POSEIDONNICKEL



ASX Code: POS Shares on Issue: 2.64B Share price: \$0.048 Market Cap: ≈\$127M

Cash & equivalents at 30/06/20: \$45.2M

Board of Directors

Non-Executive Chairman Derek La Ferla

Non-Executive Directors

Felicity Gooding Dean Hildebrand Peter Muccilli

Managing Director & CEO

Peter Harold

CFO & Joint Company Secretary

Brendan Shalders

Joint Company Secretary

Andrea Betti

Key Shareholders

Black Mountain Metals: 20.8% Wyloo Metals: 17.1%

Key Nickel Assets (100%)

Black Swan/Silver Swan Lake Johnston Windarra

Principal & Registered Office

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GOLDEN SWAN ASSAYS CONFIRM EXCEPTIONAL DRILL INTERSECTION AND NEW DIAMOND WEDGE EXTENDS DISCOVERY

18 AUGUST 2020

HIGHLIGHTS

- PBSD030B Golden Swan assays received returning:
 - 9.0m (4.5m true width) @ 10.46% Ni on basal contact
 - o including 4.6m (2.3m true width) @ 13.8% Ni
- PBSD030B is an upward wedge some 50m from the discovery hole PBSD0029A which intersected 7.6m (4.3m true width) @ 8.8% Ni
- PBSD030C is an additional upward wedge from PBSD030B, and has intersected two separate mineralised zones (assays waiting):
 - 2.7m zone of stringer nickel sulphides in an interpreted upper pinch out position, and;
 - additional 0.55m semi-massive nickel sulphides on the basal contact.
- The Golden Swan drilling program on the discovery cross section has already confirmed mineralisation on multiple surfaces over 130m and remains open. High priority dilling continues.
- Given the quality of results, the Company is considering several options to both accelerate the resource definition programs at Golden Swan and to help realise the greater exploration potential of the Southern Terrace.

Photo: intersection in hole PBSD030C



Poseidon Nickel (ASX: POS, "the Company") is very pleased to announce the receipt of excellent Golden Swan assays for hole PBSD030B.

Managing Director and CEO, Peter Harold, commented "The latest assay and drill results confirm the significance of the Golden Swan discovery. The thick, high grade nickel intersections in combination with favourable geological setting is pointing to something very exciting. Should Golden Swan continue to evolve and prove to be economically viable, the close proximity to the existing Silver Swan decline would allow mining operations be commence in a very short timeframe."

Technical Discussion

Composite assays for hole PBSD030B are presented in Table 1 and confirm a 50m up-plunge continuation of high-grade mineralisation from the discovery hole PBSD029A (refer to Table 2). The high nickel grades and good widths in both holes are similar and suggest good continuity of mineralisation between the two holes. In addition, the assays confirm the significance of the Southern Felsic Terrace Target Zone and the Golden Swan mineralisation which is proximal to the existing Silver Swan decline.

Table 1 – Latest composite assays received for PBSD030B

	m			True			Co		Pd	As
PBSD0030B Intercept	From	m To	Interval	Width	Ni%	Cu%	ppm	Pt g/t	g/t	ppm
Massive + Stringer										
Sulphides	691.94	700.94	9	4.5	10.46	0.47	2022	0.32	0.62	118
Massive Sulphide	691.94	696.5	4.56	2.3	13.81	0.41	2769	0.41	0.45	50
Massive Sulphide	700.2	700.94	0.74	0.4	17.35	1.24	2400	0.25	1.05	50

Table 2 - Composite assays for PBSD029A released 5 August 2020

·	m			True			Со		Pd	As
PBSD0029A Intercept	From	m To	Interval	Width	Ni%	Cu%	ppm	Pt g/t	g/t	ppm
Massive + Stringer										
Sulphides	740.2	747.75	7.55	4.3	8.82	0.68	1633	0.30	1.00	425
Massive Sulphide	743.65	745.75	2.1	1.2	15.86	0.52	2819	0.47	1.24	445
Matrix Sulphide	761.55	762.45	0.9	0.5	6.52	2.04	1750	< 0.005	0.92	700
Matrix Sulphide	810.6	811.55	0.95	0.4	1.50	0.06	346	< 0.005	0.01	73

In addition to the two intersections above, a third intersection into the Golden Swan mineralisation has been achieved, in hole PBSD030C. **This intersection extends the known mineralisation over a plunge of 130m.** The intersection in hole PBSC030C (as shown in Figure 2) occurred 20m up-dip of the intersection in hole PBSD030B. Furthermore, a second semi-massive sulphide intersection in the same hole is located on a continuation of the up-plunge portion of the Southern Terrace. Geological details of the latest intersection are presented in Table 3.

Table 3 - PBSC030C Geological Details

From	То	Geology
635	669.8	Felsic Terrace
669.8	672.5	Golden Swan stringer sulphides in felsic pinch structure (pentlandite/pyrite/pyrrhotite)
672.5	692.5	Felsic Terrace
692.45	693	Semi-massive sulphides (pentlandite/pyrite/pyrrhotite) – Terrace sulphide continuation
693	701	Blebby to disseminated nickel sulphides in Black Swan Flow

The Golden Swan stringer nickel sulphides were intersected in a felsic pinch-out structure near the top of the downhole electromagnetic (DHEM) response on the drill section. DHEM modelling suggests that upplunge mineralisation continues south of this intersection. Pinch-out structures are a common occurrence in nickel deposits as can be seen by the location and spacing of the Silver Swan massive sulphides lodes, represented in red in Figure 2.

The semi-massive sulphide intersection in hole PBSD030C, although lower in the drillhole, represents mineralisation on the upper continuation of the Southern Terrace which extends above Golden Swan pinch-out (see Figure 2). An additional, deeper intersection in hole PBSD029A highlights nickel sulphide formation on the Southern Terrace contact on the down-plunge continuation (see Figure 2).

Due to limitations on the current DHEM, and with the additional intersections as modelled, the Golden Swan mineralisation is shown to be open up-plunge, down-plunge and also open to the south along the Southern Terrace.

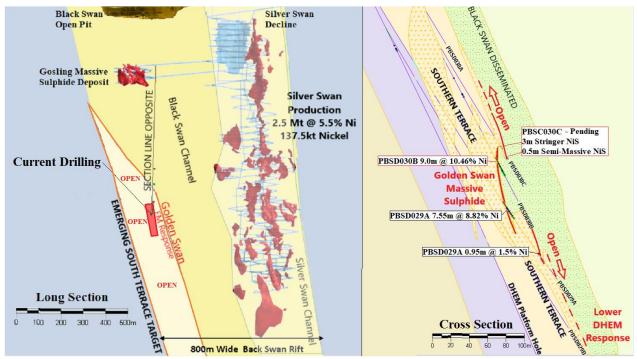


Figure 2 - Southern Terrace and Golden Swan location, intersections and geology. The mineralised surface on the Southern Terrace identified by DHEM and drilling is shown in red. North is to the left on the longsection. The cross-section is looking north.

Southern Felsic Terrace

Modelling of the Southern Terrace has begun utilising a combination of the historical and new drilling. The Southern Terrace target occurs due to the orientation and nature of the sidewall of the Black Swan channel. The felsic rock-type that occurs alongside the Black Swan Disseminated mineralisation is conducive to massive sulphide formation where this felsic unit comes into contact with the base of the disseminated nickel sulphide flow. The massive sulphide formation on the felsic substrate at Silver Swan is a similar analogy.

As can be seen in Figure 2, the greater South Terrace area is potentially very large and its southern extent has not yet been defined. The Golden Swan EM response is 150m long and 50m wide at present, and is limited in strike extent only by the physical properties of the EM loop and receiver used. The South Terrace could extend well beyond the Golden Swan EM response and so does the potential for mineralisation.

3D modelling of the Southern Terrace will be completed in the coming weeks after which several exploration approaches can be evaluated.

Next Steps

Work has begun to extend the PBSD029 DHEM Platform Hole which runs in the footwall and down the plunge of the Golden Swan mineralisation. The completion of this hole will tie in with the completion of the underground EM loop in the Silver Swan workings. It is anticipated that the use of the underground loop should greatly enhance the exploration of the Southern Terrace and assist in future drill targeting.

Further exploration will be governed by the EM response received and how it fits into the geological framework of the Southern Terrace.

Given the excellent results achieved to data and generative EM programs that are underway, the Company is considering several options to accelerate resource definition programs and how best to explore the greater expanse of the Southern Terrace. These options include the possibility of both surface and underground drilling as well as scoping out the potential of developing an exploration drill drive from the Silver Swan Decline, directly behind the Golden Swan mineralisation. Such a drive could then be repurposed to access economic mineralisation quickly for extraction.

Preliminary metallurgical testwork on the Golden Swan massive sulphide will commence shortly with the aim of clearly understanding the benefits of how best to utilise this very high-grade resource in combination with the other Resources at Black Swan.

Peter Harold

Managing Director & CEO

18 August 2020

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

The announcement was authorised for lodgement by the Board of Poseidon Nickel Limited.

About Poseidon Nickel Limited

Poseidon Nickel Limited (**ASX Code: POS**) is a nickel sulphide development and exploration 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 where project risk capital and operating costs are low. A critical element of this strategy has been to acquire projects and operations with high levels of geological prospectivity likely to lead to potential substantial extension of the operation's life 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 Abi Rose deposit at Lake Johnston and the recent discovery of the Golden Swan mineralisation at Black Swan. The Company is also undertaking a Definitive Feasibility Study on retreating the gold tailings at Windarra given the strength of that A\$ gold price.

Table 4 - Drill Hole Details

Hole ID	Local E	Local N	Local RL	Depth	Dip	Local Azi	Comment
PBSD0029	10173.8	11302.6	11012	964.3	-67.96	88.64	DHEM Platform
PBSD0029A	10173.8	11302.6	11012	845.9			Wedge hole
PBSD0029B	10173.8	11302.6	11012	899.8			Wedge hole
PBSD0030	10173.8	11302.6	11012	761.8	-62.4	82.24	DHEM Platform
PBSD0030B	10173.8	11302.6	11012	740			Wedge hole
PBSD0030C	10173.8	11302.6	11012	719.8			Wedge hole

Table 5 - Assay Details for PBSD030B

Table 5 - A	Table 5 - Assay Details for PBSD030B											
Sample	m Fom	m To	Interval	SG	Ni%	Cu%	Co ppm	As ppm	MgO%	Pt g/t	Pd g/t	NSNi%
EX6192	691	691.84	0.84	2.70	<100	0.05	<50	<100	2.32	<0.005	0.025	0.003
EX6193	691.84	691.94	0.1	2.84	0.18	0.14	50	<100	3.58	0.05	0.035	0.0345
EX6194	691.94	693	1.06	4.64	14.68	0.30	2850	50	0.49	0.64	0.645	0.296
EX6195	693	694	1	4.72	15.21	0.27	2300	50	0.36	0.175	0.38	0.311
EX6196	694	695	1	4.46	10.16	0.77	3950	50	0.72	0.595	0.395	0.209
EX6197	695	696	1	4.66	14.88	0.38	2400	50	0.32	0.26	0.44	0.31
EX6198	696	696.5	0.5	4.52	14.00	0.32	2000	50	1.53	0.355	0.305	0.3315
EX6199	696.5	697.67	1.17	3.56	4.37	0.69	1050	400	10.94	0.22	1.48	0.3425
EX6201	697.67	698.5	0.83	2.94	0.59	0.20	150	300	16.49	0.095	0.295	0.157
EX6202	698.5	699.35	0.85	2.92	1.18	0.09	300	200	21.65	0.07	0.195	0.203
EX6203	699.35	700.2	0.85	3.11	2.76	0.19	500	50	18.80	0.29	0.755	0.205
EX6204	700.2	700.94	0.74	4.42	17.35	1.24	2400	50	2.86	0.245	1.05	0.429
EX6205	700.94	702	1.06	2.88	0.73	0.05	150	50	23.18	0.04	0.1	0.1855
EX6206	702	703	1	2.95	1.44	0.09	200	50	22.13	0.095	0.15	0.233
EX6207	703	704	1	2.90	0.79	0.05	150	100	23.90	0.045	0.1	0.1685
EX6208	704	705	1	2.89	0.77	0.05	150	50	23.40	0.045	0.09	0.1945
EX6209	705	706	1	2.92	0.80	0.05	150	50	24.22	0.04	0.085	0.253
EX6210	706	707	1	2.77	0.54	0.03	150	50	27.52	0.025	0.05	0.1885
EX6211	707	708	1	2.93	0.33	0.02	100	50	25.48	0.015	0.03	0.24
EX6212	708	709	1	2.93	0.43	0.02	150	50	29.35	0.015	0.03	0.317
EX6213	709	710	1	2.90	0.55	0.03	150	50	30.68	0.02	0.05	0.26
EX6214	710	711	1	2.90	0.54	0.02	100	50	30.78	0.02	0.04	0.316
EX6215	711	712	1	2.90	0.55	0.03	100	50	29.90	0.02	0.04	0.343
EX6216	712	713	1	2.91	0.56	0.03	100	50	30.63	0.02	0.035	0.2925
EX6217	713	714	1	2.94	0.95	0.05	200	50	29.60	0.035	0.09	0.4495
EX6218	714	715	1	2.93	0.72	0.02	150	50	30.65	0.03	0.065	0.359

MINERAL RESOURCE STATEMENT

Table 1: Nickel Projects Mineral Resource Statement

								MINERAL R	ESOURCE	CATEGO	RY				
Nickel Sulphide Resources		Cut Off Grade	ı	NDICATI	ED		INFERRE	:D				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)
BLACK SWAN PROJECT															
Black Swan	2012	0.40%	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	4.50%	108	9.4	10,130	61	9.7	5,900	168	9.5	16,030	0.19	316	0.4	679
LAKE JOHNSTON PROJECT															
Maggie Hays	2012	0.80%	2,600	1.60	41,900	900	1.17	10,100	3,500	1.49	52,000	0.05	1,800	0.10	3,400
WINE	ARRA PROJEC	т													
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
тота	L														
Total Ni, Co, Cu Resources	2004 & 2012		16,775	1.04	174,030	27,275	0.81	221,500	44,049	0.90	395,530	0.02	7,516	0.03	13,379

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 4th August 2014) Silver Swan Resource as at 5 August 2019 (see ASX announcement "Silver Swan Resource Upgrade..." released 5th August 2019)

Maggie Hays Resource as at 17 March 2015 (see ASC announcement "50% Increase in Indicated Resources at Lake Johnston" released 17th March 2015)

Mt Windarra Resource as at 7 November 2014 (see ASX announcement "Poseidon Announces Revised Mt Windarra Resource" released 7th November 2014)

South Windarra and Cerberus Resource as at 30 April 2013 (see ASX announcement "Resource Increase of 25% at Windarra Nickel Project" released 1st 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.

Table 2: Updated Gold Tailings Project Mineral Resource Statement

	Windarra Gold Tailings Project North and South Dams Mineral Resource - JORC 2012 tabulation										
	INDICATED										
	Tonnes (t)	Au (g/t)	Au (oz)	Ag (g/t)	As (ppm)	Cu (ppm)	Ni (%)				
North Dam	3,624,000	0.78	91,000	1.9	1,770	360	0.10				
South Dam	923,000	0.48	14,000	0.6	630	369	0.26				
Total	4,547,000	0.72	105,000	1.6	1,540	360	0.13				

Table 2.1 Windarra Gold Tailings Project JORC2012 Mineral Resource

The Windarra Tailings estimate for North and South Dams has been reported based on the following:

- no cut-off grade has been used to report the resource, as the potential mining method dictates removal of the entire dams.
- a dry bulk in situ density of 1.6 t/m^3 has been used to derive tonnages.
- resource numbers in Table 2.1 may not sum exactly due to rounding.

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 Dam	6,198,000	0.37	74,000	435.0	270	0.3			

Table 2.2 Windarra Central Dam JORC2012 Mineral Resource

 $\label{thm:control} \textit{The Windarra Tailings estimate for the Central Dam has been reported based on the following:}$

- No cut-off grade has been used to report the resource, as the potential mining method dictates removal of the entire dam down to a specified elevation.
- The mineralisation has been reported above a flat elevation of 446 mRL; there are tailings below this level but these have been shown by drilling to contain no gold, and it is anticipated that the proposed mining method will not treat material below this elevation
- A dry bulk in situ density of 1.6 t/m³ has been used to derive tonnages.
- Resource totals may not sum exactly due to rounding.

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

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.

ORE RESERVE STATEMENT

Table 3: Nickel Projects Ore Reserve Statement

		ORE RESERVE CATEGORY							
Nickel Sulphide Reserves	JORC Compliance	PROBABLE							
		Tonnes (Kt)	Ni% Grade	Ni Metal (t)					
SILVER SWAN PROJECT									
Silver Swan Underground	2012	130	5.2	6,800					
Black Swan Open pit	2012	3,370	0.63	21,500					
TOTAL									
Total Ni Reserves	2012	3,500	0.81	28,300					

Note: Calculations have been rounded to the nearest 10,000 t of ore, 0.01 % Ni grade 100 t Ni metal and 10t of cobalt metal.

Silver Swan Underground Reserve as at 26 May 2017 (see ASX announcement "Silver Swan Definitive Feasibility Study" released 26th May 2017) Black Swan Open Pit Reserve as at 5 November 2014 (see ASX announcement "Poseidon Announces Black Swan Ore Reserve" dated 5th November 2014).

The Company is aware that the 2019 upgrade to the Silver Swan Indicated Resource will materially affect the Silver Swan Reserve above which was based upon the 2015 Silver Swan Resource Estimate (refer to Table 1 above for the new Silver Swan Resource estimate). Such information is based on the information complied by the Company's Geologists and the Competent Persons as listed below in the Competent Person Statements.

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

COMPETENT PERSON STATEMENTS:

The information in this report that relates to Exploration Results is based on, and fairly represents, information compiled and reviewed by Mr Steve Warriner, Chief Geologist, who is a full-time employee at Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists.

The information in this report which relates to the Black Swan Mineral Resource is based on, and fairly represents, information compiled by Mr Andrew Weeks who is a full-time employee of Golder Associates Pty Ltd. The information in this report which relates to the Black Swan Ore Reserve is based on, and fairly represents, information compiled by Mr Andrew Weeks who is a full-time employee of Golder Associates Pty Ltd and who is a Members of the Australasian Institute of Mining and Metallurgy.

The information in this report which relates to the Silver Swan Mineral Resource is based on, and fairly represents, information compiled by Mr Steve Warriner, Chief Geologist, who is a full-time employee at Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists and Mr Kahan Cervoj who is a full time employee of Optiro Pty Ltd and is a Fellow of the Australasian Institute of Mining and Metallurgy. The information in this report which relates to the Silver Swan Ore Reserve is based on, and fairly represents, information compiled by Mr Matthew Keenan who is a full-time employee of Entech Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy.

The information in this report which relates to the Lake Johnston Mineral Resource is based on, and fairly represents, information compiled by Mr Steve Warriner, Chief Geologist, who is a full-time employee at Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists and Mr Andrew Weeks who is a full-time employee of Golder Associates Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy. The information in this report which relates to the Lake Johnston Ore Reserves Project is based on, and fairly represents, information compiled by Mr Matthew Keenan who is a full time employee of Entech Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy.

The information in this report that relates to Mineral Resources at the Windarra Nickel Project and Gold Tailings Project is based on, and fairly represents, information compiled by Mr Steve Warriner, Chief Geologist, 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 Optiro Pty Ltd and is a Fellow of the Australasian Institute of Mining and Metallurgy. The Windarra Project contains Mineral Resources which are reported under JORC 2004 Guidelines as there has been no Material Change or Re-estimation of the Mineral Resource since the introduction of the JORC 2012 Codes. Future estimations will be completed to JORC 2012 Guidelines.

Mr Warriner, Mr Cervoj, Mr Weeks, Mr Glacken and Mr Keenan all 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 Warriner, Mr Cervoj, Mr Weeks, Mr Glacken and Mr Keenan have consented 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 STATEMENT - INFERRED RESOURCE STATEMENTS:

The Company notes that an Inferred Resource has a lower level of confidence than an Indicated Resource and that the JORC Codes, 2012 advises that to be an Inferred Resource it is reasonable to expect that the majority of the Inferred Resource would be upgraded to an Indicated Resource with continued exploration. Based on advice from relevant competent Persons, the Company has a high degree of confidence that the Inferred Resource for the Silver Swan deposit will upgrade to an Indicated Resource with further exploration work.

The Company believes it has a reasonable basis for making the forward looking statement in this announcement, including with respect to any production targets, based on the information contained in this announcement and in particular, the JORC Code, 2012 Mineral Resource for Silver Swan as of May 2016, together with independent geotechnical studies, determination of production targets, mine design and scheduling, metallurgical testwork, external commodity price and exchange rate forecasts and worldwide operating cost data.

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 Silver Swan underground mine.

BLACK SWAN EXPLORATION RESULTS SECTION 1 Sampling Techniques and Data

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

The nature, quality and appropriateness of the assaying and

laboratory procedures used and whether the technique is

considered partial or total.

JORC Code explanation Commentary Sampling techniques Nature and quality of sampling (e.g. cut channels, random chips, or NQ2 and BQ Diamond drilling has been used to obtain samples. Sampling specific specialised industry standard measurement tools is performed by cutting the core in half, one half sent to the lab and the appropriate to the minerals under investigation, such as down hole other half retained. Generally, 1 m samples or smaller have been used for gamma sondes, or handheld XRF instruments, etc.). These exploration drilling based on the logged geology. examples should not be taken as limiting the broad meaning of Older samples have been obtained from drilling carried out on the Include reference to measures taken to ensure sample tenements since 1968, incorporating several lease owners. Sampling representivity and the appropriate calibration of any measurement protocols from drilling between 1968 and 1991 have not been well tools or systems used. documented. Aspects of the determination of mineralisation that are Material to the Public Report. Diamond drilling sampling protocol since 1995 has followed accepted In cases where 'industry standard' work has been done this would industry practice for the time, with all mineralised core sampled and be relatively simple (e.g. 'reverse circulation drilling was used to intervals selected by geologists to ensure samples did not cross geological obtain 1 m samples from which 3 kg was pulverised to produce a or lithological contacts. Core was halved, with a half quartered, with one 30 g charge for fire assay'). In other cases more explanation may quarter core sent for assay, half core kept for metallurgical testing, and be required, such as where there is coarse gold that has inherent the remaining quarter core retained for geological reference. sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. **Drilling techniques** Drill type (e.g. core, reverse circulation, open-hole hammer, rotary Diamond drilling is the primary methods by which drilling has been air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, conducted. triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, Diamond core is NQ2 size. Core orientation was carried out using the Ezimark system. **Drill sample recovery** Method of recording and assessing core and chip sample recoveries Core recovery and presentation has been documented as being good to and results assessed. excellent. Measures taken to maximise sample recovery and ensure representative nature of the samples. There is no recovery bias of 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. Logging Whether core and chip samples have been geologically and The drill core has been oriented prior to the core being logged. Data was geotechnically logged to a level of detail to support appropriate electronically captured and uploaded in to the site geology database. 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. Sub-sampling techniques and sample preparation If core, whether cut or sawn and whether quarter, half or all core NQ2 Diamond drilling has been used to obtain samples. Sampling is performed by cutting the core in half, one half sent to the lab and the taken. other half retained. Generally, 1 m samples or smaller have been used for If non-core, whether riffled, tube sampled, rotary split, etc. and exploration drilling based on the logged geology. 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 sub-sampling 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. Quality of assay data and laboratory tests

Pulps were prepared by acid digest and analysed by ICP-OES using

QAQC were used.

standard laboratory practices. Both independent and laboratory internal

JORC Code explanation	Commentary
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.	Standard samples which have a well-defined margin of error suitable for the deposit have been inserted at a rate of 1 in 20.
Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	No external laboratory checks were conducted for drill samples.
Verification of sampling and assaying	
The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Logging and assay data is electronically captured and up loaded in to the site geology database.
Location of data points	
Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	All collar surveys were completed to an accuracy of ±200 mm. All Black Swan diamond drill holes have been routinely surveyed generally every 5 m or less using a Reflex North-seeking Gyro.
Data spacing and distribution	•
Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	One section down the dip of the Golden Swan mineralisation has partially been completed to date. The data in this announcement shows the relevant spacing between holes.
Orientation of data in relation to geological structure	•
Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drill hole orientation was dominantly perpendicular to geological continuity and befits the requirements of resource estimation. The drilling is of an angle that enables true widths to be calculated and unbiased samples to be taken.
Sample security	
The measures taken to ensure sample security.	Samples are bagged and wrapped and sent to the lab via road transport.
Audits or reviews	
The results of any audits or reviews of sampling techniques and data.	Examination of duplicate, blank and standard data does not highlight any material bias or systematic error.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Section 2: Reporting of Exploration Results

Mineral Tenement and Land Tenure Status Type, reference name/number, location and ownership including Black Swan open-pit is centred on M27/39 and extends into M27/200. agreements or material issues with third parties such as joint ventures, Silver Swan is wholly located on M27/200. They are located 42.5km NE partnerships, overriding royalties, native title interests, historical sites, of Kalgoorlie. They are registered to Poseidon Nickel Atlantis Operations wilderness or national park and environmental settings. Pty Ltd, a wholly owned subsidiary of Poseidon Nickel Ltd, following the purchase of the assets. Historical royalties of 3% NSR exist over the minerals produced. 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. **Exploration Done by Other Parties** Acknowledgment and appraisal of exploration by other parties. Refer to Section 1 (above) The Black Swan Disseminated Resource has been explored by MPI, Lion Ore and Norilsk Nickel. All companies followed best practise and Poseidon has validated all data handed over as a part of the purchase. Only minor errors have been found and corrected. Geology Deposit type, geological setting and style of mineralisation. Refer to body of text above. **Drill Hole Information** A summary of all information material to the understanding of the Refer to the body of the announcement and Section 1 above. exploration results including a tabulation of the following information for all Material 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. **Data Aggregation Methods** In reporting Exploration Results, weighting averaging techniques, Grades have been aggregated using the length x SG weighted average. maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. See body of text for individual sample grades. 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. 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 True widths are stated where necessary. 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'). Diagrams Appropriate maps and sections (with scales) and tabulations of Refer to the body of text above. 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 **Balanced Reporting** Where comprehensive reporting of all Exploration Results is not Not applicable. practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration

Results.								
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.	Refer to body of text above. Metallurgy recoveries of Golden Swan sulphides has not been conducted as yet. Given the prevailing mineralogy no issues are expected.							
Further work								
The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Poseidon expects to undertake further resource definition and grade control drilling at Golden Swan.							
Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Mineralogical and metallurgical recovery studies will be conducted on the drill samples.							