



## HM INTERCEPTED OUTSIDE TARGET AREA – NEW TENURE APPLIED FOR

- ✕ Drilling across “line 1” extends known mineralisation across strike by up to 180 m, with step out drilling indicating that mineralisation may extend across strike for more than 1 km
- ✕ Visual Heavy Mineral (HM) observed in all holes outside of Exploration Target area
- ✕ Ilmenite dominated mineralisation panned over 30 m in furthest step out hole (WP012)
- ✕ Given the highly encouraging results, HVY has applied for 15 blocks of additional tenure to the East of the Company’s existing tenure and adjacent to GMA’s mining lease and exploration tenure at Port Gregory (Figure 1)
- ✕ Upon granting of E70/5934, HVY will be the largest tenure holder targeting garnet mineralisation, in the Port Gregory Region

Heavy Minerals Limited (ACN 647 831 833) (“**Heavy Minerals**” or the “**Company**”) is pleased to announce that drilling at our 100% owned Port Gregory Project has intercepted mineralisation outside of the Exploration Target Area footprint. Three step out holes drilled along the Southern Boundary of tenement E70/5160 (Figure 3) all intercepted garnet mineralisation, with hole WP012, 1 km further across strike from the edge of previously identified mineralisation (Figure 3) intercepting ilmenite dominated mineralisation from surface. At present the existing Exploration Target of between 3.5 Mt and 4.5 Mt contained garnet (Table 1) has an estimated width of 1.6 km.

The ilmenite dominated HM fraction intercepted in hole WP012, 1 km across strike from the Exploration Target was panned to a depth of 30.6 m. On the back of these highly encouraging visual results, HVY has applied for additional tenure (E70/5934) to the east of tenement E70/5160. This additional ground is also notably adjacent to GMA’s mining lease (M70/1380) and exploration license E70/3055.

Drilling results and performance, coupled with the passive seismic interpretation indicates a deeper than anticipated limestone basement and sporadic occurrences of a thin calcrete cap at shallow depths. Due to the deeper limestone basement the company has changed its drilling contractor to one with a larger, more suitable drilling rig. This will allow HVY to complete the 12,000 m drilling program prior to breaking for the end of the year and with minimal disruption to HVY’s plan of rapidly defining a resource and moving to the study phase of the project. Having this larger rig on site will also allow HVY to expand upon the existing program by targeting mineralisation both deeper and across a wider area of strike.

Executive Director & CEO, Mr. Nic Matich said:

*“The discovery of mineralisation outside our Exploration Target area is a testament to the quality of our tenure and the potential for it to host a sizable heavy mineral resource.*

*Applying for the additional ground was an obvious strategic decision given the visual results to date.*

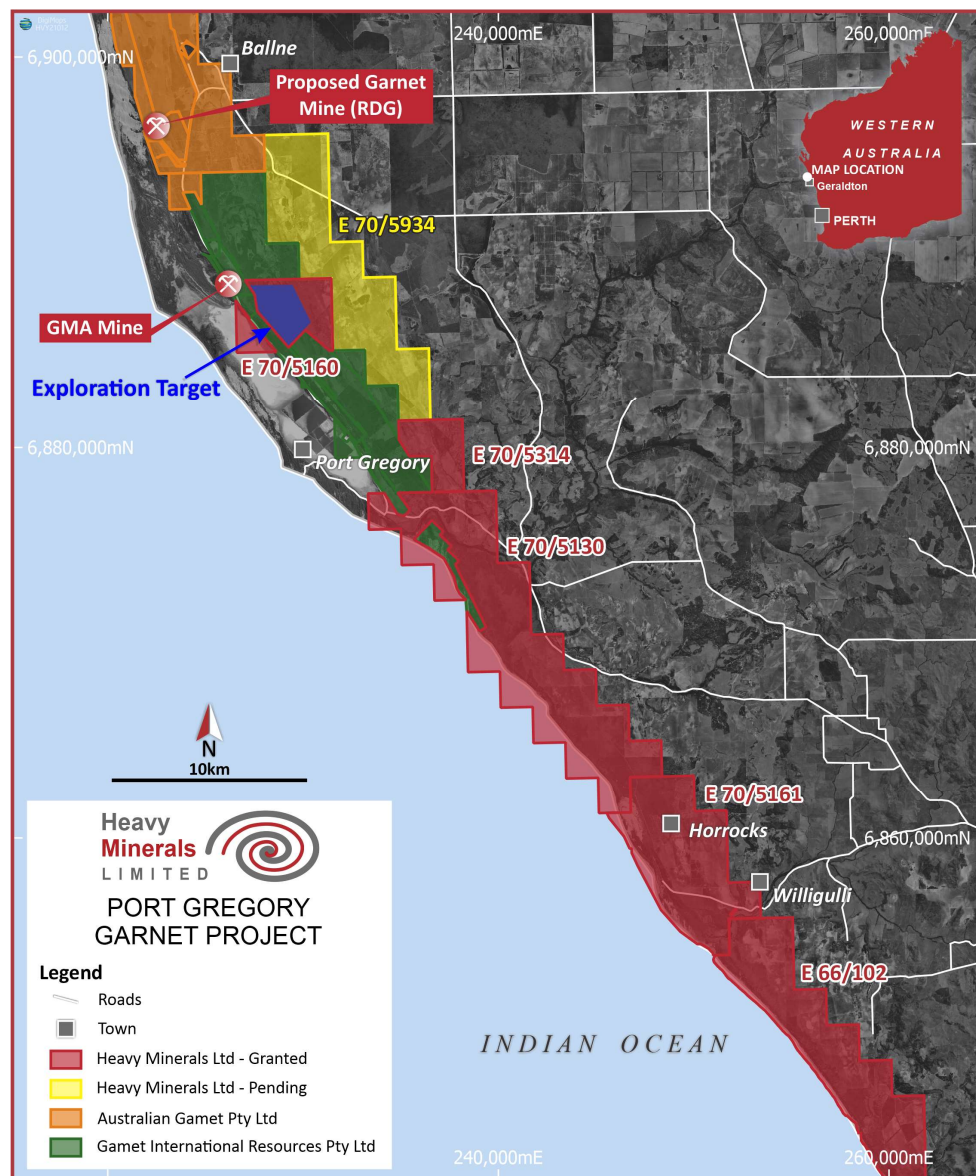
*We are committed to providing tangible results and outcomes for our shareholders, by improving our daily drilling rate and expanding the program to include additional ground that could potentially host mineralisation that was not fully captured in our Exploration Target.”*



## Additional tenure under application (Port Gregory):

HVY has applied for additional 15 blocks of tenure totaling 45.42 km<sup>2</sup> (Figure 1). Upon approval, HVY's ground holding in the Port Gregory region will expand by approximately 25%, solidifying its position as the largest tenement holder in the Port Gregory region, targeting garnet mineralisation.

The ground under application is considered by HVY to be prospective for both garnet and ilmenite mineralisation and notably borders GMA's mining lease (M70/1380) and exploration lease E70/3055.







**“Step-out” panning results:**

Phase 1 drill collars highlighting the step out collars that have returned positive visual panning results is represented in Figure 3.

Ilmenite dominated mineralisation in collar WP012 is represented in Figure 2.



Figure 2: Example of mineralisation (WP012)

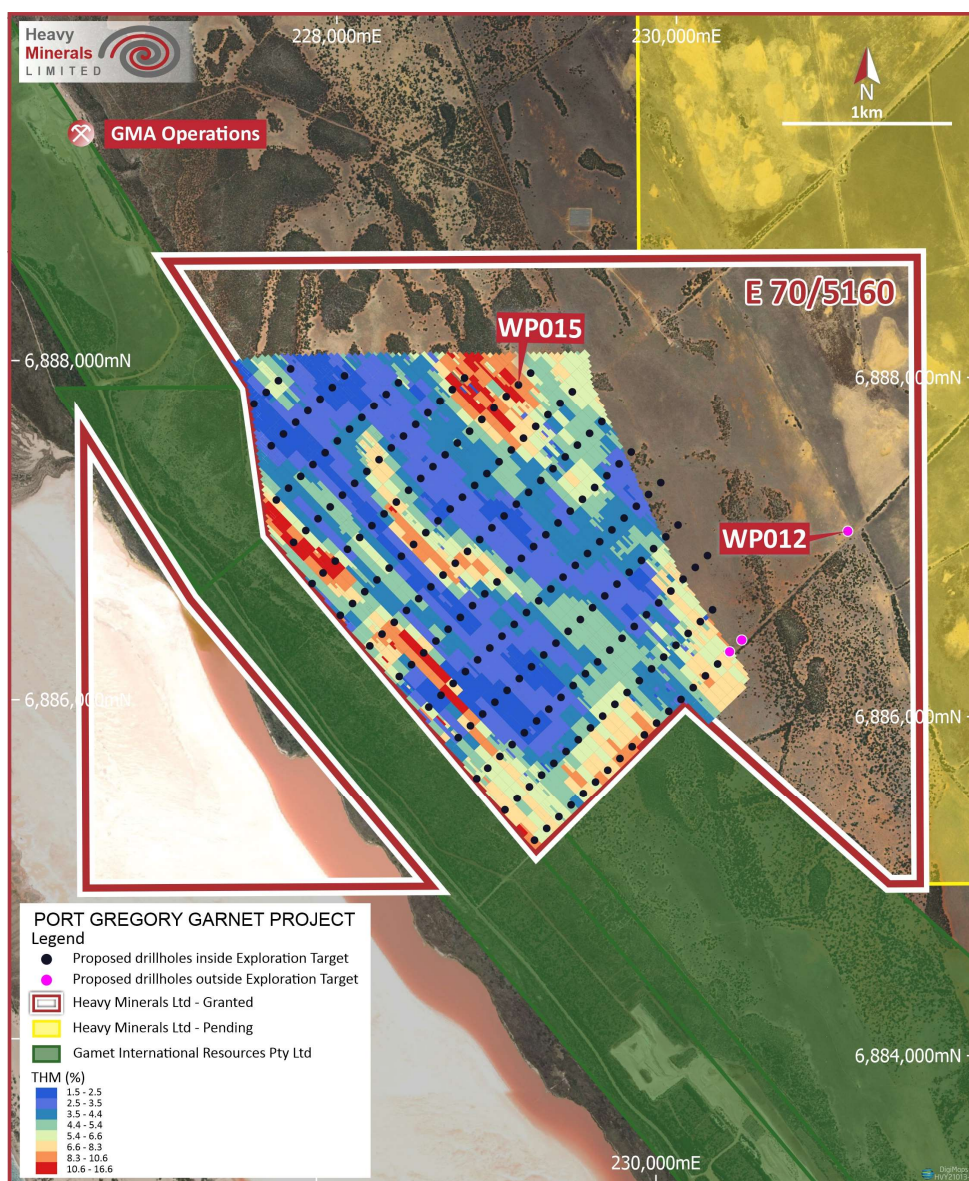


Figure 3: Drill collars of interest



#### Northern boundary panning results:

Mineralisation in collar WP015 on the northern boundary of the Exploration Target, is represented in Figure 4, highlighting both garnet and ilmenite fractions.

This panning result is consistent with HVY's Exploration Target defined from GMA's historical drilling results

The correlation between the visual results and historical data is a positive indicator as to the validity of HVY's Exploration Target.



Figure 4: Example of mineralisation (WP015)

#### Terrain Drilling's 4X4 MAN Rig has now mobilised to complete 12,000 m drilling program

HVY has proactively engaged with multiple drilling contractors since the program began to ensure that HVY's ambitious timelines are not jeopardised. Competition for drilling rigs is at historic highs with commentary from an industry insider alerting HVY that drilling staff are becoming a bottleneck in placing rigs into service. HVY's proactive stance has rapidly delivered a second rig to site (Figure 5) to finalise the program with the expectation that a maiden resource is still on track to be delivered in Q1 2022.



Figure 5: Terrain Drilling AC rig actively drilling on site.





Table 1: E70/5160 Tenement - Exploration Target

Summary of Exploration Target <sup>1</sup>							HM Assemblage <sup>2</sup>		
	Material (Mt)	In situ HM (Mt)	In situ Garnet (Mt)	HM (%)	SL (%)	OS (%)	Garnet (%)	Ilmenite (%)	Non Valuable HM (%)
Exploration Target	170 – 250	7 – 9	3.5 – 4.5	3.5 – 4.5	10	20	46	1	53
<b>Grand Total</b>	<b>170 – 250</b>	<b>7 – 9</b>	<b>3.5 – 4.5</b>	<b>3.5 – 4.5</b>	<b>10</b>	<b>20</b>	<b>46</b>	<b>1</b>	<b>53</b>

<sup>1</sup>Exploration Target reported at an upper cut-off-grade of 2.5% HM and a lower cut-off grade of 1.5%.

<sup>2</sup>Mineral assemblage is reported as a percentage of in-situ HM Content.

The potential quality and grade of the Exploration Target is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource for this target area and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

#### Exploration Target Development

Previous exploration activities by GMA were carried out on tenement E 70/5160, with a total of 52 holes for 1,725 m and 589 assays completed. These assays included THM, SLIMES and OS as well as mineralogy assays (mags, ilmenite, and garnet). It is assumed that individual assays have been prepared for each sample interval as there are no composite sample identifiers.

The mineralogy assay method has not been described or documented in WAMEX reports, however it is likely that a magnetic fractionation has been carried out for the individual HM sink fractions and then an XRF or XRD performed on the magnetic fraction, yielding an ilmenite and garnet assay.

The drill hole and assay data was used to develop a 3D block model in Datamine using the following steps:

- The 52 holes were constrained with an upper topography surface generated from the collar co-ordinates.
- The end of hole was used as the lower basement constraint. These constraints were selected to prevent assay grades from being interpolated below maximum drill hole depths.
- A perimeter string was developed around the drill hole collar locations with an offset of approximately 200 m north and south and 80-100 m east and west.
- A block model was created by filling cells between the two constraining surfaces using a parent cell size of 50 x 100 x 3 m in XYZ.
- Assay grades were interpolated into the block model using inverse distance weighting (cubed).
- An assumed bulk density of 1.7 gcm<sup>-3</sup> was used to estimate material tonnages.
- An Exploration Target was estimated by reporting tonnages between two grade cut-off ranges, the lower at 1.5% HM and the upper at 2.5% HM.
- No assumed minimum thicknesses or other constraints were used to estimate the Exploration Target.



This announcement has been authorised by the Board of Directors of the Company.

**Ends**

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**About Heavy Minerals Limited**

Heavy Minerals Limited (ASX:HVV) is an Australian listed industrial mineral exploration company. Our projects are prospective for industrial minerals including but not limited to garnet, zircon, rutile and ilmenite. Our primary focus is the Port Gregory Garnet Project which has an Exploration Target of between 3.5 Mt and 4.5 Mt contained Garnet.

To learn more please visit: [www.heavyminerals.com](http://www.heavyminerals.com)

**Competent Person Statement**

*The information in this announcement that relates to Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr. Greg Jones (FAusIMM) who is a Non-Executive Director for Heavy Minerals Limited. Mr. Jones is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Jones has reviewed this report and consents to the inclusion in the report of the matters in the form and context with which it appears.*

*The Exploration Results referred to in this announcement were first reported in accordance with ASX Listing Rule 5.7 in the Company's prospectus dated 27 July 2021 and released on the ASX market announcements platform on 10 September 2021. The Company confirms that it is not aware of any new information or data that materially affects the information included in the prospectus.*