

31<sup>st</sup> January 2012

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

Dear Sir

**Re: POTENTIAL NEW HIGH GRADE ORE BODY AT WINDARRA**

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
Andrew Forrest	Non-Executive Chairman
Geoff Brayshaw	Non-Executive Director
Richard Monti	Non-Executive Director
Chris Indermaur	Non-Executive Director
Ross Kestel	Company Secretary

##### **Corporate Enquiries**

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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

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ASX Announcement

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### Potential New High Grade Ore Body at Windarra

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- **High grade nickel intersections identified north of the Mt Windarra ore body and outside of existing mine plan**
- **Intersections include 4.6m at 3.2% nickel, 1.55m at 7.86% nickel, 2.3m at 2.64% nickel and 0.65m at 12% nickel**
- **Mineralisation has been intersected between 50m and 240m below surface**
- **Mineralisation is close to infrastructure and potentially could be accessed from the existing Mt Windarra decline**

Poseidon Nickel Limited (ASX:POS) is pleased to announce that it has identified a new potentially mineable ore zone at the Windarra Nickel Project. The potential ore body is north of the area currently included in the mine plan for Mt Windarra and appears to commence approximately 50m from the surface, below the main oxidised zone. Poseidon believes that it has intersected the mineralisation to a depth of 240 m with historic drilling indicating that it may continue deeper. The mineralised body is sub vertically plunging and runs parallel to the G Shoot zone (Figures 1 & 2) which forms the main part of the current mineralised resource base. The intersections into this zone which is now referred to as "H Shoot", includes a true width intersection of 4.6m at 3.2% nickel which contains 0.65m at 12.20% in WUG0001 (Table 1). WUG0004A intersected H Shoot with a true width of 1.55m at 7.86% nickel and WUG0008 returned a 2.39m intersection (0.9m true width) at a grade of 2.00% nickel.

In addition as part of the process of converting the Mt Windarra resources into reserves, the drilling into the targeted G Shoot has also returned encouraging results with WUG0002 returning 5.9m (true width) at 2.08% Ni, WUG0003A returned 2.8m at 2.63% nickel, WUG0005 returned 5.3m (true width) at 1.57% nickel and WUG0007 returned 2.3m (true width) at 2.64% nickel (Table 1). The drilling intersected thicker mineralisation in places than anticipated due to remobilisation of sulphides into the footwall rocks adjoining and below G Shoot. Poddy remobilised mineralisation was also encountered within shear zones between G and H Shoots.

Historic drilling by Western Mining Corp (WMC) shows sporadic high grade hits to the south and below this drilling which, up until this date, has been difficult to model. This recent drilling has demonstrated continuity between the mineralised intersections in the H Shoot position, which will be developed further with future planned drilling and the aid of 3 dimensional modelling.

David Singleton, Managing Director said "These new intersections have indicated the potential for a parallel ore body to G Shoot at Mt Windarra. The intersections are close to the surface and close to the existing recently refurbished Mt Windarra decline. If proven up, this resource could supply additional early years ore for the planned 700,000 tonne concentrator. We will extend the drilling in this area over the coming months."

Poseidon Nickel is developing the Windarra Nickel Project in Western Australia. The project is a higher grade nickel sulphide deposit that has demonstrated high recovery levels through a standard nickel floatation concentrator. The total current Mineral Resource is located at two positions approximately 10kms apart and includes the existing brownfields

mine at Mt Windarra and a new discovery at Cerberus. Poseidon is on track to complete its definitive feasibility study in early 2012 and is targeting initial concentrate production in 2013. The concentrator plant to be constructed at Mt Windarra is expected to have a nameplate capacity of 700,000 tonnes of ore per annum.

**Table 1: Mt Windarra Significant Intersections**

Hole_ID	Dip/Azi	From (m)	To (m)	Interval (m)	True Width (m)	Ni%	Comment
WUG0001	-53/271	122.48	129.53	7.05	4.60	3.20	H Shoot
	<i>including</i>	123.70	124.70	1.00	0.65	12.20	
	<i>including</i>	127.86	129.53	1.67	1.09	3.23	
		143.46	145.94	2.48	1.65	1.63	G Shoot
WUG0002	-60/271	162.88	164.72	1.84	0.95	1.38	H Shoot
		171.83	183.23	11.4	5.90	2.08	G Shoot + G Footwall Combined
	<i>including</i>	173.45	176.00	2.55	1.30	3.68	G Shoot
	<i>including</i>	181.70	183.23	1.53	0.80	3.07	G Footwall
WUG0003A	-65/271	188.60	194.29	5.69	2.80	2.63	G Shoot
	<i>including</i>	188.60	189.50	0.90	0.44	4.60	
WUG0004A	-55/255	144.80	147.43	2.63	1.55	7.86	H Shoot
		169.77	177.88	8.11	5.90	1.05	G Shoot + G Footwall Combined
WUG0005	-62/255	192.40	193.17	0.77	0.40	1.63	H Shoot
		201.04	212.00	10.96	5.30	1.57	G Shoot + G Footwall Combined
	<i>including</i>	201.04	205.27	4.23	2.05	2.58	G Shoot
WUG0006	-66/255	225.85	226.37	0.52	0.25	1.09	G Shoot
WUG0007	-65/265	194.25	197.79	3.54	1.80	1.10	H Shoot
		206.46	211.08	4.62	2.30	2.64	G Shoot
		214.26	219.05	4.79	2.40	0.72	G Footwall
WUG0008	-68/271	208.31	210.70	2.39	0.9	2.00	H Shoot
		283.00	287.55	4.55	1.8	0.82	G Shoot
	<i>including</i>	286.00	286.72	0.72	0.3	1.93	

**Table 2: Windarra Nickel Project Resource Statement**

Windarra Nickel Project Sulphides	Cut Off Grade	Resource Category								
		Indicated			Inferred			TOTAL		
		Tonnes	Ni% Grade	Ni Metal t	Tonnes	Ni% Grade	Ni Metal t	Tonnes	Ni% Grade	Ni Metal t
Mt Windarra	0.75%	910,000	1.24	11,300	2,955,000	1.72	50,900	3,865,000	1.61	62,200
South Windarra	0.80%	771,665	0.98	7,533	-	-	-	771,665	0.98	7,533
Cerberus	0.75%	2,773,041	1.25	34,637	1,777,743	1.91	33,996	4,550,784	1.51	68,633
<b>Total Sulphide</b>		<b>4,454,706</b>	<b>1.20</b>	<b>53,470</b>	<b>4,732,743</b>	<b>1.79</b>	<b>84,896</b>	<b>9,187,449</b>	<b>1.51</b>	<b>138,366</b>

\*Note: Minor errors in totals exist due to rounding.

Note: The information in this report relates to Exploration Results and Mineral Resources based on information compiled by Mr N Hutchison, General Manager of Geology at Poseidon Nickel, who is a Member of The Australian Institute of Geoscientists and Mr I Glacken who is a Fellow of the Australasian Institute of Mining and Metallurgy as well as a full time employee of Optiro Pty Ltd. Mr Hutchison and Mr Glacken both 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Hutchison and Mr Glacken 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.

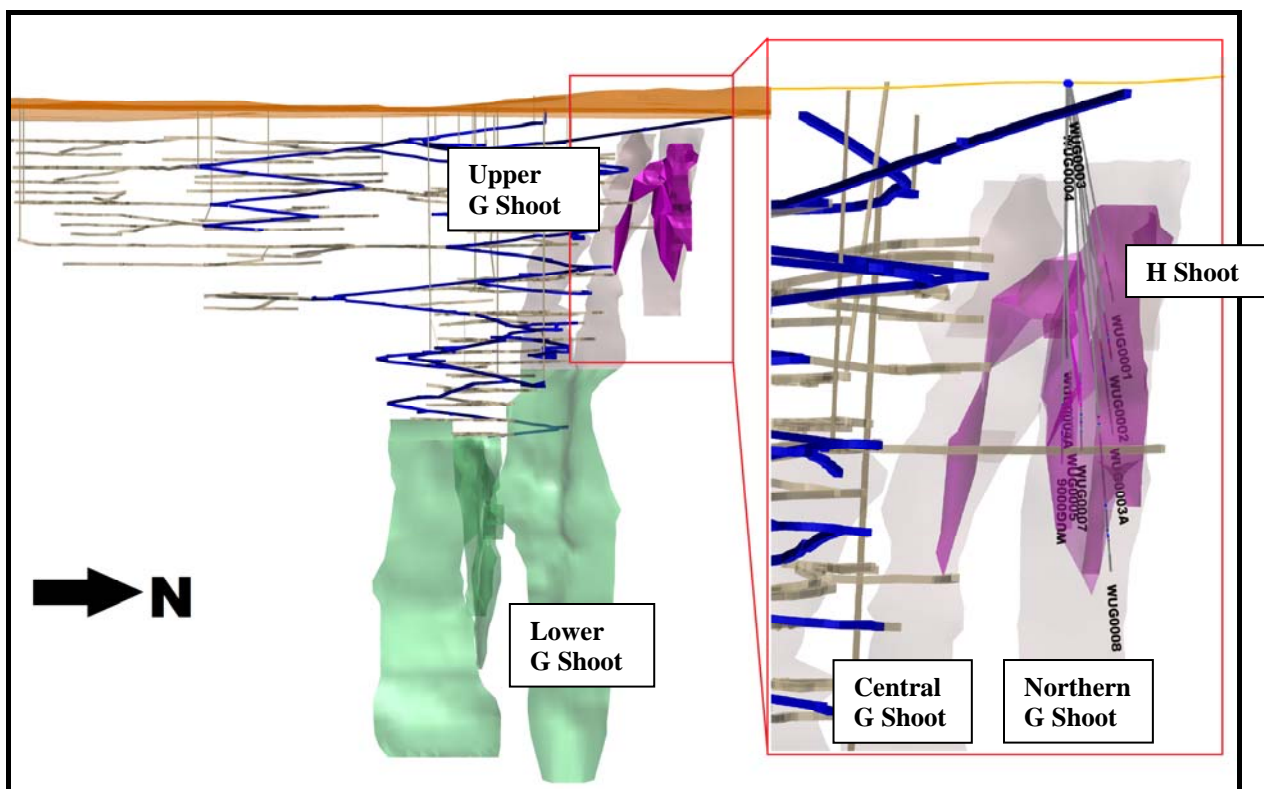


Figure 1: 3D model of the Windarra mine showing the defined ore shoots with respect to the mine decline (blue) and development (grey). The newly defined H Shoot is defined by the dark purple shape, with Upper G Shoot (light grey) and Lower G Shoot (green) shown relative to the H Shoot position. The positions of the reported drill intersection are shown on the expanded inset.

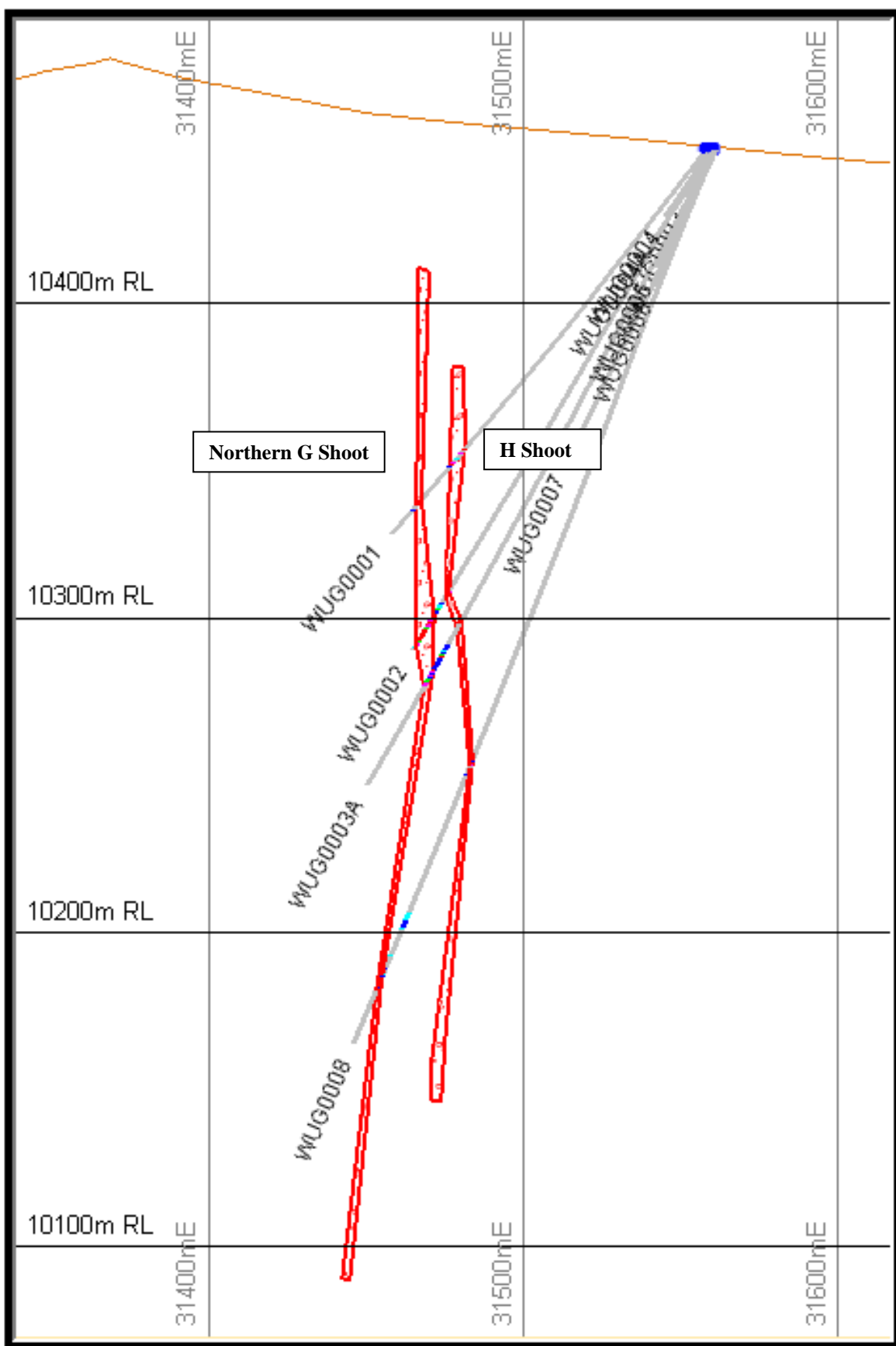


Figure 2: Cross section through 10265mN showing recent drill holes intersecting H shoot which is positioned parallel and to the east of Northern G Shoot.