

ASX Announcement

20 December 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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Priority Uranium Targets Identified During Evaluation of Thunderball Uranium Deposit

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- **Key datasets, including the drillhole database, re-established to facilitate evaluation and upgrading of historic resource at the Thunderball Uranium deposit (Thunderball) to JORC 2012 compliance in 2024**
- **Several priority uranium targets identified, including potential extensions to the near-surface Thunderball deposit**
- **Thunderball remains open with potential for significant uranium mineralisation down-plunge of the current resource, and at depth, parallel and beneath the known mineralisation**
- **Thunderball and numerous nearby uranium prospects have seen little exploration since 2011, and are adjacent to PNX's 100% owned Hayes Creek zinc-gold-silver, and Fountain Head gold projects**

PNX Metals Limited (**ASX: PNX**) ("**PNX**" "the **Company**") is pleased to announce that it has re-established several key datasets since the return of the Uranium Rights over its tenure in the Pine Creek Region of the NT¹, including the near-surface Thunderball Uranium deposit (Thunderball) (Figure 1).

Previous drilling at Thunderball from 2008 to 2010 delineated two discrete sub-parallel dipping uranium lodes (Figure 2) and informed the estimation of a pre-JORC 2012 mineral resource estimate (refer THX ASX release 7 February 2011²).

Work is now underway using the drillhole database, which includes 232 drill holes (39 Diamond holes and 193 RC holes) for 31,363m, to update the Thunderball Mineral Resource Estimate ("MRE") to JORC-2012 compliance, and to prioritise new targets for further testwork.

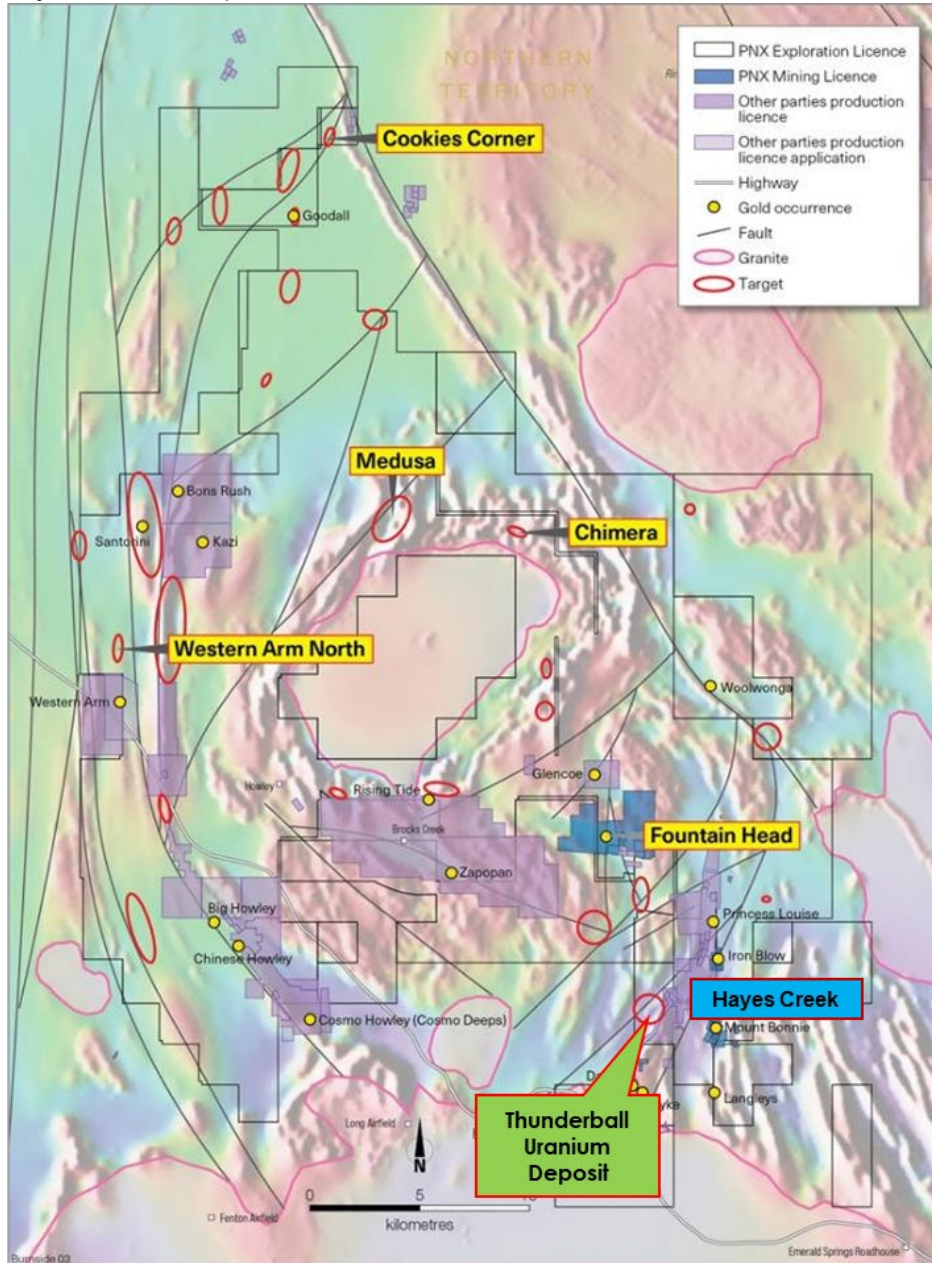
Thunderball remains open down-dip and there has been limited exploration to test for repetitions beneath the lower lode. The deposit contains very high-grade intercepts, the better ones include:

- **15.0 m @ 1.5% U₃O₈ from 139.0 m in TPCRC019**,
 - including 1.0m @ 20.3% U₃O₈ (THX ASX release 25 September 2009³);
- **11.0 m @ 3.4% U₃O₈ from 144.0 m in TPCDD026** (Figure 4),
 - including 4.6m @ 8.0% U₃O₈ (THX ASX release 4 November 2009⁴);
- **15.0 m @ 8,633 ppm U₃O₈ from 135.0 m in TPCRD093**,
 - including 9.0m @ 1.4% U₃O₈,
 - including 1.0m @ 11.3% U₃O₈ (THX ASX release 30 September 2010⁵).

PNX Executive Chairman Graham Ascough said: "PNX has a very large landholding in a world-renowned uranium province including a known uranium deposit with numerous high-grade prospects. The recent significant rise of the uranium price has resulted in strong interest in the Uranium potential at Hayes Creek, and the

assessment and ranking of targets will be a priority over the NT wet season. Early results of the compilation efforts have identified new targets and highlighted previously identified targets that have seen little field work since 2011.”

Figure 1: Project location map



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Background Information and Planned Work

PNX is currently evaluating the geological model and drillhole database with a view to upgrade the historic Thunderball MRE. The Company will address the recommendations set out in the previous MRE report and incorporate new data that includes drill results, secular equilibrium studies, mineralogy and baseline mining studies in preparation for the update.

In the estimation of the previous mineral resource at Thunderball, a top-cut of 4000 ppm (0.4%) U_3O_8 was applied to the higher-grade intercepts due to insufficient drillhole density to determine continuity of the higher-grade zones². PNX will determine drilling requirements to better delineate these higher-grade zones ahead of the 2024 field season.

It is expected that the initial evaluation will be completed early in 2024 with recommendations for the next phase of work to follow.

Based on a relatively detailed understanding of the structural and stratigraphic controls on mineralisation, the previous MRE report highlighted the potential for significant uranium mineralisation down plunge of the current resource and at depth, parallel and beneath the current mineralisation. As a result, drilling below the Thunderball deposit looking for a repeat of mineralisation as well as down-plunge will be a high priority for future programs that will focus on resource growth.

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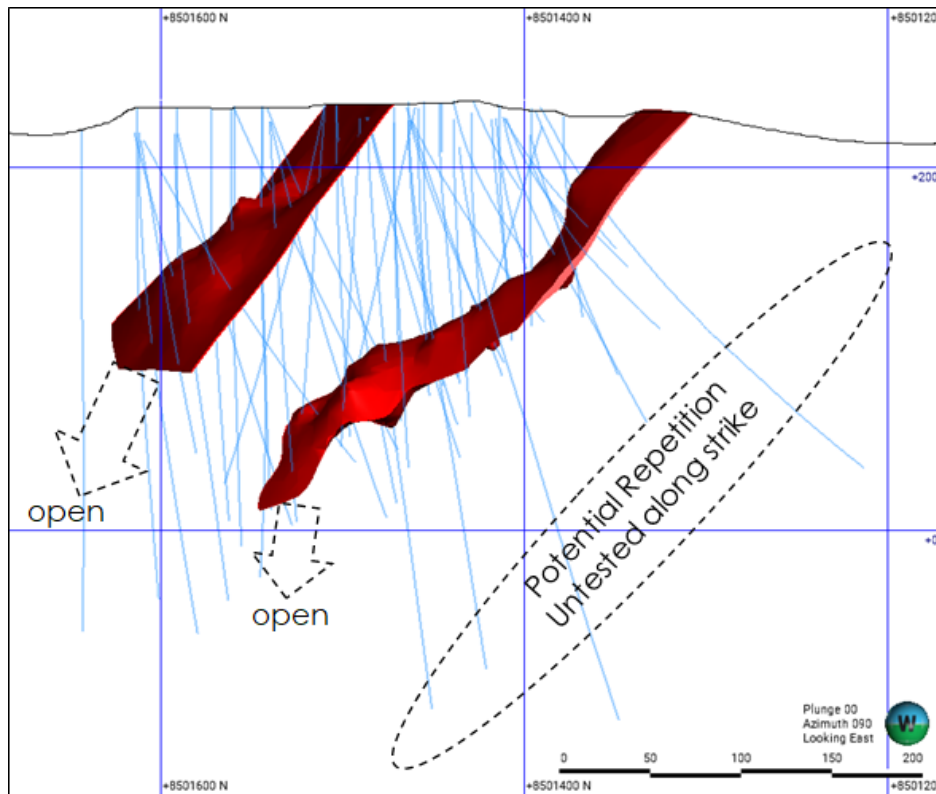


Figure 2: Thunderball Uranium Deposit - 3D view of Upper and Lower Ore bodies with drillhole traces (blue)

In addition to Thunderball, PNX is also evaluating the exploration results from other uranium prospects that have seen little or no exploration since they were first identified between 2008-2011 (Figure 3), primarily due to the drop in uranium prices after the impact of the Fukushima accident in early 2011. This work includes evaluating extensive surface sample datasets and numerous geophysical surveys completed by previous explorers and PNX, in the area.

The three priority prospects are:

Golden Eye – radiometric peak ~4.0 km southwest of Thunderball where uranium is associated with gold, platinum and palladium. Ten holes were drilled at Golden Eye with best result of:

- 3.0 m @ 2,779 ppm U_3O_8 + 431 ppb Au+Pt+Pd from 44.0 m in TPCRC109⁶
 - including 1.0 m @ 7,481 ppm U_3O_8 + 1,106 ppb Au+Pt+Pd from 44.0 m.

Moonraker – radiometric peak ~1,200 m northeast along geological strike from Thunderball. Five holes drilled with best result of:

- 2.0 m @ 944 ppm U_3O_8 from 41.0 m in TPCRC115⁶
 - including 1.0 m @ 1,510 ppm U_3O_8 from 41 m.

Thunderball Extended – radiometric peak ~600 m southwest along geological strike from Thunderball. Fourteen holes drilled with best results of:

- 10.0 m @ 556 ppm U₃O₈ from 24.0 m
 - including 2 m @ 1,204 ppm U₃O₈ from 27.0 m in TPCDD001⁷,
- 9.0 m @ 518 ppm U₃O₈ from 27.0 m
 - including 1.2 m @ 1,848 ppm U₃O₈ from 30.0 m in TPCDD002⁷.
 - including 1.2 m @ 1,848 ppm U₃O₈ from 30.0 m in TPCDD002⁷.

Work programs for the above prospects will be developed prior to the 2024 field season.

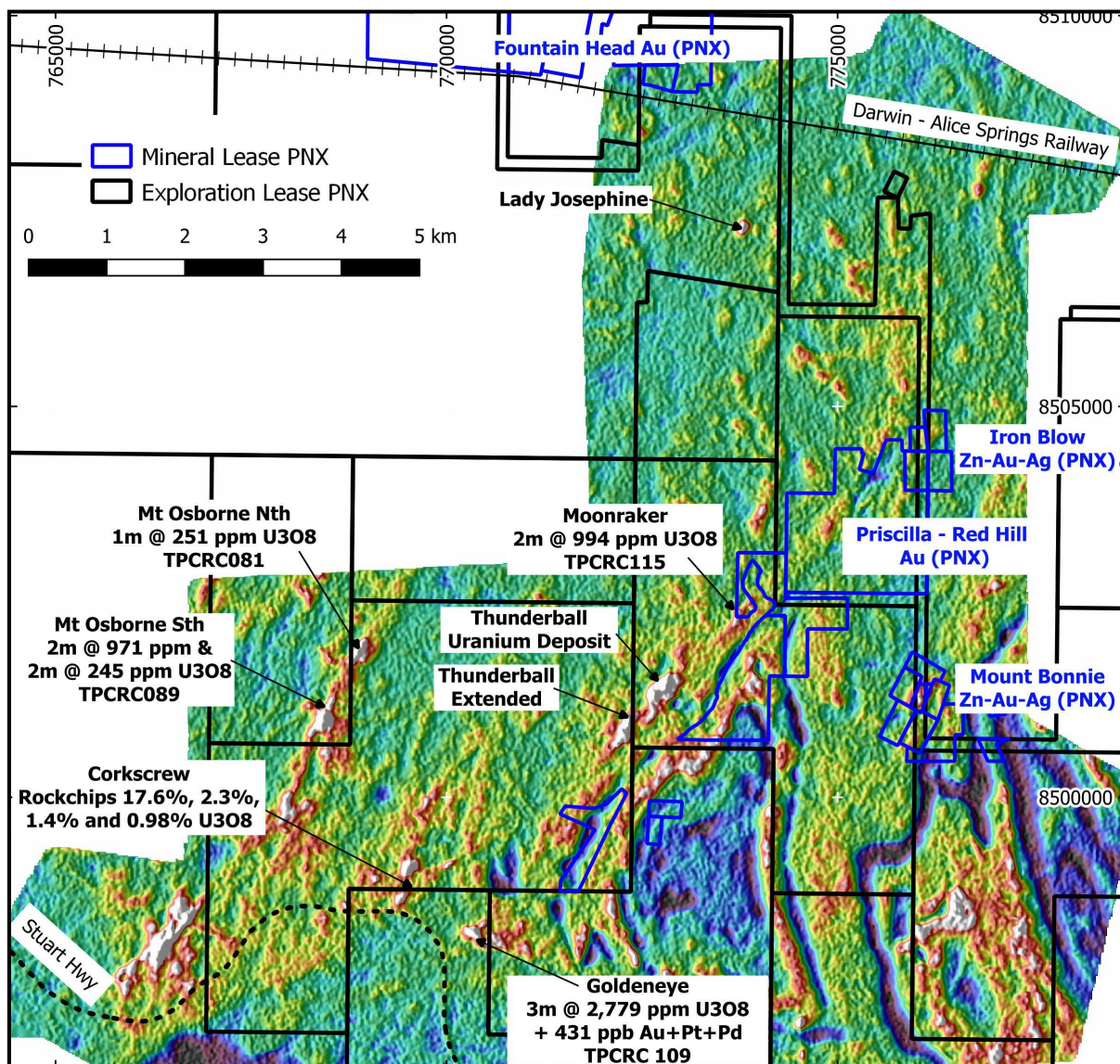


Figure 3: Location of Thunderball uranium deposit and uranium prospects^{8,9,10} identified by Thundelarra between 2008 and 2011 in relation to PNX’s existing Fountain Head gold and Hayes Creek zinc-gold-silver projects. Background is uranium intensity map (heat map with hot colours indicating stronger uranium signal) collected from airborne survey by Thundelarra in 2009¹¹.

References

- 1 “Pine Creek uranium rights returned to PNX” PNX Metals Ltd ASX 9 November 2023.
- 2 “Thunderball uranium deposit maiden JORC resource” Thundelarra Exploration Ltd. ASX 7 February 2011.
- 3 “Spectacular Drill Results from the Thunderball Uranium Prospect” Thundelarra Exploration Ltd ASX 25 September 2009

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- 4 "Thunderball Diamond Drill Results" Thundelarra Exploration Ltd ASX 04 November 2009
 - 5 "Hayes Creek Assay Results" Thundelarra Exploration Ltd ASX 30 September 2010
 - 6 "New uranium and platinum-palladium-gold discoveries at Hayes Creek" Thundelarra Exploration Ltd. ASX 10 November 2010.
 - 7 "Drilling intersects high grade uranium at the Thunderball prospect N.T." Thundelarra Exploration Ltd. ASX 25 May 2009.
 - 8 "17.6% U₃O₈ from surface sampling of new Hayes Creek radiometric targets" Thundelarra Exploration Ltd ASX 19 April 2010.
 - 9 "New uranium mineralisation discovered at Hayes Creek project" Thundelarra Exploration Ltd ASX 27 August 2010.
 - 10 "New uranium discovery in the Pine Creek region, Northern Territory" Thundelarra Exploration Ltd ASX 25 June 2009.
 - 11 "New Pine Creek uranium targets" Thundelarra Exploration Ltd ASX 10 February 2010.

Competent Person's Statement

The information in this report that relates to exploration data is based on information compiled by Dr Michael Green, who is a full-time employee and shareholder of PNX Metals Ltd. Dr Green is a Member of the Australian Institute of Geoscientists (AIG No: 4360) and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Dr Green consents to the inclusion of this information in the form and context in which it occurs.

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

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