

30 April 2013

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

Dear Sir,

**Re: DEFINITIVE FEASIBILITY STUDY SUPPORTS LOW COST, LONG LIFE NICKEL OPERATION**

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

Yours faithfully



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

Enc

**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**

Mr David Singleton – MD & CEO  
P: 61 8 9382 8799  
F: 61 8 9382 4760

E: [admin@poseidon-nickel.com.au](mailto:admin@poseidon-nickel.com.au)

**Shareholder Enquiries**

Enquiries concerning shareholdings should be addressed to:

Computershare Investor Securities  
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 9382 8799  
F: 61 8 9382 4760

**Registered Office**

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

**Media Enquiries**

Shane Murphy/Jane Munday  
FTI Consulting  
P: 61 8 9485 8888  
M: 0420 945 291/0488 400 248

**Home Exchange**

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

---

ASX Announcement

30 April 2013

---

**Windarra Definitive Feasibility Study Supports Low Cost, Long Life Nickel Operation**

---

**Highlights**

- **DFS results confirm the viability of the Windarra Nickel Project in Western Australia**
- **Expected average annual production of 9,600 tonnes of contained nickel in concentrate at an average operating cost of US\$3.35/lb over initial 10 year life of mine (net of gold credits)**
- **Additional gold processing facility estimated to produce over 45,000 ounces of gold in the first 3 years**
- **Expected to deliver a total EBITDA of US\$1.8 billion and has an NPV of US\$546m over initial 10 year life of mine\***
- **Pre-start Project capital cost estimated at A\$197 million, comparing favourably to global capital intensity costs for the industry**
- **First concentrate sales revenue expected 16 months after final financing**
- **Credit Suisse has been engaged to assist Poseidon in assessing financing alternatives for the Project**
- **Further potential for significant mine life extension beyond 10 years through near mine and regional exploration opportunities**
- **All necessary government approvals to commence production received (subject to final financing and offtake arrangements), with Poseidon now moving to fast-track construction and financing arrangements**
- **Several major resource analysts remain positive about nickel price improvements based on fundamental supply analysis despite short term weakness.**

Poseidon Nickel Limited (ASX:POS) ("Poseidon" or "the Company") is pleased to announce that the results of a Definitive Feasibility Study ("DFS") for the Windarra Nickel Project ("Windarra" or "the Project") demonstrate robust project viability through low capital and mining costs.

The Windarra Nickel Project, located 260 kilometres north east of Kalgoorlie in Western Australia, is on track to be Australia's newest nickel producer and is scheduled to be ready to meet projected supply shortfalls in 2014/2015. The DFS incorporates the development of the existing brownfields Mt Windarra underground mine ("Mt Windarra"), the nearby greenfields Cerberus underground mine ("Cerberus"), a nickel sulphide concentrator plant and a re-treatment plant. It also details the development of gold production facility on the site.

\*Note: see assumptions at end of this announcement

The DFS establishes a robust financial position for the Project, with second quartile operating costs and favourable capital intensity per pound of nickel produced.

The DFS estimates average annual production of 9,600 tonnes of contained nickel in concentrate at an average operating cost of US\$3.35/lb (net of gold credits) over an initial 10 year life of mine. The financial results published in this report use an average nickel price of US\$8.46 for 2013 compared to the average spot price in the year to date of US \$7.68. The DFS also shows that the gold processing facility will produce over 45,000 ounces of gold in the first 3 years.

Total EBITDA is expected to be US\$1.8 billion with an estimated NPV of US\$546m over an initial 10 year mine life. The total pre-start capital cost for the Project is estimated at A\$197 million (excludes nickel tailings reprocessing which is planned to commence 3 years later). Poseidon expects to return the Mt Windarra Nickel Mine to production in 2014 assuming final financing this financial year.

Poseidon's Chairman, Mr Andrew Forrest, commended the project team for the delivery of the successful DFS.

"The DFS confirms a strong future for Poseidon as a low cost producer of nickel in Australia with a mine life potentially well beyond a decade. I very much look forward to the day we will cut the ribbon on first production at Poseidon, built upon the foundations of the celebrated Windarra mine," said Mr Forrest.

Poseidon's Managing Director, Mr David Singleton, said the Company's objective was to immediately move to finance completion, construction and production.

"We are in the fortunate position of expecting to have two-thirds of the required capital items secured in signed contracts by the time financing is completed.

We see the timing of the Project as significant, with Windarra's development in parallel with widely held expectations of a substantial recovery in nickel price and demand.

Successful return to production at Windarra will represent a link back to the celebrated past of Western Australia's nickel industry, with a homecoming back to the original 1969 Poseidon nickel discovery that commenced the 1970's nickel boom."

Poseidon Nickel, who is being advised by Grant Samuel, has engaged Credit Suisse to assist in developing the various alternatives towards financing the Project. Credit Suisse is a major international investment bank which recently led a successful major debt financing for Fortescue Metals Group (FMG).

### **Definitive Feasibility Study Summary**

The DFS proposes the parallel mining of the Mt. Windarra brownfields ore body and the greenfields Cerberus ore body (in an approximate life of mine ("LOM") ratio of 3:2) to supply feed to the concentrator over an initial 10 year period. The plant will possess approximately 30% more nameplate capacity than required for the proposed mine throughput of circa 700,000tpa to give flexibility on increased mining rates anticipated from further exploration activities.

In addition to the nickel ore, the project includes a 4.36 million tonne gold tailings reserve in the North and South tailings dams which will be reprocessed through a standard CIL plant to be

constructed adjacent to the nickel sulphide concentrator facility. The combined nickel and gold plant tailings will be pumped via pipeline and deposited into the South Windarra pit, avoiding the need for surface tailing facilities and reducing the environmental footprint of the project.

After completion of the DFS a number of option studies were conducted on additional identified opportunities including a study to reprocess nickel tailings (see later comments) and the use of gas for power from year 4 onwards. These options have been included in the projected financial results below.

The projected financial results for the Project are expected to be as follows:

	Full Project Economics (DFS plus options)
Total Nickel Ore Processed <sup>1</sup>	7.2mt @ 1.57% Nickel
Total Gold Tailings Retreatment <sup>2</sup>	4.4mt @ 0.71g/t
Total Nickel Tailings Retreatment <sup>3</sup>	10.1mt @ 0.32%
Pre-Start Capital Cost <sup>4</sup>	A\$197m
Average Operating Cost <sup>5</sup>	US\$3.35/lb
Mining Cost (Operating) <sup>6</sup>	A\$64.11/t
Processing Cost <sup>7</sup>	A\$37.70/t
Total Revenue <sup>8</sup>	US\$3,431m
EBITDA <sup>9</sup>	US\$1,834m
NPV @ 8% Discount Rate <sup>10</sup>	US\$546m
Project IRR (pre-tax) <sup>11</sup>	31%

The DFS was compiled and completed by Arccon (WA) Pty Ltd a wholly owned subsidiary of Allmine ASX AZG ("Arccon") with input from industry consultants. Arccon completed the design of the nickel and gold processing plants and various associated infrastructure. Life of Mine ("LOM") planning was completed by Rockteam Pty Ltd supported by Beck Consulting and Dempers & Seymour for underground Geotechnical support. Environmental assessments were undertaken by MBS Environmental. A full list of major consultants is attached to this announcement.

### **Project Details**

#### **Mt Windarra Underground Mine**

Approximately 61% or 440,000tpa of the annual ore production for the project is planned to be mined from the existing underground mine at Mt Windarra. In 2008, Poseidon started a surface drilling programme to augment drilling results from the previous operator, Western Mining Corporation ("WMC"), to define an Indicated and Inferred Resource of 3.95 mt at 1.73% for 68,300 tonnes of nickel. WMC had consistently achieved above 80% resource conversion

(Table 1) to a diluted mining reserve (which was the pre-JORC equivalent of a reserve). This pre-JORC resource to reserve conversion factor has been modelled, tested and applied by Poseidon's independent consultants (Optiro and Rock Team) to the resource, resulting in an estimated initial LOM of 7.3 years at Mt Windarra. In order to attain additional resource definition for mine planning purposes, re-commissioning of the decline portal is continuing and will enable further resource definition drilling from the drilling programme which commenced in November 2012 and remains in operation.

Geotechnical assessment has indicated that a sub-level caving mining method for the lower mine shoots is preferred, which is a cost effective solution and was the methodology used in the later years of mining at Mt Windarra by previous operators WMC. The DFS has estimated Mt Windarra mining costs of A\$57 per tonne over the LOM.

The Mt Windarra orebody (Figure 1) has an initial life based on the resource conversion used of 7.3 years. In addition a modelled 2.7 year extension has been applied based on Poseidon's assumption that extensions will be added as a result of infill drilling at Mt Windarra which remains undrilled in several significant areas. For example drilling results have supported continuing mineralisation particularly around A & B Shoots, recent extensions of F Shoot and mineralisation at depth, where the new geological models indicate a likelihood of further mineralisation.

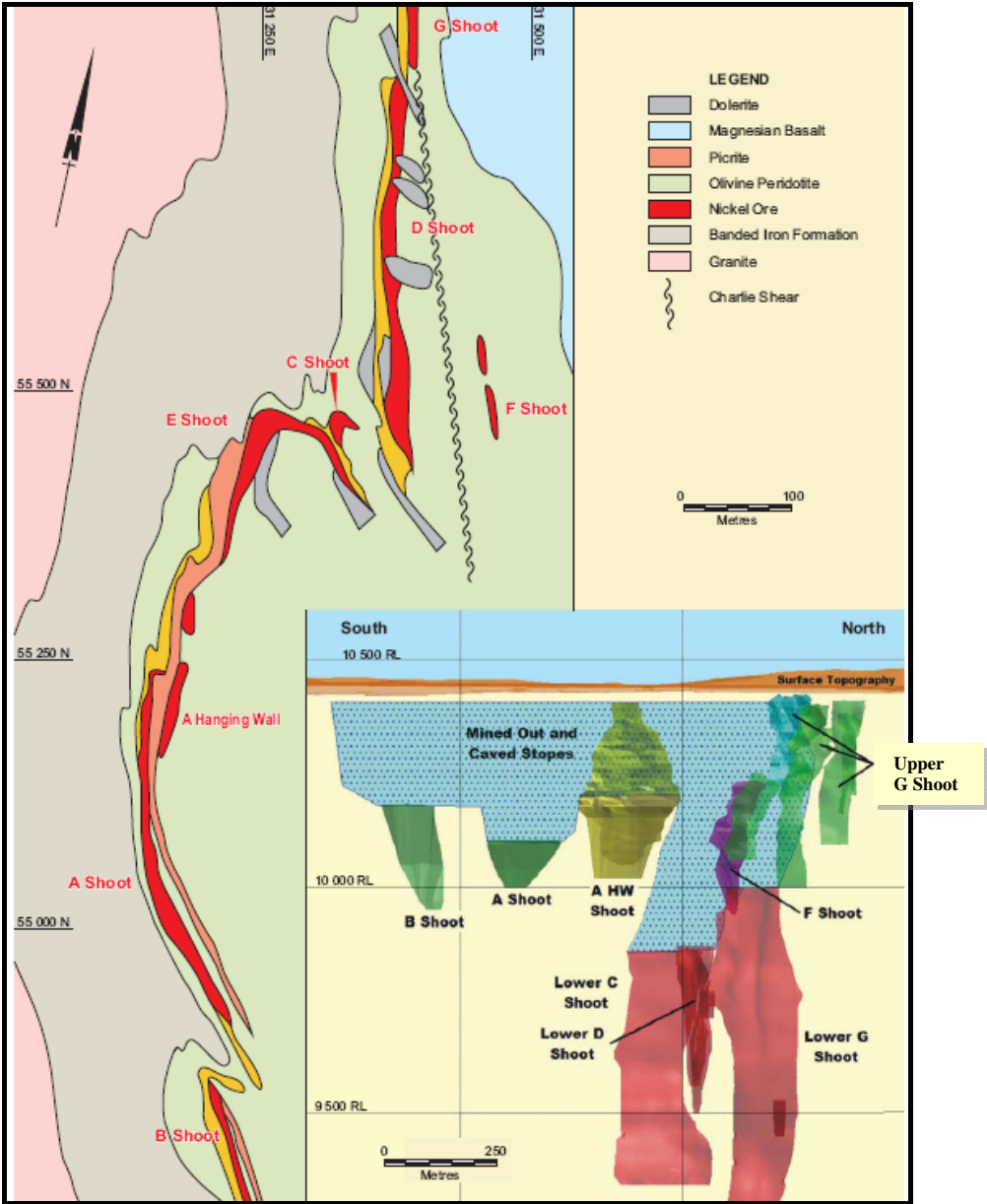


Figure 1: Mt Windarra Geology Plan and Section

The existing Mt Windarra infrastructure (Figure 2) includes a vertical hoisting shaft approximately 460 metres deep and includes the associated surface, head frame, winder and ore haulage bins. Existing underground facilities include a crusher chamber and associated infrastructure. The final refurbishment of this infrastructure is included in the capital cost estimate for the project. The use of the vertical hoist system eliminates the need for truck haulage of ore and waste up the decline from the mines 10060RL (approx. 390m below the surface) and significantly reduces the operating cost of the mine. Poseidon has rehabilitated the access decline with the objective of accessing underground drilling positions to a depth of approximately 425 metres below surface during the development phase of the project, exposing the underground crusher.

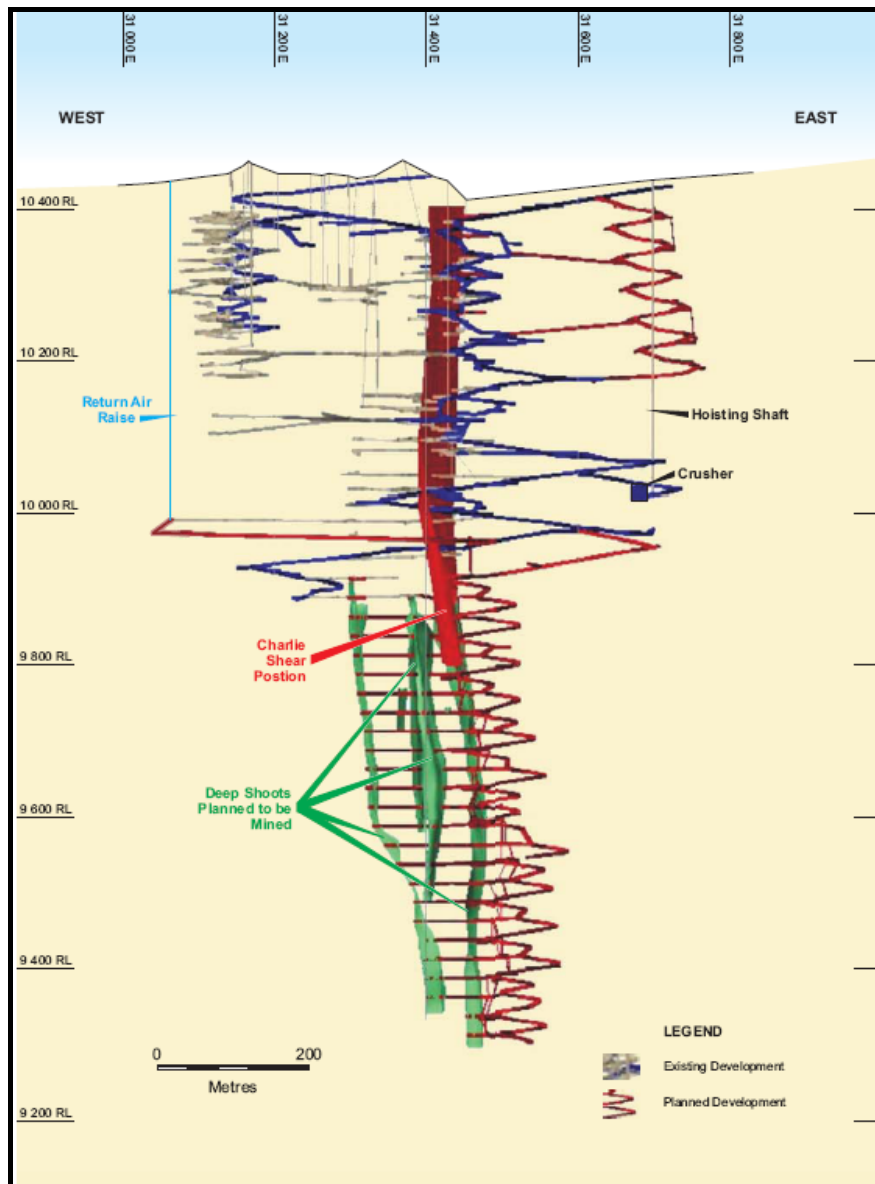


Figure 2: Mt Windarra Mine Cross Section



### Cerberus Underground Mine

Cerberus was discovered by Poseidon in 2008 (Figure 3) and will provide the balance of ore feed to the nickel sulphide concentrator plant. Cerberus has a total Indicated and Inferred resource of 4.55 mt at 1.51% for 68,600 tonnes of nickel including a Probable reserve of 1.22 mt at 1.3% for 15,880 tonnes of nickel. The mining cost has been estimated at A\$76/t. in the DFS. The Cerberus development plan includes the excavation of a boxcut to a depth of 40m and a decline and return airway to the orebody. Geotechnical assessment has indicated that the mining method for Cerberus is likely to be longitudinal sublevel caving (“LSLC”), which is a combination of long hole stoping and sub-level caving. The Cerberus resource has a reserve life of approximately 4.5 years. Infill resource drilling of the higher grade Cerberus Deeps is anticipated to extend the Cerberus reserve with LOM modelling supporting an additional 5.5 years of ore feed for a total LOM of around 10 years for the deposit.

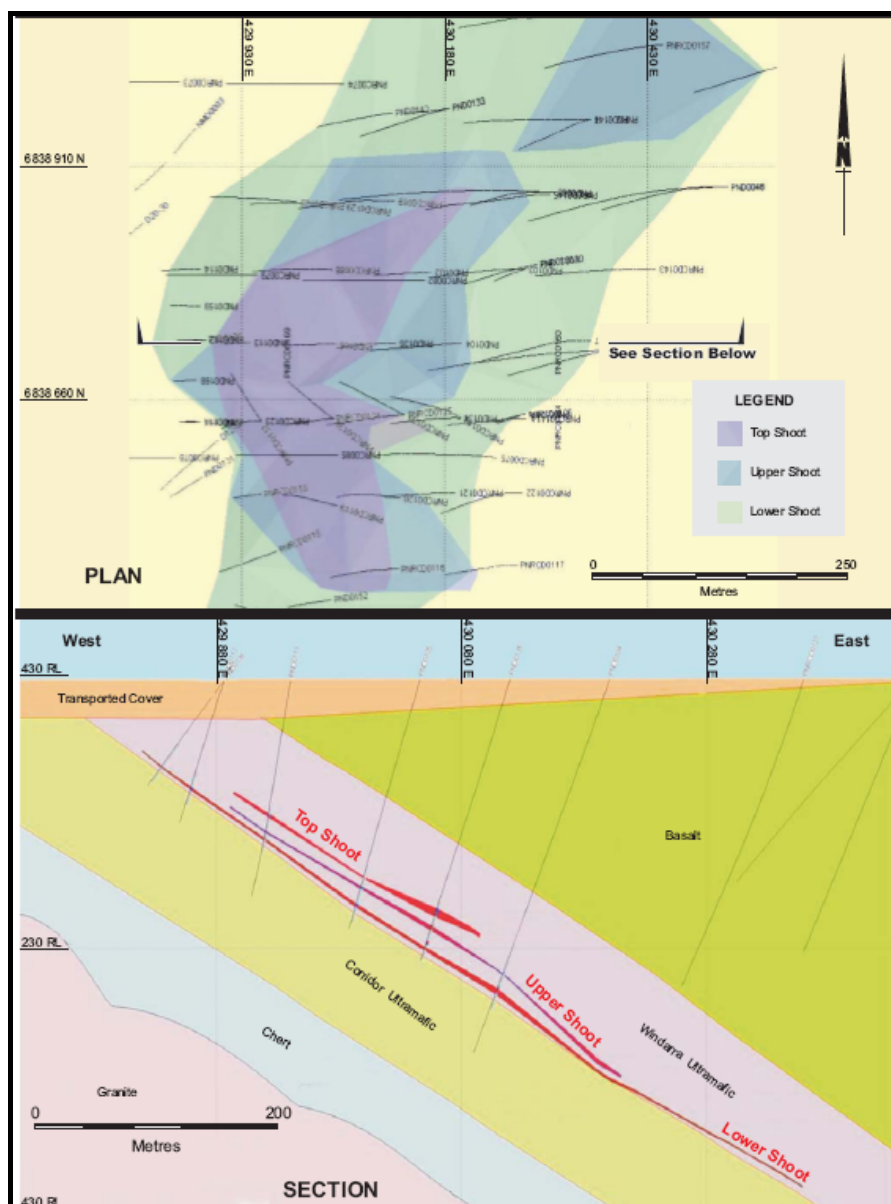


Figure 3: Cerberus Deposit



The proposed Windarra nickel processing plant (Figure 4) will be a conventional nickel sulphide ore treatment plant similar in design to many other nickel sulphide plants in Western Australia and globally.

The processing plant will use the standard three stage froth flotation technology comprising a rougher, middling and scavenger circuit, plus cleaners and cleaner scavengers to extract the nickel from the sulphide material in the Mt Windarra and Cerberus deposits. The plant will include an underground crushing station at Mt Windarra and a surface crusher for Cerberus. The crushed rock will then be milled in a Semi-Autonomous Grinding (SAG) mill and fed into the froth flotation cells. The resulting concentrate is dewatered in a standard plate and frame filter press ready for packaging and shipment.



Poseidon intends to operate a separate processing circuit (Figure 5) to retreat the gold tailings that were deposited at the site from local mines during the 1980's and 1990's. The tailings will be recovered by hydraulic mining using a standard technique commonly employed in the tailings recovery industry. The slurry will be pumped to a thickener and then to a bank of conventional carbon-in-leach tanks to recover the gold onto activated carbon. This carbon will be removed from the slurry, washed, bagged and trucked to a custom carbon treatment plant located in Kalgoorlie, Western Australia. A simple flowsheet is illustrated below. The plant is expected to commence gold production two months prior to nickel sulphide concentrate production.

The overall amount of precious metals produced in the first 3.2 years is expected to be 45,600 ounces of gold and 104,600 ounces of silver.

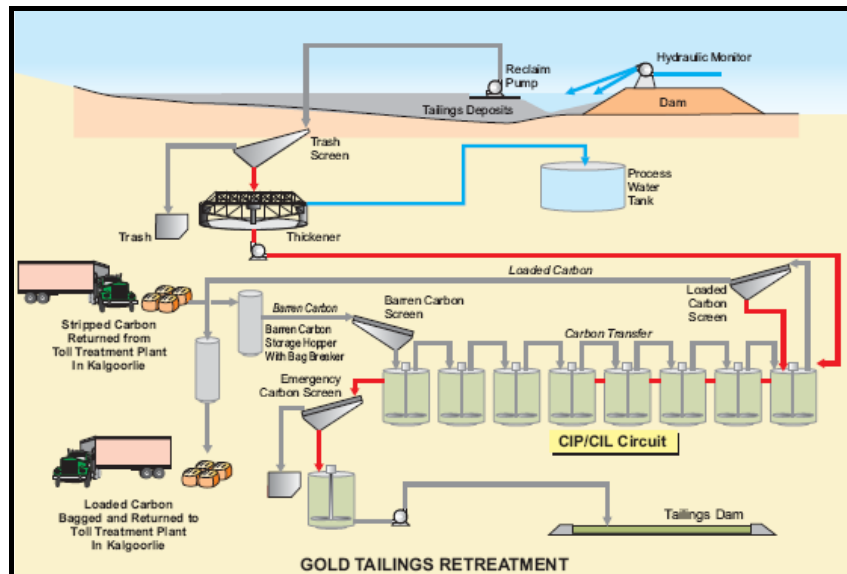
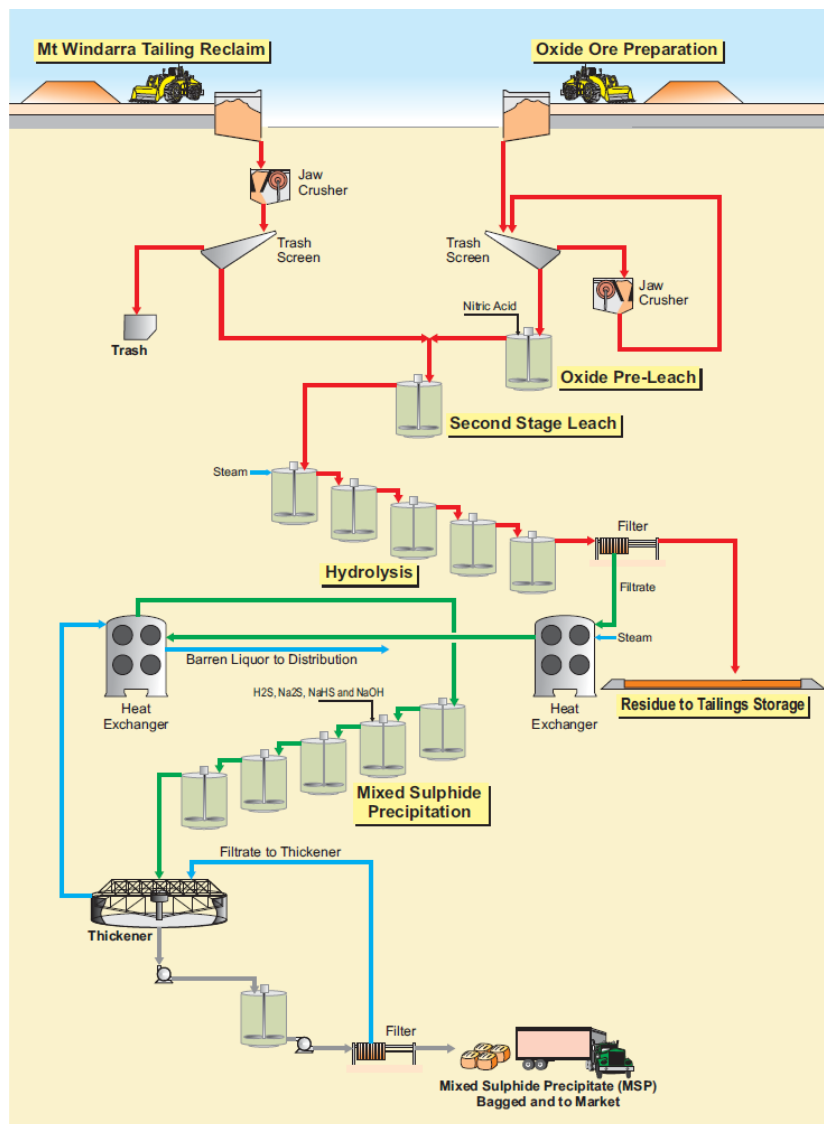


Figure 5: Gold Tailings Retreatment Flowsheet

### Nickel Tailings Retreatment

Mt Windarra was previously mined between 1974 and 1991 and, as a result, the site has 9.6 mt of tailings<sup>3</sup> in dams and 2.98 mt of additional oxidised material which the Company believes can be treated using an atmospheric acid leach process. Following an initial engineering study and batch testwork the process flowsheet (Figure 6) was tested under a continuous pilot programme in early 2012, with some general batch testing progressing. The current plans are to reuse some of the gold elution tanks and gold tailings mining methodology to process the ore, although significant additional infrastructure will be required. The project has an initial estimated life of 13 years and will produce approximately 4,900 tonnes of nickel in concentrate per annum from the low grade nickel stockpiled in waste dumps and oxide dumps stored on the site from previous operations. These tailings and dumps contain around 45,000 tonnes of nickel (Phase 2).



**Figure 6: Nickel Tailings Retreatment Flowsheet**

## Project Construction

The overall construction time for Phase 1 has been estimated at 56 weeks for the nickel sulphide concentrator plant and 48 weeks for the gold plant, with commissioning commencing immediately after construction. The plant and major infrastructure construction should be built under a lump sum turnkey arrangement with an experienced contractor. The standard nature of the plant and its design is familiar with local constructors indicating that construction will be low risk and less susceptible to cost and time delays. The existing site infrastructure including village accommodation, kitchen, dry mess, office areas, process and potable water, electrical power and access roads, will ensure that the project construction can commence immediately after closing of the financing for the Project.

Poseidon expects to confirm an EPC contract before closing of the financing for the Project to enable a fast start of the project construction. The EPC contract for the nickel sulphide

concentrate plant will also include the gold treatment plant, site electrical power, raw, potable and process water, village accommodation and tailings disposal facilities.

At the Mt Windarra mine, the refurbishment of underground facilities to enable the current drilling programme to take place will enable mining operations to commence well ahead of the necessary plant feed schedule. GSM Mining, which has been undertaking the refurbishment work, has the majority of the necessary mobile equipment on site to commence mining operations. Mining could start several months ahead of the process plant construction completion. Immediately after financing, initial activities at Mt Windarra will include completing refurbishment of the decline beyond the current drilling positions, refurbishment of the vertical hoist system and re-establishment of the deep return airways (other return airways have already been completed) prior to restarting the sub-level caving mining.

The Cerberus deposit requires the construction of a 40 metre deep box cut down to the freshrock level followed by the construction of an access decline and return airway to the initial mining level. The contracts for these elements of the construction are in an advanced stage of preparation and are expected to be finalised ahead of financing to ensure operations commence quickly on site. Poseidon is taking steps to accelerate the decline construction in order to commence mining as early as possible and thereby enable the mining methodology to be trialled before full rate production is required.

Poseidon’s strategy has been to agree the major and critical path contracts to be finalised ahead of the financing arrangements to reduce capital cost risk and the project lead time. Poseidon expects to agree contracts worth circa 60% of the capital value of the Project prior to closing of the financing.

Figure 7 shows the planned construction and commissioning schedule and times shown as post final financing. Poseidon expects to produce its first gold 14 months after final financing and to commence nickel sulphide production from its mines after 16 months. Poseidon estimates that the project will meet full design output within 18 months of construction.

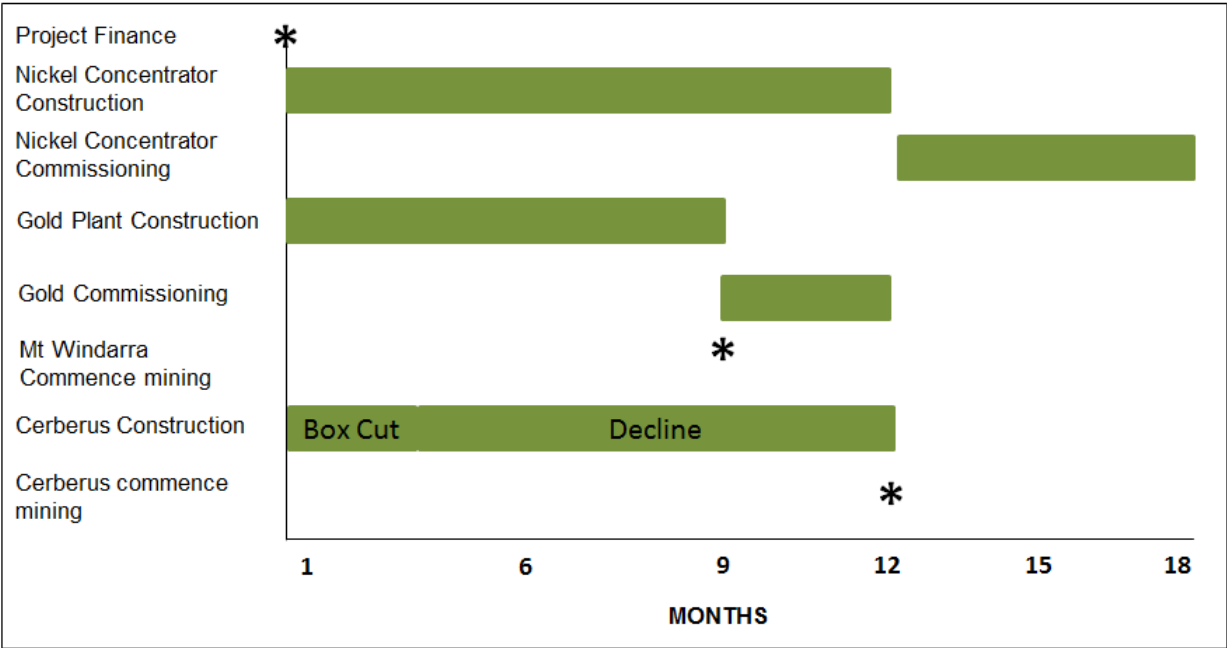
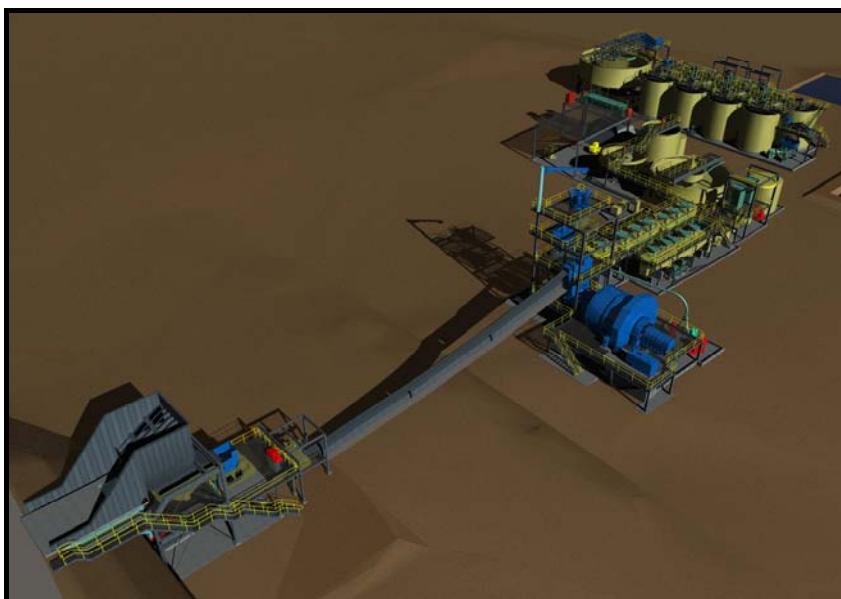


Figure 7: Project Timeline

### Infrastructure and Transport Facilities

In addition to the nickel sulphide concentrator plant, initial site infrastructure facilities to be provided as part of the project include a diesel-powered power station, electrical reticulation, raw water supply from a site local borefield and process water from the South Windarra open pit, potable and process water reticulation, operations workforce village accommodation, plant buildings and communication systems.



**Figure 8: 3D Image of Combined Process Plants (Excl. Nickel Tailings)**

The total installed power at Windarra is 9.8MW. Poseidon is currently working on several proposals incorporating gas or renewables to significantly reduce the cost of power for the project and has included one of these options in its financial capital and operating plan.

The Windarra site includes approximately A\$52m worth of in-situ infrastructure left over from previous operations that will not require replicating and presents a considerable capital and timescale advantage to the company. Overall the project capital intensity (i.e. capital in US\$ per annum pound of nickel in concentrate produced) is below the range predicted for similar projects worldwide, demonstrating some of the advantages of this brownfields operation.

#### Off-take

The nickel sulphide concentrator plant is expected to produce a high quality smeltable concentrate suitable for the major nickel markets around the world. Windarra has good access to external infrastructure with Government maintained roads to the site; a rail loading point is within 80km with access to the export ports of Fremantle (Perth) and Esperance and road access to the Geraldton Port. The DFS is based on shipment by containerised concentrate through Fremantle Port to the export market, although more efficient bulk options are being assessed. Poseidon has received several offers for concentrate offtake from smelters and commodity traders which meet or exceed the payable pricing terms used in the DFS and remain under negotiation. Predicted future shortages from 2014/2015 of concentrates to meet smelter capacity worldwide are expected to lead to strong market demand for the product.

## **Permitting and Approvals**

In November 2012, Poseidon announced that Windarra had received approval from the Minister for State Development, conditional on completing its financing and offtake arrangements for the Project, for its application to recommence operations on the site. The application included all of the necessary tenure, environmental and infrastructure approvals including Native Title applications. Approvals for the reprocessing of nickel tailings will be required to be in place ahead of developing the processing facilities in 2017/18.

## **Mineral Resource and Ore Reserve Estimates**

### **Mt Windarra and Cerberus**

The Windarra Nickel Project has a large initial mining reserve and is one of the few new, higher grade sulphide nickel projects in Australia. The reserves and resources estimates comprise the Mt Windarra brownfield mine resource and the greenfield Cerberus resource.

The host rock to the nickel mineralisation is the Windarra Ultramafic unit comprising komatiitic ultramafic rocks and basaltic volcanics, formed as a result of submarine lava flows. The komatiites display typical flow textures that have enabled the Poseidon geologists to interpret the mineralising trends. The volcanic activity has resulted in ore shoots that reflect the pulsing nature of the lava flows. Figures 1 & 3 show the distribution of the various ore shoots at Mt Windarra and Cerberus.

At Mt Windarra the resources are predominantly within three zones, C, D and G below the historical workings. At Cerberus there are three principal shoots, Top, Upper and Lower with the mineable Probable Reserve occurring within the Lower shoot.

The geological modelling was undertaken by Poseidon geologists using a cut-off grade of 0.75% Ni grade to define the mineralised envelopes. It is Poseidon's view that the geology is well defined and interpretations are underpinned by a good understanding of the geological model.

Initial Poseidon resource estimates have been audited and confirmed by independent consultants Optiro, which used Ordinary Kriging to interpolate the grades. Optiro also validated the geological interpretations and the databases.

## **Ore Reserves**

Poseidon commissioned consultant mining engineers Rock Team to prepare LOM plans for the Mt Windarra and Cerberus mines using both Indicated and Inferred Resources.

Rock Team has prepared an Ore Reserve estimate for the upper sections of both mines. The Ore Reserves are based on the Indicated Resources of Mt Windarra and Cerberus in line with the JORC (2004) code for conversion of resources into ore reserves and total 1.55Mt grading 1.3% nickel containing 19,900 tonnes of nickel, as shown in the table below. The mine design is based on sublevel caving ("SLC") for the Windarra Resources. The mine design at Cerberus is based on longitudinal sublevel caving ("LSLC").

The Mt Windarra ore body has been defined to JORC (2004) standards using drilling from surface coupled with existing drill data which has been verified by Poseidon and audited by Optiro. Over the 20 years of previous operations, WMC achieved a resource to mined ore conversion of circa 80% on a consistent basis (Table 1). This has been modelled, tested and verified by Poseidon's independent consultants Optiro and Rock Team. This has been used to determine the initial mine life. Poseidon believes that this approach of estimating resource conversion is an effective approach that utilises 20 years of actual experience and data in the operation of the mine whilst infill and confirmation drilling of the underground resource progresses.

**Table 1: Western Mining Corporation (WMC) actual resource to mined ore ratio for each shoot**

Ore Shoot	WMC Resource to Mine Ore Conversion
A	91%
A-HW	Not Mined
B	79%
C	77%
D	81%
E	87%
F	Not Mined
G	Not Mined
Average	83%

**Table 2: Nickel Sulphide Resource Statement as at December 31, 2012**

Windarra Nickel Sulphide Project	Cut Off Grade	Resource Category – Nickel Sulphides								
		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%	974,000	1.25	12,400	2,977,000	1.88	55,900	3,951,000	1.73	68,300
South Windarra	0.80%	772,000	0.98	7,500	-	-	-	772,000	0.98	7,500
Cerberus	0.75%	2,773,000	1.25	34,600	1,778,000	1.91	34,000	4,551,000	1.51	68,600
<b>Total Sulphide</b>		<b>4,519,000</b>	<b>1.21</b>	<b>54,500</b>	<b>4,755,000</b>	<b>1.89</b>	<b>89,900</b>	<b>9,274,000</b>	<b>1.56</b>	<b>144,400</b>

**Table 3: Nickel Sulphide Ore Reserve Statement as at December 31, 2012**

Windarra Nickel Sulphide Project	Ore Reserve Category – Nickel Sulphides		
	Probable		
	Tonnes	Ni% Grade	Ni Metal t
Cerberus	1,221,000	1.30	15,880
Mt. Windarra	326,000	1.22	4,000
<b>Total Sulphides</b>	<b>1,547,000</b>	<b>1.29</b>	<b>19,880</b>



**Table 4: Windarra Gold Tailings Project Resources Statement as at December 31, 2012**

Windarra Gold Tailings Project	Resource Category – Gold Tailings		
	Indicated		
	Tonnes	Grade (g/t)	Au (oz)
North & South Dams	4,795,000	0.71	109,500
Central Dam	6,198,000	0.37	73,000
<b>Total Gold Tailings</b>	<b>10,993,000</b>	<b>0.52</b>	<b>182,500</b>

**Table 5: Windarra Gold Tailings Project Ore Reserves Statement as at December 31, 2012**

Windarra Gold Tailings Project	Ore Reserve Category – Gold Tailings		
	Probable		
	Tonnes	Grade (g/t)	Au (oz)
North & South Dams	4,360,000	0.72	101,500
Central Dam	6,074,000	0.37	72,000
<b>Total Gold Tailings</b>	<b>10,434,000</b>	<b>0.52</b>	<b>173,500</b>

**Table 6: Windarra Nickel Tailings Project Resource Statement at December 31, 2012**

Windarra Nickel Tailings & Oxide Project	Cut Off Grade	Resource Category – Nickel Oxide & Tailings								
		Indicated			Inferred			TOTAL		
		Tonnes	Ni% Grade	Ni Metal t	Tonnes	Ni% Grade	Ni Metal t	Tonnes	Ni% Grade	Ni Metal t
Woodline Well	0.50%				344,000	1.25	4,300	344,000	1.25	4,300
Sth Windarra Dumps	0.00%	2,976,000	0.41	12,200				2,976,000	0.41	12,200
Central Tailings Dam	0.00%	9,602,000	0.34	32,600				9,602,000	0.34	32,600
<b>Total Oxide</b>		<b>12,578,000</b>	<b>0.36</b>	<b>44,800</b>	<b>344,000</b>	<b>1.25</b>	<b>4,300</b>	<b>12,922,000</b>	<b>0.38</b>	<b>49,100</b>

**Table 7: Windarra Nickel Tailings Project Ore Reserves Statement as at December 31, 2012**

Windarra Nickel Tailings & Oxide Project	Ore Reserve Category – Nickel Oxide & Tailings		
	Probable		
	Tonnes	Ni% Grade	Ni Metal t
<b>Total Nickel Oxide &amp; Tailings</b>	<b>12,310,000</b>	<b>0.35</b>	<b>44,000</b>

**Resource Upside**

Following the discovery of the Cerberus deposit in 2008, Poseidon has identified a number of other high value targets on the tenement packages. Poseidon believes that extensions to the Cerberus deposit exist close to the existing deposit. Drilling currently underway at Mt Windarra has already identified similar potential near mine resource extensions around C Shoot and F Shoot. Importantly, the down dip extensions of A & B shoots at Mt Windarra (see Figure 1) have not been properly drill tested and appear likely to provide opportunity for resource extension, potentially for mining in the early years

The Cerberus deposit was discovered using modern geophysical and geochemical techniques combined with a well-developed overall regional geological model. After the discovery, only limited additional regional drill testing of targets has taken place on the tenements. Poseidon remains confident that there remains reasonable rationale behind further discovery opportunities on the tenements in future years.



**--ENDS--**

*The information in this report that relates to Mineral Resources is 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.*

*The information in this report that relates to nickel sulphide Ore Reserves 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 that relates to oxide and tailings Ore Reserves is based on information compiled by Leanne Cureton, who is a Member of The Australasian Institute of Mining and Metallurgy as well as a full time employee of Optiro Pty Ltd.*

*Mr Hutchison, Mr Glacken, Mr Grubic and Ms Cureton 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Hutchison, Mr Glacken, Mr Grubic and Ms Cureton 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.*

For further information, please contact

David Singleton	Shane Murphy	Jane Munday
Poseidon Nickel Ltd	FTI Consulting	FTI Consulting
Managing Director	(08) 9485 8888	(08) 9485 8888
(08) 9382 8799	0420 945 291	0488 400 248

## Project Consultants

- The DFS was compiled by Arccon, in conjunction with China Nonferrous Metal Industry's Foreign Engineering and Construction Co Ltd ("NFC"), with input from a range of mining, geotechnical, engineering, processing and environmental consultants. The principal contributors to the DFS are:
  - *Geology and Resources* – Optiro Pty Ltd ("Optiro"), Xstract Pty Ltd ("Xstract"), Maxwell Geoservices Pty Ltd ("Maxwell"), CSA Pty Ltd ("CSA")
  - *Reserves, Mining and Geotechnical Studies* – Optiro, Rock Team Pty Ltd, ("Rock Team"), Beck Engineering Pty Ltd ("Beck Engineering"), Dempers and Seymour Pty Ltd ("D&S"), Rapallo Group ("Rapallo"), Fraser Alexander Pty Ltd (Fraser Alexander)
  - *Process Testwork, Plant Design, Power Study* - SGS Lakefield Oretest Pty Limited ("SGS"), JKTech Pty Ltd ("JKTech"), Orway Mineral Consultants Pty Ltd ("Orway"), Tomra Sorting Solutions-Mining, Outotec Pty Ltd ("Outotec"), Arccon (WA) Pty Ltd a wholly owned subsidiary of Allmine ASX AZG ("Arccon"), Project Consultancy Services Pty Ltd ("PCS")
  - *Gold Process Testwork, Plant Design, Power Study* – SGS, Nagrom Pty Ltd ("Nagrom")
  - *Tailings Leach Project* – Elemental Engineering Pty Ltd ("Elemental Engineering"), Direct Nickel Pty Ltd ("DNI")
  - *Hydrology, Environmental, Tailings Disposal, Heritage and Native Title* – Groundwater Resource Management Pty Ltd ("GRM"), Martinick Bosch Sell Pty Ltd ("MBS"), Coffey Consultants Pty Ltd, ("Coffey"), Golder Associates Pty Ltd, Kellie Hill Consulting Pty Ltd
  - *Risk Review* – Battery Limits Pty Ltd.
  - *Financial Model Review* – Corality Financial Group ("Corality").

**NOTES:**

<sup>1</sup> Total Nickel Ore Processed is the quantity of ore processed over a 10 year period from the Mt Windarra and Cerberus mines. This is based on the LOM schedules prepared by the independent mining engineer and assumes a 2.7 year extension of Windarra's initial resources.

<sup>2</sup> Total Gold Tailings Retreatment is the quantity of gold tailings retreated over a 3.2 year period. This is based on the LOM schedule prepared by the independent geological consultant. This excludes the gold recovered through nickel tailings retreatment.

<sup>3</sup> Total Nickel Tailings Retreatment is the quantity of nickel tailings and oxide material from the retreatment of nickel tailings, low grade nickel in stockpiles in waste dumps and oxide ore stored on site from previous operations. This is based on the LOM schedule prepared by the independent geological consultant. The retreatment of nickel tailings commences 3.5 years into the project at the completion of gold tailings retreatment.

<sup>4</sup> The Pre-Start Capital Cost includes all capital requirements for pre-start to be spent in the first 18 months of the project to build the nickel concentrator, gold retreatment facility site services, establishment of the Cerberus box cut, access decline and related services and completing the refurbishment of the Mt Windarra mine including access declines, ventilation, underground crusher station and vertical haulage winder and other infrastructure to complete the operating mine. This excludes on going sustaining capital and mine development over the remaining LOM and capital associated with the nickel tailings retreatment which is assumed to be funded from free cash flow

<sup>5</sup> The Average Operating Cost is an average over the 10 year period of the financial model and stated on a C1 basis which includes mining, flotation concentration, transport, sea freight, administration, royalties (to State and BHPB) and gold credits but excludes smelting and refining charges.

<sup>6</sup> Mining Cost (Operating) per tonne is the average operating cost of mining for Mt Windarra and Cerberus over the LOM based on sub-level caving and longitudinal sub-level caving methods respectively. This excludes mine development costs which are capital costs.

<sup>7</sup> Processing Cost is the average cost of processing nickel ore through the concentrator plant over the LOM excluding transport costs from Windarra to an offtake party.

<sup>8</sup> Total Revenue is the total revenue generated by the Project on a payable basis over the LOM and excluding royalties and other charges and based on the commodity pricing assumptions detailed below.

<sup>9</sup> Earnings before interest, tax, depreciation and amortisation ("EBITDA") is the total EBITDA generated over the LOM from the DFS financial model including the options described in this announcement.

<sup>10</sup> Net Present Value ("NPV") of the project has been calculated using a pre-tax discount rate of 8%.

<sup>11</sup> The Internal Rate of Return ("IRR") of the Project is based on the cashflows generated by the Project under the above assumptions.

**The following assumptions have also been used:**

Forecast Nickel prices are sourced from Wood Mackenzie as at February 2013. As a guide, the report uses the following prices for the next 3 years: 2013 - US\$8.46/lb, 2014 – US\$8.74/lb, 2015 – US\$8.39/lb.

Forecast Gold prices are sourced from Bloomberg – Forward curve as at 21 March 2013.

Forecast Foreign Exchange rates for AUD:USD have been sourced from Bloomberg as at 21 March 2013.

DFS refers to the Definitive Feasibility Study completed by Arccon into the Windarra Nickel Project.

The Project includes nickel sulphide mining at Mt Windarra and Cerberus and retreatment of onsite gold and nickel tailings in addition to the future exploration potential.

The financial model ("Model") includes the Project and options as defined in this announcement. The Model extends over a 10 year period from commencement of the Project on a nominal basis. All costs are stated on a Project basis and exclude any allocation of corporate overheads.

Corality has been engaged to undertake an audit of the Model. At this stage, Corality has completed a high level review of the Model (including an integrity and functionality review) used to calculate the pre-tax NPV (referred to above). Corality's work is on going and a Model Audit Opinion Letter will be issued upon completion of its scope of works in accordance with the terms of its engagement letter with the Company.

Poseidon is developing the first new nickel project in Western Australia for many years. The Windarra 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.

## Disclaimer

This announcement contains certain “forward-looking statements”. These forward-looking statements are based on the beliefs of Poseidon's management as well as assumptions made by and information currently available to Poseidon's management, and speak only as of the date of this announcement. Forward-looking statements involve known and unknown risks, assumptions, uncertainties and other important factors that could cause Poseidon's ability to complete and commission the project, its actual results, performance or achievements, or industry results, to differ materially from any future results, performance or achievements expressed or implied by such forward-looking statements (and from past results, performance or achievements). These forward-looking statements include, but are not limited to, all statements other than statements of historical facts, including, without limitation, statements regarding completion of the project, estimated resources and reserves, plans, strategies and objectives of management, anticipated production or construction commencement dates, expected costs and production outputs, EBITDA and other expected financial results, rates of return or net present values, outlook, and anticipated productive lives of projects and mines. In some cases, you can identify forward-looking statements by terminology such as, “aim,” “anticipate,” “assume,” “believe,” “continue,” “could,” “estimate,” “expect,” “forecast,” “intend,” “may,” “objectives,” “outlook,” “plan,” “potential,” “predict,” “project,” “risk,” “should,” “target,” “will” or “would” or the negative of such terms or other comparable terminology and other similar expressions that are predictions of or otherwise indicate future events or trends. Poseidon can give no assurance that the forward-looking statements in this presentation will not materially differ from actual results, and the inclusion of forward-looking statements in the announcement should not be regarded as a representation by Poseidon or any other person that they will be achieved.

In addition, the assumptions and estimates underlying the expected financial results included in this announcement are inherently uncertain and are subject to regulatory, business and economic risks and uncertainties that could cause actual results to differ materially from those contained in this announcement. You should be aware that the timing of events and the magnitude of their impact might differ from that assumed in preparing the expected financial results, and that this may have a material positive or negative effect on our financial performance and the financial performance of the project.