

5<sup>th</sup> March 2015

### High Grade Intersection Extends Mineralised Zones at Mt Windarra

### Highlights

- Windarra drilling programme intersects high grade nickel mineralisation in two new zones (extending G & H Shoots)
- Massive sulphide intersections include;
  - 3.10m (true width) @ 2.96% nickel within a broader 7.0 metres (true width) of mineralisation grading 1.82% Ni in G Shoot (WUG0061)
  - 2.50m (true width) @ 1.70% nickel within a broader 5.0 metres (true width) of mineralisation grading 1.44% Ni in H Shoot (WUG0060)
- Zone is 135 metres from refurbished decline and would be readily accessible
- Additional drilling is being undertaken to further assess the extent of the mineralised zone

Poseidon Nickel Limited (ASX:POS or the Company) is pleased to announce that it has intersected high grade massive sulphide nickel in drill hole WUG0061 as well as WUG0060 at its Mt Windarra operation (Table 1).

WUG0061 intersected 9.54m (7.00 true width) of nickel mineralisation grading 1.82% Ni which comprised of a narrower H Shoot intersection (Table 1) and 4.13m (3.10m true width) G Shoot which graded 2.96% Ni within the broader mineralised zone.

The intersection was 40m below previous drilling and below the known extent of the Upper G Shoot mineralisation in the resource model (sees Figure 1). The intersection is important because it is located close to existing infrastructure and adjacent to the refurbished area of the mine decline. This mineralisation is therefore potentially accessible more quickly and cost effectively after mine restart than the ore zones at depth. Poseidon is planning to mine the Upper G Shoot ore body early in the mining sequence to provide initial ore deliveries to the offtake party and this newly discovered extension will potentially add easily accessible nickel to the mining inventory.

In addition WUG0060 intersected 6.07m (5.00m true width) at 1.44% Ni which includes 3.00m (2.50m true width) grading 1.70% Ni in H Shoot which is located in front of the defined G Shoot mineralisation (Figure 1 and Table 1).

Hole ID	Easting Local	Northing Local	RL Local	Dip	Azi Local	Shoot Name	From (m)	To (m)	True Width (m)	Ni%
WUG0056	31562.39	55749.9	10172.5	+7.2	310.90	G Shoot	143.00	145.00	2.00	1.08
WUG0057	31562.39	55749.9	10172.5	+8.0	304.10	G Shoot	125.00	125.84	0.84	1.47
WUG0058	31562.39	55749.9	10172.5	-9.1	309.35	G Shoot	139.00	144.00	4.00	1.32
WUG0059	31562.39	55749.9	10172.5	-25.4	303.00	G Shoot	144.90	145.75	0.70	1.05
WUG0060	31562.39	55749.9	10172.5	-23.5	309.65	H Shoot	134.00	140.07	5.00	1.44
						incl	134.00	137.00	2.50	1.70
						G Shoot	147.91	151.00	2.50	1.20
WUG0061	31562.39	55749.9	10172.5	-37.8	310.46	G+H Shoot	170.00	179.54	7.00	1.82
						H Shoot	170.00	171.00	0.75	1.08
						G Shoot	174.00	178.13	3.10	2.96

### **Table 1: Significant Drill Intersections**

Further drilling will allow Poseidon to confirm if these intersections will lead to an economic extension to the mineralisation which may be added to the current mining inventory. The position and nature of the Upper G Shoot and H Shoot ore bodies defined to date suggest that both showed signs of pinching out. However, these intersections suggest the mineralisation has reformed in both shoots and are swelling out again. Whilst this is not unexpected (as C Shoot also displayed pinch and swell characteristics) it is potentially an important discovery in an area close to and below existing resources/reserves which have no drilling.

The underground diamond drill holes were part of a drilling programme at Windarra announced in November 2014 which was focussed primarily on further definition and infill of known resources prior to final mine scheduling, not on discovering additional ore zones. However, a single drill hole at the end of the drill programme (WUG0061) was planned to test a theory on possible extensions below the known resource which appears to have been successful. Poseidon will now extend the planned drilling programme to further detail the discovery hole (Figure 1).



Figure 1: Mt Windarra Long-Section (Looking West) showing location of current JORC Resources (green) and recent drill holes. The enlarged inset shows the positions of the reported intersections and the holes planned to test the extent of mineralisation.

## MINERAL RESOURCE STATEMENT

### **Table 1: Nickel Projects Mineral Resource Statement**

						Mineral R	lesource	Category			
Nickel	JORC	Cut Off	In	dicated		h	nferred			TOTAL	
Sulphide Resources	Compliance	Grade	Tonnes	Ni%	Ni Metal	Tonnes	Ni%	Ni Metal	Tonnes	Ni%	Ni Metal
nesources			(Kt)	Grade	t	(Kt)	Grade	t	(Kt)	Grade	t
WIN	NDARRA P	ROJECT									
Mt Windarra	2012	0.90%	922	1.56	14,000	3,436	1.66	57,500	4,358	1.64	71,500
South Windarra	2004	0.80%	772	0.98	8,000	-	-	-	772	0.98	8,000
Cerberus	2004	0.75%	2,773	1.25	35,000	1,778	1.91	34,000	4,551	1.51	69,000
BLA	CK SWAN	PROJEC	т								
Black Swan	2012	0.40%	9,600	0.68	65,000	21,100	0.54	114,000	30,700	0.58	179,000
LAK	LAKE JOHNSTON PROJECT										
Maggie Hays	2012	0.80%	2,000	1.40	27,900	1,800	1.43	25,200	3,800	1.41	53,100
TOTAL	TOTAL										
Total Ni Resources	2004 & 2012		16,067	0.93	149,900	28,114	0.82	230,700	44,181	0.86	380,600

Note: totals may not sum exactly due to rounding

### Table 2: Gold Tailings Project Mineral Resource Statement

			Mineral Resource Category								
Gold Tailings	JORC	Cut Off	In	dicated		l.	nferred			TOTAL	
Resources	Compliance	Grade	Tonnes	Grade	Au	Tonnes	Grade	Au	Tonnes	Grade	Au
			(Kt)	(g/t)	(oz)	(Kt)	(g/t)	(oz)	(Kt)	(g/t)	(oz)
WIN	WINDARRA GOLD TAILINGS PROJECT										
Gold Tailings	2004	NA	11,000	0.52	183,000	-	-	-	11,000	0.52	183,000
TOTAL											
Total Au Resources	2004		11,000	0.52	183,000	-	-	-	11,000	0.52	183,000

Note: totals may not sum exactly due to rounding.

### **ORE RESERVE STATEMENT**

**Table 3: Nickel Project Ore Reserve Statement** 

Nickel		Ore Reserve Category					
Sulphide	JORC	Probable					
Reserves	Compliance	Tonnes (Kt)	Ni% Grade	Ni Metal t			
WINDARRA PROJECT							
Mt Windarra	2004	498	1.78	9,000			
Cerberus	2004	1,221	1.30	16,000			
BLA	CK SWAN P	ROJECT					
Black Swan	2012	3,370	0.63	21,500			
TOTAL							
Total Ni Reserves	2004 & 2012	5,089	0.91	46,500			

Note: totals may not sum exactly due to rounding.

#### Notes

The information in this report that relates to the Windarra Nickel Project, Mineral Resources is based on information compiled by Neil Hutchison, General Manager of Geology at Poseidon Nickel, who is a Member of The Australian Institute of Geoscientists and 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 information in this report that relates to Ore Reserves at the Windarra Nickel Project is based on information compiled by Denis Grubic, who is a Member of The Australasian Institute of Mining and Metallurgy as well as a full time employee of Rock Team Pty Ltd.

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.

Mr Hutchison, Mr Glacken, Mr Weeks, Mr Bazin and Mr Grubic 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 Hutchison, Mr Glacken, Mr Weeks, Mr Bazin and Mr Grubic have consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

This document contains Mineral Resources and Ore Reserves which are reported under JORC 2004 Guidelines as there has been no Material Change or Re-estimation of the Mineral Resource or Ore Reserves since the introduction of the JORC 2012 Codes. Future estimations will be completed to JORC 2012 Guidelines.

The Australian Securities Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.

Page 5

ATTACHMENT A JORC (2012) Table 1 Mt Windarra

# SECTION 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (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).	Drilling at Windarra Nickel Project (WNP) was completed by Poseidon Nickel Limited (Poseidon). NQ2 Diamond drill core was used to obtain samples which were sawn with an automatic core saw and half split prior to sampling and submitted to the lab.
	These examples should not be taken as limiting the broad meaning of sampling.	Diamond core has been split on lithological contacts for sampling purposes. Sample intervals are checked by the supervising geologist and field technician throughout the sampling process.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	All tools are regularly serviced to manufactures specifications.
	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	All sampling for resource estimation at Windarra Nickel Project (WNP) is based on diamond drill core. Sample selection is based on geological core logging and sampled to geological contacts. Individual assay samples typically vary in length from a minimum of 0.2m and a maximum length of 1.2m.
	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	Assays are by four acid digest and OES finish method and four acid digest with AAS finish.
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).	Core drilling was carried out by Gilberts Underground Drilling utilising an LM75 rig. All core was NQ2 diamond core. The core was orientated using the 2IC EzyMark orientation tool.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	All recovered diamond core has been meter marked by on site field technicians and/or geologists. Any core loss is determined and recorded as part of the geological logging process.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Core recovery is typically 100% with only minor losses in and around shear zones with rare loss in mineralised zones.
	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.	No relationship exists between core recovery and grade.
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.	All core is geologically and geotechnical logged to a high standard which is appropriate for mineral resource estimation purposes.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Core is logged onto Toughbook computers using FieldMarshal software using validated coding. The data is checked in Micromine then loaded into Poseidon's SQL Server database via DataShed which is managed and maintained by Maxwell Geoservices.
		All core is photographed dry and wet.
	The total length and percentage of the relevant intersections logged	Core is continuously logged along the entire length of the hole.

Criteria **JORC Code explanation** Commentary Sub-samplina All core selected for sampling is cut into half core using a If core, whether cut or sawn and whether quarter, techniques and CoreWise automated core saw and sampled for assaying by on half or all core taken. sample preparation site field technicians. If non-core, whether riffled, tube sampled, rotary Not applicable split, etc and whether sampled wet or dry. Assay samples are typically 1 m in length but may vary in length For all sample types, the nature, quality and from a minimum of 0.2 m and a maximum length of 1.2 m appropriateness of the sample preparation according to geological boundaries. technique. Where possible all cut samples are selected from the same side Quality control procedures adopted for all subof the downhole orientation mark to ensure the core is not sampling stages to maximise representivity of "selectively sampled". samples. Measures taken to ensure that the sampling is Not routinely completed as surplus material is required for representative of the in situ material collected. including for instance results for field metallurgical sampling duplicate/second-half sampling. Nickel mineralisation is very coarse and represents a large Whether sample sizes are appropriate to the grain proportion of the material therefore weigh vs. grain size is not size of the material being sampled. an issue. Quality of assay data Assaying was completed by an accredited laboratory and is of and laboratory tests the highest standards. QAQC reference materials where used and inserted into the sampling sequence. Samples have been analysed by Quantum Analytical laboratories The nature, quality and appropriateness of the in Perth. assaying and laboratory procedures used and The laboratory process for Poseidon samples involve: sorting, whether the technique is considered partial or drying, & crushing to nominal 10mm, then up to 3kg is total pulverised to 75um (LM5). A 0.5g sample charge is mixed with Lithium Borate flux and fused at 1080°C. The melt is dissolved in HCl acid and analysed using ICP-OES finish (15 elements). For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument Not applicable - chemical assaying applied. make and model, reading times, calibrations factors applied and their derivation, etc. Reference standards and blanks are routinely inserted into every batch of samples at a rate of 1 in every 25 samples. Poseidon's inserted standards in general showed results within expected ranges. The calculated means for Lab standards are very close to Nature of quality control procedures adopted (e.g. expected for the majority of standards and are within industry standards, blanks, duplicates, external laboratory expectations. checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been Laboratory repeat checks and original samples correlated very established. well. Monthly QAQC reports are compiled by Maxwell Geoservices. The QAQC results indicate that the assays used for resource estimation at WNP are a fair representation of the material that has been sampled. Verification of The verification of significant intersections by Significant intersections are verified and calculated by the sampling and either independent or alternative company Geology Manager (CP). assaying personnel. Numerous historic drill holes were checked with twinned holes but no twinning has occurred during recent drilling as adjacent The use of twinned holes. drill holes at WNP support each other very well geologically and analytically

Criteria	JORC Code explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Assay data is imported directly from laboratory supplied digital files which are QAQC validated via DataShed then loaded into the SQL drillhole database.
	Discuss any adjustment to assay data.	No adjustments to assays are made.
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	Poseidon uses a digital north seeking gyroscope system to position & record underground drill hole collar dips and azimuths.
	Resource estimation.	Mine workings have been digitized from the WMC survey master level plans completed by the authorized mine surveyor.
	Specification of the grid system used.	All historic and modern surveying is completed in local mine coordinates which are then converted to MGA GDA94 Zone 51 and stored in the database.
	Quality and adequacy of topographic control.	All underground hole collars are located by mine surveyors using Total Station control and surveyed control points which are tied into surveyed trig points.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	WNP resource estimation holes are typically drilled on a regular grid spacing that varies according to the size and consistency of the resource being drilled.
	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.	Typical spacing is less than 30 m between drill holes for Indicated Resources and 40m or greater for Inferred resources.
	Whether sample compositing has been applied.	No sample compositing is undertaken as all samples are logged and analysed in full.
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.	The mineralised bodies are relatively planar and grades are typically consistent within individual resource domains so drill orientation does not introduce any significant bias.
	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.	Underground drill holes can have varying intersection angles from 90° to not less than 15° to contacts with the majority not being less than 30°.
		Core is delivered directly to the core yard which is separated from the main mine area and is manned by Poseidon personnel.
Sample security	The measures taken to ensure sample security.	All sampled core is bagged and wire-tied closed then placed in a large bulka bag which is also wire-tied closed. This is couriered direct to the labs were it is inspected before opening by lab staff.
		Sample security is considered adequate.
		All Mineral Resource data is audited by consultants Maxwells Geoservices and Optiro.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Independent Consultants Behre Dolbear Australia (BDA) completed an extensive independent technical review of the WNP which included site visits.
		wine which included site visits.

## **MT WINDARRA**

## SECTION 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
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	Mt Windarra is situated on a Special Act Lease M38/261SA which is under "Agreement" with the State Government. There is a 1% revenue royalty due to BHPB if the nickel product is not sold to/treated by BHPB. There are no material issues at Mt Windarra. Poseidon owns 100% of M38/261SA which is in good standing
	reporting along with any known impediments to obtaining a licence to operate in the area.	and has no overriding encumbrances.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Windarra Project was owned and operated historically by Western Mining Corporation (WMC) until it was sold in 2005. Vast historically drilling, mining and exploration data was handed over with the acquisition.
Geology	Deposit type, geological setting and style of mineralisation.	Mineralisation at Mt Windarra is classic "Kambalda Style" komatiite-ultramafic hosted nickel sulphide mineralisation. The mineral resource at WNP comprises seven mineralised "shoots" (A, B, C, D, F, G & H Shoots) which have a total strike length of 1200 m and extend vertically from 45 m below surface (Upper G Shoot) to an open depth of 1125 m below surface (C & G Shoot). Four of the "shoots" (A, B, C & D Shoots) have been historically mined to a depth of 550 m below surface and continue from this depth to 1125 m.
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.	Relevant information is shown alongside the drill hole results in the body of the report.
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.	Length weighted averaging has been used to accurately estimate the grade of the intersections. No top cuts have been applied and are not required.
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').	Drill holes are oblique to the targeted mineralisation therefore true width corrections has been applied to intersections and reported in the body text.

Criteria	JORC Code explanation	Commentary
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.	See body of report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The reporting is factual & balanced
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.	This drilling data supports the vast drilling database that was acquired with the purchase of the Windarra Project and the extensive resource drilling completed by Poseidon since 2006.
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, mine planning/geotechnical and grade control drilling at Mt Windarra.

### MT WINDARRA

## **SECTION 3 Estimation And Reporting Of Mineral Resources**

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

Criteria	JORC Code explanation	Commentary
Database integrity		All WNP drill holes and resource samples are logged onto Toughbook computers using FieldMarshal software with validated coding restricting incorrect data entry. The data is checked in Micromine then loaded into Poseidon's SQL Server database and validated via DataShed which is managed and maintained by Maxwell Geoservices.
	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	Assay data is imported directly from laboratory supplied digital files which are QAQC validated via DataShed then loaded into the SQL drillhole database to ensure there are no transcript errors.
	Mineral Resource estimation purposes.	WMC data was recorded on paper drill logs which were stored on microfilm. Logs were printed and entered manually into excel spreadsheets then imported into the Poseidon Datashed database. The data was validated against library tables during the import.
		CSA Australia completed an audit of the historical data in the database, which resulted in the location of missing &/or uncertain data and correcting it.
	Data validation procedures used.	Validation checks were undertaken on the data. See above.
Site visits	Comment on any site visits undertaken by the	The geology competent person has been with Poseidon for 7 years and is intimately involved in the WNP taking regular trips to site and going on FIFO roster during drilling programs.
	Competent Person and the outcome of those visits.	Representatives of Maxwell Geoservices, BDA and CSA have all visited the site.
	If no site visits have been undertaken indicate why this is the case.	Not applicable

Criteria	JORC Code explanation	Commentary			
Geological interpretation	Confidence in (or conversely, the uncertainty of)	There is a high level of confidence in the geological interpretation of all WNP resources due to the extensive historical operating experience and records kept by WMC, as well as the readily identifiable stratigraphic control on mineralisation.			
	the geological interpretation of the mineral deposit.	Wireframes have been used to constrain the estimation and are based on drillhole intercepts and geological boundaries. Wireframes for Shoots A and B have a 1.0% Ni cut-off grade, C and F have a 0.75% Ni cut-off grade, D has a 0.45% Ni cut-off grade and G and H have been constructed to a 0.8% Ni cut-off grade for shape consistency.			
	Nature of the data used and of any assumptions made.	The mineralisation is generally quite planar with minor structural overprints and drill intercepts clearly define the shape of the mineralised body with limited options for large scale alternate interpretations.			
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Not applicable			
	The use of geology in guiding and controlling Mineral Resource estimation.	Wireframes are used to constrain the estimation and are based on drill hole intercepts and geological boundaries.			
	The factors affecting continuity both of grade and geology.	Wireframes have been constructed to various nickel cut-off grades for shape and geological consistency.			
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 mineral resource at WNP comprises seven mineralised "shoots" (A, B, C, D, F, G & H Shoots) which have a total strike length of 1200 m and extend vertically from 45 m below surface (Upper G Shoot) to an open depth of 1125 m below surface (C & G Shoot). Four of the "shoots" (A, B, C & D Shoots) have been historically mined to a depth of 550 m below surface and continue from this depth to 1125 m.			
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.	Nickel and copper grades in Shoots A and B were estimated using a ID <sup>2</sup> algorithm. No variography was carried out on Shoot A and B. A search ellipse of 4 m (x) by 20 m (y) by 40m (z) and a minimum of 2 and a maximum of 16 samples were used in the estimation process. All the other shoots used were estimation using Ordinary Kriging (OK) within Surpac or Datamine software. Shoots C, D and F had eight elements estimated by OK; nickel, copper, cobalt, arsenic, magnesium, magnesium oxide, iron and sulphur. Shoots G and H had a total of 17 elements estimated using a combination of OK, average grade assignment and via regression equations. The drilling grid spacing is approximately 40 m by 40 m. All samples were composited to 1 m downhole intervals. The composites for shoots C, D, F, G and H were density-weighted. Variogram orientations were largely controlled by the strike of mineralisation and downhole variography. Variograms for estimation were determined individually for each element. Where there was poor variograms, correlated elements used the Ni variogram. Local search domains were established within individual shoots to reflect the different orientations. Other estimation parameters, such as search distance, minimum and maximum sample numbers varied between shoots. KNA was carried out on individual shoots to give optimum estimation parameters.			

Criteria	JORC Code explanation	Commentary
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The March 2014 Mineral Resource estimates were compared to those of May 2013 (C and F shoots) and April 2012 (D Shoot). Overall there has been an increase of 8% in tonnes and a decrease of 11% in nickel grade in the March 2014 resource update; this is due to the lower mean grade of the recent drilling. The decrease in nickel metal of the resource is 4%. The April 2012 Mineral Resource estimates were compared to those of 2007/2008 (G shoot). Overall there was an increase in tonnes of 3% and a decrease of 3% in nickel grade in the April 2012 resource update. This is possibly due to the change from ID <sup>2</sup> to OK. There was an increase in nickel metal content of 3%. The A and B Shoot estimates were completed in 2007 by Poseidon. The resource model has not been compared to any reconciliation data.
	The assumptions made regarding recovery of by- products.	No assumptions have been made regarding recovery of any by- products.
	Estimation of deleterious elements or other non- grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	As was the only deleterious element estimated.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The block model dimensions and parameters were based on the geological boundaries and average drill grid spacing. Sub-blocks were used to ensure that the block model honoured the domain geometries and volume. Block estimates were controlled by the original parent block dimensions. For Shoots A and B the individual parent block dimensions were 2 mE by 20 mN by 20 mRL with sub-blocking allowed. All of the other shoots had individual parent block dimensions of 5 mE by 25 mN by 25 mRL, with sub-blocking allowed. Estimation into parent blocks used a discretisation of 2 (X points) by 5 (Z points) for Shoots C, D and F. Discretisation of 3 (X points) by 3 (Y points) by 5 (Z points) was used for G Shoot and 3 (X points) by 8 (Y points) by 5 (Z points) was used for H Shoot to better represent estimated block volumes.
	Any assumptions behind modelling of selective mining units.	No selective mining units were assumed in this estimate.
	Any assumptions about correlation between variables.	Multi-element analysis was conducted on the density weighted composites. There was a strong correlation between nickel and cobalt, nickel and iron and nickel and sulphur. In some cases there was also a strong correlation between copper and cobalt.
	Description of how the geological interpretation was used to control the resource estimates.	Drillhole sample data was flagged using domain codes generated from three dimensional mineralisation domains. Sample data was composited to a one metre density weighted downhole length. Mineralisation domains for each shoot were treated as hard boundaries, while orientation domains were treated as soft boundaries in the estimation process.
	Discussion of basis for using or not using grade cutting or capping.	Top cuts were established by investigating univariate statistics and histograms of sample values by domain. A top cut level was selected if it reduced the sample variance and did not materially change the mean value.
	The process of validation, the checking process used the comparison of model data to drillhole data, and use of reconciliation data if available.	Model validation was carried out, including visual comparison between density weighted composites and estimated blocks; check for negative or absent grades; statistical comparison against the input drill hole data and graphical plots.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis

Criteria	JORC Code explanation	Commentary
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	All Windarra resource models have been modelled to a nominal wireframe cut-off grade of either 0.45%, 0.75%, 0.8% or 1.0% nickel, with a minimum width of 1 m to encapsulate the entire mineralised body. The edges of the resource shapes may be narrower than minimum mining widths, meaning that a small proportion of the shape is unlikely to be mineable; however, the inclusion adds to the ore/waste discrimination of the Reserve process.
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.	No minimum mining assumptions are made during the resource wire framing or estimation process. Mining parameters, including minimum width assumptions are applied during the conversion to Ore Reserves. The mining process will be Sub- Level Caving (SLC) which includes internal dilution and is included during the resource estimation process.
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.	No metallurgical factors or assumptions are made during the resource estimation process as this is addressed during conversion to Ore Reserve. The resource estimation block model has been populated with multi-element data which is required for the metallurgical analysis during the Ore Reserve process.
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	WNP is a historic brown-fields mine with a 20 year operating history and residual infrastructure remains in place. No environmental factors or assumptions are made during the resource estimation process.
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 measurements are taken using weight in air vs. weight in water gravimetric methodology
	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,	All drill core is in fresh rock and solid so no coatings are applied to reduce water penetration.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	A nickel grade vs. density regression formula was used to assign SG values to the block model. For Shoots A, B, G and H the WMC regression formula of "SG = $1/((-0.0118*Ni\%) + 0.3417)$ " was used. For Shoots C, D and F a fixed SG of 2.88 was applied from 0 to less than 0.8% nickel, followed by the application of the linear regression "SG = $(0.132*Ni\% + 2.856)$ " from 0.8% nickel and above.

Criteria	JORC Code explanation	Commentary
Classification	The basis for the classification of the Mineral Resources into varying confidence categories	Classification of the resource models are based primarily on drill density and geological understanding in conjunction with increased confidence from historic mining and grade control drill data.
	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 classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The classification reflects the view of the Competent Person.
Audits or reviews		In June 2013 independent Consultants Behre Dolbear Australia (BDA) completed an extensive independent technical review of the WNP which included site visits and review of the Resource & Reserve estimates.
	The results of any audits or reviews of Mineral Resource estimates.	BDA's review of the resources and reserves has been undertaken in accordance with the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves prepared by the Joint Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, December 2004 update ("the JORC Code"). This report has been prepared in keeping with the Valmin Code for the Technical Assessment and Valuation of Mineral Assets and Securities for Independent Expert Reports as adopted by the Australasian Institute of Mining and Metallurgy in 1995 and as amended and updated in 2005 ("the Valmin Code"). The Poseidon drill results and techniques were reviewed and confirmed by Optiro as compliant to the reporting of Reserves and Resources under the JORC Code. BDA has reviewed this report and discussed the work with Optiro. The work has been competently undertaken by recognised specialists, based on geological interpretations of the various zones and shoots by Poseidon geologists. The estimation procedures are considered appropriate and are generally consistent with industry standards.
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 relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to global estimates of tonnes and grade.
	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 resource estimates are considered to be appropriate for reserve generation and scheduling on a quarterly to annual scale.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	The resulting estimates are supported by historical production.

### **CORPORATE DIRECTORY**

#### **Director / Senior Management**

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

#### **Corporate Enquiries**

Mr David Singleton – MD & CEO P: 61 8 6167 6600 F: 61 8 6167 6649

E: admin@poseidon-nickel.com.au

#### Shareholder Enquiries

Enquiries concerning shareholdings should be addressed to:

Computershare Investor Services GPO Box D182, Perth WA 6840 P: 61 8 9323 2000

### Principal Office

Unit 8, Churchill Court 331-335 Hay Street SUBIACO WA 6008 P: 61 8 6167 6600 F: 61 8 6167 6649

### **Registered Office**

Level 2, Spectrum 100 Railway Road SUBIACO WA 6008 P: 61 8 9367 8133 F: 61 8 9367 8812

#### Media Enquiries

P: 61 8 6167 6600 F: 61 8 6167 6649 E: admin@poseidon-nickel.com.au

### Home Exchange

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