

26 September 2018

## DRILLING RECOMMENCED AT ABI ROSE NICKEL DEPOSIT

### *Highlights*

- **Mitchells Drilling has recommenced diamond core drilling at Abi Rose**
- **Following the success of previous drilling an initial 3 diamond holes for 1,500m contracted with an additional 3 holes for 1,800m planned as immediate follow up if successful**
- **Newexco Services has been contracted to assist Poseidon with rig management as well as geological and geophysical support**
- **Significant intersections from previous drilling included;**
  - **PLJD0001; 0.19m high grade zone of remobilised nickel sulphide grading 10.20% Ni**
  - **PLJD0002; 10.48m wide zone of nickel mineralisation grading 3.20% Ni, containing 5.72m at 4.66% Ni and 1.29m @ 10.22% Ni**
  - **PLJD0003; 1.13m zone of massive nickel sulphide mineralisation grading 3.35% Ni, including 0.26m at 8.67% Ni**
- **Lake Johnston was host to the Emily Ann Mine which averaged a resource grade of 4.1% nickel and produced 46,000 tonnes nickel**

Poseidon Nickel Limited (ASX:POS or the Company) is pleased to announce that drilling of 3 diamond holes for a planned 1,500m has recommenced at the Abi Rose Nickel Deposit which is located within the Company's 100% owned Lake Johnston Project. Abi Rose was discovered in early 2016<sup>1</sup> following 3 successful diamond drill holes, ~400m north of the high grade Emily Ann nickel mine (Figure 1). A contingency of another 3 drill holes comprising 1,800m of core drilling has been planned and drilling will continue immediately should the first holes be successful (Figure 2).

Mitchells Drilling Services have commenced the first of these holes (Figure 3) and Newexco Services have been contracted to assist Poseidon with overlapping rig management, logging, as well as geological and geophysical support. Newexco were integral in working with Poseidon's geologists, leading to the discovery of Abi Rose. Newexco have been contracted to continue the geological and geophysical support to advance the Abi Rose project with the aim of discovering enough nickel mineralisation to potentially define a resource within close proximity to the existing Emily Ann mine infrastructure.

<sup>1</sup> (ASX: Significant High Grade Nickel Intersection at Emily Ann North; 25<sup>th</sup> January 2016)

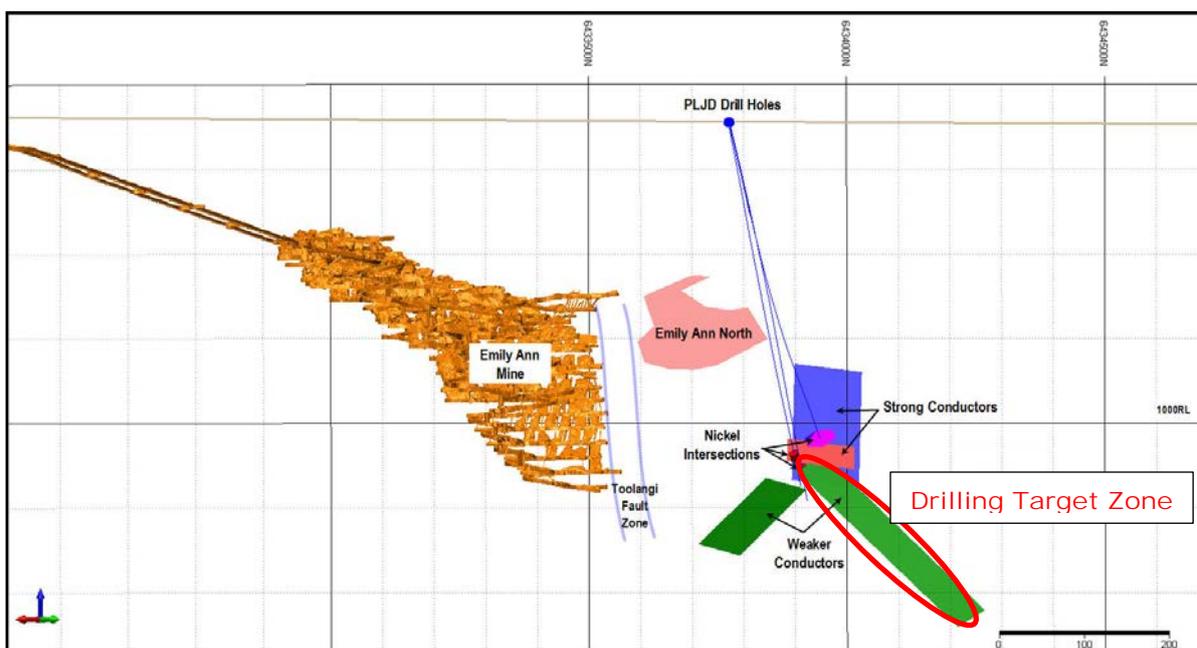


Figure 1: Long-section showing location of Abi Rose discovery drilling relative to the Emily Ann mine and Emily Ann North mineralisation. EM conductor locations are shown as well as the target zone for the current drilling program

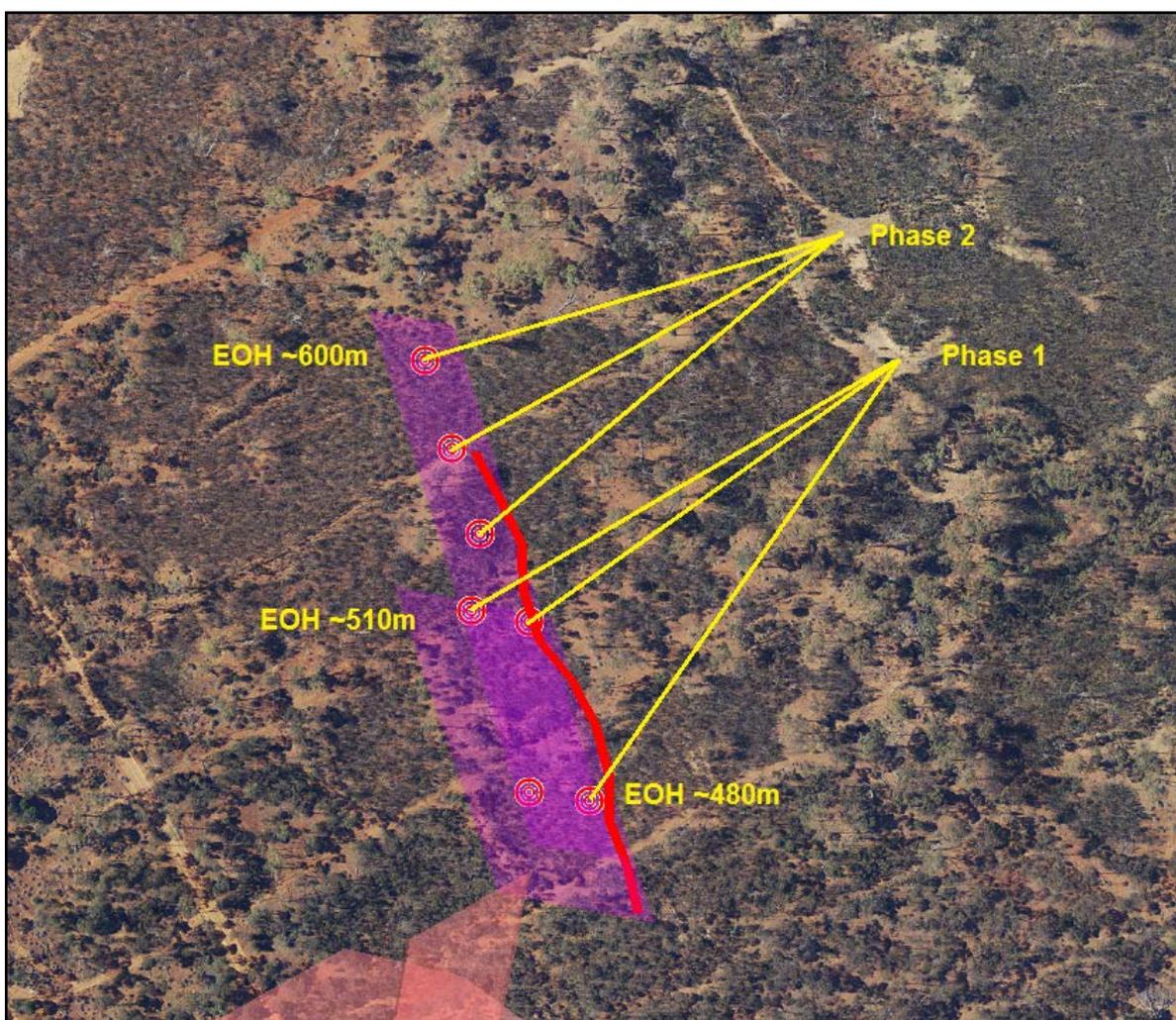


Figure 2: Planned drill holes with modelled target horizon (red) and DHEM plates (purple)



**Figure 3: Commencement of diamond drill hole PLJD004 to test the modelled extension of Abi Rose nickel mineralisation**

## CORPORATE DIRECTORY

### **Director / Senior Management**

Chris Indermaur	Non-Executive Chairman
David Singleton	Non-Executive Director
Geoff Brayshaw	Non-Executive Director
Robert Dennis	Managing Director & CEO
Eryn Kestel	Company Secretary

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### **Shareholder Enquiries**

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 GPO Box D182, Perth WA 6840  
 T: +61 8 9323 2000

### **Home Exchange**

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

## MINERAL RESOURCE STATEMENT

Table 1: Nickel Projects Mineral Resource Statement

Nickel Sulphide Resources	JORC Compliance	Cut Off Grade	MINERAL RESOURCE CATEGORY												
			INDICATED			INFERRED			TOTAL						
			Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Tonnes (Kt)	Ni% Grade	Ni Metal (t)	Co% Grade	Co Metal (t)	Cu% Grade	Cu Metal (t)
<b>BLACK SWAN PROJECT</b>															
Black Swan	2012	0.40%	9,600	0.68	65,000	21,100	0.54	114,000	30,700	0.58	179,000	0.01	4,200	NA	-
Silver Swan	2012	4.50%	52	9.19	4,800	84	9.01	7,600	136	9.08	12,400	0.17	250	0.45	600
<b>LAKE JOHNSTON PROJECT</b>															
Maggie Hays	2012	0.80%	2,600	1.60	41,900	900	1.17	10,100	3,500	1.49	52,000	0.05	1,800	0.10	3,400
<b>WINDARRA PROJECT</b>															
Mt Windarra	2012	0.90%	922	1.56	14,000	3,436	1.66	57,500	4,358	1.64	71,500	0.03	1,200	0.13	5,700
South Windarra	2004	0.80%	772	0.98	8,000	-	-	-	772	0.98	8,000	NA	-	NA	-
Cerberus	2004	0.75%	2,773	1.25	35,000	1,778	1.91	34,000	4,551	1.51	69,000	NA	-	0.08	3,600
<b>TOTAL</b>															
Total Ni, Co, Cu Resources	2004 & 2012		16,720	1.01	168,700	27,300	0.82	223,200	44,020	0.89	391,900	0.05	7,450	0.10	13,300

Note: totals may not sum exactly due to rounding. NA = information Not Available from reported resource model.

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

Black Swan Resource as at 22 July 2014, Silver Swan Resource as at 3 June 2016, Maggie Hays Resource as at 17 March 2015, Mt Windarra, South Windarra and Cerberus Resource as at 30 April 2013

Table 2: Gold Tailings Project Mineral Resource Statement

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

Note: totals may not sum exactly due to rounding.

Windarra Gold Tailings Resource as at 30 April 2013.

## ORE RESERVE STATEMENT

Table 3: Nickel Projects Ore Reserve Statement

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

Note: Calculations have been rounded to the nearest 10,000 t of ore, 0.01 % Ni grade 100 t Ni metal and 10t of cobalt metal.

Co & Cu grades and metal content for Black Swan require additional modelling prior to estimation.

Silver Swan Underground Reserve as at 26 May 2017, Black Swan Open Pit Reserve as at 5 November 2014.

The Company is not aware of any new information or data that materially affects the information in this report and the Resource/Reserve tables above. Such information is based on the information compiled by the Company's Geologists and the Competent Persons as listed below in the Competent Person Statements.

**COMPETENT PERSON STATEMENTS:**

*The information in this report that relates to Exploration Results is based on, and fairly represents, information compiled and reviewed by Mr N Hutchison, General Manager of Geology who is a full-time employee at Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists.*

*The information in this report which relates to the Black Swan Mineral Resource is based on, and fairly represents, information compiled by Andrew Weeks who is a full-time employee of Golder Associates Pty Ltd. The information in this report which relates to the Black Swan Ore Reserve is based on, and fairly represents, information compiled by Andrew Weeks who is a full-time employee of Golder Associates Pty Ltd and who is a Members of the Australasian Institute of Mining and Metallurgy.*

*The information in this report which relates to the Silver Swan Mineral Resource is based on, and fairly represents, 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 which relates to the Silver Swan Ore Reserve is based on, and fairly represents, information compiled by Matthew Keenan who is a full-time employee of Entech Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy.*

*The information in this report which relates to the Lake Johnston Mineral Resource is based on, and fairly represents, information compiled by Neil Hutchison, General Manager of Geology at Poseidon Nickel, who is a Member of The Australian Institute of Geoscientists and Andrew Weeks who is a full-time employee of Golder Associates Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy. The information in this report which relates to the Lake Johnston Ore Reserves Project is based on, and fairly represents, information compiled by Matt Keenan who is a full time employee of Entech Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy.*

*The information in this report that relates to Mineral Resources at the Windarra Nickel Project and Gold Tailings Project is based on, and fairly represents, information compiled by 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 Windarra Project contains Mineral Resources which are reported under JORC 2004 Guidelines as there has been no Material Change or Re-estimation of the Mineral Resource since the introduction of the JORC 2012 Codes. Future estimations will be completed to JORC 2012 Guidelines.*

*Mr Hutchison, Mr Glacken, Mr Weeks, and Mr Keenan all have sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code 2012). Mr Hutchison, Mr Glacken, Mr Weeks, and Mr Keenan have consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

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

**FORWARD LOOKING STATEMENT – INFERRED RESOURCE STATEMENTS:**

*The Company notes that an Inferred Resource has a lower level of confidence than an Indicated Resource and that the JORC Codes, 2012 advises that to be an Inferred Resource it is reasonable to expect that the majority of the Inferred Resource would be upgraded to an Indicated Resource with continued exploration. Based on advice from relevant competent Persons, the Company has a high degree of confidence that the Inferred Resource for the Silver Swan deposit will upgrade to an Indicated Resource with further exploration work.*

*The Company believes it has a reasonable basis for making the forward looking statement in this announcement, including with respect to any production targets, based on the information contained in this announcement and in particular, the JORC Code, 2012 Mineral Resource for Silver Swan as of May 2016, together with independent geotechnical studies, determination of production targets, mine design and scheduling, metallurgical testwork, external commodity price and exchange rate forecasts and worldwide operating cost data.*

**FORWARD LOOKING STATEMENTS:**

*This release contains certain forward looking statements including nickel production targets. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "except", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and expected costs. Indications of, and guidance on future earnings, cash flows, costs, financial position and performance are also forward looking statements*

*Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change, without notice, as are statements about market and industry trends, which are based on interpretation of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance.*

*Forward looking statements may be affected by a range of variables that could cause actual results or trends to differ materially. These variations, if materially adverse, may affect the timing or the feasibility and potential development of the Silver Swan underground mine.*