

**Continued Success with More Nickel Sulphides Intersected at Abi Rose**

**Highlights**

- **PLJD0004 intersects Nickel-Copper bearing sulphides; 1.54m @ 1.82% nickel and 0.18% copper down plunge at Abi Rose, including 0.47m @ 4.36% nickel and 0.46% copper from 466.02m down hole**
- **DHEM completed and PLJD0005 has been collared**
- **Since initial discovery in 2015, four out of four drill holes completed, including the current hole, have all intersected mineralisation. Two additional holes are to be drilled in the current program**
- **Confirmation of magmatic Ni-Cu type emplacement model of which Emily Ann is interpreted to be the top, Ni rich accumulation**

Poseidon Nickel Limited (ASX:POS or the Company) is pleased to announce continued success following the restart of drilling at the Abi Rose nickel discovery.

PLJD0004, the first of three planned holes, commenced in late September (refer ASX: Drilling Recommended at Abi Rose Nickel Deposit-26/09/18) targeted the down plunge extension of mineralisation identified during drilling in 2015-2016. PLJD0004 intersected a 2.9m wide zone of ultramafic rocks comprising pyroxenitic gabbros within a package of felsic volcanics, 56m down plunge from the previous intersections. All four holes drilled at Abi Rose have intersected nickel mineralisation.

Nickel-copper bearing sulphides comprising disseminated and massive sulphide accumulations occur over a 1.54m wide zone in Tables 1 and Figures 1. Within this zone was a massive and highly disseminated zone of 0.47m grading 4.36% nickel and 0.46% copper from 466.02m down hole. A full list of assays are presented in Table 3.

The next hole to be drilled by the Company PLJD0005 (refer collar details at Table 2) has commenced and is targeting the confluence of the new and previous DHEM plates ~25m down plunge from PLJD0002.

<b>PLJD0004</b>	<b>m From</b>	<b>m To</b>	<b>Width</b>	<b>% Ni</b>	<b>% Cu</b>	<b>ppm Co</b>
	465.73	468.63	2.90	1.08	0.1	422
including	466.02	467.56	1.54	1.82	0.18	707
with	466.02	466.49	0.47	4.36	0.46	1814

**Table 1: PLJD0004 Significant Intersection Summary**



Figure 1: Drill hole PLJD0004 showing massive sulphide zone and lower remobilised sulphide blebs (Left Image: 466.02-466.18m) as well as disseminated sulphides below the massive sulphide zone (Right Image: 466.18-466.47m). Pyroxenitic gabbro can be seen in the lower core run.

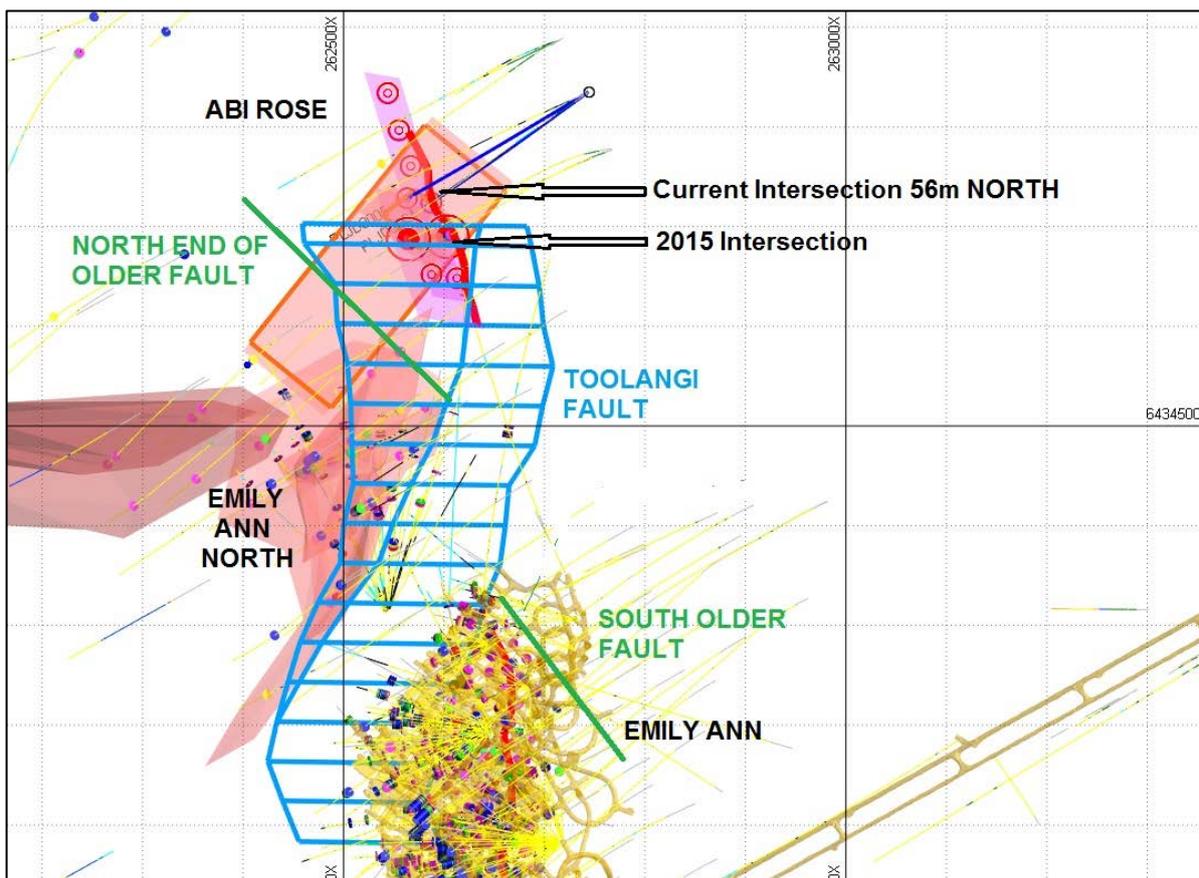


Figure 2: Plan view showing the magmatic conduit appears to be offset by multiple faulting events. Abi Rose appears to be dislocated from Emily Ann and Emily Ann North mineralisation. The pink rectangle is the 2015 DHEM plate which parallels the predicted orientation of Abi Rose.

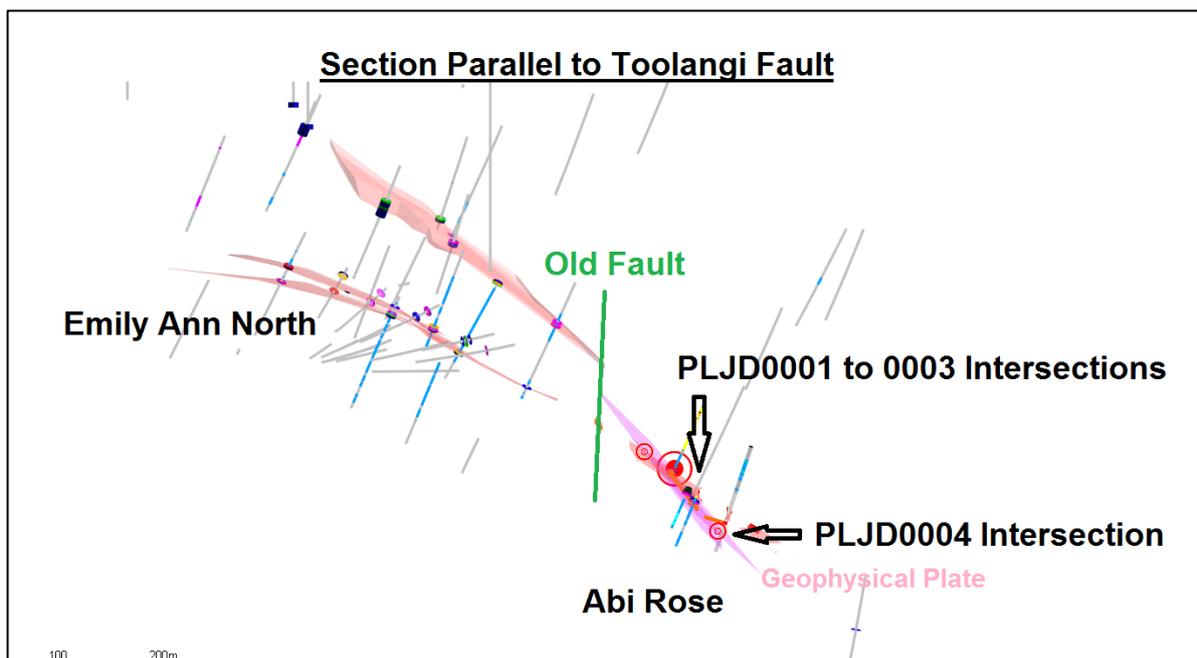


Figure 3: Section looking northwest, parallel to Toolangi Fault. The nickel sulphide intersection in PLJD0004 is located 56m down plunge and north of the earlier Abi Rose intersections. Abi Rose appears dislocated from the Emily Ann North mineralisation.

An update to the market will be provided at the completion of PLJD0006, wrapping up the initial scouting phase of drilling before step-out drilling to the north is planned.

Collar	MGA East	MGA North	RL	Target Depth	EOH Depth	Dip	Azimuth (MGA)
PLJD0004	262743.9	6434835.0	1357	466	531.5	-69.1	235.8
PLJD0005	262744.2	6434835.5	1357	461	~510	-68.0	231.7

Table 2: Drill Hole Collar Details

Hole ID	Sample #	From	To	Width	SG	Ni %	Cu %	Co %	As ppm
PLJD0004	EX176201	465	465.73	0.73	2.70	0.002	0	0	0
	EX176202	465.73	466.02	0.29	2.98	0.21	0.004	65	0
	EX176203	466.02	466.18	0.16	4.27	7.78	0.136	2800	0
	EX176204	466.18	466.49	0.31	3.37	2.12	0.669	1170	0
	EX176206	466.49	467	0.51	3.03	0.502	0.0265	120	0
	EX176207	467	467.36	0.36	3.01	0.272	0.0135	75	0
	EX176208	467.36	467.56	0.2	2.99	0.735	0.038	170	0
	EX176209	467.56	468.63	1.07	2.98	0.166	0.007	75	0
	EX176211	468.63	469.65	1.02	2.72	0.048	0.0145	0.0015	0
	EX176212	469.65	470	0.35	2.76	0.14	0.024	0.005	0
	EX176213	470	470.36	0.36	2.78	0.0815	0.0055	0.002	0
	EX176214	470.36	471	0.64	2.69	0.001	0	0	0

Table 3: PLJD0004 Assay Details

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 Steve Warriner, Chief Geologist 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 Member 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.

## CORPORATE DIRECTORY

### **Director / Senior Management**

Geoff Brayshaw	Non-Executive Chairman
Felicity Gooding	Non-Executive Director
Karl Paganin	Non-Executive Director
Robert Dennis	Managing Director & CEO
Eryn Kestel	Company Secretary

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### **Home Exchange**

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

## ATTACHMENT A

### JORC (2012) Table 1

#### Abi Rose

#### ABI ROSE

#### SECTION 1 Sampling Techniques and Data

*(Criteria in this section apply to all succeeding sections)*

JORC Code explanation	Commentary
<b>Sampling techniques</b>	
<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>NQ2 Diamond drill core was used to obtain samples which were sawn with an automatic core saw and half split or quarter split (if re-assaying) prior to sampling and submitted to the lab.</p> <p>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.</p> <p>Assays are determined by four acid digest with ICP finish from an accredited laboratory.</p>
<b>Drilling techniques</b>	
<p><i>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.).</i></p>	<p>Core drilling was carried Mitchell Services with a truck mounted Schramm diamond rig. Holes were collared as HQ and cased down to NQ2 prior to intersecting the mineralised zone.</p>
<b>Drill sample recovery</b>	
<p><i>Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<p>Drilling recovery is calculated through core measurements and RQD assessment, matched against actual hole depth. There has been no core loss through the sampled horizon.</p>

JORC Code explanation	Commentary
<b>Logging</b>	
<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>A sophisticated hierarchical lithological coding system based on observed properties was used for geological logging. Lithologys are recorded separately and an abbreviated code for plotting sections included. Mineralisation and structural data was recorded in separate tables.</p>
<b>Sub-sampling techniques and sample preparation</b>	
<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>NQ2 Diamond drill core was used to obtain samples which were sawn in half with an automatic core saw prior to sampling and submittal to the lab.</p> <p>Samples were sent to SGS Laboratories in Perth for assaying.</p> <p>Sampling was overseen by the site Chief Geologist and transported directly to the lab in Perth.</p>
<b>Quality of assay data and laboratory tests</b>	
<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	<p>Assaying was completed by an accredited laboratory and is of the highest standards. QAQC reference materials where used and inserted into the sampling sequence.</p>
<b>Verification of sampling and assaying</b>	
<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Alternative company personnel have verified the calculation of the significant intercepts.</p>

JORC Code explanation	Commentary
<b>Location of data points</b>	
<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Drill collars have been surveyed by GPS and directional surveys, including hole set-up have utilised true-north seeking gyros. Allowances for grid convergence have been made.</p>
<b>Data spacing and distribution</b>	
<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>Drill spacing is adequate to model a degree of continuity between significant intercepts based upon the prevailing geology and also utilising underground mapping from the Emily Ann workings.</p>
<b>Orientation of data in relation to geological structure</b>	
<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<p>There is no bias introduced from the selected drill orientation.</p>
<b>Sample security</b>	
<p><i>The measures taken to ensure sample security.</i></p>	<p>The site Chief geologist supervised the entire process through to delivery of samples to the lab.</p>
<b>Audits or reviews</b>	
<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p>There are no documented reviews of audit or review for sampling as it has been completed to high industry standard procedures.</p>

**ABI ROSE****SECTION 2 Reporting of Exploration Results***(Criteria in this section apply to all succeeding sections)*

<b>Mineral Tenement and Land Tenure Status</b>	Abi Rose is situated on M63/283 which is located 190km SW of Kalgoorlie. The tenement is registered to Poseidon Nickel.
<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	<p>A long standing Native Title Agreement (since 1997) exists with the Ngadju People and will be continued by Poseidon Nickel.</p> <p>The tenement is located within the buffer zone of the Bremer Range Priority Ecological Community and within the Proposed Nature Reserve 82.</p> <p>Lake Johnston Plant commenced operation in 2001 and there are no known impediments to continue operating in this area.</p> <p>There are no royalties or other interests held.</p>
<b>Exploration Done by Other Parties</b> <i>Acknowledgment and appraisal of exploration by other parties.</i>	LionOre Australia and Norilsk Nickel Australia previously completed exploration, drilling and mining of the Lake Johnston project until Poseidon's acquisition in late 2014.
<b>Geology</b> <i>Deposit type, geological setting and style of mineralisation.</i>	The Lake Johnston Project is located 80km ENE of Western Areas' Forrestania Project which contains their flagship Flying Fox Mine. Flying Fox and Abi Rose are both intrusive style ultramafic bodies, not extrusive Kambalda style lava flows. They have undergone similar intrusive emplacement, nickel mineralisation, and structural overprinting histories.
<b>Drill hole information</b>	All holes reported are surface diamond holes. Collar co-ordinates and hole angles have been tabulated in the report.
<b>Data aggregation methods</b>	Length and SG weighted calculations have been applied to the intersections reported .
<b>Relationship between mineralisation widths and intercept lengths</b>	No true width corrections has been applied to intersections.
<b>Diagrams</b>	See body of report.
<b>Balance reporting</b>	The reporting is factual & balanced .
<b>Other substantive exploration data</b>	This drilling data supports the vast drilling database that was acquired with the purchase of the Lake Johnston Project.
<b>Further work</b>	Further drilling will be undertaken.