

# ASX Announcement

## 10 October 2023

## LAKE JOHNSTON DRILLING UNDERWAY

### KEY POINTS

- Aircore and reverse circulation drilling program has commenced at Lake Johnston to progress several highly promising greenfields targets along the Western Ultramafic Unit and at Maggie Hays West
- Assay results from the May 2023 reconnaissance drilling program had successfully identified multiple targets with coincident zones of elevated Ni and Cu, along with highly anomalous platinum group elements, confirming strong prospectivity for nickel sulphides
- The current drilling program will infill the widely spaced traverses at each target to further delineate the geochemical dispersion and the morphology of the Western Ultramafic basal contact
- The results from the current drill program will facilitate the design and priority of future deeper drilling programs targeting high-grade nickel deposits



FIGURE 1: AIRCORE DRILLING AT MAGGIE HAYS WEST

**Poseidon Nickel Limited (ASX: POS, “the Company”)** is pleased to provide an update on exploration drilling at Lake Johnston.

CEO, Craig Jones, commented: *“Following the successful Lake Johnston reconnaissance drilling program earlier this year that tested over a 14km strike of the Western Ultramafic Unit on widely spaced traverses, we are pleased to have commenced a further program to follow-up the significant targets that were identified.*

*The Western Ultramafic Unit drilling has so far delivered positive results with coincident nickel copper and PGE’s considered indicators for nickel sulphides and we are very excited about the prospectivity of the targets already defined.”*



**FIGURE 2: AIRCORE DRILLING AT MAGGIE HAYS WEST**

## LAKE JOHNSTON DRILLING PROGRAM

### Results from Previous Drilling

The Western Ultramafic Unit (WUU) has been defined along 17km of strike. An initial program of shallow air core (AC) and reverse circulation (RC) drilling along 14km of this strike has also delineated the interpreted overturned basal contact of the WUU completed in May 2023 (refer to ASX announcement “*Exciting Greenfields Nickel Intersections at Lake Johnston*” dated 3 July 2023).

The aim of the AC component of the drill program was to identify near surface regolith geochemical signatures that are potentially emanating from nickel sulphides, help map the location of the WUU basal contact and to potentially identify channelised “Kambalda-style” embayment features along the contact that are known to be conducive areas for the accumulations of nickel sulphide mineralisation at its base.

The deeper RC holes provided critical litho-geochemical information beneath areas where near surface regolith geochemical anomalism have been identified, confirm the fertility of the unweathered host rocks and provide further vectors towards potential zones of well mineralised nickel sulphides.

Assay results from the drill program’s 400m spaced lines along the WUU returned coincident nickel sulphide pathfinder (Ni:Co:Cu and PGE) anomalous zones within the weathering profile at seven separate locations, which have been assigned the prospect names Roundtop, Raggedy Ann, Johnny Turk, Maggie Hays North, Maggie Hays West, Windy Hill and Jaymee Ruth (Figure 4). The pathfinder anomalism at Maggie Hays West, which appears to be associated with a classical “Kambalda-style” embayment of the basal contact, included Ni > 0.4% (at times Ni > 1.0%), Cu > 150ppm and Co > 500ppm. Combined PGE > 50ppb were also confirmed over prospective “channel facies” cumulate ultramafic rocks within this embayment zone.

All seven prospects identified along the WUU by the initial wide spaced drill program warrant follow up with drilling now underway to achieve this goal.

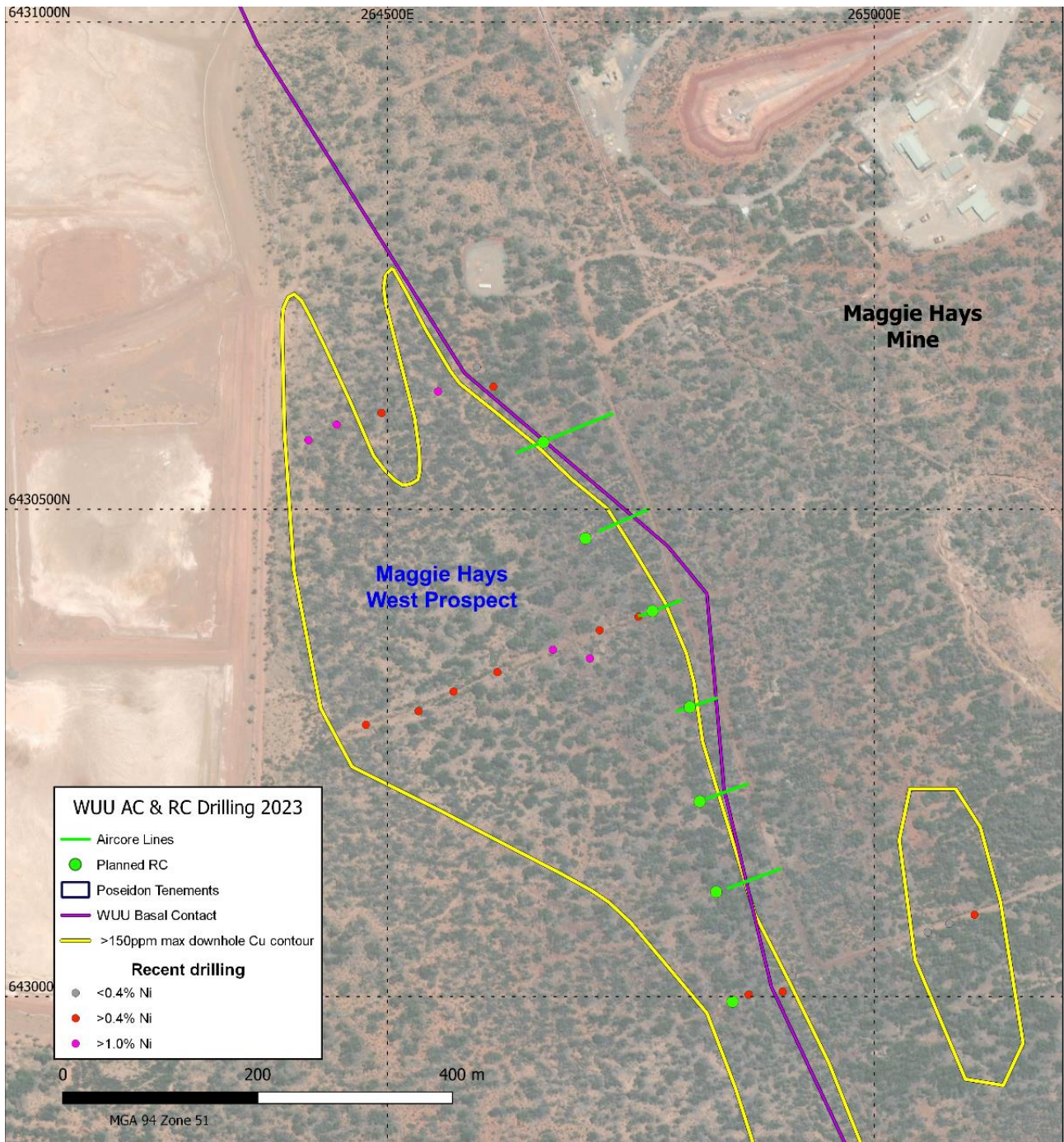
### Proposed Drilling Program

The drill program now underway has two main components. At Maggie Hays West an additional 18 AC holes are planned with a further 7 slimline RC holes to be completed thereafter. For the six other regional prospects along the WUU an additional 7 slimline RC holes are planned.

The Maggie Hays West AC drilling will be undertaken first along the 700m strike extent of the embayment feature with the aim to better define the position and morphology of the basal contact of the WUU with the underlying BIF unit in this area. Drilling is planned on 100m spaced sections. Once the position and morphology of the WUU/BIF contact has been better defined by the AC program, the drill program will transition to deeper RC drilling with the aim to obtain comprehensive fresh rock geochemical data on the cumulate textured WUU rocks recognised along the contact in this area.

The aim of the RC drilling to be undertaken on the six regional prospects is to follow up the anomalous geochemistry identified by the earlier wide spaced drill program by testing the basal WUU / BIF contact at depth beneath these anomalies using the existing drill lines.

Figures 3 and 4 below show the planned drill hole locations.



**FIGURE 3: PROPOSED AIRCORE DRILL LINES FOR MAGGIE HAYS WEST**

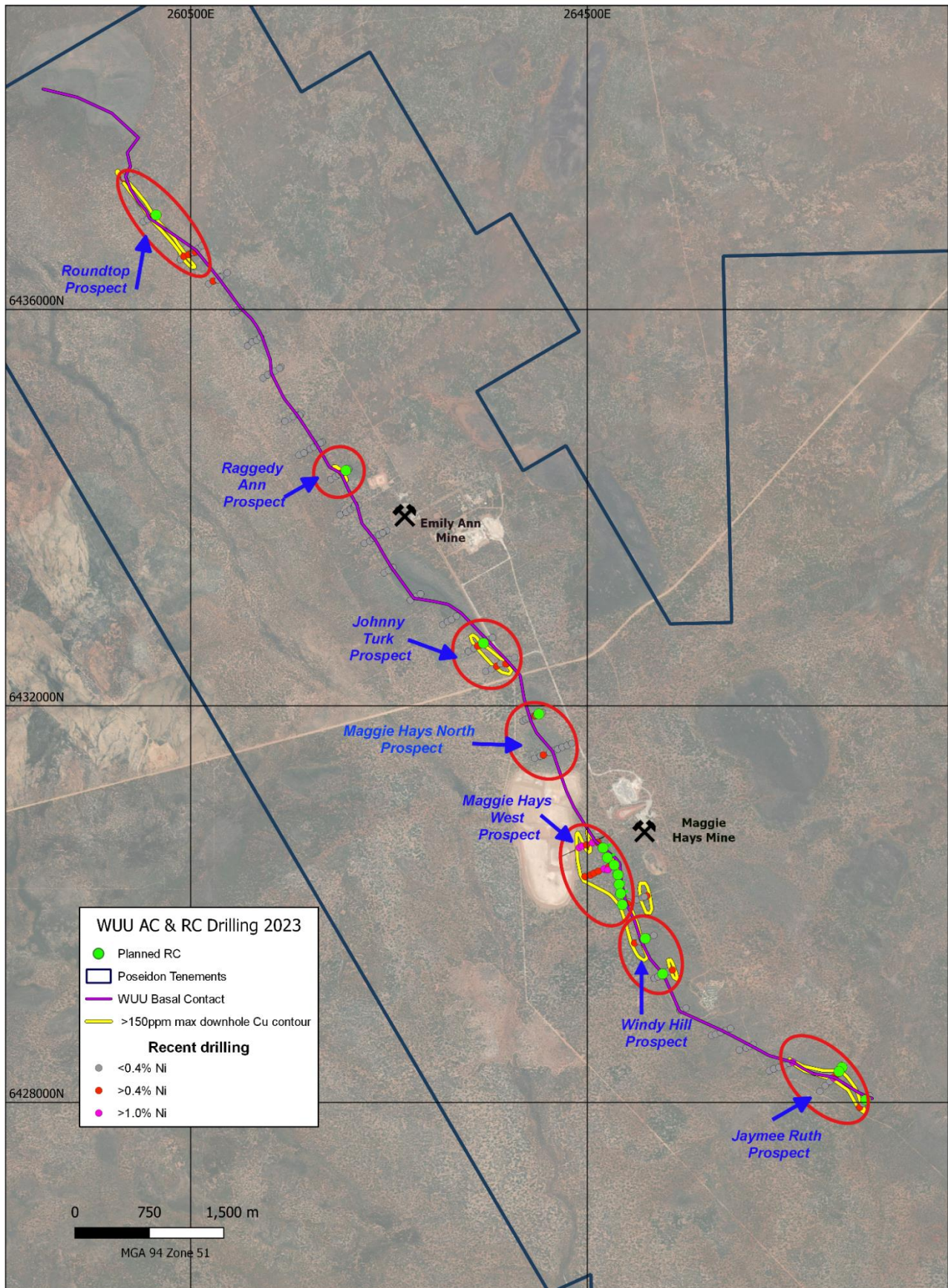


FIGURE 4: RC DRILLHOLE LOCATION PLAN FOR REGIONAL TARGETS AND MAGGIE HAYS WEST

*This announcement was authorised for lodgement by the Board of Poseidon Nickel Limited.*



**Craig Jones**  
Chief Executive Officer

**10 October 2023**

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## About Poseidon Nickel Limited

Poseidon Nickel Limited (ASX Code: POS) is a nickel sulphide exploration and development company with three projects located within a radius of 300km from Kalgoorlie in the Goldfields region of Western Australia and a resource base of around 420,000 tonnes of nickel and 180,000 ounces of gold.

Poseidon's strategy is focused on the exploration and eventual restart of its established nickel operations in Western Australia with the aim of being a +15,000tpa nickel producer. A critical element of this strategy has been to acquire projects and operations with significant existing infrastructure, large nickel resources and geological prospectivity likely to lead to resource growth through the application of modern exploration techniques.

Poseidon owns the Windarra, Black Swan and the Lake Johnston Nickel Projects. In addition to the mines and infrastructure including concentrators at Black Swan and Lake Johnston, these projects have significant exploration opportunities demonstrated by the discovery of the Golden Swan Resource at Black Swan, the Abi Rose and more recently the Maggie Hays West mineralisation at Lake Johnston.

The Company completed a Bankable Feasibility Study on Black Swan in November 2022 which will be the first project to restart. This could be followed by Lake Johnston and then Windarra, subject to favourable Feasibility Studies, appropriate project financing structures being achieved, the outlook for the nickel price remaining positive and all necessary approvals being obtained.

A Definitive Feasibility Study on retreating the gold tailings at Windarra and Lancefield was completed in mid-2022. A potential partner for this project is currently conducting due diligence on the Lancefield gold tailings and accessing the water in the South Windarra pit.

### FORWARD LOOKING STATEMENTS:

This release contains certain forward looking statements including nickel production targets matters that may involve risks or uncertainties and may involve significant items of subjective judgement and assumptions of future events that may or may not eventuate (Forward Statements). Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "except", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and expected costs. Indications of, and guidance on future earnings, cash flows, costs, financial position and performance are also forward-looking statements. No independent third party has reviewed the reasonableness of any such statements or assumptions. None of the Company, their related bodies corporate and their respective officers, directors, employees, or advisers represent or warrant that such Forward Statements will be achieved or will prove to be correct or gives any warranty, express or implied, as to the accuracy, completeness, likelihood of achievement or reasonableness of any Forward Statement contained in this release. Except as required by law or regulation, the Company assumes no obligation to release updates or revisions to Forward Statements to reflect any changes. Recipients should form their own views as to these matters and any assumptions on which any of the Forward Statements are based and not place reliance on such statements.

### PREVIOUSLY REPORTED INFORMATION:

The information in this report that references previously reported exploration results is extracted from the Company's previous ASX announcement "Exciting Greenfields Nickel Intersections at Lake Johnston" dated 3 July 2023 noted in the body of the report where that reference appears. A copy of the announcement is available on the Company's website or on the ASX website ([www.asx.com.au](http://www.asx.com.au)). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and the Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.