

29 April 2022

## QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 31 MARCH 2022

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Pantera Minerals Limited (ASX:PFE) (“Pantera” or “the Company”) is pleased to provide an overview of its quarterly activities for the period ending 31 March 2022 (“Quarter”, “Reporting Period”).

### HIGHLIGHTS

#### *Yampi Cu-Fe Project*

- Assay results returned from the 2021 diamond drill program indicated the presence of a large hydrothermal alteration system – anomalous gold, arsenic, bismuth, molybdenum and antimony detected within hematite alteration – known pathfinder elements for porphyry copper-gold mineralisation with grades to 32 ppb Au, 3.34 ppm Mo and 28.3 ppm Sb encountered.
- Geophysical modelling of existing magnetics data within E 04/2660 confirmed a large intrusive magnetic body.

#### *Hellcat Pb-Zn-Ag Project*

- Overwhelming Shareholder support for the acquisition of the Hellcat Project.
- Helicopter electromagnetic (“EM”) geophysical survey completed over the Teano and Navi prospect areas using the Versatile Time Domain Electromagnetic (“VTEM”), outlining multiple conductors.
- Field reconnaissance identified additional galena mineralisation in outcrop, proximal to the geophysical targets.
- The mineralised ‘Teano Vein’ now extended by 800m to a strike length of 3500m.
- The Hellcat Project tenement package increased with the granting of new exploration Licence E 52/4026, increasing the total landholding for the project to 442km<sup>2</sup>.

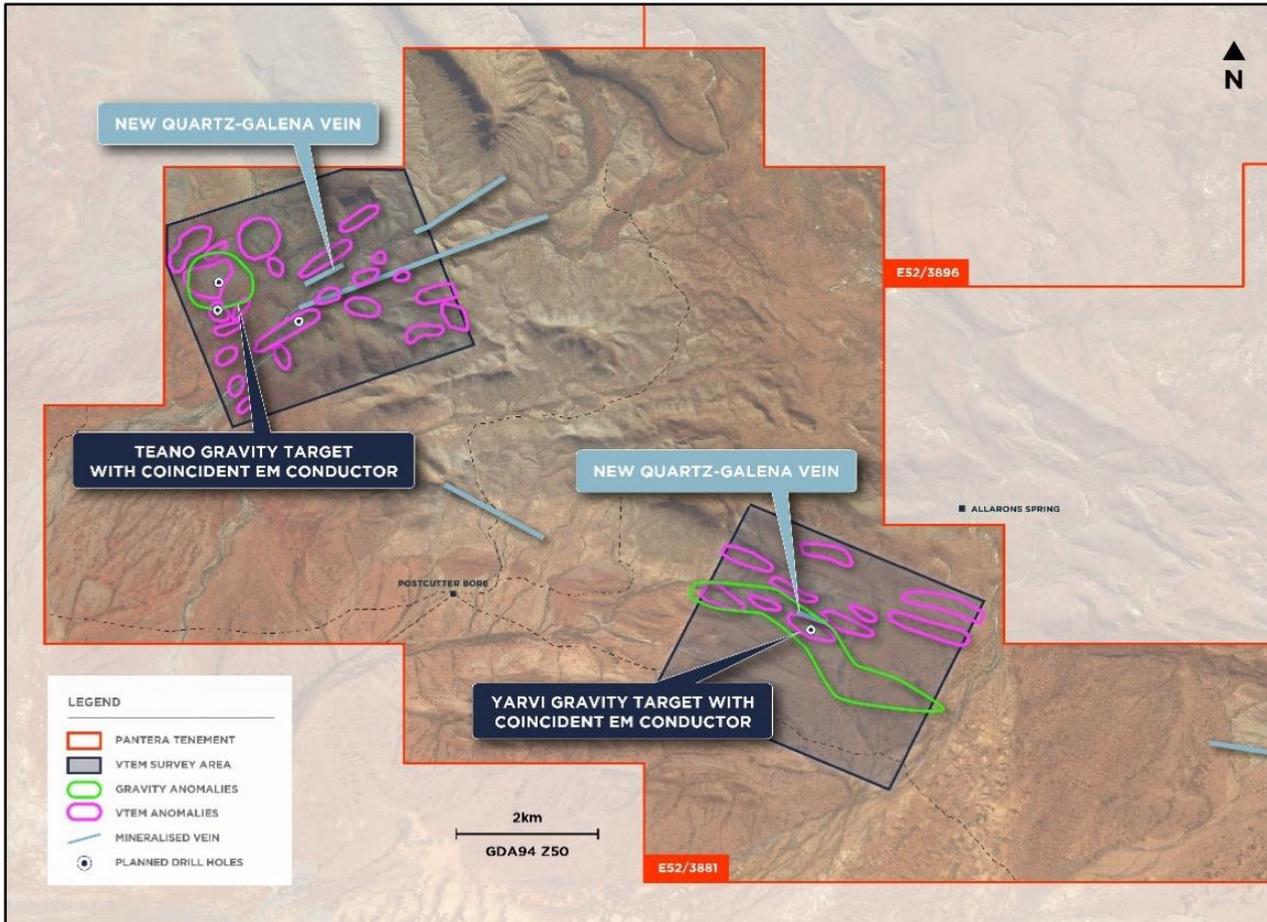


Figure 1 - Teano and Yarvi prospects showing the gravity and VTEM targets.

### *Frederick Pb-Zn-Ag Project*

- An in-depth review of historic data identifying high priority geochemical anomalies.
- Commencement of fieldwork at the Frederick Project.
- A detailed ground gravity survey completed over the eastern half of the project, which will compliment previous surveys over the western part of the project.

### *Weelarrana Mn Project*

- An in-depth review of historic data identifying high priority targets.
- Heritage and cultural clearance survey scheduled for early June 2022.
- Drilling program designed, scheduled to commence early July 2022.

## PLANNED ACTIVITIES H1 2022

### *Yampi Cu-Fe Project*

- Undertaking of aeromagnetic and radiometric survey over the tenement area and modelling of geophysical data.
- Completion of exploration activity to determine the source of the anomalous geochemistry in the 2021 diamond drill holes – which potentially signifies that porphyry copper-gold mineralisation exists within the tenement package.

### *Hellcat Pb-Zn-Ag Project*

- Heritage and cultural clearances scheduled for late May 2022.
- Commencement of the 4 diamond drillholes program early July 2022, with the ability to increase number of holes drilled if needed.
- Infill aerial magnetics & radiometric survey.

### *Weelarrana Mn Project*

- Mapping and rock chip sampling.
- Heritage and cultural clearances scheduled for early May 2022.
- Commencement of drill program early July 2022.

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## Yampi Project

The Yampi Iron Ore Project comprises one (1) granted exploration licences (E 04/2542), the Yampi Copper Project comprises one (1) granted exploration licence (E 04/2660) and the Yampi Extension Project comprises four (4) applications for explorations licences (E 04/2700, E 04/2701, E 04/2702, and E 04/2703). The Yampi Iron Ore and Yampi Extension Project are referred together as the Yampi Projects.

The Yampi Projects are located approximately 140 km north of Derby and 30 km southeast of Koolan Island in the Buccaneer Archipelago of the Kimberley Region of Western Australia and cover an area of approximately 640 km<sup>2</sup>.

The Yampi Projects sit within the Kimberley Basin, which forms part of the King Leopold Origin. Within the Yampi Projects area there are two tectonic units, the Hopper Terrane and folded rocks of the Early Proterozoic Kimberley Basin. Rocks of the Hopper Terrane comprise a sequence of felsic volcanics, migmatites, basic sills and granitoids, which underlie the early Proterozoic shallow marine shelf sediments of the Kimberley Basin.

During the Quarter, the Company completed the following key activities:

- Assay results received from the 2021 diamond drilling program indicating the presence of a large hydrothermal alteration system – anomalous gold, arsenic, bismuth, molybdenum and antimony detected within hematite alteration - known pathfinder elements for porphyry copper-gold mineralisation with grades

to 32 ppb Au, 3.34 ppm Mo and 28.3 ppm Sb encountered (see PFE ASX Announcement 29 April 2022 ‘Yampi Project Exploration Update – Pathfinder Elements For Porphyry Copper-Gold Mineralisation Encountered’).

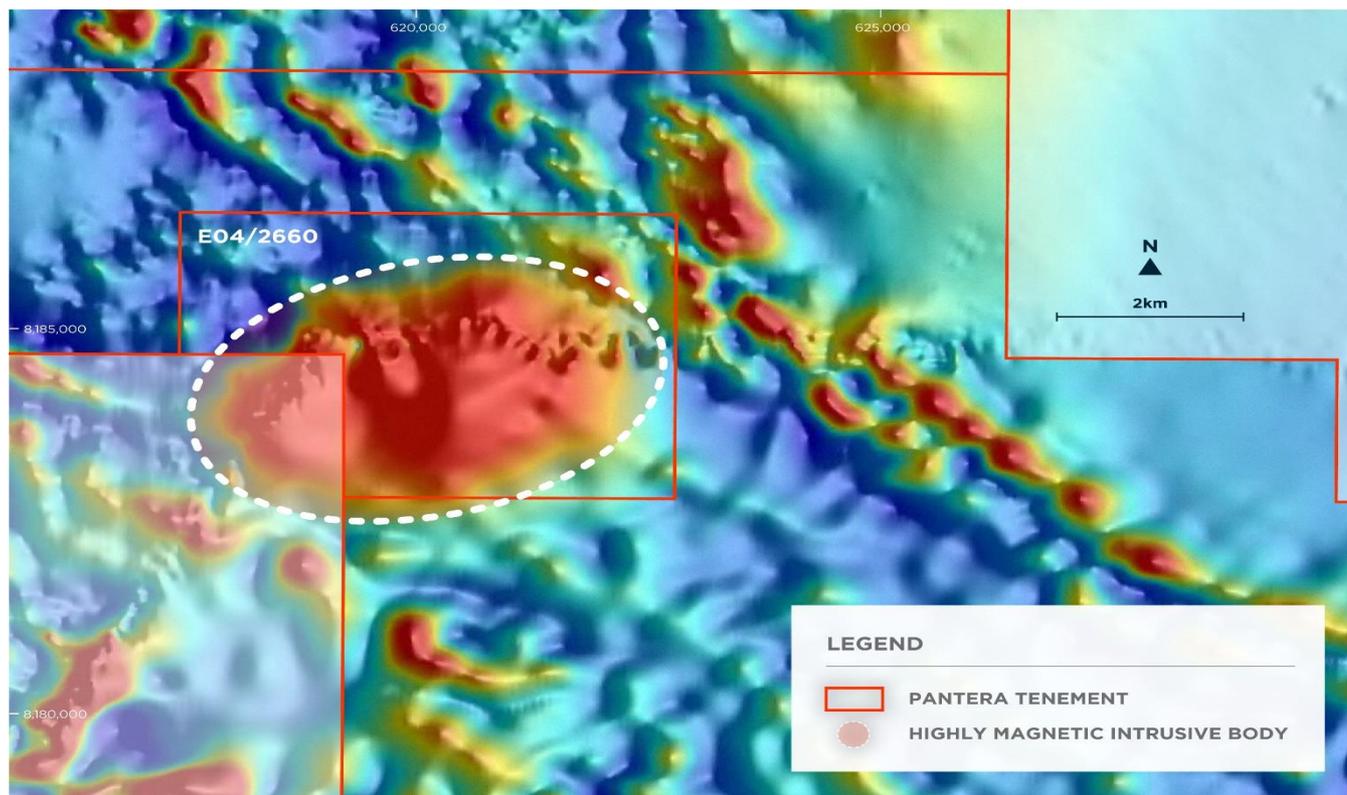
- Geophysical modelling of existing magnetics data within E 04/2660 completed, confirming a large intrusive magnetic body.



Figure 2 - Anomalous trace element geochemistry associated with hematite alteration in YMP004D.

#### Yampi Project Next Steps

- Aeromagnetic and radiometric survey covering 5824 line kms over the majority of the Yampi Project tenements confirmed to commence early May 2022.
- Modelling of acquired ground gravity and aeromagnetic/radiometric data to develop a detailed 3D model of the intrusive magnetic body, providing an improved understanding of the structure of the area and hydrothermal fluid pathways – see Fig. 3.
- Pathfinder analysis of trace element geochemistry – determine if any vectors to copper-gold mineralization exist.
- Stream and soil sampling – concentrating on gold and base metals.
- Mapping and rock chip sampling – concentrating on areas of structural complexity where the intrusive magnetic body may come to surface.
- Close spaced ground gravity survey over the magnetic intrusive body.
- Development and permitting of drill targets – EIS grant application.
- Approval of a Deed of Access with the Department of Defence to access the Yampi Sound Training Area (YSTA).



**Figure 3 - Highly magnetic intrusive body within E 04/2660.**

The combination of mapping, surface geochemistry and detailed ground gravity and aeromagnetic and radiometric data will greatly assist in understanding the mineral potential of the area and the development of drill programs.

### Hellcat Project

Located within the Gascoyne Region of Western Australia, the Hellcat Project covers 442km<sup>2</sup> of granted tenure considered prospective for base and precious metal mineralisation. Hellcat represents a greenfields project with advanced, drill-ready geophysical targets, exhibiting gravity and EM signatures similar to the globally significant Abra lead-silver deposit (ASX:G1A), which is located 100 kms east of Teano.

The Teano gravity and EM anomaly identified within the Hellcat Project is analogous to the anomalous geophysical response observed at the Abra Deposit, indicating the presence of dense minerals at depth. The observed fresh galena within quartz veins and altered carbonate host rocks further increase the prospectivity of the Teano target.

Pantera Minerals acquired 80% interest of the Hellcat Project in December 2021.

During the Report Period, the Company completed the following key activities:

- Helicopter EM geophysical survey completed over the Teano and Navi prospect areas using the VTEM, outlining multiple conductors.
- Field reconnaissance identified additional galena mineralisation in outcrop, proximal to the geophysical targets.
- The mineralised 'Teano Vein' now extended by 800m to a strike length of 3500m.

- The Hellcat Project tenement package increased with the granting of new exploration Licence E 52/4026, increasing the total landholding for the project to 442km<sup>2</sup>.

## VTEM Conductor Targets

Interpretation of the VTEM survey data has identified a significant number of EM conductor targets. Conductor plate modelling has been carried out on the higher priority EM conductor targets and 4 drillholes have been planned to drill test these targets.

The most significant of the EM conductor targets identified coincides with the Teano gravity anomaly, and the conductive source was modelled to sit about 375m below surface. The EIS<sup>1</sup> funded drillhole planned to test the gravity target will also test the EM conductor response.

Galena Mining's (ASX:G1A) globally significant Abra Pb-Ag Deposit (100km east of Teano) is associated with a broad, asymmetric single peak EM anomaly that was resolved by the VTEM system<sup>2</sup>. The source of the EM conductor response at Abra is caused by zones of weakly conductive massive galena ( $\pm$ pyrite and chalcopyrite) mineralisation within parts of the ore body. The Abra Deposit is also associated with a discrete gravity and magnetic anomaly.

## Field Reconnaissance

Field reconnaissance to follow up some preliminary VTEM conductor target areas has identified new zones of quartz veining with fresh galena mineralisation at both the Teano and Yarvi prospect areas. Access routes to the four planned diamond drillholes have been marked out, in anticipation of the upcoming Heritage Survey.

At **Teano**, the main 'Teano Vein' has been extended a further 850m towards the gravity anomaly, increasing the total mineralised strike length to 3500m. Significantly, fresh galena veinlets were observed within a rock sample of highly silicified unit that surrounds the quartz vein, which had not been observed by previous explorers.

At **Yarvi**, the 'Postcutters Trend' of highly silicified alteration of the carbonate host with quartz-galena veining was identified for the first time. The identification of this anomalous zone along with a coincident EM conductor and gravity response has increased the prospectivity of the Yarvi target.

<sup>1</sup> Exploration Incentive Scheme (EIS) – The Western Australia Department of Mines, Industry Regulation and Safety will contribute 50% of the direct drilling costs, up to \$150,000.

<sup>2</sup> David Stannard, Jayson Meyers, and Angelo Scopel, (2021), "The Abra sedimentary-hosted Pb-Ag-Cu-Au deposit, Western Australia: A geophysical case study," The Leading Edge 40: 129–138.



Figure 4 – Examples of fresh galena mineralisation within rock samples.

### Hellcat Project Next Steps

- Heritage and cultural survey to clear drill sites and access routes.
- Drilling of 4 diamond drillholes under EIS funding approved for Hellcat.
- High resolution airborne magnetic and radiometric surveying in E 52/3896, E 52/3944 and E 52/4026.

### Frederick Project

The Frederick Project comprises one exploration licence covering an area of 275km<sup>2</sup> and is located 875km north-northeast of Perth and 348km northwest of Meekatharra in the Upper Gascoyne region of Western Australia. Importantly, the Project is located 170kms to the northwest from Galena Mining's (ASX:G1A) Abra Pb-Ag Deposit, a globally significant lead-silver project located in the Gascoyne region.

During the Report Period, the Company completed the following key activities:

- Commencement of field work.

- A detailed ground gravity survey completed over the eastern half of the project, which will compliment previous surveys over the western part of the project (Fig. 5).
- An in-depth review of historic data has identified high priority geochemical anomalies, which require field validation prior to drill targeting.

This is the first exploration undertaken by Pantera at Frederick, with the project area subject to only light exploration in the past via surface geochemistry and limited geophysical surveys.

### Ground gravity survey

The detailed ground gravity survey consisted of 877 stations on a 400m x 400m grid in a sparsely explored area of the project, over the Irregully Formation and Kiangi Creek Formation sediments. This geophysical survey will provide full detailed gravity coverage over lithologies considered prospective for base and precious metal mineralisation, and will assist with exploration targeting.

The Irregully Formation within the tenement area has been complexly folded and faulted with an interpreted, doubly plunging anticline underlying a surface geochemical anomaly of elevated lead, zinc and copper. Associated with this interpreted fold and geochemical anomaly is a coincident gravity geophysical anomaly, which has a similar geological setting to Galena Mining's Abra Deposit Pb-Ag, lead-silver project located in the Gascoyne region (ASX:G1A (Indicated/Inferred 34.5Mt @ 7.2% Pb and 16g/t Ag<sup>3</sup>).

Finalised data from the survey is expected in the coming weeks, which will be followed by review and interpretation from consultant geophysicists.

<sup>3</sup> Galena Mining Limited (ASX:G1A) ASX Announcement – Galena Achieves 2020 Drilling Objectives At Abra – Updates MRE (28 April 2021).

## Historic data compilation and Targeting

Data compilation of historic surface geochemical sampling has been completed, generating a geochemical database with over 3,000 soil and lag samples, predominantly from the western half of the project. The geochemical data was levelled to allow comparison between sample type and analytical technique. Only one third of the tenement has been effectively explored via surface geochemistry.

The in-depth review of the historic sampling has outlined multiple geochemical anomalies, with four of these being high priority. This review indicates that surface geochemical sampling has been effective in outlining anomalous base metal geochemistry (Pb-Zn-Cu) in the region, and that further surface sampling of prospective lithologies is warranted over the eastern half of the tenement, particularly over any gravity-high anomalies. This work will be planned once the results of the gravity survey are received.

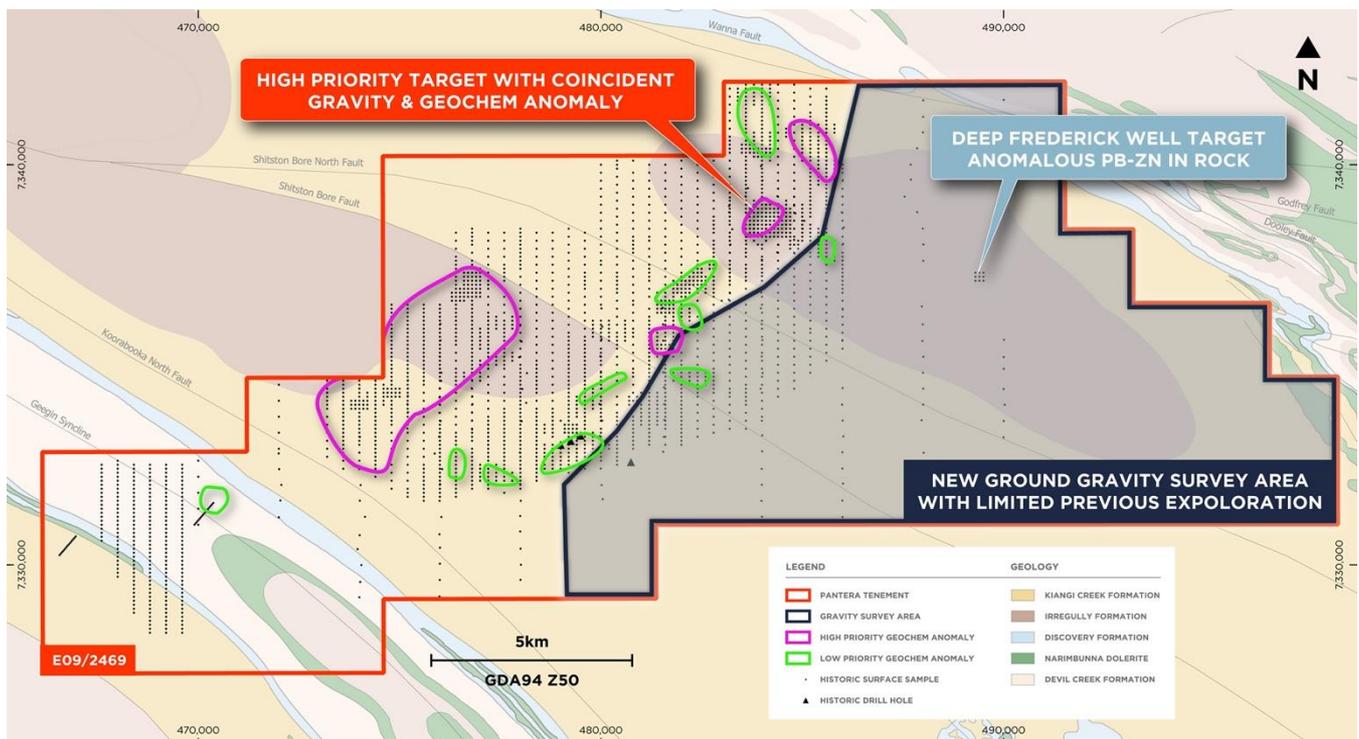


Figure 5 – Frederick Project tenement map showing the ground gravity survey area and high priority geochemical anomalies, over GSWA 100K geological mapping.

## Fredericks Project Next Steps

- Review, process and interpret the ground gravity survey data
- Further surface geochemical sampling in areas of high gravity anomalism

## Weelarrana Project

The Weelarrana Manganese Project comprises one (1) granted exploration licence, E 52/3878 covering an area of approximately 212 km<sup>2</sup>, and two (2) exploration licence applications in the area covering 189 km<sup>2</sup>.

## Weelarrana Project Next Steps

- Mapping and rock chip sampling.

- Heritage and cultural clearances scheduled for late May 2022.
- Commencement of drill program early July 2022.

## Corporate

On 25 February 2022, the Company issued 3,500,000 shares and 7,500,000 free attached options (one for one with an exercise price of \$0.25 and expiry 1 May 2026) under the second tranche of the two tranche Placement approved the Extraordinary General Meeting held on 18 February 2022. As part of the compensation for lead manager services for the Placement, on 25 February 2022 the Company issued PAC Partners Limited (PAC) with 1,875,000 options with for nil consideration with an exercise price of \$0.25 and expiry 1 May 2026. Both the placement options and the lead manager options are unquoted equity securities.

As per ASX Listing Rule 5.3.1, a summary of the Company's exploration activities for the quarter is contained herein, with exploration expenditure incurred during the period of circa A\$348k.

As per ASX Listing Rule 5.3.2, there were no substantive mining production and development activities undertaken during the March 2022 quarter.

In accordance with Listing Rule 5.3.5, the Company advises that payments made to related parties as advised in the Appendix 5B for the quarter ended 31 March 2022 were as follows; A\$43,583 for Director fees.

In accordance with Listing Rule 5.3.4, as the March 2022 quarter was in a period covered by a 'Use of Funds' statement in the IPO Prospectus, below is a comparison of the Company's actual expenditure to 31 March 2022 against the estimated expenditure in the 'use of funds' statement:

Use of Funds	Per IPO Prospectus (2 year period)	YTD 31 March 2022
2 Year Exploration Expenditure – Yampi Projects (Yampi Iron Ore, Yampi Extension & Yampi Copper Projects)	\$2,470,000	\$739,000
2 Year Exploration Expenditure – Weelarrana Manganese Project	\$842,000	\$88,000
2 Year Exploration Expenditure – Frederick Project	\$1,072,000	\$75,000
Expenses of the Offer	\$672,906	\$600,426
Administration costs	\$400,000	\$400,000
Working capital	\$2,256,880	\$377,000
<b>Total</b>	<b>\$7,713,786</b>	<b>\$2,279,426</b>

END –

This release is authorised by the Board of Directors of Pantera Minerals Limited.

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### Competent Person’s Statement (Yampi & Welarrana Projects)

The information in this report that relates to exploration results and exploration targets is based on and fairly represents information compiled by Mr Nick Payne, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Payne 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 Payne consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### Competent Person’s Statement (Hellcat & Fredrick Projects)

The information in this report that relates to exploration results and exploration targets is based on and fairly represents information compiled by Ms Georgina Clark, a Competent Person who is a Member of the Australian Institute of Geoscientists. Ms Clark 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’ (“JORC Code”). Ms Clark consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

All parties have consented to the inclusion of their work for the purposes of this announcement. The interpretations and conclusions reached in this announcement are based on current geological theory and the best evidence available to the author at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however might be, they make no claim for absolute certainty. Any economic decisions which might be taken on the basis of interpretations or conclusions contained in this presentation will therefore carry an element of risk.

### 2022 March Quarter – ASX Announcement

This Quarterly Activities Report contains information extracted from ASX market announcements reported in accordance with the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (“2012 JORC Code”). Further details (including 2012 JORC Code reporting tables where applicable) of exploration results referred to in this Quarterly Activities Report can be found in the following announcements lodged on the ASX, there have been no material changes since the date of these releases:

Exploration Commenced at Fredrick Project	21/3/2022
Hellcat VTEM Survey Strengthens Gravity Targets	6/4/2022
Yampi Exploration Update Pathfinder Elements For Porphyry Copper-Gold Mineralisation Encountered	29/4/2022

## ABOUT PANTERA MINERALS

Pantera Minerals Limited (ASX:PFE) is a Perth-based iron ore, copper, gold, manganese and base-metal explorer with a portfolio of projects located across some of Western Australia’s most prolific greenstone belts and base-metal basins (Figure 5). The Company is building its landholdings within Tier-1 mining locations, close to existing deposits and infrastructure.



Figure 5 – Pantera Minerals Portfolio of Western Australian Exploration Programs

## Appendix 1: Tenement Schedule (ASX Listing Rule 5.3)

**Mining tenements held at the end of the quarter and their location**

Project	Location	Tenement Details	Interest	Holder
Yampi Iron Ore Project	WA	E 04/2542	80%	Yampi Resources Pty Ltd
Yampi Extension Project	WA	E 04/2700 E 04/2701 E 04/2702 E 04/2703	100% <sup>1</sup> 100% <sup>1</sup> 100% <sup>1</sup> 100% <sup>1</sup>	New Age Iron Pty Ltd New Age Iron Pty Ltd New Age Iron Pty Ltd New Age Iron Pty Ltd
Yampi Copper Project	WA	E 04/2660	100%	Yampi Resources Pty Ltd <sup>2</sup>
Weelarrana Manganese Project	WA	E 52/3878 E 52/3981 E 52/3982	100% 100% <sup>1</sup> 100% <sup>1</sup>	Yampi Resources Pty Ltd Yampi Resources Pty Ltd Yampi Resources Pty Ltd
Frederick Polymetallic Project	WA	E 09/2469	100%	Yampi Resources Pty Ltd
Hellcat Project	WA	E 52/3881 <sup>3</sup> E 52/3896 <sup>3</sup> E 52/3944 <sup>3</sup> E 52/4026 <sup>4</sup>	80% 80% 80% 80%	Hellcat Minerals Pty Ltd Hellcat Minerals Pty Ltd Hellcat Minerals Pty Ltd Hellcat Minerals Pty Ltd

1 Licences for these projects are in application and yet to be fully granted.

2 Exploration licence to be transferred to Yampi Resources Pty Ltd.

3 Exploration licence to be acquired under terms of acquisition – 80% to be transferred to Pantera on settlement of transaction.

4 Exploration licence granted to Pantera 80% and 20% Bangemall Metals Pty Ltd.

**Mining tenements acquired during the quarter and their location**

Nil

**Mining tenements disposed during the quarter and their location**

Nil

**The beneficial percentages interests held in farm-in or farm-out agreements at the end of the of the quarter**

Nil

**The beneficial percentages interests in farm-in or farm-outs agreements acquired or disposed of during the quarter**

Nil

## SUMMARY OF CASH EXPENDITURE PER PROJECT

<b>Project</b>	<b>Cash Expenditure \$'000</b>
Yampi Iron Ore Project	82
Yampi Copper Project	30
Frederick Polymetallic Project	54
Weelaranna Manganese Project	29
Yampi Extension Project	45
Hellcat Project	108
<b>Total</b>	<b>348</b>