

## QUARTERLY REPORT 31 MARCH 2022

29 April 2022

### HIGHLIGHTS

- **Resource Definition Drilling**
  - Black Swan Disseminated resource drilling program completed
- **Metallurgy**
  - Metallurgical test work on various ore sources, nickel recoveries and potential concentrate specifications advancing
  - Regrind test work on Black Swan Disseminated samples confirms higher nickel grade can be achieved in the final concentrate
- **Bankable Feasibility Study (BFS)**
  - Engineering studies well advanced
  - Additional drilling, work scope changes and industry wide pressures have pushed the BFS delivery out a few months to September 2022
- **Pure Battery Technologies (PBT) Kalgoorlie pCAM refinery**
  - PBT, in partnership with Poseidon, received a \$119.6 million Modern Manufacturing Initiatives Grant from the Federal Government
  - Excellent pressure oxidation nickel/cobalt leach extraction achieved on a flotation concentrate produced using a blend of the serpentinite and talc carbonate ores
  - PBT and Poseidon negotiating a definitive agreement to work together going forward
- **Lake Johnston Engineering Study**
  - Lake Johnston circuit and infrastructure can be refurbished for ~\$31 million
  - Operating cost of the processing facility is estimated at ~\$36 per tonne based on throughput of 0.9 million tonnes per annum
- **Lake Johnston Exploration**
  - Up to 15,000 metre Western Komatiite RC drilling program to commence in the June 2022 quarter
- **Windarra Gold Tailings**
  - Windarra Nickel Project State Agreement has been terminated
  - Non-binding indicative offers for a development partner received, final offers due 2 May 2022
- **Corporate**
  - Cash - \$16.8 million as at 31 March 2022

**Poseidon Nickel (ASX: POS, “the Company”)** is pleased to report on its activities for the March quarter 2022.

Managing Director and CEO, Peter Harold, commented: *“The Company continues to make solid progress on our ‘Fill the Mill’ strategy. The Black Swan Disseminated resource drilling program, Silver Swan decline rehabilitation and pit dewatering studies were important milestones achieved in the March quarter.*

*During the quarter Pure Battery Technologies were advised that their proposed development of a battery cathode active material (pCAM) refinery hub in Kalgoorlie, in partnership with Poseidon, is to receive a \$119.6 million MMI grant. Poseidon is extremely well placed to be a major beneficiary from this project given we could be a significant supplier of feed to the proposed pCAM Hub from our existing 400,000 tonne nickel resource base and nickel concentrators at Black Swan and Lake Johnston. In accordance with the MOU entered into with PBT in July 2021 we are now working on formalising our partnership arrangement with PBT.*

*The appointment of Craig Jones as General Manager Mining bolsters our executive team and provides the necessary mining expertise required to progress toward the restart and then into the operational phase at Black Swan.*

*Industry wide pressures, additional drilling and some changes to the scope of work has pushed the delivery of the Bankable Feasibility Study out a few months with the study now due in September 2022. Given the extremely strong nickel price outlook for the foreseeable future this short delay is immaterial in our strategic objective in creating a long-life nickel business.”*

## BLACK SWAN

### Fill the Mill Strategy Update

During the quarter solid progress was made on the Black Swan Bankable Feasibility Study (BFS) despite delays driven by resource constraints in the Western Australian mining sector. Since commencing the BFS the following work streams have been completed up to the end of March 2022:

- Black Swan Disseminated (BSD) resource drilling;
- rehabilitation of the final 150 metre stretch of the Silver Swan decline;
- studies on dewatering the Black Swan open pit;
- Craig Jones, General Manager Mining, appointed and commenced;
- in-fill resource drilling within the Silver Swan Channel;
- Silver Swan Tailings maiden Resource;
- five year water access agreement signed with Norton Gold Fields;
- Golden Swan maiden Resource;
- Silver Swan Tailings metallurgical testwork program;
- Silver Swan Tailings Storage Facility geotechnical investigation;
- Silver Swan U/G ore flotation characterisation testwork; and
- Golden Swan U/G ore flotation characterisation testwork.

The following workstreams remained ongoing at the end of March 2022:

- updating the Silver Swan and Black Swan Disseminated (BSD) Resources to JORC Indicated classification;
- mining studies to convert the Silver Swan, Golden Swan and BSD Resources to Reserves;

- metallurgical test work on blending the various ore sources to determine the optimum feed blend, expected metallurgical recoveries for each feed source and typical concentrate specifications;
- environmental and development approvals for the mining activities, infrastructure requirements including power supply and on-site accommodation (if required);
- discussions with PBT in relation to finalising a definitive agreement;
- offtake and financing discussions ongoing with interested parties; and
- completing the Bankable Feasibility Study.

Additional drilling, work scope changes and industry wide pressures mean the timetable has been revised with the Final Investment Decision (FID) which is now expected to be made during September 2022 and plant commissioning now scheduled for the June 2023 quarter.

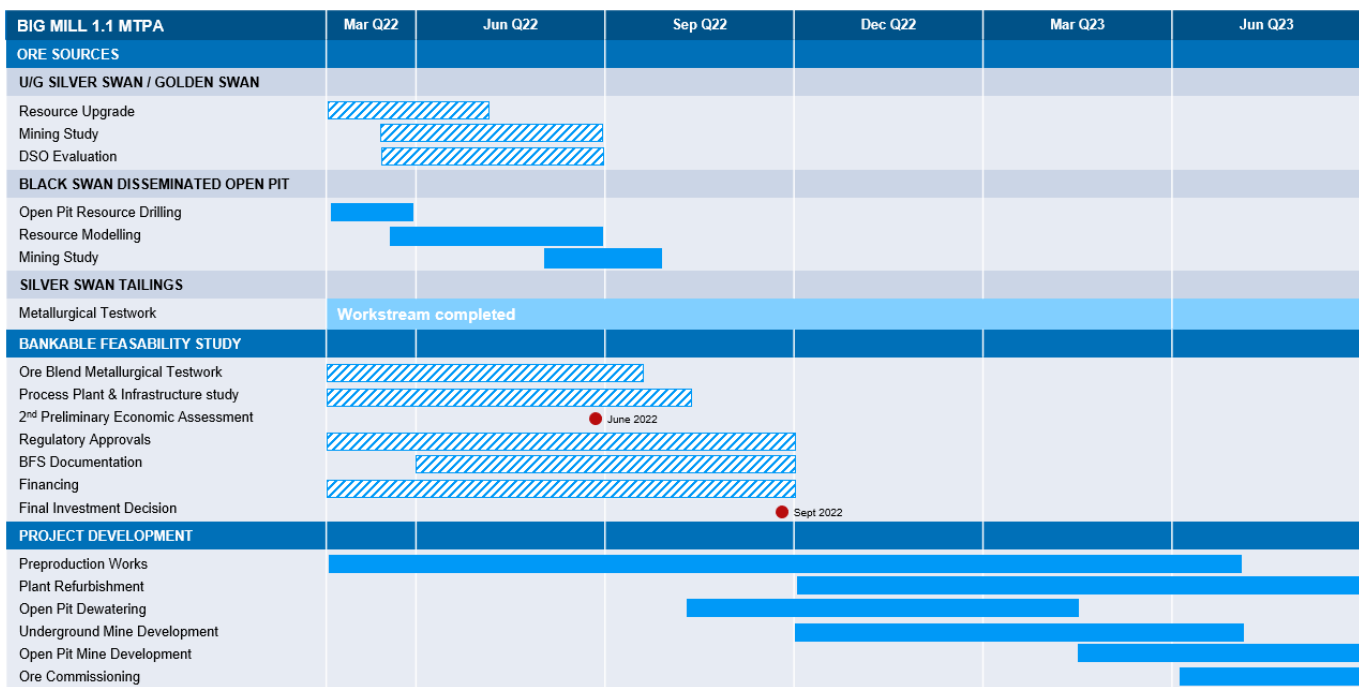


FIGURE 1: REVISED BLACK SWAN INDICATIVE TIMETABLE

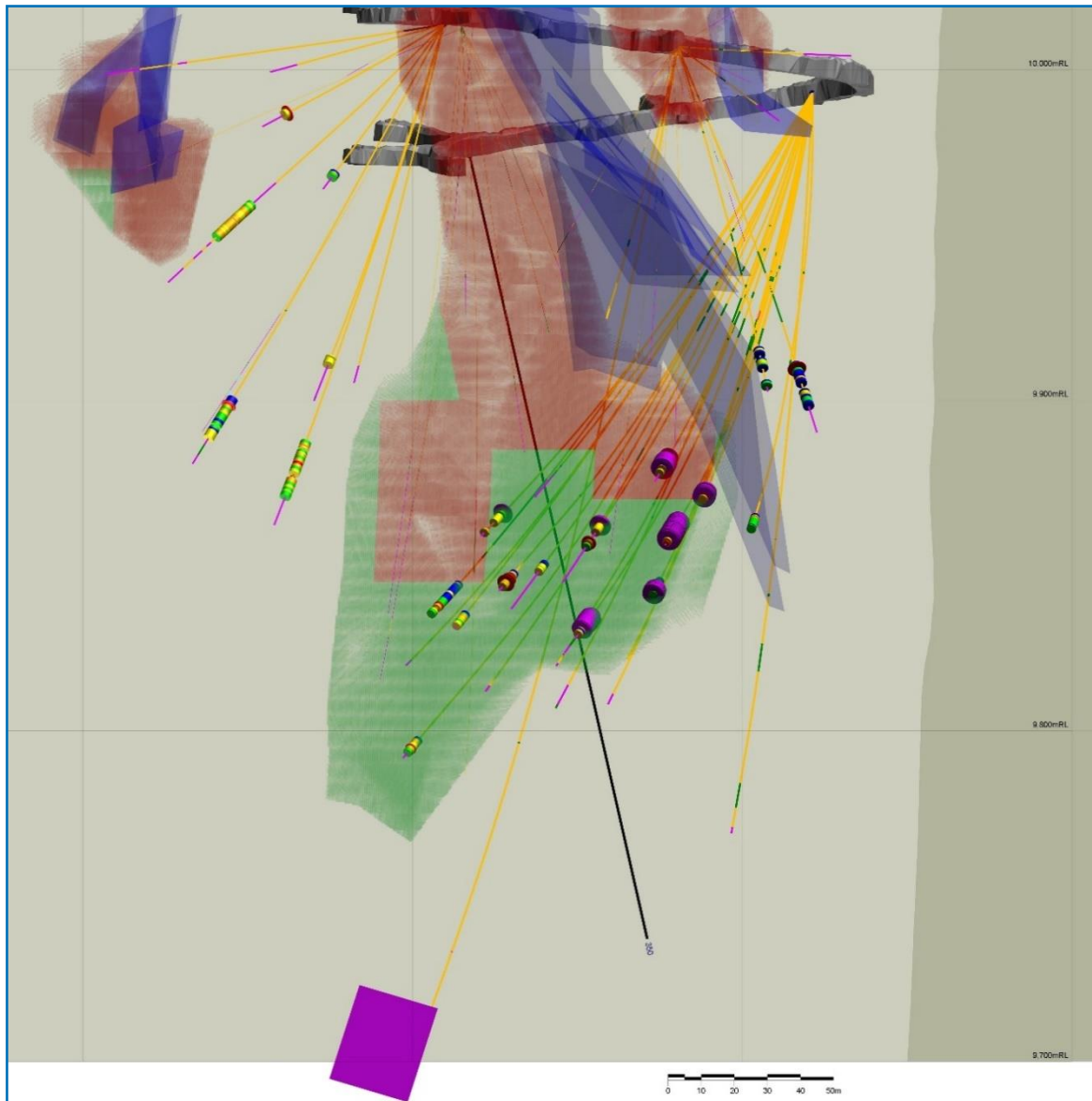
### Resource Definition Drilling

The planned diamond drilling underneath the Black Swan pit has been completed. The program drilled 24 holes for 5,144 metres and has added significantly to the understanding of the widespread mineralisation within the Black Swan ultramafic flow (ASX “Black Swan Restart Project Update” 5 April 2022).

Modelling is currently underway to delineate the serpentinite and talc altered parts of the orebody. The Company is currently working with WSP Golder on the new resource estimation and is aiming to release the results to market during the June Quarter.

### Silver Swan Extension Opportunities

A deeper hole has been drilled below the current known Silver Swan Resource and a down hole EM (DHEM) survey conducted to follow up the EM plate previously identified in hole PTMD022 (see Figure 2). Hole PTMD026 was drilled to a depth of 281m and ended in an apparent structure on the ultramafic contact. The DHEM survey modelling suggests that the current Tundra-Mute mineralisation fits the mid-time, off-hole anomaly previously detected, but nothing significant was detected in the late time or forward modelled results.



**FIGURE 2: EXISTING DHEM PLATES AND DRILLING BELOW TUNDRA-MUTE**

## Metallurgy Update

### Silver Swan Tailings

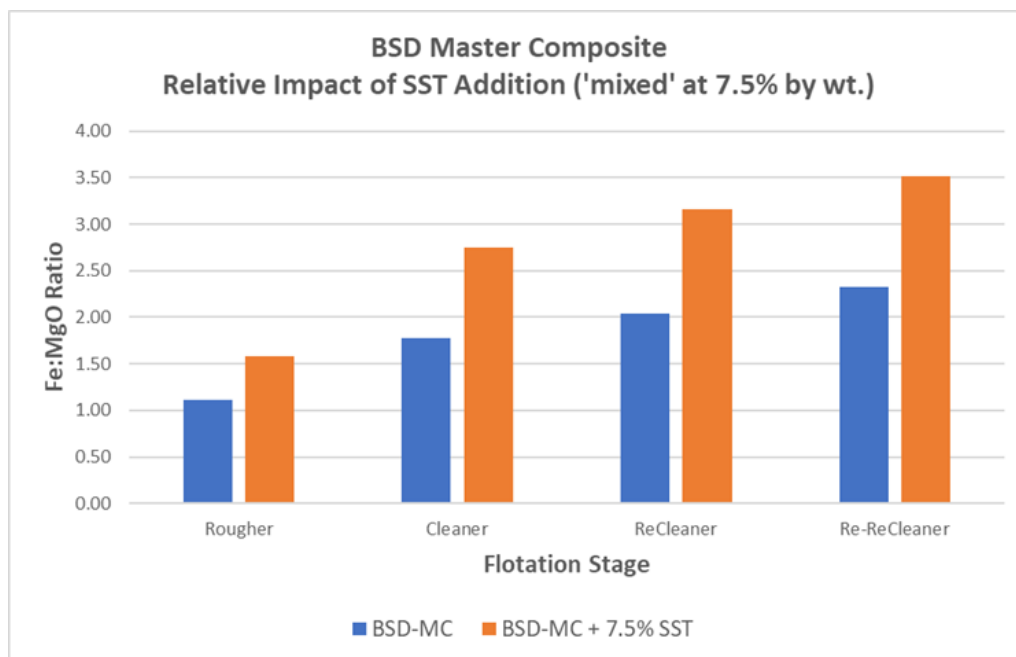
Metallurgical testwork on the Silver Swan Tailings (SST) was completed in December 2021 (ASX, “*High Grade Intersections at Silver Swan*”, 20 December 2021). The testwork characterised the response of the SST to conventional sulphide flotation techniques, re-floating the metal sulphides present in the SST both in isolation, through to a final concentrate, and as a mixture with a master composite generated from the Black Swan Disseminated (BSD) ore collected from surface stockpiles. The testwork supports the positive flotation characterisation results reported in 2019.

Key observations and interpretations of the recent testwork are summarised below:

- The SST floated (in isolation) to a re-cleaner concentrate yielded a 24% mass pull, with a nickel grade of 1.6%, nickel recovery of 48%, arsenic grade of 0.3%, and importantly an Fe:MgO ratio of 15:1. There is no discernible difference in the improvement in the Fe:MgO ratio when floating the SST in isolation and recombining with the concentrate produced from the BSD ore, relative to simply 'mixing'

the SST with the BSD ore and floating as a mixture. This is positive since it will reduce the circuit complexity and associated capital and operating costs.

- The SST are proposed to be reclaimed hydraulically via a small barge pump and pumped approximately 500 metres, to be mixed with the BSD ore at the SAG Mill discharge hopper.
- Mixing 7.5% by weight of SST with the BSD ore improves the Fe:MgO ratio significantly, to within generally accepted guidelines for smelters.
  - The improvement is maintained across all stages of flotation i.e., the rougher stage through to the final re-cleaner concentrate (refer to Figure 3).
  - The Fe:MgO ratio can be improved even further with more SST added but at the expense of nickel grade in the final concentrate. At this stage, the anticipated blend rate is ~10% addition of the SST.



**FIGURE 3: IMPACT OF MIXING SST (AT 7.5% BY WT.) WITH BSD ORE**

An evaluation of historical production data from the Black Swan concentrator has provided a baseline which was used to predict the concentrate specification when the SST is blended with the BSD ore. The modelling predictions included the addition of the high-grade massive sulphide ore mined from the Silver Swan underground, blended in at historical production levels. Based on the testwork results the final concentrate specification with the addition of 7.5% of the SST was modelled. The modelled concentrate specification was provided to potential offtakers as part of our process during late 2021 to seek indicative offtake terms. The preliminary market approach received a strong level of interest from potential customers and offtake partners, indicating saleability of the anticipated concentrate product.

## Silver Swan Underground

Metallurgical characterisation testwork using representative samples collected from the recent Silver Swan resource drilling is complete.

Based on the results, the metallurgical samples collected from the Silver Swan underground are responding well to conventional flotation tests. The results are in line with the historical production performance at the Silver Swan Concentrator. Detailed results will be reported as part of the Feasibility Study once the ore blending testwork program is complete.

### Golden Swan Underground

Metallurgical characterisation testwork using representative samples collected from the Golden Swan underground exploration target is complete (ASX “Black Swan Restart Project Update” 5 April 2022).

The Golden Swan Master Composite, which graded 3.67% Ni (after allowance for mine dilution) had a relatively high MgO content. Due to the MgO content, the flotation testwork required a high addition rate for MgO depressant at the rougher stage. Subsequent cleaning yielded a final cleaner concentrate grade of 17.0% nickel, 1,100ppm arsenic, with an Fe:MgO ratio of 4.7:1, at a nickel recovery of 83.3%.

Detailed results will be reported as part of the Feasibility Study once the ore blending testwork program is complete.

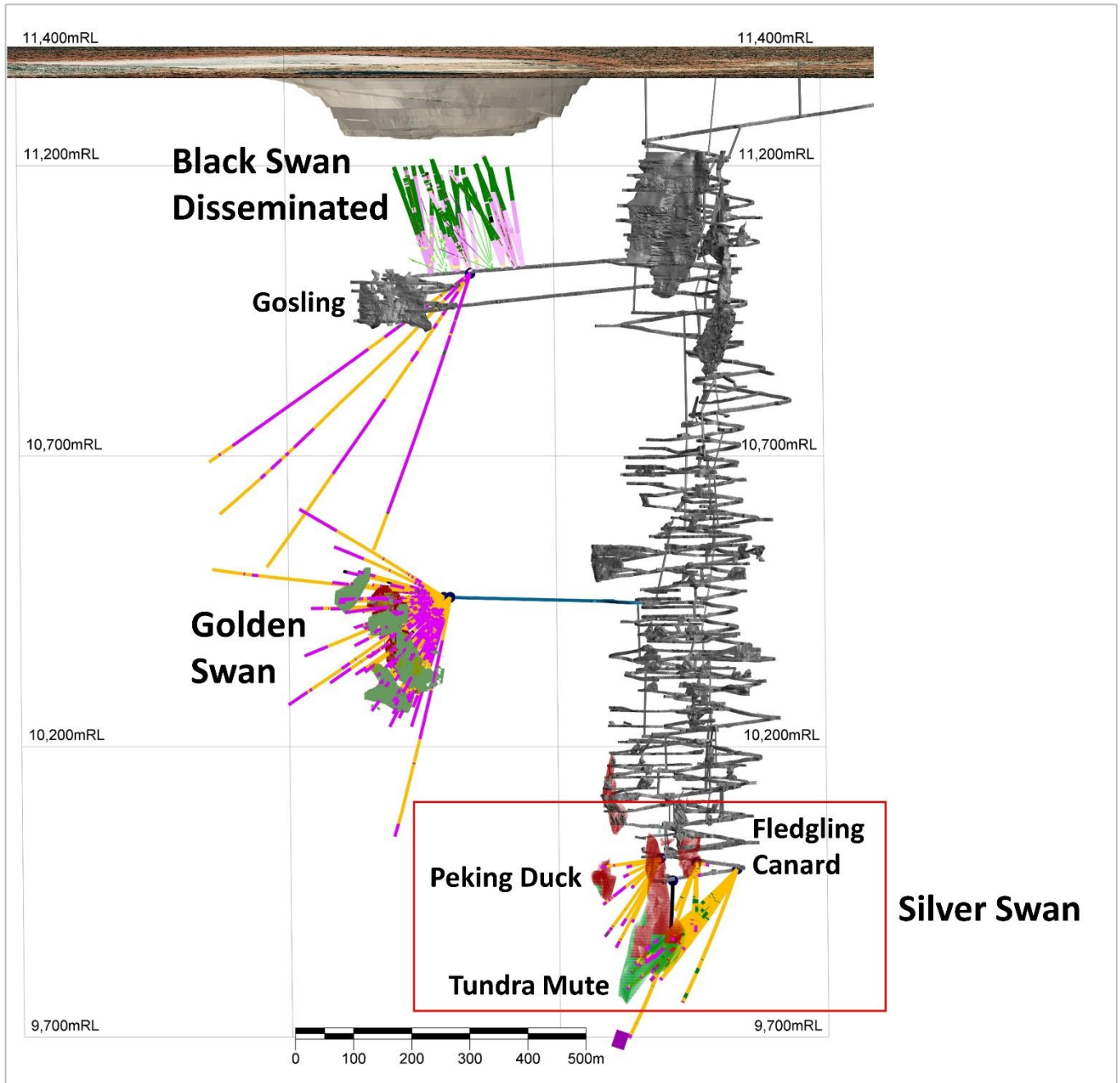


FIGURE 4: OVERVIEW OF RESOURCE DRILLING AT BLACK SWAN

## Black Swan Disseminated

Ore characterisation testwork using representative samples collected from approximately 80-120 metres below the base of the current pit floor level continues. The testwork on the metallurgically favourable serpentinite ore forms an integral part of the ore blending testwork program.

The following observations can be made based on the preliminary results received to date:

- Quantitative X-Ray Diffraction (QXRD) will be used to model the talc distribution within the serpentinite ore-type below the current pit floor level. A detailed talc assessment program is well underway.
- The ratio of sulphur to nickel (S:Ni) in whole rock analysis appears to be reducing with depth. The S:Ni ratio is a standard technique employed on low grade disseminated nickel orebodies. The ratio can predict changes to the nickel mineralogy. For low grade disseminated nickel orebodies, such as Black Swan, a S:Ni ratio of less than 1.0 indicates millerite (NiS) is likely to be the predominant form of nickel mineralisation.

Millerite can be difficult to liberate and subsequently float (relatively slow floating) due to its relatively fine grain size compared to pentlandite (NiFe)<sub>9</sub>S<sub>8</sub>. Pentlandite is the predominant source of nickel mineralisation in the Silver Swan and Golden Swan massive sulphide deposits.

Historical reports have identified where millerite is present, the millerite grain size is very fine, requiring a regrind of a suitable flotation concentrate stream to assist with the mineral liberation from the antigorite host rock. A preliminary regrind test, where the rougher concentrate was reground to 80% passing 25 microns and the reground concentrate re-floated and cleaned, yielded the following positive results:

- Final re-cleaner concentrate nickel grade 31%;
- The MgO and SiO<sub>2</sub> content in the re-cleaner concentrate reduced by ~50% (both to less than 12% by weight), demonstrating significantly improved liberation of interlocked gangue minerals; and
- Overall nickel recovery reduced by approximately 5%.

A Pressure Oxidation (POX) test was completed on a ~50:50 talc carbonate / serpentine ore blend. The POX leach extraction results were excellent, demonstrating greater than 97% nickel and cobalt extraction to the POX leach solution after 120 minutes residence time in the laboratory autoclave, with greater than 90% extraction of both nickel and cobalt after only 30 minutes residence time.

The ore characterisation and blending testwork program is approximately 50% complete. The program was delayed by the need to collect additional samples of the serpentinite ore-type, given the first batch of samples (specifically from PBS038) were found to contain high levels of talc.

## Engineering Studies

### Process Plant and Infrastructure Study

GR Engineering Services (GRES) commenced the Process Plant and Infrastructure study during the quarter.

GRES is working with Western Power to assess the power allocation required for access to the Western Power electrical grid. GRES is also assessing a 200 person accommodation camp located at Black Swan. The accommodation camp may be required to house a percentage of the workforce given the current shortage of accommodation in the Kalgoorlie region.

GRES is also evaluating the potential to utilise the existing Silver Swan ball mill as a concentrate regrind stage. Based on the positive testwork results received to date it is likely the regrind duty would be applied on selected flotation banks from the rougher flotation stage. More testwork is required to optimise the opportunity to incorporate a concentrate regrind stage.

## Black Swan Pit Dewatering Study

The Black Swan Pit Dewatering Study was completed at the end of February 2022. The study assessed the operating history of the Black Swan Tailings Storage Facility (TSF) and its interface with the Black Swan Pit. The Black Swan TSF forms part of an overall Integrated Waste Rock Landform (IWR) with the TSF positioned only 350 metres to the south of the Black Swan Pit. As of September 2021, the Black Swan Pit contained approximately 300ML of saline water that needs to be removed prior to recommencing mining activities.

In January 2012, the southern wall at the Black Swan Pit had a localised failure. Therefore, it was important to assess the pit/TSF interface in detail to ensure that appropriate controls are put in place to manage the transfer of 300ML of water from the Black Swan Pit to the adjacent TSF. Recognising the central decant (water recycling system) at the Black Swan TSF would not be in operation until the Black Swan Concentrator commenced production.

The Black Swan Pit is proposed to be dewatered at approximately 20litres/second over a period of 6-9 months, with a large percentage of the water likely to be directed to an alternate TSF (located much further way from the Black Swan open pit) for a dust suppression duty or sent to water vaporisers (positioned within the crest of the Black Swan open pit).

The Company expects to commence pit dewatering to align with recommencement of open pit mining operations.

## Silver Swan Tailings Geotechnical Study

The geotechnical investigation of the Silver Swan TSF was completed at the end of February 2022.

Outcomes from the study were:

- the embankment walls will have an adequate factor of safety against failure when the tailings are reclaimed. The factor of safety will be maintained whether the tailings are reclaimed via a hydraulic mining approach or via a mechanical mining method; and
- the Silver Swan Tailings Storage Facility could be reused to store tailings in the future after the existing tailings are reclaimed (and reprocessed).

## Mining Studies

During January/February 2022, Entech investigated the options available to remove and remediate the wall failure located on the southern side of the Black Swan Pit. Waste rock from the wall failure is currently sterilising a significant tonnage of serpentinite ore. The assessment confirmed that addressing the wall 'slip' is technically feasible and is to be incorporated within the overall mine plan going forward.

The mining studies will continue with impending Silver Swan and Black Swan Resource updates once available.

## Marketing and Project Funding

The Company has received strong interest from various parties to enter an offtake arrangement for concentrate to be produced at Black Swan. Preliminary concentrate specifications were provided to interested parties, including trading houses, battery makers and smelters, with competitive indicative offtake terms received from a number of parties. Poseidon will continue to engage with these parties as more information becomes available on the final concentrate specifications and the expected production schedule.



## LAKE JOHNSTON

### Lake Johnston Exploration Update

During the period, the Program of Work (PoW) lodged with the Department of Mines, Industry Regulation and Safety (DMIRS) was approved for an exploration program targeting the high priority Western Ultramafic unit. The program will consist of up to 250 holes on 43 lines, drilling up to 15,000 metres. The Company is aiming to commence the program during the next quarter.

### 1.5Mtpa Processing Plant Engineering Study

The results of an engineering study to refurbish and operate the Lake Johnston processing plant were released on 27 January 2022. The engineering study investigated the cost of refurbishing the existing processing plant at a throughput rate of 900ktpa and operating it to an accuracy of +/- 20%. The study identified that Lake Johnston plant could be refurbished for a modest \$31 million over a seven-month period.

Lake Johnston is the next nickel sulphide mining and processing operation that the Company could bring on stream sometime after the recommencement of operations at Black Swan. If both Black Swan and Lake Johnston were in production, the Company has potential to achieve one of our stated corporate objectives of producing at circa 15,000 tonnes per annum of nickel in concentrate.

## WINDARRA GOLD TAILINGS PROJECT

### Development Partnership

In mid-2021 Poseidon completed a Definitive Feasibility Study on processing the Windarra and Lancefield gold tailings resources through a purpose-built plant at Windarra. Given the primary focus of the Company is the restart of the Black Swan operations the decision was made to look for a partner to develop this project.

Argonaut PCF was appointed to find a suitable partner and has received considerable interest in the tailings project. A number of short-listed parties requested additional data on the prospectivity of the Windarra leases for gold exploration and that information has been provided to the parties for review. To accommodate the additional data review period Argonaut PCF deferred the final offer deadline until 2 May 2022.

## OPERATIONS

### Operating Update

#### Black Swan

Black Swan was on care and maintenance during the quarter. Activities at Black Swan over the quarter included the BSD resource drilling program below the open pit and rehabilitation works on the Silver Swan decline.

Activities on site were completed without any significant safety incidents.

#### Windarra

Windarra remained on care and maintenance during the quarter.

## Lake Johnston

Lake Johnston remained on care and maintenance during the quarter.

## CORPORATE

### Pure Battery Technologies

In July 2021, Poseidon signed an MOU with Pure Battery Technologies (PBT) which has plans to build and operate a battery active cathode material (pCAM) refinery hub in Kalgoorlie, Western Australia. If PBT's pCAM Hub is constructed, it could be of great benefit to Poseidon by maximising margins on concentrates supplied to the refinery as well as potentially being able to treat a broader range of nickel concentrate specifications Poseidon could produce.

During the quarter:

- PBT achieved excellent results from preliminary POX leach testwork using samples of Black Swan Nickel Sulphide concentrates; and
- the Federal Government announced PBT, in partnership with Poseidon, had been awarded a \$119.6 million grant under the Modern Manufacturing Initiative – Manufacturing Collaboration Stream (see ASX announcement “\$119.6 million Modern Manufacturing Initiative Grant for Integrated Battery Material Refinery Hub in Kalgoorlie” released 17 March 2022)

### Personnel

Craig Jones, an experience mining engineer joined the executive team as General Manager Mining. Craig is an excellent addition to the team and will be instrumental in finalising the mining studies for the Black Swan BFS and implementing the restart, should FID be given.

### COVID Update

The Company and its contractors continue to operate within the safe operating parameters specified by the Western Australian Government.

### Financial

As at 31 March 2022, the Company held cash and current investments totalling \$16.8 million.

Over the March 2022 quarter, Poseidon's net cash outflow from operating and investing activities totalled \$5.2 million which included \$4.1 million of exploration and evaluation costs.

Costs incurred over the quarter amounted to \$6.0 million compared to a forecast of \$5.5 million, with the variance to forecast being higher exploration costs for additional unforecasted BSD resource drilling and Silver Swan decline rehabilitation works not anticipated prior to commencement of the period.

There were no production or development activities conducted over the quarter and as such no production or development expenditures were incurred.

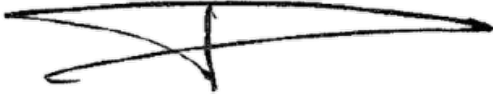
Related party expenses over the quarter totalled \$74,936, all of which were fees paid to Directors.

With feasibility study works continuing on the Black Swan restart, Poseidon has forecasted costs of \$5.3 million over the next quarter.

### Other

There were no material changes in mineral tenements during the period.

*This Quarterly Activities Report was authorised for release by the Poseidon Board of Directors.*



**Peter Harold**  
**Managing Director and CEO**

29 April 2022

**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. 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 and the Abi Rose deposit at Lake Johnston.

Black Swan will be the first project to restart 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.

The Company completed a Definitive Feasibility Study on retreating the gold tailings at Windarra and Lancefield in July 2021 and is currently investigating potential partners to develop the project and monetise the asset.

### COMPETENT PERSON STATEMENTS:

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

- "Poseidon Announces Black Swan Mineral Resource" released 4 August 2014
- "Silver Swan Resource Update" released 27 April 2022
- "50% Increase in Indicated Resources at Lake Johnston" released 17 March 2015
- "Silver Swan Tailings – Maiden Resource Estimate" released 15 September 2021
- "Golden Swan Maiden Resource" released 27 October 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.

# MINERAL RESOURCE STATEMENT

## Table 1: Nickel Projects Mineral Resource Statement

Nickel Sulphide Resources	JORC Compliance	Cut Off Grade	MINERAL RESOURCE CATEGORY													
			INDICATED			INFERRED			TOTAL							
			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%	9,600	0.68	65,000	21,100	0.54	114,000	30,700	0.58	179,000	0.01	4,200	NA	-	
Silver Swan	2012	1.0%	138	9	12,450	8	6	490	146	9.5	12,940	0.165	277	0.36	608	
Golden Swan	2012	1.0%	111.6	4.7	5,200	48.4	2.2	1050	160	3.9	6,250	0.08	123	0.3	480	
<b>LAKE JOHNSTON PROJECT</b>																
Maggie Hays	2012	0.80%	2,600	1.6	41,900	900	1.17	10,100	3,500	1.49	52,000	0.05	1,800	0.1	3,400	
<b>WINDARRA PROJECT</b>																
Mt Windarra	2012	0.90%	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	0.80%	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	-	0.08	3,600	
<b>TOTAL</b>																
Total Ni, Co, Cu Resources	2004 & 2012		16,917	1.07	181,550	27,270	0.80	217,140	44,187	0.90	398,690	0.02	7,600	0.1086	13,788	

Note: totals may not sum exactly due to rounding. NA = information Not Available from reported resource model. The Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

- **Black Swan Resource** as at 22 July 2014 (see ASX announcement "Poseidon Announces Black Swan Mineral Resource" released 4<sup>th</sup> August 2014)
- **Silver Swan Resource** as at 27 April 2022 (see ASX announcement "Silver Swan Resource Update" released 27<sup>th</sup> April 2022)
- **Golden Swan Resource** as at 12 November 2021 (see ASX announcement "Golden Swan Maiden Resource – Additional Information released 12<sup>th</sup> November 2021)
- **Maggie Hays Resource** as at 17 March 2015 (see ASC announcement "50% Increase in Indicated Resources at Lake Johnston" released 17<sup>th</sup> March 2015)
- **Mt Windarra Resource** as at 7 November 2014 (see ASX announcement "Poseidon Announces Revised Mt Windarra Resource" released 7<sup>th</sup> 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<sup>st</sup> December 2011)

Zone	Table 1B. Silver Swan Tailings Resource										
	Measured										
	Tonnes	Ni%	Ni t	Cu%	Co ppm	Fe%	MgO%	As%	S%	Density	
1	280,600	0.75	2118	0.02	283	16.7	8.81	0.04	7.56	2.84	
2	394,365	1.04	4082	0.06	967	26.1	4.71	0.17	13.56	3.09	
<b>Total</b>	674,964	0.92	6200	0.04	683	22.2	6.42	0.11	11.06	2.98	

**Silver Swan Tailings Resource** as at 15 September 2021 (ASX Announcement "Silver Swan Tailings – Maiden Resource Estimate" 15 September 2021)

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.

# GOLD TAILINGS MINERAL RESOURCE STATEMENT

## Table 2: Gold Projects Ore Resource Statement

Table 2A 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

Table 2B 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

**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 Table 3A 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).

## TENEMENTS HELD

**Table3: Tenements Held as at 31 March 2022**

AREAS OF INTEREST	TENEMENTS	ECONOMIC ENTITY'S INTEREST
Western Australia		
Windarra Nickel Assets	SA 38/261, G38/21, L38/121, L39/184, L38/199, L38/218, L39/221	100%
Windarra South	MSA 38/261, 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	E63/1067, G63/0008, G63/0005, L63/0051, L63/0052, L63/0055, L63/0057, M63/0163, M63/0282, M63/0283, M63/0284, M63/0292, M63/0293, M63/0294, M63/0522, M63/0523, M63/0524, E63/1784	100%
Black Swan Nickel Assets	M27/0039, M27/0200, M27/0214, M27/0216, L27/0057, L27/0058, L27/0059, L27/0074, L27/0075, L27/0077, L27/0078, L24/0219, L24/0222, G27/	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 March 2022 Quarter

Nil

Beneficial Percentage Interests Held in Farm-In or Farm-Out Agreements during the March 2022 Quarter

Nil

Beneficial Percentage Interests Held in Farm-In or Farm-Out Agreements Acquired or Disposed of during the March 2022

Nil