# **Quarterly Activities Report**

30 October 2023

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 30/09/23: 5,380,624,719 Shares

**Board & Management:** 

Non Exec Chairman: Graham Ascough Non Exec Director: Hansjoerg Plaggemars Non-Exec Director: Hansjörg Schmidt

Non-Exec Director: Rowan Johnston

MD/CEO: James Fox

CFO/Co Secretary: Angelo Gaudio

Top Shareholders as at 30/09/23:

Delphi Unternehmensberatung 43.87% Computershare

Deutsche Balaton Sochrastem SA

Marilei International Limited

**Share Registry:** 

6.32% Investor Services Pty Ltd

5.54% Level 5 115 Grenfell Street

4.11% Adelaide South Australia 5000

Phone:

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# **Quarterly Highlights**

## **Northern Territory Exploration & Project Development**

- Costeans at the new C6 gold discovery support surface field observations and expose high-grade surface gold zones. Significant results reported include:
  - 21.5 g/t Au over 1.5 m in Costean 3 upper south section,
  - 30.7 g/t Au over 1.0 m in Costean 3 upper north section,
  - 28.5 g/t Au over 0.5 m in Costean 4 upper and lower south section,
  - 11.8 g/t over 2.5 m in Costean 4 lower north side, and
  - 7.88 g/t Au over 2.5 m in Costean 4 upper north side
- High-grade (>10 g/t) gold in outcrop traced over ~3 km N-S strike extent define the greater C6 gold corridor
- Multiple parallel gold corridors, such as C7 and Brumby/Bartons also identified on the Northern Leases
- Aircore and RC drilling commenced at the C6 gold prospect to determine depth continuity of the highgrade zone, test fresh-rock below weathered gold-rich massive sulphide veins mapped in costeans and build the geological model of area for future targeting. Results pending.
- Drone magnetic survey completed across Northern Leases tenure to provide geological foundation for future exploration. Data interpretation pending.

#### Corporate

- \$2.04 million cash on hand at 30 September 2023
- Subsequent to the Quarter end \$250k was received from Sovereign Metallurgical relating to the sale of the Moline Project with the balance of \$0.75 million plus replacement of the Environmental Bond expected to be received during the December Quarter

## SEPTEMBER QUARTERLY ACTIVITIES REPORT

PNX Metals Limited (ASX: PNX) ("PNX" "the Company") is pleased to present its quarterly activities report for the period ended 30 September 2023.



# **Safety and Environment**

There were no reportable safety or environmental incidents during the quarter.

# **Exploration**

#### **Northern Leases**

During the quarter, fieldwork continued at the Company's recent C6 gold discovery. The C6 prospect is part of PNX's Burnside Northern Leases with the new high-grade zone located on the 100% owned EL31893. The Northern Leases are located in the Pine Creek region of the NT, approximately 100 km south of Darwin and 25 km north of the Fountain Head gold, and Hayes Creek zinc-gold-silver projects.

PNX's Northern Leases host multiple kilometre-scale gold targets with the potential for economically significant gold mineralisation along the same structural corridor as the Cosmo Howley gold mine (owned by Agnico Eagle Mines Ltd) and numerous other gold deposits (refer ASX release 13 February 2023).

Work conducted by PNX at C6 during the quarter included reconnaissance aircore drilling, drone magnetic surveying and surface rock-chip and costean (trench) sampling. There has been limited historic work at C6 and no previous RC drilling at the new high-grade gold zones.

The C6 gold-rich surface gossan, from which multiple rock-chip samples exceeding 100 g/t gold were returned, is interpreted to be the weathered remnants of massive sulphide veins. Drill testing via RC drilling commenced after quarter end (refer ASX release 18 October 2023) and results are pending.

Widespread surface samples greater than 10 g/t Au from an area with limited surface outcrop extended the mineralised zone over a 3 km strike; with numerous areas requiring further assessment and testing along the north-south geological corridor.

Multiple parallel trends have also been identified, including the C7 and Bartons/Brumby prospects where PNX has confirmed and extended historic high-grade gold results (Figure 1).

## **Summary C6 costean assays**

- Assays from Costeans 3 and 4 returned the highest gold grades beneath the exposed gossan. Best results were:
  - 1.5 m @ 21.5 g/t Au from 54.5 m Costean 3 upper south side,
    - including 2 m @ 26.9 g/t Au from 54.5 m,
  - o 1.0 m @ 30.7 g/t Au from 54.5 m Costean 3 upper north side,
  - o 2.5 m @ 11.8 g/t Au from 68.5 m Costean 4 lower north side
    - including 0.5 m @ 49.9 g/t Au from 70.0 m,
  - o 2.5 m @ 7.88 g/t Au from 68.5 m Costean 4 upper north side
    - including 0.5 m @ 32.6 g/t Au from 70.0 m,
  - 1.0 m @ 1.46 g/t Au from 70.0 m and 2.5 m @ 1.64 g/t Au from 75.0 m in Costean 2,
  - o. 5 m @ 2.84 g/t Au from 57.5 m and 0.5 m @ 2.45 g/t Au from 69.0 m in Costean 1, and
  - 0.5 m @ 2.29 g/t Au from 32.0 m in Costean 6.
- Surface rock chip samples (Figure 1) taken from limited outcrop exceeding 10.0 g/t Au extend for over 2.9 km
  - o Northernmost sample 2.6 km north of gossan zone returned 7.37 g/t Au.
  - o Southernmost sample 1.5 km south of gossan zone returned 6.1 g/t Au.

### Summary C6 aircore drilling assays

Aircore drilling has been used as a reconnaissance technique along the C6 corridor to better understand the geology and provide a cross-section of samples in the area. The first aircore drilling assays included 18 drill holes near the high-grade gossan at C6 prospect and 34 reconnaissance holes across the C6 corridor (Figure 2) (refer ASX release 18 October 2023). Best intercepts reported to date were:

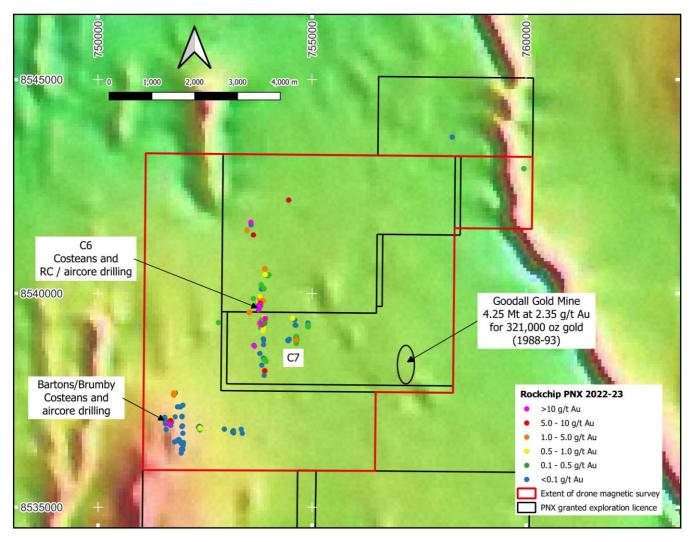


- 2 m @ 3.38 g/t Au from surface in C6AC004A,
- 1 m @ 1.57 g/t Au from 5 m in C6AC007B
- 1 m @ 14.9 g/t Au from 2 m in C6AC008A,
- 1 m @ 2.00 g/t Au from 22 m in C6AC009A, and
- 1 m @ 2.24 g/t Au from surface in C6AC010A.

Further reconnaissance aircore drilling along the C6 and Brumby/Bartons corridors has been completed with results pending at the time of writing.

The recent assay results, along with new geological and geophysical data, provide important information to update the geological model and target high-grade gold veins with deeper RC drill holes at C6. An RC drilling program commenced at C6 after quarter end to test the depth extent of the mineralisation.

A drone magnetic survey was flown over the majority of PNX's Northern Leases during the quarter. Preliminary data indicates that the survey has delineated important geological features, such as folds and faults, and will provide a very useful base map for future exploration. Full interpretation is still pending.



**Figure 1:** Location of gold prospects in the Company's Northern Lease including all PNX rock chip assays from 2022-23, location of the historic Goodall gold mine and extent of current drone magnetic survey. Background: regional Total Magnetic Intensity



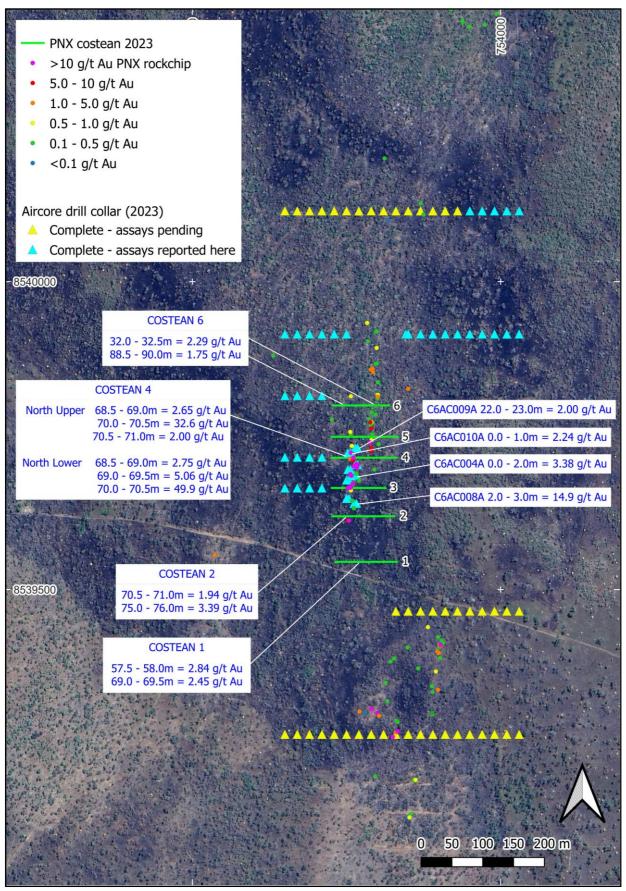


Figure 2: Latest results - final assays for costeans, first assays for reconnaissance aircore drilling



# **Project Development - Fountain Head**

### **Government and Environmental Approvals**

Following the grant of the environmental approval for the Company's 100% owned Fountain head Gold Project in late February 2023, the Company completed and submitted its Mining Management Plan (MMP) to the Department of Industry, Tourism & Trade (DITT) for assessment and approval in May 2023.

The Company has recently received feedback from DITT on the Fountain Head Gold Project MMP and is currently working though the comments to determine the time and cost of the additional work required. The request for further information is mostly administrative to ensure that the MMP records the environmental approval commitments which PNX has already committed to undertaking. Approval of the MMP is the last step in the approvals process for the Fountain Head Gold Project.

The Mt Porter MMP is being finalised for submission, however the response to DITT regarding the Fountain Head MMP has been prioritised resulting in a short delay to its submission, now expected to be within the December Quarter.

## **Hayes Creek Metallurgical Studies**

Metallurgical test work from Fountain Head and Hayes Creek parallel development synergies study commenced in August 2023. This is specifically targeting improved gold recoveries via utilisation of the integrated plant design and is expected to take 10-12 weeks.

### Competed:

- Samples received and logged and head assays
- Whole of ore CIL leach and sighter flotation tests

#### Underway:

- Bulk flotation on Iron Blow composite
- Grind and Zn cleaner flotation on Zn rougher concentrates
- Intensive cyanide leach on combined Cu/Pb rougher concentrates

### **Planned Activities December 2023 Quarter**

- RC drilling at C6 targeting primary mineralisation in bedrock
- Ongoing soil and rockchip surveys and geological mapping along C6 gold corridor and surrounding northern leases area
- · Interpretation of drone magnetic survey and ground-truthing
- Ongoing review of existing tenure for gold, silver and zinc, plus other commodities of recent interest
- Respond to DITT regarding questions related to the Fountainhead MMP, and finalise and submit the Mt Porter MMP
- · Continue with Fountain Head and Hayes Creek Plant integration metallurgical test-work
- · Complete sale of Moline to Sovereign Metallurgical
- · Complete acquisition of Mt Porter gold project

## Corporate

Cash on hand at 30 September 2023 was \$2.04 million.

The date for the satisfaction of the condition's precedent for the Completion of the acquisition of the Mt Porter gold deposit was extended to 16 November 2023 due to ongoing delays to satisfy the conditions precedent.

During, and subsequent to the quarter end, Moline payments of \$0.5 million were received. Remaining Moline payments totalling \$0.75 million and replacement of the environmental bond (approximately \$300k) are due by Completion, extended to 20 November 2023 (refer ASX releases 1 March 2022, and 14 April 2023).



The Quarterly Cashflow Report (Appendix 5B) for the period ending 30 September 2023 provides an overview of the Company's financial activities. Exploration and evaluation expenditure for the reporting period was \$611k. Corporate and other expenditure amounted to \$296k. Payments to related parties and their associates during the recently completed quarter and shown in section 6 of the Appendix 5B to this quarterly activities report were \$136k. These payments are related to salaries, superannuation and fees paid to directors during the quarter.

The Company's AGM is to be held on 9 November 2023, at Level 3, 170 Frome Street, Adelaide SA 5000 (Grant Thornton). Proxy Forms must be received by no later than 10.30 am (Adelaide time) on Tuesday 7 November 2023.

For further information please visit the Company's website <a href="www.pnxmetals.com.au">www.pnxmetals.com.au</a> or contact:

#### **James Fox**

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TENEMENTS
Northern Territory

| Tenement    | Name             | Holder                       | Area Hectare          |
|-------------|------------------|------------------------------|-----------------------|
| ML30512     | Mt Bonnie        |                              | 6.4                   |
| ML30589     | Mt Bonnie        |                              | 31.6                  |
| WLN1033     | Mt Bonnie        |                              | 4.8                   |
| WLN1039     | Mt Bonnie        |                              | 1.2                   |
| MLN214      | Iron Blow        |                              | 6.3                   |
| MLN341      | Iron Blow        |                              | 14.9                  |
| MLN342      | Mt Bonnie        | PNX Metals Ltd 100%          | 13.7                  |
| MLN343      | Iron Blow        | T TVX Wetals Ltd 10070       | 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 ha              |
| MLN794      | Fishers-1        |                              | 8.1                   |
| MLN795      | Fishers-2        | PNX Metals Ltd 100%          | 8.1                   |
| ML30936     | Good Shepherd    |                              | 106.0                 |
|             | •                | Total Golden Dyke            | 122.2 ha              |
| VIL31124    | Fountain Head    |                              | 33.5                  |
| WLN1020     | Fountain Head    | DNV44                        | 12.0                  |
| MLN4        | Fountain Head    | PNX Metals Ltd 100%          | 529.9                 |
| MLN1034     | Fountain Head    | <u> </u>                     | 304.2                 |
|             |                  | Total Fountain Head          | 879.6 ha              |
| ML29679     | Glencoe          | PNX Metals Ltd 100%          | 199.0                 |
|             |                  | Total Glencoe                | 199.0 ha              |
| VIL23839 ## | Mt Porter ##     | Ausgold Trading Pty Ltd 100% | 364.7                 |
|             |                  | Total Mt Porter              | 364.7 ha              |
| ML24173 +   | Moline +         |                              | 3126.0                |
| MLN1059 +   | Moline +         | PNX Metals Ltd 100%          | 418.7                 |
| MLN41 +     | Mt Evelyn +      |                              | 8.9                   |
|             | •                | Total Moline                 | 3,553.6 ha            |
|             |                  | Total Mineral Leases         | 4,922.4 ha            |
|             |                  |                              |                       |
| EL28616 +   | Moline +         |                              | 262.5 km <sup>2</sup> |
| EL31099     | Bridge Creek     | 7                            | 60.2 km <sup>2</sup>  |
| EL31893     | Ringwood Station | PNX Metals Ltd 100%          | 23.4 km <sup>2</sup>  |
| EL32489     | J25 Anomaly      | _                            | 20.0 km <sup>2</sup>  |
| EL33217     | Stray Creek      | <del>-</del>                 | 46.0 km <sup>2</sup>  |
|             | , <b>-</b>       | Total Exploration Licences   | 412.1 km <sup>2</sup> |

<sup>\*</sup> On 28 February 2022, PNX Metals Limited agreed to divest the Moline project (tenements ML24173, MLN1059, MLN41 & EL28616) in the Northern Territory to Sovereign Metallurgical Pty Ltd. (Refer ASX 1 March 2022 & 14 April 2023). Completion extended to occur by 20 November 2023.

<sup>##</sup> On 27 September 2022, PNX agreed to acquire ML23839 (Mt Porter) from Ausgold Trading Pty Ltd. (Refer ASX 28 September 2022). Completion has been extended to occur by 16 November 2023.



| Tenement           | Name               | Holder  | (Area sq km) |
|--------------------|--------------------|---|--------------|
| Burnside Project * |                    |   |              |
| EL10012            | Mt Ringwood        |   | 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     | DNIV Matela Ltd 000/ NITMO 400/                       | 86.9         |
| EL24058            | Yam Creek          | PNX Metals Ltd 90%, NTMO 10%                          | 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 Pro       | oject *            |   |              |
| Tenement           | Name               |   |              |
| EL25054            | Maud               |   | 64.0         |
| EL28902            | Maud               | PNX Metals Ltd 90%, NTMO 10%                          | 104.5        |
| ML30293            | Chessman           |   | 1.1          |
| Rocklands Pro      | oject #            |   |              |
| EL10120 #          | Rocklands 1        |   | 6.68         |
| EL25120 #          | Rocklands 2        |   | 10.02        |
| EL27363 #          | Rocklands 4        | PNX Metals Ltd – earned-in 100%                       | 6.68         |
| EL25379 #          | Rocklands 7        |   | 6.68         |
| EL23509 #          | Rocklands 8        |   | 20.00        |
| ML29933 ^          | Rocklands 3        | DNIV Material tall accorded in 2007. Devild Transport | 3.54         |
| ML29937 ^          | Rocklands 5        | PNX Metals Ltd – earned-in 80%, David Trow 20%        | 0.85         |
|                    |                    | Total Exploration Licences                            | 1,167.25     |

<sup>\*</sup> PNX Metals Ltd has earned a 90% interest under a farm-in agreement with NT Mining Operations Pty Ltd (Agnico Eagle Australia) (NTMO)

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<sup>\*</sup> 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).

<sup>^</sup> PNX Metals Ltd has earned a 80% 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**). A 20% interest is held by David Trow.



| Northern | Territory | - Licence | Applications |
|----------|-----------|-----------|--------------|
|          |           |           |              |

| <b>Exploration Licence Applications</b> |                   |                              |                                       |
|---|-------------------|------------------------------|---------------------------------------|
| EL33476                                 | Salt Trough Creek | PNX Metals Ltd – 100%        | 10 Blocks; 32.38 km <sup>2</sup>      |
| EL33477                                 | Harriet Creek     |                              | 146 Blocks; 487.03 km <sup>2</sup>    |
| EL33478                                 | Copperfield Creek |                              | 35 Blocks; 116.64 km <sup>2</sup>     |
| EL33479                                 | Burnside Granite  |                              | 10 Blocks; 33.41 km <sup>2</sup>      |
| EL33480                                 | Horners Creek     |                              | 5 Blocks; 16.70 km <sup>2</sup>       |
| EL33502                                 | Golden Grove Gap  |                              | 11-part Blocks = 3.00 km <sup>2</sup> |
| EL33503                                 | Burnside Gap      | PNX Metals Ltd 90%, NTMO 10% | 19-part Blocks = 4.37 km <sup>2</sup> |
| EL33536                                 | Mt Ringwood Gap   |                              | 5-part Blocks = 1.81 km <sup>2</sup>  |
|   |                   | 695.18 km <sup>2</sup>       |                                       |