

17 April 2025

## Muckanippie Project Update

### Highlights

- Phase 2 drill program comprising 128 holes for 4,486 metres completed at the Rosewood Titanium Discovery and other Titanium Prospects within the Muckanippie Project, SA.
- Drilling at Rosewood tested for extensions of the Heavy Mineral mineralisation 1.6 kilometres north of currently defined mineralised outline.
- A 1-tonne bulk sample of the mineralised interval collected from Rosewood East area for trial metallurgical testwork.
- Large areas approved for drilling after successful Heritage Survey completed last week, particularly those located further north of the currently drilled area at Rosewood.
- Heritage Survey also includes a clearance for close-spaced resource drilling over the Rosewood HMS Prospect, proposed for later this year.
- Petratherm has earned a 51% beneficial interest in EL 6715 and has elected to earn a further 19%, bringing its total interest in the tenement to 70%, pursuant to the Narryer Metals Farm-in Agreement.

**Petratherm Limited** (ASX: PTR) (“PTR” or “the Company”) is pleased to announce the successful completion of the Phase 2 extension drilling program at the Rosewood Titanium Discovery, as well as other Prospect sites across the Muckanippie Project, located in the northern Gawler Craton of South Australia (Figure 1). In total, 128 air-core holes were drilled for a total of 4,486 metres.

Previously at Rosewood, the Company reported highly encouraging heavy mineral (HM) drill intercepts over a continuous 15km<sup>2</sup> area, which remains open in multiple directions<sup>1,2</sup>. Mineralogy results from the Rosewood East area have indicated HM sands with >95% Valuable Heavy Mineral content, composed primarily of high value titanium minerals – rutile product (high-titanium leucoxene and rutile) and pseudorutile<sup>3</sup>. Most recently, results from sizing analysis indicate the HM is coarse grained and highly amenable to producing excellent mineral recoveries using conventional gravity spiral processing techniques<sup>4</sup>.

### Rosewood Phase 2 Drill Program

At Rosewood, 73 drill holes were completed for a total of 2,225 metres, testing extensions of the heavy mineral mineralisation across a 9-kilometre east-west trend. Multiple north-south drill lines were extended northwards up to 1.6 kilometres (Figure 2). The average hole depth at Rosewood was 30 metres.

The current drilling outlines the extent of the 2024 heritage drill clearance survey area. A second, larger heritage survey that was completed late last week will allow for drilling to extend several kilometres further to the north, east and west. The next phase of exploration drilling is scheduled to commence later this quarter.

At Rosewood, drilling included two infill lines located 400 metres on either side of line 421000 E (Figure 2), spanning a 3.6-kilometre interval where previous drilling identified high HM concentrations. This infill drilling

<sup>1</sup> PTR ASX release 04 December 2024 – Drill Results Confirm Major HMS Discovery at Rosewood

<sup>2</sup> PTR ASX release 6 February 2025 – Drilling Confirms Potential for World-Class Titanium Project

<sup>3</sup> PTR ASX release 20 January 2025 – Pure High-Value Titanium Mineral Assemblage at Rosewood

<sup>4</sup> PTR ASX release 5 March 2025 – Positive Rosewood Heavy Mineral Size Analysis

aims to better characterise the grade, thickness and continuity of mineralisation between holes in the Rosewood East area.

In addition to exploration drilling, an approximate 1-tonne bulk sample was collected from the mineralised interval within the Rosewood East area for metallurgical testwork. A representative sample was composited from 8 holes spaced 200 metres apart along a 1.4-kilometre trend (Figure 2). The bulk sample will be processed by IHC Mining in Brisbane using a wet concentrator plant, followed by magnetic and electrostatic separation to produce HM concentrates. The study aims to inform mineral recovery processing and final mineral products.



*Photo 1: Drilling and hole logging, Rosewood Prospect, April 2025*

**Petratherm Chief Executive Officer, Peter Reid, commented:**

*“The Phase 2 drilling has tested for extensions of the Rosewood mineralisation up to 1.6 kilometres further north, with samples now dispatched for heavy mineral analysis. During the final stages of the program, the Company completed a large heritage survey allowing for future step-out drilling (Phase 3) beyond the current drill area. Petratherm has worked closely with the Traditional Owners of the land for many years now, fostering a strong relationship. We are very grateful for their ongoing support for this project.”*

*“Whilst we eagerly await this next round of drilling results another key milestone from the project will be the processing of the 1-tonne bulk sample for metallurgical testwork. These results will inform separation processing and produce initial mineral sample products.”*

## Duke, Nardoo and Claypan Phase 2 Drill Program

At the Duke, Nardoo and Claypan Prospects, away from the Rosewood Heavy Mineral Sands Discovery, exploration drilling late last year identified a new style of high-grade Titanium-Rich HM mineralisation hosted in saprolite clay, (Figure 1)<sup>5</sup>.

Saprolite is the deeply weathered, upper clay rich zone of basement rock that has undergone significant chemical breakdown. Titanium minerals within this zone are resistant to weathering and have been concentrated within the saprolite profile. This style of HM mineralisation presents potential for free-dig mining, where the valuable heavy minerals have potential to be separated using standard wet concentration techniques similar to typical HMS operations.

The current round of drilling included additional drill traverses at each of these prospects, testing extensions of the mineralisation and collecting enough sample for mineralogical and metallurgical testing. A total of 55 drill holes for 2,261 metres have been drilled for this style of mineralisation.

**Table 1 – Drilling Summary**

Prospect	Number of Holes	Total Metres
Rosewood	73	2,225
Duke	16	594
Nardoo	30	1,290
Claypan	9	377
<b>TOTAL</b>	<b>128</b>	<b>4,486</b>



*Photo 2: Members of the Cultural Heritage Surveying Team, April 2025, Rosewood North Prospect*

<sup>5</sup> PTR ASX release 19 February 2025 – New Style of Titanium Mineralisation at Muckanippie

## Heritage Survey Update

The Company completed an Aboriginal Cultural Heritage Survey with Native Title representatives from Antakirinja Matu-Yankunytjatjara Aboriginal Corporation (AMYAC) over a three-day period last week.

The survey significantly expanded the cleared drill area at Rosewood, allowing for future extensional drilling particularly to the north and west of the recent Phase 2 drill program, as well as closer-spaced drilling for potential future resource drilling.

The clearance has additionally approved a large area for wider exploration drilling over other prospects, such as Duke, Nardoo, Claypan and other potential new target areas. Petratherm has worked closely with AMYAC over the past several years and greatly appreciates their ongoing support for the project.

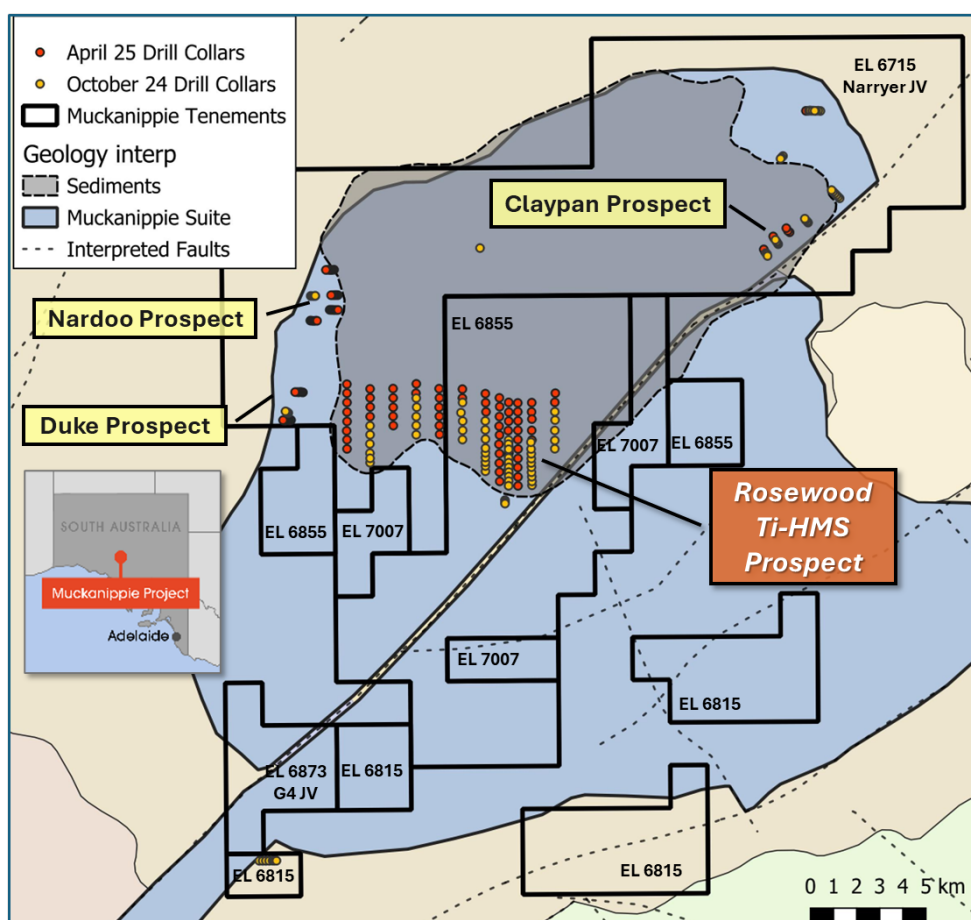
## Narryer Farm-in and Joint Venture Agreement

The Company has advised Narryer Metals (ASX NYM) that the Stage 1 commitment<sup>6</sup> has now been met, thereby earning Petratherm a 51% legal and beneficial interest in EL 6715 (Figure 1).

Additionally, the Company has given notice of its election to earn a further 19% interest in the tenement (for a total of 70% interest) by spending a further \$300,000 over the next 24 months (Stage 2 commitment).

## Next Steps

Following this next round of heavy mineral assaying, mineralogy studies and bulk testing work, exploration drilling is anticipated to resume in early June. The next round of drilling will test for further extensions of the Rosewood mineralisation, particularly to the north.



**Figure 1:** Interpreted Geological Map of Muckanippie Project Area, Tenements, Prospects, 2024<sup>2</sup> and 2025 drill collars. Surrounding Muckanippie Suite is a local source of HM into the younger sedimentary sequence.

<sup>6</sup> PTR ASX release 18 April 2024 – Farm-in Agreement Expands Muckanippie Project

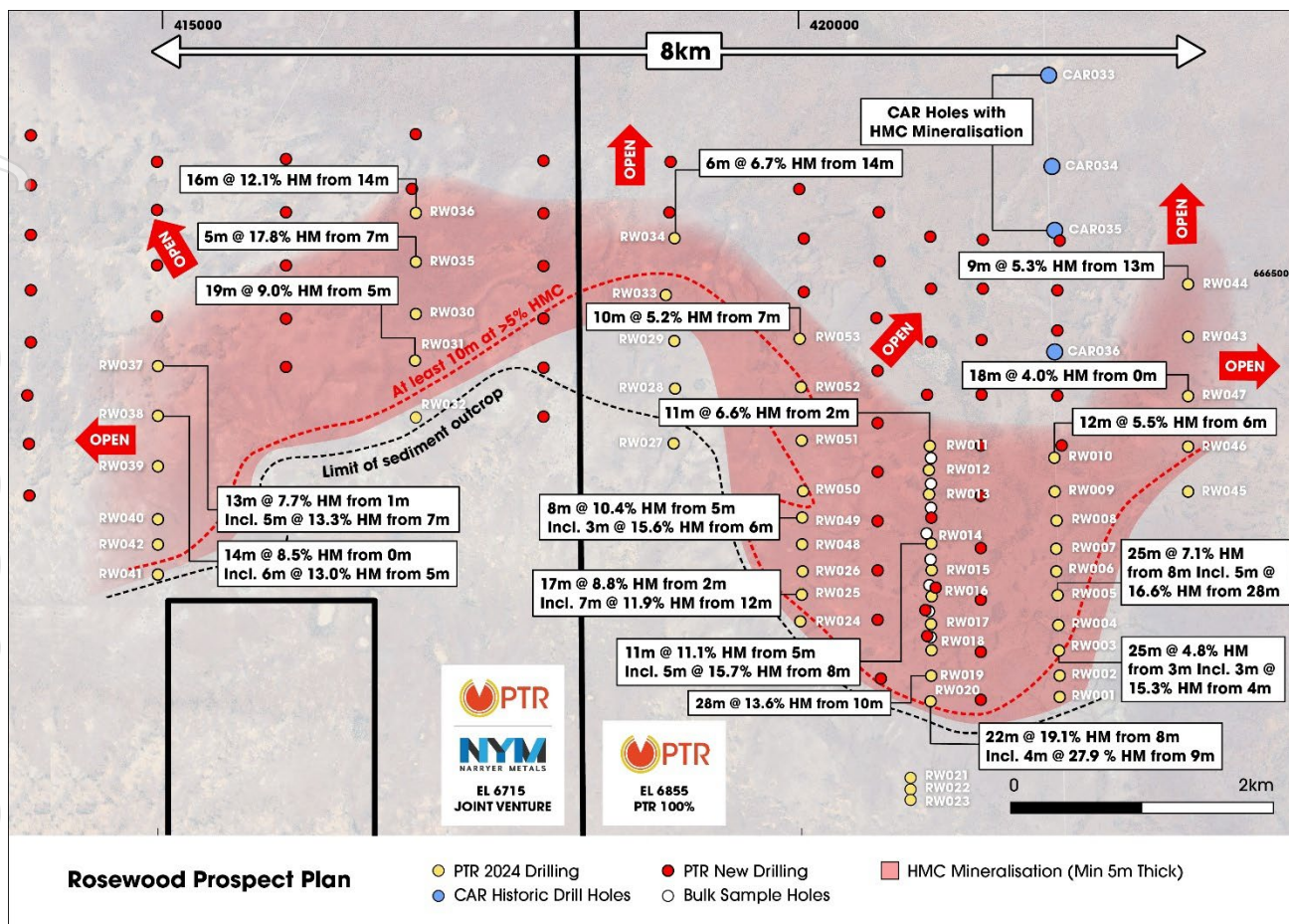


Figure 2: Rosewood Prospect plan map showing extent of mineralisation defined from September 2024 drilling and location of new drill collars. HM assays are pending for new drill holes.

## ENDS

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

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### Competent Persons Statement:

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Peter Reid, who is a Competent Person, and a Member of the Australian Institute of Geoscientists. Mr Reid is not aware of any new information or data that materially affects the historical exploration results included in this report. Mr Reid is an employee of Petrathern Limited. Mr Reid 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 Reid consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## About Petratherm Limited

Petratherm Limited (ASX: PTR) is a copper and 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 of South Australia. Recent exploration has uncovered significant concentrations of titanium rich heavy mineral sands (HMS) over large areas at its Muckanippie Project Area. The Project contains 100% owned Petratherm tenure and the JV tenements, EL 6715 (Narryer Metals Limited, ASX:NYM)<sup>7</sup> and EL6873 (G4 Metals)<sup>8</sup>. The mineral sands are associated with the weathering of a major intrusive complex, the Muckanippie Suite, which has been found to be highly prospective for critical minerals including Platinum Group Elements, Vanadium, and Titanium. This is an early-stage Greenfields project with exceptional upside potential.

The Company has two major exploration projects in the world-class Olympic Copper-Gold Province of South Australia. Work in the region has uncovered Iron-Oxide Copper-Gold style alteration/mineralisation at both its Mabel Creek and Woomera Project Areas. Geophysical targeting work has defined several compelling Tier-1 Copper-Gold targets which the Company is aiming to drill test during the 2025 calendar period.



**PTR's Project Locations in South Australia**

<sup>7</sup> PTR ASX release 18 April 2024 – Farm-in Agreement Expands Muckanippie Project

<sup>8</sup> PTR ASX release 29 Feb 2024 – Farm-In Agreement Executed – Muckanippie Project Expansion

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**Table 2 – Drill Holes Collars**

Hole ID	Easting MGA94 Z53	Northing MGA94 Z53	RL metres	Dip Deg.	Azimuth Deg.	EOH Depth metres
<b>Rosewood</b>						
25RW001	421405	6661805	188	90	0	38
25RW002	421403	6662192	187	90	0	52
25RW003	421396	6662599	186	90	0	51
25RW004	421403	6662988	181	90	0	51
25RW005	421407	6663397	182	90	0	51
25RW006	421400	6663805	180	90	0	37
25RW007	421402	6664203	179	90	0	51
25RW008	421407	6664611	180	90	0	63
25RW009	421398	6665006	180	90	0	30
25RW010	421396	6665388	182	90	0	33
25RW011	422000	6665400	184	90	0	30
25RW012	421992	6665000	185	90	0	24
25RW013	422006	6664690	186	90	0	27
25RW014	421998	6664201	183	90	0	33
25RW015	422006	6663784	184	90	0	30
25RW016	422999	6665415	191	90	0	30
25RW017	423021	6665810	184	90	0	30
25RW018	420981	6664192	181	90	0	27
25RW019	421012	6663225	182	90	0	30
25RW020	421021	6662694	188	90	0	39
25RW021	420985	6662497	189	90	0	42
25RW022	421000	6662315	187	90	0	36
25RW023	420613	6661999	189	90	0	30
25RW024	420599	6662403	191	90	0	30
25RW025	420595	6662789	189	90	0	33
25RW026	420599	6663197	188	90	0	30
25RW027	420581	6663603	186	90	0	39
25RW028	420604	6664001	189	90	0	33
25RW029	420588	6664382	185	90	0	30
25RW030	421002	6664601	180	90	0	24
25RW031	421007	6664989	181	90	0	25
25RW032	421001	6665411	179	90	0	30
25RW033	420599	6665606	175	90	0	42
25RW034	420611	6665226	180	90	0	42
25RW035	420600	6664798	182	90	0	30
25RW036	420020	6665001	183	90	0	15
25RW037	420004	6665394	180	90	0	33
25RW038	419992	6665789	180	90	0	30
25RW039	418998	6665984	176	90	0	30
25RW040	418997	6665598	177	90	0	27
25RW041	417990	6666003	183	90	0	30
25RW042	418005	6665602	180	90	0	30
25RW043	417991	6665199	186	90	0	30
25RW044	417003	6666212	180	90	0	39
25RW045	416988	6665804	183	90	0	30
25RW046	418012	6664026	185	90	0	30
25RW047	418002	6664405	185	90	0	18
25RW048	418001	6664809	184	90	0	30
25RW049	416008	6664408	190	90	0	30
25RW050	415998	6664811	190	90	0	30
25RW051	416002	6665198	184	90	0	30
25RW052	416001	6665604	185	90	0	33
25RW053	415997	6666008	186	90	0	36
25RW054	415002	6665993	187	90	0	30
25RW055	415005	6665606	185	90	0	21
25RW056	415008	6665213	183	90	0	24
25RW057	414003	6665407	179	90	0	21
25RW058	414001	6665810	182	90	0	10
25RW059	413999	6666197	181	90	0	21
25RW060	415003	6664798	182	90	0	21
25RW061	414006	6664994	184	90	0	27
25RW062	414006	6664588	182	90	0	24
25RW063	413988	6664181	184	90	0	21
25RW064	414003	6663798	184	90	0	24
25RW065	414004	6663401	185	90	0	30
25RWBUL01	421000	6662303	187	90	0	22
25RWBUL02	420995	6662499	189	90	0	22
25RWBUL03	421001	6662700	187	90	0	22
25RWBUL04	421002	6662908	187	90	0	22
25RWBUL05	420986	6663102	184	90	0	22
25RWBUL06	421002	6663302	184	90	0	22
25RWBUL07	421003	6663497	185	90	0	19
25RWBUL08	421001	6663703	184	90	0	16

Hole ID	Easting MGA94 Z53	Northing MGA94 Z53	RL metres	Dip Deg.	Azimuth Deg.	EOH Depth metres
<b>Duke</b>						
25DK001	411582	6664647	186	90	0	40
25DK002	411544	6664632	186	90	0	34
25DK003	411490	6664630	188	90	0	51
25DK004	411442	6664636	188	90	0	60
25DK005	411387	6664634	190	90	0	60
25DK006	411340	6664625	189	90	0	40
25DK007	411290	6664625	191	90	0	37
25DK008	411236	6664644	192	90	0	39
25DK009	412097	6665843	181	90	0	15
25DK010	412054	6665847	184	90	0	42
25DK011	412010	6665859	180	90	0	30
25DK012	411955	6665859	180	90	0	34
25DK013	411912	6665847	181	90	0	25
25DK014	411853	6665857	182	90	0	5
25DK015	411806	6665855	182	90	0	27
25DK016	411757	6665857	184	90	0	57
<b>Nardoo</b>						
25ND001	412416	6668943	184	90	0	49
25ND002	412455	6668941	181	90	0	24
25ND003	412512	6668932	182	90	0	57
25ND004	412565	6668932	181	90	0	46
25ND005	412617	6668932	181	90	0	54
25ND006	412665	6668941	179	90	0	55
25ND007	412707	6668935	178	90	0	24
25ND008	413253	6669409	179	90	0	32
25ND009	413305	6669406	177	90	0	42
25ND010	413356	6669406	178	90	0	27
25ND011	413406	6669405	179	90	0	53
25ND012	413453	6669397	180	90	0	29
25ND013	413505	6669402	180	90	0	44
25ND014	413557	6669398	181	90	0	36
25ND015	413616	6669403	181	90	0	34
25ND016	413611	6670043	181	90	0	16
25ND017	413558	6670042	181	90	0	44
25ND018	413512	6670045	177	90	0	36
25ND019	413463	6670040	174	90	0	30
25ND020	413415	6670040	178	90	0	33
25ND021	413365	6670039	178	90	0	41
25ND022	413315	6670040	181	90	0	60
25ND023	413444	6671141	178	90	0	60
25ND024	413393	6671137	179	90	0	54
25ND025	413341	6671129	179	90	0	54
25ND026	413291	6671130	180	90	0	39
25ND027	413246	6671130	180	90	0	60
25ND028	413190	6671142	177	90	0	53
25ND029	413140	6671134	180	90	0	42
25ND030	413089	6671132	175	90	0	47
<b>Claypan</b>						
25CP001	433936	6678004	160	90	0	22
25CP002	433865	6678003	161	90	0	18
25CP003	433160	6672759	185	90	0	44
25CP004	433084	6672821	185	90	0	51
25CP005	433017	6672936	183	90	0	60
25CP006	432492	6672496	183	90	0	54
25CP007	432449	6672581	182	90	0	42
25CP008	432092	6671920	179	90	0	51
25CP009	432042	6672020	179	90	0	45

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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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<p><b>Drilling</b></p> <ul style="list-style-type: none"> <li>128 drillholes have been selected for Heavy Liquid Separation (HLS) testing, from recently completed Petratherm drilling.</li> <li>1 metre samples were split from the drill rig using a cone splitter attachment to the cyclone.</li> <li>A riffle splitter will be used to split 1 metre samples for HLS testing. Assay results are pending.</li> <li>Samples will be dried, weighed and soaked.</li> <li>De-slime using 2mm and 38um Endecott sieves.</li> <li>Standard HM separation conducted HLS on - 2mm /+0.038mm sand using Tetrabromoethane (TBE), discarding floats.</li> <li>Historic drill hole information has been sourced from open file public records managed by the South Australian Department of Primary Industries and Resources.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <li>Petratherm has completed air core drilling.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Air core drilling methods were utilised throughout the duration of the program.</li> <li>Hole diameters are 78mm.</li> <li>A Geologist was on site for every drill hole to ensure that sample recoveries were appropriate. Excellent recoveries were recorded.</li> <li>1m sample intervals were collected in buckets or large sample bags and a 1 metre split sample taken using a cone splitter attached to the drill cyclone into pre-numbered calico bags.</li> <li>3m composite samples were collect using a spear method from 1m spoils.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were geologically logged by the on-site geologist.</li> <li>Geological logging is qualitative.</li> <li>Representative chip trays containing 1 m geological sub-samples were collected.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Samples averaging 1.6 kg were collected for laboratory assay, using a cone splitter.</li> <li>It is considered representative samples were collected.</li> <li>Samples will be dried, weighed and soaked. De-slime using 2mm and 38um Endecott sieves. Standard HM separation conducted HLS on - 2mm /+0.038mm sand using Tetrabromoethane (TBE), discarding floats.</li> <li>The nature, quality and appropriateness of sample preparation will be achieved.</li> <li>Duplicate and Standard check samples have been introduced into the sample stream.</li> <li>Laboratory analytical charge sizes are standard sizes and considered adequate for the material being assayed.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>For the HLS work, internal quality control will be carried out by Diamantina Laboratories. QC samples, in the form of standards and repeats were inserted at a rate of approximately 1 in 20.</li> <li>3m assays for TiO<sub>2</sub> analysis carried out by ALS Laboratories, including blanks and standards.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling has been completed and assays are pending.</li> <li>Verification of future intercepts will be undertaken by an geologist, who has visually assessed drill samples and who will examine the laboratory data.</li> <li>All data used is from primary sources.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All maps and locations are in UTM grid (GDA94 Z53) and have been measured by a GPS with a lateral accuracy of <math>\pm 5</math> metres and a topographic accuracy of <math>\pm 5</math> metres.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Petratherm has completed regional exploration drilling along drill traverses over magnetic anomalies. Drill hole traverses extend from 600 metres to 3.2 kilometres.</li> <li>Drill assays are pending and only drill collar data is provided</li> <li>Data spacing will be insufficient to establish the degree of geological and grade continuity required for a Mineral Resource estimation.</li> <li>No compositing was used.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>At Rosewood Prospect step out vertical drilling is targeting extensions of flat lying HMS mineralisation and will provide an accurate account of thickness and extent once assaying is completed.</li> <li>At Duke, Nardoo and Claypan Prospects mineralisation is hosted in saprolite and drilling is orientated perpendicular to magnetic features and drilled at 50-100m to give an indication of mineralised width.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were taken directly from the field to Petratherm's warehouse and then couriered to Diamantina Laboratories in Perth.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>There is currently a review into the methods used to improve HM recoveries.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>EL6815 was granted 100% to Petratherm Limited on 12/08/2022 for a period of 6 years.</li> <li>EL 6855 was granted 100% to Petratherm Limited on 18/10/22 for a period of 6 years.</li> <li>EL 7007 was granted 100% to Petratherm Limited on 15/08/24 for a period of 6 years.</li> <li>EL6873 was granted to G4 Metals</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>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.</p> <ul style="list-style-type: none"> <li>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 may earn up to an 70% interest, via a 2 Stage Farm-in with further provisions, dependent on elections, to earn up to an 80% equity in the project. Refer to PTR ASX release 18/04/2024</li> <li>The tenements are located approximately 120 km south south-west of Coober Pedy overlapping Bulgunna, Mulgathing and Commonwealth Hill Pastoral Stations.</li> <li>The tenements are located within the Woomera Prohibited Area (Green Zone).</li> <li><b>Native Title Claims:</b> SCD2011/001 Antakirinja Matu-Yankunyjatjara.</li> <li>The tenements are in good standing and no known impediments exist.</li> </ul>
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Previous exploration work includes;</li> <li><b>Surface Geochemical Sampling:</b> Calcrete</li> <li><b>Airborne Geophysics:</b> Magnetics &amp; Radiometrics.</li> <li><b>Ground Geophysics:</b> Prospect scale Magnetics, Gravity and EM.</li> <li><b>Exploration Drilling:</b> Open file records indicate 296 RAB / Air core, 2 sonic &amp; 51 RC reconnaissance and prospect scale holes drilled over Project Group.</li> </ul>
<p><b>Geology</b></p>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>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 placers in overlying younger cover strata.</li> </ul>
<p><b>Drill hole Information</b></p>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole collar locations, RL, dip and azimuth of reported drill holes</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>information for all Material drill holes:</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> <p>• 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.</p>	<p>contained in Table 2 of this report.</p>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• No exploration drill results are reported, only completion of drilling.</li> <li>• Drill assays are pending.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• 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’).</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable, drill assay results are pending</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• See figures in main body of release attached.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Petratherm has completed drilling of 128 drill holes totalling 4,486 metres at 4 prospects on the Muckanippie Project (see Figure 1) with the potential to host titanium-bearing Heavy Minerals.</li> <li>• Drill results are pending.</li> </ul>
<b>Other substantive</b>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical</li> </ul>	<ul style="list-style-type: none"> <li>• No other substantive exploration data has been collected by Petratherm.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b><i>exploration data</i></b>	<i>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>	
<b><i>Further work</i></b>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>A range of exploration techniques are being considered to progress exploration.</li> <li>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.</li> <li>Further infill and extension drilling is likely to occur in the near future.</li> </ul>

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