

Quarterly Activities Report

December 2022

This announcement has been authorised to be lodged with the ASX by the Board of Directors of PNX Metals Limited.



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ASX: PNX

Issued Capital as at 31/12/22:
4,444,057,807 Shares

Board & Management:

Non Exec Chairman: Graham Ascough
Non Exec Director: Hansjoerg Plaggemars
Non-Exec Director: Hansjörg Schmidt
Non-Exec Director: Richard Willson
Non-Exec Director: Frank Bierlein
MD/CEO: James Fox
CFO/Co Secretary: Angelo Gaudio

Top Shareholders as at 31/12/22:

Delphi Unternehmensberatung 45.58%
Sochrastem SA 5.96%
Marilei International Limited 4.97%

Share Registry:

Computershare
Investor Services Pty Ltd
Level 5 115 Grenfell Street
Adelaide South Australia 5000
Phone:
1300 305 232 (within Australia)
+61 3 9415 4657 (outside Australia)

Quarterly Highlights

Northern Territory Exploration & Project Development

- Northern Territory Environmental Protection Authority (NT EPA) recommends environmental approval be granted for the Fountain Head gold Project – Ministerial consent expected mid-February
- Drone magnetic survey identifies new gold target zones between the Glencoe & Fountain Head gold deposits, within the same host stratigraphy of the nearby Cosmo gold mine
- RC drill program successfully confirms extensions to mineral lodes at the Glencoe gold deposit with further drilling planned for April 2023
- Fountain Head and Hayes Creek Parallel Development Synergies assessment underway by PNX's engineering partner, Como Engineers

Corporate

- Subsequent to the end of the reporting period, a non-renounceable Rights Issue was announced to raise up to \$4.4 million (before costs and expenses) with firm commitments of \$2.1 million from major shareholders
- Capital raising to support ongoing development activities at Fountain Head and Hayes Creek integrated gold-silver-zinc projects, and continue near-mine and regional gold/ base metals exploration
- \$1.5 million cash on hand at 31 December 2022

DECEMBER QUARTERLY ACTIVITIES REPORT

PNX Metals Limited (ASX: PNX) (“**PNX**” “**the Company**”) is pleased to present its quarterly activities report for the period ended 31 December 2022.

Project Development – Fountain Head

There were no reportable safety or environmental incidents during the quarter and all statutory reporting is up to date.

Government and Environmental Approvals

Significant progress has been made in relation to environmental approvals required for the development of the Company's Fountain Head Gold Project (FHGP).

On 3 January 2023, the NT EPA issued its assessment report for the FHGP proposed by PNX. The NT EPA's assessment concluded that PNX's proposed FHGP development can be implemented and managed in a manner that is environmentally acceptable and therefore recommended that environmental approval be granted, subject

to certain conditions being met. The Company considers these conditions to be part of normal mining operations conducted in the NT.

Following the NT EPA’s recommendation, the Minister for Environment, Climate Change, and Water Security (Minister), has 30 business days (ending 15 February 2023) to grant an environmental approval for the FHGP.

Upon receipt of an approved EIS from the Minister, the Mt Porter, Glencoe and Fountain Head operational Mining Management Plan (MMP) will be finalised and submitted sequentially. Technical studies are also ongoing to inform the Hayes Creek EIS.

Exploration

In November, the Company announced that a NT Government co-funded detailed drone-based magnetic survey had identified new gold targets between the Glencoe and Fountain Head gold deposits (refer ASX release 17 November 2022).

The 1,238 line-km drone magnetic survey, flown by SensorEM, covered PNX’s 100% owned zinc-gold-silver Hayes Creek, and Fountain Head and Glencoe gold projects (Figure 1). The prospective new targets have the same orientation as gold-rich sheeted-quartz veins in the Tally Ho deposit and occur within the same prospective stratigraphy that hosts the nearby >1.2 Moz Cosmo Howley gold mine. Several discrete magnetic anomalies of interest were also identified between the Mt Bonnie and Iron Blow VMS deposits, which together comprise Hayes Creek.

A follow-up work program comprising shallow drilling and geochemistry is being planned to test the newly delineated sub-surface magnetic stratigraphy and lineament corridor.

The survey was co-funded by Grants NT Geophysics and Drilling Collaborations program (refer ASX release 2 June 2022) and is part of the Northern Territory Government’s ‘Resourcing the Territory’ initiative.

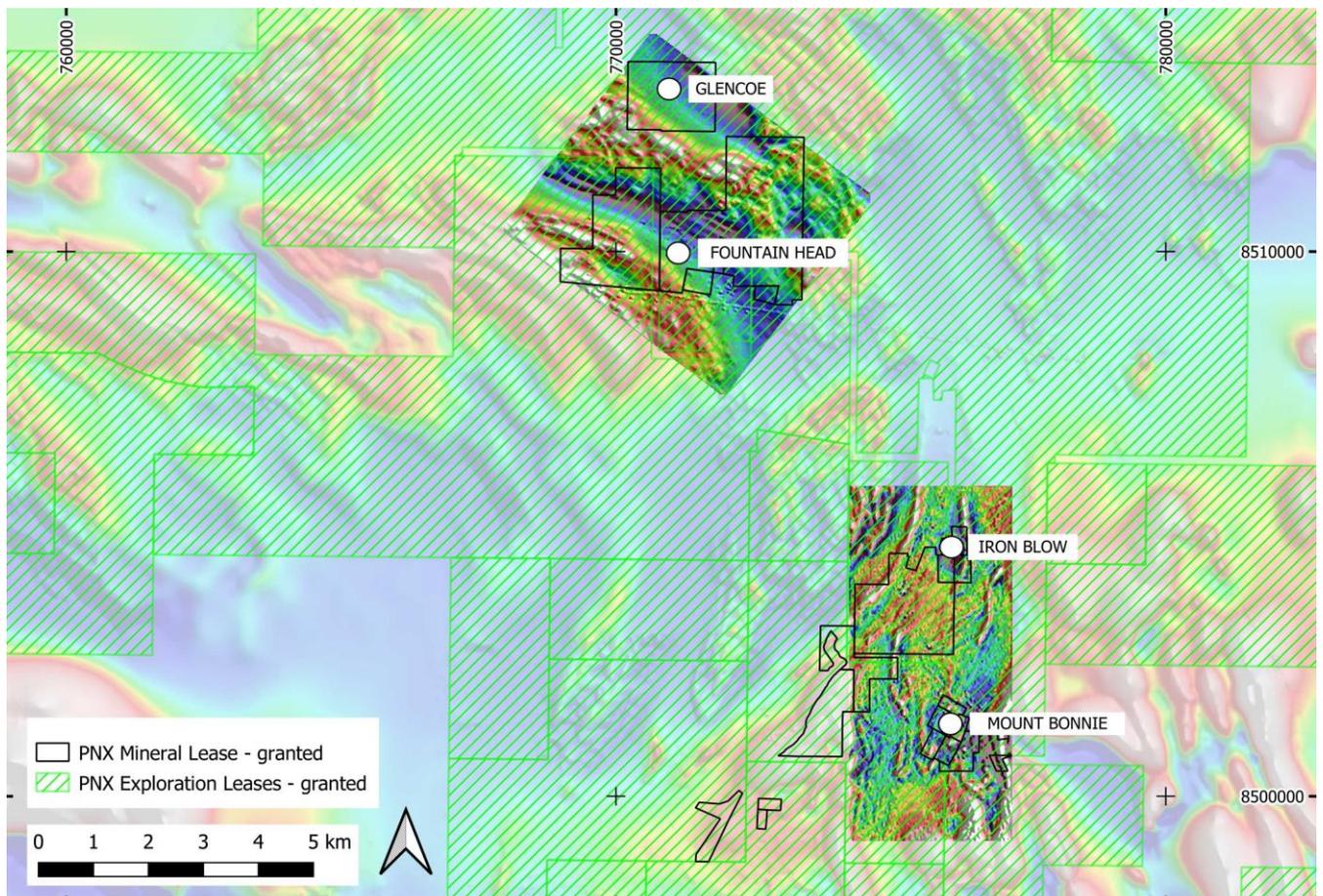


Figure 1: New magnetic imagery from recent drone survey over PNX’s 100% owned Glencoe & Fountain Head gold, and Mt Bonnie & Iron Blow zinc-gold-silver deposits. Background image: regional Total Magnetic Intensity.

Glencoe RC Drilling Results

The Company announced that newly obtained drilling results had successfully confirmed extensions to mineral lodes at the Glencoe gold deposit (refer ASX release 16 December 2022). The program comprised 18 RC drill holes for a total of 1,740 metres. Results included:

- 4 m at 1.52 g/t Au from 50 m, and
 - 2 m at 2.50 g/t Au from 86 m in GLRC056
- 2 m at 2.81 g/t Au from 28 m in GLRC063
- 4 m at 2.35 g/t Au from 13 m, and
 - 4 m at 1.29 g/t Au from 87 m in GLRC065
- 8 m at 1.52 g/t Au from 75 m, including
 - 3 m at 2.92 g/t Au from 78 m in GLRC054

These results were successful in demonstrating continuity to the east of the Central Zone by approximately 200 metres, and that the gold-bearing quartz veins previously reported at surface (refer ASX release 20 March 2022) extend at depth and to the south, oblique to the main gold mineralisation.

The RC drill results, in conjunction with interpretation of the drone magnetic survey conducted, provides the Company with new gold targets which will be part of further drilling planned to commence after the NT wet season, expected from April 2023. Follow-up shallow drilling to obtain broad-spaced geochemical information is planned for the area between Glencoe and Fountain Head to test for gold-rich sheeted quartz veins similar to Tally Ho and gold-rich stratigraphic units similar to Cosmo.

Field mapping of the discrete magnetic anomalies between Mount Bonnie and Iron Blow is planned as the known zinc-gold-silver-rich massive sulphide deposits have a discernible magnetic response.

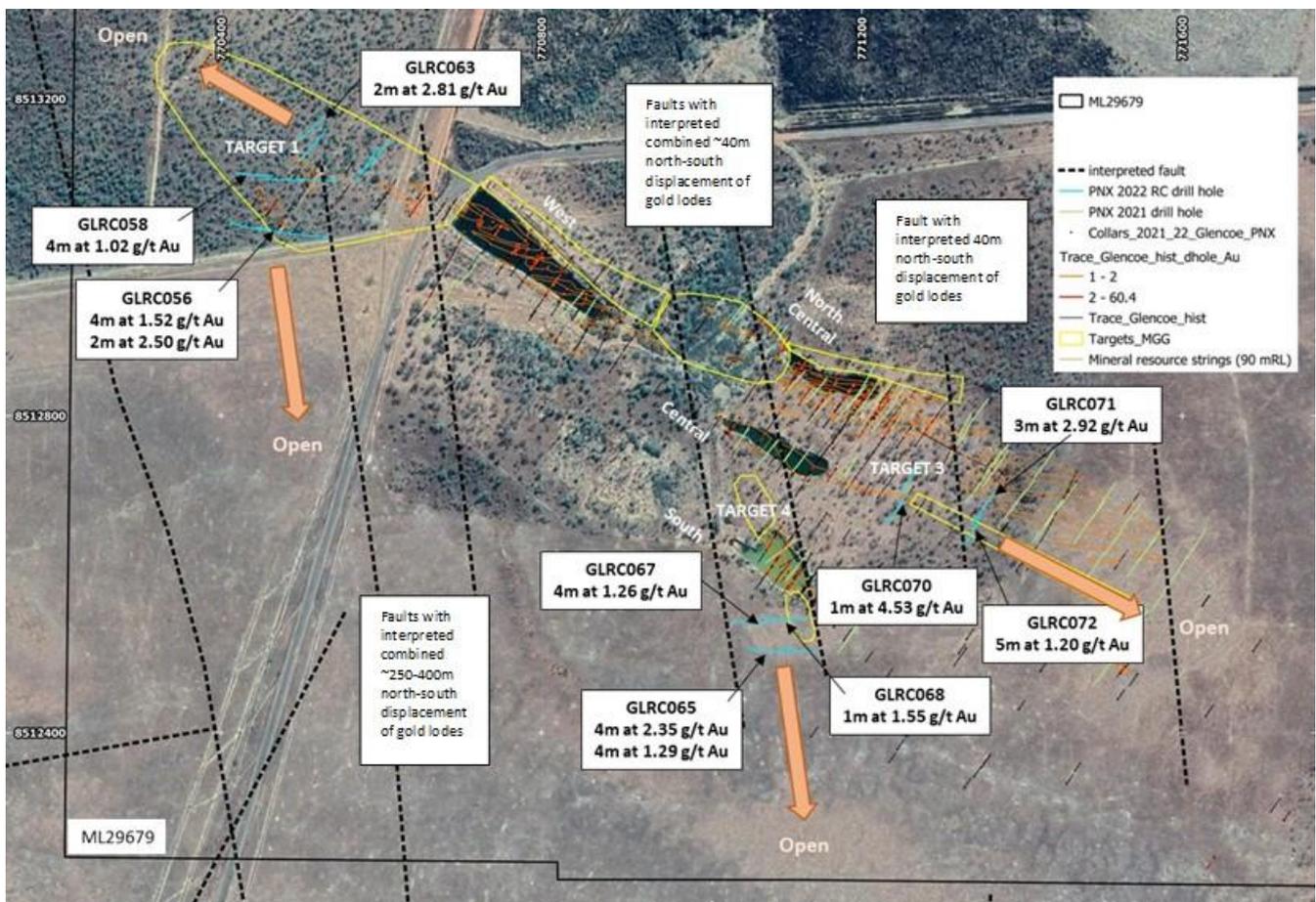


Figure 2: RC drill results integrated with interpreted faults from drone magnetics survey.

Plant and Infrastructure Engineering and Design

During the quarter, Como Engineering (Como) commenced a parallel development synergies study for the Fountain Head and Hayes Creek integration (Figure 3).

The aim of this study work is to assess opportunities identified through the integrated flowsheet to improve capital efficiency; overall resource utilisation; recoveries and payment terms for metals produced; tailings quality; and profit margins.

	Opportunities due to Plant Integration	Brief Description	Deliverables	Timing	Total additional recovery of metals (AuEq*) over Life of Mine (LoM)
1	Project Synergy Review (underway)	Integration of FH gold CIL Plant and Hayes Creek flotation	Capital and operating cost savings	Jan '23	n/a
			Update integrated process flowsheet & est. capex requirement to implement changes		
2	Recirculate Float Tails (underway)	Leach float tails through CIL circuit to improve overall Au + Ag recoveries	Leach tests on float tails to quantify Au + Ag recoveries & reagent consumptions	Feb '23	Target up to 15-20koz
			Equipment requirements & +/- 35% capital estimate		
3	Improve distribution and recovery of payable metals	Refinery limits on concentrate grade & deleterious elements results in lower float recoveries, nil payment for certain metals, e.g., copper & lead	Review existing test work & marketing/ offtake terms, identify opportunities, recommend test work	H1'23	Target up to 35-40koz
4	Alternative processing of Precious Metals (PM) concentrate stream	Assess alternative process to PM flotation circuit to improve resource utilisation/ recoveries/ tailings	Options analysis for on-site treatment and refining of PMs	H1'23	Target up to 30-35koz
			Test-work to determine optimum processing route and PM recovery for onsite treatment		
			Cost benefit analysis		
5	Updated Integrated Plant design to PFS level confidence and accuracy	Incorporate the above findings in an updated PFS	Prepare PFS on Integrated Plant, and improved utilisation and payables of HC ore	H2'23	Target total 80-95koz over LoM

Figure 3: Plant Integration and parallel development study aims

Planned Activities March 2023 Quarter

- Submission of Mine Management Plan to NT Government to permit drilling between Glencoe and Fountain Head
- Compile, interpret and report surface geochemistry and mapping from 2022 field season
- Continue review of Mt Porter exploration data and commence relogging critical archival diamond drill holes to increase resource confidence and identify targets for extensional drilling
- Continue to update geological models and generate new targets around known mineral resource domains and advanced prospects
- Project generation of existing tenure for gold, silver and zinc, plus other commodities of interest
- Receipt of Fountain Head EIS and progression of sequential operational Mine Management Plans for Mt Porter, Glencoe and Fountain Head gold projects
- Continue with Fountain Head and Hayes Creek Plant integration studies

Corporate

Subsequent to the quarter end, on 30 January 2023, the Company announced a non-renounceable Rights Issue to raise up to \$4.4 million (before costs and expenses) and has received firm commitments of \$2.1 million from existing major shareholders in relation to the offer. Refer to the ASX for Offer Memorandum, Investor Presentation, ASX Release and Cleansing Statement 708AA(2)(f).

The date for the conditions precedent for acquisition of the Mt Porter gold deposit was extended to 31 March 2023. This was primarily related to finalisation of the stamp duty assessment being delayed over the holiday period.

Cash on hand at 31 December 2022 was \$1.5 million.

The Quarterly Cashflow Report (Appendix 5B) for the period ending 31 December 2022 provides an overview of the Company's financial activities. Cash exploration and evaluation expenditure for the reporting period was \$719k. Net corporate and other expenditure amounted to \$307k. The total amount paid to non-executive Directors of the entity and their associates in the period (item 6.1 of the Appendix 5B) was \$59k and includes Directors' fees and superannuation.

For further information please visit the Company's website www.pnxmetals.com.au or contact:

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TENEMENTS

Northern Territory – 100% owned

Tenement	Name	Holder	Area Hectare
ML30512	Mt Bonnie	PNX Metals Ltd 100%	6.4
ML30589	Mt Bonnie		31.6
MLN1033	Mt Bonnie		4.8
MLN1039	Mt Bonnie		1.2
MLN214	Iron Blow		6.3
MLN341	Iron Blow		14.9
MLN342	Mt Bonnie		13.7
MLN343	Iron Blow		14.9
MLN346	Mt Bonnie		16.0
MLN349	Iron Blow		15.0
MLN405	Mt Bonnie		12.0
MLN459	Mt Bonnie		15.0
MLN811	Mt Bonnie		8.1
MLN816	Mt Bonnie		8.1
Total Hayes Creek			168.0
MLN794	Fishers-1	PNX Metals Ltd 100%	8.1
MLN795	Fishers-2		8.1
ML30936	Good Shepherd		106.0
Total Other			122.2
ML31124	Fountain Head	PNX Metals Ltd 100%	33.5
MLN1020	Fountain Head		12.0
MLN4	Fountain Head		529.9
MLN1034	Fountain Head		304.2
Total Fountain Head			879.6
Glencoe			
ML29679	Glencoe	PNX Metals Ltd 100%	199.0
Total Glencoe			199.0
Mt Porter ##			
ML23839 ##	Mt Porter ##	Ausgold Trading Pty Ltd 100%	364.7
Total Mt Porter			364.7
Moline +			
PNX Metals Ltd 100%			
ML24173 +	Moline +	PNX Metals Ltd 100%	3126.0
MLN1059 +	Moline +		418.7
MLN41 +	Mt Evelyn +		8.9
Total Moline			3,553.6
Total Mineral Leases			5,287.1
EL28616 +	Moline +	PNX Metals Ltd 100%	262.5 km ²
EL31099	Bridge Creek	PNX Metals Ltd 100%	60.2 km ²
EL31893	Ringwood Station	PNX Metals Ltd 100%	23.4 km ²
EL32489	J25 Anomaly	PNX Metals Ltd 100%	20.0 Km ²
Total Exploration Licences			366.1 km²

+ On 28 February 2022, PNX agreed to divest the Moline project (tenements ML24173, MLN1059, MLN41 & EL28616) in the Northern Territory to Sovereign Metallurgical Pty Ltd, with completion to occur within 18 months of the Agreement. (Refer ASX 1 March 2022).

On 27 September 2022, PNX agreed to acquire ML23839 (Mt Porter) from Ausgold Trading Pty Ltd. (Refer ASX 28 September 2022)

Northern Territory – Farm-in Tenements

Tenement	Name	Holder	(Area sq km)
Burnside Project *			
EL10012	Mt Ringwood	PNX Metals Ltd 90%, Newmarket 10%	14.9
EL10347	Golden Dyke		10.0
EL23431	Thunderball		13.4
EL23536	Brocks Creek		70.4
EL23540	Jenkins		16.7
EL23541	Cosmo North		3.3
EL24018	Hayes Creek		23.4
EL24051	Margaret River		86.9
EL24058	Yam Creek		3.3
EL24351	McCallum Creek		13.4
EL24405	Yam Creek		4.1
EL24409	Brocks Creek South		22.1
EL24715	Mt Masson		56.8
EL25295	Margaret Diggings		10.0
EL25748	Burnside		584.5
EL9608	Mt Bonnie	10.0	
Chessman Project *			
Tenement	Name		
EL25054	Maud	PNX Metals Ltd 90%, Newmarket 10%	64.0
EL28902	Maud		104.5
ML30293	Chessman		1.1
Rocklands Project #			
EL10120 #	Rocklands 1	PNX Metals Ltd – earned-in 100%	6.68
EL25120 #	Rocklands 2		10.02
EL27363 #	Rocklands 4		6.68
EL25379 #	Rocklands 7		6.68
EL23509 #	Rocklands 8		20.00
ML29933 ^	Rocklands 3	PNX Metals Ltd – 80%, Trojan Enterprises Pty Ltd and David Trow 20%	3.54
ML29937 ^	Rocklands 5		0.85
Total Exploration Licences			1,167.25

* PNX Metals Ltd has earned a 90% interest under a farm-in agreement with Newmarket Gold NT Holdings Pty Ltd (**Newmarket**).

PNX Metals Ltd has earned a 100% interest in the Hardrock Rights under a farm-in agreement with Rockland Resources Pty Ltd (**Rockland**) and Oz Uranium Pty Ltd Holdings Pty Ltd (**Oz**).

^ PNX Metals Ltd has earned a 80% interest in the Hardrock Rights under a farm-in agreement with Rockland Resources Pty Ltd and Oz Uranium Pty Ltd Holdings Pty Ltd. A 20% interest is held by Trojan Enterprises Pty Ltd and David Trow.