

## QUARTERLY REPORT 31 DECEMBER 2023

### KEY POINTS

- **Lake Johnston Nickel Exploration**
  - **Latest drill assay results confirm a strong and coherent Ni-Cu-PGE regolith anomaly at Maggie Hays West over 1km.** Drill results include:
    - PLJA176: 36m @ 0.99% Ni, 286ppm Cu, 141ppb PGE
      - with intervals grading up to 2.37% Ni, 624ppm Cu and 353ppb Pt+Pd
    - PLJA177: 21m @ 1.13% Ni, 374ppm Cu, 136ppb PGE
      - with intervals grading up to 2.16% Ni, 425ppm Cu and 207ppb Pt+Pd
  - Maggie Hays West is confirmed as a compelling regional nickel sulphide target and further drilling will be completed to progress this exciting target
- **Lake Johnston Lithium Exploration**
  - Soil sampling targeting the southern area of the Western Ultramafic Unit, identified several broad anomalous lithium values over a strike length of 3km with corresponding rubidium and caesium anomalism
  - Promising lithium levels of >100ppm Li<sub>2</sub>O returned, similar to those recently reported by other companies exploring for lithium in the Lake Johnston region
  - Farm-In Agreement with Mantis Resources to earn into two tenements in close proximity to Lake Johnston with outcropping lithium bearing pegmatites from historical composite sampling returning high grades from 2.80% up to 3.85% Li<sub>2</sub>O
- **Windarra**
  - Gold tailings processing trial and water access agreement signed with Mt Morgans WA Mining unlocking value from the water in the South Windarra pit and the gold tailings resources
  - External consultant engaged to undertake further nickel exploration targeting
- **Black Swan Restart Project – 1.1Mtpa Throughput**
  - **Metallurgical testwork confirms non-sulphide nickel content of the disseminated serpentinite ore is consistent with Bankable Feasibility Study assumptions**
  - Cost effective 12-month option secured for the provision of 150 accommodation rooms in Kalgoorlie

- **Black Swan Expansion Project – 2.2Mtpa Throughput**
  - Progress on establishing commercial path to market via either High Pressure Acid Leach (HPAL) or Pressure Oxidation (POX) processing:
    - Rougher concentrate samples provided to potential customers who have advised they have achieved nickel extraction of circa 95% for HPAL
    - POX testwork indicates 96% nickel extraction
  - Majority of input assumptions for prefeasibility study received with exception of indicative nickel payability
- **Corporate**
  - Board and executive transition combined with revised care and maintenance operating model at Black Swan forecast to deliver annual cost savings of over \$3.0 million
  - Various fund-raising initiatives being progressed including monetising gold tailings, partnering to fund the lithium exploration at Lake Johnston and partnering the Black Swan project including treating third party feeds
  - R&D return of \$465,000 received from ATO on 18 January 2024
  - Cash and investments of \$3.0 million at 31 December 2023 (excludes R&D return)

**Poseidon Nickel (ASX: POS, “the Company”)** is pleased to provide a report on its activities and progress achieved for the December quarter 2023.

CEO, Craig Jones, commented: *“The December quarter was a busy time with the management transitions and changes to the operating care and maintenance model at Black Swan coming into effect. With a focus on cost reductions across the business as a result of the depressed nickel price, we have implemented various changes that are forecast to deliver annualised savings of over \$3.0 million. Given there is the potential for the nickel price to remain depressed in the short term the focus will remain on reducing costs, while advancing our exciting exploration targets and maintaining our assets.”*

*Lake Johnston has seen a heightened level of activity over the quarter with follow up drilling of the Maggie Hays West prospect returning positive drill results confirming a strong 1km wide coherent Ni-Cu-PGE regolith anomaly. Further work is being planned to target this area in the search for high grade massive sulphides.*

*A soil geochemistry program completed in the southern part of the Lake Johnston tenement package defined multiple broad anomalous lithium values over a strike length of 3km. This discovery will be followed up during 2024. Further to this discovery, an Earn-in Agreement was executed with Mantis Resources over tenements adjacent to ours which host outcropping lithium bearing pegmatites based on historical samples that returned high grades from 2.80% up to 3.85% Li<sub>2</sub>O. These tenements will be incorporated into our 2024 exploration plans.*

*The Black Swan project study works continued following the confirmation that the non-sulphide nickel content of the assays received to date, are in line with the results used in the November 2022 Bankable Feasibility Study. Additional variability testwork is now being finalised to confirm the concentrate product specifications. A 12 month option was secured for the provision of up to 150 accommodation rooms with a service provider within Kalgoorlie. This is a significant step in reducing the execution risk for the project when a decision to restart is made, in a better nickel price environment.*

*The technical study for the Expansion project (up to 2.2Mtpa) was completed during the quarter. We are waiting for indicative nickel payable terms from potential customers. As a result of the current economic environment, the PFS study will not be released until the indicative payability terms are received and the nickel price improves.*

*At Windarra, an agreement has been reached with Genesis Minerals for the supply of water from the South Windarra pit to their Laverton facility when they restart their project. Along with an option to trial process some of the historic Lancefield tailings through the facility, these agreements monetise some of the Company's non-core resources."*

## LAKE JOHNSTON

### Nickel Exploration

During October 2023 the Company commenced an aircore (AC) and reverse circulation (RC) drilling program to progress several highly promising greenfields targets along the Western Ultramafic Unit (WUU) and at Maggie Hays West. Following results from the previous drilling program completed during May 2023, multiple targets were successfully identified with coincident zones of elevated Ni and Cu, along with highly anomalous platinum group elements, confirming strong prospectivity for nickel sulphides. The October 2023 drilling program was designed to infill the widely spaced traverses at each target to further delineate the geochemical dispersion and the morphology of the Western Ultramafic basal contact.

The October 2023 drilling program comprised a total of 18 AC holes for 844m and seven RC holes for 835m. A total of 1,049 samples were collected and dispatched to SGS's Perth Laboratory for analysis. The first batch of assay results were received and reported in December 2023 (ASX announcement "Exploration & Gold Tailings Update" dated 18 December 2023). Significant results from these assay results are presented in Table 1.

**TABLE 1: MAGGIE HAYS WEST ASSAY RESULTS USING 0.4% NI CUT OFF (PGE= PLATINUM + PALLADIUM)**

Hole	From	To	Ni Intercept
<b>PLJA175</b>	3	18	15m @ 0.66% Ni, 191ppm Cu, 171ppb PGE
	21	23	2m @ 0.58% Ni 159ppm Cu, 64ppb PGE
<b>PLJA176</b>	3	39	36m @ 0.99% Ni 286ppm Cu, 141ppb PGE
<b>including</b>	7	13	<b>6m @ 1.23% Ni, 334ppm Cu, 85 ppb PGE</b>
<b>and</b>	21	34	<b>13m @ 1.31% Ni, 332ppm Cu, 229ppb PGE</b>
<b>and</b>	25	26	<b>1m @ 2.06% Ni, 624ppm Cu, 353ppb PGE</b>
<b>and</b>	28	29	<b>1m @ 2.01% Ni, 349ppm Cu, 188ppb PGE</b>
<b>and</b>	33	34	<b>1m @ 2.37% Ni, 347ppm Cu, 249ppb PGE</b>
<b>PLJA177</b>	15	16	1m @ 0.52% Ni, 100ppm Cu, 70ppb PGE
	18	39	21m @ 1.13% Ni, 374ppm Cu, 136ppb PGE
<b>including</b>	26	36	<b>11m @ 1.41% Ni, 425ppm Cu, 162ppb PGE</b>
<b>and</b>	28	29	<b>1m @ 2.16% Ni, 355ppm Cu, 207ppb PGE</b>
<b>PLJA179</b>	33	36	3m @ 0.83% Ni, 170ppm Cu
	43	51	8m @ 0.63% Ni, 124 ppm Cu
	56	59	3m @ 0.60% Ni, 249 ppm Cu
<b>PLJA182</b>	17	25	8m @ 0.55% Ni, 107ppm Cu
	27	28	1m @ 0.41% Ni 147 ppm Cu
	30	35	5m @ 0.44% Ni, 87 ppm Cu
	38	39	1m @ 0.41% Ni, 90 ppm Cu
<b>PLJA183</b>	13	14	1m @ 0.41% Ni, 154ppm Cu
	19	48	29m @ 0.52% Ni, 112ppm Cu
	55	56	1m @ 0.46% Ni, 26ppm Cu
	62	63	1m @ 0.43% Ni, 15ppm Cu
<b>PLJA185</b>	3	4	1m @ 0.48% Ni, 219ppm Cu

	6	8	2m @ 0.45% Ni, 472ppm Cu
	11	17	6m @ 0.44% Ni, 266ppm Cu
	29	32	3m @ 0.51% Ni, 43ppm Cu
	41	42	1m @ 0.51% Ni, 105ppm Cu
<b>PLJA186</b>	33	35	2m @ 0.48% Ni, 75ppm Cu
<b>PLJA187</b>	6	8	2m @ 0.55% Ni, 73 ppm Cu
	11	22	11m @ 0.49% Ni, 89 ppm Cu
	26	31	5m @ 0.55% Ni, 20ppm Cu
	38	39	1m @ 0.53% Ni, 118ppm Cu

### Maggie Hays West

The Maggie Hays West component of the recent drill program consisted of 17 AC holes for 807m drilled on 100m spaced lines with the aim to define the position of the basal (eastern) contact of the WUU against the Banded Iron Formation (BIF). Maggie Hays West is located 200m west of the existing Maggie Hays nickel ore body and associated underground workings (Maggie Hays is 250m from the surface within the Central Ultramafic Unit (CUU)).

The program included important resampling of selected historic diamond drilling holes at Maggie Hays West to add more litho-geochemical information. Of the four holes sampled, two (LJD0003A and MHUD0551) intersected nickel sulphide mineralisation at the WUU contact, Figure 1 (refer to ASX announcement “Exciting Greenfields Nickel Intersections at Lake Johnston” dated 3 July 2023).



**FIGURE 1: HISTORICAL CORE PHOTO (MHUD0551) SHOWING MASSIVE SULPHIDE MINERALISATION INTERSECTED AT THE INTERPRETED BASAL CONTACT OF THE WUU. GRADE 2.55M @ 1.92% Ni AND 1344PPM Cu FROM 235.45M\***

\*Refer to ASX Poseidon announcement “New Mineralised zone identified at Lake Johnston” dated 18 February 2015 for previously reported nickel sulphide intersections.

Following the October 2023 drilling program, assay results for all AC holes at Maggie Hays West were received. The results included a **best nickel intercept of 1.0m at 2.37% Ni, 347ppm Cu and 249ppb Pt+Pd in Hole PLJA176, within a 36m intercept of 0.99% Ni.** This provides significant additional support for the existence of a strong coherent nickel anomaly associated with the interpreted komatiite channel and basal contact of the WUU. Interpretation of the results, in conjunction with a detailed review of the historical drilling suggests the Maggie Hays West anomaly consists of a 1km long channel feature developed in the WUU directly above the CUU. In addition to the anomaly, the channel is also partly defined by an appreciable thinning of the BIF unit that separates the two ultramafic units in this area. A potential connection between the two units associated with the possible complete absence of the

separating BIF unit is now also recognised near to the surface further enhancing the prospectivity of the largely untested WUU and creating an exciting exploration target.

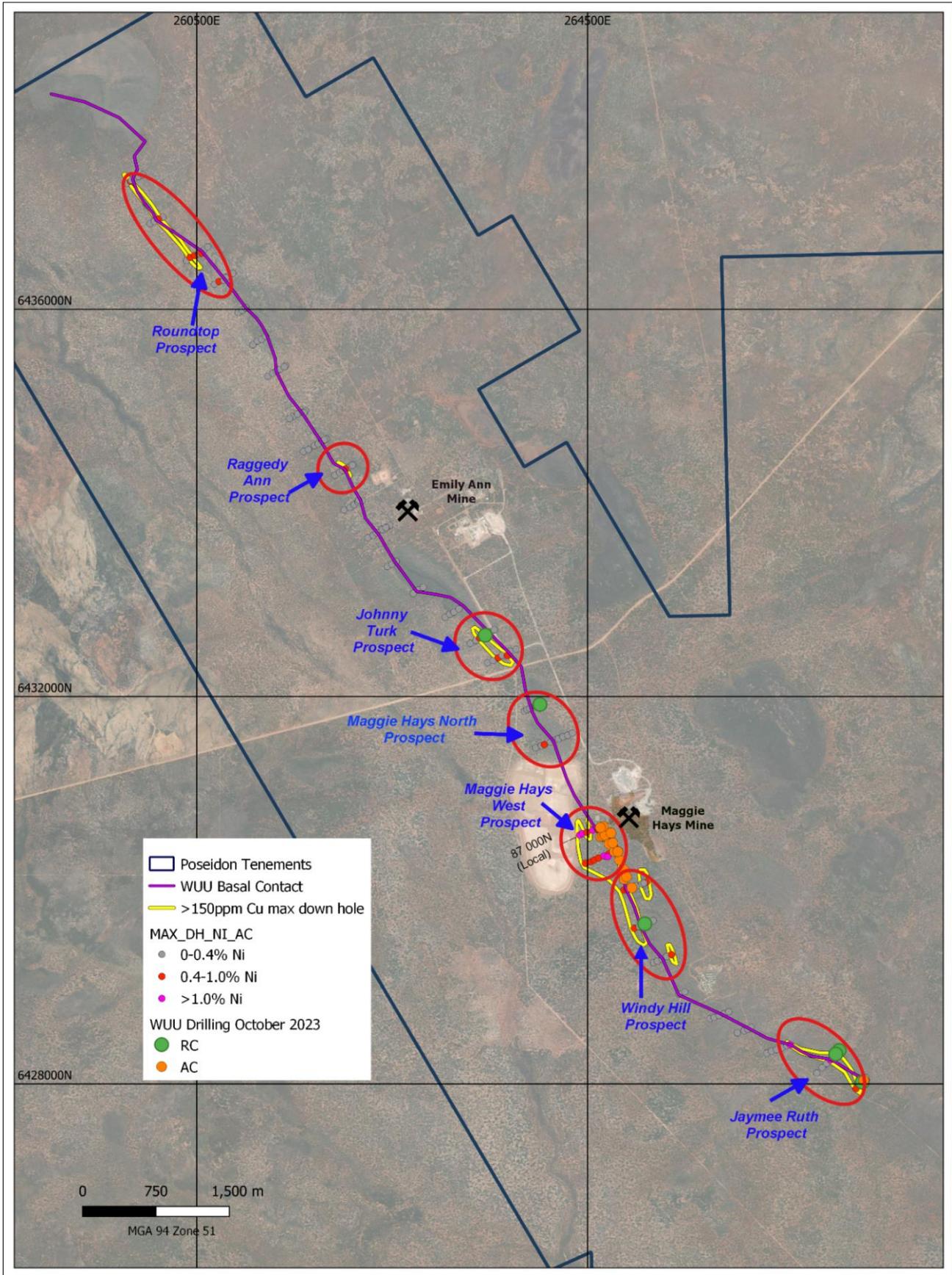
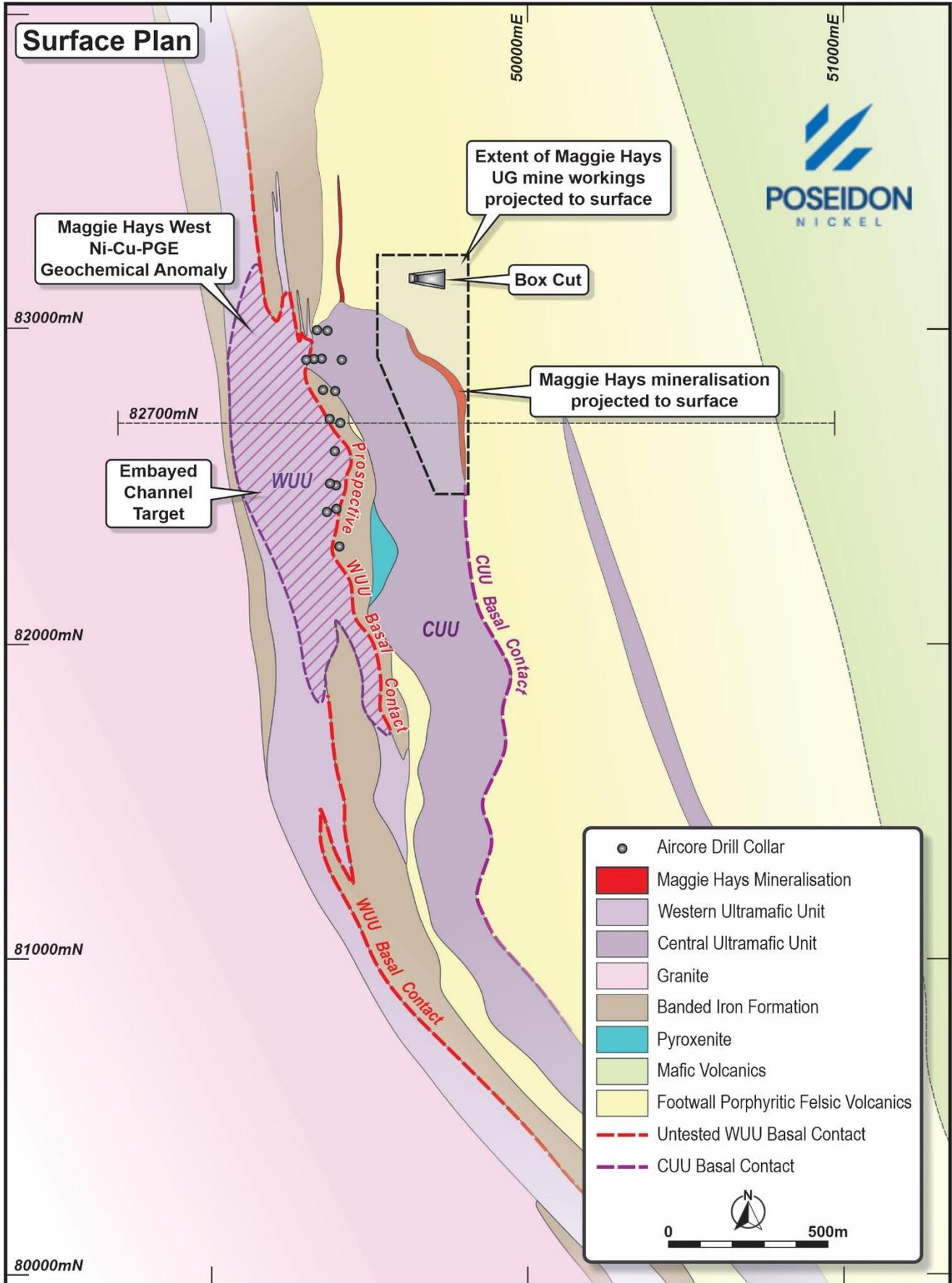
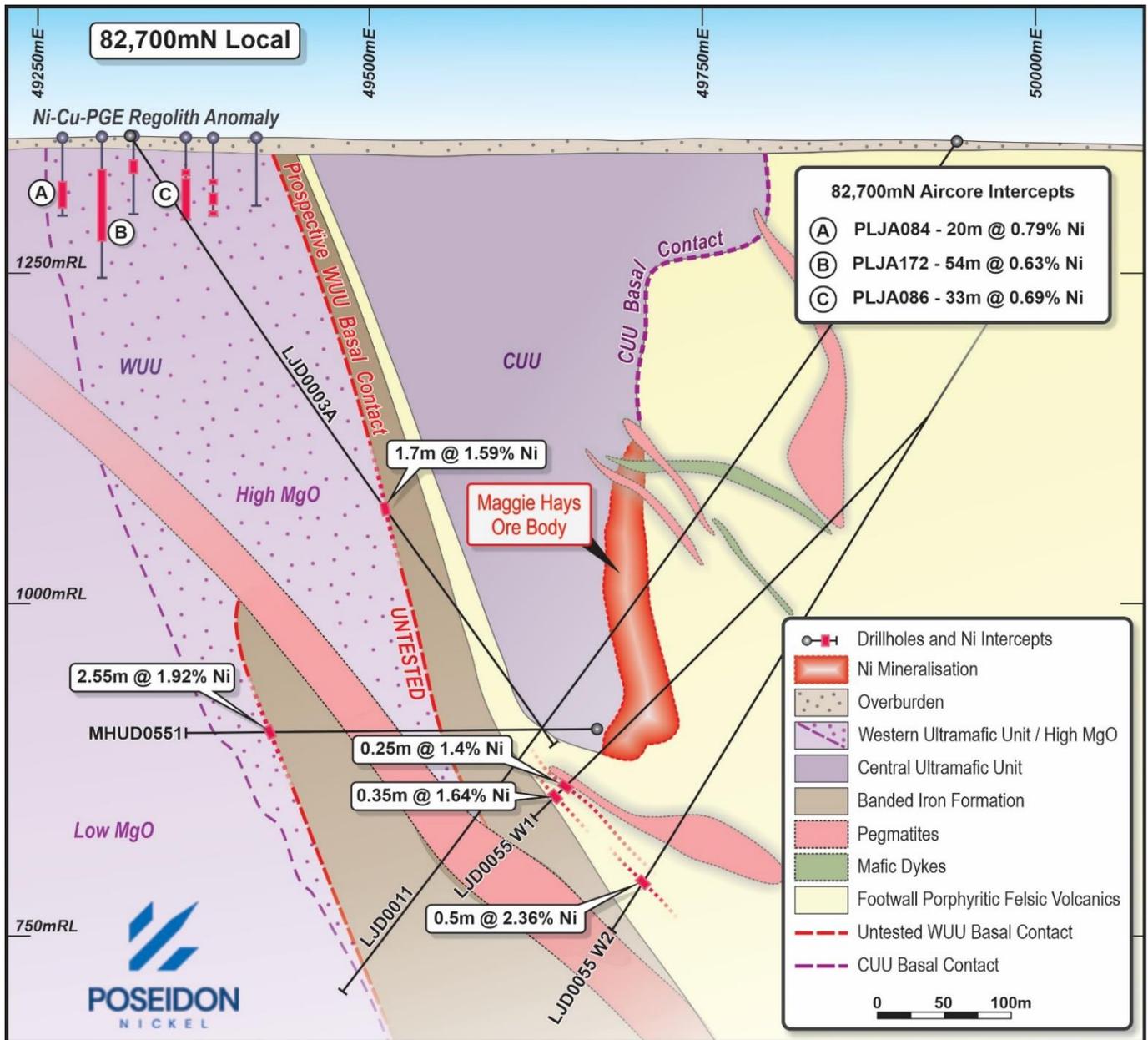


FIGURE 2: LOCATION PLAN SHOWING COMPLETED DRILLING IN OCTOBER 2023 AT LAKE JOHNSTON



**FIGURE 3: GEOLOGICAL INTERPRETATION SURFACE MAP (1350MRL) SHOWING THE RELATIONSHIP BETWEEN THE WUU AND CUU, THE GEOCHEMICAL (Ni:Cu:PGE) ANOMALISM AND THE LOCATION OF THE RECENT AIRCORE HOLES DRILLED IN OCTOBER, 2023**



**FIGURE 4: CROSS SECTION 82700N WITH HISTORICAL INTERCEPTS OF NICKEL SULPHIDES ALONG THE BASAL CONTACT OF THE WUU**

Testing of the Maggie Hays West anomaly and associated WUU “channel-like” zone merits further exploration efforts and planning for efficient targeting with cost effective exploration techniques is being evaluated for the next stages of the work programs for 2024.

### Regional Targets

The October 2023 drilling on regional prospects involved one AC (37m) and seven RC (835m) holes being drilled at Jaymee Ruth, Windy Hill, Maggie Hays North and Johnny Turk. The recently returned assay results from this portion of the program have replicated nickel enrichment within the regolith at each of these prospects except Windy Hill. Intersections of fresh fine, trace disseminated sulphides internal to the WUU at Jaymee Ruth and two metres of massive pyrite located on the WUU basal contact at Windy Hill were both confirmed as iron rich, downgrading these prospects. Significant results are summarised in Table 2 with associated JORC tables released in ASX announcement “*Exploration & Gold Tailings Update*” dated 18 December 2023.

Further assessment of the nature of the regional WUU contact, particularly towards the northern half of the project, has highlighted additional priority shallow AC drilling is required at Johnny Turk, Raggedy Ann and Roundtop to test and further define the extent of high MgO lithologies identified near the basal contact. This additional shallow drilling is planned to be completed in 2024.

**TABLE 2. SIGNIFICANT ASSAY RESULTS RETURNED IN THE REGIONAL RC PROGRAM WITH A 0.4% CUT-OFF.**

Hole	From	To	Ni Intercept
PLJC001	32	37	5m @ 0.62% Ni, 100ppm Cu, 39ppb PGE
PLJC002	7	22	15m @ 0.48% Ni, 66ppm Cu, 18ppb PGE
PLJC005	57	61	4m @ 0.41% Ni, 13ppm Cu, 20ppb PGE
PLJC006	50	54	4m @ 51% Ni, 244ppm Cu, 50ppb PGE
PLJC007	18	26	8m @ 0.47% Ni, 38ppm Cu, 20ppb PGE

\* refer to ASX announcement "Exploration & Gold Tailings Update" dated 18 December 2023 for associated JORC tables.

## Lake Johnston Lithium Review

During the Quarter the Company commenced a review of the lithium potential at Lake Johnston, refer to ASX announcement "Exploration & Gold Tailings Update" dated 18 December 2023. Data from five regional soil sampling programs completed during 2023 to delineate the extent of the WUU were re-examined, four of which were orientation surveys to determine the effectiveness of the Ultrafine technique to define bedrock in transported regimes to the north of the project (Figure 5). The standout area was the southern-most program where in-situ soils covering the WUU confirmed broad anomalous lithium values with corresponding rubidium (Rb) and caesium (Cs) anomalism in places over a strike length of 3km (Figure 6). This anomaly is open to the east and south-west where it continues underneath North Lake Hope. **The lithium levels in the soils are similar to levels recently reported by other exploration companies exploring for lithium bearing pegmatites in the Lake Johnston region.** The coincident Rb in-soil anomalism could indicate the presence of lithium bearing pegmatites as Rb is incompatible in early forming minerals and increases in the melt as they fractionate. It is interpreted that there is a potential granite source associated with the pegmatites that are present to the west of the anomaly.

Three orientation soil sampling programs completed at Roundtop, Johnny Turk and Maggie Hays West along the WUU have also returned similar lithium values but, in these areas, transported soil cover up to 30 metres thick is present. Thus, further work is required to confirm if these results are true bedrock anomalism and if a large system of lithium bearing pegmatites is concealed beneath the transported cover.

In addition to the soil data, a preliminary review of the logged pegmatite data recorded in the Lake Johnston drill-hole database was also completed which identified numerous broad pegmatite zones (>100m thickness). Selective inspection of the available core from several of these zones with pXRF and UV light resulted in eight fluorescent samples with slightly elevated lithium levels which were sent for analysis. Many large pegmatite intrusions are yet to be inspected within the company's tenements.

While the assay results from this limited sampling did not return any significant lithium anomalism, it has provided important information regarding the mineralogy of the pegmatites. These results will be incorporated with the historical data previously collected by Poseidon to build lithium fertility maps of the region.

The initial results of the lithium review support further work, with the Company intending to ramp-up lithium search activities across 2024. The initial focus will involve field checks, resampling of existing cores and verification of existing soil anomalies, followed by mapping and rock chip sampling of known pegmatite outcrops and significantly extending soil sampling coverage over areas of in-situ residual soils. To assist the implementation of this work and drive target selection and prioritisation the Company has engaged a consultant with significant lithium expertise.

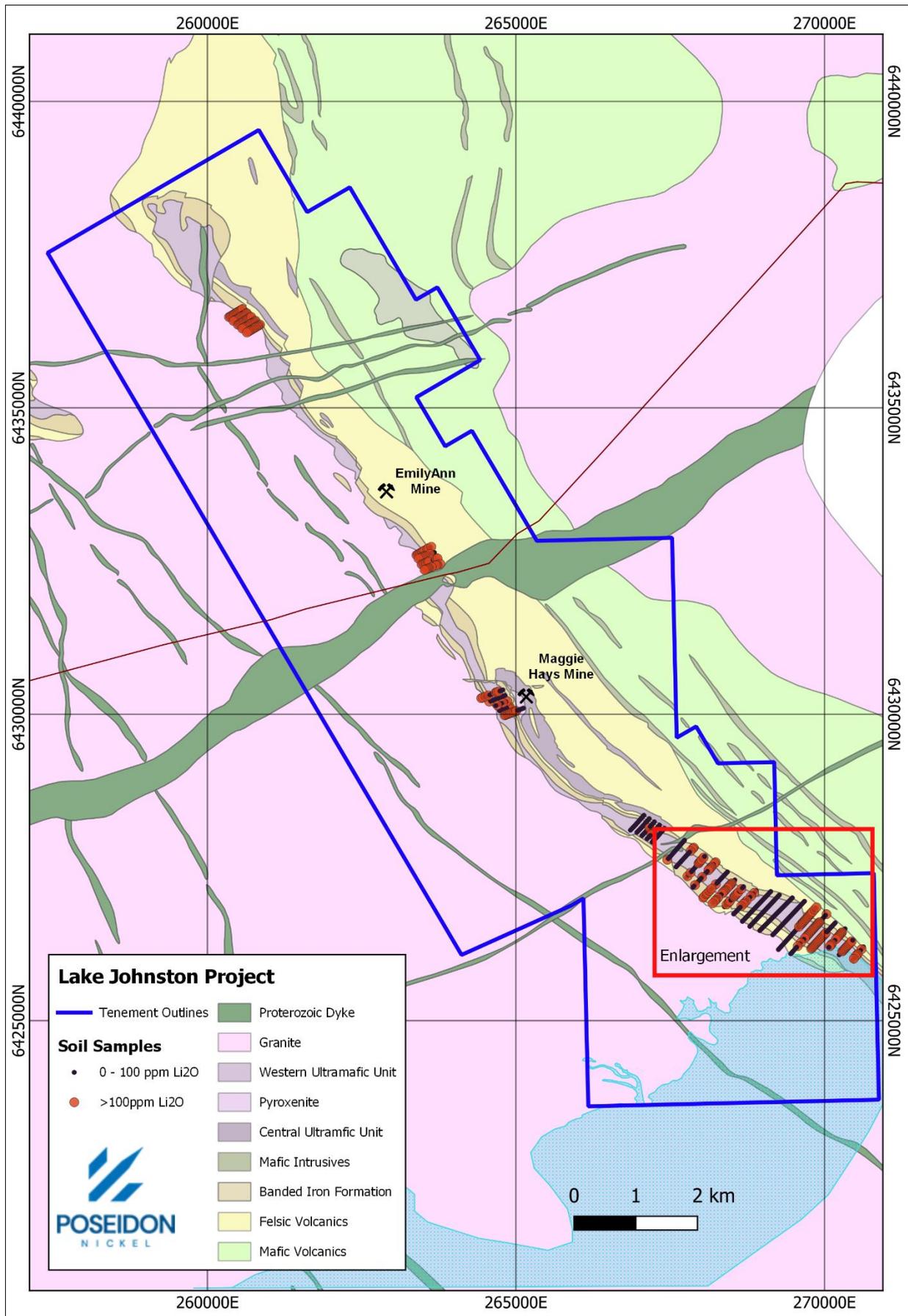
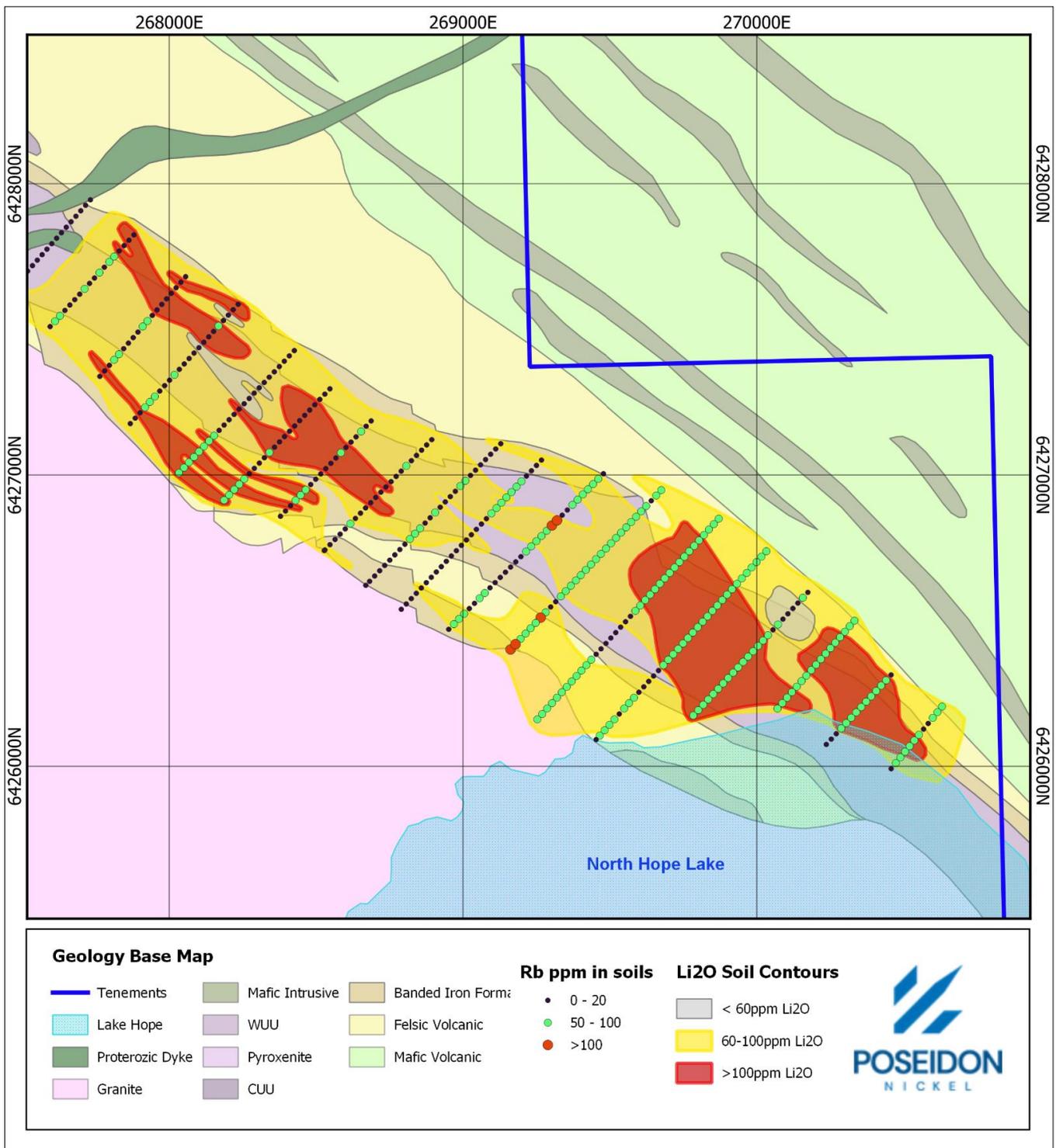


FIGURE 5: REGIONAL GEOLOGICAL PLAN SHOWING THE LOCATION OF THE SOILS PROGRAM OVER THE WUU AND SOILS WITH >100PPM Li<sub>2</sub>O



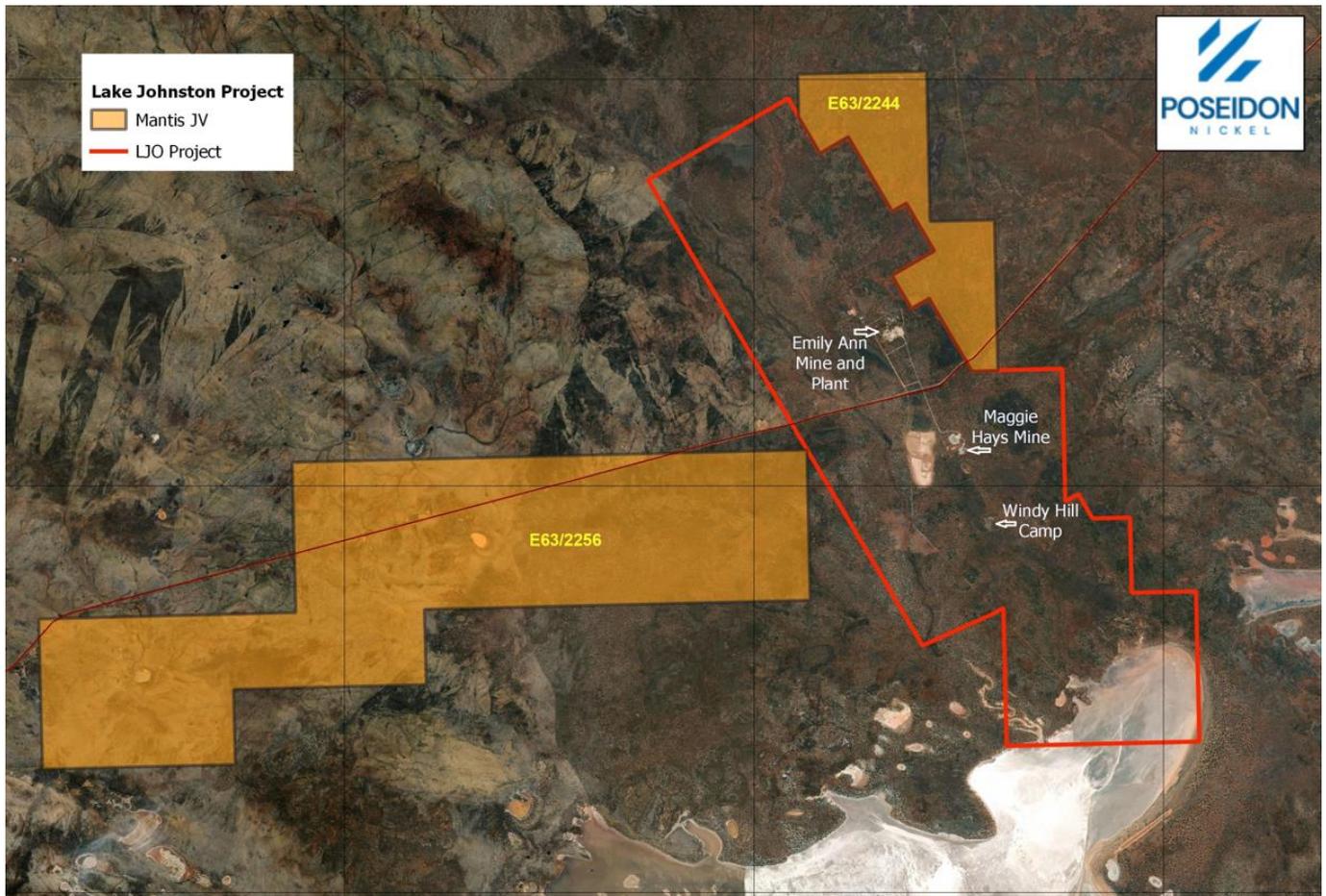
**FIGURE 6: SOILS LOCATED IN THE SOUTHERN PORTION OF THE PROJECT AREA SHOWING Li<sub>2</sub>O CONTOURS AND COINCIDENT RUBIDIUM ANOMALISM WITHIN A RESIDUAL SOIL PROFILE**

### Strategic Farm-In Over Lithium Bearing Pegmatites

During the quarter, the Company entered into a Farm-in Agreement with Mantis Resources Pty Ltd (“**Mantis**”) to earn up to a 100% interest in exploration licences 63/2244 and 63/2256 (the “**Mantis tenements**”) which are located in close proximity to the Lake Johnston Project (shown in Figure 7).

A summary of the key terms for the Farm-In Agreement are included in ASX announcement “*Poseidon Enters Strategic Farm-In Over Lithium Bearing Pegmatites Near Lake Johnston*”, dated 21 December 2023.

During early 2016, Poseidon undertook lithium exploration activities in the northeast area of the Lake Johnston Project. **These activities discovered high grade lithium bearing pegmatites, with composite samples from outcropping pegmatite exposures returning assay results grading from 2.80% to 3.85% Li<sub>2</sub>O (refer to ASX announcement “*High Grade Lithium Bearing Pegmatites Located at Lake Johnston*” dated 23 May 2016).** These outcropping lithium pegmatites were, at the time, within exploration license E63/1067 which was formerly registered to Poseidon and was subsequently surrendered.



**FIGURE 7: LOCATION OF FARM-IN TENEMENTS (E63/2244 AND E63/2256) IN PROXIMITY TO LAKE JOHNSTON PROJECT**

## WINDARRA

### Exploration review

During the June 2023 quarter, the Company engaged geological consultants NewExco to complete a review of exploration targets at Windarra. This review noted a number of high priority targets that required follow-up work. From this review the Company engaged a specialist nickel geological consultant to complete a belt scale review across the tenements and recommend follow up work programs.

An initial focus of approximately 7km of the basal contact between Cerberus and Mt Windarra is being completed. Lithochemical validation of historical drillholes has shown that drill logging has not always matched with lithochemistry in assay and/or with surface mapping. In some area, the historic logging had interpreted thin komatiite flows with low prospectivity to host nickel sulphides. The recent

lithochemistry verification and reinterpretation in these selected areas now points to a much thicker and consistent high magnesium basal ultramafic in a channelised position, a key setting for nickel sulphide, that was intruded by a series of mafic and felsic dykes. These same dyke suites occur at the Mt Windarra and Windarra South nickel mines. Consequently, the revised geological interpretation has re-rated a number of regional targets.

**A three-dimensional footwall model is being completed and six highly prospective targets have been identified in this limited review. Exploration programs are being modelled to test these targets during 2024.**

This targeting work is ongoing and further details of these results will be provided in an exploration update.

## Lancefield Gold Tailings Trial and Windarra Water Access Agreement

During the Quarter the Company signed a term sheet with Mt Morgans WA Mining Pty Ltd (“**Mt Morgans**”), a wholly owned subsidiary of Genesis Minerals Limited (“**Genesis**”), for Mt Morgans to undertake trial processing of up to 100,000 tonnes of Lancefield gold tailings through their Laverton processing facility and to have access to 2.5GL per annum of water from the South Windarra pit.

The term sheet outlines the terms for the following:

- Mt Morgans to undertake a processing trial of up to 100,000 tonnes of Lancefield gold tailings through their currently idled Laverton processing facility; and
- Mt Morgans to access up to 2.5GL of water per annum from the South Windarra open pit over a 5 year period.

In exchange for access to the South Windarra water resource, Poseidon is to receive the following consideration:

- \$500,000 within 10 days of the agreement being signed, subject to satisfaction of certain conditions;
- A further \$500,000 following Mt Morgans receiving all necessary regulatory and environmental approvals to access the water in the South Windarra open pit; and
- Preceding the second anniversary of drawing water by Mt Morgans, and for each subsequent year they draw water, the Company will receive \$400,000 per annum.

Prior to commencement of the Lancefield gold tailings trial, parties are to enter into a profit share agreement, with costs being borne solely by Mt Morgans if there is nil profit.

Previously, the Company acquired an option for the right to treat tailings from Lancefield in August 2020 (refer to ASX announcement “*Poseidon to Acquire Right to Treat Lancefield Gold Tailings*”, dated 17 August 2020).

A summary of the key terms of the term sheet are included in ASX announcement “*Lancefield Gold Tailings Trial and Windarra Water Access Agreement*”, dated 21 December 2023.

## Gold Tailings Project

The Company recently completed metallurgical testwork to assess the potential of Draslovka’s Glycine Leaching Technology, which may improve gold recoveries for the tailings retreatment project. Draslovka is a global leader in cyanide-based chemical specialties and their Glycine Leaching Technology (GlyCAT™) is considered one of the most environmentally sustainable and cost-effective ways to produce precious metals and critical minerals.

Results are reported on representative samples of the Lancefield gold tailings (Comp C) and two samples of nickel tailings from the Windarra Central Dam (WCD). The samples were collected from separate sonic drilling programs.

The objectives of the testwork and a high-level summary of the key outcomes are presented below:

- Objective 1: Assess if Draslovka's GlyCAT™ technology can improve the gold extraction from that reported in the DFS.
  - **Key outcome:** Gold extraction improved by approximately 10% when the sample (particle sizing P<sub>80</sub> 167 microns) was ground finer to P<sub>80</sub> 41 microns. This improvement was evident whether utilising cyanide as the leaching lixiviant or GlyCAT™ (a mixture of cyanide and glycine).
- Objective 2: Assess whether Draslovka's GlyLeach™ technology can extract nickel from the nickel tailings contained in the WCD.
  - **Key outcome:** This proof-of-concept testwork demonstrated circa 49.3% of the nickel and 36.6% of the cobalt was leached and adsorbed onto resin-in-pulp in a 48-hour resin-in-pulp bottle roll test when the sample (particle sizing P<sub>80</sub> 192 microns) was ground finer to P<sub>80</sub> 30 microns and when the slurry temperature was maintained at nominally 50 degrees Celsius.

After interpolation of the leach kinetics for the GlyLeach™ test, approximately 35% of the nickel in the WCD nickel tailings sample was leached within a 16-hour period. This is the leach residence time available in the Carbon-In-Pulp (CIP) leach tanks proposed for the Windarra Gold Tailings Project.

The positive results reported for the nickel tailings sample opens the opportunity to consider incorporating the WCD into the production profile for the Windarra Gold Tailings Project. The activated carbon for the CIP circuit could be switched to a suitable resin when processing the nickel tailings with the nickel and cobalt extracted from the resin using the same stripping circuit, thus utilising the same project infrastructure, mining, and processing equipment.

The positive result for the Lancefield Comp C sample opens the opportunity to significantly improve the gold extraction from the Lancefield gold tailings. Realising both opportunities would require the installation of a Ball Mill and cyclone cluster to grind the tailings finer. Additional testwork would be required to assess if these recent metallurgical breakthroughs can deliver improved economics for the project.

Since the Windarra Gold Tailings Definitive Feasibility Study (DFS) (refer to ASX announcement "*Windarra Gold Tailings DFS Highlights Robust Project*" released 23 July 2021) was released, the Australian dollar gold price has improved significantly, lifting approximately 30% from A\$2,333/oz in the DFS to circa A\$3,000/oz today. The improvement in gold price combined with any uplift in gold recoveries, would improve project economics.

The agreement with Mt Morgans does not impact Poseidon's rights to the remainder of the Lancefield gold tailings or the Windarra gold and nickel tailings. The Company continues to receive inbound interest regarding partnership opportunities for the gold tailings project.

## BLACK SWAN

### Black Swan Restart Project

During the quarter the Company advanced the following workstreams to progress the Black Swan restart project:

- Grid power supply – Western Power continue studies into the supply of grid power to Black Swan. Western Power have advised grid power will be available from late 2024

- Accommodation – see separate section
- Offtake and debt funding – the Company maintains dialogue with the two shortlisted parties on progress of the restart workstreams. Offtake and debt funding discussions are on hold pending an improvement in the nickel market which supports a restart of Black Swan
- Metallurgical recovery assumptions – see separate section

The Company expects a more favourable environment for project development beyond 2023. In line with the Company's strategic plan of developing a pathway to production, restarting Black Swan as soon as it is feasible to do so remains a key goal.

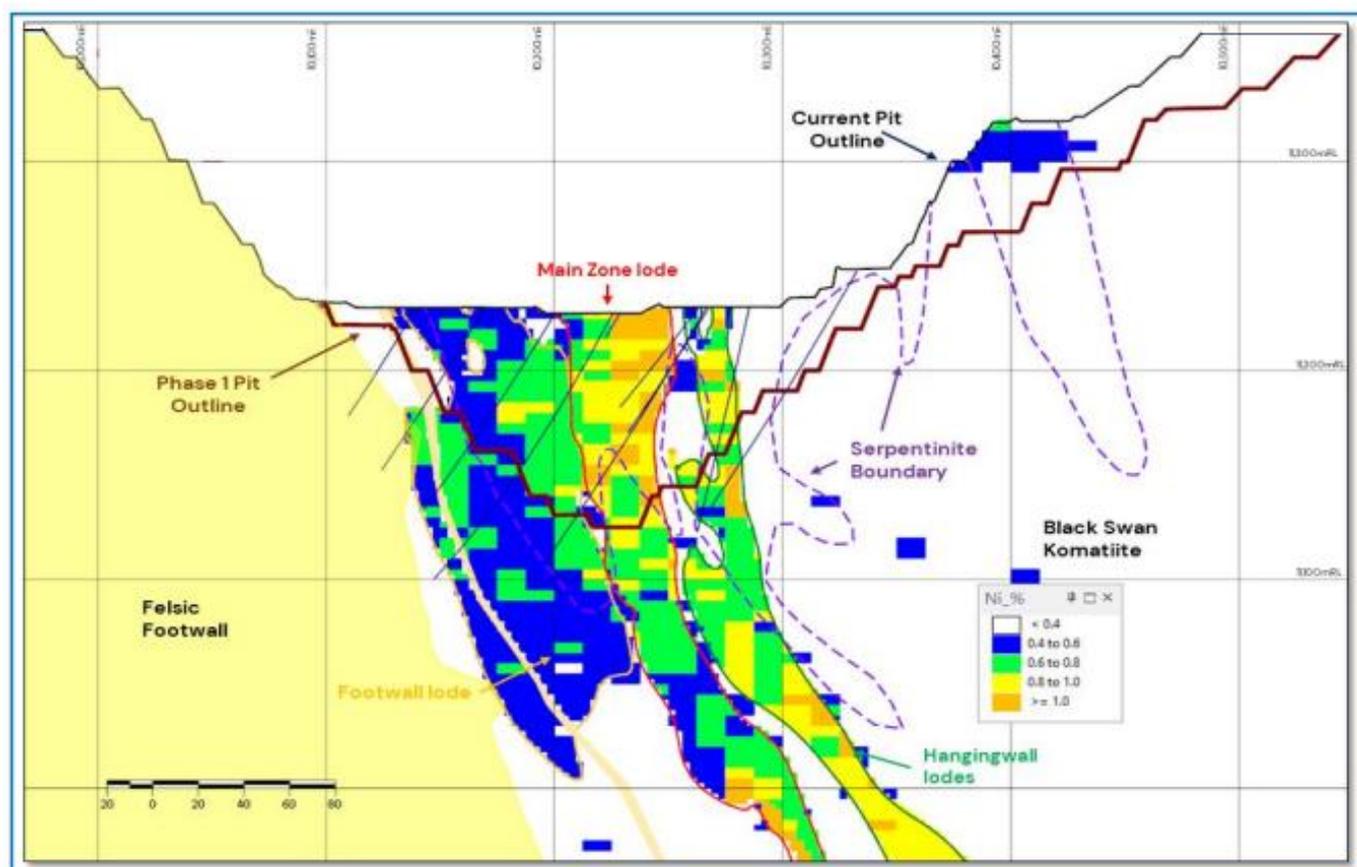
### Accommodation

The Company entered into an option agreement for the provision of accommodation rooms in Kalgoorlie with an established provider. The low-cost option provides Poseidon a minimum of 150 rooms for a minimum of four years. The option can be exercised at any time during the 12-month period through to the end of October 2024.

### Metallurgical Testwork

The Black Swan Disseminated Mineral Resource was updated by Golders in June 2023 and incorporated an additional 3,000 assays from a 112-hole RC drilling program drilled from the base of the pit (refer to ASX Announcement "*Updated Resource provides more Nickel at Black Swan*" dated 7 June 2023).

The updated Mineral Resource pointed to a notable increase in the Non-Sulphide Nickel (NSNi) content within the modelled mineralised zones (see Figure 8) along with a lower sulphur to nickel ratio (S:Ni ratio) in the Hangingwall zone. Follow-up work was conducted in June and July 2023 to compare the NSNi assays from prior diamond drilling (DD) campaigns, however a reliable comparison could not be made given the limited NSNi assays completed. The NSNi assays received from the RC drilling program were approximately two times higher than anticipated. This led to a recommendation to improve confidence in the NSNi assay dataset given the importance of the metallurgical recovery assumptions and anticipated concentrate specification for the project. Various testwork and reviews have now confirmed that the abnormality was associated with the oxidation of the fine RC drill samples prior to assaying and that the NSNi are now confirmed to be in line with the November 2022 Bankable Feasibility Study (BFS).



**FIGURE 8: BLACK SWAN DISSEMINATED RESOURCE IDENTIFYING MINERALISED ZONES, FOOTWALL, MAIN ZONE AND HANGINGWALL**

Expert technical advisors recommended the use of samples derived from DD core to assess the variability in the NSNi content within each mineralised zone and to verify the nickel recovery within each mineralised zone. The metallurgical testwork program will also quantify the concentrate specification quality that can be achieved within each mineralised zone.

The first stage of the confirmatory testwork commenced immediately following the August 2023 capital raising:

- DD core intervals from historical holes were selected and sent to the Strategic Metallurgy laboratory to assess the NSNi content on a 1 metre sampling basis and to confirm metallurgical recoveries. The samples selected represent the three modelled mineralised zones (Main, Hangingwall and Footwall) and provide spatial representation of the second half of the mine plan.
- With reference to Table 3, the underlying NSNi content reported from the first stage of testwork is in line with the metallurgical samples utilised in the November 2022 Bankable Feasibility Study (BFS). Despite the limited number of DD samples (70) tested so far, the results indicate that it is likely that the higher NSNi assays derived from the finer RC drill samples was a result of the samples oxidising between drilling and assaying.

TABLE 3 - INTERIM ASSAY RESULTS FROM DIAMOND CORE METALLURGICAL SAMPLES

BSD Ore Zone	Tonnage Proportion of Mine Plan (%)	Met Comps (No.#)	As (%)	Co (%)	Fe (%)	MgO (%)	Ni (%)	S (%)	SiO2 (%)	NSNi (%)	S/Ni Ratio	%NSNi
<b>Main</b>	51.6	28	0.040	0.022	5.80	37.1	1.14	1.72	34.8	0.090	1.51	8.0
<b>Footwall</b>	25.7	21	0.040	0.020	5.84	37.7	0.78	1.24	33.8	0.123	1.60	15.8
<b>Hangingwall</b>	22.7	21	0.038	0.015	4.75	37.1	0.99	0.66	37.6	0.126	0.67	12.7

The second stage of the confirmatory testwork involves diamond core samples from the 10-hole DD and metallurgical sampling program completed during September 2023:

- Approximately 520 additional NSNi assays were received from the drilling program that was designed to intersect the three mineralised zones and to spatially cover the north to south extents of the resource. Importantly, the NSNi assays received were all in line with the results presented in Table 1 and therefore are also in line with the samples tested in the BFS. This is another positive outcome given the much larger sampling size and extent of the resource covered by the drilling program.
- An investigation into why the NSNi assays reported in the RC in-fill drilling program returned 'elevated' values has concluded that partial sulphide oxidation is the most likely mechanism. RC drilling introduces a significant amount of energy (including heat) into the rock, pulverising it to produce ultra-fine samples. These ultra-fine size fractions are then susceptible to sample 'aging' i.e., partial oxidation of the liberated metal sulphides. The RC samples took approximately six weeks from drilling to be assayed in the laboratory. This significant time period is also believed to have contributed to the partial oxidation of the pulverised RC samples.

The testwork program is continuing with nickel recovery and product specifications for all three mineralised zones to be confirmed and compared to the BFS. The remainder of the program is expected to be completed during the March 2024 quarter period.

## 2.2Mtpa Expansion Project Study

During the quarter progress was made with interested parties provided samples of the rougher concentrate product to confirm suitability as a feed source for their hydrometallurgical processes.

- One potential customer completed High Pressure Acid Leaching (HPAL) testwork and confirmed the nickel extraction for the rougher concentrate was circa 95% when the concentrate was blended at 2.5%, 5.0% and 7.5% (by weight) with their nickel laterite ore.
- Pressure Oxidation (POX) amenability testwork has also demonstrated high nickel extraction can be achieved with the rougher concentrate with relatively rapid leach kinetics. The testwork reported circa 96% nickel extraction within 30 minutes when applying standard POX operating conditions in a laboratory autoclave.

These tests confirm high nickel extraction rates for the rougher concentrate when processed through either a HPAL or POX facility, which is an important input to the Prefeasibility Study (PFS) for the Expansion Project.

The Company has now received all the required input assumptions to the PFS with the exception of nickel payability assumptions for the rougher concentrate. Rougher concentrate is not a widely traded product

and therefore verifiable nickel payability assumptions are not readily available to confirm revenue assumptions in the PFS.

The Company will complete the PFS for internal purposes, however until potential customers are able to provide nickel payability inputs for the study, the Company will not be releasing the study results. Further to this, and similarly to the smelter concentrate project restart, the expansion project would benefit from a more favourable nickel price environment for project development.

## OPERATIONS

### Operating Update

There were no significant safety issues or incidents reported across the operations.

#### Black Swan

Black Swan remained on care and maintenance during the quarter.

#### Lake Johnston

Lake Johnston remained on care and maintenance during the quarter.

With increasing interest in lithium around Lake Johnston, requests for accommodation services at Windy Hill camp have increased along with accommodation fee revenue. The Company recently entered into an agreement to provide accommodation services to one party and is discussing similar arrangements with other parties.

Following an environmental compliance inspection by DMIRS during the June 2023 quarter, a number of items were identified that required action. These included dust control of the tailings facility requiring supplementary monitoring requirements as well as additional measures to cover the surface layer with a binding agent to reduce the amount of windblown dust being generated. These works were completed during the December 2023 quarter safely and under budget.

#### Windarra

Windarra remained on care and maintenance during the quarter.

## CORPORATE

### Leadership and Operations Transition

Following the decision made during the previous quarter to defer the restart of Black Swan, the Company made prudent decisions to significantly reduce the operating costs of the business.

To achieve the cost reduction, some significant personnel changes were made to reduce the corporate overhead while preserving the knowledge base of the Company. Peter Harold transitioned from Managing Director to Non-Executive Chair, Craig Jones was appointed CEO while Derek La Ferla and Dean Hildebrand retired from the board. Revisions have been made to the care and maintenance operating model at Black Swan which will result in a material reduction in annual operating costs without impacting the restart timetable. Combined cost reductions from these initiatives are forecast to deliver over \$3 million of savings on an annualised basis.

## Financial

As at 31 December 2023, the Company held cash and current investments totalling \$3.0 million. Following period end the Company received a \$465,000 R&D refund from the ATO on 18 January 2024.

Over the quarter, Poseidon's net cash outflow from operating and investing activities totalled \$4.2 million which included \$3.1 million of exploration and evaluation costs.

During the quarter, the Company received payment of an exploration incentive scheme grant from the WA government totalling \$138,947 relating to the exploration drilling completed at Lake Johnston during 2023.

With the increase in accommodation services provided at Lake Johnston the Company received increased revenues offsetting the care and maintenance costs for the project. During the December 2023 quarter, \$104,481 accommodation services revenue were accrued.

There were no production or development activities conducted over the period and so no production or development expenditures were incurred.

Related party expenses over the quarter totalled \$47,790, all of which were fees paid to Directors.

## Funding

Various fund-raising initiatives are being progressed including monetising the gold tailings, introducing a partner to fund lithium exploration at Lake Johnston and partnering opportunities for the Black Swan project which could include processing third party material.

*This Quarterly Activities Report was authorised for lodgement by the Board of Poseidon Nickel Limited.*



**Craig Jones**  
CEO

**30 January 2024**

***For further information contact Craig Jones:***

***T: + 61 (0)8 6167 6600***

***E: admin@poseidon-nickel.com.au***

## 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 over 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 profitable and sustainable 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 Black Swan, Lake Johnston and Windarra 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, 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 is planned to be the first project to restart, subject to appropriate project financing structures being achieved, the outlook for the nickel price improving and all necessary approvals being obtained.

A Definitive Feasibility Study on retreating the gold tailings at Windarra and Lancefield was completed in mid-2022. In December 2023 Mt Morgans entered into a trial processing agreement with Poseidon on the Lancefield gold tailings and accessing the water in the South Windarra pit.

### COMPETENT PERSON STATEMENTS:

The information contained within this announcement is extracted from the reports titled:

- "Exploration & Gold Tailings Update" released 18 December 2023
- "Exciting Greenfields Nickel Intersections at Lake Johnston" released 3 July 2023
- "Updated Resource provides more Nickel at Black Swan" released 7 June 2023
- "Positive Black Swan Feasibility Study" released 21 November 2022
- "Black Swan Restart Update" released 12 July 2022
- "More Nickel in Updated Black Swan Mineral Resource" released 4 July 2022
- "Non-Executive Director Warren Hallam Appointment" released 1 June 2022
- "Silver Swan Resource Update" released 27 April 2022
- "Golden Swan Maiden Resource" released 27 October 2021
- "Silver Swan Tailings – Maiden Resource Estimate" released 15 September 2021
- "Windarra Gold Tailings DFS Highlights Robust Project" 23 July 2021
- "Gold Tailings Resource at Windarra updated to JORC 2012 Indicated" 22 Jun 2020.

which are available to view on [www.poseidon-nickel.com.au](http://www.poseidon-nickel.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 announcement and, in the case of Minerals Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not materially modified from the original market announcement."

The Australian Securities Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.

### 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.

## APPENDIX 1 - Nickel Projects Mineral Resource Statement

Nickel Sulphide Resources	JORC Compliance	Cut Off Grade	MINERAL RESOURCE CATEGORY															
			MEASURED			INDICATED			INFERRED			TOTAL						
			Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Co% Grade	Co Metal (t)	Cu% Grade	Cu Metal (t)
<b>BLACK SWAN PROJECT</b>																		
Black Swan	2012	0.4%	800	0.78	7,000	15,100	0.73	111,000	10,400	0.69	71,000	26,300	0.72	189,000	0.02	4,000	0.03	7,900
Silver Swan	2012	1.0%	-	-	-	138	9.00	12,450	8	6.00	490	146	8.80	12,940	0.16	240	0.36	530
Golden Swan	2012	1.0%	-	-	-	112	4.70	5,200	48	2.20	1,050	160	3.90	6,250	0.08	120	0.30	480
Silver Swan Tailings	2012	NA	675	0.92	6,200	-	-	-	-	-	-	675	0.92	6,200	0.07	460	0.04	270
Stockpiles	2012	0.4%	-	-	-	1,200	0.49	5,900	400	0.53	1,900	1,600	0.50	7,800	NA	NA	NA	NA
<b>LAKE JOHNSTON PROJECT</b>																		
Maggie Hays	2012	0.8%	-	-	-	2,600	1.60	41,900	900	1.17	10,100	3,500	1.49	52,000	0.05	1,800	0.10	3,400
<b>WINDARRA PROJECT</b>																		
Mt Windarra	2012	0.9%	-	-	-	922	1.56	14,000	3,436	1.66	57,500	4,358	1.64	71,500	0.03	1,200	0.13	5,700
South Windarra	2004	0.8%	-	-	-	772	0.98	8,000	-	-	-	772	0.98	8,000	NA	-	NA	-
Cerberus	2004	0.75%	-	-	-	2,773	1.25	35,000	1,778	1.91	34,000	4,551	1.51	69,000	NA	-	NA	-
<b>TOTAL</b>																		
Total Ni, Co, Cu Resources	2004 & 2012		1,475	0.84	13,200	23,600	0.98	233,500	17,000	1.03	176,000	42,100	1.00	422,700	0.02	7,800	0.05	18,300

Note: totals may not sum exactly due to rounding. NA = Information Not Available from reported resource model.

- **Black Swan Resource** as at 7 June 2023 (see ASX announcement "Updated Resource provides more Nickel at Black Swan" released 7 June 2023)
- **Silver Swan Resource** as at 27 April 2022 (see ASX announcement "Updated Silver Swan Resource underpins significant increase in high-grade Indicated resource base" released 27 April 2022)
- **Golden Swan Resource** as at 27 October 2021 (see ASX announcement "Golden Swan Maiden Resource" released 27 October 2021).
- **Silver Swan Tailings Resource** as at 15 September 2021 (see ASX announcement "Silver Swan Tailings – Maiden Resource Estimate" released 15 September 2021)
- **Stockpile Resource** as at 22 July 2014 (see ASX announcement "Poseidon Announces Black Swan Mineral Resource" released 4 August 2014)
- **Maggie Hays Resource** as at 17 March 2015 (see ASC announcement "50% Increase in Indicated Resources at Lake Johnston" released 17 March 2015)
- **Mt Windarra Resource** as at 7 November 2014 (see ASX announcement "Poseidon Announces Revised Mt Windarra Resource" released 7 November 2014)
- **South Windarra and Cerberus Resource** as at 30 April 2013 (see ASX announcement "Resource Increase of 25% at Windarra Nickel Project" released 1 December 2011)

## Appendix 2 – Nickel Reserves Statement

Nickel Sulphide Reserves	JORC Compliance	BLACK SWAN PROJECT							
		Proved/Probable	Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Co % Grade	Co Metal (t)	Cu % Grade	Cu Metal (t)
Black Swan	2012	Proved	579	0.7	4.2	NA	NA	NA	NA
		Probable	2,608	0.7	17.7	NA	NA	NA	NA
Silver Swan	2012	Proved	-	-	-	NA	NA	NA	NA
		Probable	179	5.0	9.0	NA	NA	NA	NA
Golden Swan	2012	Proved	-	-	-	NA	NA	NA	NA
		Probable	100	4.0	4.0	NA	NA	NA	NA
Total Ni Reserves	2012	Proved	579	0.7	4.2	NA	NA	NA	NA
		Probable	2,887	1.1	30.7	NA	NA	NA	NA
		Total	3,466	1.0	34.9	NA	NA	NA	NA

Note: totals may not sum exactly due to rounding. NA = Information Not Available from reported resource model.

- Black Swan Reserve, Silver Swan Reserve and Golden Swan Reserve as at 21 November 2022 (see ASX announcement “Positive Black Swan Feasibility Study” released 21 November 2022)

The Company is not aware of any new information or data that materially affects the information in the relevant market announcements. All material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

## APPENDIX 3 – Gold Projects Ore Resource Statement

### Windarra Gold Tailings Project North and South Dams Mineral Resource – JORC 2012 Tabulation

INDICATED							
	Tonnes (t)	AU (g/t)	Au (oz)	Ag (g/t)	As (ppm)	CU (ppm)	Ni (ppm)
North Dam	3,902,000	0.78	98,000	1.9	1,805	365	975
South Dam	850,000	0.50	14,000	0.6	645	355	2,533
<b>Total</b>	<b>4,752,000</b>	<b>0.73</b>	<b>112,000</b>	<b>1.7</b>	<b>1,600</b>	<b>363</b>	<b>1,250</b>

### Windarra Gold Tailings Project Central Dam Mineral Resource – JORC 2012 Tabulation

INDICATED							
	Tonnes (t)	AU (g/t)	Au (oz)	As (ppm)	CU (ppm)	Ni (%)	
Central	6,198,000	0.37	74,000	435.0	270	0.3	

### Lancefield Gold Tailings Mineral Resource – JORC 2012 Tabulation

INDICATED AND INFERRED							
	Tonnes (t)	AU (g/t)	Au (oz)	Ag (g/t)	As (ppm)	CU (ppm)	Ni (ppm)
Indicated	1,210,084	1.27	49,278	3.61	2,789	314	70
Inferred	337,964	1.20	13,063	3.48	2,951	269	57
<b>Total</b>	<b>1,548,048</b>	<b>1.23</b>	<b>62,341</b>	<b>3.58</b>	<b>2,824</b>	<b>304</b>	<b>67</b>

**Windarra Gold Tailings North and South Dams Resource:** no cut-off grade has been used to report the resource, as potential mining method dictates removal of the entire dams. a dry bulk in situ density of 1.6 t/m<sup>3</sup> has been used to derive tonnages. resource numbers in the above table may not sum exactly due to rounding.

**Windarra Gold Tailings central Dam Resource:** No cut-off grade has been used to report the resource, as the potential mining method dictates removal of the entire dam down to a specified elevation. The mineralisation has been reported above a flat elevation of 446 mRL; there are tailings below this level but these have been shown by drilling to contain no gold, and it is anticipated that the proposed mining method will not treat material below this elevation. A dry bulk in situ density of 1.6 t/m<sup>3</sup> has been used to derive tonnages. Resource totals may not sum exactly due to rounding.

Windarra Gold Tailings Resource as at 22 June 2020 (see ASX announcement "Gold Tailings Resource at Windarra updated to JORC 2012 Indicated" 22 Jun 2020).

Lancefield Gold Tailings Resources as at 23 July 2021 (see ASX Announcement "Windarra Gold Tailings DFS Highlights Robust Project" 23 July 2021).

## TENEMENTS HELD

## Tenements Held as at 31 December 2023

AREAS OF INTEREST	TENEMENTS	ECONOMIC ENTITY'S INTEREST
Western Australia		
Windarra Nickel Assets	M261SA, G38/21, L38/121, L39/184, L38/199, L38/218, L39/221	100%
Windarra South	L38/119, L38/122, L38/220	100%
Woodline Well	M39/1075, L39/224	100%
Pool Well	M38/1244, M38/1245, L38/118	100%
Lake Johnston Nickel Assets	G63/8, G63/5, L63/51, L63/52, L63/55, L63/57, M63/163, M63/282, M63/283, M63/284, M63/292, M63/293, M63/294, M63/522, M63/523, M63/524, E63/1784 (80% interest), E63/2244 (farm-in), E63/2256 (farm-in)	100% (except for E63/1784, E63/2244, E63/2256)
Black Swan Nickel Assets	M27/39, M27/200, M27/214, M27/216, L27/57, L27/58, L27/59, L27/74, L27/75, L27/77, L27/78, L24/219, L24/222, L27/95, L27/96, G27/2	100%

E = Exploration Licence M = Mining Lease MSA = Mining Tenement State Act PL = Prospecting Licence L = Miscellaneous Licence

Mining Tenements Acquired or Disposed during the December 2023 Quarter

40% Compulsory Partial Surrender of E63/1784 was completed 12<sup>th</sup> October 2023. Eight blocks were dropped as per DEMIRS requirements for the tenement in its 6<sup>th</sup> year.

Beneficial Percentage Interests Held in Farm-In or Farm-Out Agreements during the December 2023 Quarter

Farm-out Agreement

Nil

Beneficial Percentage Interests Held in Farm-In or Farm-Out Agreements Acquired or Disposed of during the December 2023

Farm-in Agreement entered for exploration licences 63/2244 and 63/2256 (refer to ASX announcement, "Poseidon Enters Strategic Farm-in Over Lithium Bearing Pegmatites Near Lake Johnston", dated 21 December 2023).

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Poseidon Nickel Limited

ABN

60 060 525 206

Quarter ended ("current quarter")

31 December 2023

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	241	309
1.2	Payments for		
	(a) exploration & evaluation (if expensed)	(1,176)	(2,843)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(925)	(1,837)
	(e) administration and corporate costs	(443)	(1,067)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	99	202
1.5	Interest and other costs of finance paid	(72)	(111)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other – sundry income	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(2,276)</b>	<b>(5,347)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(44)	(80)
	(d) exploration & evaluation (if capitalised)	(1,887)	(3,345)
	(e) investments	-	-
	(f) other non-current assets	-	-

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	300
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(1,931)</b>	<b>(3,125)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	150	6,098
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(5)	(324)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>145</b>	<b>5,774</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	7,065	5,701
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,276)	(5,347)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,931)	(3,125)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	145	5,774

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>3,003</b>	<b>3,003</b>

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	3,003	7,065
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>3,003</b>	<b>7,065</b>

**6. Payments to related parties of the entity and their associates**

6.1	Aggregate amount of payments to related parties and their associates included in item 1	48
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

**Current quarter  
\$A'000**

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

**7. Financing facilities**

*Note: the term "facility" includes all forms of financing arrangements available to the entity.*

*Add notes as necessary for an understanding of the sources of finance available to the entity.*

	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-
7.2	Credit standby arrangements	-
7.3	Other (please specify)	-
<b>7.4</b>	<b>Total financing facilities</b>	<b>-</b>

**7.5 Unused financing facilities available at quarter end**

-

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>8. Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (Item 1.9)	(2,276)
8.2 Capitalised exploration & evaluation (Item 2.1(d))	(1,887)
8.3 Total relevant outgoings (Item 8.1 + Item 8.2)	(4,163)
8.4 Cash and cash equivalents at quarter end (Item 4.6)	3,003
8.5 Unused finance facilities available at quarter end (Item 7.5)	-
8.6 Total available funding (Item 8.4 + Item 8.5)	3,003
8.7 <b>Estimated quarters of funding available (Item 8.6 divided by Item 8.3)</b>	<b>0.7</b>

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: During the past 6 months the Company implemented cost saving initiatives which delivered over \$3.0 million of annualised savings. The Company is reducing operating costs to ensure net operating cash flows reflect a reduced level of spending going forward.

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: The Company is running a number of concurrent processes on various assets to raise funds. If these initiatives are not successful the Company may consider seeking new equity via a capital raising. If the Company decides to raise funds or proceed with an asset sale, it believes it would be successful in raising sufficient funds to continue with the planned level of operations.

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: The Company expects to continue its operations and meet business objectives in the future with funding from existing cash reserves and a potential capital raise and/or asset sale if required, at the appropriate time.

## Compliance statement

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- This statement gives a true and fair view of the matters disclosed.

Date: 30 January 2024 .....

Authorised by: The Board of Poseidon Nickel Ltd .....

---

**Mining exploration entity or oil and gas exploration entity quarterly cash flow report**

---

**Notes**

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.