

## QUARTERLY REPORT 30 JUNE 2023

### KEY POINTS

- **Updated Black Swan Mineral Resource Estimate**

- Updated Black Swan disseminated Mineral Resource Estimate of 26.3Mt at 0.72% Ni for 189,000t Ni
- Compared to the 2022 Mineral Resource:
  - 48% increase in the contained Ni in the Measured and Indicated JORC Resource Categories;
  - 14% increase in the average Ni grade; and
  - 8,000t increase in contained Ni

- **Black Swan 1.1Mtpa Restart Project**

- Offtake and project debt financing documentation well advanced
- Environmental works approval and mining proposal approval received
- Western Power has advised grid power will be available from late 2024
- Additional metallurgical testwork to be conducted to confirm recovery assumptions for the disseminated serpentinite ore
- Decision made to defer the restart of Black Swan due to project related factors and external market conditions
- Planning underway to drill test the EM plate at Target 5 proximal to the Silver Swan decline

- **Black Swan Expansion Project - 2.2Mtpa throughput**

- Expansion Project prefeasibility study continues to progress and is on track to be completed late in 2023
- Concentrate samples sent to potential customers to confirm suitability as a feed source for their hydrometallurgical processes

- **Lake Johnston**

- Assay results from the recent drill program on the Western Ultramafic Unit has identified multiple zones of anomalous nickel, with several grading above 1.0% Ni
- Potential open-ended channel up to 400m wide identified at Maggie Hays West
- Planning the next round of drilling to test the six additional targets identified along the 14km strike

- **Corporate**

- Cash and investments of \$5.7 million at 30 June 2023

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

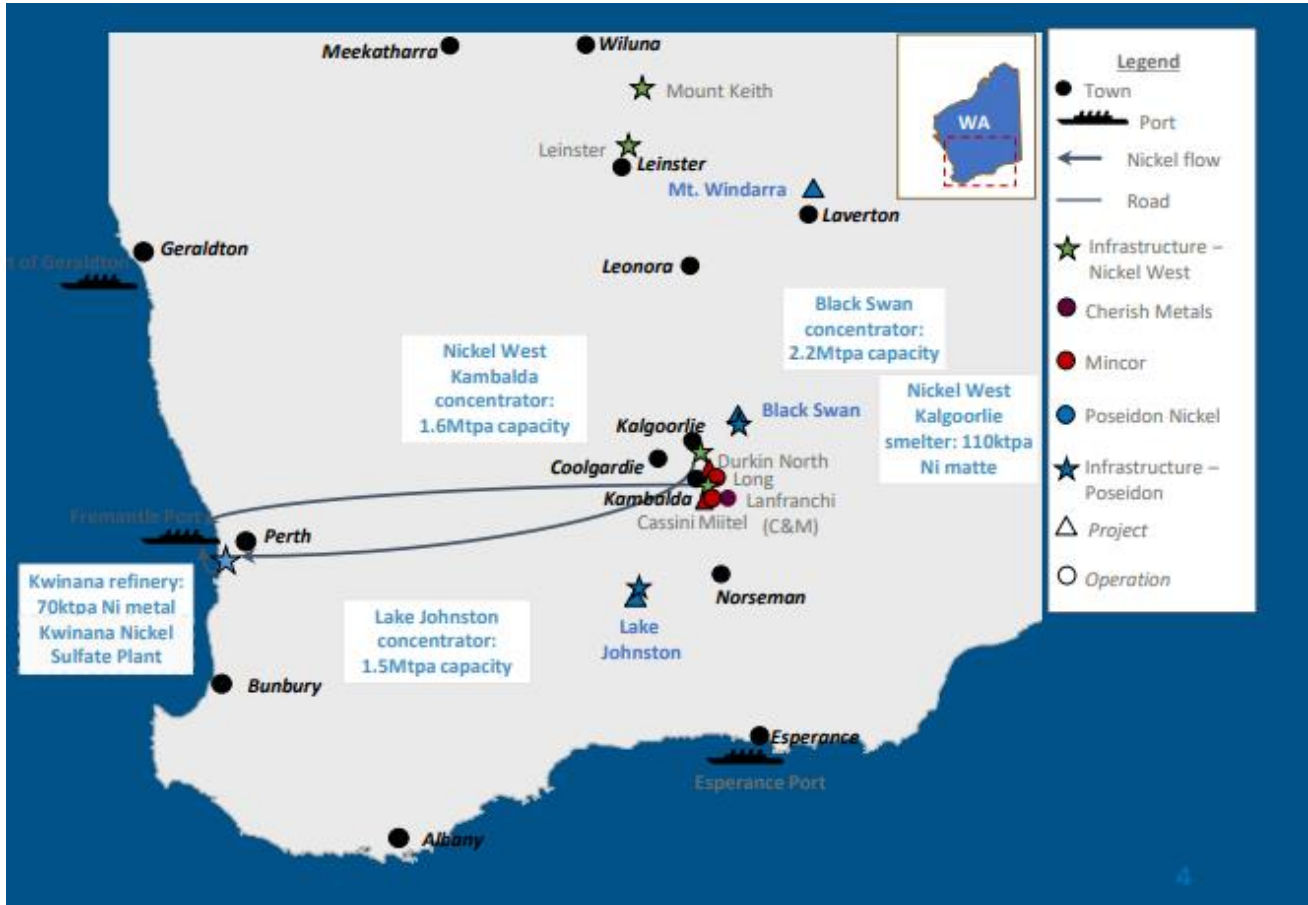
Managing Director and CEO, Peter Harold, commented: *“We made solid progress towards the restart of the Black Swan project over the quarter. The offtake and project debt financing work streams are well advanced as we continue to progress documentation drafting with the two shortlisted parties. We delivered the Black Swan Resource update with an additional 48% of contained nickel included in the Measured and Indicated categories. In addition, we have received all necessary regulatory approvals for the Black Swan restart.*

*The drilling completed earlier this year and the updated resource model have indicated that further metallurgical testwork is required to confirm the recoveries used in the feasibility study for the disseminated open pit ore.*

*We have also recently been advised that grid power availability, which is a lower cost option than diesel fired power, has been delayed from mid-2024 to late 2024 due to longer lead times for Western Power to upgrade the existing transmission infrastructure. This delay combined with the additional metallurgical testwork, continuing tightness in the WA labour market, the lack of the availability of Kalgoorlie FIFO accommodation and the increased volatility in global commodity and equity markets has led to the decision to delay the Black Swan restart. The primary aim of the Company remains restarting Black Swan when all the above items have been resolved and the nickel price outlook and equity markets are more favourable.*

*In the meantime, we will complete the Black Swan Expansion Project prefeasibility study and undertake further exploration drilling at both Black Swan and Lake Johnston targeting high-grade mineralisation.*

*Given the strategic importance of our nickel resources, mining inventories and our installed concentrator capacity, that can be recommissioned at a relatively low capital cost, our assets are well positioned within a region that has limited options for treating third party feeds.”*



**FIGURE 1: POSEIDON’S ASSETS STRATEGICALLY LOCATED IN WESTERN AUSTRALIAN**

## BLACK SWAN

### Black Swan Restart Project

The status of the main workstreams progressed over the quarter are as follows:

- Pre-works at Black Swan
  - Mineral Resource update – completed and reported in early June 2023
  - Processing plant – contract for plant refurbishment being drafted with GR Engineering Services Limited (GRES)
  - Approvals – all regulatory approvals are now in place for a project restart
  - Accommodation – continuing to progress securing an option over 150 rooms in Kalgoorlie
  - Power – Western Power have confirmed grid power would be available late 2024
  - Offtake and project debt financing well advanced (see separate section)
  - Additional Metallurgical Testwork underway (see separate section)

### Offtake and Debt Financing

The Company is negotiating offtake and project debt financing with two large international groups. The process progressed significantly over the quarter with both groups providing draft offtake and financing agreements. The Company has reviewed these documents and continues to negotiate with assistance from our concentrate marketing consultant and lawyers.

### Metallurgical Testwork

The results from locked-cycle flotation testwork on the open pit disseminated serpentinite ore that underpinned the November 2022 Black Swan Bankable Feasibility Study (Black Swan BFS) predicted a nickel recovery that also aligned with the recovery reported in the production data from when the project last operated in 2008/09. A detailed review of the non-sulphide nickel (NSNi) and sulphur to nickel (S:Ni) ratio has been undertaken based on the recent disseminated open pit drilling results and the most recent Disseminated Mineral Resource Block Model (updated in June 2023). The new assay results suggest that the serpentinite samples that were utilised for the Black Swan BFS testwork program may have a lower NSNi content and a higher S:Ni ratio than what Norilsk Nickel Australia (NNA) reported in historical resource mine grade control data.

The implications of this are that the composite samples from the disseminated resource utilised for the Black Swan BFS, while representative of the ore mined and processed in 2008/09, may not accurately represent the current Black Swan BFS open pit mine plan. The disseminated open pit drilling results recently obtained by Poseidon and the historical NNA resource mine grade control data set both utilised RC drilling to obtain the samples for NSNi assays. It is possible that the RC drilling process, which pulverises a large proportion of the drill core into ultra fine particles, may result in reporting elevated NSNi assays because of the considerable particle surface area that is generated from the RC drilling mechanism. The extremely large particle surface area generated, which is exposed to the elements for many weeks prior to the NSNi assays being completed at the laboratory, may lead to some oxidation of the nickel sulphides, thereby potentially reporting elevated NSNi results. This aspect will be assessed by using diamond drill core for the upcoming metallurgical sampling program.

Additional samples are required to be taken and tested to ensure there is appropriate representation of the life of mine plan. These samples will assess areas of the mine plan not represented by the previous metallurgical samples. These additional samples will be obtained from diamond drill core (to eliminate any potential for nickel sulphide oxidation) and subject to locked-cycle flotation tests. Three distinct ore zones

have been identified being the Main zone, Footwall zone and Hanging wall zone, and these will be sampled and tested separately, to optimise nickel recoveries and to confirm concentrate specifications reported in the BFS. A drill rig is scheduled to be on site during August 2023 with the diamond drilling program to be conducted from the bottom of the open pit.

The metallurgical testwork program will be completed in two stages. The first stage will accelerate an understanding of the NSNi content (and identify any potential variation between ore zones) by utilising existing diamond drill core that was obtained from the 2021/2022 Gosling drilling program. This diamond drilling program accesses each ore zone (at depth) and will provide sample spatial representation of the second half on the mine plan. The existing core will be tested as soon as possible at the metallurgical lab between August and October 2023 with the results anticipated by late October 2023. The results will provide information on the NSNi content and the nickel recovery for each ore zone. The second stage of the metallurgical testwork program will again utilise diamond core samples, this time obtained from the new drilling and sampling program. These samples will also intersect each ore zone separately and will provide spatial representation of the first half of the mine plan. The second stage of the testwork will have sufficient mass of sample allocated to each ore zone to complete the required ore blending and Locked-cycle flotation tests, required to confirm the final concentrate quality reported in the 2022 BFS. The Updated Mineral Resource Model identifies one of the ore zones (the Hanging Wall ore zone) having a lower S:Ni ratio (~0.80) and as such, may require a higher proportion of the Silver Swan Tailings (SST) blended in, when processing this ore zone in isolation. The new samples required for the second stage of the testwork program are anticipated to arrive at the metallurgical laboratory during the first week of October 2023. Based on this milestone, the results from the second stage of the testwork program are anticipated to be reported in February 2024.

## Restart Decision Deferred

Despite the solid progress made since the Black Swan BFS was delivered the decision to restart Black Swan has been delayed due a combination of factors:

- the later availability of grid power;
- the need to complete additional metallurgical testwork;
- the continuing tightness in the WA labour market;
- ability to secure accommodation in Kalgoorlie for FIFO workers; and
- the volatility in global commodity and equity markets.

The primary aim of the Company remains restarting Black Swan when all the above items have been resolved and the nickel price outlook and equity markets are more favourable.

## Updated Mineral Resource

An updated Mineral Resource Estimate (MRE) was release during the quarter that incorporated 10,845 metres of new drilling from 112 reverse circulation (RC) drill holes completed between December 2022 and February 2023 from within the confines of the Black Swan open pit. This drill program was specifically undertaken to increase the confidence in the Black Swan MRE, by infilling the area extending approximately 125 metres immediately below the existing open pit with the objectives to better delineate the metallurgically important serpentinite and talc-carbonate hosted resources and to lift most of these resources into the Measured and Indicated categories.

The MRE update was prepared for Poseidon by independent resource consultants WSP Australia Pty Limited (WSP), using all available assay data as of May 2023. The updated MRE now totals 26.3Mt at 0.72% Ni for 189,000 tonnes of nickel contained. The MRE replaces the previous Black Swan MRE

completed by WSP in July 2022 (*refer to Company announcement “Black Swan Mineral Resource” dated 4 July 2022*) which reported 28.9 Mt at 0.63% Ni for 181,000 tonnes of nickel contained.

The updated MRE compared to the 2022 estimate resulted in a:

- 48% increase in the contained Ni in the Measured and Indicated JORC Resource Categories;
- 14% increase in the average Ni grade; and
- 8,000t increase in total contained Ni

## 2.2Mtpa Expansion Project Study

The Expansion Project is based on treating 2.2Mtpa of mill feed and producing a rougher concentrate. This project is expected to produce a concentrate more attractive as a feed for either pressure oxidation (POX) or high-pressure acid leach (HPAL) plants rather than a conventional nickel smelter.

The June 2023 Black Swan Resource Update (*refer ASX announcement “Updated Resource provides more nickel at Black Swan”, dated 7 June 2023*) resulted in a 48% increase in Measured and Indicated Resources and a 14% increase in the average nickel grade. Preliminary mine design reviews indicate that an increase in nickel contained in the mining inventory for the Expansion Project is possible given the higher average grades reported in talc carbonate zones.

Metallurgical studies continued during the quarter to determine the optimal rougher concentrate grade, metallurgical recovery and typical specifications to allow for potential offtakers to provide indicative terms. Concentrate samples have been supplied to potential customers to confirm suitability as a feed source for their hydrometallurgical processes.

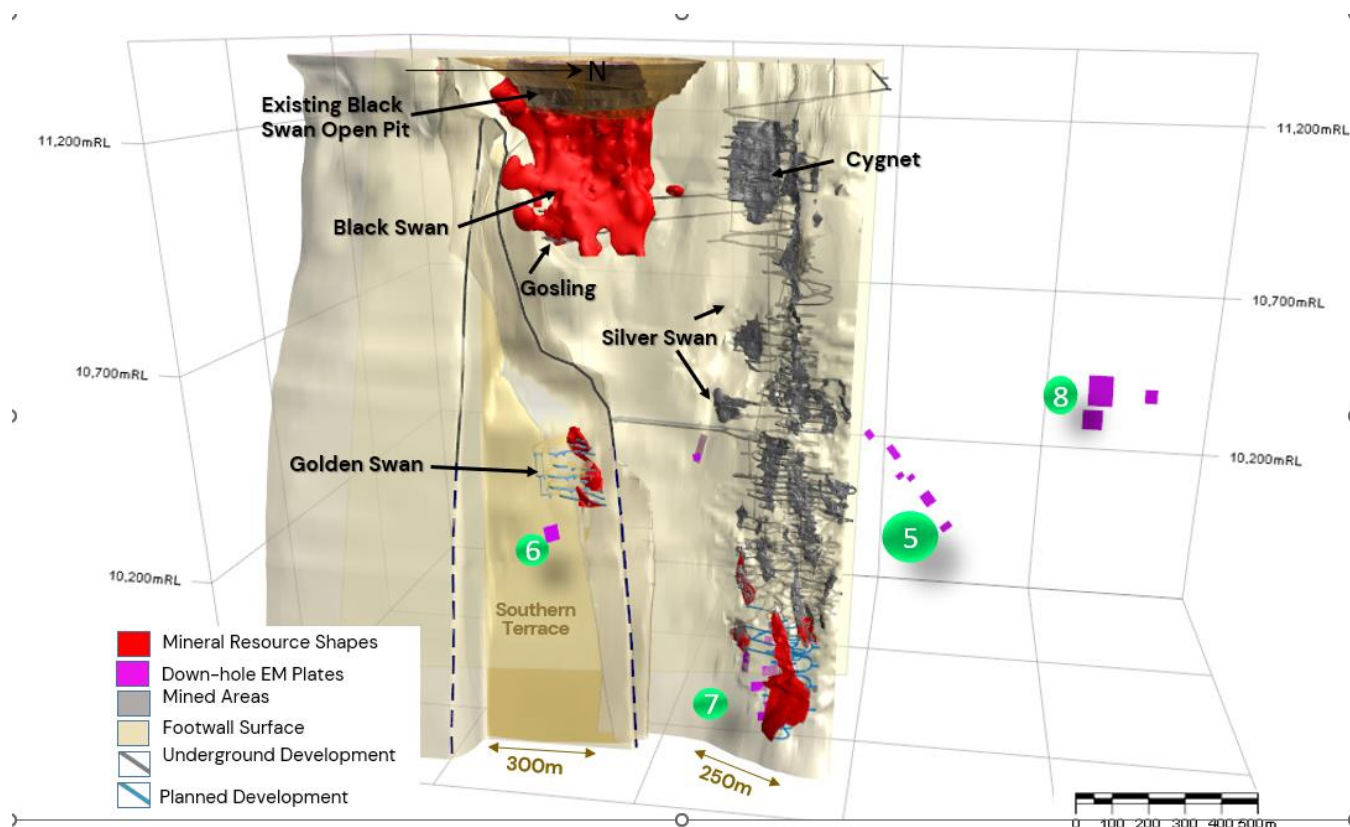
Over the period GRES continued to progress the engineering study to determine the capital and operating costs associated with refurbishing and operating the plant at its 2.2Mtpa nameplate capacity.

## Black Swan Exploration

Work undertaken by our exploration team in conjunction with geological consultants Newexco Exploration Pty Ltd (Newexco) identified several exploration targets that warrant follow up (priority targets are displayed in Figure 2).

Newexco has identified Target 5 as a priority target which consists of a series of unexplained electromagnetic anomalies to the north of the high-grade Silver Swan channel and can be drilled from either the Silver Swan 410-Level stockpile or from the Silver Swan decline. Planning to drill test this anomaly is underway with drilling contractors advising a rig could be available in September.





**FIGURE 2: BLACK SWAN – PRIORITY DRILL TARGETS IN THE VICINITY OF THE SILVER SWAN HIGH-GRADE CHANNEL**

## LAKE JOHNSTON

### Exploration - May 2023 Drill Program

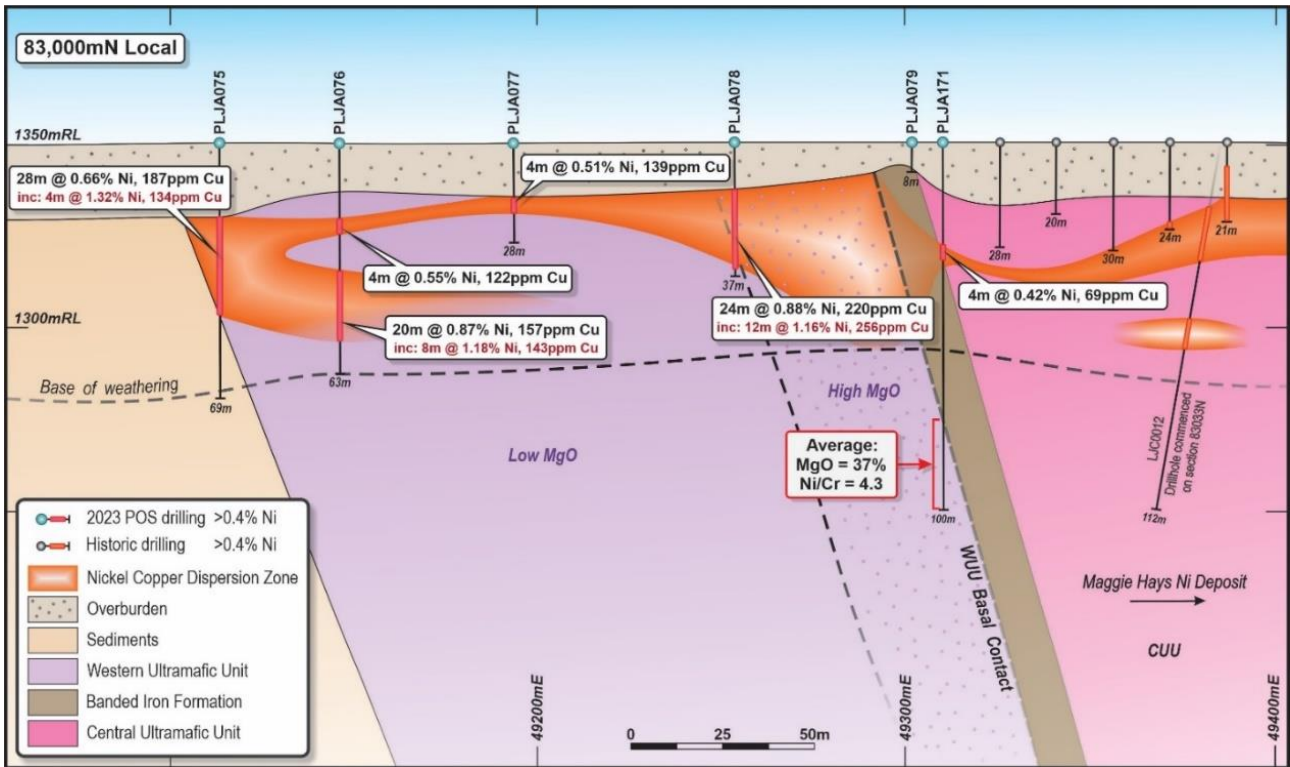
Over the quarter, an initial program of shallow air core (AC) and reverse circulation (RC) drilling to delineate 14km of the interpreted overturned basal contact of the Western Ultramafic Unit (WUU) was completed (*Refer ASX release Exciting Greenfields Nickel Intersections at Lake Johnston, dated 3 July 2023*).

Assay results from the drilling along the WUU returned coincident nickel sulphide pathfinder (Ni:Co:Cu) anomalous zones within the weathering profile at seven separate prospects, including Round Top, Raggedy Ann, Johnny Turk, Maggie Hays North, Maggie Hays West, Windy Hill and Jaymee Ruth.

As announced previously, the existing Lake Johnston deposits are hosted within the Central Ultramafic Unit (CUU), which has been the focus of extensive exploration by previous owners. In contrast the WUU is relatively underexplored and regional geologies indicate there is potential for economic nickel sulphide mineralisation.

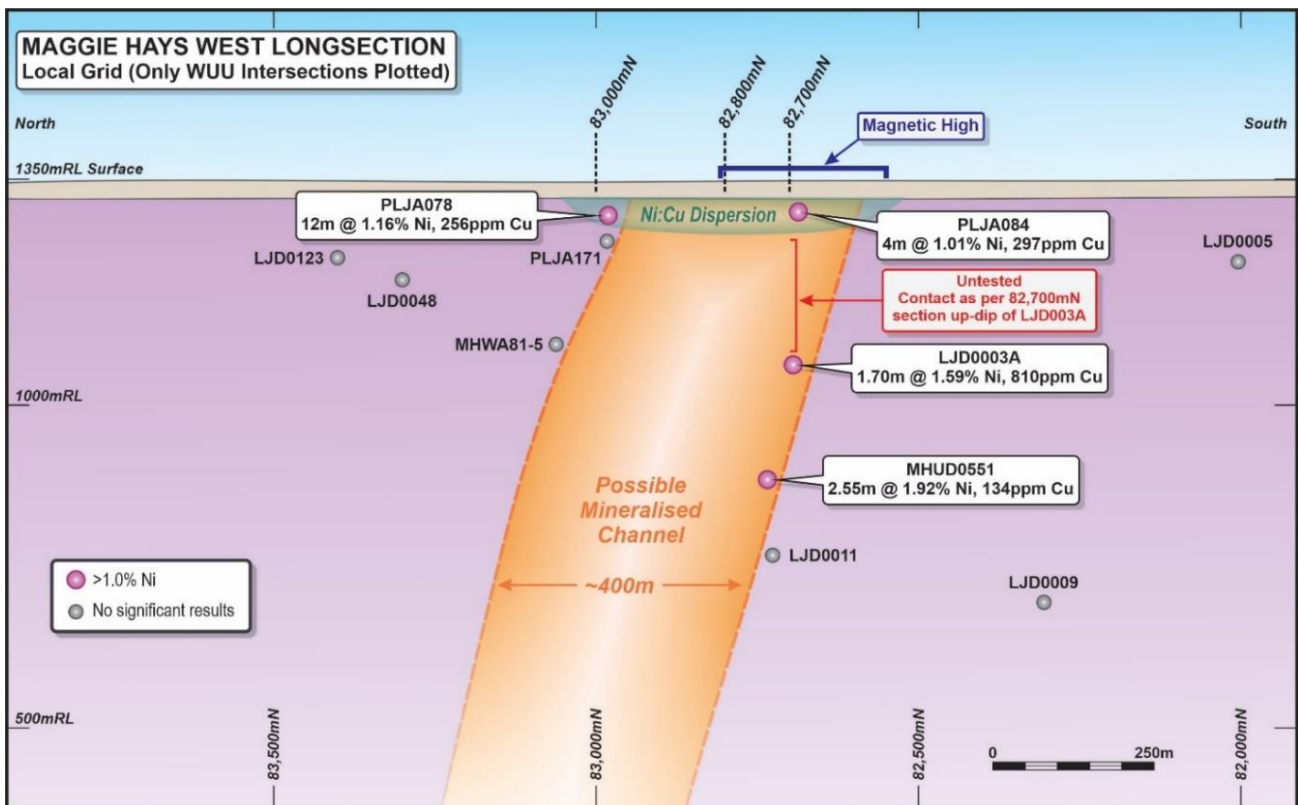
Furthermore this drill program has enhanced the prospectivity at Maggie Hays West by confirming the Ni:Cu regolith anomalism up dip from isolated historic nickel sulphide drill intersections. The drilling has also confirmed the thickening of the WUU to 300 metres on drill line 82700N (local grid) and the development of an embayed contact due to a possible channel feature.

One of the RC drillholes (PLJA171) was drilled through the basal contact at Maggie Hays West returning MgO values averaging 37% (max. 41 % MgO) and Ni:Cr ratios averaging 4.3 which is indicative of fertile channel facies ultramafic cumulate rocks at the base of the thickened WUU (refer Figure 3).



**FIGURE 3. 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**

The drilling has led to the hypothesis that a possible, open ended mineralised channel target can be inferred at the Maggie Hays West Prospect that is up to 400m wide and corresponds to a discrete magnetic feature (refer Figure 4). The interpretation presents a compelling high priority target for follow up drilling.



**FIGURE 4. MAGGIE HAYS WEST LONG SECTION WITH WUU BASAL CONTACT INTERCEPTS PLOTTED ONLY. NOTE THE INFERRED MINERALISED CHANNEL OPPORTUNITY IS LARGELY UNTESTED.**

## Regional Targets and Future Drilling

The May 2023 drilling also defined six other targets for follow up with anomalous nickel present near the basal WUU contact. This includes the newly identified Windy Hill and Jaymee Ruth prospects together with the Round Top, Raggedy Ann, Johnny Turk and Maggie Hays North prospects.

Further assays of the anomalous zones from the first drill program on the one metre splits will be conducted to delineate the anomalous intervals and will include analysis for PGEs. This will aid planning for infill and follow up drilling at the identified prospects.

## WINDARRA

### Gold Tailings Project

The Binding Heads of Agreement with Green Gold Projects Pte Ltd was terminated in July after Green Gold advised the Company that one of the Conditions Precedent could not be satisfied.

While it is disappointing that Green Gold did not progress with the Windarra gold tailings project a regional resources company has expressed a strong interest in processing the Lancefield gold tailings and potentially the Windarra gold tailings along with accessing the considerable water resource in the South Windarra pit. Indicative terms have been presented by the interested party with data being exchanged and a formal Term Sheet currently being negotiated.

## 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. An AC/RC exploration drilling program was undertaken as discussed above.

Following an environmental compliance inspection of the project during the quarter, a number of items were identified that require addressing. 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. Works are being planned and budgeted to address the action items over the coming quarters.

#### Windarra

Windarra remained on care and maintenance during the quarter.

## CORPORATE

### Financial

As at 30 June 2023, the Company held cash and current investments totalling \$5.7 million.

Over the quarter, Poseidon's net cash outflow from operating and investing activities totalled \$4.3 million which included \$2.9 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 \$66,507, all of which were fees paid to Directors.

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

**Peter Harold**  
**Managing Director & CEO**

**31 July 2023**

***For further information contact Peter Harold: + 61 (0)8 6167 6600.***

## 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 Maggie's Hays West mineralisation at Lake Johnston.*

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

*A Definitive Feasibility Study on retreating the gold tailings at Windarra and Lancefield was completed in mid-2022. A 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](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%	-	-	-	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	-
<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
		<b>Total</b>	<b>3,466</b>	<b>1.0</b>	<b>34.9</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

*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 30 June 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 June 2023 Quarter

Nil

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

Farm-out Agreement

Nil

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

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	75	433
1.2 Payments for		
(a) exploration & evaluation (if expensed)	(1,103)	(4,522)
(b) development	-	-
(c) production	-	-
(d) staff costs	(758)	(3,989)
(e) administration and corporate costs	(818)	(2,518)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	119	333
1.5 Interest and other costs of finance paid	(39)	(155)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other – sundry income	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(2,524)</b>	<b>(10,418)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	(12)	(384)
(d) exploration & evaluation (if capitalised)	(1,799)	(6,047)
(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 (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(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>(1,811)</b>	<b>(6,431)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	11,902
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	-	(441)
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>-</b>	<b>11,461</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	10,036	11,089
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,524)	(10,418)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,811)	(6,431)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	11,461



## 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 (12 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>5,701</b>	<b>5,701</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	5,701	10,036
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>5,701</b>	<b>10,036</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	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)	-
<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.</b>	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (Item 1.9)	(2,524)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	(1,799)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(4,323)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	5,701
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	5,701
8.7	<b>Estimated quarters of funding available (Item 8.6 divided by Item 8.3)</b>	1.3

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 expects to continue at the current level of net operating cash flows and maintain the current 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 has taken steps to prepare for 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 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: 31 July 2023 .....

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

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

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**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.