POSEIDONNICKEL

5th November 2014

Company Announcements Officer
ASX Limited
Exchange Centre
Level 4, 20 Bridge Street
SYDNEY NSW 2000

Dear Sir,

Re: POSEIDON ANNOUNCES BLACK SWAN ORE RESERVE

We enclose herewith a copy of an announcement in relation to the above.

Yours faithfully

David P.A. Singleton
MANAGING DIRECTOR &
CHIEF EXECUTIVE OFFICER

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CORPORATE DIRECTORY

Director / Senior Management

David Singleton	Managing Director & Chief Executive Officer
Chris Indermaur	Non-Executive Chairman
Geoff Brayshaw	Non-Executive Director
Robert Dennis	Non-Executive Director
Ross Kestel	Company Secretary

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Home Exchange
The Company's shares are listed on the Australian Securities Exchange and the home exchange is Perth
ASX code: POS

ASX Announcement 5th November 2014

Poseidon Announces Black Swan Ore Reserve

- **Initial Black Swan Probable Ore Reserve:**
  - **3.37 million tonnes @ 0.63% Ni for 21,500 tonnes contained nickel**
- **Initial Reserve represents a nominal 3 years of plant throughput**

Poseidon Nickel Limited (ASX:POS) is pleased to confirm that it has made further progress with advancing the Black Swan open pit nickel mining Project in readiness for production activities to commence. A substantial initial mining Ore Reserve of **3.37mt of ore @ 0.63% for 21,500 tonnes of nickel** has been independently defined by Golder Associates.

The reserves include 1.19mt of ore that was previously mined from the open pit but was not processed prior to the facility being put into care and maintenance. This ore offers Poseidon a quick processing ramp up and reduces the operating cost of mining for the first 12 months of production after the site is reopened.

The calculation of an Ore Reserve follows the completion of the Projects Feasibility Study and initial JORC 2012 compliant Mineral Resource which has previously been announced. Poseidon has been able to complete the Reserve definition work prior to formal completion of the purchase of the Project which is expected to occur before the end of the year.

It should be stressed that this Ore Reserve is an initial update as Poseidon has not yet undertaken any drilling at the site with the aim of increasing the reserve life further. Poseidon believes that the outcome of the study gives additional confidence on the future viability of the project as the analysis takes economic considerations fully into account when calculating the Ore Reserve. At this stage Poseidon does not believe that it needs to undertake further resource drilling to confirm additional project reserves given the low start-up capital requirements of the project but rather will carry out additional drilling in parallel with potential production operations. Poseidon will however continue to work on long lead items whilst completion activities are underway. These activities were reported in detail in the September Quarterly Report.

David Singleton, Managing Director and CEO said, “Achieving a nominal 3 year reserve life even before we have carried out any additional drilling is an important milestone for Black Swan. Acquisition activities are now well advanced and we still expect completion to occur this year.”

The Feasibility Study on the Black Swan project announced by Poseidon in August 2014 is based on approximately 1.1 million tonnes of ore per annum through the Black Swan processing plant. This throughput represents a nominal 3 operating years of reserves with a further 25 million tonnes of ore in Inferred Mineral Resources requiring further drilling and potential conversion to reserves in the future.

BLACK SWAN ORE RESERVE ESTIMATION (Extracted from Golders report)

Poseidon recently announced its intention to acquire the Black Swan Project from OJSC MMC Norilsk Nickel ("Norilsk Nickel") and announced the completion of the JORC 2012 compliant Mineral Resource in August 2014 by Golder Associates Pty Ltd (Golder). Poseidon immediately engaged Golder to continue the work and estimate the Black Swan Ore Reserve to

JORC 2012 standards. The estimation and classification of Ore Reserves was completed jointly by IMC Mining and Golder.

The Mineral Resource and Ore Reserve estimates were classified in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012). Golder has consented to the release of the attached Ore Reserve statement (Table 1 below) and Attachment A as required under the JORC 2012 code.

Table 1: Black Swan Ore Reserves on 24 September 2014 (at 0.4% nickel cut-off grade)

Nickel Sulphide Reserves	JORC Compliance	Ore Reserve Category		
		Probable		
		Tonnes (Kt)	Ni% Grade	Ni Metal t
BLACK SWAN PROJECT				
Open Pit	2012	2,170	0.71	15,500
Stockpiles	2012	1,190	0.49	6,000
TOTAL				
Total Ni Reserves	2012	**3,370**	**0.63**	**21,500**

Note: totals may not sum exactly due to rounding.

The open-pit Black Swan Ore Reserve has been estimated from an Indicated Mineral Resource of **9.6mt at 0.68% Ni containing 65kt of nickel metal** (using 0.4% cut-off grade) which represents a 34% conversion factor from resources to reserves. The total disseminated nickel sulphide resource at Black Swan is **30.7mt @ 0.58% Ni for 179kt of contained nickel metal** (using 0.4% cut-off grade). The pit shells from the Measured and Indicated (MI) and Measured, Indicated plus Inferred (MII) pit optimisation are shown in (Figure 1). A revised pit design is shown in Figure 2, which takes into account a safety berm and ramp switch backs below a slip in the south wall of the pit

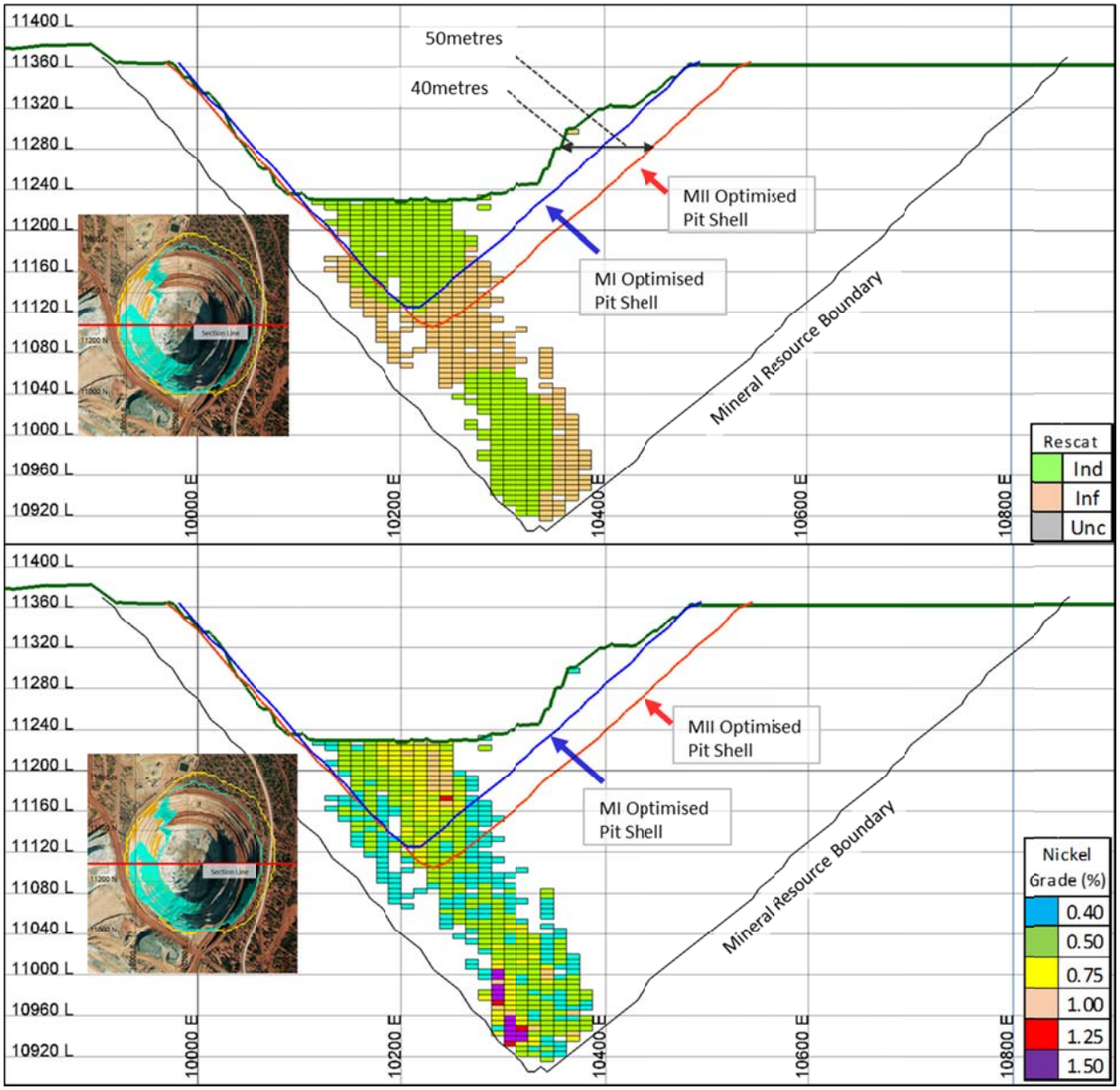

Figure 1: Pit Optimisation Cross-Section with Resource Blocks Looking North (11250N)

Figure 2: Revised Black Swan Pit Design (oblique view) to Account for Slip on the South Wall

Additional material exists as unprocessed ore stockpiles in various locations on the site (Figure 3) and these have been included in the Ore Reserve estimate (Table 1). Mill feed for the first 6 months will be sourced from the existing stockpiles which allow Poseidon to delay production from the Black Swan pit by 6 months from startup to allow for dewatering of the pit. During this time the stockpiles will be reclaimed and processed, with the water from the pit being utilised in the plant during the stockpile treatment process.

The remaining ore at the base of the current Black Swan open pit has a low strip ratio of approximately 0.5 waste:ore and is predominantly high recovery serpentine ore. This pit should provide a good opportunity for early cashflows once the processing plant is reconditioned. The mine benefits from having no major impediments for a rapid ramp up to productive operations.

The existing mine support infrastructure (workshops, admin and roads) appears to be in a sound condition and will not require any major investment of time or money to restart operations. The cost to restart mining operations is estimated to be between A$1.3M and $1.5M whilst the mining operating cost is estimated to be between A$16/bcm and A$18/bcm (circa A$6.13/t to A$6.90/t of ore). Total site operating costs are estimated to be between A$16M and A$22M per year. It is estimated that the project will produce 96Kt of concentrate at an average grade of 13.5% nickel.

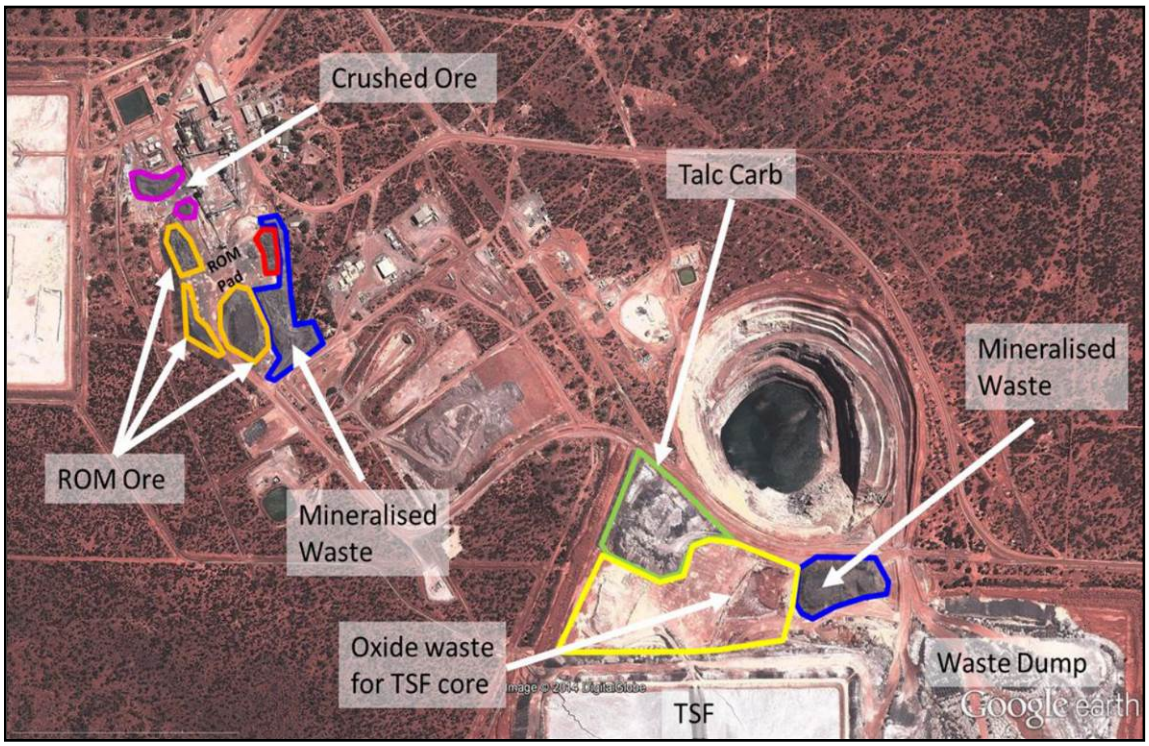

Figure 3: Black Swan Stockpile Locations

BLACK SWAN RESERVE ASSUMPTIONS AND METHODOLOGY

The Black Swan Ore Reserves estimate is shown in Table 1 and has been classified and reported in accordance with the JORC 2012 guidelines. The Ore Reserve has been estimated by taking into account the relevant modifying factors including:

- Loss and dilution
- Cut-off grade estimate
- Metallurgical response for Serpentine and Talc Carbonate material
- Nickel metal payability estimate
- Mining, processing and concentrate transport cost estimates

The Ore Reserves are based on a long term LME price of US$9.71/lb nickel and an exchange rate of 0.85 USD:AUD.

The Ore Reserves are based on a mined nickel cut-off grade of 0.4% comprising of an in-situ nickel cut-off of 0.40% for Serpentine ore and 0.45% for Talc Carbonate Ore. There are no Measured Resources at Black Swan.

The Ore Reserves are based on 35% of ex-pit stockpiles. 30% of the Ore Reserves are Talc Carbonate material which is expected to have a lower overall metallurgical recovery than the Serpentine material.

The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

MINERAL RESOURCE STATEMENT

Table 2: 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
BLACK SWAN PROJECT											
Black Swan	2012	0.40%	8,400	0.70	59,100	20,700	0.54	111,900	29,100	0.59	170,900
Stockpiles	2012	0.40%	1,200	0.49	5,900	400	0.53	1,900	1,600	0.50	7,800
TOTAL											
Total Ni Resources	2012	0.40%	**9,600**	**0.68**	**64,900**	**21,100**	**0.54**	**113,800**	**30,700**	**0.58**	**178,700**

Note: totals may not sum exactly due to rounding

ORE RESERVE STATEMENT

Table 3: Nickel Project Ore Reserve Statement

Nickel Sulphide Reserves	JORC Compliance	Ore Reserve Category		
		Probable		
		Tonnes (Kt)	Ni% Grade	Ni Metal t
BLACK SWAN PROJECT				
Black Swan	2012	3,370	0.63	21,500

Note: totals may not sum exactly due to rounding.

Notes

The information in this report which relates to the Black Swan Mineral Resource and Ore Reserves is based on information compiled by Andrew Weeks who is a full-time employee of Golder Associates Pty Ltd and Francois Bazin of IMC Mining Pty Ltd who are both Members of the Australasian Institute of Mining and Metallurgy and Neil Hutchison, General Manager of Geology at Poseidon Nickel, who is a Member of The Australian Institute of Geoscientists.

Mr Weeks, Mr Bazin and Mr Hutchison 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 Weeks, Mr Bazin and Mr Hutchison 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.

ATTACHMENT A
JORC (2012) Table 1
Black Swan

BLACK SWAN
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.

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.*	Pulps were prepared by acid digest and analysed by ICP-OES using standard laboratory practices. Both independent and laboratory internal 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. They are located 42.5km NE of Kalgoorlie. They are registered to MPI Nickel PTY Ltd which is a 100% subsidiary of OJSC MMC Norilsk Nickel. They are currently in the process of being transferred 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)
Geology	
Deposit type, geological setting and style of mineralisation.	Refer to Section 3 (below)
Drill Hole Information	
	No new Exploration Results have been reported.
Data Aggregation Methods	
	No new Exploration Results have been reported.
Relationship Between Mineralisation Widths and Intercept Lengths	
	No new Exploration Results have been reported.
Diagrams	
	No new Exploration Results have been reported.
Balance Reporting	
	No new Exploration Results have been reported.
Other Substantive Exploration Data	
	No new Exploration Results have been reported.
Further work	
	Poseidon expects to undertake further resource definition and grade control drilling at Black Swan

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

JORC Code explanation	Commentary
	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 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.*	Mineralisation was estimated within domains defined by lithological information and statistical analysis of sample data in the composite file was used for estimation purposes. 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	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.

JORC Code explanation	Commentary
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.	
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 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.*	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 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 Mineral Resource was estimated by Golder Associates Pty Ltd in August 2014. This model was used as the basis for the Ore Reserves. The Mineral Resource contains in-situ and stockpiled Indicated Resources based on drilling completed by various companies from the 1960s to 2004. The Mineral Resource also contains material in surveyed ex-pit stockpiles. The mineral resource model contains an estimate of volume, tonnage, Ni, As, Fe, MgO and S The parent block size used in the Mineral Resource is 12.5 m × 25 m × 5 m with 3.125 m × 12.5 m × 2.5 m (XYZ) sub-blocks. The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce 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.*	A site visit was undertaken by the Competent Person (Mr Francois Bazin) on 2 July 2014. An open pit, tailings dam and site infrastructure inspection was undertaken. The site visit confirmed that the site was in care and maintenance and that there were significant ex-pit stockpiles of mineralised material. A pit wall failure was noted in the south-east corner of the Black Swan open pit. A geotechnical review of this wall failure was commissioned and the findings were that recommencing operations was safely achievable. Minor remedial work would be required to re-establish catch capacity on the berm below the failure. The Ore Reserves have taken into account the material sterilised due to the failure.
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 Preliminary Feasibility Study was managed by Simulus Engineers in Perth, WA. The Preliminary Feasibility Study team included the following specialist consultants: ▪ Geology/Mineral Resources: Golder Associates Pty Ltd ▪ Processing and Metallurgy: Simulus Engineers Pty Ltd and GR Engineering Pty Ltd. ▪ Mining/Ore Reserves: IMC Mining Pty Ltd ▪ Environmental, Social, compliance: MBS Environmental ▪ Native title: KHC ▪ Legal: Poseidon Nickel Ltd ▪ Other supporting documentation provided through previous owners such as Lionore Australia Pty Ltd and Norilsk Nickel Australia Pty Ltd
Cut-off parameters	
The basis of the cut-off grade(s) or quality parameters applied.	A recovered nickel cut-off grade of 0.18% Ni was used to define ore and waste. This is approximately equivalent to an in-situ cut-off grade of 0.40% for Serpentine material and 0.45% for Talc Carbonate material. The long term LME prices used to estimate the cut-off grade is US$9.71/lb and a USD:AUD exchange rate of 0.85.
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.*	The Black Swan 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 remaining ore is approximately 0.5:1 (waste:ore) The geotechnical parameters and blasting practices used during previous operations will be used in future operations. Grade control will be carried out by drilling 25 m deep RC holes ahead of production. Mining dilution was estimated locally by assessing the impact of modelling a selective mining unit of 12.5 m × 12.5 m × 5 m. This was achieved by regularising the block model. A subsequent local and spatial dilution estimate was achieved. Within the designed pit shell the overall dilution estimate is 4% at 0.34% nickel. A 95% mining recovery factor was applied to the ore tonnage to account for

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▪ *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.*	mining related loss such as poorly assigned trucks, spillage and drill and blast losses. Other than as dilution, Inferred Resources have not influenced the shape of the final pit. The inclusion of Inferred Resources was assessed as a sensitivity in the pit optimisation and this shows that a cutback may be feasible pending on further drilling below the current pit floor. The mine has been on care and maintenance for 5.5 years, the key infrastructure to support the mining operations is already in place and required minimal refurbishment.
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 had a capacity of approximately 2.2 Mtpa on competent underground ores when it was last operated by Norilsk in 2009 before being placed into care and maintenance. Poseidon Nickel is planning to operate the concentrator at approximately 1.1 Mtpa as a 55:45 blend of Mt Windarra underground: Black Swan open pit ore. The plant will be refurbished and minor modifications to the flowsheet and reagents will be made to allow for the reduced throughput and new ore blend. A scope and cost for this refurbishment has been generated as part of the Study. The plant is an existing and proven concentrator suited to processing nickel sulphide ores such as those proposed. The metallurgical process is conventional, well understood and has many years of operational experience to support the flotation response of the Black Swan Serpentine ore as well as the blended Mt Windarra ore. The Black Swan Talc Carbonate ore has not, historically, been processed in large quantities at the Black Swan concentrator although has been incorporated as a minor part of the feed blend at times. The majority of the Talc Carbonate ore mined historically 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 Serpentine ore but that flotation is technically feasible. The Talc Carbonate recovery is estimated to be between 40%-60% depending on the nickel head grade. A 6 tonne bulk sample of Talc Carbonate ore was tested by Gipronickel in 2010. An assessment of the proposed blend of Serpentine and Talc Carbonate ore has also determined that the blend will form a saleable concentrate. It is noted that a stand-alone Black Swan concentrate would be high in MgO and arsenic and would likely incur penalties. However, when blended with Mt Windarra concentrate (to be processed at Black Swan) the resultant concentrate is forecast to produce a saleable concentrate with no expected penalties. The higher grade nickel Black Swan concentrate also complements the lower nickel Grade Mt Windarra concentrate.
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.	The site has a large number of approvals issued under the *Mining Act* and *Environmental Protection Act*. Approvals remain current for the project and can be transferred to Poseidon as part of the change in ownership. Environmental impacts were assessed as part of obtaining the above approvals. No significant impacts are considered to result from the project. Geochemical characterisation studies have been conducted on Black Swan Disseminated (BSD) waste rock and tailings and Mt Windarra and Cerberus tailings. BSD waste rock and tailings were both determined to be Non Acid Forming (NAF). Mt Windarra tailings were classified as potentially acid forming (PAF). An additional geochemical study is being conducted by MBS to assess the potential implications of storing tailings from the proposed ore blend on top of existing material in the BSD TSF. Project land disturbance appears to be within approved amounts. No additional land disturbance beyond approved amounts will be required for waste rock and tailings management. Clearing Permits have expired and new applications would be required for future land disturbance if greater than 10 ha per annum per tenement. Works for the Stage 5 lift of the BSD TSF commenced prior to the project being placed on care and maintenance. These works were not completed and, as such, certification of the works by the Department of Environment Regulation (DER) could not be obtained. The Works Approval authorising

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	construction of the 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 RL 11 378.5 m. Based on current approvals, it is estimated that there is currently 4 years of storage capacity on the TSF.
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 is in care and maintenance. The required infrastructure is already in place and only relatively minor refurbishment including the concentrator, tailings dam, workshops and the haul roads is required. As the site is 53 km from Kalgoorlie, a residential workforce is expected to drive in/drive out on a daily basis. Existing grid power via two lines is available to the site. Only one is required at the proposed reduced base case plant throughput of 1.1 Mtpa and no underground mining. The existing water supplies from the Black Swan borefield, Silver Swan underground dewatering, Black Swan open pit dewatering and the Federal Pit are sufficient to operate the plant at the base case throughput of 1.1 Mtpa.
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 project capital cost has been estimated to an accuracy level of +/-25% based on cost modelling and design work carried out in the Preliminary Feasibility Study. A more detailed refurbishment cost estimate was completed to estimate the cost of refurbishing the plant. The operating costs were estimated from a combination of first principles, 2008/9 historic operating costs and recent contractor quotations. They were also benchmarked against similar sized concentrators. The USD:AUD exchange rate varies from 0.93 to 0.85 and was provided by Poseidon Nickel. Deleterious elements and associated penalties for high MgO and Arsenic have not been applied to the Black Swan concentrate pricing due to the forecasted chemistry of the Black Swan and Windarra concentrate blend. If Black Swan concentrate was sold unblended, then it is expected that penalties would apply. A global payability of 75% contained metal has been applied to factor downstream treatment and refining charges. Quotations have been obtained for road transportation charges from Black Swan to Esperance and for sea-freight to China. WA state royalties for nickel and a third party royalty have been modelled.
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.*	The forecast head grade of Black Swan ore to the mill is based on a mine production schedule (inclusive of dilution). Metal recoveries regressions have been applied to the Serpentine and Talc Carbonate ore on a block by block basis. A USD:AUD exchange rate between 0.93 and 0.85 was used in the financial model No allowance has been made for potential credits from cobalt or copper as these have not been modelled in the resource model. A forecast of nickel prices (from Wood Mackenzie), rather than the long term average, has been used in the financial model.
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.*	Poseidon Nickel is currently discussing concentrate offtake agreements with potential buyers. The volume of concentrate produced by Black Swan will be too small to have an impact on the global market of nickel sulphide concentrate. The demand, supply and stock situation, consumer trends and future areas likely to influence the nickel market are captured through the forecast nickel price used in the reserve estimation. This price is a Wood McKenzie estimate and was compared against a number of other metal traders and resource analyst estimates. These estimates consider the above factors driving nickel price forecast.
Economic	
The inputs to the economic analysis to produce the net present value	The economic analysis of the Black Swan open cut Ore Reserves have been

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(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.*	assessed by Poseidon Nickel as a combined project with the Windarra underground mine. The key financial metrics of the Black Swan Ore Reserves have also been assessed on a stand-alone basis. The results of the Black Swan stand-alone economic analysis demonstrate that the project is viable and produces a positive NPV estimate of A$42M using a 10% discount rate. The project financial metrics are significantly improved, however, with the inclusion of Mt Windarra underground ore as 55% of the feed due to the higher nickel head grade and recovery at Mt Windarra and favourable concentrate blend chemistry. The financial analysis is based on the following key input parameters: ■ Nickel price forecast from US$8.72-US$11.40/lb (average of US$10.08/lb) ■ USD:AUD exchange rate between 0.90 and 0.85 ■ Mining costs are from a local contractor and processing costs are based on the recently completed Preliminary Feasibility Study Sensitivities were carried out on nickel price, exchange rate, capital and operating costs, processing costs and metallurgical recoveries At +/-20% of the base case parameter, the Black Swan standalone project NPV estimate remained positive. The project is most sensitive to changes in exchange rate, nickel price and metallurgical recovery
Social	
The status of agreements with key stakeholders and matters leading to social licence to operate.	A compensation agreement exists between Black Swan Nickel Operations and Mt Vetters Pastoral Station (dated 19/04/1996). 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. Poseidon 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.*	Poseidon through its wholly owned subsidiary Poseidon Nickel Atlantis Operations Pty Ltd has executed an Asset Sales Agreement with Norilsk Nickel's Ltd wholly owned subsidiaries Black Swan Nickel Limited Pty Ltd and MPI Nickel Pty Ltd to acquire the Black Swan mine and operations. The Asset Sale Agreement was entered into by the parties on 4 July 2014. The Asset Sale Agreement is subject to a number of conditions precedent which are to be satisfied prior to completion of the transaction. At the time of reporting the Ore Reserves a number of the conditions precedent remain to be satisfied. Poseidon and Norilsk are seeking to complete the transaction by 31 October 2014. Upon completion of the Asset Sale Agreement Poseidon Nickel Ltd (through its wholly owned subsidiary) will own the Ore Reserves. No significant impediments are believed to exist to obtaining additional regulatory approvals if the project description changes from what has previously been authorised. A new approval from DER (via a Works Approval) will be required to permit completion of the BSD TSF Stage 5 lift and use of this structure for storage of tailings above RL11378.5 m. Clearing Permits obtained for the project have all expired. New applications would be required for future land clearing. No significant impediments to obtaining these are foreseen.
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 Black Swan open pit is a developed project that has been on care and maintenance for 5.5 years. The pit is planned to progress 90 m deeper and is mostly in ore. The Ore Reserves have been estimated after the application of loss, dilution and other modifying factors to the Mineral Resource. No Measured Resources have been defined at Black Swan and therefore no

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	Proved Ore Reserves can be defined. The Probable Ore Reserves are the economically mineable portions of the Indicated Mineral Resource above the relevant cut-off grade. The Competent Person believes that the conversion of the Mineral Resource to Ore Reserves, as described above, is appropriate.
Audits or reviews	
The results of any audits or reviews of Ore Reserve estimates.	The Ore Reserve estimation methodology has been internally reviewed by IMC and Golder Associates.
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 Ore Reserves are based on a recently completed Preliminary Feasibility Study and as such the confidence in the Ore Reserve estimate is high as discussed below: Considerations in favour of a high confidence in the Ore Reserves: ■ 35% of the Ore Reserves are in existing out of pit stockpiles. ■ The mining process is simple, small scale and utilises proven technology ■ The Black Swan mill has a long operating history and suited to processing these ores ■ The project, as previously operated, is fully permitted. Additional approvals will be required for the BSD TSF embankment raise and construction of a haul road on L27/75. Considerations in favour of a lower confidence in the Ore Reserves: ■ Further Talc Carbonate and Black Swan/Windarra blend metallurgical testwork is required to confirm assumptions made in the Preliminary Feasibility Study. Preliminary work indicates that this will not be a major technical challenge. ■ Future nickel price and exchange rate forecasts carry an inherent level of risk. ■ The longer term viability of the project is contingent on the delivery of ore from Poseidon Nickel's Windarra underground mine. All modifying factors have been applied at a local scale (e.g. loss and dilution, economic parameters).