicks Hill	South Australia	100%
Copper/Gold	EL40/2010	Heazlewood Hill	Tasmania	100%
	EL4882	Kingoonya	South Australia	100%
	EL5125	Cleanskin Swamp	South Australia	100%
4	EL5126	Long Creek	South Australia	100%

TENEMENT REGISTER

¹ JV with UraniumSA Limited earning 73% in uranium interest



MINERAL RESOURCE STATEMENTS

Heemskirk Mineral Resource

Classification	Deposit	Tonnes	Grade	Contained Tin
		millions	% tin	tonnes
Indicated	All	1.41	1.26	17,790
Inferred	All	4.87	1.10	53,710
Total		6.28	1.14	71,500
Indicated	Queen Hill	1.41	1.26	17,790
Inferred	Queen Hill	0.19	1.63	3,090
	Severn	4.17	0.98	40,900
	Montana	0.51	1.91	9,710
Total		6.28	1.14	71,500

1. block cut-off grade of 0.6% tin

2. tonnes rounded to reflect uncertainty of estimate

3. estimates prepared by Resource and Exploration Geology

St Dizier Mineral Resource

Classification	Deposit	Tonnes	Grade		Contained Tin
		millions	% tin	% iron	tonnes
Indicated	St Dizier	1.20	0.69	23.70	8,280
Inferred	St Dizier	1.06	0.52	22.22	5,512
Total Resource		2.26	0.61	23.00	13,792

1. block cut-off grade of 0.3% Sn

2. tonnes rounded to reflect uncertainty of estimate

3. estimate prepared by Resource and Exploration Geology



Competent Person Statement

The information in this report that relates to Exploration Results is compiled by Mr R K Hazeldene who is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists and 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 in this report.

The information in this report that relates to Heemskirk Tin Mineral Resources was last reported on 24th July 2013 in an ASX release titled "Pre-feasibility Study Advances Heemskirk Tin". The information was prepared in accordance with the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by Tim Callaghan of Resource and Exploration Geology. The information in this report that relates to the St Dizier Mineral Resource was announced on 12 March 2014 in an ASX release titled "Heemskirk Tin Project: New Open Pittable Resource at St Dizier". The information was prepared in accordance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code) by Tim Callaghan of Resource and Exploration Geology. Tim Callaghan is a Member of The Australasian Institute of Mining and Metallurgy ("AusIMM"), has a minimum of five years' experience in the estimation and assessment and evaluation of Mineral Resources of this style and is the Competent Person as defined in the JORC Code. This report accurately summarises and fairly reports his estimations and he has consented to the resource report in the form and context in which it appears.

Stellar Resources confirms that it is not aware of any new information or data that materially affects the information included in the Mineral Resource estimates reported on 24 July 2013 and 12 March 2014, Stellar confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. In addition, Stellar Resources confirms that the form and context in which the Competent Person's findings are presented have not been materially modified.

Forward Looking Statements

This report contains a number of forward looking statements with respect to the company's plans for mineral development. Known and unknown risks and uncertainties and factors outside of the company's control may cause the actual results, performance and achievements of the company to differ materially from those expressed or implied in this report. To the maximum extent permitted by law and stock exchange rules, the company does not warrant the accuracy, currency or completeness of the information in this report, nor the future performance of the company and will not be responsible for any loss or damage arising from use of the information.

For further details please contact:

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or visit our Website at: http://www.stellarresources.com.au

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/2013

Name of entity

STELLAR RESOURCES LIMITED

Current quarter

ABN

96 108 758 961

Quarter ended ("current quarter")

31 December 2014

Year to date

Consolidated statement of cash flows

Cash flows related to operating activities			(6 months)
		\$A'000	\$A'000
1.1	Receipts from product sales and related debte	ors –	_
1.2	Payments for (a) exploration & evaluation	n (423)	(897)
	(b) development	_	—
	(c) production	_	—
	(d) administration	(137)	(425)
	(e) goods & services tax	32	82
1.3	Dividends received	_	—
1.4	Interest and other items of a similar nature	29	61
	received		
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	_	—
1.7	Other	_	—
	Net Operating Cash Flows	(499)	(1,179)
	Cash flows related to investing activities		
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	-	—
	(c) other fixed assets	-	—
1.9	Proceeds from sale of: (a) prospects	-	-
	(b) equity investments	-	—
	(c) other fixed assets	-	-
1.10	Loans to other entities	-	—
1.11	Loans repaid by other entities	-	-
1.12	Other (provide details if material)	(1)	(1)
	Net investing cash flows	(1)	(1)
1.13	Total operating and investing cash flows (can	ried	
	forward)	(500)	(1,180)

Rule 5.5

⁺ See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (brought		
	forward)	(500)	(1,180)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	_	_
1.15	Proceeds from sale of forfeited shares	_	_
1.16	Proceeds from borrowings	_	_
1.17	Repayment of borrowings	_	_
1.18	Dividends paid	_	_
1.19	Other (provide details if material)	_	_
	Net financing cash flows	_	_
	Net increase (decrease) in cash held	(500)	(1,180)
1.20	Cash at beginning of quarter/year to date	3,500	4,180
1.21	Exchange rate adjustments to item 1.20	_	_
1.22	Cash at end of quarter	3,000	3,000

Payments to directors of the entity, associates of the directors, related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	112
1.24	Aggregate amount of loans to the parties included in item 1.10	_

1.25 Explanation necessary for an understanding of the transactions

Directors fees and remuneration \$96k; rent/office support, Melbourne, paid to Mineral Deposits Limited \$16k

Non-cash financing and investing activities

- 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows
 - _
- 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

⁺ See chapter 19 for defined terms.

Financing facilities available Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities	-	_
3.2	Credit standby arrangements	-	_

Estimated cash outflows for next quarter

		\$A'000
4.1	Exploration and evaluation	360
4.2	Development	-
4.3	Production	_
4.4	Administration	145
	Total	505

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.		Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	120	150
5.2	Deposits at call	2,880	3,350
5.3	Bank overdraft	_	_
5.4	Other (provide details)	_	_
	Total: cash at end of quarter (item 1.22)	3,000	3,500

Changes in interests in mining tenements and petroleum tenements

		Tenement	Nature of interest	Interest at	Interest
		reference	(note (2))	beginning	at end of
		and location		of quarter	quarter
6.1	Interests in mining	EL4573	Exploration Licence Stony Top Hill,	100%	0%
	tenements and		SA lapsed		
	petroleum tenements				
	relinquished, reduced	EL4882	Exploration Licence Kingoonya,SA	100%	100%
	or lapsed		area reduced to 48.4km ²		
6.2	Interests in mining	EL6/2014	Exploration Licence Stonehenge	0%	100%
	tenements and		Creek, TAS, granted		
	petroleum tenements				
	acquired or increased				

⁺ See chapter 19 for defined terms.

Issued and quoted securities at end of current quarter Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per	Amount paid up per
			1	security (see note	security (see note 3)
				3) (cents)	(cents)
7.1	Preference				
	+securities				
	(description)				
7.2	Changes during				
	quarter				
	(a) Increases				
	through issues				
	(b) Decreases				
	through returns				
	of capital, buy-				
	backs,				
	redemptions				
7.3	+Ordinary	200 227 775	200 227 775		
	securities	500,227,775	500,227,775		
7.4	Changes during				
	quarter				
	(a) Increases				
	through issues				
	(b) Decreases				
	through returns				
	of capital, buy-				
	backs				
7.5	⁺ Convertible				
	debt securities				
	(description)				
7.6	Changes during				
	quarter				
	(a) Increases				
	through issues				
	(b) Decreases				
	maturad				
	converted				
77	Ontions			Evorcico Prico	Evniry Data
/./	Options	25,000,000	_	8 cents	SRZAL 26/02/2017
78	Issued during	22,000,000		Exercise Price	Expiry Date
7.0	quarter	17 500 000	_	Various Prices	SRZAA 20/11/2019
	quarter	17,000,000			
7.9	Exercised during				
1.5	quarter				
7.10	Expired during				
/.10	quarter				
7.11	Debentures				
	(totals only)				
7.12	Unsecured			1	
	notes (totals				
	only)				

⁺ See chapter 19 for defined terms.

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).
- 2 This statement does give a true and fair view of the matters disclosed.

Date: 22 January 2015 (Company secretary)

Print name: Christina R Kemp

Notes

Sign here:

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements and petroleum tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement or petroleum tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Financial Reporting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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