POSEIDONNICKEL

Corporate Directory

ASX Code: POS
Shares on Issue: 2,638M
Market Cap: ≈$115M
Cash and equivalents at 30 June 2019
$60.1M

Board of Directors

Non-Executive Chairman
Geoffrey Brayshaw

Non-Executive Directors
Felicity Gooding
Karl Paganin

Managing Director and CEO
Robert Dennis

Company Secretary
Eryn Kestel

Key Shareholders

Black Mountain Metals: 19.8%
Squadron Resources: 17.1%

Key Operating Nickel Assets (100%)

Black Swan/Silver Swan
Lake Johnston
Windarra

Principal & Registered Office

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Subiaco 6008
Western Australia

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SILVER SWAN RESOURCE UPGRADE AND BLACK SWAN UNDERGROUND RC DRILLING

5TH AUGUST 2019

HIGHLIGHTS

SILVER SWAN RESOURCE UPGRADE

- **Silver Swan JORC 2012 INDICATED Restart Resource more than doubles to 10,130 tonnes of nickel metal at a grade of 9.4% Ni**
- **Silver Swan JORC 2012 Indicated + Inferred Resource increases 30% to 16,030 tonnes of nickel metal at a grade of 9.5% Ni**
- **Silver Swan Life of Mine (LOM) schedule set to increase based upon the growth in the Indicated Resource, higher grade and increased continuity of massive sulphide mineralisation**

BLACK SWAN DRILLING COMMENCES

- **Underground RC drilling commenced below the Black Swan Open Pit to assess potential underground resource**

SILVER SWAN RESOURCE UPGRADE

Poseidon Nickel (ASX: POS, "the Company") is pleased to announce a 30% increase in the JORC 2012 compliant Silver Swan Indicated and Inferred Resource Estimate recently prepared by Optiro Pty Ltd (Optiro). The current Total Silver Swan Resource stands at 168,000t @ 9.5%Ni for a total of 16,030 nickel tonnes. The Company previously announced that Poseidon had completed underground drilling and the resulting geological interpretations and new wireframes were supplied to Optiro for the estimation which was completed recently.

The July 2019 Mineral Resource update has focussed on the remaining four orebodies - the Goose, Fledgling-Canard, Tundra-Mute and Peking Duck areas. The estimate was classified in accordance with the JORC 2012 Code and has been reported above a 4.5% nickel cut-off as presented in Table 1.

Table 1 - Silver Swan Resource Estimate by Optiro, August 2019

Area	Silver Swan Resource - August 2019											
	Indicated				Inferred				Total			
	kt	Ni %	As ppm	Ni metal (t)	kt	Ni %	As ppm	Ni metal (t)	kt	Ni %	As ppm	Ni metal (t)
Tundra-Mute	68	9.2	3,200	6,260	59	9.8	3,290	5,800	127	9.5	3,240	12,060
Peking Duck	26	9.7	2,520	2,560	1.2	8.8	4,330	100	27	9.7	2,590	2,660
Fledgling-Canard	12	9.9	2,100	1,160	0				12	9.9	2,100	1,160
Goose	1.7	9.0	3,180	150	0				1.7	9.0	3,180	150
Total resource	108	**9.4**	**2,910**	**10,130**	61	**9.7**	**3,310**	**5,900**	168	**9.5**	**3,060**	**16,030**

Totals may not sum correctly due to rounding

For the Indicated Mineral Resource, in comparison to the previous 2015 estimate, the 2019 estimate has resulted in a 107% increase in the tonnes, a 2% increase in the nickel grade and a 112% increase in contained nickel metal. In the Inferred category, there has been a reduction of 28% in tonnes, an 8% increase in the nickel grade, resulting in a reduction of 22% of contained nickel metal due to the conversion of these to the indicated category.

Importantly, the doubling of the Indicated Resource is expected to positively affect the Silver Swan Reserve and LOM schedule upon which work is now underway.

The combined Mineral Resource has an increase of 24% in tonnes, a 5% increase in nickel grade with a resultant 30% increase in nickel metal. This significant increase in the Mineral Resource is the result of the additional drilling extending and increasing the volume of mineralisation, combined with closer spaced drilling improving the proportion of Indicated Mineral Resource

BLACK SWAN LOM EXTENSION DRILLING COMMENCES

The Company is also pleased to announce the commencement of drilling after awarding a 2,500m trial Underground RC drilling program to Metres Down Under (MDU). The drilling is aimed at investigating the potential exploitation of an underground disseminated nickel resource below the Black Swan Open Pit.

Prior to drilling the Silver Swan deposit, POS drilled two holes into the Black Swan Disseminated Deposit 1000m below surface to prove continuity of the deposit at depth (refer to ASX announcement 27th May 2019). The success of these two holes enabled geological control to be made between the 2019 deep drilling and current Open Pit resource, through a series of diamond holes collared from the Gosling Decline (Figure 1).

These historical holes clearly show that the three lodes observed in the open pit (named Footwall, Central and Hangingwall) also continue through the Gosling Area (300 to 500m below surface) and are still present in the drilling performed by Poseidon this year at 1000m depth. However, due to the very nuggety nature of the blebby nickel mineralisation encountered in both Poseidon's drilling and the historical holes, interpretation of a hard grade boundary necessary to calculate a mineable underground resource is difficult. This can be seen in Figure 1 which just presents raw assay grades >0.8% Ni as coloured dots.

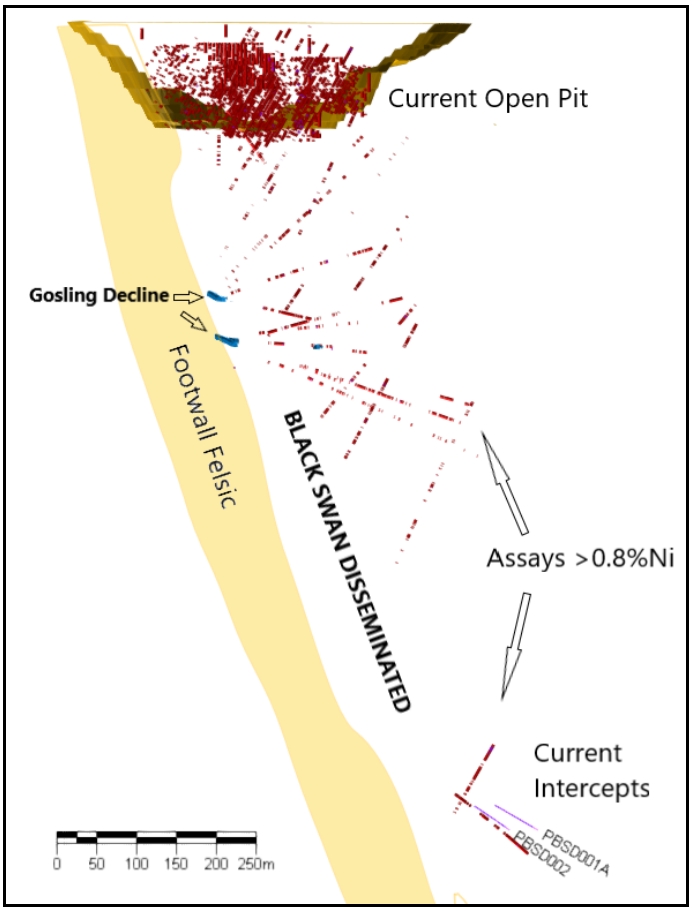

Figure 1 - Existing drilling below the Black Swan Open Pit showing raw assay grades >0.8% Ni.

In order to decrease or overcome nugget effect, the company needs to either drill many more diamond holes or increase the size of the hole and thus sample size.

The best solution was deemed to trial Underground RC Drilling which has been successfully utilized for the same reasons in deep Gold Deposits such as Sunrise Dam. NQ2 drill core has a diameter of 51mm whereas the underground RC hole has a diameter of 110mm. This leads to a substantial increase in sample size and should almost negate nugget effect.

The MDU rig has arrived on site and is currently being transported underground to the Gosling Access Drive to commence the two ring trial (refer to Figure 2). Two rings, or sets of holes, will be drilled and geologically assessed as to the appropriateness of the drill technique, which has not been used before in nickel.

In theory, as nickel is measured in percent, and gold in grammes per tonne, this technique will perform vastly better in the nickel environment and help to better define the small shifts in grade that need to be defined for a successful underground bulk mining operation, as is the opportunity below the open pit.

A successful outcome would mean that this cheaper drilling technique would yield a much better result than diamond drilling and less holes would be needed for a statistically similar result. Upon a successful

trial, the program would be expanded across the strike length of the Black Swan Deposit to assess the technique in more detail and to define bulk-mineable sections of the Black Swan Disseminated Deposit.

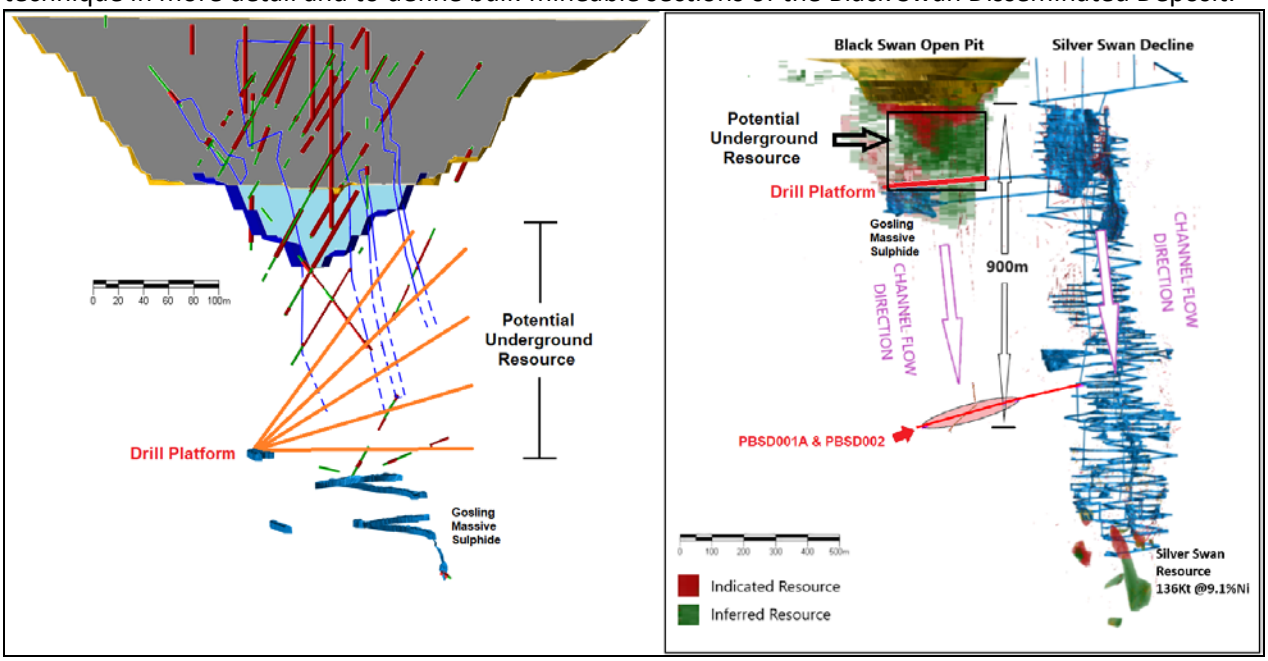

Figure 2 - Underground drilling planned for Black Swan

The trial is expected to take 1 to 2 months to complete (drill rates are currently unknown in ultramafic). A further month will be necessary to receive all assays and assess the results.

DETAIL ON THE SILVER SWAN RESOURCE MODELLING AND ESTIMATION

LOCAL GEOLOGY

Nickel sulphide mineralisation at Silver Swan is hosted by the Black Swan Komatiite Complex (BSKC), a 3.5 km long by 0.6 km thick arcuate lens of olivine cumulate and spinifex-textured komatiite flows. The complex is enclosed within a broad NE dipping sequence of intermediate felsic lavas and associated volcanoclastics. Graphitic black shales have been recognised in the enclosing felsic sequence approximately 700 m above and below the BSKC. The BSKC and enclosing felsic volcanic sequence face and dip steeply towards the NE. Except for several small areas of sub-outcrop, a thin veneer of lateritic red soil covers the BSKC.

The northern and southern tails of the complex thin and terminate rapidly in a complex series of interdigitating felsic and komatiite horizons. Individual horizons are typically of limited extent both along strike and down plunge. The southern tail of the complex is the most pronounced. It extends over approximately 1 km and is overlain by up to three discrete thin komatiite flows.

Large areas of the BSKC have been subjected to an intense carbonation event, which altered rocks of an earlier serpentinisation event to talc–carbonate ± quartz-sericite assemblages, and at the same time destroyed most primary igneous textures of the parent komatiite (Hicks & Gamble, 2001). Carbonate is by far the most dominant alteration mineral and is present as magnesite and siderite. Fine talc flakes intergrown with the carbonate form a significant component in some areas. Quartz is a minor constituent, replacing and enveloping the carbonate, while minor sericite is a widespread alteration product.

Two small bodies of serpentinite near the centre and at the northern end of the complex survived the carbonation event. These bodies are dominated by antigorite-carbonate-talc assemblages, with the central body, the Black Swan serpentinite, hosting the Black Swan Disseminated (BSD) mineralisation. Igneous textures are generally well preserved within these areas.

A variety of relict igneous textures have been recognised within the BSKC with orthocumulate olivine textures (pseudomorphically replaced by carbonate or antigorite) the most common, especially to the south. Meso- to adcumulate textures is much less common. Flow-top breccias and spinifex-textured zones are recognised in less-altered flows about the margins of the complex.

The BSKC has been intruded by possibly as many as six dyke suites. Four are distinctive and easily recognisable while two are more mineralogically variable.

SILVER SWAN GEOLOGICAL MODELLING

The Tundra and Mute orebodies (Figure 3) had been interpreted as separate zones by Norilsk Nickel. In 2015, Poseidon identified and located a number of drill holes whose data was lost during shutdown of the operations in 2009, which supported joining these lodes. In early 2019, Newexco was commissioned by Poseidon to track down missing downhole EM (DHEM) surveys that paper records at the Black Swan Mine stated were completed in early 2008. The digital interpretations of this data did not form part of the data set handed over to Poseidon.

Using a combination of the additional drill hole data and the DHEM modelling, the company completed an underground diamond drilling campaign totaling 3,662m from the bottom of the Silver Swan Decline in June this year to target and derisk the current resource and also to exploit additional opportunities that had been identified. This has resulted in the increased Silver Swan Resource published today.

Geological evidence from core demonstrated that the majority of holes have intersected the main Silver Swan thermal erosion area found beneath the komatiite channel. Drilling also showed that a suite of mafic dykes and pegmatite intrusions were responsible for the remobilisation of massive sulphides away from the intruded portions of the channel. The orientation of the dykes intersecting with the komatiite give a northerly plunge. Thus when the sulphides are remobilised, the lodes also appear to have a northerly plunge.

Figure 1 below shows the progressive development of the Silver Swan model from 2009 when Norilsk shut the mine to 2016 when Poseidon acquired the project and completed a review (including finding an additional number of lost holes), through to the conclusions drawn from the current drill program where drillholes revealed new information about the Tundra-Mute Lode. The influence of the dykes clearly seen which correlate well with the DHEM anomalies.

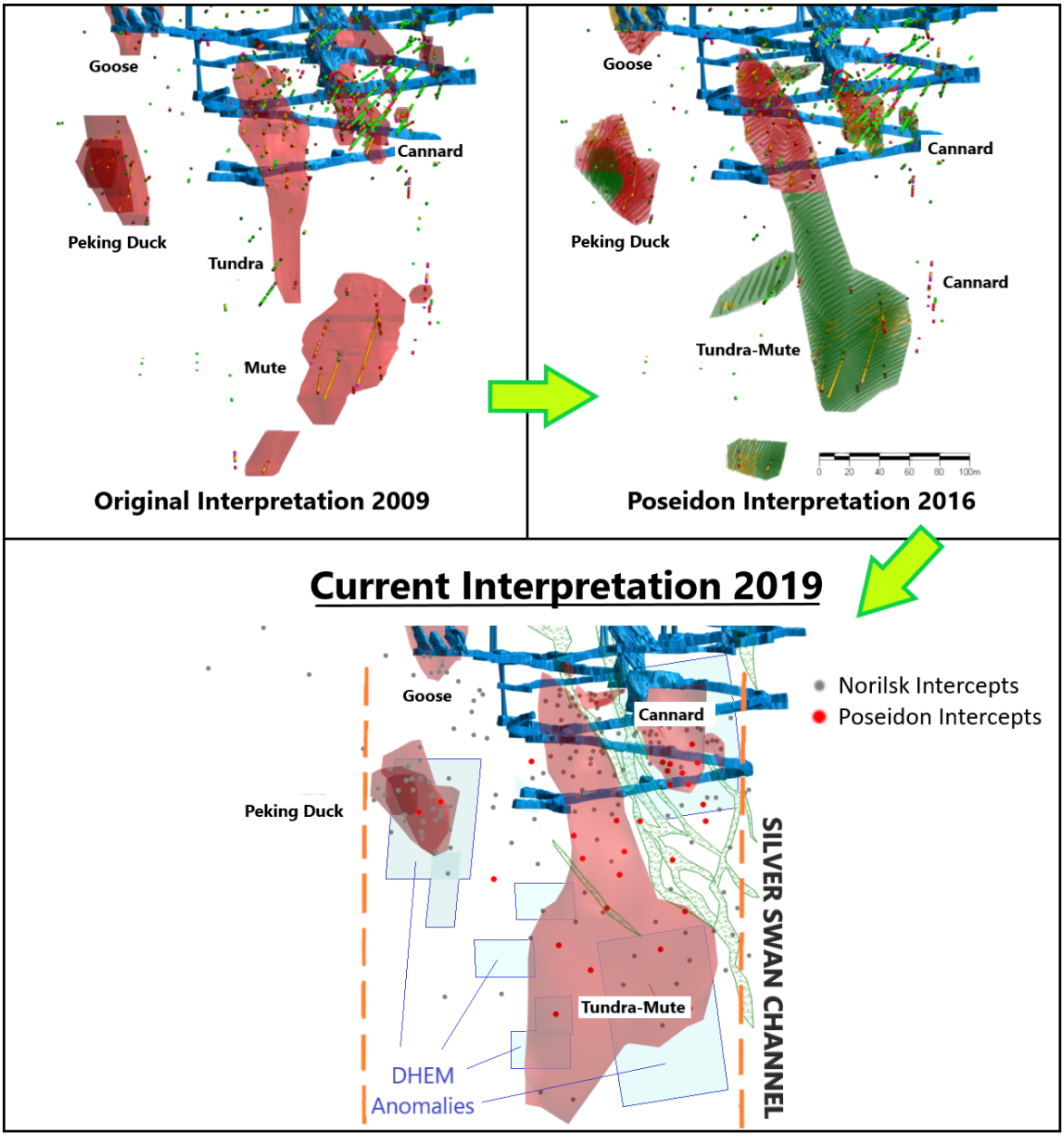

Figure 3 -The progressive development of the Silver Swan resource from mine closure in 2009 until after the completion of the current drill program.

Historical drilling failed to penetrate a basalt dyke that lay between the drill platform and mineralisation, thus information on the komatiite geology behind those locations was not available for much of the mid-Tundra-Mute Lode. From persevering with the difficult drilling through the basalt dyke, we now realise that the main Silver Swan channel still vertically and that the seemingly “separate” Tundra, Mute, Canard and Fledgling Lodes were once joined. It was only the dykes and a lack of drilling that gave the impression that the lodes were separating and that even with the later remobilisation, there is more continuity to the mineralisation than previously modelled. Again, this is shown in Figure 3.

Furthermore, the drilling concluded that there is not at present a repeat of the number, type nor intensity of dykes responsible for remobilisation of sulphides further down the channel, meaning that continuity of the proposed mining area may be greater than first anticipated and that the geotechnical challenges associated with the dykes should be lessened.

Geological modelling of the Silver Swan mineralisation had used 3D Micromine software to manually generate sectional interpretations of massive sulphide intersections utilizing geology in preference to assay grades. A geological footwall was constructed to represent the felsic to komatiite transition where massive sulphides naturally accumulated to guide the interpretive process. Areas of stringer sulphides in

the felsic footwall by and large were included in the interpretation where grades exceeded 3% nickel. This only affected a small proportion of the rockmass which was almost exclusively massive nickel sulphide. The sectional interpretations were then wireframed in Surpac to control and make accurate the triangulation process.

DATA

Poseidon provided Optiro with the drillhole database, in Microsoft Access format, which includes the collar, downhole survey, geology, sampling and assay information. The company also provided updated wireframes of the orebody interpretations for Goose, Peking Duck, Tundra-Mute and Fledgling-Canard lodes along with perimeter surfaces for the intersecting barren dykes and wireframes representing the current underground development and voids for depletion.

The assay data sample length was assessed by Optiro, and a composite length of 1.0 m was selected as the most appropriate. The raw samples were then length-density composited. After a review of the respective grade distributions, top-cuts were applied to nickel, arsenic, cobalt and copper to minimise the impact of outlier values. The top-cuts were derived from reviewing the statistical plots (histograms and probability plots).

TONNES AND GRADE ESTIMATION

The available samples were flagged and coded by the respective interpretations and 1.0 m length-density weighted composites created. The statistics from the composite samples were reviewed using the grade distribution plots, mean and variance as well as disintegration analysis and it was decided that top-cuts were requiredfor nickel (1 cut), arsenic (19 cut), cobalt (2 cut) and copper (8 cut). Data was not declustered for use in the estimation as the ordinary kriging (OK) process largely addresses any data clustering when weighting the samples. For the purposes of model validation, the input composites were declustered using an optimal cell size for each domain using Supervisor.

Optiro generated and modelled traditional variograms using the composited sample data for each element, with the exception of arsenic and copper, which were normal-scores transformed variograms with the resultant model back-transformed. Variogram analysis was carried out using Supervisor (v8) software.

A block model was created in Datamine RM using a parent block size of 2 mE by 5 mN by 5 mRL, with sub-blocking down to 0.25 mE by 0.5 mN by 0.5 mRL. The small sub-blocking was employed at domain boundaries to allow for adequate representation of the domain geometry and volume. The block model was validated visually against the drillhole data and wireframes to ensure that the blocks were coded correctly.

A total of eight variables - nickel, arsenic, cobalt, copper, iron, magnesium oxide (MgO), sulphur and density - were estimated by ordinary kriging using Datamine RM. All grade estimation was completed at the parent block support; hence, all sub-blocks within the model receive the parent block estimate. Each domain was treated as a hard boundary during grade estimation.

The chalcophile variables (nickel, cobalt, copper, iron, sulphur) as well as density, were estimated using the nickel variogram directions/rotations in order to preserve the cross-correlation relationships for these variables. Arsenic and MgO employed their own individual variogram directions/rotations. A three pass search strategy was employed, with an initial search distance of 25 m x 25 x 10 m using 6 to 36 samples. The second search pass used the same number of samples and the search distance was doubled. The third pass used twice the second search distance and between 4 and 18 samples.
The resultant estimate was initially validated in section and plan, followed comaprisons between the whole of domain naïve and declustered composite and estimated means. Swath plots were then

prepared by northing and elevation. There was good validation between the composites and estimated values.

CLASSIFICATION

The Silver Swan Mineral Resource estimate has been classified in accordance with the guidelines of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012). The Mineral Resource has been classified on the geological understanding, grade and geological continuity and sample spatial distribution and proximity to known development. Table 2 outlines the criteria used to classify the resource, which is presented by category in Figure 4.

Table 2 - JORC 2012 Resource classification definitions

Classification	Criteria
Measured	Drill spacing to less than 15 m by 15m; underground development completed above and below. *No material is classified as Measured in this Resource.*
Indicated	Drill spacing of between 25m by 25 m to 15 m by 15 m; consistent strike and dip orientation, geological and grade continuity between drill intercepts, proximal (<25 m) to ore development
Inferred	Drill spacing greater than 25 m by 25 m; uncertainty in geological and grade continuity between intercepts; distal to current underground development

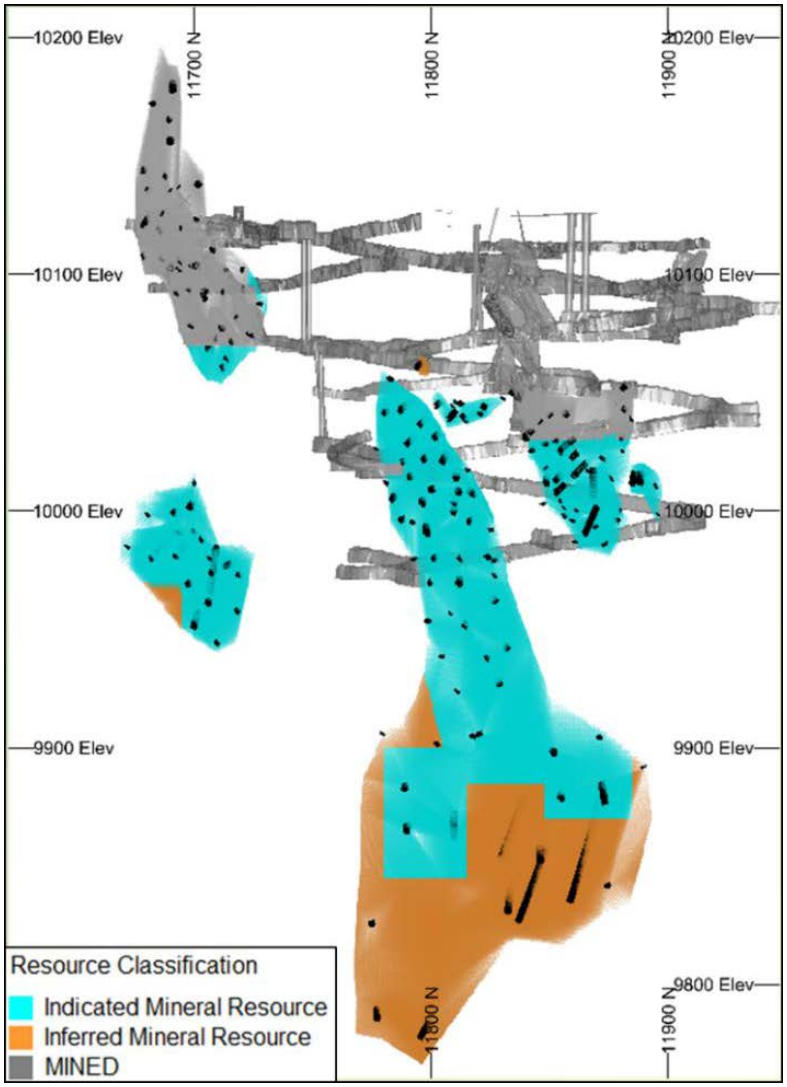

Figure 4 - Silver Swan Resource Classification

The Silver Swan Mineral Resource has been reported above a 4.5% Ni cut-off grade and has been depleted using the underground development. In areas where recovery is unlikely due to proximity to open stopes and inaccessible development, the resource has been manually coded as unclassified.

COMPARISON WITH PREVIOUS ESTIMATES

The previous Mineral Resource was generated by Optiro on behalf of Poseidon in November 2015 and has been compared with the current estimate in Table 3.

Table 3 - Comparison with previous estimates

Estimate	Area	Indicated			Inferred			Total		
		kt	Ni %	Ni metal (t)	kt	Ni %	Ni metal (t)	kt	Ni %	Ni metal (t)
Jul-2019	Tundra-Mute	68	9.2	6,260	59	9.8	5,800	127	9.5	12,060
	Peking Duck	26	9.7	2,560	1.2	8.8	100	27	9.7	2,660
	Fledgling-Canard	12	9.9	1,160	0			12	9.9	1,160
	Goose	1.7	9.0	150	0			1.7	9.0	150
	Total Ni resource	**108**	**9.4**	**10,130**	**61**	**9.7**	**5,900**	**168**	**9.5**	**16,030**
Nov-15	Tundra-Mute	24	9.2	2,200	73.3	8.85	6,480	97.2	8.9	8,690
	Peking Duck	21	8.8	1,820	8	10.2	820	28.7	9.2	2,640
	Fledgling-Canard	5.8	10.4	600	2.9	9.81	280	8.7	10.2	880
	Goose	1.5	10.0	150				1.5	10.0	150
	Total Ni resource	**51.9**	**9.2**	**4,770**	**84.2**	**9.01**	**7,580**	**136.1**	**9.1**	**12,360**
% difference	Tundra-Mute	**183%**	**0%**	**185%**	**-19%**	**10%**	**-10%**	**31%**	**6%**	**39%**
	Peking Duck	**27%**	**11%**	**41%**	**-86%**	**-13%**	**-88%**	**-4%**	**6%**	**1%**
	Fledgling-Canard	**102%**	**-4%**	**93%**				**34%**	**-3%**	**32%**
	Goose	**11%**	**-10%**	**0%**				**11%**	**-10%**	**0%**
	Total Ni resource	**107%**	**2%**	**112%**	**-28%**	**8%**	**-22%**	**24%**	**5%**	**30%**

The additional drilling has improved the Mineral Resource by:

- increasing the geological understanding of the mineralisation
- increasing the volume of the known mineralised lodes
- improving the confidence in the interpretations and subsequent estimates, transferring previously Inferred Resource to now Indicated Resource.

Optiro's recommendations for future work on the Silver Swan estimate are as follows:

- The historical drillhole data above the current Mneral Resource should be reviewed to ensure and documentation supporting the database needs to be prepared.
- Future drillhole design for Silver Swan mineralisation should maximise the drillhole intersections Drillhole-mineralsiation intersections less than 25° do not provide good definition on the volume of mineralisation and is likely to limit the amount of Inferred Mineral Resource that can be transferred to Indicated, almost irrespective of the number of drillholes.
- The excellent geological work underpinning this Mineral Resource update should be fully documented going forward, to support any additional mining studies.

Rob Dennis
Managing Director & CEO

5 August 2019

For further information contact Rob Dennis : + 61 (0)8 6167 6600.

About Poseidon Nickel Limited

Poseidon Nickel Limited (ASX: POS, "Poseidon"), is an Australia focussed nickel company that owns three previously operating Nickel Sulphide mines: Windarra, Black Swan/Silver Swan and Lake Johnston. These 100% owned assets collectively had an operating capacity of 3.6mtpa (Lake Johnston 1.5mtpa; Black Swan 2.1mta). The processing facilities at Lake Johnston and Black Swan have been maintained through company managed, care and maintenance programs.

On 18 July 2018, POS released to ASX a definitive feasibility study regarding the restart of operations and potential outcomes for Black Swan/Silver Swan, located 50 kms from Kalgoorlie. Poseidon is currently undertaking a number of de-risking initiatives including additional underground diamond drilling at Black Swan.

Poseidon has continued to explore at Lake Johnston, with recent diamond drilling at the Abi Rose prospect. These exploration results were released to ASX on 22 October 2018 and 21 November 2018.

Windarra has a number of near mine exploration projects including the extension of the original Windarra deposit, Cerberus, South Windarra and Woodline Well.

The current Resource Statement below shows a combined Nickel resource of 391,900 tonnes of Nickel (which should be read with the Competent Person statements below).

MINERAL RESOURCE STATEMENT

Table 1: Nickel Projects Mineral Resource Statement

Nickel Sulphide Resources	JORC Compliance	Cut Off Grade	MINERAL RESOURCE CATEGORY												
			INDICATED			INFERRED			TOTAL						
			Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Co% Grade	Co Metal (t)	Cu% Grade	Cu Metal (t)
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
WINDARRA PROJECT															
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		**16,775**	**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, Silver Swan Resource as at 5 August 2019, Maggie Hays Resource as at 17 March 2015, Mt Windarra, South Windarra and Cerberus Resource as at 30 April 2013

Table 2: Gold Tailings Project Mineral Resource Statement

Gold Tailings Resources	JORC Compliance	Cut Off Grade	MINERAL RESOURCE CATEGORY				
			TOTAL INDICATED				
			Tonnes (Kt)	Au Grade (g/t)	Au (oz)	Ag Grade (g/t)	Ag (oz)
WINDARRA GOLD TAILINGS PROJECT							
Gold Tailings	2004	NA	11,000	0.52	183,000	1.9	670,000
TOTAL							
Total Au Resources	2004		**11,000**	**0.52**	**183,000**	**1.9**	**670,000**

Note: totals may not sum exactly due to rounding.

Windarra Gold Tailings Resource as at 30 April 2013.

ORE RESERVE STATEMENT

Table 3: Nickel Projects Ore Reserve Statement

Nickel Sulphide Reserves	JORC Compliance	ORE RESERVE CATEGORY						
		PROBABLE						
		Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Co% Grade	Co Metal (t)	Cu% Grade	Cu Metal (t)
SILVER SWAN PROJECT								
Silver Swan Underground	2012	57*	5.79	3,300	NA	NA	NA	NA
Black Swan Open pit	2012	3,370	0.63	21,500	NA	NA	NA	NA
TOTAL								
Total Ni Reserves	2012	3,427	0.72	24,800	0.11	60	0.26	150

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.

Co & Cu grades and metal content for Black Swan require additional modelling prior to estimation. Silver Swan Underground Reserve as at 26 May 2017, Black Swan Open Pit Reserve as at 5 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 2016 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.*

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 2019 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 Member of the Australasian Institute of Mining and Metallurgy. The information in this report which relates to the 2016 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.

ATTACHMENT A
JORC (2012) Table 1
BLACK SWAN EXPLORATION, MINERAL RESOURCEAND ORE RESERVE ESTIMATE

BLACK SWAN EXPLORATION AND RESERVE ESTIMATE
SECTION 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

JORC Code explanation	Commentary
Sampling techniques	
Nature and quality of sampling (e.g. 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	Reverse circulation and diamond drilling have been used to obtain samples. Sampling is a mixture of full core, half core, quarter core and chip sampling. Generally, 1 m samples or smaller have been used for exploration drilling, whilst grade control drilling in the Black Swan pit is on 2 m sample lengths. Samples have been obtained from drilling carried out on the tenements since 1968, incorporating several lease owners. Sampling protocols from drilling between 1968 and 1991 have not been well documented. Diamond drilling sampling protocol since 1995 has followed accepted industry practice for the time, with all mineralised core sampled and intervals selected by geologists to ensure samples did not cross geological or lithological contacts. Core was halved, with a half quartered, with one quarter core sent for assay, half core kept for metallurgical testing, and the remaining quarter core retained for geological reference. Samples from reverse circulation drilling were collected using cone splitters, with field splits taken every 20 samples.
Drilling techniques	
Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	Diamond and reverse circulation drilling are the primary methods by which drilling has been conducted. The majority of diamond core is NQ, the rest being HQ size. Core orientation was carried out using either spear marks or the Ezimark system.
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 recovery and presentation has been documented as being good to excellent, with the exception of one hole used in the estimation, BSD189, which suffered significant core rotation, but little loss, within the oxide zone. Due to the good to excellent core recovery, Golder has no reason to believe that there is bias due to either sample recovery or loss/gain of fines.
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.*	Much of the drill core has been oriented prior to the core being logged. Recent data was electronically captured and uploaded in to the site Acquire® geology SQL database. Golder has been provided with no record of core photography, nor the extent to which drilling was logged geologically.
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 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.*	Early diamond core is assumed to have been chisel cut, whilst most core was cut using a core saw, with either half or quarter core used for sampling. RC samples were collected by use of a cone splitter, with duplicates collected every 20 samples. Later resource and grade control drilling was crushed to <3 mm and then split to 3 kg lots, then pulverised. This is appropriate given the sample interval and mass.
Quality of assay data and laboratory tests	
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is	Pulps were prepared by acid digest and analysed by ICP-OES using standard laboratory practices. Both independent and laboratory internal

JORC Code explanation	Commentary
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	QAQC were used. Site specific standards were derived from two RC drill holes specifically designed for the purpose and prepared by ORE Pty Ltd in Melbourne. Analysis for these standards was for Ni, As, Fe and Mg. For RC grade control drilling, blank samples were inserted 1 in 50 and 1 in 19 samples as standard. Standard samples have a well-defined margin of error suitable for the deposit. 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 Acquire® geology SQL 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 ±10 mm. A local grid based on seven known AMG 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 used to tie the survey control stations to the Australian Height Datum (AHD). A height datum of AHD + 1000 m was adopted for the Black Swan project. All Black Swan diamond drill holes have been routinely surveyed—generally every 30 m or less. In the case of the some early drill holes, however, only the hole dip component was measured, using the acid vial method. All subsequent diamond drill holes have been surveyed using Eastman single shot down hole survey instruments.
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.*	Surface drilling used a spacing of 20 m to 50 m across strike and approximately 50 m along strike. In pit drilling is on a 10 m by 10 m staggered pattern. Underground drill data was also used in the estimate. Sample data was composited to 2 m.
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.
Sample security	
The measures taken to ensure sample security.	There are no documented details available for sample security.
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 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.*	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. Historical royalties of 3% NSR exist over the minerals produced.
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 both MPI and Norilsk Nickel. Both 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 Section 3 (below)
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 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.*	Refer to the body of the announcement above.
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.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Grades have been aggregated using the length x SG weighted average. See body of text for individual sample grades.
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').*	True widths are stated where necessary.
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	Refer to the body of text above.
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	Not applicable.

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. Metallurgical recoveries for the stockpiled ore from the Black Swan Open Pit have been determined by stockpile as follows, based on historical processing data; - Yellow Stockpile: 73-78%% - HG Talc Stockpile: 49-61%% Where possible exploration results and geological logging will reflect the Yellow Stockpile (Serpentinite Mineralisation > 0.5% Ni) or the HG Talc Stockpile (Talc Mineralisation > 0.5% Ni). The other stockpiles and associated recoveries come from blends of the above or low grade and not applicable to exploration results. Metallurgical testing is yet to be conducted on the core subject to this announcement.
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.*	Poseidon expects to undertake further resource definition and grade control drilling at Black Swan. Mineralogical and metallurgical recovery studies will be conducted on the drill samples.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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. *Data validation procedures used.*	Logging and assay data has been electronically captured and uploaded in to the site Acquire® geology SQL database. The database gas been previously reviewed by Golder and was found to be in excellent condition. It is very clean and contains few errors, but does not contain sample and assay quality control information. Golder conducted visual validation checks on the drill hole data, with holes not relevant to the estimation removed from the dataset.
Site visits	
Comment on any site visits undertaken by the Competent Person and the outcome of those visits. *If no site visits have been undertaken indicate why this is the case.*	Golder has previously visited the Black Swan site, with several visits conducted within the last five years. A further visit was not made for this resource estimate. Black Swan has a long history of exploration and has been an operating mine, with both open pit and underground mining operations taking place.
Geological interpretation	
Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	The geological interpretation is validated by drill and mining activity, as well as in-pit mapping by previous owners. Where possible, estimation has been restricted to lithologies controlling and surrounding mineralisation. The geological domaining is based on data from previous resource estimates completed by Norilsk Nickel Pty Ltd and Gipronickel that have been reviewed by Golder previously, and for this resource estimate. The interpretation for this Mineral Resource estimate relies solely upon data from drilling, and not on mapping or surface sampling.
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 mineralisation associated with the Black Swan deposit runs along a strike length of approximately 250 m north-south and approximately 100 m east-west. Drilling has intercepted Ni mineralisation at up to 600 m below surface.
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	Mineralisation was estimated within domains defined by lithological information and statistical analysis of sample data in the composite file was used for estimation purposes.

JORC Code explanation	Commentary
of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	The block size is 12.5 m (X) by 25 m (Y) by 5 m (Z). The sub-block size is 3.125 m (X) by 12.5 m (Y) by 2.5 m (Z). High-grade restraining was applied to Ni in one domain, based on data analysis of assayed samples. The high-grade samples were used only in the estimation of blocks within a 25 m radius of the high grade sample. Using parameters derived from the modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades for Ni, As, MgO, Fe, and S. The estimation was conducted in three passes with the search size increasing for each pass. In some domains, where blocks had not been filled after three passes, a fourth pass was used, with samples from outside the domain of interest used to fill the remaining blocks. The model was validated visually and statistically using swath plots and comparison to sample statistics.
Moisture	
Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Density measurements were performed using the immersion technique. The density was calculated as a wet density even though core was often left to dry for some time. In some sampling programmes a representative section of core was used for measurements, rather than the entire core. Therefore a 5% moisture factor was applied to the Specific Gravity (SG) values used in the resource estimate.
Cut-off parameters	
The basis of the adopted cut-off grade(s) or quality parameters applied.	The resource model is constrained by assumptions about economic cut-off grades. The Mineral Resources were reported using a cut-off grade of 0.4% Ni which was applied on a block by block basis.
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 mining 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.	The block model uses a parent cell size of 12.5 m (X) by 25 m (Y) by 5 m (Z), primarily determined by data availability and the dimensions of the mineralisation.
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.	Metallurgical recovery of nickel was assigned based on data calculated by the Black Swan mill whilst mining operations were in progress.
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.	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.	Bulk density estimates were calculated from core obtained from drilling programmes. Golder applied a moisture factor of 5% to account for the bulk density measurements being based on wet core, and that in some drilling programmes, selected portions of core being used to represent the

JORC Code explanation	Commentary
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. *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	whole, rather than all core being measured for bulk density.
Classification	
The basis for the classification of the Mineral Resources into varying confidence categories. *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).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). The classification of Mineral Resources was completed by Golder based on geological confidence, drill hole spacing and grade continuity. The Competent Person is satisfied that the result appropriately reflects his view of the deposit. Continuous zones meeting the following criteria were used to define the resource class: <u>Indicated Resource</u> ■ Blocks that were estimated with samples with an average of less than 30 m distance from blocks. ■ Number of drill holes confirming grade continuity. <u>Inferred Resource</u> ■ Blocks that were estimated with samples with an average of less than 50 m distance from blocks. ■ Limited number of drill holes. Mineral Resource classification was restricted to a Lerch-Grossman pit shell using a potential future nickel price. This was combined with the accuracy of the estimate ascertained by geological confidence, drill hole spacing and grade continuity from available drilling data.
Audits or reviews	
The results of any audits or reviews of Mineral Resource estimates.	This Mineral Resource estimate is based on data from previous resource estimates completed by Norilsk Nickel Pty Ltd and Gipronickel that have been reviewed by Golder.
Discussion of relative accuracy/confidence	
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. *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.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The relative accuracy is reflected in the resource classification discussed above that is in line with industry acceptable standards. This is a Mineral Resource estimate that includes knowledge gained from mining and milling recovery data during production.

Section 4 Estimation and Reporting of Ore Reserves

JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	
Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Black Swan open pit and surface stockpile Ni Mineral Resources used as the basis of this Ore Reserve were estimated by Golder Resources Pty Ltd and announced to market with the previous Ore Reserve estimate in November 2014. This Resource contains both in-situ material and previously mined material in surveyed ex-pit stockpiles. The Co Resource used as the basis of this Ore Reserve was estimated by Entech Pty Ltd in April 2017 and has been announced concurrently with this

JORC Code explanation	Commentary
	Reserve. Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	
Comment on any site visits undertaken by the Competent Person and the outcome of those visits. *If no site visits have been undertaken indicate why this is the case.*	The Competent Person (Mr Matthew Keenan) visited the BSNO site on 7th June 2016. The visit included inspection of the Black Swan open pit and surface stockpiles. The site visits did not give the Competent Person any reason to believe that any portion of the Reserve Estimate will not be mineable.
Study status	
The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The Black Swan and surface stockpile material being converted from Mineral Resource to Ore Reserve is based on a Preliminary Feasibility Study undertaken in 2014. Modifying factors accurate to the study level have been applied based on detailed selective mining unit (SMU) analysis. Modelling indicates that the resulting mine plan is technically achievable and economically viable.
Cut-off parameters	
The basis of the cut-off grade(s) or quality parameters applied.	For the Black Swan open pit, a recovered nickel cut-off grade of 0.21% Ni was used to define ore and waste. This is approximately equivalent to an in-situ cut-off grade of 0.46% Ni for the serpentinite ore and 0.56% for the talc carbonate ore. A nickel price of $US6.50/lb and a USD:AUD exchange rate of 0.76 was used to determine the cut-off grades.
Mining factors or assumptions	
The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.* *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* ▪ *The mining dilution factors used.* ▪ *The mining recovery factors used.* ▪ *Any minimum mining widths used.* ▪ *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* ▪ *The infrastructure requirements of the selected mining methods.*	Detailed mine designs were carried out on the Black Swan open pit, and these were used as the basis of the Reserve estimate. The Black Swan open pit Ore Reserves are based on a conventional open pit mining method using hydraulic excavators and off-road trucks to haul the ore and waste from the pit and stockpiles. The pit has already been developed. The current pit floor is approximately 120 m below the original surface. The strip ratio of the Reserve pit design is approximately 0.3:1 (waste:ore). Open pit wall angles were determined based on independent geotechnical analysis and historical pit wall designs. A slip in the SE corner of the pit has been reviewed by independent geotechnical consultants and considered in the Reserve design. Open pit grade control will be carried out by 25 m deep RC holes ahead of production. Open pit mining dilution was estimated locally by modelling a selective mining unit of 12.5m x 12.5m x 5m. This was achieved by regularising the block model to conform to this block size. A 95% open pit mining recovery factor was applied to the ore tonnage to account for mining related losses. Surface stockpile tonnages are based on detailed site surveys carried out at cessation of previous mining operations. Stockpiles grades are based on site grade control models. Surface stockpiles are assumed to be reclaimed by the processing plant ROM loader if <500 m from the plant. If >500m from the plant, an additional allowance has been made for reclaim load and haul.

JORC Code explanation	Commentary
	The mining method chosen is well-known and widely used in the local mining industry and production rates and costing can be predicted with a suitable degree of accuracy. Suitable access exists for all ore sources. Allowance has been made for dewatering of the Black Swan open pit. Independent geotechnical consultants MineGeotech Pty Ltd and Snowden Mining Industry Consultants Pty Ltd (2008) contributed appropriate geotechnical analyses to a suitable level of detail. These form the basis of mine design for the open pit Reserve estimate. Only the Indicated portion of the Mineral Resource was used to estimate the Ore Reserve. All Inferred material has had grade set to waste for the purposes of evaluation. The Ore Reserve is technically and economically viable without the inclusion of Inferred Mineral Resource material. Most of the infrastructure required for the operations is already in place and has been under care and maintenance for approximately 8 years, including a processing plant and associated infrastructure, access roads, offices and ablutions, connections to the Western Power grid, power reticulation, and borefields. Allowance has been made for refurbishment of this infrastructure where required based on quotes provided by reputable independent vendors to an appropriate standard of detail.
Metallurgical factors or assumptions	
The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	The Black Swan concentrator was successfully operated at throughput rates up to 2.2Mtpa on the Reserve deposits during previous operations. All Reserve ore is expected to be processed through this concentrator at a rate of 1.1Mtpa. Suitable associated infrastructure is in place including water supply and storage, reagents storage, and tailings disposal and storage systems. Extensive historical data exists on metallurgical characteristics of the Reserve orebodies. The cost of plant refurbishment has been determined to a PFS standard of accuracy. The metallurgical process is conventional, well understood and has many years of operational data to support the flotation responses of the Black Swan and Silver Swan ores. The Black Swan Talc Carbonate ore has not, historically, been processed in large quantities at the Black Swan plant although it has been incorporated as a minor part of the feed blend at times. The majority mined has been stockpiled. The metallurgical recovery of Black Swan Talc Carbonate ore has been tested and assessed by various groups in 2008 (Norilsk, AMEC and Ammtec) and 2010 (Gipronickel). The results from this testwork demonstrate that the recovery from Talc Carbonate ore is lower than Serpentinite ore but that flotation is technically feasible. Based on this work, the metallurgical recovery for the Black Swan open pit ore has been assumed at 65% for this Ore Reserve estimate.

JORC Code explanation	Commentary
	Cobalt has been included as a by-product in the Ore Reserve estimate. Metallurgical recoveries for the stockpiled ore have been determined by stockpile as follows, based on historical processing data; - Crushed Stockpile: 64% - Yellow Stockpile: 73% - Lime Stockpile: 69% - HG Talc Stockpile: 49% - Blue Indicated Stockpile: 52%
Environmental	
The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Geochemical characterisation studies have been conducted that indicate that the rock mass is non-acid forming. An additional geochemical study was conducted by MBS Environmental to assess the potential implications of storing tailings from the proposed ore blend on top of existing material in the tailings storage facility (TSF). Works for the Stage 5 lift of the TSF commenced prior to the project being placed in care and maintenance. These works were incomplete and, as such, certification of the works by the Department of Environmental Regulation (DER) could not be obtained. The Works Approval authorising construction of the new embankment raise has since lapsed. A new Works Approval will be required prior to completing the lift. Under current approvals tailings cannot be deposited above RL11378.5 m. Based on current approvals, it is estimated that there is currently 4 years of storage capacity in the TSF. This is sufficient to cover storage of tailings generated by processing the estimated Reserve ore. POS has advised that most required approvals already issued under the *Mining Act* and *Environmental Protection Act* from previous operations remain current. At this point in time the Competent Person sees no reason permitting will not be granted within a reasonable time frame.
Infrastructure	
The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The project site is already developed and on care and maintenance. All required surface infrastructure is already in place and requires only minor refurbishment to the concentrator, TSF, workshops and haul roads. As the site is 53 km from Kalgoorlie, a residential workforce will commute to site daily. The mine is connected to the Western Power grid through two lines, one feeding the concentrator and one feeding the other surface infrastructure and underground workings. The existing water supplies from the Black Swan borefield, Silver Swan underground dewatering system, Black Swan pit dewatering and the Federal pit are sufficient to operate the plant at a throughput of 1.1Mtpa.
Costs	
The derivation of, or assumptions made, regarding projected capital costs in the study.	The project capital cost has been estimate to an accuracy of +/-25% based on detailed cost modelling and design work carried out in the Black Swan

JORC Code explanation	Commentary
The methodology used to estimate operating costs. *Allowances made for the content of deleterious elements.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made for royalties payable, both Government and private.*	PFS. More detailed costs have been sourced for refurbishment of site infrastructure. Operating costs for the open pit and processing plant were estimated from a combination of first principles, 2008/2009 historic operating costs and recent contractor quotations. They were also benchmarked against similar sized concentrators. The USD:AUD exchange rate assumed for the cost modelling was 0.76. Road transport charges for concentrate transport are based on factored quotes. WA state royalties of 2.5 % and a third-party royalty of 1% have been applied to gross concentrate nickel revenues.
Revenue factors	
The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	Forecasts for head grade delivered to the plant are based on detailed mine plans and mining factors. A global payable 68% of contained nickel metal has been applied to factor downstream treatment and refining charges. Payabilities are based on information provided by POS following discussions with potential offtake partners. A flat USD:AUD exchange rate of 0.76 was used in the financial model. Co by-products have currently been modelled in the Black Swan open pit. No by-products have been modelled from the surface stockpiles. A flat nickel price of US$6.50/lb has been assumed for the financial analysis, based on forecasts provided by POS. Deleterious elements (As and MgO) and associated penalties have been applied to the Black Swan pit concentrate pricing. These penalties are based on the historical concentrate grades generated by processing the Black Swan ore, and applying a penalty of US$3/dmt of concentrate for every 0.01% As grade over 0.2%, and a penalty of $40/dmt of concentrate for every unit of Fe:MgO ratio under 5. The penalties were advised by POS based on the 2014 study work and discussions with potential offtake partners. The total deleterious element penalty assumed for the Black Swan Reserve estimate works out to $151.32 per dmt of concentrate.
Market assessment	
The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. *A customer and competitor analysis along with the identification of likely market windows for the product.* *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	POS is currently discussing offtake agreements with potential buyers. The volume of concentrate produced by processing the estimated Reserve will be too small to have an impact on the global market of nickel sulphide concentrate.
Economic	
The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	The Black Swan pit and surface stockpiles Ore Reserves have been assessed both as combined and stand-alone projects in detailed financial models.

JORC Code explanation	Commentary
NPV ranges and sensitivity to variations in the significant assumptions and inputs.	All cases are economically viable and have a positive NPV at a 10% discount rate at the stated commodity price and exchange rate. Sensitivity analysis shows that the project is most sensitive to commodity price/exchange rate movements. The project is still economically viable at unfavourable commodity price/exchange rate adjustments of 10%.
Social	
The status of agreements with key stakeholders and matters leading to social licence to operate.	A compensation agreement exists between the Black Swan Nickel Operations and Mt Vetters Pastoral Station. This has been updated periodically as the operation has changed. Compensation previously paid under this agreement has been adequate to address all impacts of the project. No further compensation is required under the terms of this agreement. However, previous practice may have resulted in an expectation of additional compensation if significant additional land clearance is proposed. Significant land clearance is not required under the current Reserve estimate plan. POS will continue to communicate and negotiate in good faith with key stakeholders
Other	
To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: *Any identified material naturally occurring risks.* *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	A formal process to assess and mitigate naturally occurring risks will be undertaken prior to execution. Currently, all naturally occurring risks are assumed to have adequate prospects for control and mitigation. No marketing agreement has yet been signed but the Competent Person considers that such an agreement is reasonably likely. Interest has been expressed by various potential offtake partners for the concentrate and it was successfully marketed during previous operations. Based on the information provided, the Competent Person sees no reason all required approvals will not be successfully granted within the anticipated timeframe.
Classification	
The basis for the classification of the Ore Reserves into varying confidence categories. *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The Probable Ore Reserve is based on that portion of the Indicated Mineral Resource within the mine designs that may be economically extracted and includes an allowance for dilution and ore loss. None of the Probable Ore Reserves have been derived from Measured Mineral Resources. The result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	
The results of any audits or reviews of Ore Reserve estimates.	The Ore Reserve estimate, along with the mine design and life of mine plan, has been peer-reviewed by Entech internally.
Discussion of relative accuracy/confidence	
Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. *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.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.*	The Black Swan pit and stockpile design, schedule, and financial model on which the Ore Reserve is based has been completed to a Pre-Feasibility study standard, with a corresponding level of confidence. Considerations in favour of a high confidence in the Ore Reserves include: - Approximately 17% of nickel metal tonnes are contained within ex-pit already mined surface stockpiles. - The mining process is simple, small scale and utilises proven technology - The Black Swan mill has a long operating history processing the Reserve material - The project, as previously operated, is fully permitted.

JORC Code explanation	Commentary
It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Additional approvals will be required for some tailings dam and road construction works. Considerations in favour of a lower confidence in Ore Reserves include; - Deleterious element penalties still need to be confirmed based on marketing agreements and metallurgical testwork on the proposed processing blend. Since the Black Swan concentrate was successfully sold during previous operations, it is not expected that such penalties will render the Reserve estimate unsaleable. - Future nickel price and exchange rate forecasts carry an inherent level of risk - There is a degree of uncertainty associated with geological estimates. The Reserve classifications reflect the levels of geological confidence in the estimates. - There is a degree of uncertainty regarding estimates of impacts of natural phenomena including geotechnical assumptions, hydrological assumptions, and the modifying mining factors, commensurate with the level of study. - A binding offtake agreement for the product has not yet been signed. The Ore Reserve is based on a global estimate. Modifying factors have been applied at a local scale. Further, i.e. quantitative, analysis of risk is not warranted or appropriate at the current level of technical and financial study.

ATTACHMENT B
JORC (2012) Table 1
SILVER SWAN EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVE ESTIMATE

SILVER SWAN EXPLORATION RESULTS AND RESERVE ESTIMATE

SECTION 1 Sampling Techniques and Data

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

JORC Code explanation	Commentary
Sampling techniques	
Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	Underground diamond drilling has been used to obtain core samples. Sampling is a mixture of full core, and half core sampling. In general, 1 m samples or smaller have been used for exploration and grade control drilling. Samples have been obtained from drilling carried out from underground drilling by LionOre and Norilsk Nickel Australia below the 10100mRL level. The drilling database and block model above this RL have been cut from the resource estimate data set as these have been mined out and are not reported in this document. Only drilling completed between 2006 and 2008 are included in the resource estimate. Diamond drilling sampling protocol has followed accepted industry practice, with all mineralised core sampled and intervals selected by geologists to ensure samples did not cross geological or lithological contacts. Core was halved, with a half sent for assay and the remaining core retained for geological reference.
Drilling techniques	
Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	Underground diamond drilling is the method by which drilling has been conducted into the ore zones below the 10100mRL level of the mine. All of the diamond core below the reported 10100mRL is of NQ size. Core orientation was carried out using the EzyMark system. All core trays are digitally photographed to maintain a permanent record of core prior to any sampling operations. Hard copy photographs exist for core photographed before the advent of digital photography.
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 recovery and presentation has been documented as being good to excellent and inspection of core trays by Poseidon geologists has confirmed the quality of core recovery. Due to the good to excellent core recovery, Poseidon has no reason to believe that there is bias due to either sample recovery or loss/gain of core.
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.*	Much of the drill core has been oriented prior to the core being logged. Drilling data and geological logging was electronically captured and uploaded in to the site Acquire® geology SQL database. This has been exported to an Access database which has been converted to Surpac format for modelling. The entire length of the drillholes have been logged geologically and entered into the digital database.
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 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.*	All of the deeper drill core used in this estimation was either full core or cut using a core saw, with half core used for sampling. Resource and grade control drilling was crushed to <3 mm and then split to 3 kg lots, then pulverised. This is appropriate given the sample interval and mass.

JORC Code explanation	Commentary
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	All assaying since March 2004 has been carried out by Kalgoorlie Assay Laboratories (Kalassay, now Bureau Veritas) using ICP-OES on a 4 acid digest using standard laboratory practices. Both independent and laboratory internal QAQC were used. Site specific standards were derived from two RC drillholes specifically designed for the purpose and prepared by ORE Pty Ltd in Melbourne. Analysis for these standards was for Ni, As, Fe and Mg. The following QA/QC measures were adopted during the sampling and assaying of underground diamond drill core and include: • Blank inserted in 1:25 samples • Certified standards inserted in 1:25 samples • Sizing analysis of 1:20 samples • Duplicate analysis of quarter core for 1:25 holes • Analysis of laboratory QAQC. Repeat analysis completed by laboratory on 5% of samples • Monthly reporting of QAQC • Six monthly temporal and spatial analysis of the erroneous standards and blanks. The quality of the data received from the laboratory appears to be good, with no major issues being highlighted. Standard samples have a well-defined margin of error suitable for the deposit. No external laboratory checks were conducted on the 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 Acquire® geology SQL database which was handed over to Poseidon following the sale transaction. This has been exported to an Access database which has been converted to Surpac format for modelling.
Location of data points	
Accuracy and quality of surveys used to locate drillholes (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 ±10 mm and recorded by the underground surveyor. A local grid based on seven known AMG_84 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 used to tie the survey control stations to the Australian Height Datum (AHD). A height datum of AHD + 1000 m was adopted for the Black Swan project. A local mine grid was established and used throughout the operation. Poseidon has also converted surveys to the current MGA_94 grid format. All Silver Swan diamond drillholes have been routinely surveyed downhole. All underground diamond drillholes have been surveyed using either Eastman Single Shot down hole survey instruments or Reflex Gyro instruments.
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.*	Underground drilling used a maximum spacing of 10 m x 10 m for Indicated category resources and approximately 10m x 20m and 20 m x 40m for Inferred resources. Sample data was composited to 1 m.
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.*	Drillhole orientation was dominantly between 20^0-60^o to geological continuity as the mineralisation is drilled form underground workings in the footwall of the deposit which dips 80^0 to grid east. The angle of intersection is factored into the resource shape interpretations and is well understood as it is verified by mining and reconciliation of the ore zones to a depth of 1300m below surface. The sampling and interpretations meets the requirements of the resource estimation.

JORC Code explanation	Commentary
Sample security	
The measures taken to ensure sample security.	There are no documented details available regarding sample security. As the mine is not precious metals and the drilling consists of visually observable massive nickel sulphide mineralisation, security is not considered to have been compromised.
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. The drillhole intersections correlate well with the block model results.

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 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.*	Silver Swan underground mine is located in the Kalgoorlie District within M27/200. Silver Swan mine is part of the Black Swan Operation which is located 42.5km NE of Kalgoorlie. M27/200 is registered to MPI Nickel PTY Ltd which is a 100% subsidiary of OJSC MMC Norilsk Nickel. Following the purchase of the assets from Norilsk, the tenement is currently in the process of being transferred to Poseidon Nickel Limited. All operating licences are in place and are currently being renewed and transferred to Poseidon Nickel. Historical royalties of 3% NSR exist over the minerals produced.
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 LionOre in 2004. Much of the exploration drilling and development was completed by these 2 companies. In turn LionOre was taken over by Norilsk in 2007 and continued mining and developing the underground mine at Silver Swan. 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 Type 1a komatiite hosted massive nickel sulphide deposit. Nickel is hosted within the Black Swan Komatiite Complex, a large series of ultramafic komatiite flows. The massive sulphide Silver Swan mineralisation is located within the lower basal komatiite flow of the Black Swan Complex. Controlling factors include presence of ultramafic, location with the ultramafic stratigraphy, and the texture of the sulphide mineralisation
Drillhole Information	
	The Silver Swan deposit has only been drilled at depth by diamond drilling methods and much of the historical core has been retained on site and is accessible. Poseidon recently drilled an NQ2 diamond campaign following industry best practise in all data collection and sampling techniques.
Data Aggregation Methods	
	Aggregation of grades utilised length and specific gravity weighting of assay results
Relationship Between Mineralisation Widths and Intercept Lengths	
	True widths have been stated with intercept lengths wherever required. True widths have been calculated in 3 dimensions using 3D Micromine software.
Diagrams	
	Refer to body of text above
Balance Reporting	
	All relevant information has been reorted
Other Substantive Exploration Data	
	Refer to body of text above
Further work	
	Poseidon expects to undertake further resource definition and grade control drilling at Silver Swan to convert more Inferred to Indicated resources.

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 Poseidon Nickel Ltd (POS) has been checked and validated by POS personnel during data collection and entry. The POS logging and assay data were electronically captured and uploaded to SQL drillhole database. POS supplied the data to Optiro as an extraction to a MS Access database from SQL drillhole database. This data was imported into Datamine and a variety of checks were undertaken, that did not identify any material errors with the most recent data.
	Data validation procedures used.	Basic validation steps were completed on the drillhole data supplied to Optiro. During input and desurveying in Datamine Studio RM, checks for overlapping intervals and gaps in downhole interval files, checks that assays where within expected ranges and that all data integrated as expected were undertaken and no problems identified.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	Optiro CP, Kahan Cervoj has not visited the Silver Swan site. No site visit was conducted as on-site exploration activity has been significantly reduced prior to when the CP was engaged to undertake the work.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The geological interpretations have been validated by on-going 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 the 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.
	The use of geology in guiding and controlling Mineral Resource estimation.	The mineralisation is defined by nickeliferous massive sulphide 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, a large series of ultramafic komatiite flows. The massive sulphide Silver Swan mineralisation is located within the lower basal komatiite flow of the Black Swan Complex. 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 375 m striking grid north-south and has been tested down dip to a length of 1,550 m vertically, with a steep plunge towards the north-east and is still open down plunge. The 2019 update is for 10 individual sulphide lenses grouped into 4 mineralised areas, that range from 12 to 120 m (averaging 62 m) along strike, 70 to 300 m 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 software (v1.4.132.0). Prior to estimation, the samples and block model were coded using domain wireframes. Length-density weighted composite 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. The nickel, arsenic, cobalt and copper composite grades were top-cut to minimise the impact of a small number of extreme values. Parent block estimation into a parent block size of 2 mE by 5 mN by 5 mRL, using a block discretisation of X:4, Y:4, Z:4. A variable sub-block size is 0.25 mE by 0.5 mN by 0.5 mRL 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 36 samples with a search rang of 25 m in along strike and down-dip, and a distance of 10 m across strike. • The second pass used the same minimum and maximum number of samples, but search distance was doubled • The third pas used 250 m along strike and down-dip and a distance of 50 m across strike. Maximum distance of extrapolation is 25 m.
	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 2019 Mineral Resource. Compared to the previous November 2015 Mineral Resource, the 2019 estimate has resulted in a 107% increase in the tonnes, 2% increase in the nickel grade and a 112% increase contained nickel metal of the Indicated Resource. There has been a reduction of 28% of the tonnes, an 8% increase in the nickel grade which has resulted in a reduction of 22% of the contained nickel metal for the Inferred Resource. The combined Mineral Resource seen an increase of 24% of the tonnes, a 5% increase in the nickel grade and with the resultant nickel metal increasing by 30%. These significant increase in the Mineral Resource is the result of the additional drilling extending and increasing the volume of mineralisation, combined with closer spaced drilling improving the proportion of 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 2 m (X) by 5 m (Y) by 5 m (Z) with drilling spaced from 10 to 60 m 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 correlations (R> 0.85) between nickel, iron 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.
	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 cuts were applied to nickel, arsenic, copper and cobalt to minimise the impact of a few extreme grades. The top-cute were derived using a combination of histogram, cumulative distribution and mean/variance analysis and population disintegration.

Criteria	JORC Code explanation	Commentary
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	The panel 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 where 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 estimated 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 texture. The Mineral Resource has been reported using a cut-off grade of 4.5% nickel.
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 mining 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.*	The current Silver Swan mineralisation commences approximately 1,360 m below surface and is exclusively an underground Mineral Resource. The previous Mineral Resource supported a positive feasibility study that was announced on 18 July 2018, demonstrating the reasonable prospect for eventual economic extraction.
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 floatation processes.
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, not-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 and porosity is negligible. 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 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 25 mN x 25 mRL 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 is of a low confidence. These areas are supported by a nominal drill spacing of greater than 25 mN x 25 mRL, where only grade or geological continuity is implied and/or where the estimated is not well informed.
	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, that 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 July 2019 Silver Swan massive sulphide Mineral Resource appropriately reflect the Competent Person's view of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	The July 2019 Silver Swan massive sulphide Mineral Resource has been reviewed internally by Optiro Pty Ltd, but has not been externally reviwed.
	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	The current Mineral Resource classification suitably reflects the relative accuracy of the Mineral Resource. There has been no statistical procedure undertaken to quantify the relative accuracy.
	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 July 2019 Silver Swan massive sulphide Mineral Resource is considered a global estimate, primarily because of the sample spacing and drillhole intersection angle 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.

Section 4 Estimation and Reporting of Ore Reserves

JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	
Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Silver Swan Ni Mineral Resource used as the basis of this Ore Reserve were estimated by Poseidon Nickel Ltd and Optiro Pty Ltd and was announced to market in June 2016. Cu and Co Mineral Resources have been announced to the market concurrently with this Ore Reserve. Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	
Comment on any site visits undertaken by the Competent	The Competent Person (Mr Matthew Keenan) visited the site on 7th June 2016.

JORC Code explanation	Commentary
Person and the outcome of those visits. *If no site visits have been undertaken indicate why this is the case.*	The visit included inspection of the Silver Swan underground workings and surface infrastructure. The site visits did not give the Competent Person any reason to believe that any portion of the Reserve Estimate will not be mineable.
Study status	
The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	A Pre- Feasibility Study has been completed for the Silver Swan material being converted from Mineral Resource to Ore Reserve. Modifying factors accurate to the study level have been applied based on detailed stope design analysis. Modelling indicates that the resulting mine plan is technically achievable and economically viable.
Cut-off parameters	
The basis of the cut-off grade(s) or quality parameters applied.	Cut-off grade parameters for the underground ore were determined based on the 2017 financial analysis, assuming toll treatment of ore by a third party. The fully costed stoping cut-off grade applied for the Silver Swan underground was 3.0% Ni, and the incremental stoping cut-off grade was 2.1% Ni. A nickel price of $US6.50/lb and a USD:AUD exchange rate of 0.76 was used to determine the cut-off grades.
Mining factors or assumptions	
The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.* *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods.*	Detailed mine designs were carried out on the Silver Swan underground, and these were used as the basis of the Reserve estimate. The Silver Swan Ore Reserve is planned to be mined using a bottom-up modified Avoca method with unconsolidated backfill. This mining method is based on detailed dynamic geotechnical modelling. Diesel powered trucks and loaders will be used for materials handling. Diesel-electric jumbo drill rigs will be used for development and ground support installation, and diesel-electric longhole rigs used for production drilling. The mining methods chosen are well-known and widely used in the local mining industry and production rates and costing can be predicted with a suitable degree of accuracy. Suitable access is available through the existing workings, which have been kept pumped dry during care and maintenance. Re-entry and refurbishment of capital development was costed in the Silver Swan mine plan based on detailed independent expert inspection. Independent geotechnical consultants MineGeotech Pty Ltd and Beck Engineering Pty Ltd contributed appropriate geotechnical analyses to a suitable level of detail. These form the basis of mine design, ground support and mining method selection for the Reserve estimate. Only the Indicated portion of the Mineral Resource was used to estimate the Ore Reserve. All Inferred material has had grade set to waste for the purposes of evaluation. The Ore Reserve is technically and economically viable without the inclusion of Inferred Mineral Resource material. Underground stopes were designed inclusive of minimum mining width of 2.5 m plus dilution volumes determined by independent geotechnical analysis and dynamic modelling. Global planned waste dilution is 35%, and unplanned waste dilution is 7%. An extra 2% of waste dilution was applied to allow for overbog of fill. Non-fill dilution was assumed to carry a grade of 0.35% Ni, based on Mineral Resource information provided by POS. Sub-level intervals are 25 m based on geotechnical advice. Maximum stope spans opened prior to filling are 5 m along strike. A mining recovery of 95% has been applied to all stopes. Ore development had an assumed 100% mining recovery, based on historical experience and industry standards. Most of the infrastructure required for the operations is already in place and has been under care and maintenance for approximately 8 years, including a processing plant and associated infrastructure, access roads, offices and ablutions, connections to the Western Power grid, power reticulation, and borefields. Allowance has been made for refurbishment of this infrastructure where required based on quotes provided by reputable independent vendors to

JORC Code explanation	Commentary
	an appropriate standard of detail.
Metallurgical factors or assumptions	
The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	The Silver Swan Reserve estimate has been determined based on a sale of DSO to a customer in China. The payability of the ore has been provided by POS based on discussions with this potential offtake partner. The DSO sale is based on payability of 67% of the contained nickel only. Based on information provided by POS, this payability is assumed to cover any contained by-products, metallurgical recovery, and deleterious elements.
Environmental	
The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Geochemical characterisation studies have been conducted that indicate that the rock mass is non-acid forming. POS has advised that most required approvals already issued under the *Mining Act* and *Environmental Protection Act* from previous operations remain current. At this point in time the Competent Person sees no reason permitting will not be granted within a reasonable time frame.
Infrastructure	
The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The project site is already developed and on care and maintenance. The underground workings are powered and kept dry through the installed pumping system. All required surface infrastructure is already in place and requires only minor refurbishment. All required underground infrastructure is in place to commence mining including primary ventilation fans, escapeways, high voltage power reticulation, service water and compressed air. Allowance has been made for refurbishment and recommissioning of this infrastructure based on inspections and detailed quotes. As the site is 53 km from Kalgoorlie, a residential workforce will commute to site daily. The mine is connected to the Western Power grid through two lines, one feeding the concentrator and one feeding the other surface infrastructure and underground workings. Allowance has been made for additional diesel generated power to supplement this underground feed.
Costs	
The derivation of, or assumptions made, regarding projected capital costs in the study. *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made for royalties payable, both Government and private.*	The Silver Swan PFS mining costs are based on detailed quotes from suppliers and mining contractors gathered as part of a Request for Quotation process involving three reputable and experienced underground contractor firms. These were also benchmarked against similar operations in the WA Goldfields and historical data from previous operations at Silver Swan. The USD:AUD exchange rate assumed for the cost modelling was 0.76. Road and sea transport charges for DSO are based on factored quotes provided by POS. WA state royalties of 2.5 % and a third-party royalty of 1% have been applied to gross concentrate nickel revenues.

JORC Code explanation	Commentary
Revenue factors	
The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	Forecasts for head grade delivered to the plant are based on detailed mine plans and mining factors. A global payability of 67% contained nickel metal has been applied to the DSO. Any by-product credits from contained Cu and co have been assumed to be incorporated into the payability, based on advice from POs following discussions with potential offtake partners. A flat USD:AUD exchange rate of 0.76 was used in the financial model. A flat nickel price of US$6.50/lb has been assumed for the financial analysis, based on forecasts provided by POS.
Market assessment	
The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. *A customer and competitor analysis along with the identification of likely market windows for the product.* *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	POS is currently discussing offtake agreements with several potential offtake partners, including the partner offering the DSO sale option used to determine the Reserve estimate. The volume of concentrate produced by processing the estimated Reserve will be too small to have an impact on the global market of nickel sulphide concentrate.
Economic	
The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	The Silver Swan underground Ore Reserve has been assessed in a detailed financial model. The Reserve plan is economically viable and has a positive NPV at a 10% discount rate at the stated commodity price and exchange rate. Sensitivity analysis shows that the project is most sensitive to commodity price/exchange rate movements. The project is still economically viable at unfavourable commodity price/exchange rate adjustments of 10%.
Social	
The status of agreements with key stakeholders and matters leading to social licence to operate.	A compensation agreement exists between the Black Swan Nickel Operations and Mt Vetters Pastoral Station. This has been updated periodically as the operation has changed. Compensation previously paid under this agreement has been adequate to address all impacts of the project. No further compensation is required under the terms of this agreement. However, previous practice may have resulted in an expectation of additional compensation if significant additional land clearance is proposed. Significant land clearance is not required under the current Reserve estimate plan. POS will continue to communicate and negotiate in good faith with key stakeholders
Other	
To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: *Any identified material naturally occurring risks.* *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the*	A formal process to assess and mitigate naturally occurring risks will be undertaken prior to execution. Currently, all naturally occurring risks are assumed to have adequate prospects for control and mitigation. No marketing agreement has been signed but it is expected that such an agreement is likely to be arrived upon. Interest has been expressed by various potential offtake partners for the concentrate and it was successfully marketed during previous operations. Based on the information provided, the Competent Person sees no reason all required approvals will not be successfully granted within the anticipated timeframe.

JORC Code explanation	Commentary
materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	
The basis for the classification of the Ore Reserves into varying confidence categories. *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The Probable Ore Reserve is based on that portion of the Indicated Mineral Resource within the mine designs that may be economically extracted and includes an allowance for dilution and ore loss. None of the Probable Ore Reserves have been derived from Measured Mineral Resources. The result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	
The results of any audits or reviews of Ore Reserve estimates.	The Ore Reserve estimate, along with the mine design and life of mine plan, has been peer-reviewed by Entech internally.
Discussion of relative accuracy/confidence	
Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. *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.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Silver Swan design, schedule, and financial model on which the Ore Reserve is based has been completed to a Pre- Feasibility study standard, with a corresponding level of confidence. Considerations in favour of a high confidence in the Ore Reserves include: - The mining process is well-known, small scale and utilises proven technology - The revenue is derived from a simple DSO model which disregards metallurgical factors - The project, as previously operated, is fully permitted. Considerations in favour of a lower confidence in Ore Reserves include; - Future nickel price and exchange rate forecasts carry an inherent level of risk - There is a degree of uncertainty associated with geological estimates. The Reserve classifications reflect the levels of geological confidence in the estimates. - There is a degree of uncertainty regarding estimates of impacts of natural phenomena including geotechnical assumptions, hydrological assumptions, and the modifying mining factors, commensurate with the level of study. - A binding offtake agreement for the product has not yet been signed. The Ore Reserve is based on a global estimate. Modifying factors have been applied at a local scale. Further, i.e. quantitative, analysis of risk is not warranted or appropriate at the current level of technical and financial study.