

UPDATED SILVER SWAN RESOURCE UNDERPINS SIGNIFICANT INCREASE IN HIGH GRADE INDICATED RESOURCE BASE

27 April 2022

Key Points

- Total Indicated and Inferred Resource at Silver Swan is now 130,000t @ 9.6% Ni for 12,400t Ni at a 4.5% Ni COG Silver Swan
- The high-grade Indicated Mineral Resources from both Golden Swan and Silver Swan now stands at 250,000t @ 7.10% Ni for 17,665t Ni, a 75% increase of nickel metal from 2019
- Indicated Resource category is at a confidence level that can be used in Reserve calculations
- Black Swan Disseminated Resource update on track to be delivered later this quarter

Poseidon Nickel (ASX: POS) ("Poseidon", "the Company") is pleased to announce an updated Mineral Resource Estimate (MRE) for the Silver Swan deposit at Black Swan.

Managing Director and CEO, Peter Harold, commented, "the delivery of the updated high-grade resource at Silver Swan Resource and the Golden Swan Resource in October 2021 has taken a lot of effort and has achieved important deliverables for Poseidon.

Both resource updates have incorporated recent drilling from newly established drill cuddies in optimum positions. The latest drill program at Silver Swan in particular, has minimised the uncertainties associated with the 2019 resource estimate. The 2019 estimate had included numerous drillholes which intersected the mineralised surface at very acute angles. The high-grade Golden Swan and Silver Swan Resources will be important sources of feed for the Black Swan Fill the Mill strategy. We look forward to finalising the updated Black Swan Disseminated Resource and then finalising the open pit and underground mining plans which will form the basis on the Black Swan Bankable Feasibility Study, due for completion in September this year."

Silver Swan Resource Tables

The Silver Swan Mineral Resource Estimate (**MRE**) was prepared for Poseidon by independent resource consultants Snowden Optiro Pty Ltd following the completion of the 38 hole, 8,179m exploration and resource drilling programme. The 2022 Mineral Resource Update has focussed on the four mineralised lenses:

- Goose
- Fledgling-Canard
- Tundra-Mute
- Peking Duck

The MRE was classified in accordance with the 2012 JORC Code, has been reported above a 1.0% nickel cutoff, and is included as Table 1 with the JORC 2012 Compliance Tables (Sections 1, 2 and 3) included as Appendix 3.



	Silver Swan Resource - April 2022														
	Indicated						Inferred				Total				
Area	kt	Ni %	As ppm	Co ppm	Ni metal (t)	kt	Ni %	As ppm	Co ppm	Ni metal (t)	kt	Ni %	As ppm	Co ppm	Ni metal (t)
Tundra- Mute	99	8.7	2,990	1,720	8,625	6	5.9	1,500	770	370	105	8.6	2,900	1,660	8,995
Peking Duck	26	9.6	2,830	1,770	2,520	2	6.7	1,500	1,070	120	28	9.5	2,740	1,720	2,640
Fledgling- Canard	12	9.5	2,290	1,250	1,120						12	9.5	2,290	1,250	1,125
Goose	2	10.2	3,990	3,160	185						2	10.2	3,990	3,160	185
Total resource	138	9	2,910	1,700	12,450	8	6	1,500	840	490	146	9.5	3,060	1,650	12,940

TABLE 1: SILVER SWAN MINERAL RESOURCE APRIL 2022 AT A 1% NI COG

Mineral Resource Summary

Poseidon engaged Snowden Optiro Pty Ltd to undertake the Silver Swan MRE update with the aim to quantify the resource and create a Block Model suitable for mine planning purposes. A summary of the methodology is contained in this release.

Geology and Geological Interpretation

The Silver Swan Massive (SSM) deposit comprises four narrow, high grade nickel sulphide mineralised shoots, located along the basal ultramafic contact of the Black Swan Komatiite (BSK). The BSK is a large extrusive ultramafic flow that can be traced over a 3,500m strike length and extends at least 1,600m below surface. The width of the BSK varies from 150 to 600m in the central area of the flow, which narrows significantly along strike north and south of the central portions of the flow.

The four shoots that were assessed for this MRE are Goose, Peking Duck, Fledgling-Canard and Tundra-Mute (**Figure 1**). There is remnant mineralisation located within the Goose shoot, and the top 15m of the Fledgling-Canard shoot has also been mined. The Peking Duck and Tundra-Mute shoots are unmined, other than some limited development in the upper portions of Tundra-Mute.

Within the Black Swan stratigraphy there are several late felsic to intermediate intrusive unites, typically described as porphyritic dykes which have stoped out the mineralisation. These have been depleted from the mineralisation by resetting the density to 0.00. As with the previous estimates, these have been modelled to ensure that any mineralisation is suitably accounted for.

The BSK hosts both disseminated nickel sulphide (Black Swan Disseminated - BSD), and massive sulphide nickel mineralisation (Silver Swan - SSM, White Swan - WSM, Cygnet - CM, Gosling - GM and Golden Swan - GSM). The SSM mineralisation is the most significant massive sulphide accumulation within the BSK, extending from 195m to 1,550m below surface and consisting of a series of narrow, variably sized vertical shoots.

As a function of the depth of the SSM and the location of the available drilling locations, the majority of the 2019 and earlier drilling was drilled at very acute intersection angles to the mineralisation. The 2020 and 2021 drilling aimed at improving the drillhole intersections and providing infill data for the 2019 MRE (*Silver Swan Resource Upgrade and Black Swan Underground RC Drilling* - ASX Announcement 5 August 2019).



The 2020 and 2021 drilling programmes predominantly tested the Tundra-Mute shoot, with only a very limited number of drillholes testing the Fledgling-Canard and Peking-Duck shoots, and no additional drilling into the Goose shoot.

Following completion of the exploration drilling in the last quarter of 2021, the interpretations were updated. The 2022 updated interpretations were prepared by Snowden Optiro, primarily using the logged lithology codes identifying the predominantly massive sulphide lithologies, combined with rock geochemistry.

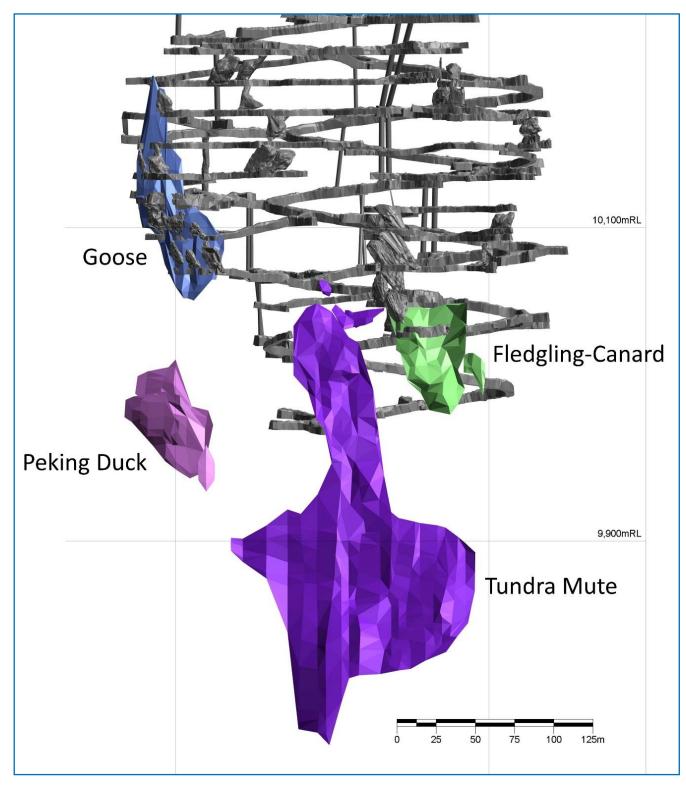


FIGURE 1: LONG SECTION LOOKING WEST SHOWING SIMPLIFIED LAYOUT OF THE SILVER SWAN DEPOSITS



Drilling Techniques

The pre-2020 drillhole downhole surveys were completed using a range of surveying methods ranging from acid etch for the very early (1960 and 1970s) drilling, through to north seeking gyro/REFLEX tools. As a consequence of the previous mining at Silver Swan, there is confidence in the downhole survey data. This confidence is further supported by the observation by the Poseidon team that the 2020 and 2021 drilling program intersected the mineralisation extremely close to the target depths predicted from the 2019 estimate.

The Silver Swan MRE update is based on the 38 holes of the exploration and resource drilling program undertaken by Poseidon in 2021. Drilling was conducted by Webdrill using a Diamec Smart 6 Mobile Carrier rig. The holes were drilled in NQ2 and the core was orientated using the Trucore Orientation Tool and surveyed using the DHS DeviGyro OX tool.

The collar table for the 2021 program is included as Table 3 in Appendix 1.

Figures 2 and 3 show the 2021 and historical drilling that was used as the basis for this MRE.

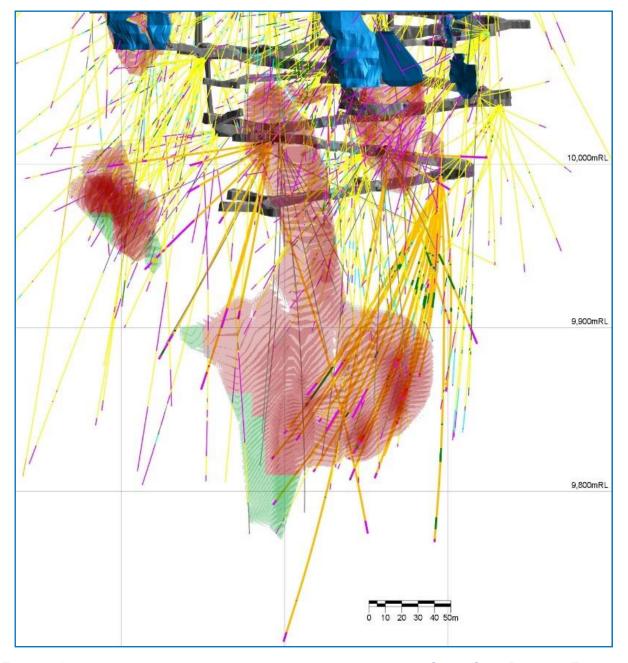


FIGURE 2: LONG SECTION SHOWING HISTORIC AND RECENT DRILLING AROUND SILVER SWAN DEPOSITS. THE 2021 PROGRAMME IS SHOWN AS THICKER DRILL TRACES



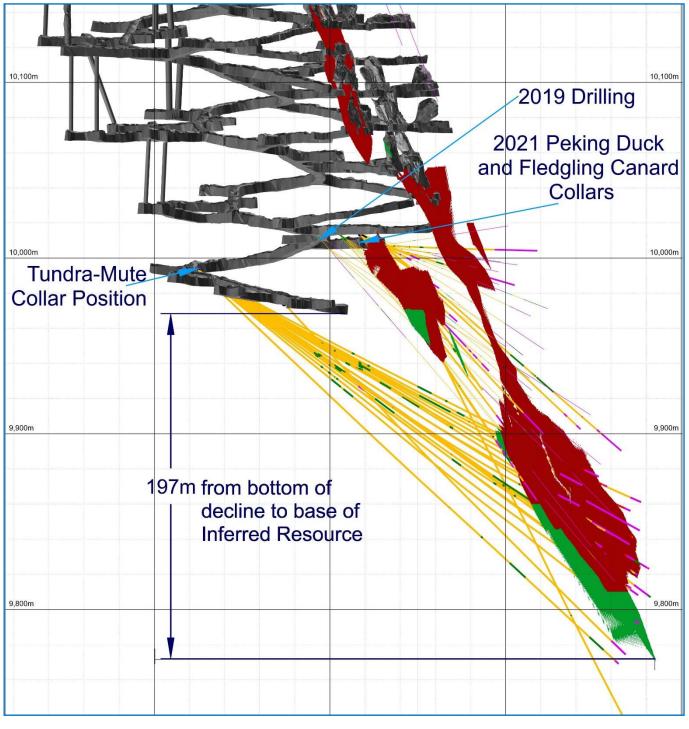


FIGURE 3: CROSS SECTION LOOKING NORTH SHOWING 2019 AND 2021 PROGRAM COLLAR LOCATIONS AND IMPROVED DRILLING ANGLES FOR 2021 TUNDRA-MUTE PROGRAM

Sampling and Sub-Sampling Techniques

The Silver Swan mineralisation was identified visually using the presence, texture and proportion of nickeliferous sulphide material, and lithology. Samples were divided into logged domains, with no individual sample being greater than 1.2m or less than 0.2m. Core samples are sawn and were sampled as half core, unless duplicates were taken, which required samples to be quarter core. All sampling was as diamond core. Certified Reference Material (CRM) standards and blank samples were submitted at nominal rate of 1 in 20 (achieved rate was 1 in 14 for the CRMs).



Sample Analysis Method

The pre-2020 assay data was generated by a range of techniques, predominantly x-ray fluorescence (**XRF**) or ICP-MS and ICP-OES. No details of the historical sample preparation are available; however, as noted, the previous mining successfully exploited the deposit for a number of years and hence there is confidence in the historical analytical data.

All Silver Swan core samples submitted for assay in 2021 were analysed by the ICP-OES method, which is a total analytical technique and considered appropriate for the style of mineralisation. For the 2021 drilling programme, samples were dispatched to SGS in Perth. Post sample receipt and drying, sample preparation consisted of crushing and pulverisation, followed by four acid digest. The SGS ICP-OES technique code was ICP41Q. Each sample was analysed for a total of eleven elements, including nickel, copper, cobalt, arsenic and sulphur.

Estimation Methodology

Snowden Optiro prepared the interpretations primarily based upon the logged lithology (massive and semimassive sulphide) in combination with the available geochemistry.

The interpretations were used to flag the samples, from which 1.0m length-density weighted composites were created, which were used for estimation. Only arsenic required the use of top-cuts, primarily to restrict the impact of extreme grades. However, the top-cuts applied for arsenic were primarily to restrict the influence of the extreme values. As arsenic is a deleterious element, the top-cuts were kept relatively optimistic to minimise the risk of artificially lowering the expected arsenic for mine planning and scheduling purposes.

All boundaries were treated as hard for the purposes of estimation. Ordinary kriging (**OK**) was selected as the preferred estimation technique because of the low variance/CV, low nugget structures, and minimal skew exhibited in the respective grade distributions. Variography was prepared for all variables using the data from Tundra-Mute Domain 204 exclusively, as this was the only domain with a sufficient number of samples. A three-pass search strategy was used, with the first pass search ranges of 30m x 15m x 5m in the plane of the mineralisation. A parent block size of 2.0mE x 5mN x 5mRL was used.

Cut-Off Grade

The Mineral Resource was interpreted using the massive nickel sulphide texture and stratigraphic position of the mineralisation. The Mineral Resource has been reported using a cut-off grade (**COG**) of 1.0% nickel which reflects a nominal mining cut-off.

The grade distribution at 1% COG is shown in **Figure 4**.



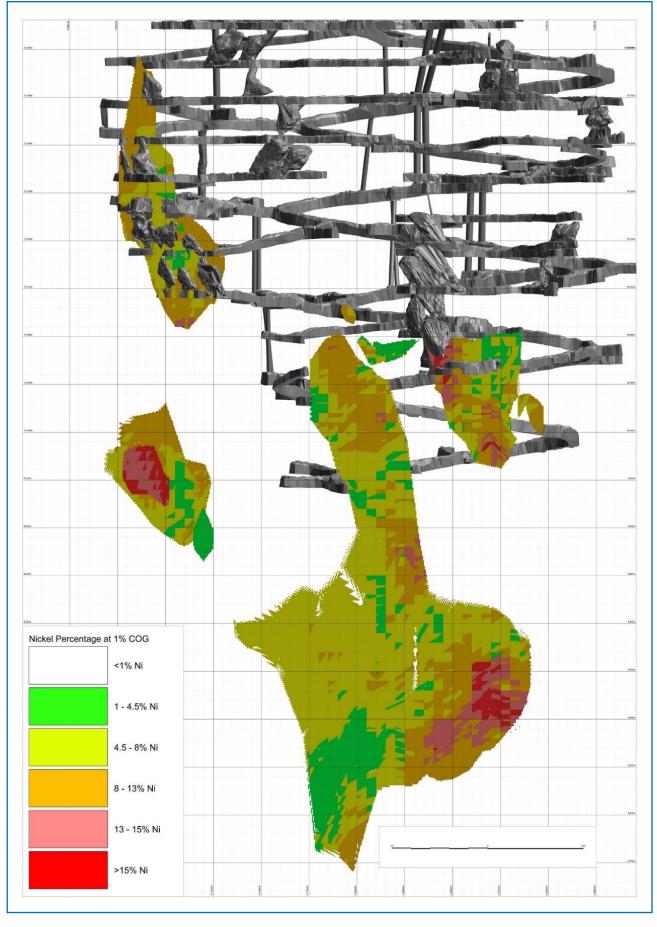


FIGURE 4: SILVER SWAN NI GRADE DISTRIBUTION AT 1% COG



Resource Classification and Reasonable Prospects of Eventual Economic Extraction

The Mineral Resource has been classified into Indicated and Inferred categories following the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (the JORC Code). No Measured Mineral Resources have been defined. The classification criteria were assigned based on the robustness of the input data, the drillhole spacing, geological confidence and grade continuity. The classification reflects the Competent Person's views of the deposit.

The Indicated Mineral Resource is of a moderate confidence. These areas are considered to have a moderate to high confidence in the geological interpretation, are considered well informed and are supported by a nominal drill spacing less than 20mN x 20mRL, with suitable drillhole intersection angles, and where grade and geological continuity can be assumed.

The Inferred Mineral Resource is of a low confidence. These areas are considered to have a low or variable confidence in the geological interpretation, are considered poorly informed supported by a nominal drill spacing greater than 20mN x 20mRL, and/or with increasingly acute drillhole intersection angles, and where grade and geological continuity is implied but cannot be assumed.

Reasonable prospects for eventual economic extraction (**RPEEE**) have been demonstrated by the previous underground mining of the Cygnet, Gosling and Silver Swan orebodies, which are of comparable volumes and grade and at similar depths and are spatially adjacent to Golden Swan. RPEEE considerations meant that only hanging wall mineralisation adjacent to the contact mineralisation was considered a Mineral Resource.

The distribution of Indicated and Inferred resources at Silver Swan is shown in Figure 5.



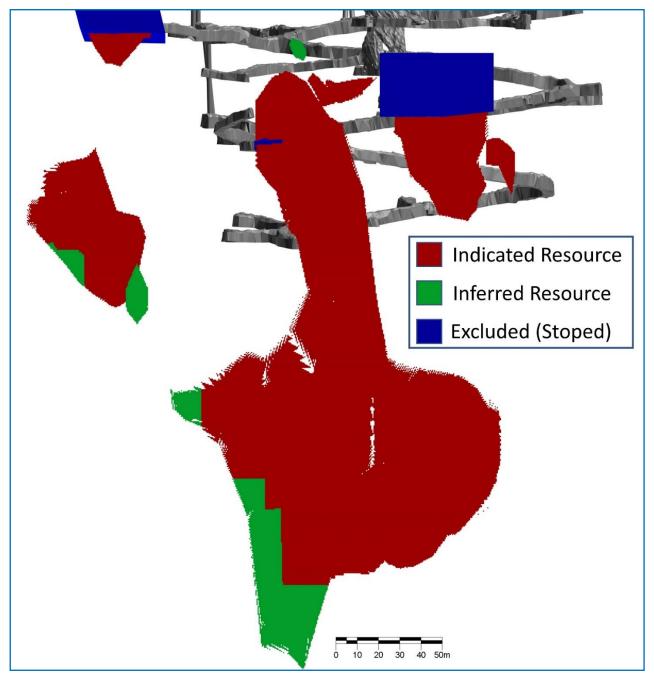


FIGURE 5: SILVER SWAN 2022 RESOURCE CATEGORIES

Comparison to Previous Estimate

A comparison between the 2019 and 2022 Silver Swan Mineral Resource at a 4.5% nickel cut-off is presented in **Table 2**.

The additional drilling has changed the overall Mineral Resource by increasing the geological understanding and confidence within the Tundra Mute area and upgrading Inferred to Indicated Mineral Resource. Much of the August 2019 Inferred Mineral Resource was at the deeper margins of the mineralisation, which is narrower than the more central portions of the mineralisation. While this means a decrease in the Total Resources from the August 2019 MRE, it is only the Inferred Resource portion which cannot be taken to any Reserve classification that has decreased. The Indicated Resource has increased by 24kt at the 4.5% Ni COG to 124kt (or 138kt at a more realistic mining COG of 1% Ni).



Adding the 111.6kt at 4.7% Ni in Indicated Resource in Golden Swan (see ASX announcement "Golden Swan Maiden Resource" released 27 October 2021) increases the overall Massive Sulphide component of Black Swan Operations to 250kt at 7.1% Ni, an increase of 130% in Indicated Resources over the 2019 figures.

The updated Silver Swan Resource combined with the Golden Swan Resource now totals 17,750t of contained Ni metal in Indicated Resources which is an increase of 7,620t of Ni metal, or 75%, over the 2019 Indicated Resource. Importantly, Indicated Resources are what can be used to determine the mining inventory and then Reserves, subject to the appropriate physical and economic assumptions.

Mineral Resource	Area		h	ndicated				Inferred				Total	
	Alta	kt	Ni %	As ppm	Ni metal (t)	kt	Ni %	As ppm	Ni metal (t)	kt	Ni %	As ppm	Ni metal (t)
	Peking Duck	26	9.74	2,515	2,560	1.15	8.8	4,328	100	27	9.7	3,940	2,661
2019	Tundra-Mute	68	9.21	3,198	6,260	59.4	9.8	3,293	5,800	127	9.5	1,952	12,080
	Goose	1.7	9.01	3,182	150	0				1.7	9.0	3,182	149
	Fledgling-Canard	12	9.9	2,100	1,160	0				12	9.9	2,100	1,158
	Total resource	108	10.8	3,423	10,130	61	10.0	3,667	5,900	168	9.5	2,299	16,049
	Peking Duck	25	9.9	2,869	2,486	1.3	8.2	1,449	105	26	9.8	3,266	2,591
	Tundra-Mute	87	9.6	2,932	8,304	4.5	6.9	1,679	310	91	9.4	2,962	8,614
2022	Goose	1.5	10.2	3,995	151					1.5	10.2	3,995	151
	Fledgling-Canard	11	10.0	2,103	1,092					11	10.0	2,103	1,092
	Total resource	124	9.7	2,859	12,033	6	6.5	1,465	415	130	9.6	2,964	12,448
	Peking Duck	96%	101%	114%	97%	111%	93%	33%	105%	97%	101%	83%	97%
	Tundra-Mute	128%	104%	92%	133%	8%	71%	51%	5%	72%	100%	152%	71%
2019-2022 change	Goose	89%	113%	126%	101%					89%	113%	126%	101%
	Fledgling-Canard	93%	101%	100%	94%					93%	101%	100%	94%
	Total resource	116%	89%	84%	119%	10%	65%	40%	7%	77%	100%	1 29 %	78%

TABLE 2: COMPARISON OF 2019 AND 2022 SILVER SWAN MINERAL RESOURCE ESTIMATE AT 4.5% NI COG

Black Swan Resource Update

Following the completion of drilling on the Black Swan Disseminated (**BSD**) mineralisation in March 2022, the drilling and lithological logging results along with sections showing the serpentinite and talc-carbonate zones have been provided to WSP Golder to start the process of wireframing domains using the assays received to date.

As at the date of this announcement there are five assays still outstanding with an anticipated delivery date of the end of April. The expected delivery of the updated MRE for the BSD is the end of May 2022.

The delivery of the updated MRE for Silver Swan together with the pending delivery of the updated MRE for the BSD is expected to provide a firm foundation for Phase 1 of the Fill the Mill strategy at Black Swan. The updated BSD MRE has the potential to provide a significant Phase 2 mine life based on supplying concentrate into Pure Battery Technologies proposed pCAM refinery in Kalgoorlie.



This announcement has been authorised for release by the Poseidon Board of Directors.

Peter Harold Managing Director and CEO

27 April 2022

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

COMPETENT PERSON STATEMENTS:

The information in this report that relates to Exploration Targeting and Results is based on, and fairly represents, information compiled and reviewed by Mr Andrew Pearce, who is an employee of Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists.

The information in this report which relates to the Silver Swan Mineral Resource is based on, and fairly represents, information compiled by Mr Andrew Pearce, Exploration Manager, who is a full-time employee at Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists and Mr Ian Glacken who is a full time employee of Snowden Optiro Pty Ltd and is a Fellow of the Australasian Institute of Mining and Metallurgy.

Mr Pearce and Mr Glacken have sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code 2012). Mr Pearce and Mr Glacken consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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. 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.

Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change, without notice, as are statements about market and industry trends, which are based on interpretation of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance.

Forward looking statements may be affected by a range of variables that could cause actual results or trends to differ materially. These variations, if materially adverse, may affect the timing or the feasibility and potential development of the Golden Swan underground mine.

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.



Appendix 1 - Mineral Resource Statement

TABLE 3: NICKEL PROJECTS MINERAL RESOURCES STATEMENT

							М	INERAL RES	OURCE CAT	EGORY					
Nickel Sulphide	JORC	Cut Off		INDICATED			INFERRED					TOTAL			
Resources	Compliance	Grade	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 PI	ROJECT													
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
1	LAKE JOHNSTON PROJECT														
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
	WINDARRA PRO	DJECT													
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
	TOTAL														
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 modelled to produce the Ore Reserves

- Black Swan Resource as at 22 July 2014 (see ASX announcement "Poseidon Announces Black Swan Mineral Resource" released 4 August 2014)
- Silver Swan Resource as at 5 August 2019 (see ASX announcement "Silver Swan Resource Upgrade" released 5 August 2019)
- 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)

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.

	Silver Swan Resource - April 2022														
Area			Indicated	I				Inferre	d				Tota	I	
Alea	kt	Ni %	As ppm	Co ppm	Ni metal (t)	kt	Ni %	As ppm	Co ppm	Ni metal (t)	kt	Ni %	As ppm	Co ppm	Ni metal (t)
Tundra- Mute	99	8.7	2,990	1,720	8,625	6	5.9	1,500	770	370	105	8.6	2,900	1,660	8,995
Peking Duck	26	9.6	2,830	1,770	2,520	2	6.7	1,500	1,070	120	28	9.5	2,740	1,720	2,640
Fledgling- Canard	12	9.5	2,290	1,250	1,120						12	9.5	2,290	1,250	1,125
Goose	2	10.2	3,990	3,160	185						2	10.2	3,990	3,160	185
Total resource	138	9	2,910	1,700	12,450	8	6	1,500	840	490	146	9.5	3,060	1,650	12,940

TABLE 4: SILVER SWAN MINERAL RESOURCE ESTIMATE

Silver Swan Resource as at 5 August 2019 (see ASX announcement "Silver Swan Resource Upgrade" released 5 August 2019)

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



TABLE 5: SILVER SWAN TAILINGS RESOURCE - SEPTEMBER 2021

		Silver Swan Tailings Resource - September 2021								
		Measured								
Zone	Tonnes	Ni%	Nit	Cu%	Co ppm	Fe%	MgO%	As%	S%	Density
1	280600	0.75	2118	0.02	283	16.7	8.81	0.04	7.56	2.84
2	394365	1.04	4082	0.06	967	26.1	4.71	0.17	13.56	3.09
Total	674964	0.92	6201	0.04	683	22.2	6.42	0.11	11.06	2.98

Silver Swan Tailings Resource as at 15 September 2021 (see ASX announcement "Silver Swan Tailings – Maiden Resource Estimate" released 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.

TABLE 6: GOLDEN SWAN 2021 MINERAL RESOURCE AT A 1.0% NICKEL CUT-OFF

					Golden Swan Resource - October 2021								
Туре	Indicated			Inferred				Total					
	kt	Ni %	As ppm	Ni metal (t)	kt	Ni %	As ppm	Ni metal (t)	kt	Ni %	As ppm	Ni metal (t)	
Contact	111.6	4.7	390	5,200	8.8	4.7	500	410	120.4	4.7	390	5,610	
Hanging Wall	-	-	-	-	39600	1.6	140	640	39.6	1.6	140	640	
Total	111.6	4.7	390	5,200	48.4	2.2	208	1050	160	3.9	332	6,250	

Note: totals may not sum due to rounding

Golden Swan Resources as at 27 October 2021 (see ASX announcement "Golden Swan Maiden Resource" released 27 October 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.



Appendix 2

TABLE 7: SILVER SWAN 2021 PROGRAMME COLLAR DETAILS

CollarID	EAST	NORTH	RL	Dip	Azimuth (True)	TD (m)
Tundra-Mu	ıte					
PTMD001	10424.96	11895.72	9992.93	-32.8	62.7	297.2
PTMD002	10424.96	11895.72	9992.93	-33.9	67.7	299.7
PTMD003	10424.96	11895.72	9992.93	-32.9	72.8	268.4
PTMD004	10424.96	11895.72	9992.93	-35.4	62.4	323
PTMD005	10424.96	11895.72	9992.93	-29.3	58.0	258.4
PTMD006	10424.96	11895.72	9992.93	-30.6	68.3	259.2
PTMD007	10424.96	11895.72	9992.93	-31.2	55.1	264
PTMD008	10424.96	11895.72	9992.93	-36.6	57.8	304
PTMD009	10424.96	11895.72	9992.93	-37.7	58.9	314.4
PTMD010	10424.96	11895.72	9992.93	-35.5	69.0	290.6
PTMD011	10424.96	11895.72	9992.93	-36.5	74.5	306.2
PTMD012	10424.96	11895.72	9992.93	-34.4	71.9	296.8
PTMD013	10424.96	11895.72	9992.93	-36.9	67.7	316.1
PTMD014	10424.96	11895.72	9992.93	-34.8	59.6	313.5
PTMD015	10424.96	11895.72	9992.93	-32.8	56.6	292
PTMD016	10424.96	11895.72	9992.93	-35.1	63.7	310
PTMD017	10424.96	11895.72	9992.93	-32.4	55.6	171
PTMD018	10424.96	11895.72	9992.93	-32.2	54.6	283.3
PTMD019	10424.96	11895.72	9992.93	-38.2	70.5	26
PTMD020	10531	11864	10007	-55.7	69.5	101.0
PTMD021	10424.96	11895.72	9992.93	-30.3	49.5	285.0
PTMD022	10531	11864	10007	-61.8	69.4	342.0
PTMD023	10424.96	11895.72	9992.93	-44.1	52.6	316.0
PTMD024	10424.96	11895.72	9992.93	-25	67.5	2.0
PTMD025	10424.96	11895.72	9992.93	-33.8	75.2	295.2
-	-	ling Canard				
PPCD001	10517.47	11791.8	10013.57	-8.7	127.6	105
PPCD002	10517.47	11791.8	10013.57	-13.4	110.9	61.8
PPCD003	10517.47	11791.8	10013.57	-25.4	102.5	74.6
PPCD004	10517.47	11791.8	10013.57	-42.6	100.5	131.9
PPCD005	10517.47	11791.8	10013.57	-47.7	104.7	157.3
PPCD006	10517.47	11791.8	10013.57	-56.1	75.6	186.6
PPCD007	10517.47	11791.8	10013.57	-53.2	67.9	137
PPCD008	10517.47	11791.8	10013.57	-38.3	85.1	80.7
PPCD009	10517.47	11791.8	10013.57	-50.7	92.2	173.1
PPCD010	10531	11864	10007	-2.7	19.5	105.8
PPCD011	10531	11864	10007	-15.8	27.0	86
PPCD012	10531	11864	10007	-38.5	31.0	186.4
PPCD013	10531	11864	10007	-41.5	34.0	157.3



Appendix 3

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 NQ2 core was sampled at least 10m either side of logged mineralisation by cutting the core in half using a Corewise core saw. Samples were divided into logged domains, with no individual sample being greater than 1.2m or less than 0.3m. Appropriate QAQC standards and blanks from Geostatswere inserted, and duplicates taken in quarter core at selected intervals where mineralisation variability warranted it.
Drilling techniques	 Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc). 	 Drilling is conducted by Webdrill using the Diamec Smart 6 Mobile Carrier rig. The holes are drilled in NQ2 and the core was orientated using the Trucore Orientation Tool. The hole was surveyed using the DHS DeviGyro OX tool.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Core was recovered via 3m core tube used behind drill bit, and then transferred from tube to core trays. Recovery was calculatedon the amount recovered versus the amount drilled. Depths and recovery were recorded on wooden blocks placed in the core trays by the driller at the end of every run. Lost core was also recorded in this way. Core recovery was good, even through frequent broken ground.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Core was logged into Geobank Mobile. Logging was done for Geology, structure, RQD and a check against drilling records for recovery. Holes were validated before being exported to the Geobank database. After logging, all core was photographed inboth dry and wet images. The photographs æstored on a Perth based network drive.



Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Core was sampled as half core, unless duplicates were taken which required samples to be quarter core.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Samples were dispatched to SGS lab in Perth After crushing and pulverizing they were analysed by 4-acid ore grade digest with ICP- OES finish
Verification of sampling and assaying		 Sampling was conducted by the logging geologists who are employees of Newexco Data is collected using Geobank Mobile which utilises a validation function before data can be exported into the Geobank database
Location of data points		 All collar surveys were completed to an accuracy of ±10mm. A local grid based on known MGA references was created. The Department of Land Information (formerly the Department of Land Administration) benchmark UO51 on the Yarri Road opposite 14 Mile Dam was usedto tie the survey control stations to the Australian Height Datum (AHD). A height datum of AHD + 1000m was adopted for the Black Swan project. All holes are surveyed using the DHS Devishot tool. Shots were take every 2 or 3m on in and out runs across the entire length of the hole at every survey interval. The tool is True North seeking and has an accuracy of +/-1 degree of dip and azimuth. In tool analysis gave an indication of whether the survey passed or failed and successive surveys were overlayed in DeviCloud to visually check deviation



Criteria	JORC Co	de explanation	С	ommentary
				between surveys with an average survey used as the base for modelling.
Data spacing and distribution	Results Whether sufficie and gra Resour proced	bacing for reporting of Exploration S. Per the data spacing and distribution is nt to establish the degree of geological ade continuity appropriate for the Mineral rce and Ore Reserve estimation ure(s) and classifications applied. Per sample compositing has been applied.	•	The holes drilled form part of a program that is intended to bring the mineral occurrence to Indicated status. The nominal spacing is 40x40m, with infill drilling to be conducted as required to comply with resource modelling requirements.
Orientation of data in relation to geological structure	unbiase the ext the dep If the re orienta minera introdu	er the orientation of sampling achieves ed sampling of possible structures and ent to which this is known, considering posit type. elationship between the drilling tion and the orientation of key lised structures is considered to have ced a sampling bias, this should be ed and reported if material.	•	Drill core is oriented using the Trucore Ori.
Sample security	• The me	easures taken to ensure sample security.	•	N/A
Audits or reviews		sults of any audits or reviews of ng techniques and data.	•	No audits or reviews were completed during drilling



Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Black Swan open pit is centred on M27/39 and extends into M27/200. Silver Swan is wholly located on M27/200. They are located 42.5km NE of Kalgoorlie. They are registered to Poseidon Nickel Atlantis Operations Pty Ltd, a wholly owned subsidiary of Poseidon Nickel Ltd, following the purchase of the assets.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 The Silver Swan Mine was discovered by MPI Mines Ltd, then was acquired by Lion Ore in 2004. Much of the exploration drilling and development was completed by these two companies. In turn Lion Ore was taken over by Norilsk in 2007 who continued mining and developing the underground mine at Silver Swan until 2010. Poseidon Nickel purchased the operation from Norilsk in late 2014.
Geology	Deposit type, geological setting and style of mineralisation.	 The Silver Swan deposit is a Kambalda style komatiite hosted nickel deposit.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	The current drill hole information is listed as Table 4 in Appendix 1 of this document.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. 	 When reporting Silver Swan assay results, a cut-off grade of 1.0% Ni has been used.



Criteria	JORC Code explanation	Commentary
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Mineralised widths are reported as down hole lengths. Due to the uneven nature of the Felsic footwall, true width of the reported assays cannot be stated with certainty at this time.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 No significant new discovery reported. Drilling on which this report is based have been reported previously
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 Mineralised intervals >1.0% from each assay received that are consistent with Silver Swan mineralisation for this announcement are shown in Table 2. Intervals below this threshold as well as unsampled intervals are listed below the table.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 No further observations to be reported at this stage.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Resource drilling on the Black Swan deposit was commenced in FY 2021-22, and as part of that program further diamond drilling will be done in the area in order to extend the known mineralisation.



Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. 	 The historical database has been previously audited by Poseidon Nickel Ltd (POS) and a third party external consultant and was found to be in good standing. Subsequent to the database audit, data collected by POS geologists and contractors was captured electronically. The data was checked and validated before and after being uploaded to the POS SQL drillhole database, which is managed by a third-party external consultant. The drillhole data was supplied to Optiro as CSV format extracts from SQL drillhole database, was subsequently imported into Datamine, and checks performed to test the available data; no errors or discrepancies were identified.
	Data validation procedures used.	 Basic validation steps were completed on the drillhole data supplied to Snowden Optiro. During input and desurveying in Datamine Studio RM, checks for overlapping intervals and gaps in downhole interval files, checks that assays were within expected ranges and that all data integrated as expected were undertaken, with no problems identified.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	 Snowden Optiro CP, Ian Glacken, conducted a site visit on 4 August 2021, whilst exploration drilling was being conducted for the Golden Swan prospect. Exploration of the Silver Swan and Golden Swan prospects used the same exploration and database systems and protocols.
	 If no site visits have been undertaken indicate why this is the case. 	A site visit has been conducted.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	 The geological interpretations have been validated by ongoing drilling and previous mining activity, including development and face mapping by the previous lease owners and hence, there is good confidence in the geological interpretations. Estimation has been restricted to mineralised lithologies, that are based on the extensive previous mining operations.
	 Nature of the data used and of any assumptions made. 	 Interpretations used all available drillhole data, but the estimated variables were informed by surface and underground diamond drillhole sampling exclusively.
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	• The evidence from previous mining makes large scale alternative interpretations unlikely. There is scope for local variability but the impact is considered to be only of local significance.



Criteria	JORC Code explanation	Commentary
	 The use of geology in guiding and controlling Mineral Resource estimation. 	• The mineralisation is defined by nickeliferous massive sulphide lithology and texture, which was used to interpret the mineralisation for this update.
	 The factors affecting continuity both of grade and geology. 	 Nickel is hosted within the Black Swan Komatiite Complex (BSKC), a large series of ultramafic komatiite flows. The massive sulphide Silver Swan mineralisation is located within the lower basal komatiite flow of the BSKC. Controlling factors include presence of ultramafic, location with the ultramafic stratigraphy, and the texture of the sulphide mineralisation.
Dimensions	 The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource 	 The pre-mined Silver Swan mineralisation has a length of approximately 375m striking grid north-south and has been tested down dip to a length of 1,550m vertically, with a steep plunge towards the north-east. The March 2022 update is for 10 individual sulphide lenses grouped into four mineralised areas, that range from 12 to 170m (averaging 80 m) along strike, 70 to 300m vertically (averaging 90 m), with an average thickness of 3-5m. These lenses dip at -60° to -75° towards 090°.



Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. 	 Estimation was undertaken using Datamine RM Pro software (v1.11.63.0 Beta). Prior to estimation, the samples and block model were coded using domain wireframes. Length-density weighted composites were generated using a nominal 1.0 m composite length. Estimation was within interpreted massive sulphide domains which were treated as hard boundaries. Interpolation was by ordinary kriging (OK) for nickel, arsenic, cobalt, copper, iron, magnesium oxide, sulphur and density. A top-cut was applied to arsenic only to minimise the impact of a small number of extreme values. Parent block estimation was used, with a parent block size of 2mE by 5mN by 5mRL, using a block discretisation of X:4, Y:4, Z:4. A variable sub-block size is 0.25mE by 0.5mN by 0.5mRL was used to optimise the block filling of the wireframes because of the narrow and variable shoot geometry. Late, non-mineralised intrusive dykes were flagged and removed from the final Mineral Resource. A three-pass estimation strategy was employed as outlined below: The first pass used a minimum of 6 and a maximum of 34 samples, using a search range of 30 m in the primary direction, 15 m in the intermediate direction, and 5 to 10 m across-strike. The second pass used the same minimum and maximum number of samples, but the primary search distance was doubled. The third pass used a minimum of 4 and a maximum of 18 samples with a search range doubled that of search pass 2. Search passes one and two informed 99.5% of the estimate.



Criteria	JORC Code explanation	Commentary
	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	 No check estimates have been undertaken. The production records from those areas previously mined are not available to reconcile against the updated 2022 Mineral Resource. The 2019 estimate was reported at a 4.5% nickel cut-off. At the same 4.5% nickel cut-off, the Indicated Mineral Resource has a 16% increase in the tonnage, a 3% increase in grade and a 19% increase in nickel metal. The Inferred Mineral Resource had a 90% reduction in tonnes, a 26% reduction in the nickel grade and 93% reduction in the nickel grade and 93% reduction in the contained nickel metal. These changes are the result of the Inferred Mineral Resource being upgraded to a Indicated Mineral Resource being upgraded to a Indicated Mineral Resource being at the deeper margins of the mineralisation, with narrower mineralised widths compared to the remaining, better-informed parts of the mineralisation. At the 2022 reporting cut-off at 1% nickel cut-off, the combined Indicated and Inferred Mineral Resource. This is the result of the additional drilling converting the previously lower confidence Inferred Mineral Resource located at the margins of the mineralisation being converted to higher confidence Indicated Mineral Resource Indicated Mineral Resource
	 The assumptions made regarding recovery of by-products. 	 No assumptions regarding recovery of by- products have been made.
	 Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). 	 Arsenic, magnesium oxide and iron have been estimated to assist with future mine planning requirements.
	 In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	• The parent block size is 2m (X) by 5m (Y) by 5m (Z) with drilling spaced from 5 to 40m (averaging 20m) spaced drilling in the plane of the mineralisation.
	 Any assumptions behind modelling of selective mining units (SMU). 	 No assumptions regarding the mining SMU have been used.
	 Any assumptions about correlation between variables. 	 There is good correlation (R> 0.85) between nickel, iron, sulphur and density. There are moderate correlations between nickel and cobalt (R=0.67) and low to no correlation between nickel and arsenic, copper and magnesium oxide.



Criteria	JORC Code explanation	Commentary
	• Description of how the geological interpretation was used to control the resource estimates.	 The Mineral Resource estimate was constrained within interpretations of the nickeliferous massive sulphide lenses. These lenses were subsequently depleted for the presence of late, cross-cutting barren intrusive dykes.
	 Discussion of basis for using or not using grade cutting or capping. 	 Grade top-cuts were applied to the arsenic grade only, to minimise the impact of a limited number of extreme grades. The top- cuts were derived using a combination of histogram, cumulative distribution and mean/variance analysis and population disintegration.
	• The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	 The estimates were initially validated visually in section and plan and there was good correlation between the composite and estimate. The whole of domain averages for the estimates were then compared with the naïve and declustered composite samples and again there was good correlation between the two. Swath plots were then used to test the estimate and again, there was good correlation and the sample trends had been maintained.
Moisture	• Whether the tonnages are estimate on a dry basis or with natural moisture, and the method of determination of the moisture content.	 The density was measured with natural moisture. This approach is the same as was used during the previous operational phase. The core is fresh, non-porous and competent, and hence moisture is considered to be understood.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied	 The Mineral Resource was interpreted using the massive nickel sulphide lithology and texture. The Mineral Resource has been reported using a cut-off grade of 1.0% nickel head grade to reflect the current Poseidon planned strategy.
Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding minin methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	 surface and is exclusively an underground Mineral Resource. The 2019 Mineral Resource supported a positive feasibility study (announced on 18 July 2018), which demonstrated reasonable prospects for eventual economic extraction at the time. Although the feasibility study is still to be updated, successive infill exploration programs in 2019 and 2022 support the 2018 estimate and hence, the RPEEE assumption.



Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 The prediction regarding the metallurgical amenability of the Silver Swan sulphide material has been demonstrated with the historical processing using conventional sulphide flotation processes on-site.
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made 	• The project is located in a mature mining area, with established environmental legislation and practices that are industry standard. As the project has previously been mined, there are existing waste storage facilities and environmental considerations are not expected to pose any issues to the resumption of mining activity.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	• The bulk density has been measured from diamond core using the immersion method. The core is considered wet, but is also fresh, non-porous, competent and the moisture content is not considered material.
	 The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit, 	• Bulk density measurements were routinely collected for all underground drill core submitted for analysis. The core is not porous. Density was obtained from all submitted samples and hence reflects all rock and alteration zones.
	 Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Density was estimated from the composited density data.



Criteria	JORC Code explanation	Commentary
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories 	 The classification of Mineral Resources was completed by Snowden Optiro using a range of criteria, including confidence in the geological and mineralisation model, grade and geological continuity and the available drill hole spacing The Indicated Mineral Resource is of a moderate confidence. These areas are a supported by a nominal drill spacing of less than 25mN x 25mRL with a suitable intersection angle, where grade and geological continuity can be assumed and where the estimate has been well informed. The Inferred Mineral Resource reflects a lower confidence. These areas are supported by a nominal drill spacing of greater than 25mN x 25mRL, and where a significant number of intersections are subparallel to the mineralisation, or where only grade or geological continuity is implied.
	 Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). 	 The relative accuracy is reflected in the resource classification discussed above and is in line with industry acceptable standards. This is a Mineral Resource estimate that includes knowledge gained from previous mining and milling performance.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	• The Mineral Resource classification applied to the March 2022 Silver Swan massive sulphide Mineral Resource appropriately reflects the Competent Person's view of the estimate.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	 The March 2022 Silver Swan massive sulphide Mineral Resource has been reviewed internally by Snowden Optiro, but has not been externally reviewed.
	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	



Criteria	JORC Code explanation	Commentary
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used	• The March 2022 Silver Swan massive sulphide Mineral Resource is considered a global estimate, because of the sample spacing and drillhole intersection angles currently available.
	 These statements of relative accuracy and confidence of the estimate should be compared with production data, where available 	The production records for the areas previously mined are not available.