

**ASX ANNOUNCEMENT**

Heavy Rare Earths Limited (ASX: HRE)  
4 August 2025

## **HRE TO ACQUIRE ADVANCED TIN PROJECT WITH ALL MINERAL RIGHTS AT PROSPECT HILL**

- HRE to acquire rights to South Australia's largest known and most advanced tin project at Prospect Hill in the Northern Flinders Ranges
- HRE considers Prospect Hill to be an exceptional tin opportunity based on extensive historic exploration data. Tin projects of this calibre are uncommon in Australia.
- Historic drilling has confirmed tin mineralisation over 500 metres of strike and to a depth of 120 metres at the South Ridge prospect. This includes 56 holes, many with high-grade tin intercepts including:
  - 3 metres @ 4.85% Sn from 44 metres (hole PHRC03)
  - 5 metres @ 3.32% Sn from 84 metres (PHRC55)
  - 6 metres @ 2.33% Sn from 14 metres (PHP-15)
- Prior petrological and metallurgical studies indicate tin is mostly present as cassiterite, 80% of which can be recovered by gravity processing methods
- Several nearby prospects with high tin grades from surface sampling present exploration discovery opportunities
- Planned follow-up work to establish Mineral Resources at South Ridge
- Tin is on critical minerals lists of many western economies due to looming supply deficits and geopolitical concerns
- Prospect Hill represents a material addition to HRE's current suite of projects with a critical and clean energy minerals focus

Heavy Rare Earths Limited ("HRE" or "the Company") is pleased to announce it has entered into a binding Term Sheet with Havilah Resources Limited (ASX: HAV; "Havilah") to expand its rights to all minerals from the current uranium-only rights on the Prospect Hill project, which lies in the northern Flinders Ranges of South Australia (Figure 1).

On signing the Term Sheet, HRE's non-executive Chairman, John Byrne, said, *"This transaction on Prospect Hill with our major shareholder Havilah Resources is to the clear benefit of both parties. We appreciate their ongoing support in considering and agreeing our proposal to expand our mineral interests during the initial year of our commercial engagement."*

*"The Company is excited about the advanced opportunity on offer at the South Ridge tin prospect. Whilst we will maintain the momentum on our uranium JV projects at Radium Hill, Prospect Hill and Lake Namba-Billerioo, this transaction offers the potential for HRE to move quickly to advanced studies on the small-scale extraction of tin."*

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## TRANSACTION SUMMARY

HRE has executed a binding 'other minerals' Term Sheet ("**Agreement**") with Havilah that secures it the right to acquire an 80% initial interest in all Havilah's rights to non-uranium minerals within the Prospect Hill project area. It builds on the existing agreement ("**Existing Agreement**") with Havilah in which HRE is currently earning an 80% initial interest in Havilah's rights to uranium mineralisation hosted by Cretaceous age and younger sediments on the same three project area tenements (*refer to ASX announcement 21 October 2024*).

Under the Agreement, to acquire the 80% interest HRE must spend a minimum of \$1,500,000 on exploration and development of non-uranium minerals within 3 years, including \$350,000 in the first year. As part of this expenditure obligation, to acquire the 80% interest the Company is required to drill a minimum of 2,500 m during the first 18 months and a minimum of 1,250 m in the second 18 months of the 3-year earn-in term (3,750 m in total) (taken together, the "**Earn-In Requirement**").

Once HRE has earned the 80% interest in Havilah's non-uranium mineral rights by satisfying the Earn-In Requirement, a joint venture ("**JV**") will be formed and Havilah will be free-carried until the completion of a bankable feasibility study ("**BFS**") on any non-uranium mineral deposit discovered. Following completion of a BFS, Havilah will have the right to contribute its 20% pro-rata share of all future JV expenditure or otherwise dilute to below a 10% JV interest and receive a 1.5% net smelter return (NSR) royalty on production.

HRE and Havilah entered into a tenement access and mineral rights agreement ("**TAMRA**") as part of the Existing Agreement. The Company confirms that the TAMRA will continue to govern its access rights to Havilah's Prospect Hill project exploration licences under the Agreement.

Subject to completing the Earn-In Requirement, HRE will reimburse Havilah an aggregate amount of \$1,800,000 being reimbursement of Havilah's historical exploration expenditure on the project. Payment of these funds will be deferred until such time cashflows from a future non-uranium mining or processing operation at Prospect Hill are available or HRE elects to make the reimbursement payment earlier.

Completion of the transaction is subject to the following conditions precedent:

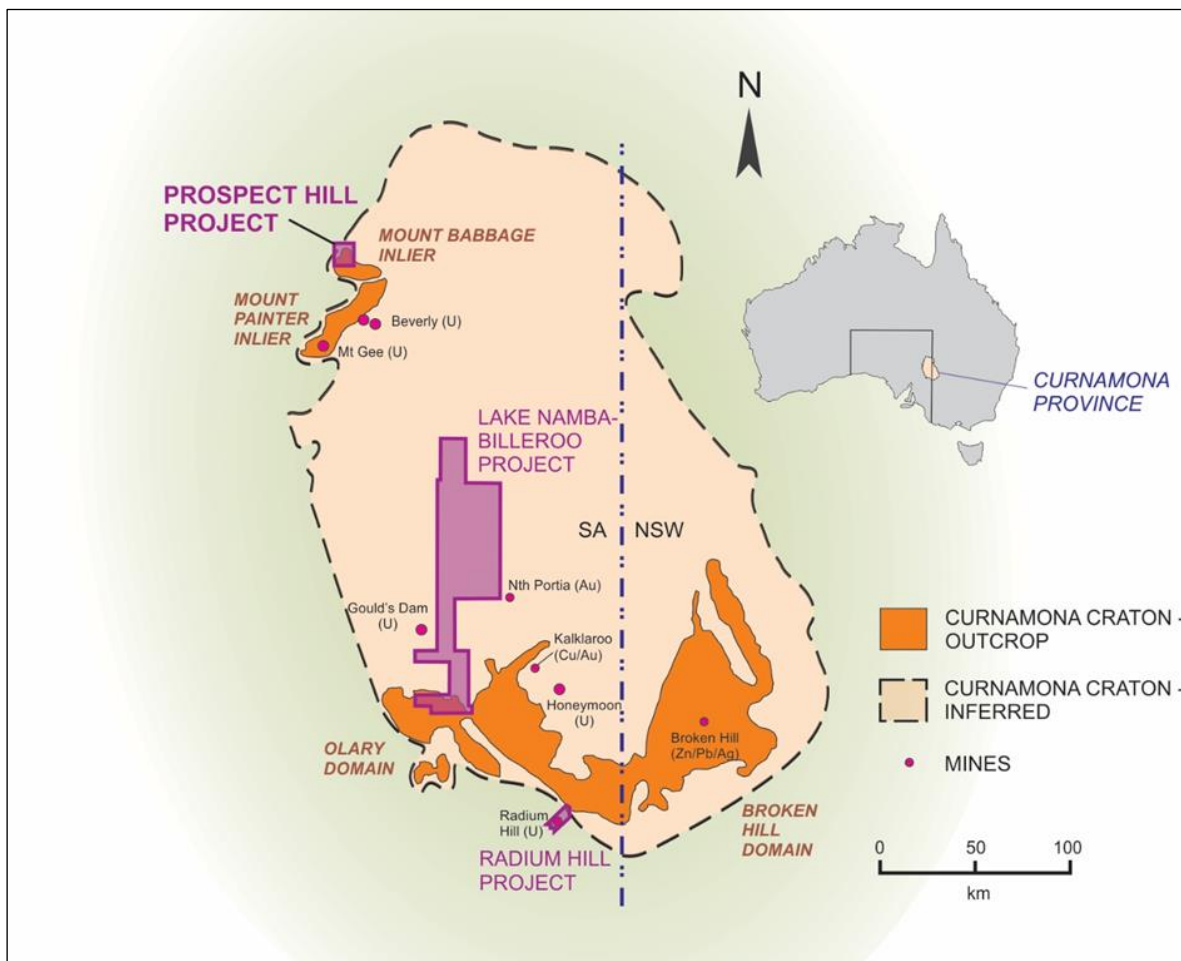
- i) shareholder approval (including for the purposes of Listing Rule 10.1) which will be sought at an Extraordinary General Meeting ("**EGM**") proposed to be held as soon as practicable. The Notice of Meeting for the EGM will include an independent expert's report, which is required for the transaction to be considered under Listing Rule 10.5.10; and
- ii) HRE and Havilah otherwise obtaining all required legal, third party and other required approvals and/or consents for the proposed transaction to proceed.

## BACKGROUND

The Prospect Hill project comprises three contiguous exploration tenements EL5891, EL6271 and EL6933 covering a total area of 75 km<sup>2</sup>. The western portion of the project area features outcropping rocks of the Curnamona Craton (Mt Painter/Mt Babbage Inliers) which hosts significant polymetallic mineralisation dominated by tin (Sn). Tin is present as cassiterite and this will be the initial focus of HRE's non-uranium exploration and development activities at Prospect Hill.

The project area has seen a number of relatively short-lived campaigns of exploration for tin and other metals since the mid-1980s at times when tin prices were substantially lower than they are today. This work resulted in the discovery of several high-grade tin prospects at surface. The best explored of these is the South Ridge prospect where drilling of 56 holes has outlined tin-rich mineralisation in a well-defined lode structure over a strike length of about 500 m. Highly mineralised drill intercepts from South Ridge include:

- 3 m @ 4.85% Sn from 44 m in PHRC03
- 5 m @ 3.32% Sn from 84 m in PHRC55
- 6 m @ 2.33% Sn from 14 m in PHP-15
- 6 m @ 1.85% Sn from 24 m in PHP-2
- 8 m @ 1.48% Sn from 11 m in PHRC24
- 10 m @ 1.16% Sn from 33 m in PHRC04.



**Figure 1: Location of HRE projects in the Curnamona Craton, South Australia.**

HRE plans to fast-track drilling work at South Ridge in the coming months with the aim of estimating a maiden Mineral Resource for the project and to acquire material for metallurgical testwork. Limited testwork to date has focused on producing a concentrate with gravity separation. The application of advanced sensor-based ore sorting technology to cassiterite



mineralisation such as that offered by TOMRA<sup>1</sup> could represent a substantial opportunity for HRE at South Ridge.

**The proposed acquisition of non-uranium mineral rights at Prospect Hill broadens HRE's exposure to clean energy, and strategic and critical minerals**, complementing its co-product critical mineral scandium (Sc) and rare earth (REE) opportunities at its high-grade Radium Hill uranium project (*refer to ASX announcement 19 May 2025*). Importantly, uranium (target commodities at Prospect Hill and Radium Hill), tin (Prospect Hill), and scandium and rare earths (Radium Hill) have been identified by a number of Western governments as being strategic or critical to their economies and, in the case of tin, scandium and rare earths, highly vulnerable to supply chain disruption (Table 1).

Tin is used in a wide variety of products including solder (electronics), chemicals (PVC stabilizers, polymer catalysts), tinplate (food packaging), alloys (bearing metal, coatings), and inorganic (ceramics, glazes) and organic (plastics, wood preservatives, pesticides, fire retardants) compounds. Tin futures<sup>2</sup> are at US\$34,000 per tonne, holding close to the three-month high of US\$35,100 as persistently low supply coincides with evidence of robust demand. Investment in new tin supply has been relatively weak for some time, with only one significant mine entering the market in the last five years. According to the International Tin Association<sup>3</sup> looming deficits and geopolitical concerns will renew the search for new tin projects and the next decade will see a new wave of government-supported investment to secure sustainably sourced supply that needs to grow by an estimated 50,000 tonnes per annum for the technology surge to 2030.

**Table 1: Critical minerals targeted at HRE's Prospect Hill and Radium Hill projects.**

COUNTRY/REGION <sup>1</sup>	URANIUM	TIN	SCANDIUM	RARE EARTHS <sup>2</sup>
Australia			✓	✓
Canada	✓	✓	✓	✓
EU			✓	✓
India		✓	✓	✓
Japan	✓		✓	✓
South Korea		✓	✓	✓
UK		✓	✓	✓
USA		✓	✓	✓

1. Selected critical minerals are shown for each country/region. Australia has declared 31 critical minerals, Canada 29, EU 30, India 30, Japan 36, South Korea 33, UK 18 and USA 50.

2. RARE EARTHS are Lanthanum (La), Cerium (Ce), Praseodymium (Pr), Neodymium (Nd), Samarium (Sm), Europium (Eu), Gadolinium (Gd), Terbium (Tb), Dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu) and Yttrium (Y).

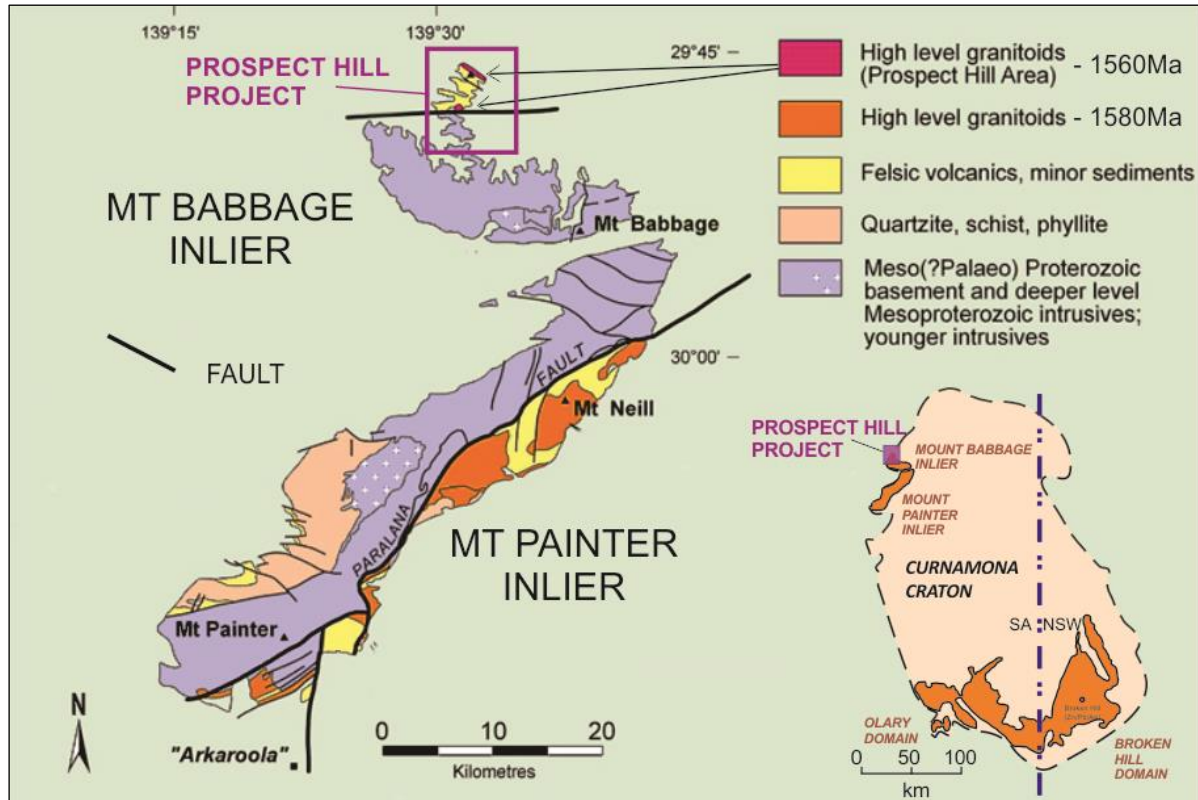
<sup>1</sup> <https://www.tomra.com/mining>

<sup>2</sup> <https://tradingeconomics.com/commodity/tin>

<sup>3</sup> <https://www.internationaltin.org/tin2030-a-vision-for-tin/>

## REGIONAL GEOLOGY

The Prospect Hill project lies in the Mt Painter/Mt Babbage Inliers at the north-western margin of the Palaeo-Mesoproterozoic Curnamona Craton, a geological province that is well-endowed in critical and clean energy minerals such as copper (Cu), REEs and U (Figure 2).



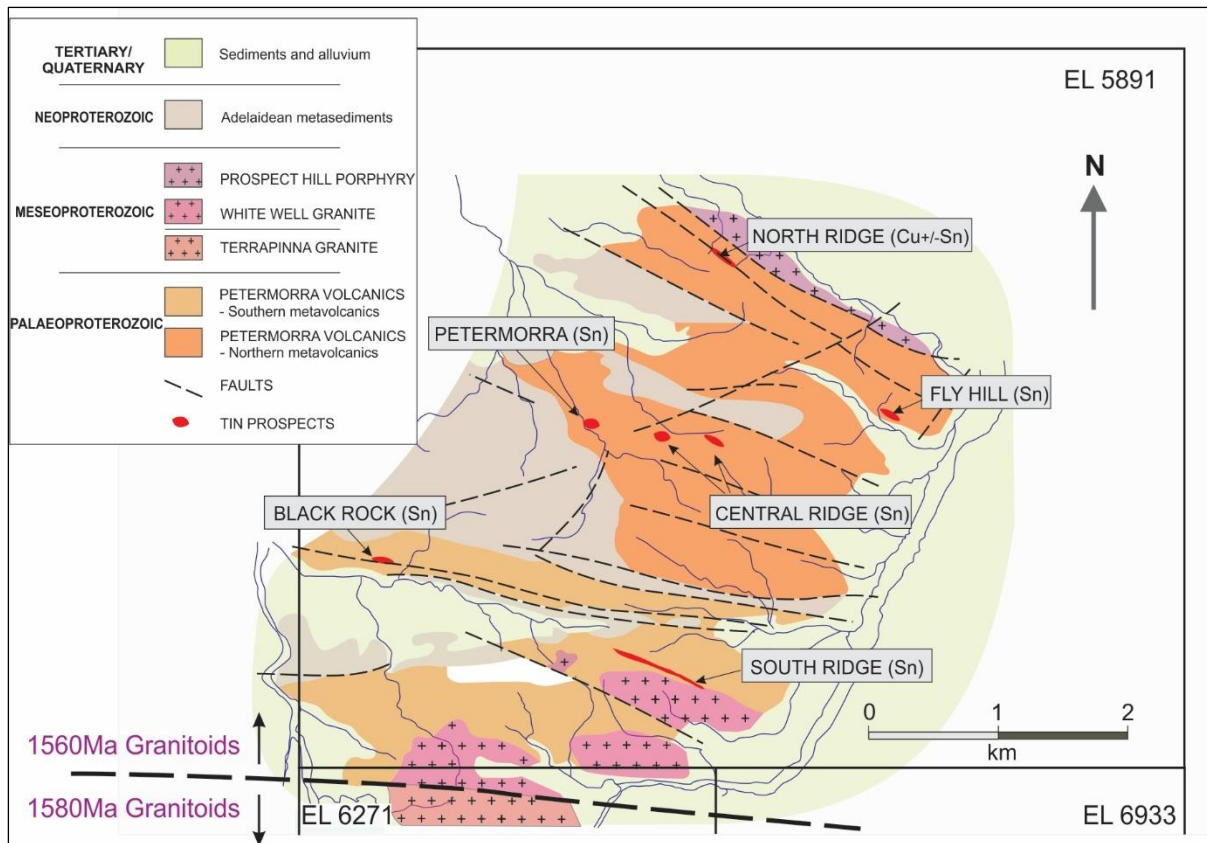
**Figure 2: Regional geology of Palaeo-Mesoproterozoic Mt Painter and Mt Babbage Inliers.**

The Mt Painter/Mt Babbage Inliers, and Curnamona Craton in general, have geological similarities with the nearby Gawler Craton most notably concerning the relationship of base, precious and critical minerals mineralisation with an igneous intrusion dating event from around 1590 Ma.

The exception to this is the Prospect Hill Block separated from the rest of the Mt Babbage Inlier by a major, as yet unnamed, E-W fault, passing through the middle of the project area (Figure 3). To the north of the fault, the Prospect Hill Block is host to less intense, higher-level deformation with several, cross-cutting, younger (1560 Ma), granitoids such as the White Well Granite and Prospect Hill Porphyry. The 1580 Ma Terrapinna Granite lies south of the fault.

## LOCAL GEOLOGY AND MINERALISATION

The Mt Babbage Inlier in the project area is dominated by Palaeoproterozoic volcanics and volcanoclastics which have been intruded by multiple, younger, Mesoproterozoic, granitoids (1560 Ma). The core of the Inlier is unconformably overlain by Neoproterozoic Adelaidean metasediments to the west and Cretaceous and younger sediments to the north and east (Figure 3).



**Figure 3: Summary of outcropping geology in EL5891 and location of Sn prospects.**

Unlike the older (1590 Ma) igneous event, younger granites are anomalous in Sn as well as other critical minerals (copper (Cu), fluorine (F), tungsten (W), uranium (U), molybdenum (Mo) and rare earths (REEs)) representing a variety of mineralisation styles<sup>4</sup>. Intrusion of younger granites into Petermorra Volcanics are interpreted to be responsible for Sn-rich polymetallic mineralisation in the Prospect Hill area.

At least three styles of Sn mineralisation have been recognised:

- i) Epigenetic fault/shear mineralisation associated with anomalous F, U, yttrium (Y), zinc (Zn) and Cu. Seen at the South Ridge prospect, this is the most significant style;
- ii) A silica-muscovite-tourmaline association, seen at surface in elliptical or pod-like accumulations. The 3D dimensional shape of this mineralisation is unknown but they may represent shoots or “pipes”. Although limited in extent these represent significant targets due to their high-grade nature (e.g., up to 56% Sn at the Black Rock prospect); and
- iii) Anomalous Sn has also been recorded in “skarn-like” zones with epidote + actinolite + sphene + grossular garnet.

HRE considers the Prospect Hill Block to be a unique, highly prospective terrain in which to discover Sn-rich deposits.

<sup>4</sup> Teale, G. S. (1993). Mesoproterozoic of the Curnamona Craton and Mount Painter and Mount Babbage Inliers, Volume 1. In J. F. Drexel & W. V. Preiss (Eds.), *The Geology of South Australia*. Adelaide: South Australia Geological Survey Bulletin 54



## EXPLORATION HISTORY AND POTENTIAL

Prospect Hill's remote location at the extreme northern end of the Flinders Ranges provided logistical challenges to early prospectors and miners in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. There is evidence of prospecting pits and shallow shafts targeting Cu mineralisation at what is now known at the North Ridge Prospect (Figure 3).

Until the latter part of the 20<sup>th</sup> century little exploration of note had been conducted in the Prospect Hill Block. Anomalous Sn in stream sediment samples collected by Marathon Petroleum (Marathon) in 1980 led to the discovery of outcropping cassiterite-rich mineralisation at South Ridge. Several other Sn prospects were also outlined (Figure 3), some with anomalous base metals, highlighting the area's prospectivity.

Outcrop samples from the South Ridge prospect returned assays up to 13% Sn, 0.8% Pb (lead), 175 g/t Ag (silver), 3.95% Cu, 2040 ppm Y and 4150 ppm Bi (bismuth). Channel sampling by Marathon indicated a well-defined zone of silicification and shearing within volcanoclastics with channel sample intervals including:

**Line 4150E: 6.2 m @ 2.74% Sn**  
**Line 4050E: 0.6 m @ 1.70% Sn**  
**Line 3950E: 2.6 m @ 0.7% Sn.**

Drill testing of South Ridge mineralisation commenced in 1986 by North Flinders Mines (North Flinders) with the completion of two percussion holes PHP-1 and 2, the second of which intersected rich cassiterite mineralisation, returning:

**PHP-2: 6 m @ 1.85% Sn from 24 m.**

Despite this high-grade Sn mineralisation, North Flinders undertook no further work.

In the late 1980s Lynch Mining Ltd undertook detailed ground magnetics and radiometrics, followed by stream, soils and rock chip sampling, delineating numerous zones of interest. They focussed on detailed mapping and sampling of the South Ridge prospect, defining a zone over 300 m in strike length and up to 15 m in width, noting that mineralisation pinched and swelled along strike and was hosted by a siliceous "*lode horizon*" with distinctive mineralogy including fluorite, garnet, quartz and gahnite in addition to cassiterite.

Shallow percussion drilling of 17 holes was undertaken during two campaigns. Eleven drill holes at South Ridge highlighted continuity of Sn-rich mineralisation along the *lode horizon*. The best drill intersections, using a 0.1% Sn cutoff, included:

**PHP-5: 4 m @ 0.72% Sn from 3 m**  
**and 5 m @ 1.77% Sn from 11 m**  
**PHP-6: 2 m @ 1.51% Sn from 18 m**  
**PHP-8: 3 m @ 1.26% Sn from 17 m**  
**PHP-15: 6 m @ 2.33% Sn from 14 m.**

Three drill holes were designed to test the zone at >100m depth but all three showed significant deviation from the original plan and it was likely they did not reach the target<sup>5</sup>.

In addition, anomalous base and precious metal values were returned in some drill holes, including 5 m @ 0.46% Cu, 1 m @ 1.8% Zn, 2 m @ 1.8% Pb and 3 m @ 64 g/t Ag.

<sup>5</sup> Lynch mining Pty Ltd EL 2158. Annual Report Mar 1997 to Mar 1998 ENV09178

Surface exploration work was completed at the North Ridge prospect area where rock chip sampling returned anomalous levels of Cu (up to 15.2%). Limited drill testing of the Central Ridge prospect intersected strongly anomalous Sn mineralisation from multiple zones below quartz-tourmaline outcrop. From five completed drill holes the best intersections were:

PHP-11: 3 m @ 0.29% Sn from 2 m  
and 2 m @ 0.23% Sn from 29 m  
PHP-12: 1 m @ 0.45% Sn from 10 m  
and 1 m @ 0.34% Sn from 30 m.

In 2005 Havilah Resources Limited (Havilah) entered into an earn-in arrangement with the then tenement holders, Teale and Associates Pty Ltd and Adrian Brewer. They completed infill and extensional drilling at the South Ridge prospect and drill test targets along North Ridge across two campaigns in 2007/08 and 2017/18.

In 2007, 10 reverse circulation (RC) drill holes, totalling 879 m, were completed at South Ridge and 9 holes totalling 483 m at North Ridge. The South Ridge program continued to intersect high-grade Sn mineralisation including:

PHRC01: 5 m @ 0.39% Sn from 33 m  
**PHRC02: 9 m @ 0.52% Sn from 43 m**  
**PHRC03: 3 m @ 4.85% Sn from 44 m**  
**PHRC04: 10 m @ 1.16% Sn from 33 m**  
**PHRC05: 3 m @ 1.35% Sn from 13 m.**

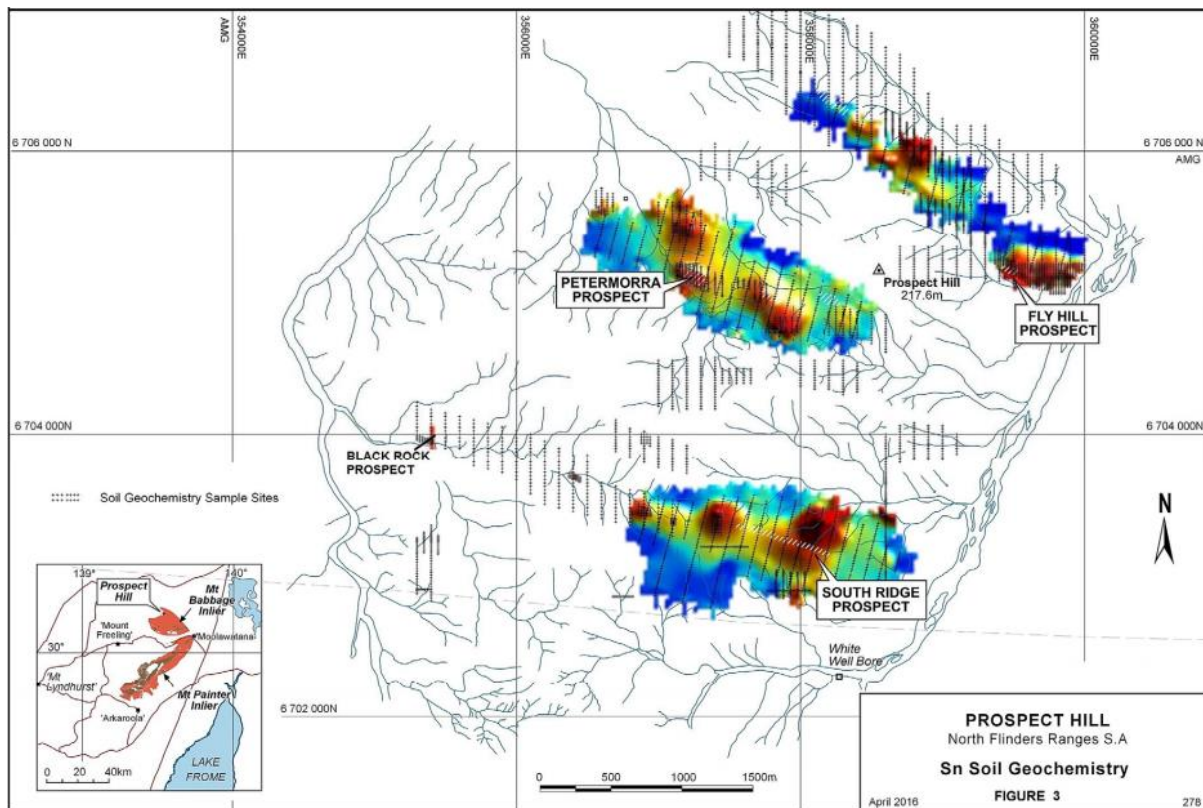
In addition to geochemical assays, the drill samples also provided material for petrological examination, for check assaying at independent laboratories, and 3 composite samples for sighter metallurgical testwork at Burnie Research Laboratory.

In 2008, a further 24 RC holes totalling 2,231 m were completed at South Ridge with intersections including:

**PHRC23: 9 m @ 0.93% Sn from 28 m**  
**PHRC24: 8 m @ 1.48% Sn from 11 m**  
**PHRC37: 5 m @ 0.85% Sn from 93 m**  
**PHRC38: 2 m @ 0.85% Sn from 100 m**  
**PHRC40: 2 m @ 0.71% Sn from 129 m.**

Plans to test extensions of South Ridge mineralisation were delayed for several years due to Native Title negotiations. During this time an extensive program of pXRF soil sampling was undertaken. A total of 1,565 sites were sampled, the results of which clearly highlight known Sn prospects (Figure 4), allowing a better understanding of mineral zonation and also adding a new prospect – Black Rock, the westernmost Sn mineralisation at Prospect Hill. Field checking of this anomaly uncovered several small but very high-grade outcrops with up to 58% Sn.





**Figure 4: Colour contoured pXRF soil assays across main Sn prospects at Prospect Hill.**

In 2016 Havilah was granted assistance from the South Australian Government PACE program to drill test the western extension of South Ridge as well as several other prospects. Drilling commenced in 2017 at western South Ridge (8 holes for 712 m) with subsequent work at the Fly Hill (9 holes for 712 m) and Petermorra (2 holes for 236 m) prospects, and the newly discovered Black Rock prospect (9 holes for 612 m).

Havilah reported that its drilling successfully extended known mineralisation at South Ridge for an additional 220 m to the west with potential for further extension despite low-grade results in the westernmost holes. Significantly, two drill holes in the final drilling program at South Ridge in 2017 intersected >1% Sn at 75 – 90 m vertical depth:

**PHRC55: 5 m @ 3.22% Sn from 84 m**  
**PHRC56: 4 m @ 1.03% Sn from 111 m.**

Drill hole PHRC54 at Fly Hill intersected two zones of anomalous Sn mineralisation – 2 m @ 0.2% Sn from 4 m and **4 m @ 0.7% Sn from 62 m, including 1 m @ 1.3% Sn**. Three drill holes at the Black Rock prospect encountered intervals of 0.2% Sn but failed to replicate the high grades obtained from surface sampling for reasons not yet understood.

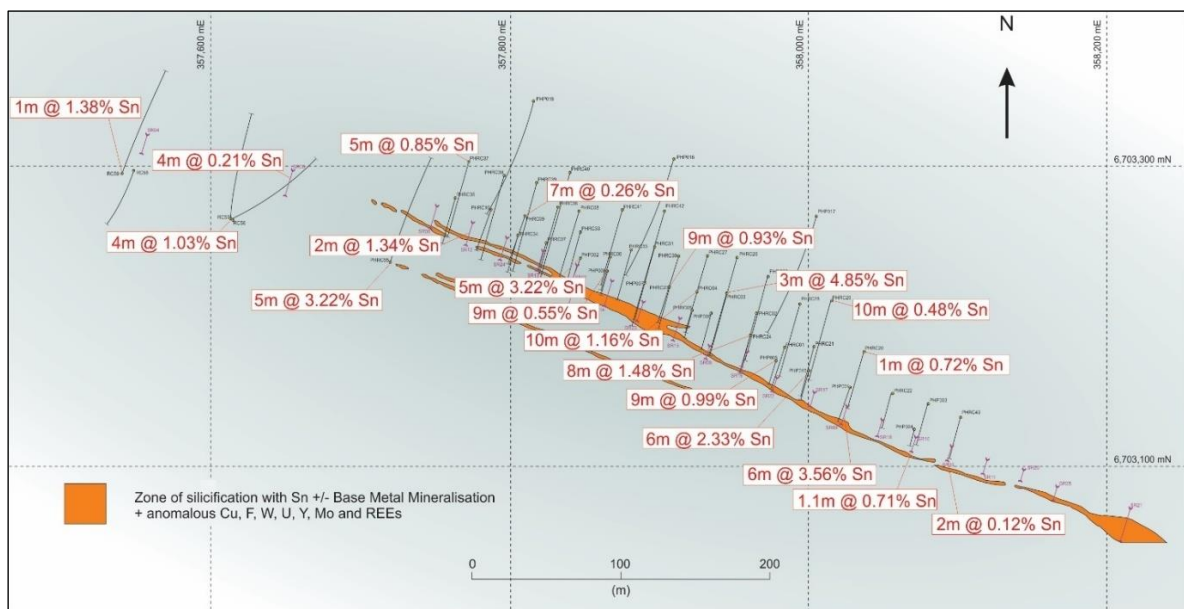
In summary, 90 holes have been drilled at Prospect Hill during multiple, short-lived campaigns over four decades, with the focus overwhelmingly on the South Ridge prospect (Table 2).

**Table 2: Previous exploration drilling summary at Prospect Hill project, 1986-2017.**

PROSPECT	YEAR/S	NO. HOLES	TOTAL METRES
South Ridge	1986, 1994, 1996, 2007, 2008, 2017	56	4,641
Central Ridge	1994	5	170
North Ridge	2007	9	483
Petermorra	2017	2	236
Fly Hill	2017	9	712
Black Rock	2017	9	612
<b>TOTAL</b>		<b>90</b>	<b>6,854</b>

## PROSPECT HILL TIN MINERALISATION – SOUTH RIDGE

The most advanced prospect at Prospect Hill is South Ridge where drilling and costeaning has outlined mineralisation within a linear, steeply-dipping structural zone of silicification and distinctive gangue mineralogy, known as the *lode horizon*, over 500 m of strike (Figure 5).



**Figure 5: Plan view of South Ridge prospect with selected drill and trench intersections.**

Within the *lode horizon*, Sn mineralisation (>0.1% Sn) varies from 1 m to 6 m true width and has been traced to over 100 m vertical depth (Figure 6). Surface mapping/trenching and percussion drilling indicate the potential effect of structural control which causes high-grade mineralisation to pinch and swell, with a shallow western dip to this trend. This was recognised in the final phases of drilling and is yet to be sufficiently tested.

Structural control of mineralisation within a linear zone is often best depicted as distribution of total metal content (grade x length). Plotting total metal content for intersections at South Ridge (>0.1% Sn cutoff) indicates a shallow westerly dip to highest-grade mineralisation (Figures 6 and 7). This also highlights the potential to extend high-grade mineralisation at South Ridge at depth and to the west (Figure 7).



Significant Sn intersections (>0.1% Sn) and drill hole details from South Ridge are detailed in Tables 3 and 5.

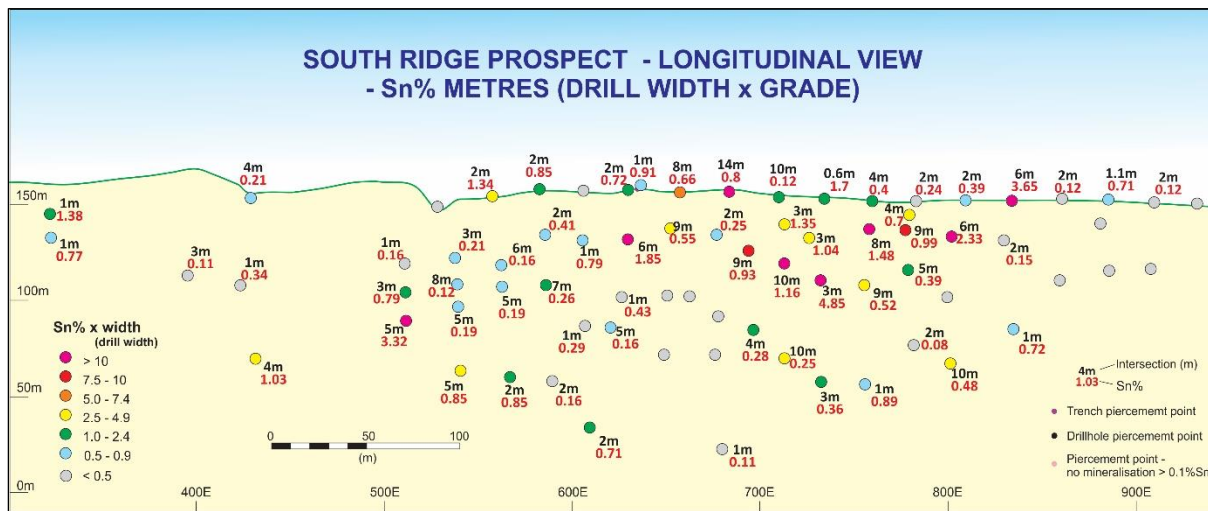


Figure 6: Longitudinal view of South Ridge prospect showing drill holes piercement points.

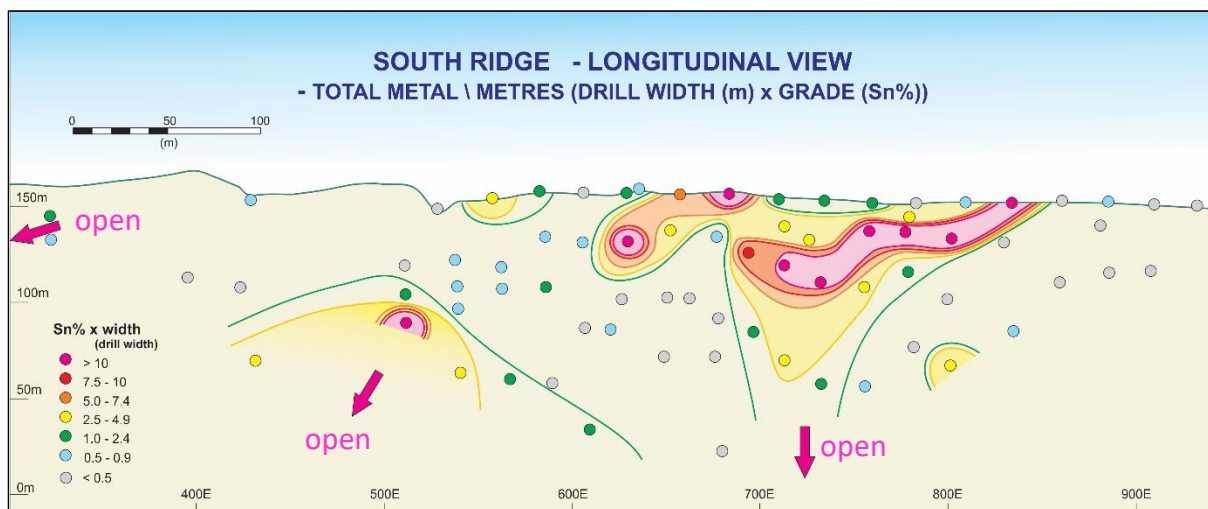


Figure 7: Longitudinal view of South Ridge prospect showing contoured total metal intersections.

## PROSPECT HILL MINERALISATION – OTHER PROSPECTS

Tin mineralisation is widespread throughout the Mt Babbage Inlier. Although most work to date had focussed on South Ridge, several other prospects show potential for further discoveries. Drilling of these prospects has been reconnaissance to date with several intersections of strongly anomalous Sn +/- base and precious metal mineralisation. Table 4 lists significant Sn (>0.1% Sn) assays at the Central Ridge, North Ridge, Fly Hill and Black Rock prospects, and Table 5 lists details of all holes drilled to date at these prospects.

High grade Sn mineralisation seen at surface at Black Rock and Fly Hill has not been replicated in drilling to date. Sn mineralisation at these other prospects differs from South Ridge in not being confined to a tabular, linear structure associated with quartz veins and



distinctive associated mineralogy such as fluorite and garnet. Sn at the other prospects is intimately associated with black tourmaline and silica and forms high-grade pods or potentially pipes.

HRE considers that understanding the structural control to Sn mineralisation at these other prospects is key to unlocking their potential. There are many geological similarities with the well-known Zaaipiaats tin field in South Africa. In this district, cassiterite mineralisation is hosted as low-grade disseminations in granite and large, and uniquely mineralised, tourmaline-rich hydrothermal-pipe and lens-shaped orebodies<sup>6</sup> which, although sometimes limited in horizontal extent, may be very high-grade and extend for many metres vertically.

Detailed structural analysis of the other drilled prospects will be undertaken prior to further drill testing.

### **PROSPECT HILL – POTENTIAL**

In summary, HRE proposes acquiring a strongly mineralised critical minerals project in the highly prospective Curnamona Craton. The Prospect Hill project comes with an extensive geological database collected over several decades that includes:

- 350 rock samples;
- 4,520 soil samples;
- 305 stream samples;
- 40 trenches (536.8 m);
- 19 percussion holes (1,156 m);
- 71 RC holes (5,698 m);
- detailed geological mapping;
- extensive petrographic sampling; and
- metallurgical testwork.

This database has demonstrated widespread Sn mineralisation at Prospect Hill and can provide a framework to rapidly upgrade the standout South Ridge Sn prospect to a Mineral Resource with targeted infill drilling and additional metallurgical testwork. There is potential to expand the mineral system down dip and along strike with additional drilling.

HRE also regards other Sn prospects in the project area are underexplored and therefore represent significant opportunities to add to any future resource inventory.

**-- Ends --**

This announcement has been approved by the Board of HRE.

### **For more information, please contact:**

#### **Exploration Manager**

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<sup>6</sup> <https://www.mdpi.com/2075-163X/10/4/379>

## **About Heavy Rare Earths Limited**

Heavy Rare Earths Limited (ASX: HRE) is an Australian uranium and critical minerals exploration and development company. HRE's key exploration projects are in the uranium- and critical minerals-rich Curnamona Province of eastern South Australia and in the Mid-West region of Western Australia.

## **Competent Person's Statement**

The Exploration Results contained in this announcement were compiled by Mr Joseph Ogierman. Mr Ogierman is a Member (#4469) of the Australian Institute of Geoscientists (MAIG). He is a full-time employee of Heavy Rare Earths Limited. Mr Ogierman has more than 35 years' experience in mineral exploration and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 JORC Code. Mr Ogierman consents to the inclusion in this announcement of the matters based on the Exploration Results in the form and context in which they appear.

## **Forward Looking Statement**

This announcement includes "forward-looking statements" as that term within the meaning of securities laws of applicable jurisdictions. Forward-looking statements involve known and unknown risks, uncertainties and other factors that are in some cases beyond HRE's control. These forward-looking statements include, but are not limited to, all statements other than statements of historical facts contained in this presentation, including, without limitation, those regarding HRE's future expectations. Readers can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "potential," "predict," "project," "risk," "should," "will" or "would" and other similar expressions. Risks, uncertainties and other factors may cause HRE's actual results, performance, production or achievements to differ materially from those expressed or implied by the forward-looking statements (and from past results, performance or achievements). Readers are cautioned not to place undue reliance on forward-looking statements. Although HRE 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.

**Table 3: Significant Sn assays at South Ridge prospect. Prospect Hill project<sup>7</sup>.**

HOLE NO.	FROM (m)	TO (m)	INTERVAL (m)	Sn (%)
PHP-1	20	22	2	0.15
PHP-2	24	30	6	1.85
<i>includes</i>	24	28	4	2.68
PHP-5	3	7	4	0.72
	11	16	5	1.77
	17	20	3	0.41
PHP-6	18	20	2	1.51
	29	32	3	0.4
PHP-7	21	23	2	0.25
	26	28	2	0.12
PHP-8	17	20	3	1.26
	21	23	2	0.15
	24	26	2	0.42
PHP-15	14	20	6	2.33
	25	26	1	0.47
PHRC01	33	38	5	0.39
<i>includes</i>	33	35	2	0.84
PHRC02	43	52	9	0.52
<i>includes</i>	46	50	4	0.93
PHRC03	44	47	3	4.85
	52	54	2	0.15
PHRC04	33	43	10	1.16
<i>includes</i>	39	43	4	2.28
PHRC05	13	16	3	1.35
	26	29	3	0.24
PHRC07	27	28	1	0.79
PHRC08	71	76	5	0.16

<sup>7</sup> Mineralised intervals do not contain more than a 1 m interval of <0.1% Sn. No top cut-off Sn grade was applied.



PHRC09	50	57	7	0.26
<i>includes</i>	50	51	1	0.86
PHRC10	34	40	6	0.16
<i>includes</i>	35	36	1	0.41
	47	52	5	0.19
PHRC20	64	65	1	0.72
PHRC21	49	50	1	0.07
PHRC23	28	37	9	0.93
<i>includes</i>	30	33	3	2.06
PHRC24	6	9	3	0.23
	11	19	8	1.48
<i>includes</i>	12	16	4	2.63
	23	24	1	0.20
	27	28	1	0.13
PHRC25	101	102	1	0.89
PHRC26	99	102	3	0.36
	111	112	1	0.07
PHRC27	84	94	10	0.25
<i>includes</i>	85	86	1	1.07
PHRC28	76	78	2	0.08
PHRC29	85	95	10	0.48
<i>includes</i>	89	90	1	2.75
PHRC30	72	76	4	0.28
PHRC31	67	68	1	0.06
PHRC32	55	56	1	0.08
	61	62	1	0.06
PHRC33	43	44	1	0.10
	59	60	1	0.43
PHRC34	21	23	2	0.41

	33	34	1	0.22
PHRC35	28	31	3	0.21
	37	45	8	0.12
	49	50	1	0.39
	56	61	5	0.19
PHRC36	54	55	1	0.06
	69	70	1	0.23
	73	74	1	0.29
PHRC37	80	82	2	0.40
	93	98	5	0.85
<i>includes</i>	95	96	1	3.34
PHRC38	90	91	1	0.06
	95	98	3	0.13
	100	102	2	0.85
	104	105	1	0.08
PHRC39	102	104	2	0.16
	107	108	1	0.13
	110	111	1	0.08
PHRC40	27	30	3	0.06
	129	131	2	0.71
PHRC42	84	85	1	0.09
	140	141	1	0.11
PHRC55	54	55	1	0.16
	69	72	3	0.79
	84	89	5	3.32
PHRC56	69	70	1	0.34
	111	115	4	1.03
PHRC57	62	65	3	0.11
PHRC59	18	19	1	1.38
	34	35	1	0.77

**Table 4: Significant Sn assays at Central Ridge, North Ridge, Fly Hill and Black Rock prospects. Prospect Hill project<sup>8</sup>.**

HOLE NO.	PROSPECT	FROM (m)	TO (m)	INTERVAL (m)	Sn (%)
PHP-11	Central Ridge	2	5	3	0.29
		29	31	2	0.23
PHP-12	Central Ridge	10	11	1	0.45
		13	14	1	0.10
		30	31	1	0.34
PHRC18	North Ridge	36	37	1	0.16
PHRC19	North Ridge	38	40	2	0.11
		52	53	1	0.16
PHRC54	Fly Hill	4	7	3	0.20
		62	66	4	0.69
PHRC65	Black Rock	27	28	1	0.23
PHRC68	Black Rock	39	40	1	0.21
PHRC71	Black Rock	54	55	1	0.28

<sup>8</sup> Mineralised intervals do not contain more than a 1 m interval of <0.1% Sn. No top cut-off Sn grade was applied.



**Table 5: Details of historic Prospect Hill project holes.**

HOLE NO.	PROSPECT	EASTING (m)	NORTHING (m)	EVEVATION (m)	AZIMUTH (°)	DIP (°)	TOTAL DEPTH (m)
PHP-1	South Ridge	358027	6703151	148	199.5	-60	50
PHP-2	South Ridge	357846	6703238	157	199.5	-60	48
PHP-3	South Ridge	358079	6703140	147	195.5	-55	50
PHP-4	South Ridge	358070	6703123	149	194.5	-55	21
PHP-5	South Ridge	357977	6703169	150	195.5	-55	30
PHP-6	South Ridge	357934	6703201	152	195.5	-55	45
PHP-7	South Ridge	357889	6703221	154	195	-55	45
PHP-8	South Ridge	357864	6703229	156	195	-55	30
PHP-9	South Ridge	358385	6703033	130	195.5	-55	35
PHP-10	Central Ridge	357710	6704991	136	195.5	-55	30
PHP-11	Central Ridge	357204	6705432	105	15.5	-60	35
PHP-12	Central Ridge	357205	6705448	105	15.5	-60	35
PHP-13	Central Ridge	357214	6705468	105	15.5	-60	35
PHP-14	Central Ridge	357219	6705489	103	15.5	-60	35
PHP-15	South Ridge	357999	6703162	149	195.5	-55	35
PHP-16	South Ridge	357909	6703304	145	196.5	-60	180
PHP-17	South Ridge	358004	6703265	139	196.5	-60	180
PHP-18	South Ridge	357815	6703343	146	195	-60	177
PHP-19	South Ridge	358378	6703034	133	195.5	-60	60
PHRC01	South Ridge	357983	6703178	150	197.5	-70	88
PHRC02	South Ridge	357964	6703201	151	195.5	-60	88
PHRC03	South Ridge	357944	6703214	152	195.5	-60	88
PHRC04	South Ridge	357924	6703215	153	195.5	-60	58
PHRC05	South Ridge	357921	6703203	153	195.5	-60	40
PHRC06	South Ridge	357866	6703238	156	195.5	-75	88
PHRC07	South Ridge	357823	6703248	160	195.5	-60	40
PHRC08	South Ridge	357845	6703269	156	196.5	-60	94
PHRC09	South Ridge	357809	6703266	157	199.5	-60	70
PHRC10	South Ridge	357786	6703270	156	199.5	-60	59
PHRC11	North Ridge	358472	6706051	127	32.5	-60	80
PHRC12	North Ridge	357961	6706409	119	32.5	-60	40
PHRC13	North Ridge	357998	6706381	122	32.5	-60	40
PHRC14	North Ridge	358049	6706366	124	32.5	-60	12
PHRC15	North Ridge	358036	6706350	124	32.5	-60	37
PHRC16	North Ridge	358092	6706317	127	32.5	-60	58
PHRC17	North Ridge	358123	6706281	130	32.5	-60	82
PHRC18	North Ridge	358760	6705834	121	32.5	-60	76
PHRC19	North Ridge	359870	6705060	94	32.5	-60	58
PHRC20	South Ridge	358036	6703175	140	195.5	-60	80
PHRC21	South Ridge	358003	6703178	145	195.5	-60	70
PHRC22	South Ridge	358055	6703147	145	195.5	-60	50

PHRC23	South Ridge	357906	6703218	153	195.5	-60	58
PHRC24	South Ridge	357960	6703186	150	195.5	-60	50
PHRC25	South Ridge	357972	6703225	145	195.5	-60	118
PHRC26	South Ridge	357951	6703238	145	195.5	-60	136
PHRC27	South Ridge	357931	6703239	146	195.5	-60	106
PHRC28	South Ridge	357993	6703207	144	195.5	-60	100
PHRC29	South Ridge	358014	6703209	145	195.5	-60	111
PHRC30	South Ridge	357912	6703239	148	197.5	-60	94
PHRC31	South Ridge	357896	6703245	150	195.5	-60	88
PHRC32	South Ridge	357880	6703243	153	195.5	-60	70
PHRC33	South Ridge	357846	6703255	154	195.5	-60	70
PHRC34	South Ridge	357804	6703253	156	195.5	-60	52
PHRC35	South Ridge	357762	6703278	147	195.5	-60	64
PHRC36	South Ridge	357831	6703272	150	195.5	-60	94
PHRC37	South Ridge	357771	6703302	145	195.5	-60	106
PHRC38	South Ridge	357795	6703293	147	195.5	-60	118
PHRC39	South Ridge	357817	6703288	148	195.5	-60	124
PHRC40	South Ridge	357839	6703295	147	195.5	-60	148
PHRC41	South Ridge	357874	6703270	148	195.5	-60	106
PHRC42	South Ridge	357902	6703269	145	195.5	-60	160
PHRC43	South Ridge	358101	6703131	146	195.5	-60	58
PHRC44	Petermorra	357158	6705166	92	199.5	-60	118
PHRC45	Petermorra	357212	6705119	100	201.5	-60	118
PHRC46	Fly Hill	359402	6705222	96	27.5	-60	94
PHRC47	Fly Hill	359441	6705190	96	27.5	-60	76
PHRC48	Fly Hill	359478	6705172	96	27.5	-60	82
PHRC49	Fly Hill	359465	6705150	96	27.5	-60	94
PHRC50	Fly Hill	359517	6705136	92	27.5	-60	100
PHRC51	Fly Hill	359634	6705186	102	207.5	-60	94
PHRC52	Fly Hill	359708	6705184	102	197.5	-60	100
PHRC53	Fly Hill	359845	6705168	102	197.5	-60	102
PHRC54	Fly Hill	359915	6705106	95	17.5	-60	74
PHRC55	South Ridge	357718	6703235	166	15.5	-60	148
PHRC56	South Ridge	357612	6703264	170	65.5	-60	160
PHRC57	South Ridge	357613	6703263	169	355.5	-60	124
PHRC58	South Ridge	357547	6703296	162	195.5	-60	76
PHRC59	South Ridge	357539	6703294	162	15.5	-60	130
PHRC60	South Ridge	357303	6703394	164	195.5	-60	58
PHRC61	South Ridge	357306	6703415	165	195.5	-60	100
PHRC62	South Ridge	357340	6703400	164	195.5	-60	94
PHRC63	Black Rock	355769	6704059	117	203.5	-60	52
PHRC64	Black Rock	355755	6704067	119	205.5	-60	52
PHRC65	Black Rock	355760	6704082	121	205.5	-65	88
PHRC66	Black Rock	355731	6704083	116	203.5	-60	58
PHRC67	Black Rock	355736	6704099	116	203.5	-65	94

PHRC68	Black Rock	355705	6704089	116	203.5	-60	58
PHRC69	Black Rock	355711	6704112	119	203.5	-60	94
PHRC70	Black Rock	355666	6704099	124	203.5	-60	58
PHRC71	Black Rock	355627	6704107	122	203.5	-60	58



## 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
<b>Sampling techniques</b>	<i>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 down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	<p>Historic drilling and surface geochemistry.</p> <ul style="list-style-type: none"><li>• The data reported in this announcement is compiled from publicly available sources, principally the South Australian Resources Information Geoserver (SARIG), an open file geoscience database. This multigenerational dataset has been collected by many companies over 25 years prior to 2005 and so has varying degrees of accompanying metadata, ranging from comprehensive to absent. As best as can be ascertained from the records studied the original sampling and drilling was conducted using industry best practice, and can be relied upon, but possible limitations due to age should be kept in mind.</li><li>• Since 2005 work was undertaken by the current tenement holders, namely Havilah Resources Limited (Havilah), Teale and Associates Pty Ltd. and former tenement holder and geologist, Adrian Brewer. Technical data generated during this period was mostly reported to the ASX by Havilah and in accordance to the 2004 JORC Code and 2012 JORC Code. All of this technical data was made available to Heavy Rare Earths Limited (HRE) for this announcement.</li></ul>

Criteria	JORC Code Explanation	Commentary
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<ul style="list-style-type: none"> <li>For percussion drilling, single metre intervals were collected directly from the cyclone cone splitter. 2-3 kg samples were riffle split at 1m intervals. prior to collection in calico bags.</li> <li>All reverse circulation (RC) drill samples were collected into pre-numbered calico bags and packed into polyweave bags by Havilah staff for shipment to the assay laboratory in Adelaide.</li> <li>Drill hole collar locations were surveyed by handheld GPS units which have an accuracy to <math>\pm 5</math> m.</li> <li>For trenching/costeaning continuous chip sampling was done generally over 1 m intervals but occasionally over 2 m intervals or sub-metre intervals dependent on exposed geological boundaries.</li> <li>Handheld XRF results are not reported individually here but were used to compile the soil geochemistry map in Figure 4. The instrument readings were checked against known standards at regular intervals.</li> </ul>
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	<ul style="list-style-type: none"> <li>Mapping and sampling by experienced geologists, petrological studies and standard laboratory assaying techniques confirm the mineralisation.</li> </ul>
<b>Drilling techniques</b>	<i>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, whether core is oriented and if so, by what method, etc.).</i>	<ul style="list-style-type: none"> <li>The first 19 drill holes at Prospect Hill were recorded in reports as percussion drill holes. All subsequent drilling has been by RC drilling.</li> <li>The 2007/08 and 2017/18 drill programs supervised by Havilah employed RC drilling with a face sampling hammer bit.</li> </ul>
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<ul style="list-style-type: none"> <li>The sample yield and quality of the RC samples was routinely recorded in drill logs.</li> <li>The site geologist considered that overall, the results are acceptable for interpretation purposes.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>Measures taken to maximize sample recovery and ensure representative nature of the samples.</i></p>	<ul style="list-style-type: none"> <li>For pre-2005 drilling there is no specific reference made regarding the optimisation of sample recovery. Industry-standard practice is assumed, given supervision by experienced geologists whereby insufficient recovery is noted and rectified by re-drilling.</li> <li>For post-2005 drilling (Havilah) sample recoveries for RC drilling were continuously monitored by the geologist on site in order to effect adjustments to drilling methodology to optimize sample recovery and quality if necessary. No issues were recorded by the experienced supervising geologist.</li> </ul>
	<p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Sample recoveries were acceptable and there is no evidence of RC sample bias.</li> </ul>



Criteria	JORC Code Explanation	Commentary
<b>Logging</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>• Historic company exploration reports from pre-2005 drilling record geological logging for every metre of drilling. Information includes rock type and mineralisation present and, where applicable, percentage of minerals present such as cassiterite or sulphides.</li> <li>• Geological logging of drill chips by Havilah was carried out on all holes by experienced geologists and technical staff. Holes were logged for lithology, weathering, alteration and mineralisation.</li> <li>• Logs loaded into Excel spreadsheets and uploaded into an SQL database.</li> <li>• Logging is semi-quantitative and 100% of reported intersections have been logged.</li> <li>• There are no documented archive samples from pre-2005 drilling.</li> <li>• For post-2005 (Havilah) drilling a representative sample of each 1 m RC interval is retained in chip trays and stored in a secure Havilah facility for future reference.</li> <li>• Samples from 5 holes were collected as representative from the final drilling program. These were offered to the South Australian Government Core Library in May 2017.</li> </ul>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	<ul style="list-style-type: none"> <li>• Percussion and RC drilling is primarily a quantitative sampling method at Prospect Hill, collecting 1 m samples for analysis.</li> </ul>
	<i>The total length and percentage of the relevant intersections logged.</i>	<ul style="list-style-type: none"> <li>• All drill intervals were logged.</li> </ul>
<b>Sub-sampling techniques and</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<ul style="list-style-type: none"> <li>• Not applicable.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>sample preparation</b>	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	<ul style="list-style-type: none"> <li>Sampling method for pre-Havilah drilling is undocumented but given the experienced geologists involved, it would have followed industry best practice. There is no reason to expect this sampling would be less reliable than later sampling.</li> <li>For Havilah sampling, RC drill chips were received directly from the drilling rig via a cyclone and were riffle split on 1 m intervals to obtain 2-3 kg samples.</li> <li>Sampling size is appropriate for the style of mineralisation observed.</li> </ul>
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<ul style="list-style-type: none"> <li>For Havilah drilling, samples were dried, crushed and pulverised to 90% passing 75 µm. This is considered to have appropriately homogenised the sample to allow subsampling for the various assay techniques.</li> </ul>
	<i>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</i>	<ul style="list-style-type: none"> <li>Subsampling of pulverised and homogenised drill chip samples was undertaken at ALS laboratory according to routine procedures.</li> </ul>
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i>	<ul style="list-style-type: none"> <li>For post-2005 drilling, blanks, duplicates and standard samples were inserted at regular intervals. Analysis of results for these control samples did not reveal any systematic assaying errors.</li> </ul>
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<ul style="list-style-type: none"> <li>Sample sizes are industry standard and considered appropriate for the style of mineralisation observed.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<ul style="list-style-type: none"> <li>Assay procedures for Havilah drilling and costean (continuous chip) sampling were performed by a reputable assay laboratory (ALS in Adelaide, South Australia).</li> <li>Eight elements Ag, Bi, Ce, Cu, Fe, Pb, Zn, Y were digested by four-acid digest then analysed by ICPMS (method ME-MS61).</li> <li>Sn and U assays were generated by lithium borate fusion XRF (method ME-MS85) – considered appropriate for these elements.</li> <li>Total assay method in both cases.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	<ul style="list-style-type: none"> <li>Niton handheld XRF analyser used for rock and soil sampling generally for 30 second count times. Machine accuracy and precision is regularly checked against a range of standards carried in the field.</li> <li>The Niton handheld XRF analyser has variable accuracy depending on the sample type and element but is considered sufficiently accurate to obtain an indication of anomalism for desired elements. This is supported by consistency of results for many analysed field samples.</li> </ul>
	<i>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.</i>	<ul style="list-style-type: none"> <li>For post-2005 drilling, blanks, duplicates and standard samples were inserted at regular intervals. Analysis of results for these control samples did not reveal any systematic assaying errors.</li> <li>Quality control procedures prior to 2005 are not known and less reliance can therefore be placed on the pre-2005 drilling data.</li> </ul>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p>	<ul style="list-style-type: none"> <li>Several competent geologists from different organisations have independently verified the trenching and drilling data over many years.</li> <li>Due to the early-stage exploration, twinned holes have not been used to validate earlier drill intersections.</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<ul style="list-style-type: none"> <li>• Drill data was compiled and collated and reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary. The intersection calculations were viewed by more than one geological personnel.</li> <li>• Drill hole data including meta data, lithological, mineral, survey, sampling and magnetic susceptibility was collected and stored as physical and electronic copies or entered directly into an Excel spreadsheet. When complete the spreadsheet was combined into a master Excel spreadsheet as the drill hole database.</li> <li>• Assay data was provided by ALS via Excel (.csv) spreadsheets. The data was validated using the results received from the known certified reference material. Hard copies of the assay certificates were stored with drill hole data such as drillers' plods, invoices, and hole planning documents.</li> <li>• Laboratory assay results were compiled into databases in commercial software including Mapinfo and Vulcan for plotting and interpretation purposes.</li> </ul>
	<i>Discuss any adjustment to assay data.</i>	<ul style="list-style-type: none"> <li>• Assay data is not adjusted.</li> </ul>
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	<ul style="list-style-type: none"> <li>• Soil sample locations were recorded using a hand-held GPS. Horizontal positional accuracy is <math>\pm 3</math>-5 m.</li> </ul>
	<i>Specification of the grid system used.</i>	<ul style="list-style-type: none"> <li>• Historical data is recorded in AGD84, Zone 54 but has been reprojected to MGA2020.</li> </ul>
	<i>Quality and adequacy of topographic control.</i>	<ul style="list-style-type: none"> <li>• Hand-held GPS only.</li> </ul>
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	<ul style="list-style-type: none"> <li>• pXRF soil data was collected at 25 m intervals along cross lines 100 m apart across prospective zones of the Petermorra Volcanics. Traverse surveys varied from 500 m to 4 km in length.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<i>Whether the 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.</i>	<ul style="list-style-type: none"> <li>Mineral Resource and Ore Reserve estimation has not been undertaken at Prospect Hill.</li> </ul>
	<i>Whether sample compositing has been applied.</i>	<ul style="list-style-type: none"> <li>Sample compositing was not used during initial drilling programs at South Ridge due to the reconnaissance nature of drilling. After more information was available, compositing 1 m samples into 2 or 3 m intervals was employed in several holes and only in unmineralised hanging wall + footwall zones. There was no compositing of samples within zones of mineralisation.</li> <li>There was no compositing of samples for drilling of other prospects other than South Ridge as this drilling is still preliminary in nature and insufficient geological information is available to enable accurate prediction of mineralised zones.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	<ul style="list-style-type: none"> <li>Soil sample lines are approximately perpendicular to the regional structural/lithological trends (Figure 4).</li> <li>Trench/costean sampling lines are approximately perpendicular to prospect-scale structural/lithological trends (Figure 5).</li> <li>Drill hole orientation at South Ridge is perpendicular to prospect-scale structural/lithological trends (Figure 5).</li> <li>Drill hole orientation at other prospects (e.g., Black Rock) is designed to be perpendicular to structural/lithological trends but insufficient information is available in the vertical plane to confirm this is the optimum orientation to test the “pod-like” tourmaline-silica+/-cassiterite mineralisation.</li> </ul>
	<i>If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	<ul style="list-style-type: none"> <li>At South Ridge, drilling is perpendicular to the main mineralisation trend but as the zone is near vertical to steeply dipping, drill holes intersect the zone at a high angle, therefore they do not reflect true width of the zone. True widths have not been calculated to date until better understanding of the South Ridge mineralised zone is achieved with additional drilling.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> <li>Samples collected by Havilah were in the custody of Havilah field personnel from collection at the drill rig until they were delivered to the laboratory.</li> </ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>Internal auditing of sampling techniques and assay data by Havilah has not revealed any material issues.</li> </ul>



## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding Section 1 also apply to this Section)

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>• Exploration licenses EL 5891 (45 km<sup>2</sup>), EL 6271 (15 km<sup>2</sup>), and EL 6933 (15 km<sup>2</sup>), that comprise the Prospect Hill project area are located 400 km NNE of Port Augusta in South Australia. They comprise a total area of 75 km<sup>2</sup> and are situated on a general lease (for grazing purposes).</li> <li>• The northern half of the Prospect Hill project, including the South Ridge prospect lies on Murnpeowie Pastoral Station while the southern half is on Moolawatana Pastoral Station.</li> <li>• The registered holder of EL 5891 is Havilah Resources Limited (Havilah) and Teale &amp; Associates Pty Ltd (Teale). Both ELs 6271 and 6933 are registered to Havilah.</li> <li>• In August 2025, Heavy Rare Earths Limited (HRE) entered into an earn-in agreement to acquire an 80% initial interest in all Havilah's rights to non-uranium minerals within the Prospect Hill project area. It builds on the existing agreement with Havilah in which HRE is currently earning an 80% initial interest in Havilah's rights to uranium mineralisation hosted by Cretaceous age and younger sediments on the same three project area tenements.</li> <li>• Two determined Native Title claim areas exist over the project area attributable to the Dieri people and Adnyamathanha people.</li> </ul>
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	<ul style="list-style-type: none"> <li>• The granted tenements are in good standing. Conducting exploration operations on the tenements is subject to the normal regulatory requirements of the South Australian Department for Energy and Mining (DEM).</li> <li>• Cultural heritage surveys are required by the respective Native Title parties prior to undertaking ground disturbing activities.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> <li>As outlined in the body of this announcement there have been several exploration campaigns undertaken by multiple companies over nearly five decades since the discovery of Sn mineralisation at South Ridge in 1980. These companies include Marathon Petroleum, North Flinders Mines, Lynch Mining, Werrie Gold, Adrian Brewer + Teale &amp; Associates, and Havilah Resources. All reports on work completed by these companies are available online through the South Australian Resources Information Geoserver (SARIG).</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> <li>There are multiple Sn-rich mineralisation styles in the Prospect Hill project. The most significant style so far encountered is a shear-hosted epigenetic vein at South Ridge associated with 1560 Ma granites. Other significant styles include high-grade pods of tourmaline + cassiterite + quartz which, although small in nature (1-2 m), have vertical extent which is yet to be confirmed. Although limited in outcrop extent they are significant targets due to the high grade of Sn. The exploration model being followed is that these occurrences may represent vectors to underlying larger tonnage but lower grade granite-hosted Sn systems.</li> <li>The Prospect Hill Block is host to several small 1560 Ma granites such as the Prospect Hill Porphyry and White Well Granite. It is postulated that intrusion of these granites into overlying Petermorra Volcanics has caused the widespread Sn +/- base metal mineralisation.</li> </ul>
<b>Drill hole Information</b>	<p><i>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:</i></p> <ul style="list-style-type: none"> <li>- easting and northing of the drill hole collar</li> <li>- elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>- dip and azimuth of the hole</li> <li>- down hole length and interception depth</li> <li>- hole length.</li> </ul>	<ul style="list-style-type: none"> <li>See the body of this announcement for tabulated drill hole collar details and mineralised results (Tables 3, 4 and 5).</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Data aggregation methods</b>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	<ul style="list-style-type: none"> <li>Sn results are documented as down hole width.</li> </ul>
	<i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	<ul style="list-style-type: none"> <li>Aggregated intercepts cited in the text and in Tables 3 and 4 contain no mineralised interval of &gt;1 m thickness with more than a 1 m interval of &lt;0.1% Sn. No top cut-off Sn grade has been applied.</li> </ul>
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	<ul style="list-style-type: none"> <li>No metal equivalents are stated.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</i></p>	<ul style="list-style-type: none"> <li>Downhole lengths are reported. Drill holes are typically oriented with the objective of intersecting mineralisation as near as possible to right angles, so that downhole intersections in general are as near as possible to true width.</li> <li>The majority of drill holes at South Ridge are directed perpendicular to the strike of the cassiterite mineralised zone <i>i.e.</i>, drill azimuth between 190° -200°, as detailed in Table 5. Inclination of the majority of South Ridge drill holes is -60° as the mineralised zone is steeply dipping to the NNE. This means that holes intersect the zone at a high angle and not perpendicular, therefore reported drill intersections are drill width and not true width.</li> <li>True widths have not been calculated to date until more accurate modelling of the South Ridge zone can be achieved with the benefit of more drilling data.</li> </ul>
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	<ul style="list-style-type: none"> <li>Plan and longitudinal vein sections of drilling at South Ridge record drill locations with the plan view showing selected high-grade Sn intersections (Figure 5). The longitudinal sections show drill piercement points of the mineralised zone and all summary assay intersections including unmineralised or poorly mineralised intersections (Figures 6 and 7).</li> </ul>



Criteria	JORC Code Explanation	Commentary
<b>Balanced reporting</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>The majority of drill hole results for Sn, the target mineral, are listed in Tables 3 and 4, without regard to the grade or thickness of Sn mineralisation. Drill holes not reported are generally barren, did not intersect the target or were abandoned due to drilling problems.</li> </ul>
<b>Other substantive exploration data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; 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.</i>	<ul style="list-style-type: none"> <li>Preliminary metallurgical testwork has been undertaken on percussion drill chips on two occasions. The first was in 1990 when hand samples of South Ridge mineralisation totalling 5 kg was tested at University of New South Wales Laboratories by Ersker Milling and Processing Pty Ltd. They reported the cassiterite was fine grained and mineralogy overall was simple with predicted recovery &gt;80% (available on SARIG in ENV8201). The second test was by Burnie Research Laboratory in 2008. Gravity separation was performed on three composite samples of 6 kg each representing low, medium and high-grade mineralisation. Overall gravity results indicate that Sn liberation becomes limited in size fractions above 75 µm and that gravity separation improved dramatically with decreasing grind size. For the high-grade composite, in the 38–75 µm fraction, 84% of Sn reported to a 48.1% Sn concentrate (available on SARIG in ENV11456).</li> </ul>
<b>Further work</b>	<p><i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<ul style="list-style-type: none"> <li>HRE plans a program of percussion and diamond core drilling to upgrade the South Ridge prospect to an initial Mineral Resource. This will involve infill drilling of existing drill sections and testing for extensions to the known zone at depth and along strike to both the west and east. Selected mineralised samples from diamond core drilling will also be used for metallurgical testwork.</li> <li>Follow-up drill testing of anomalous intersections previously obtained at other prospects will be undertaken, including at the Petermorra, Black Rock and Fly Hill prospects (Figures 3 and 4).</li> <li>For all relevant diagrams see body of this announcement.</li> </ul>