

QUARTERLY REPORT 30 SEPTEMBER 2023

KEY POINTS

- **Black Swan 1.1Mtpa Restart Project**
 - **First stage confirmatory metallurgical testwork results indicate that the non-sulphide nickel content of the disseminated serpentinite ore is consistent with Bankable Feasibility Study**
 - Environmental Works Approval and regulatory approval for the Mining Proposal received
 - Western Power progressing engineering studies for the delivery of grid power from late 2024
 - Offtake and project debt financing negotiations with the two shortlisted parties on hold pending results from confirmatory metallurgical testwork
 - Decision made during the quarter to defer the Black Swan restart due to external commodity and equity market factors and project related matters
- **Black Swan Expansion Project - 2.2Mtpa throughput**
 - Testing of rougher concentrate by potential customers indicates nickel extraction of circa 95% through HPAL processing
 - Expansion Project Prefeasibility Study continues to progress and is on track to be completed late in 2023, subject to confirming nickel payability assumptions
- **Lake Johnston**
 - Drilling and assay results returned elevated Ni, Cu and PGE's along with other positive characteristics confirms strong prospectivity of the Western Ultramafic Unit
 - Follow up drilling to test all anomalous geochemistry trends along the Western Ultramafic Unit including Maggie Hays West completed during October 2023
- **Windarra**
 - Various negotiations progressing to unlock the value of the Windarra asset
- **Corporate**
 - Craig Jones appointed CEO with Peter Harold transitioning to Non-Executive Chairman
 - Derek La Ferla and Dean Hildebrand have stepped down off the board
 - Board and executive transition combined with revised care and maintenance operating model at Black Swan will deliver costs savings of approximately \$3.0 million annually
 - Share placement completed raising \$6.0 million (before costs), 297.5 million new shares issued at 2.0 cents per share
 - Cash and investments of \$7.1 million at 30 September 2023

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

CEO, Craig Jones, commented: *“Following the decision to defer the restart of the Black Swan project primarily due to adverse market conditions, we have implemented initiatives to significantly reduce costs across the business. There has been a number of board and management changes, reducing both the number of directors and executives in the business. There has also been a change in the care and maintenance operating model at Black Swan resulting in a material reduction in annual operating costs without impacting the restart timetable for the mine and processing plant when the decision to restart is made. The current cost savings implemented total circa \$3 million on an annualised basis.*

We continue to progress key workstreams for Black Swan, including grid power studies with Western Power, additional metallurgical testwork to confirm recoveries and concentrate quality used in the November 2022 Bankable Feasibility Study, assessing accommodation options in Kalgoorlie for the proposed FIFO workforce and continuing to engage with the two shortlisted offtake and debt financing providers.

As we move forward, we will continue to assess the restart of Black Swan based on the outlook for global commodity and equity markets and the nickel price environment. We remain committed to restarting Black Swan, however until the nickel market outlook improves, the focus will be on targeted exploration and proximal business development opportunities to drive value for shareholders.

Following the successful Lake Johnston 6,500 metre reconnaissance drill program earlier this year, which returned positive results and identified numerous highly prospective targets along the Western Ultramafic Unit, we have commenced a further program to follow-up the priority targets.

The recent Western Ultramafic Unit drilling has delivered positive results with coincident nickel, copper and PGE’s which are considered indicators for nickel sulphides and we rate the prospectivity at Lake Johnston for a new high grade nickel sulphide resource as high.

We continue to assess business development opportunities with a number of proximal resource companies showing interest in entering partnerships for mutual benefits on each of our projects.

I am excited to be taking on the CEO role and look forward to working with the board and Poseidon team to unlock the significant value of our nickel resources and existing infrastructure”

BLACK SWAN

Black Swan Restart Project

During the quarter the decision was made to defer the Black Swan project restart due to the volatility in global commodity and equity markets, the need to complete additional confirmatory metallurgical testwork, the later availability of grid power and the continued tightness in the labour market and lack of accommodation in Kalgoorlie for FIFO workers.

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. The following key workstreams supporting the project restart are continuing:

- 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 – discussions continue with a potential provider for an option over 150 rooms at a mining camp in Kalgoorlie
- Offtake and debt funding – see separate section
- Metallurgical recovery assumptions – see separate section

Offtake and Debt Financing

The Company progressed offtake and debt financing document drafting with two large international groups heading into the September 2023 quarter. Following the announcement of the deferral of the Project restart drafting was put on hold pending results from the confirmatory metallurgical testwork.

Both parties have confirmed they wish to conclude offtake and debt financing to secure the smelter grade concentrate that will be produced by the Project and the Company is maintaining dialogue with both parties on matters impacting the restart.

Metallurgical Testwork

The Black Swan Disseminated Mineral Resource was updated by Golders in June 2023 after the return of approximately 3,000 assays from the 11,000m, 112-hole RC drilling program drilled from the base of the pit earlier this year (refer to ASX Announcement “*Updated Resource provides more Nickel at Black Swan*” dated 7 June 2023).

The updated Mineral Resource identified a potentially significant increase in the Non-Sulphide Nickel (NSNi) content within the modelled mineralised zones and a significantly lower sulphur to nickel ratio (S:Ni ratio) in the Hangingwall zone than previous assay data.

Expert technical advisors recommended the use of samples derived from diamond drill core and not RC samples to assess the variability in the NSNi content within each mineralised zone and to verify the nickel recovery within each mineralised zone. This is due to the concern of oxidation of the sulphides within the finely ground RC samples. The metallurgical testwork program will also confirm the concentrate quality achievable from each mineralised zone. The additional metallurgical data will bolster the current baseline dataset and further optimise future ore blends to deliver desired concentrate quality.

The first stage of this confirmatory testwork commenced immediately following the August 2023 capital raising and involved selecting diamond drill core internals from historical holes and sending these to the Strategic Metallurgy laboratory to assess the NSNi content. 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. The NSNi contents reported from the first stage of testwork (refer Table 1) are in line with the metallurgical samples utilised in the BFS and potentially confirms sulphide oxidation of the fine RC sample assays, **which is a very positive outcome.**

TABLE 1 - 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 (%)	SiO ₂ (%)	NSNi (%)	S/Ni Ratio	%NSNi
Main	51.6	28	0.040	0.022	5.80	37.1	1.14	1.72	34.8	0.090	1.51	8.0
Footwall	25.7	21	0.040	0.020	5.84	37.7	0.78	1.24	33.8	0.123	1.60	15.8
Hangingwall	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 ten-hole diamond drilling and metallurgical sampling program completed during September 2023. The drilling program 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 are all in line with the results presented in Table 1 and are in line with the samples tested in the BFS. This is further confirmation of the oxidation of the fine RC samples and a very positive outcome given the much larger sampling size and extent of the resource covered by the drilling program.

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

The Expansion Project prefeasibility study remains on track for completion in late 2023, subject to confirming payabilities for the rougher concentrate, with the following workstreams progressing:

- The engineering and processing study, which provides the estimated plant refurbishment capital expenditure and processing operating costs has been completed.
- Mine plan optimisation work is nearing completion and will provide indicative mining schedules, estimated capital expenditure and operating cost inputs for the larger open pit design.
- Engagement with potential customers for the rougher concentrate remains ongoing with concentrate samples supplied to interested parties to confirm suitability as a feed source for their hydrometallurgical processes. One potential customer has completed HPAL testwork confirming nickel extraction for the rougher concentrate is circa 95%.
- Work continues on a pressure oxidation testwork program using the same concentrate samples to assist with prefeasibility study assumptions.

Rougher concentrate is not a widely traded product and therefore verifiable nickel payability assumptions are not readily available to confirm revenue assumptions in the Prefeasibility Study (PFS). As such, the study is subject to potential customers being able to provide such information. Poseidon continues to progress the product testing with potential customers and is anticipating receiving indicative payability assumptions that can be used in the PFS.

Black Swan Exploration

Work undertaken by geological consultants, Newexco Exploration (Newexco) and our geological team identified several exploration targets (priority targets are shown in Figure 1). Target 5 was identified as a high priority target which consisted of a series of unexplained historic electromagnetic anomalies located to the north of the high-grade Silver Swan channel, approximately 1,000m below surface.

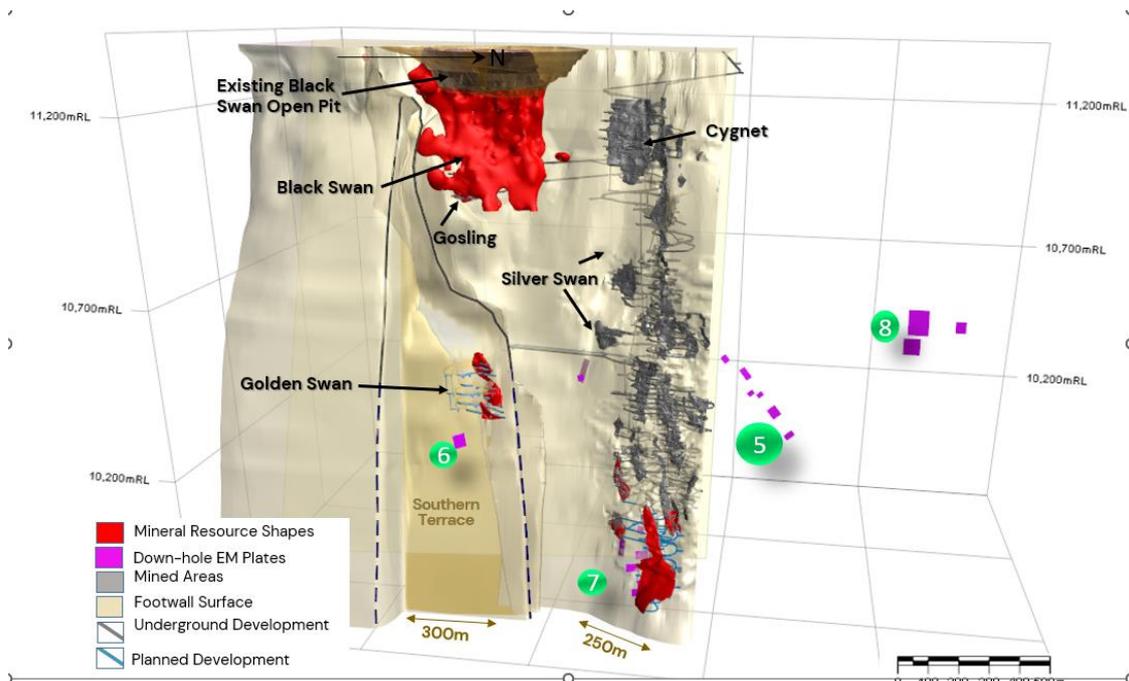


FIGURE 1: BLACK SWAN – PRIORITY DRILL TARGETS IN THE VICINITY OF THE SILVER SWAN HIGH-GRADE CHANNEL

To test Target 5, a 400m hole was drilled from the Silver Swan decline. In addition, a nearby historic hole was reopened and surveyed. The EM surveys utilising the underground EM loop did not replicate the historic anomalies that were identified using the surface loop. However, the new hole has provided additional information on the location of the basal contact and the presence of an embayment feature towards the northern channel. The Company continues geological assessment of this area and other exploration targets at Black Swan that may grow the resources for the Project.

LAKE JOHNSTON

Lake Johnston Exploration

Results from May 2023 Drilling Program

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 and to help map the location of the WUU basal contact and to potentially identify the channelised “Kambalda-style” embayment features along the contact that are known to be conducive areas for 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 had been identified, confirming 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 (refer Figure 5).

One area of particular interest identified is Maggie Hays West, located 350m to the west of the former Maggie Hays Mine (12.3Mt mined at an average grade of 1.5% Ni). Shallow drilling in this area identified several positive indicators for nickel sulphide mineralisation on the basal contact of the WUU including:

- significant Ni:Cu:PGE regolith anomalism up dip from several isolated historical nickel sulphide drill intersections, refer Figures 2 and 3;
- a thickening of the WUU to approximately 400 metres with MgO values and Ni:Cr ratios in fresh rock near the basal contact averaging 37% and 4.3 respectively, indicative of channel facies ultramafic cumulate rocks; and
- the coincident development of a potential embayed footwall channel-like feature with a strong magnetic anomaly.

All of these factors combined provide a compelling, high priority target for the Company to follow up.

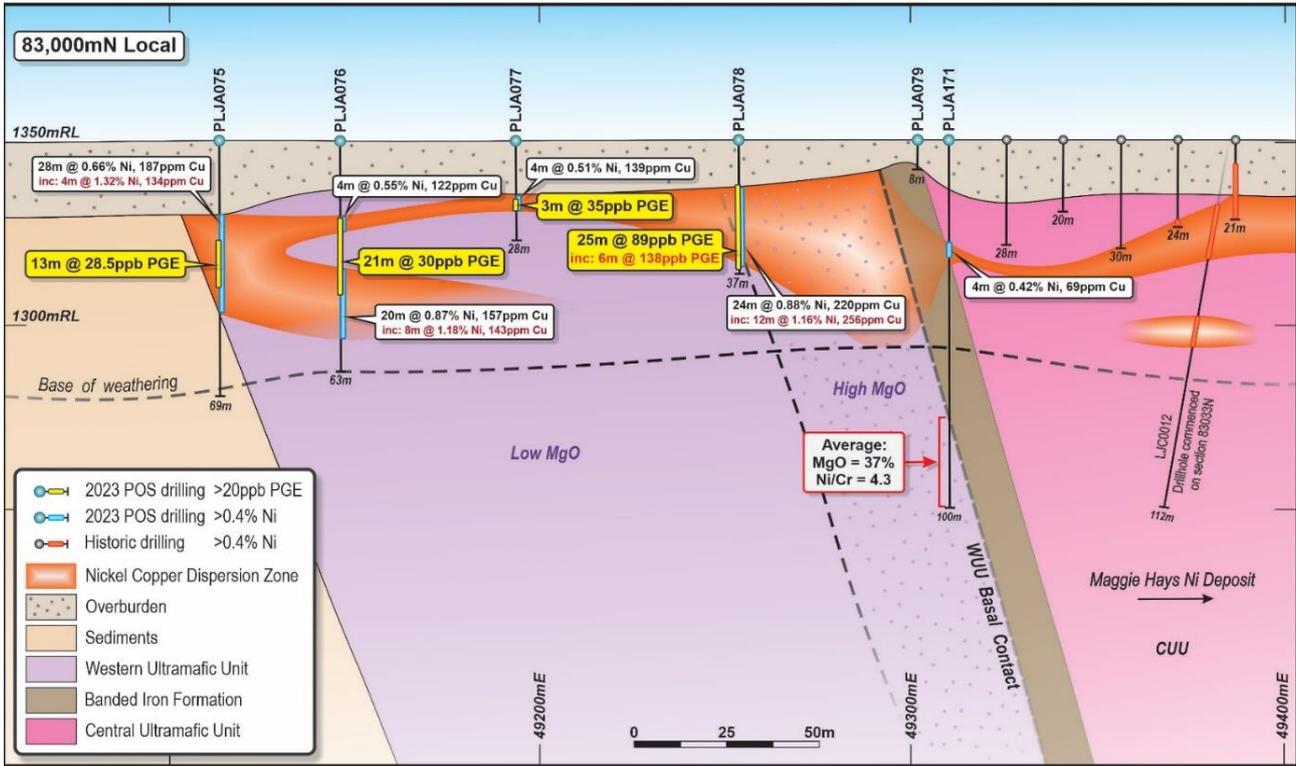


FIGURE 2: MAGGIE HAYS WEST - SECTION 83 000N (LOCAL GRID), SHOWING RECENT AND HISTORIC DRILLING WITH >0.4% Ni INTERSECTIONS, Ni:Cu DISPERSION AND HIGH MgO BASAL FLOW

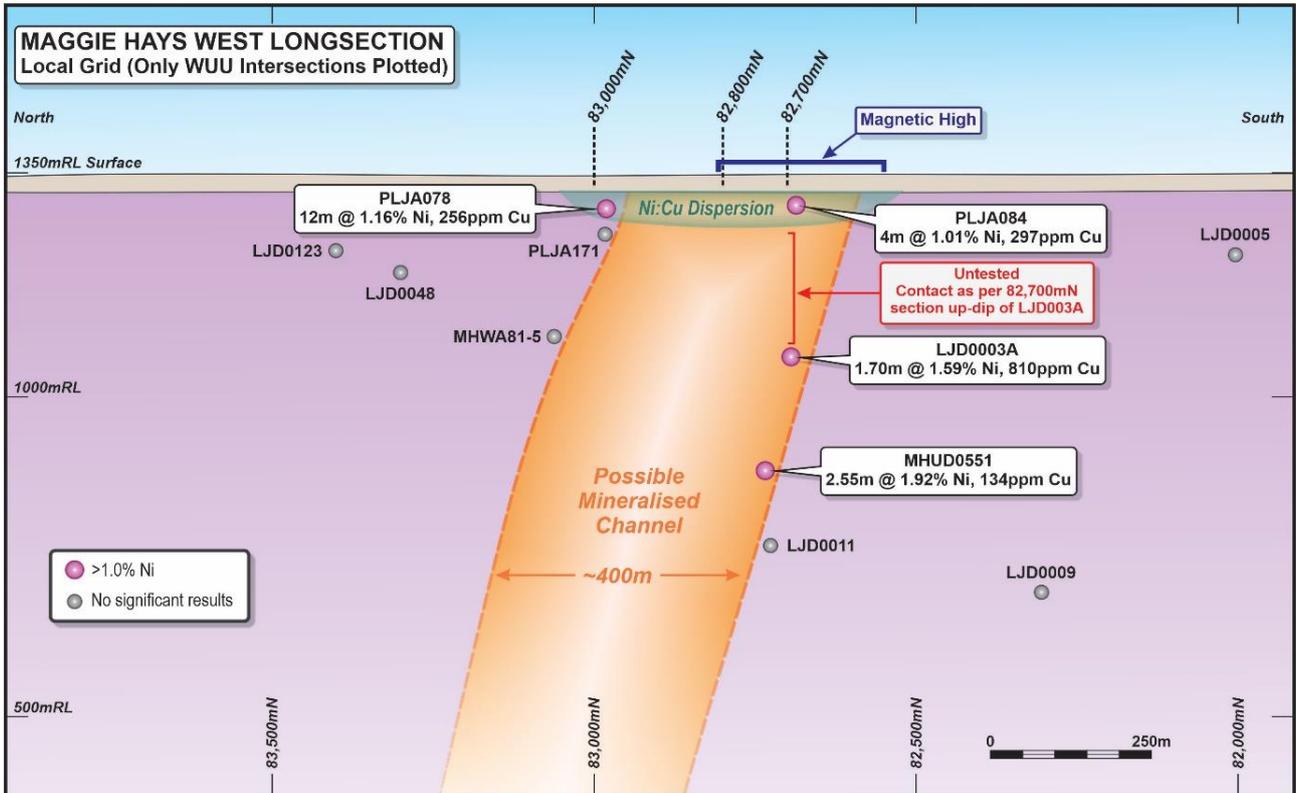


FIGURE 3: MAGGIE HAYS WEST LONG SECTION WITH WUU BASAL CONTACT INTERCEPTS PLOTTED ONLY. NOTE THE INFERRED MINERALISED CHANNEL OPPORTUNITY IS LARGELY UNTESTED.

Further Exploration Drilling

Following the end of the quarter the Company commenced a further AC/RC drilling program at Lake Johnston to infill the widely spaced traverses at the regional targets and further delineate the geochemical dispersion and the morphology of the WUU.

The drill program has two main components:

- at Maggie Hays West 18 AC holes are planned with a further seven slimline RC holes to be completed thereafter; and
- for the six other regional prospects along the WUU an additional seven 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 of the WUU rocks along the contact.

The aim of the RC drilling to be undertaken on the other 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 4 and 5 show the planned drill hole locations.

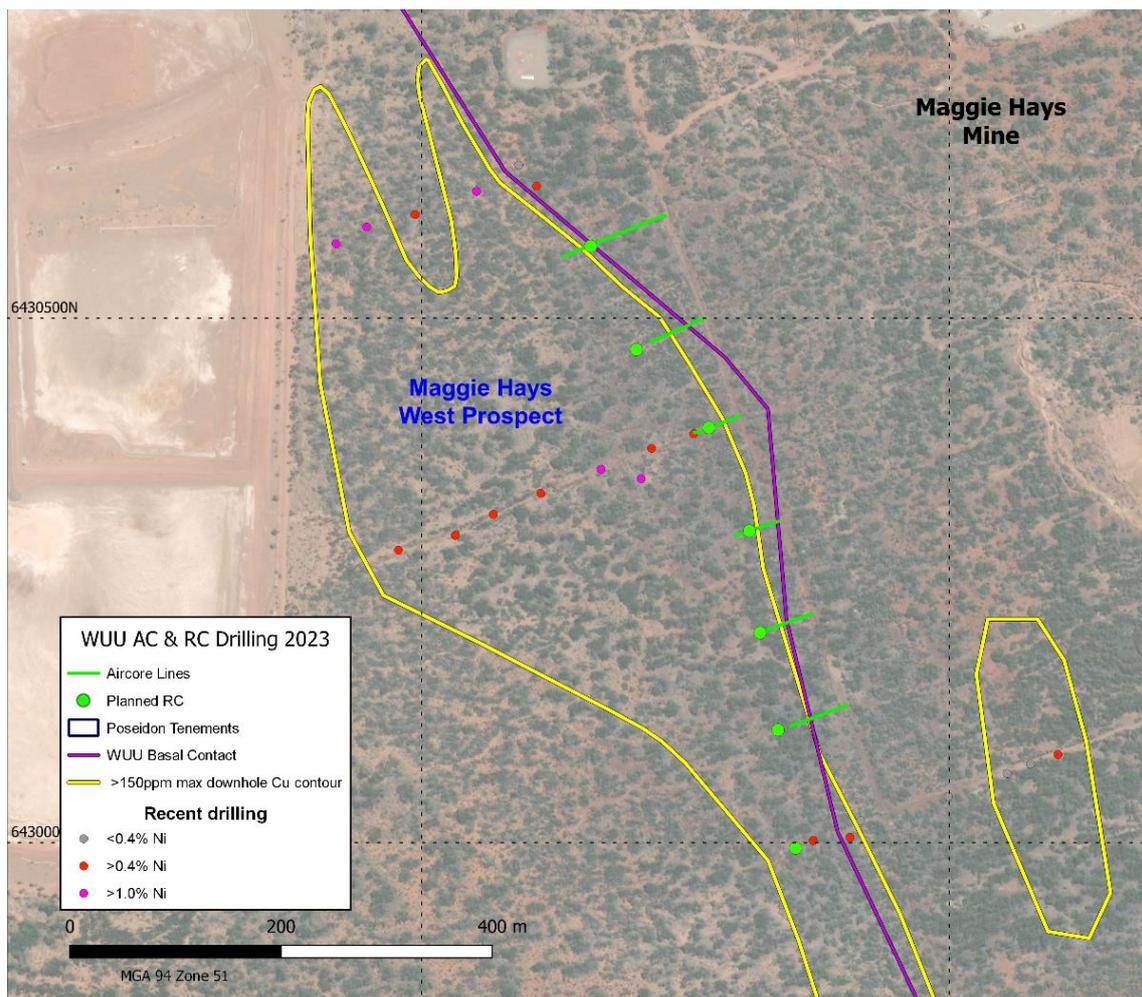


FIGURE 4: PROPOSED AIRCORE DRILL LINES FOR MAGGIE HAYS WEST

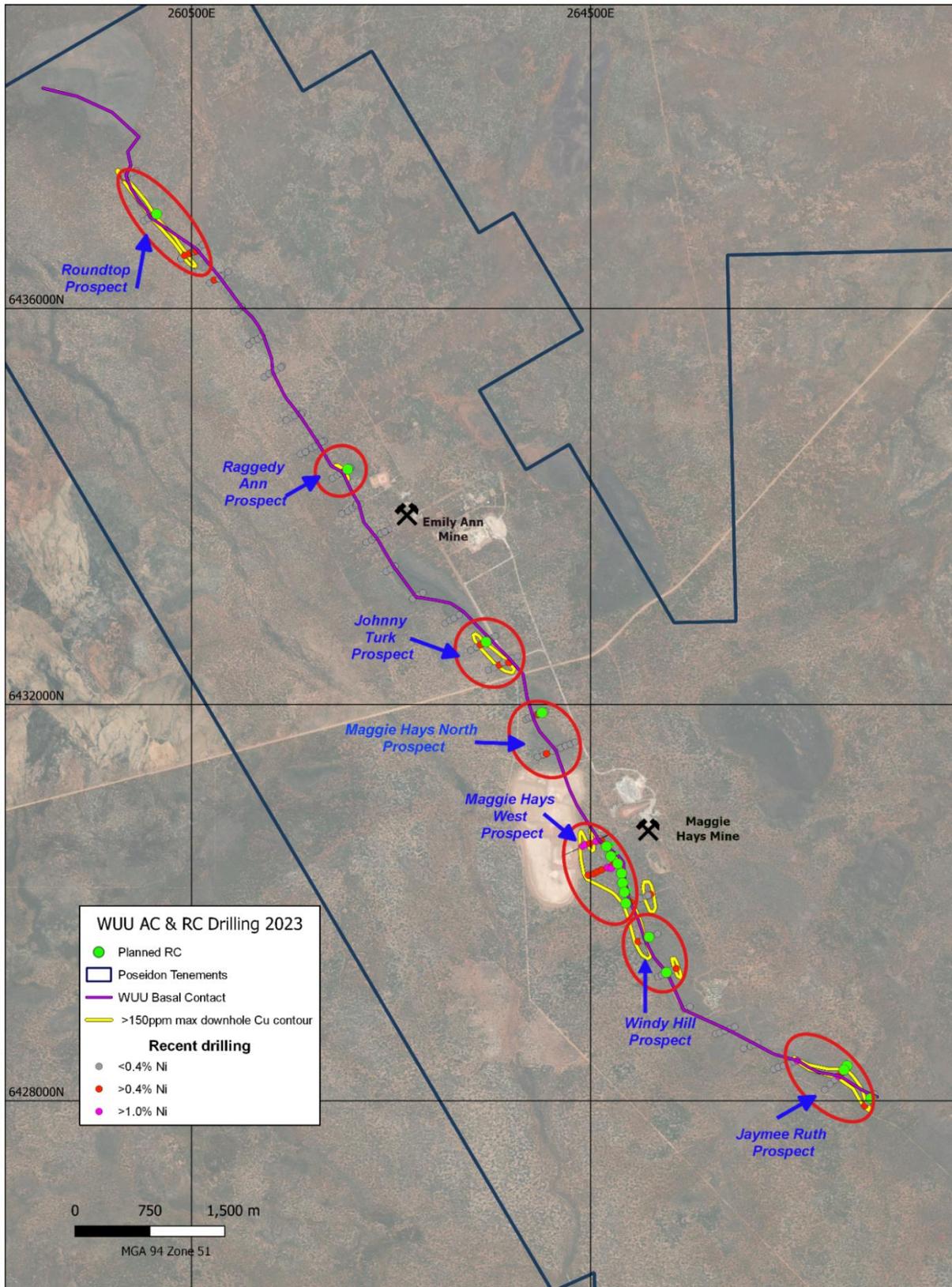


FIGURE 5: RC DRILLHOLE LOCATION PLAN FOR REGIONAL TARGETS AND MAGGIE HAYS WEST

Results from the current drill program are expected over the coming quarter and will facilitate the design and priority of future drilling programs targeting high-grade nickel deposits.

WINDARRA

Gold Tailings Project

The Binding Heads of Agreement with Green Gold Projects Pte Ltd (Green Gold) was terminated during the quarter after Green Gold advised the Company that one of the conditions precedent could not be satisfied. Following the termination the Company received an expression of interest from a resources company with facilities close to Windarra to process the Lancefield gold tailings and potentially the Windarra gold tailings along with accessing the water resource within the South Windarra pit. In addition, other proposals have been received from parties interested in the Windarra resources. The Company is pursuing these proposals with parties currently reviewing data in an electronic data room.

OPERATIONS

Operating Update

Black Swan

Black Swan remained on care and maintenance during the quarter.

Lake Johnston

Lake Johnston remained on care and maintenance during the quarter.

Following an environmental compliance inspection by DMIRS during the June 2023 quarter, a number of items were identified that required action. These include dust control of the tailings facility that will require 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.

Remediation works commenced during the period.

Windarra

Windarra remained on care and maintenance during the quarter.

CORPORATE

Leadership and Operations Transition

Following the decision to defer the restart of Black Swan the Company made the prudent decision 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 has transitioned from Managing Director to Non-Executive Chair, Craig Jones was appointed CEO while Derek La Ferla and Dean Hildebrand retired from the board effective 27 October 2023. 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 total approximately \$3 million on an annualised basis.

Remuneration

Approximately \$0.7 million of the total cost reductions relate to annualised savings in board member and executive remuneration, equating to savings of about 25% compared to 2023 employee salaries.

Shareholder alignment is one of the key principles of the Company's remuneration objectives. Pleasingly, team members, executives and all directors have personally invested/applied for Poseidon shares via the December 2022 and August 2023 placements (see further details below). In addition, the Board is also reviewing other shareholder alignment aspects such as minimum shareholdings for non-executive directors and Long Term Incentive performance periods.

Share Placement

The Company completed a placement during the period to raise \$6.0 million before costs through the issue of 297.5 million shares at 2.0 cents a share, from new and existing institutional, professional and sophisticated investors. Directors agreed to subscribe for 2,500,000 new shares as part of the placement, subject to shareholder approval at the Company's annual general meeting in November 2023.

Further to Director's participation in the most recent placement, subject to shareholder approval at the Company's annual general meeting in November 2023 the Directors have committed to subscribing to 2,857,143 new shares at 3.5 cents per share, which forms part of the December 2022 share placement.

Financial

As at 30 September 2023, the Company held cash and current investments totalling \$7.1 million.

Over the quarter, Poseidon's net cash outflow from operating and investing activities totalled \$4.3 million which included \$3.1 million of exploration and evaluation costs.

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 \$66,539, all of which were fees paid to Directors.

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



Craig Jones
CEO

30 October 2023

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 around 400,000 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 Maggies 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. This could potentially 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 planned collaboration with Green Gold Projects has recently been terminated. A new potential partner is currently conducting due diligence 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:

- "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. 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)
BLACK SWAN PROJECT																		
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
LAKE JOHNSTON PROJECT																		
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
WINDARRA PROJECT																		
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%	-	-	-	722	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	-
TOTAL																		
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
Total	4,752,000	0.73	112,000	1.7	1,600	363	1,250

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
Total	1,548,048	1.23	62,341	3.58	2,824	304	67

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/m³ 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/m³ 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 30 September 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)	100% (except for E63/1784)
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 September 2023 Quarter

Nil

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

Farm-out Agreement

Nil

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

Nil

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")

30 September 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	68	68
1.2 Payments for		
(a) exploration & evaluation (if expensed)	(1,667)	(1,667)
(b) development	-	-
(c) production	-	-
(d) staff costs	(912)	(912)
(e) administration and corporate costs	(624)	(624)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	103	103
1.5 Interest and other costs of finance paid	(39)	(39)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other – sundry income	-	-
1.9 Net cash from / (used in) operating activities	(3,071)	(3,071)

2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	(36)	(36)
(d) exploration & evaluation (if capitalised)	(1,458)	(1,458)
(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 (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	300	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)	-	-
2.6	Net cash from / (used in) investing activities	(1,194)	(1,194)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	5,948	5,948
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	(319)	(319)
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)	-	-
3.10	Net cash from / (used in) financing activities	5,629	5,629

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	5,701	5,701
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,071)	(3,071)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,194)	(1,194)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	5,629	5,629

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 (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	7,065	7,065

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	7,065	5,701
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	7,065	5,701

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	66
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)	-
7.4	Total financing facilities	-

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

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(3,071)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	(1,458)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(4,529)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	7,065
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	7,065
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	1.6

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: The Company recently implemented a number of cost saving initiatives which will drive approximately \$3.0 million on annualised savings. The Company expects net operating cash flows to be maintained at the reduced level of spending in the future.

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 prepared to undertake a capital raising and/or an asset sale as and when required. 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 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 October 2023

Authorised by: The Board of Poseidon Nickel Ltd

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.