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5 November 2025

Metallurgical Studies Produce Strong Recoveries and High Quality HMC Product from Rosewood Bulk Samples

Highlights

- **Bulk sample composites have produced a high-quality Heavy Mineral Concentrate (HMC) using standard wet separation processing techniques.**
- **The grade of the HMC product is impressive and ranged between 91-98% Heavy Mineral (HM).**
- **HM recoveries ranged between 86 - 95% and further improvements may be possible with minor amendments to the process flow sheet.**
- **QEMSCAN analysis of the heavy minerals contained in the head feed sample reported >93% Valuable Heavy Mineral (VHM) and >80% Leucoxene, a high titanium (TiO_2) content mineral.**
- **Very high bulk sample head grade ranging from 12.5% to 15.7% HM which is considered typical of the Rosewood East mineralisation**
- **Metallurgical testing is ongoing with significant opportunities to further improve the final process flow sheet as well as to determine potential product options ahead of plant design work.**

Petratherm Chief Executive Officer, Peter Reid, commented:

"The Rosewood Titanium Project continues to stand out as an exceptional new discovery. Most of this can be attributed to its unique geological setting. It is clear the project has significant size, given the area and thickness extent of mineralisation and that a significant portion is high-grade, with drill intercepts typically over 10% HM. The mineralisation remains open and drilling is currently underway to define a maiden JORC Indicated and Inferred Resource outline.

The metallurgical test work has now confirmed the ability to achieve strong recoveries and produce a very high-quality titanium product concentrate using conventional separation techniques. Most encouragingly, this testing is ongoing and we have identified numerous opportunities where small changes to the flow sheet may result in further improvements to both recoveries and product quality."

Petratherm Limited (ASX: PTR) ("**PTR**" or "**the Company**") is pleased to provide an update on Metallurgical Test trials currently underway on the Rosewood Titanium Heavy Mineral Sands Project. Bulk samples are undergoing metallurgical testing by independent Mineral Sand Process Laboratories, IHC Mining (Brisbane) and Mineral Technologies (Gold Coast). Both companies have extensive global experience in developing solutions in mineral sands geology, metallurgy, practical mining & concept engineering.

Test work has included the use of spiral separators and other conventional mineral sands processing plant for bulk sample recovery and characterisation work. The studies aim to provide a process flow sheet which will inform mineral products and future process plant design works. The results presented herein are a summary of initial key findings and additional test work is ongoing. Results received reflect the use of a conventional beneficiation process that, while indicative of what may be achieved with scalable equipment and standard production processes, must be confirmed through further detailed bulk sample metallurgical programs, the execution of which is now underway.

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Photo 1: *Rosewood Heavy Mineral Concentrate, IHC Laboratories, Brisbane*

About - Rosewood Titanium Heavy Mineral Sands Project

The Rosewood Titanium Project contained within Petratherm's larger Muckanippie Project, is a significant titanium-rich mineral sands discovery which to date has delivered outstanding exploration results. Drilling by Petratherm has defined a blanket of mineralisation which extends over an area exceeding 40km^2 and which remains open in numerous directions. Over half of this area (22km^2) includes contiguous high-grade zones of at least 10m @ > 5% HM (Figure 1), with a majority of the area showing drilling results of at least 10m @ > 8% HM[1]. JORC Level grid drilling aimed at delivering an initial Inferred and Indicated level Resource is currently underway[2].

The mineralisation at Rosewood is flat lying and starts at very shallow depths (typically 5m-7m) across the entire prospect. Early mineralogy results from the Rosewood East area indicated HM sands with up to > 95% VHM content, composed primarily of high value leucoxene titanium minerals[3]. Results from sizing analysis indicate the HM is coarse grained and likely amenable to producing strong mineral recoveries using conventional gravity spiral processing techniques[4]. The initial results from the bulk sample testing have confirmed these expectations and work is ongoing to further improve these results.

[1] PTR ASX release 01 October 2025 – Drill Program Extends Rosewood and Identifies New HMS Zone
[2] PTR ASX release 03 November 2025 – Rosewood Resource Drilling Underway
[3] PTR ASX release 20 January 2025 – Pure High-Value Titanium Mineral Assemblage at Rosewood
[4] PTR ASX release 5 March 2025 – Positive Rosewood Heavy Mineral Size Analysis

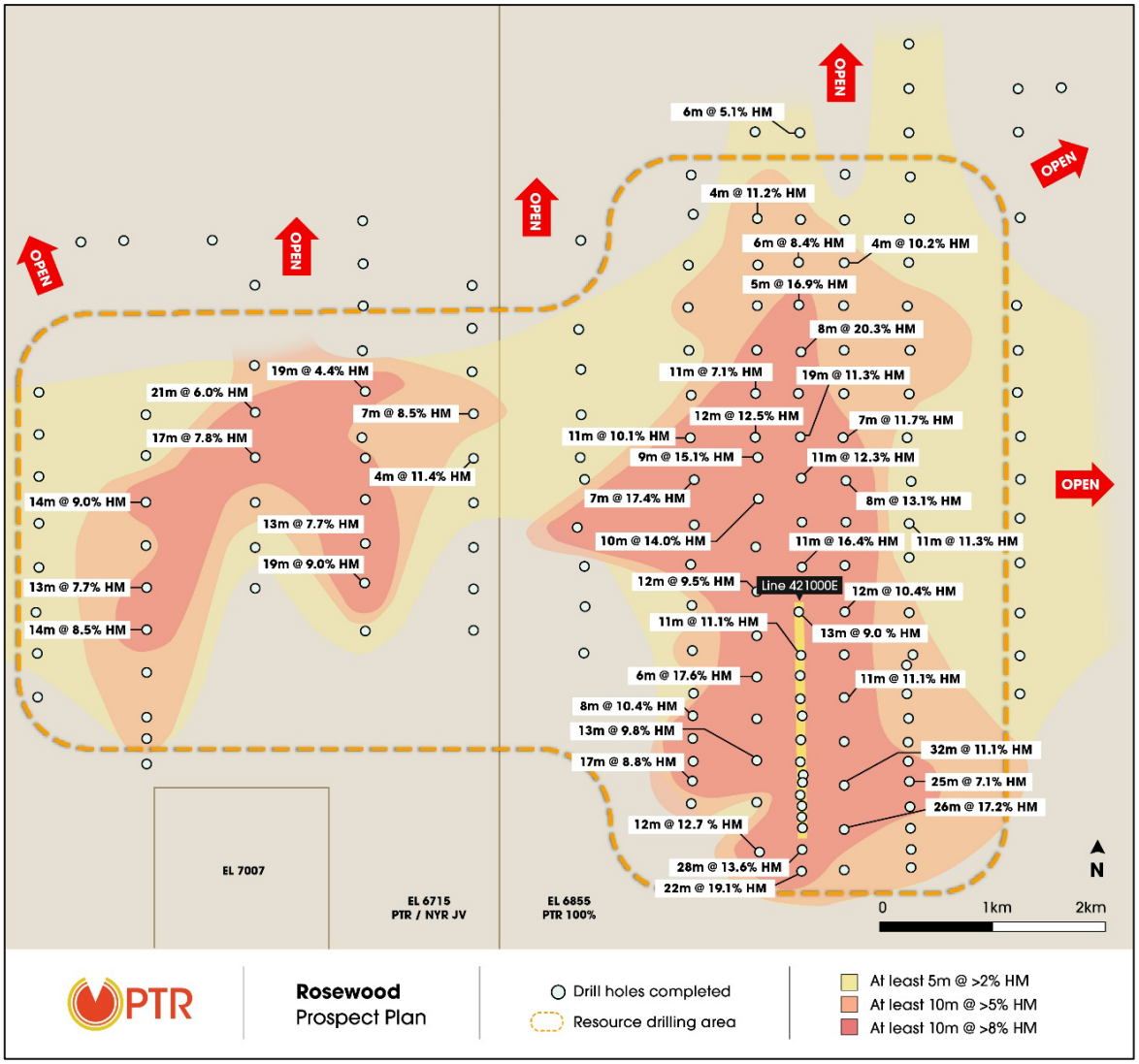

Figure 1: *Rosewood Prospect – Resource drilling area and location of cross section*

Sample Compositing

Three bulk samples were collected and submitted for preliminary metallurgical testing. The three samples were taken from composites from 13 drillholes covering 1,900m of strike length at Rosewood East and are considered representative of the main part of the mineralisation (Figure 2 cross-section). Samples were composited from drilling intervals ranging from 4 to 7m thick, with an average thickness of 6m. Samples start from as shallow as 3m below surface. Drill hole details of composite samples are provided in Table's 3 and 4 at the end of this report.

The three bulk samples all recorded **a very high bulk head grade ranging from 12.5% to 15.7% HM**, which is considered typical of the Rosewood East area mineralisation.

The sample composites are described below:

- Sample RM01: ~1 tonne composite sample from the central main Rosewood East Area, processed by IHC Mining Laboratories in Brisbane
- Sample RM02: ~100kg composite sample from a central main Rosewood East Area processed by Mineral Technologies, Gold Coast.
- Sample RM03: ~100kg composite sample from a deeper zone of Rosewood East mineralised body, processed by Mineral Technologies, Gold Coast.

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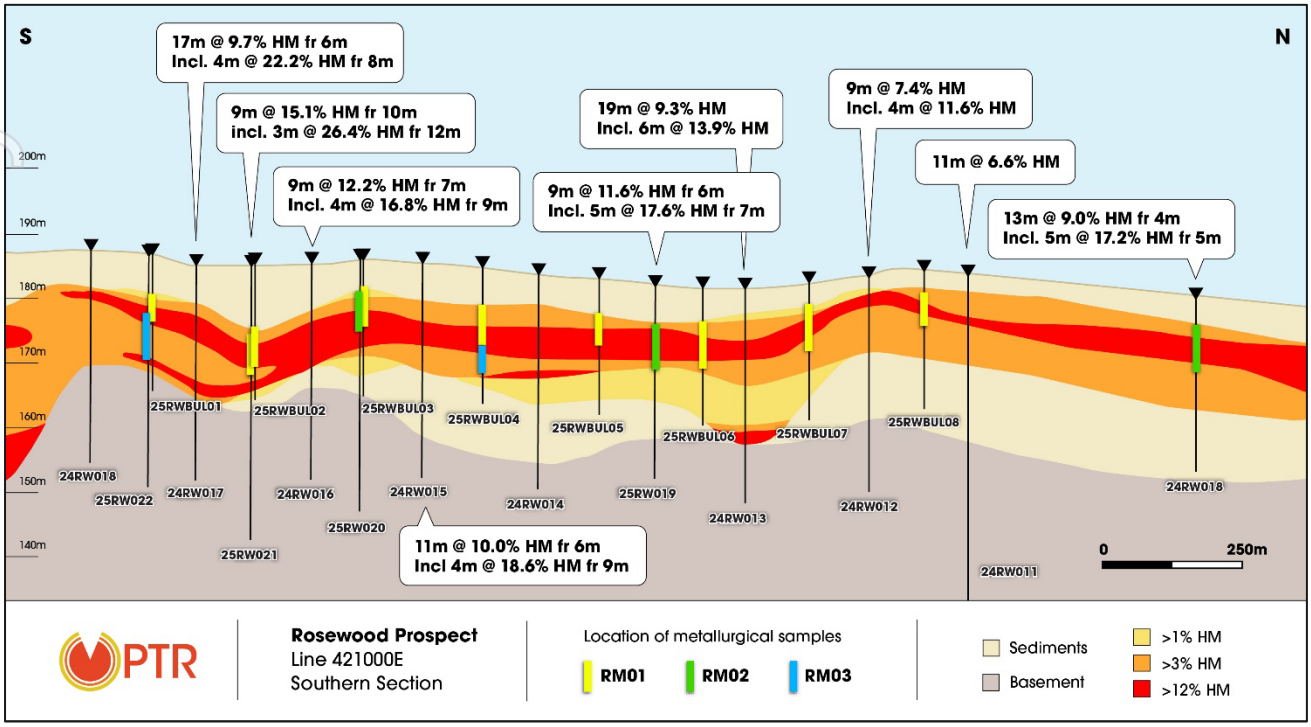

Figure 2: *Rosewood East cross section – location of metallurgical composites and significant intercepts from historical exploration drilling[1].*

Samples RM01 and RM02 comprised high-grade (>12.5% HM) ore, which geological logging indicates is typical of the upper part of the main mineralised zone at Rosewood East. Sample RM03 sits in a horizon below the main mineralised zone, which has a similar HM content but is higher in fine material. Logging of current drill hole data indicates that the upper zone, characterised by samples RM01 & RM02, represents approximately 70% of the total Rosewood high-grade mineralised zone.

Table 1: Summary of Metallurgical Results

Sample Number	Recovery HM%	Produced Heavy Mineral Concentrate HM%	Median Particle size (µm)
RM01	91.3 %	90.8 %	230
RM02	86.4 %	>98%	360
RM03	>95 %	96.9 %	320

RM01 and RM02 Test Work Results

Metallurgical test work was conducted using full-scale or scalable gravity separation techniques and other conventional physical separation methods commonly used in the mineral sands industry. The sample was initially subjected to a traditional Feed Preparation Process (FPP) simulation, which included processing and screening via a scrubber-trommel and desliming using hydro-cyclones. The resulting material was subsequently

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processed through the Wet Concentrator Process (WCP) using mineral processing equipment such as gravity spiral separators (Photo 2) and magnetic separators, which are typically used in Mineral Sands mining operations worldwide.

The Rosewood HM is coarse grained and displays a wide particle size distribution, with mid-range ore typically between 200-400 µm. These characteristics influence separation performance and guided the approach to processing.

First-pass results from sample RM01 were positive, producing three HMC products (coarse, medium and fine) with a combined **91.3% HM recovery to HMC, and product grading 90.8% HM**. The FPP approach utilised for Sample RM02 was slightly different incorporating additional attrition at the FPP front-end to break down some of the coarser material. The preliminary results of this work are also positive, with a **HMC containing in excess of 98% HM obtained after a gravity separation, with a 86.4% HM recovery**. This was accomplished through dedicated gravity processing of the coarse, medium, and fine fractions, enabling optimisation of each beneficiation stage.

The HMC generated from the WCP test work on both samples will now undergo further process development using typical mineral sands equipment within a Mineral Separation Plant (MSP), such as dry screen classification, electrostatic separation, and magnetic separation, to determine a TiO_2 suite of products that the Rosewood mining operation may produce.

Photo 2: *Rosewood HM sample being fed through a recleaner spiral at IHC Laboratories. Darker HM minerals on inner side of the spiral are split off as part of the HMC concentration process.*

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RM03 Test Work Results

Sample RM03 was collected to help understand the lower mineralised zone at Rosewood East, which is high-grade but also contains higher levels of finer sedimentary particles. Similar to bulk sample RM02, the material was subjected to attrition scrubbing and screening, which proved highly successful in removing the fine material, and returning a sand fraction grading 25% HM content. Initial separation of the sand by standard gravity spirals demonstrates **HM recoveries of >95%**. Over 80% of the VHM was then able to be recovered in a concentrate of quality suitable to report directly to the final upgrade stage, thereby reducing throughput to the cleaning stage. Subsequent HMC production via wet shaking table yielded a **clean HMC containing 96.9% HM**.

Full results from MSP testing are still pending, however preliminary magnetic separation tests indicate that a very clean VHM product can be achieved by removing the non-magnetic material (Photo 3).

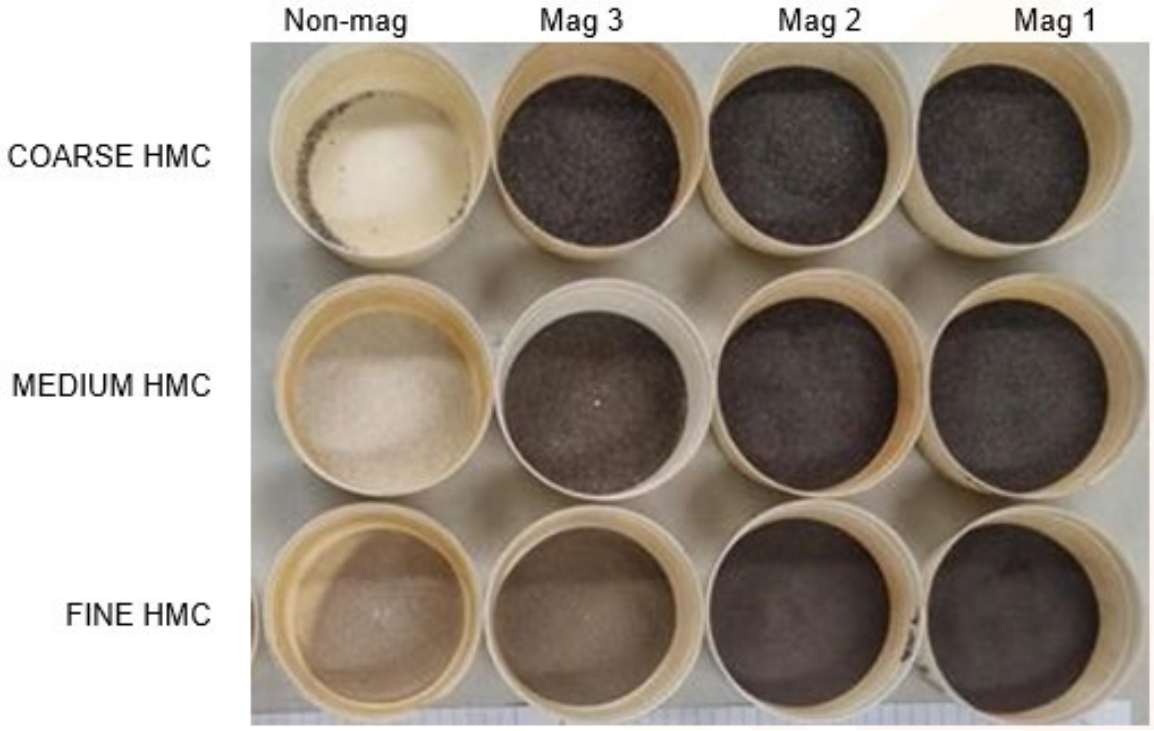

Photo3: *Magnetic Fractionation of Coarse, Medium and Fine HMC from the Rosewood sample RM03, Mineral Technologies Laboratories.*

Fines/Slimes Characterisation – Slime thickening and setting testwork

The RM01 ore sample currently evaluated by IHC Mining ore contains 29.8% fine particles with diameter less than 38 µm (slimes). The RM02 sample contained 18.8% fine particles less than 38 µm. These fines are typically removed during the FPP using desliming cyclones, then treated to recover clean water and enable disposal of the dewatered slime. The sample was submitted to Metso Australia Laboratories, the industry leader in minerals tailings processing for thickening test work.

The results were positive and showed that the Rosewood East slimes can be effectively thickened and dewatered using conventional slimes settling and thickening techniques.

Key findings are:

- Good slimes settling and thickening performance can be achieved using a readily available flocculant (BASF M10) at relatively low dosage rates of 20-30 g/tonne of slimes. No coagulants, water conditioners or other reagents are required to achieve this outcome.

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- The supernatant water quality was good, at 100mg/L total suspended solids, meaning water can be easily recovered and re-used within the process.

- Thickener underflow densities achieved range between 27-37% solids, which is typical for the heavy mineral sands industry.

These findings concur with field panning of the HM zones, which shows very little washing was required to remove sand and silt and produce a clean HM panned concentrate. It is postulated the great majority of the fines comprise un-reactive silts. This is supported by the Metso test work, and the relatively low flocculant dosage rate required to settle the slimes.

Mineral Assemblage Results

As previously stated, the three samples that underwent recovery testing will now undergo further process development using conventional mineral sands equipment within an MSP. This work will serve as a preliminary assessment of the potential products that could be produced by a mining operation at Rosewood. As a guide some Mineralogical data has been received on the HM fraction from the ore 'feedstock' for sample RM01.

Results support previous mineralogical analysis indicating high TiO_2 mineral content, and builds on early analyses on historical drill samples from the Rosewood area initially collected by the South Australian Department of Mines[5]. QEMSCAN analysis indicates that the HM is **composed of between 93 and 98% VHM, with >80% of the mineral species classified as Leucoxene** (Table 2). QEMSCAN identifies leucoxene as that mineral (or portion of a mineral grain) which assays between 70 and 95% TiO_2. The other significant titanium minerals identified include between 3 and 5% rutile (with >98% TiO_2), and between 8 and 10% altered Ilmenite (55-70% TiO_2).

Table 2: Summary of RM01 Feedstock Mineralogy

Sample		RM01 +250µm	RM01 -250µm
Mineral Mass %	**Rutile/Anatase**	4.4	3.5
	Leucoxene	82.4	80.0
	Altered Ilmenite	9.7	7.9
	Ilmenite	0.0	0.0
	Ti Intergrowths	0.6	1.2
	Ti Fe Intergrowths	0.2	0.3
	Zircon	0.0	0.3
	Quartz	0.7	2.3
	Clays	1.8	3.9
	Other Silicates	0.1	0.3
	Others	0.0	0.2
TOTAL		100.0	100.0

XRF test results from the RM03 bulk concentrate product have confirmed that processing of the Rosewood ore achieves a combined Titanium magnetic product that assays 66.4% TiO_2 and 24.7% Fe_2O_3, with dilutant SiO_2 level of 2.7% and low deleterious contaminants content of 0.71% Al_2O_3, 0.13% MgO, 0.62% MnO and 0.10% Cr_2O_3. These titanium assays are considered high for a bulk concentrate and align well with QEMSCAN data received to date.

[5] PTR ASX release 19 November 2024 – Outstanding Metallurgical Results at Muckanippie HMS Project

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Ongoing Metallurgical Studies

Work will continue on the production and characterisation of final HMC products, as well as on improvements to the process flow sheet design. A fourth 1.5 tonne bulk sample is being collected during the current resource drilling for optimisation processing based on current learnings. It is expected that initial plant design work will get underway from December once the process outline work is largely complete.

Photo 4: *CEO Peter Reid (left) and Executive Director Rob Sennitt (right) viewing Rosewood HM fractions at Mineral Technologies Laboratory, Gold Coast.*

ENDS

This announcement has been authorised for release on the ASX by the Company's Board of Directors.

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Competent Persons Statements

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Ian Warland, who is a Competent Person, and a Member of the Australian Institute of Geoscientists. Mr Warland is not aware of any new information or data that materially affects the historical exploration results included in this report. Mr Warland is an employee of Nile Exploration Pty Ltd and is currently consulting to Petratherm Limited. Mr Warland has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Warland consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Metallurgical results for RM01 is based on, and fairly reflects, information compiled by Kirri Adams, a Competent Person and Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Ms Adams is an employee of IHC Mining and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the metallurgical activities being undertaken 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". Ms Adams consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

The information in this announcement that relates to Metallurgical results for RM02 & RM03 is based on, and fairly reflects, information compiled by Etienne Raffaillac, a Competent Person and Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Raffaillac is an employee of Mineral Technologies and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the metallurgical activities being undertaken 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 Raffaillac consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

Forward Looking Statements Disclaimer

This document contains "forward looking statements" as defined or implied in common law and within the meaning of the Corporations Law. Such forward looking statements may include, without limitation, (1) estimates of future capital expenditure; (2) estimates of future cash costs; (3) statements regarding future exploration results and goals.

Where the Company or any of its officers or Directors or representatives expresses an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and the Company or its officers or Directors or representatives, believe to have a reasonable basis for implying such an expectation or belief.

However, forward looking statements are subject to risks, uncertainties, and other factors, which could cause actual results to differ materially from future results expressed, projected, or implied by such forward looking statements. Such risks include, but are not limited to, commodity price fluctuation, currency fluctuation, political and operational risks, governmental regulations and judicial outcomes, financial markets, and availability of key personnel. The Company does not undertake any obligation to publicly release revisions to any "forward looking statement."

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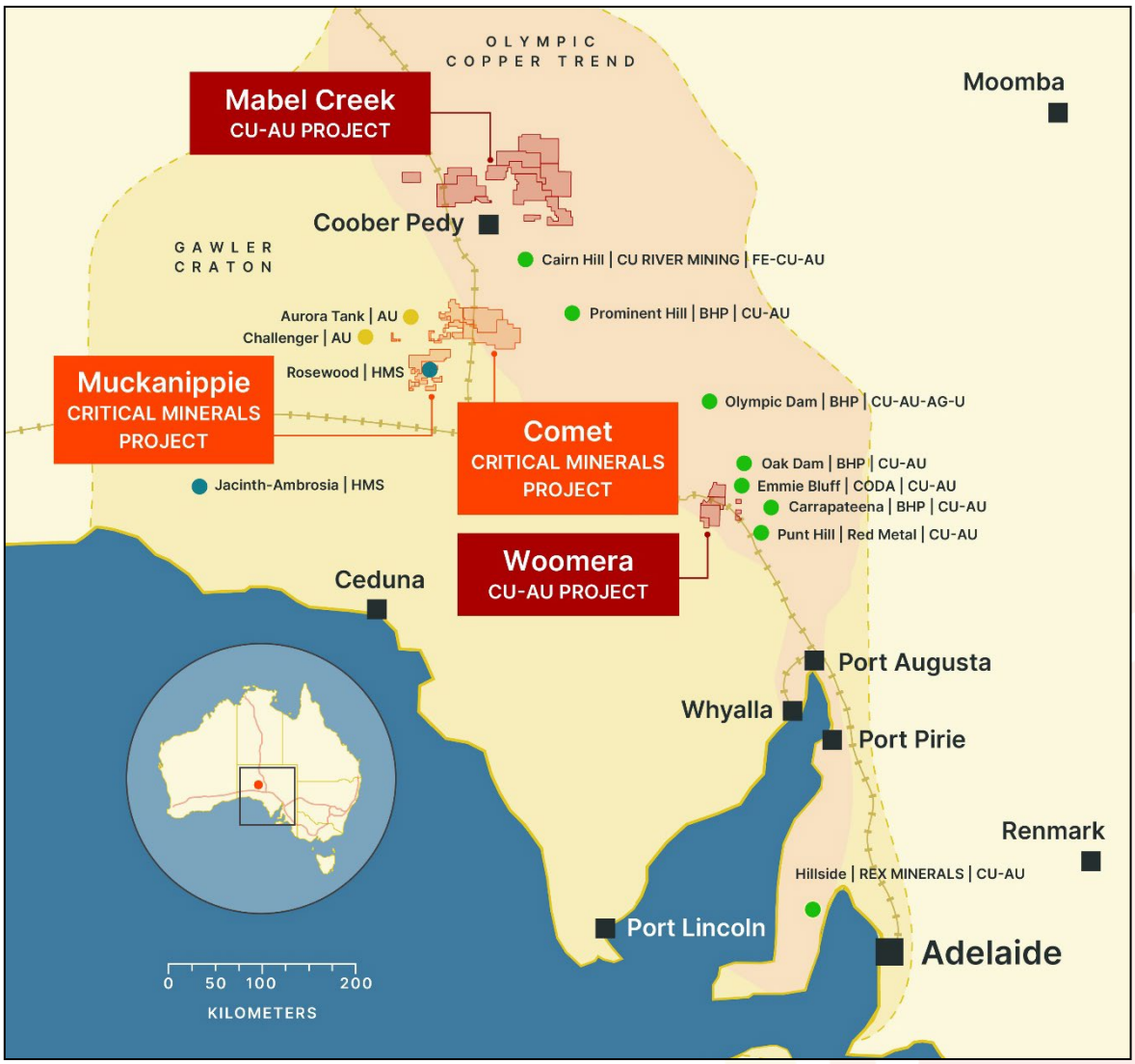
About Petratherm Limited

Petratherm Limited (ASX: PTR) is a critical minerals explorer focused on the discovery of world-class deposits in both frontier and mature mineral provinces.

The Company has a major project holding in the northern Gawler Craton in South Australia where recent exploration has uncovered significant concentrations of titanium rich heavy mineral sands (HMS) over large areas at its Muckanippie Project, which remains open and prospective for increased mineralisation.

Mineralogical test work from the Rosewood East area have indicated HMS with up to >95% Valuable Heavy Mineral content, composed primarily of high value titanium minerals. In addition, the coarse-grained nature of the discovery suggests it is likely to be amenable to producing very high recoveries using conventional gravity spiral processing techniques.

The Company also has highly prospective copper, gold and rare earth projects. Its Woomera and Mabel Creek copper-gold projects are located in the world-class Olympic Copper-Gold Province of South Australia. Work has uncovered Iron-Oxide Copper-Gold style alteration/mineralisation and geophysical targeting work has identified several compelling Tier-1 Copper-Gold targets which are drill ready. The Company's Comet Project is historically noted for its numerous gold occurrences however early stage greenfields drilling has identified significant Rare Earths hosted in shallow clays over large areas, at 3 Prospect sites.



PTR's Project Locations in South Australia

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Table 3: Bulk Sample Composite Sample Intervals

SAMPLE	Hole ID	FR	TO
RM01	25RW021	10	16
	25RWBUL01	6	10
	25RWBUL02	9	15
	25RWBUL03	4	10
	25RWBUL04	6	12
	25RWBUL05	5	10
	25RWBUL06	5	12
	25RWBUL07	3	10
	25RWBUL08	3	8
RM02	25RW018	4	11
	25RW019	6	13
	25RW020	5	11
RM03	25RW022	8	15
	25RWBUL04	12	16

Table 4: Bulk Sample Drill Hole Collars

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH Depth
	MGA94 Z53		metres	degrees		metres
25RW018	421005	6662211	188	-90	0	24
25RW019	421003	6662009	187	-90	0	45
25RW020	420997	6661808	188	-90	0	33
25RW021	420841	6661190	174	-90	0	16
25RW022	420844	6661115	173	-90	0	20
25RWBUL01	421000	6662303	183	-90	0	22
25RWBUL02	420995	6662499	182	-90	0	22
25RWBUL03	421001	6662700	182	-90	0	22
25RWBUL04	421002	6662908	186	-90	0	22
25RWBUL05	420986	6663102	186	-90	0	22
25RWBUL06	421002	6663302	180	-90	0	22
25RWBUL07	421003	6663497	183	-90	0	19
25RWBUL08	421001	6663703	186	-90	0	16

EL6815, EL6855, EL6715, EL6873 & EL7007 (Muckanippie Project) JORC Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse Au that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	**Phase 1 Drilling -** refer to JORC Table 1 published in 06/02/2025 PTR ASX release. **Phase 2 Drilling** – refer to JORC Table 1 published in 23/06/2025 PTR ASX release **Phase 3 Drilling** – refer to JORC Table1 published in 01/10/2025 PTR ASX release **Drill Sampling Summary** • Air core drillholes have been selected for Heavy Liquid Separation (HLS) testing, from recently completed Petratherm Phase drilling. • A rotary cone splitter attached to the bottom of the cyclone was used to collect a representative sample (25% split) for each 1m interval drilled and collected into a prenumbered calico bag, with the remainder of the sample collected in a green plastic bag and retained • A handful of sample from each 1m interval was panned to estimate HM% and other parameters by the on-site rig geologist. • Based on the results of the panning sample intervals were selected for laboratory HM assay • The 25% sample splits were sent to Diamantina Laboratory in WA for assaying. The 75% remaining sample was retained for metallurgical and other tests. • Diamantina is considered to be a mineral sands industry leading laboratory. • Samples are weighed on processing. The laboratory sample will be dried and passed through a rotary splitter to take 100 g sub-sample. • This sub-sample is then wet screened on a Sweco vibrating screen deck at a top aperture of 2 mm (oversize 'OS') and a bottom screen of 38 µm (SLIMES fraction). • The sand fraction containing the THM (-2 mm and +38 µm) is used for heavy liquid separation using funnels and a heavy liquid, Tetrabromoethane (TBE), with a density of between 2.92 and 2.96 gcm-3 to determine total heavy mineral

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Criteria	JORC Code explanation	Commentary
		(THM) content. • Historic drill hole information has been sourced from open file public records managed by the South Australian Department of Primary Industries and Resources. • Additional details from historic drilling are unknown.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• The air core drilling was completed by McLeod Drilling using a 6-wheel Landcruiser mounted drill rig with face sampling blade bits with a diameter of 85mm and NQ diameter (76mm) rods • An air core hammer bit was utilised for any indurated upper sediments. • Holes prefixed 25RWBUL were drilled utilising a 127mm air core hammer bit to obtain a larger sample volume. • All holes were drilled vertically • Air core is the standard industry technique for HMS exploration.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Air core drilling methods were utilised throughout the duration of the program. • A geologist was on site for every drill hole and air core samples were recorded as wet or dry and recoveries monitored to ensure that they were appropriate. Excellent recoveries were recorded. • 1m sample intervals were collected in buckets or large sample bags and a 1 metre split (~ 25%) sample taken using a rotating cone splitter attached to the drill cyclone into pre-numbered calico bags.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• All samples were geologically logged by the on-site geologist via digital entry into a Microsoft excel spreadsheet. • Geological logging is qualitative. • The logging consisted of lithology, colour, grainsize, sorting, hardness, sample condition, washability, estimated HM%, slimes and induration. • A small handful of sample (~ 50g) was selected from each metre and panned on site by a geologist, with samples > 0.5% estimated HM selected for laboratory assay. Additional samples were taken for laboratory assay above and below mineralised zones as appropriate. • Representative chip trays containing 1m geological sub-samples were collected.
Sub-sampling	• *If core, whether cut or sawn and whether quarter, half or all*	• Representative samples were taken every 1m and collected by a 25% split

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Criteria	JORC Code explanation	Commentary
techniques and sample preparation	*core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	cone splitter mounted on the bottom of the cyclone. • Samples sizes ranged from 1 to 1.5kg for laboratory assay • 25% sample split from each metre is considered representative of the drill sample collected. • The cyclone and splitter were checked and cleaned regularly and kept clear of blockages to prevent contamination between samples. • No contamination has been noted. • PTR inserted standards and duplicate samples at rate of approximately 1 in 30. ***Metallurgical test-work at IHC*** • Includes bulk sample RM01 • Intervals for metallurgical testing were selected once HMC assays were received. • Samples collected for the metallurgical test work were the 75% retained during drilling. • 102 Samples in green plastic sample bags, contained within bulka bags were received at the IHC Mining Laboratory. • 52 of the selected samples were removed from sample bags and combined into drums for weighing after which the combined sample was laid out onto a clean cement floor and manually homogenised using a Dingo digger. • The sample was then spread out and levelled using a Dingo digger. Grid sampling was conducted, taking evenly spaced samples across the width and breath of the sample using a shovel to obtain a representative sub-split of approximately 50 kg. • The 50kg sub-sample was dried at 110°C and then passed through a riffle splitter several times to produce two ~1kg sub-splits for ore characterisation. • The remainder of the ore sample underwent metallurgical test work. ***Sample characterisation & Metallurgical test-work at MT*** • Includes bulk samples RM02 and RM03 • Intervals for metallurgical testing were selected once HMC assays were received.

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Criteria	JORC Code explanation	Commentary
		• Samples collected for the metallurgical test work were the 75% retained during drilling. • A total of 21 drill core samples, contained in green plastic bags labelled “Rosewood Main”, and 11 samples, labelled “Rosewood High Slime”, were received at the Mineral Technologies Carrara Laboratory. • Representative sub-samples of each of the 21 Rosewood Main samples were extracted using a riffle splitter. These sub-samples were individually characterised for particle size distribution, density separation (HLS), and chemical composition of the sink fraction. • The remaining Rosewood Main samples were composited to form a bulk metallurgical test sample. The composite was blended to visual homogeneity, and a representative reference sample was extracted by cone and quartering. The remainder of the composite was used for metallurgical test work. • The Rosewood High Slime samples were similarly blended to visual homogeneity, and a representative sample was obtained using the cone and quartering method. The remaining material was used for metallurgical test work. • All sample processing followed industry-standard sub-sampling and sample preparation techniques, fully documented and conducted under ISO 9001-certified laboratory procedures. • Damp samples were sub-sampled using the cone and quartering method, while dry samples were further divided using a 10-way rotary sample divider followed by a two-way riffle splitter to ensure representative mass reduction. • The final laboratory sample masses were appropriate for the targeted sand particle size range. • Duplicate samples were prepared for selected key samples to verify sampling precision and reproducibility.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF*	• Samples were sent to Diamantina Laboratory in WA for assaying. • Diamantina is considered to be a mineral sands industry leading laboratory. • Samples are weighed on processing. The laboratory sample will be dried for

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Criteria	JORC Code explanation	Commentary
	instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	up to 24 hours @ 105 – 110 degrees Celsius. • The sample is loosened until friable and passed through a rotary splitter to take 100 g sub-sample. • The sub-sample is soaked overnight using TKPP solution , then washed and dried. • This sub-sample is then wet screened on a Sweco vibrating screen deck at a top aperture of 2 mm (oversize 'OS') and a bottom screen of 38 µm (SLIMES fraction). • The sand fraction containing the THM (-2 mm and +38 µm) is then dried and used for heavy liquid separation using funnels and a heavy liquid, Tetrabromoethane (TBE), with a density of between 2.92 and 2.96 gcm-3 to determine total heavy mineral (THM) content. • Field duplicates and the HM standards are inserted into the sample string at a frequency rate of 1 per 30 primary samples. • Diamantina also complete their own internal QA/QC checks by inserting laboratory repeats at a rate of 1 in 30 and the insertion of Standard Certified Reference Material at a rate of 1 in 40. • The nature, quality and appropriateness of sample preparation will be achieved. • Laboratory analytical charge sizes are standard sizes and considered adequate for the material being assayed. The nature, quality and appropriateness of the assaying is considered total. • Combined weighted average assays for the 25% splits were compared to the assays for the composited bulk head feed sample and were within 15% for each metallurgical sample. **IHC Metallurgical test work and analyses**: • Industry standard protocols were used by IHC Mining to prepare the samples for test work and analysis, in accordance with their ISO 9001 certified QA/QC protocols. • QEMSCAN and Quantitative XRD analyses conducted by Bureau Veritas Australia (Wingfield, SA). • XRF analyses conducted by Bureau Veritas (Cardiff). • Bureau Veritas Minerals is considered to be a mineral sands industry leading

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		laboratory. The Bureau Veritas Minerals XRF laboratory in Cardiff is NATA accredited for XRF analysis of key elements typically found in mineral sands ores at their Cardiff laboratory, including titanium and zirconium. • Metallurgical Ore Characterisation test work: A ~1kg representative sub-sample was wet screened at 1 mm and 38 µm using standard hand held sieves to produce slimes, (oversize - OS) and sand fractions. The sand and OS fractions were dried and weighed to determine OS and Slimes content. The sand fraction was split into sub-samples of ~150g with a riffle splitter each sub-split subjected to heavy liquid separation with LST at a density of 2.85gcm^{-3} to determine heavy mineral (HM) content. • A second ~1kg ore sample was wet screened at 1 mm and 53 µm using standard hand held sieves to produce slimes and sand fractions for particle size distribution analysis. The sand fraction was dried and subjected to dry screened using standard hand held sieves to determine the particle size distribution. The slimes fraction was dried, weighed, loosened until friable and split using a riffle splitter to produce ~50g sub-splits. Cyclosizing tests were conducted using MARC technologies sub-sieve cyclosizer Model M17. The test was repeated five times to ensure reliability of results and to ensure sufficient mass was produced in each size fraction for assays to be conducted. Samples have been submitted and results are pending. • Metallurgical test work was conducted using various full-scale or scale-able mineral separation equipment to prepare and process the ore using gravity separation. Other physical separation methods made use of lab and pilot scale equipment. Samples were analysed with respect to slimes (-38 µm, oversize (+1 mm) and heavy mineral content (+2.85 SG) using wet screening and Heavy Liquid Separation with LST. • During the ore preparation process, a sub-sample of the slimes produced from the desliming hydrocyclone was collected by means of periodic grab sampling into an Intermediate Bulk Container (IBC). The sample was allowed to settle and clear supernatant

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		water removed to reduce the volume for transport. The subsequent slimes slurry was submitted to Metso's Perth Technology Centre for slimes settling and thickening test work. Static settling tests for flocculant screening was done using methods typically applied in the mineral sands industry. Dynamic thickener tests were conducted using Metso's 99 mm Diameter High-Rate Thickener test unit. **MT Metallurgical test work and analyses:** • **Particle Size Distribution (PSD) Analysis** Particle size distribution analyses were performed using 200 mm diameter, certified square-mesh test sieves for size fractions above 20 µm aperture. Procedures followed relevant Australian Standard sample preparation and sizing methodologies. • **Density (HLS) Analysis** Density profiling was conducted by heavy liquid separation (HLS) using standard float–sink methods in accordance with established laboratory work practices. • **Chemical Composition Analysis** Chemical analyses of representative subsamples were performed by **ALS Metallurgy**, Perth (Western Australia), under their **ISO 9001-certified Quality Management System**. **XRF (Fused Bead):** Samples were pulverised in a tungsten carbide ring mill, and a subsample of pulp was fused with a flux to form a glass bead for analysis by X-ray fluorescence spectrometry (XRF). Standard mineral suite elements were determined in accordance with ALS QA/QC protocols. • **Metallurgical Test Work** Metallurgical test work was conducted using industry-standard, full-scale or scaleable mineral separation equipment to evaluate ore response to conventional beneficiation processes. • All spiral test work was completed using a single-start, full-scale industrial spiral separator, thereby eliminating scale-up uncertainty between laboratory and plant operation. Laboratory performance is expected to be representative of plant-scale outcomes under comparable feed conditions and loading rates.

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		• Attritioning, size classification, magnetic, and electrostatic separation tests were conducted using conventional, scaleable laboratory equipment. • Mass balances for single-stage separations were determined from measured stream masses wherever possible; where direct weighing was not feasible, certain stream masses were calculated by difference from feed mass. • Representative subsamples of test products were collected using industry-standard sampling techniques and analysed using one or more of the above analytical methods (PSD, HLS, and/or XRF).
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Drilling has been completed and assays presented are from the Rosewood Prospect and sedimentary exploration drilling areas. Saprolite Prospect areas are pending. • Verification of intercepts has been undertaken by PTR Geologists, who have collectively visually assessed drill samples and examined the laboratory data. • No twinned holes have been drilled at this stage • Primary field data was digitally entered via a Panasonic Toughbook using in house logging codes. The data was validated and loaded into MX Deposit database. • All data used is from primary sources. • The metallurgy Competent Person has overseen metallurgical test work and conducted periodic visits to the laboratory to observe and review the sample processing techniques. All results are checked by the Competent Person. • No repeats of slimes test work are deemed necessary at this stage. • Repeat analyses and duplicate samples were undertaken to verify the chemical composition of selected test samples and confirm analytical repeatability. • Certified reference materials (standards) were included in each batch of samples submitted for chemical assay to monitor analytical accuracy and laboratory

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		performance. • Assay detection limits vary by element and analytical method; detection limits are specified in the respective technical assay reports. Results are reported to the higher of the analytical detection limit or the appropriate number of significant figures. As a general guideline, analytical accuracy is considered within ±2 times the detection limit for concentrations up to 10 times the detection limit, and within ±5% of the reported value at higher concentrations.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All maps and locations are in UTM grid (MGA94 Z53) and have been measured by a GPS with a lateral accuracy of ± 5 metres. • Elevation data provided by PhotoSat with an accuracy of 20-50cm (dependant on vegetation coverage).
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Petratherm has completed regional step out exploration drilling along wide spaced drill traverses and over magnetic anomalies. Drill hole traverses extend from 1.2 kilometres to 6.8 kilometres, with holes typically 400 metres apart along lines. • Data spacing is insufficient to establish the degree of geological and grade continuity required for a Mineral Resource estimation. • No compositing was used.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• At Rosewood and Echo Prospects vertical drilling is targeting extensions of flat lying HMS mineralisation and provides an accurate account of thickness and extent of mineralisation drilled.
Sample security	• *The measures taken to ensure sample security.*	• Samples were taken directly from the field to Petratherm's warehouse and then couriered to Diamantina Laboratories in Perth. • The samples were dispatched directly from the Rosewood Project site to IHC

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		Mining Metallurgical laboratory in Brisbane. • Samples were received at the IHC Mining Laboratory, and inspected on receipt. The samples were in good condition with no signs of tampering. • After initial sample processing and preparation at the IHC Mining laboratory, a sub-sample of the slimes produced was trucked and delivered directly to the Metso nominated laboratory. The samples were received in good order. • No significant storage time was experienced by the samples. • Samples received at the MT Carrara Laboratory were inspected upon arrival and a full inventory with photographic evidence was completed. The sample list was crossed checked against shipping manifest. All samples received were in good condition with no signs of tampering and matched the dispatch register.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Internal reviews and audits were completed to ensure integrity of information captured throughout the metallurgical tests work conducted at IHC Mining Laboratory.\ • Internal reviews and audits were completed to ensure integrity of information captured throughout the metallurgical tests work conducted at mineral Technologies Carrara Laboratory.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• EL6815 was granted 100% to Petratherm Limited on 12/08/2022 for a period of 6 years. • EL 6855 was granted 100% to Petratherm Limited on 18/10/22 for a period of 6 years. • EL 7007 was granted 100% to Petratherm Limited on 15/08/24 for a period of 6 years. • EL6873 was granted to G4 Metals Pty. Ltd. on 18/11/2022 for a period of 6 years. Petratherm Ltd may earn up to a 70% interest via a 2 Stage Farm-in with further provisions, dependent on elections, to earn up to a 100% equity in the project. Refer to PTR ASX release 29/02/2024.

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		• EL6715 was granted on 06/04/2022 to Leasingham Metals Pty. Ltd. a, wholly owned subsidiary of ASX listed Narryer Metals Ltd. for a period of 6 years. Petratherm Ltd has earned an 70% interest, via a 2 Stage Farm-in. Refer to PTR ASX release 13/08/2025 • The tenements are located approximately 120 km south south-west of Coober Pedy overlapping Bulgunnia, Mulgathing and Commonwealth Hill Pastoral Stations. • The tenements are located within the Woomera Prohibited Area (Green Zone). • **Native Title Claims:** SCD2011/001 Antakirinja Matu-Yankunytjatjara. • The tenements are in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration work includes; • **Surface Geochemical Sampling:** Calcrete **Airborne Geophysics:** Magnetics & Radiometrics. **Ground Geophysics:** Prospect scale Magnetics, Gravity and EM. **Exploration Drilling:** Open file records indicate 296 RAB / Air core, 2 sonic & 51 RC reconnaissance and prospect scale holes drilled over Project Group.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Petratherm is exploring for Ti-Fe-V-P, rare earths, and Au-PGM associated with the Muckanippie Suite. Targets include primary basement mineralisation and secondary enrichments as HMS placer deposits in overlying younger cover strata.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and*	• Drill hole collar locations, RL, dip and azimuth of reported drill holes used for the metallurgical test work are contained in Table 4 of this report.

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	interception depth ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• All reported drill results are true results as reported by the Laboratory. • All drill results in this announcement have been previously reported and are published in 06/02/2025 PTR ASX release, the 23/06/2025 PTR ASX release and the 01/10/2025 PTR ASX release. • This announcement pertains to Metallurgical Recovery Studies with results presented in the main body of the report.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• The mineralisation viewed in drillholes is interpreted to be flat lying fluvio-deltaic marine sediments. • Drilling is vertical and should give a true reflection of mineralisation thickness.
Diagrams	• *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.*	• See figures in main body of release attached.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both*	• Petratherm has completed drilling at Rosewood and other prospects on the Muckanippie Project (see Figure 1) with the potential to host

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	low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	titanium-bearing Heavy Minerals.
Other substantive exploration data	• *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.*	• No other substantive exploration data has been collected by Petratherm.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• A range of exploration techniques are being considered to progress exploration. • Extensive assay, mineralogical and metallurgical test work will be conducted on current drill samples to determine grade, mineralogy and nature of the heavy mineral mineralisation. • Further infill and extension drilling is likely to occur in the near future. • Finalise study of fines (-53 µm) to confirm the optimal desliming cyclone particle size cut-point by means of cyclosizing and assay of size fractions. • Mineral separation process development test work and preliminary assessment of the range of potential products. • Test work to evaluate co-disposal of slimes and coarse tails as an effective means of treating and storing a tailings. • Undertake trade-off studies to evaluate potential improvements in grade and recovery across coarse, medium, and fine size fractions, balanced against potential increases in processing circuit complexity. • Commence preliminary market assessments to define key product specifications and identify prospective market positioning and offtake opportunities

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