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EXCITING GREENFIELDS NICKEL INTERSECTIONS AT LAKE JOHNSTON

Highlights

- Assay results from the recent drill program undertaken along the defined Western Ultramafic Unit (WUU) has identified multiple zones of anomalous nickel
- At Maggie Hays West, Nickel has been intersected at the base of the WUU. Best results include:
 - PLJA075 28m @ 0.66% Ni, 187 ppm Cu from 20m
 including 4m @ 1.32% Ni, 134ppm Cu from 40m
 - PLJA076 8m @ 1.18% Ni, 143 ppm Cu from 40m
 - PLJA078 24m @ 0.88% Ni, 220 ppm Cu from 12m

including 12m @ 1.16% Ni, 256ppm Cu from 20m

- PLJA080 4m @ 0.52% Ni, 744 ppm Cu from 36m
- PLJA081 7m @ 0.70% Ni, 588 ppm Cu from 40m (EOH)

These intersections indicate a coherent highly anomalous Ni:Cu regolith trend over 300m

- The Maggie Hays West Ni:Cu regolith anomaly is located up dip from isolated historic nickel sulphide intersections:
 - LJD0003A 1.70m @ 1.59% Ni, 810ppm Cu*
 - MHUD0551 2.55m @ 1.92% Ni, 1344ppm Cu*
- Maggie Hays West could represent a mineralised, open-ended channel, up to 400m wide and is considered a compelling nickel sulphide target
- Two new prospects identified at Windy Hill and Jaymee Ruth with highly anomalous Ni:Cu
 values alongside the West Ultramafic Unit. Best results include:

Windy Hill

PLJA140 12m @ 0.46% Ni, 329ppm Cu from 8m, and 4m @ 0.48% Ni, 812ppm Cu from 24m (EOH)

Jaymee Ruth

- PLJA122 5m @ 0.51% Ni, 255ppm Cu from 5m (EOH)
- The drilling program tested 14km strike of the overturned prospective Western Ultramafic Unit basal contact
- Anomalous zones within the weathering profile has also been identified at Roundtop, Raggedy Ann, Johnny Turk, Maggie Hays North

^{*}Refer to ASX Poseidon announcement "New Mineralised zone identified at Lake Johnston" dated 18 February 2015 for previously reported nickel sulphide intersections.



Poseidon Nickel (ASX: POS) ("Poseidon" or "the Company") is very pleased to report nickel intersections from the Company's recent drilling program that focussed on testing the majority of the newly identified Western Ultramafic Unit (WUU) at Lake Johnston.

Managing Director and CEO, Peter Harold, commented, "The initial results from the drilling program are extremely positive for a reconnaissance program and confirmed several areas of coincident nickel copper anomalism at several prospects along the Western Ultramafic Unit basal contact.

The results indicate the possibility of a mineralised, open ended channel target at Maggie Hays West that is up to 400m wide and corresponds to a discrete magnetic feature. This interpretation presents a compelling high priority target that warrants further drilling.

The Western Ultramafic Unit opens up new opportunities for further discoveries and is an exciting development for Lake Johnston. The Company looks forward to progressing exploration on the Western Ultramafic Unit."

Drilling Program

The WUU structure has been identified along 17km of strike. An initial program of shallow air core (AC) and reverse circulation (RC) drilling to delineate 14km of the interpreted overturned basal contact of the WUU was completed in May 2023. A total of 157 AC holes for 5,081 metres were drilled on 32 x 400-metre spaced lines. Initial sampling was conducted based on 4-metre composites. A further 17 RC holes for 1,556 metres were drilled.

The aim of the drill program was to both map the interpreted WUU basal contact and the channelised embayed features that are prospective for the accumulations of nickel sulphide mineralisation at its base and against the basal contact position as observed in Kambalda-style nickel sulphide deposits. The deeper RC holes provide critical geochemical information about the host rock fertility beneath the weathering profile and about the mineralisation of the basal contact.



FIGURE 1: MAGGIE HAYS WEST DRILL LINE, 82 700N LOCAL GRID LOOKING TO THE WEST SHOWING THE RECENT DRILLING AND MAGGIE HAYS TAILING DAM IN THE BACKGROUND



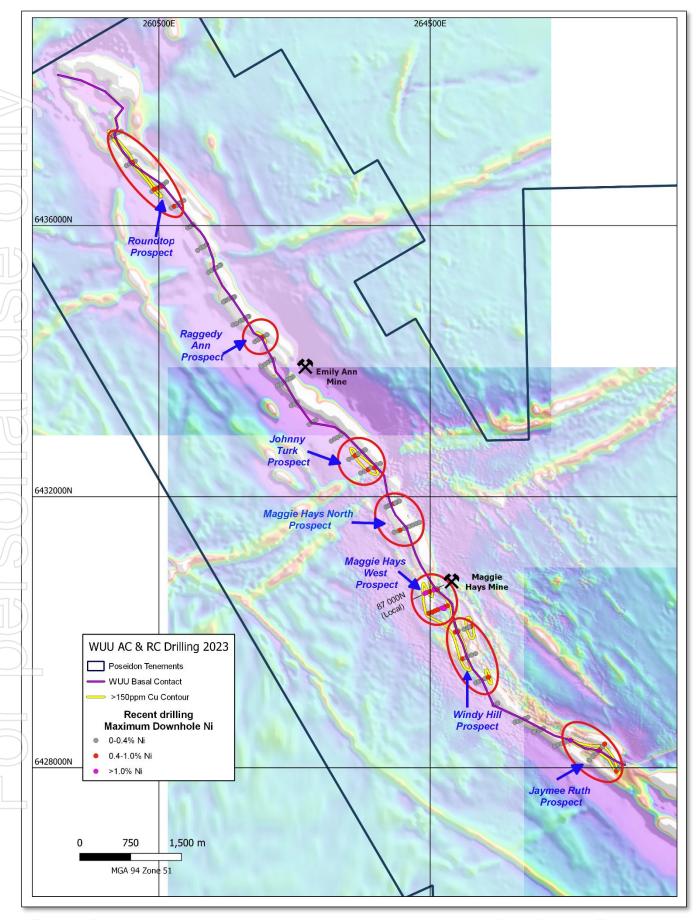


FIGURE 2: DRILLHOLE LOCATION PLAN OF THE RECENT PROGRAM COMPETED AT THE LAKE JOHNSTON PROJECT, WITH MAXIMUM DOWNHOLE NICKEL AND >150PPM CU CONTOUR HIGHLIGHTED OVER MAGNETICS



Anomalous Nickel Intersections

Assay results from the reconnaissance drilling along the WUU has returned coincident nickel sulphide pathfinder (Ni:Co:Cu) anomalous zones within the weathering profile at seven separate prospects, including Roundtop, Raggedy Ann, Johnny Turk, Maggie Hays North, Maggie Hays West, Windy Hill and Jaymee Ruth (Figure 2).

The pathfinder anomalism includes Ni > 0.4% (at times Ni > 1.0%), Cu >150ppm and Co >500ppm have also been confirmed over prospective cumulate phase ultramafic rocks at various locations along the belt, (Figure 2 and Table 1). The assay results, collar location data and other information from the recent drilling are available in Appendix 1, Tables 1 and 2.

TABLE 1: DRILLHOLE INTERCEPTS OF >0.4% NI FROM RECENT AIRCORE DRILLING.

	Prospect	Hole	Hole	From	То	Interval	Ni	Со	Cu	Cr	MgO
74)		Туре	(m)	(m)	(m)	(%)	(ppm)	(ppm)	(ppm)	(%)
<u> </u>	Roundtop	PLJA002	AC	44	48 (EOH)	4	0.42	167	62	2206	13.25
/	Roundtop	PLJA011	AC	44	48	4	0.40	129	214	1587	6.19
	Roundtop	PLJA012	AC	28	31 (EOH)	3	0.46	213	67	2979	8.59
	Roundtop	PLJA013	AC	28	29 (EOH)	1	0.42	193	56	649	2.31
	Roundtop	PLJA016	AC	20	24	4	0.99	458	76	1684	13.56
J	Johnny Turk	PLJA066	AC	12	18 (EOH)	6	0.52	557	178	2576	0.27
	Maggie Hays	PLJA072	AC	8	12	4	0.41	578	394	3032	0.45
	North		and	16	35	19	0.66	444	179	2093	7.31
	Maggie Hays	PLJA075	AC	20	48	28	0.66	307	187	4228	10.1
	West		and	40	44	4	1.32	355	134	2813	18.17
	Maggie Hays	PLJA076	AC	20	24	4	0.55	203	122	3735	0.91
/	West		and	32	52	20	0.87	379	157	4482	12.16
			including	40	48	8	1.18	<i>4</i> 33	143	4473	14.2
75	Maggie Hays West	PLJA077	AC	16	20	4	0.51	221	139	2654	1.99
님	Maggie Hays	PLJA078	AC	12	36	24	0.88	1500	220	6788	4.99
	West		including	20	32	12	1.16	2561	256	6844	3.57
	Maggie Hays	PLJA080	AC	28	32	4	0.41	118	245	5562	4.21
	West			36	40	4	0.52	167	744	2360	1.23
	Maggie Hays West	PLJA081	AC	40	47 (EOH)	7	0.70	148	588	2657	8.16
	Maggie Hays West	PLJA082	AC	32	44	12	0.60	352	112	3614	11.26
	Maggie Hays West	PLJA083	AC	24	44	20	0.50	228	87	3890	5.62
	Maggie Hays	PLJA084	AC	28	48	20	0.82	499	71	3584	3.38
	West		including	40	44	4	1.01	297	28	6017	3.63
	Maggie Hays West	PLJA085	AC	12	24	12	0.67	152	187	4232	1.67
	Maggie Hays West	PLJA086	AC	24	64 (EOH)	40	0.65	663	205	4375	2.82
	Windy Hill	PLJA087	AC	28	44	16	0.55	490	133	4649	7.96
	Windy Hill	PLJA091	AC	4	20	16	0.44	81	152	6356	1.63
			and	24	44	20	0.70	625	112	4496	1.84



Prospect	Hole	Hole	From	То	Interval	Ni	Со	Cu	Cr	MgO
		Туре	(m)	(m)	(m)	(%)	(ppm)	(ppm)	(ppm)	(%)
Windy Hill	PLJA092	AC	16	28	12	0.56	242	65	2935	12.6
Jaymee Ruth	PLJA116	AC	12	20	8	1.04	562	126	2480	7.86
		including	12	16	4	1.23	330	125	2576	3.86
Jaymee Ruth	PLJA119	AC	20	40	20	0.71	487	117	3815	12.7
		including	24	28	4	1.29	968	119	3567	10.88
Jaymee Ruth	PLJA120	AC	20	24	4	0.41	590	90	1741	13.6
Jaymee Ruth	PLJA122	AC	8	13 (EOH)	5	0.51	225	54	3308	10.3
Jaymee Ruth	PLJA124	AC	16	20	4	0.41	231	199	4552	1.94
Maggie Hays North	PLJA132	AC	20	24	4	0.42	127	14	945	11.21
Windy Hill	PLJA140	AC	8	20	12	0.46	110	329	3733	0.32
		and	24	28 (EOH)	4	0.48	77	812	2418	0.12
Raggedy Ann	PLJA142	AC	16	32	16	0.57	215	198	2509	14.49
Johnny Turk	PLJA148	AC	20	32	12	0.84	711	127	2696	13.3
Johnny Turk	PLJA151	AC	28	48 (EOH)	20	0.58	226	91	1679	3.28
Roundtop	PLJA158	RC	84	88	4	0.51	197	3	628	36.71*
Roundtop	PLJA160	RC	28	32	4	0.49	228	60	639	5.36
Johnny Turk	PLJA170	RC	84	92	8	0.48	137	146	494	40.4*
Maggie Hays West	PLJA171	RC and**	28 76	32 100	4 24	0.42 0.23	743 102	69 14	70 542	0.93 37.3*
Maggie Hays	PLJA172	RC	12	72	60	0.61	301	129	5141	4.78
West		including	36	40	4	1.07	417	121	4777	10.22
Windy Hill	PLJA173	RC	16	24	8	0.57	576	92	3867	11.94
		and	40	52	12	0.58	166	41	3615	18.17

^{*}MgO values in fresh rock

MAGGIE HAYS WEST

Verification of several positive attributes in the latest drilling phases have upgraded the prospectivity at the Maggie Hays West Prospect. These positive attributes include the confirmation of Ni:Cu regolith anomalism up dip from isolated historic nickel sulphide drill intersections (summarised in Figures 3, 4 and 5). The drilling has also confirmed the thickening of the WUU to 300 metres on drill line 82700N (local grid) and the development of an embayed contact due to a possible channel feature.

Latest Maggie Hays West drill results include:

- PLJA075 28m @ 0.66% Ni, 187 ppm Cu from 20m
 - including 4m @ 1.32% Ni, 134ppm Cu from 40m
- PLJA076 20m @ 0.87% Ni, 157 ppm Cu from 32m
 - including 8m @ 1.18% Ni, 143 ppm Cu from 40m
- PLJA078 24m @ 0.88% Ni, 220 ppm Cu from 12m
 - including 12m @ 1.16% Ni, 256ppm Cu from 20m
- PLJA080 4m @ 0.41% Ni, 245 ppm Cu from 28m and 4m @ 0.52% Ni, 744 ppm Cu from 36m
- PLJA081 7m @ 0.70% Ni, 588ppm Cu from 40m (EOH)
- PLJA085 12m @ 0.67% Ni, 187ppm Cu from 12m
- PLJA086 40m @ 0.65% Ni, 205ppm Cu from 24m (EOH)

^{**}for litho-geochemical purposes only, <0.4% Ni



Previously reported nickel sulphide intersections at Maggie Hays West include:

- LJD0003A 1.70m @ 1.59% Ni, 810ppm Cu from 329.30m*
- MHUD0551 2.55m @ 1.92% Ni, 1,344ppm Cu from 235.45m*

*Refer to ASX Poseidon announcement "New Mineralised zone identified at Lake Johnston" dated 18 February 2015 for previously reported nickel sulphide intersections.

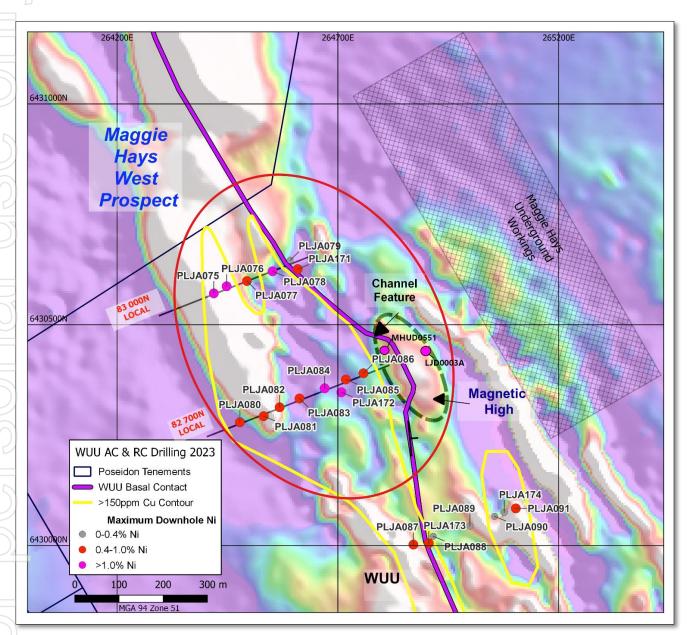


FIGURE 3. ENLARGEMENT OF MAGGIE HAYS WEST PROSPECT. DRILLING INTERSECTION >0.4% NI SHOWN OVER 1VD AERO-MAGNETICS IMAGE. NOTE THE DISCRETE LOCAL MAGNETIC HIGH OVER THE OVERTURNED WUU BASAL CONTACT THAT DIPS TO THE EAST (HIGHLIGHTED PURPLE) AND THE ANOMALOUS NI:CU DRILL RESULTS OVER 300M.

One RC drillhole (PLJA171) was drilled through the basal contact in the recent program at Maggie Hays West returning MgO values averaging 37% (max. 41% MgO) and Ni/Cr ratios averaging 4.3 which is indicative of fertile channel facies ultramafic cumulate rocks at the base of the thickened WUU (Figure 4).



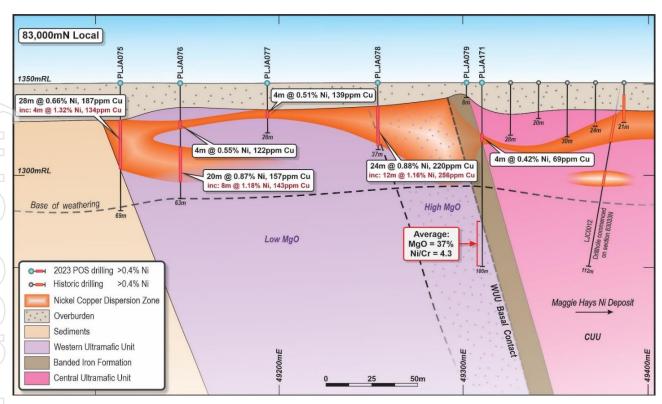


FIGURE 4. MAGGIE HAYS WEST - SECTION 83 000N (LOCAL GRID), SHOWING RECENT AND HISTORIC DRILLING WITH >0.4%

NI INTERSECTIONS, NI:CU DISPERSION AND HIGH MGO BASAL FLOW

When all these positive attributes are collectively compiled onto a long section projection, a possible mineralised, open ended channel target can be inferred at the Maggie Hays West Prospect that is up to 400m wide and corresponds to a discrete magnetic feature (Figure 5). The interpretation presents a compelling high priority target that warrants further drilling.

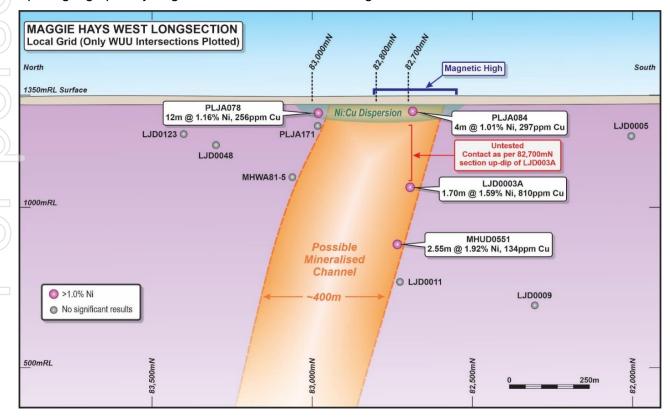


FIGURE 5. MAGGIE HAYS WEST LONG SECTION WITH WUU BASAL CONTACT INTERCEPTS PLOTTED ONLY. NOTE THE INFERRED MINERALISED CHANNEL OPPORTUNITY IS LARGELY UNTESTED.



Regional Targets

Drilling has also defined six other targets for follow up with anomalous nickel present near the basal WUU contact, refer Figure 2. This includes the newly identified Windy Hill and Jaymee Ruth prospects. At Windy Hill elevated Ni:Cu trends have been intersected in close proximity to the BIF with limited drilling in the area. Significant **Windy Hill** intersections include:

- PLJA087 16m @ 0.55% Ni, 133ppm Cu from 28m
- PLJA091 16m @ 0.44% Ni, 152 ppm Cu from 4m and 20m @ 0.7% Ni, 112ppm Cu from 20m
- PLJA140 12m @ 0.46% Ni, 329 Cu from 8m and 4m @ 0.48% Ni, 812ppm Cu from 24m (EOH)

Similarly, the new prospect at **Jaymee Ruth** located in the south of the tenement holding has been identified with elevated Ni:Cu ratios at the basal contact along a 800m geochemical anomaly (Figure 2). Significant intersection include:

- PLJA116 8m @ 1.04% Ni, 126ppm Cu form 12m
 - including 4m @ 1.23% Ni, 125ppm Cu from 12m
- PLJA124 4m @ 0.41% Ni, 199ppm Cu from 16m (EOH)

Roundtop, Raggedy Ann, Johnny Turk and Maggie Hays North prospects have all returned anomalous nickel and further assessment is required on all six prospects.

Next Steps

The results provide increased confidence in the geological setting and prospectivity of the WUU. Further sampling of the anomalous zones to one metre re-splits have been taken to delineate the anomalous intervals and will include analysis for PGEs. This will aid in the planning for infill and follow up drilling at the identified prospects, along with testing along the further southern 4km extension of the WUU.

Background

The Lake Johnston Project is located 190km south-west of Kalgoorlie in Western Australia and contains two historical underground nickel sulphide mines, Emily Ann and Maggie Hays, along with a 1.5Mtpa processing plant, 200-person village and associated infrastructure. The existing deposits are hosted within the Central Ultramafic Unit (CUU), which has been the focus of extensive exploration by previous owners.

Studies on the Maggie Hays deposit and more recently on Emily Ann by Poseidon indicate both deposits were emplaced within a felsic volcanic sequence by a series of intrusive ultramafic magmas that collectively form the CUU. The CUU and felsic volcanic sequence are capped by a regionally persistent banded iron formation (BIF). The intrusive emplacement model for the deposits was recently enhanced by the discovery of significant nickel sulphide mineralisation within an interpreted narrow feeder zone to the Emily Ann deposit at Abi Rose (refer to Poseidon ASX announcements "More Nickel Sulphides Intersected at Abi Rose" dated 22 November 2018 and "Significant High Grade Nickel Intersection at Emily Ann North" dated 25 January 2016).

The Western Ultra Mafic Unit (WUU) overlies the regionally persistent BIF sequence and is interpreted to have been emplaced as a series of extruded ultramafic flows by the CUU magmas breaching through the BIF sequence. Therefore, the basal contact of the WUU is considered a high priority target for potential economic nickel sulphide mineralisation by Poseidon that has been historically overlooked.

Potential Restart of Lake Johnston

In order to restart Lake Johnston, the Maggie Hays underground mine would need to be dewatered and the existing process plant refurbished, or a new, high-grade orebody (like Emily Ann) discovered and mined.

In early 2022, GR Engineering (GRES), the same organisation that provided the mill refurbishment estimate for Black Swan, completed an engineering study to determine the refurbishment and operation



cost of the Lake Johnston plant and associated infrastructure (refer ASX release *Lake Johnston Engineering Scoping Study* dated 21 February 2022).

The Company has commenced exploration activities aimed at increasing the Lake Johnston resource, focusing initially on the highly prospective Western Ultramafic Unit. Assuming the Company was to restart operations at Lake Johnston that production together with the potential Black Swan production could result in the Company achieving one of its stated corporate objectives of producing >15,000t of nickel in concentrate per annum.

This announcement was authorised for release by Poseidon Board of Directors.

Peter Harold

Managing Director

3 July 2023

For further information contact Peter Harold: +61 (08) 6167 6600

About Poseidon Nickel Limited

Poseidon Nickel Limited (ASX Code: POS) is a nickel sulphide exploration and development company with three projects located within a radius of 300km from Kalgoorlie in the Goldfields region of Western Australia and a resource base of around 400,000 tonnes of nickel and 180,000 ounces of gold.

Poseidon's strategy is focused on the exploration and eventual restart of its established nickel operations in Western Australia. A critical element of this strategy has been to acquire projects and operations with significant existing infrastructure, large nickel resources and geological prospectivity likely to lead to resource growth through the application of modern exploration techniques.

Poseidon owns the Windarra, Black Swan and the Lake Johnston Nickel Projects. In addition to the mines and infrastructure including concentrators at Black Swan and Lake Johnston, these projects have significant exploration opportunities demonstrated by the discovery of the Golden Swan Resource at Black Swan and the Abi Rose mineralisation at Lake Johnston.

Black Swan will be the first project to restart followed by Lake Johnston and then Windarra, subject to favourable Feasibility Studies, appropriate project financing structures being achieved, the outlook for the nickel price remaining positive and all necessary approvals being obtained.

The Company has completed a Definitive Feasibility Study on retreating the gold tailings at Windarra and Lancefield and has entered into a Heads of Agreement with Green Gold Projects whereby Green Gold will develop the project and Poseidon can retain an 8% free carried interest, subject to certain conditions precedent being satisfied.



COMPETENT PERSON STATEMENTS:

The information in this report that relates to Exploration Targeting and Results is based on, and fairly represents, information compiled and reviewed by Ms Karyn Parker, who is an employee of Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists.

Ms Parker, has 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). Ms Parker consents 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.

Additional information on Poseidon's mineral resource contained within this announcement is extracted from the reports titled:

- "Lake Johnston Plant Capital and Operating Estimates Study Completed", released 21 February 2022
- "More Nickel Sulphides Intersected at Abi Rose" released 22 November 2018
- "Significant High Grade Nickel Intersection at Emily Ann North" released 25 January 2016
- "New Mineralised zone identified at Lake Johnston" dated 18 February 2015.

which are available to view on www.poseidon-nickel.com.au.

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 Lake Johnston Project.



Appendix 1

TABLE 2: DRILLHOLE COLLAR LOCATION DATA, REPORTED IN GDA 94 MGA ZONE 51

Prospect	Lease	Hole ID	Туре	East	North	RL	Dip	Azi (True)	EOH (m)
Roundtop	M 63/282	PLJA001	AC	259784	6437302	1364	-90	0	56
Roundtop	M 63/282	PLJA002	AC	259822	6437322	1364	-90	0	48
Roundtop	M 63/282	PLJA003	AC	259863	6437348	1364	-90	0	41
Roundtop	M 63/282	PLJA004	AC	259903	6437372	1364	-90	0	74
Roundtop	M 63/282	PLJA005	AC	259945	6437395	1364	-90	0	62
Roundtop	M 63/282	PLJA006	AC	260021	6436886	1364	-90	0	25
Roundtop	M 63/282	PLJA007	AC	260067	6436909	1364	-90	0	10
Roundtop	M 63/282	PLJA008	AC	260110	6436930	1364	-90	0	4
Roundtop	M 63/282	PLJA009	AC	260151	6436951	1364	-90	0	32
Roundtop	M 63/282	PLJA010	AC	260394	6436516	1364	-90	0	71
Roundtop	M 63/282	PLJA011	AC	260431	6436537	1364	-90	0	61
Roundtop	M 63/282	PLJA012	AC	260480	6436555	1364	-90	0	31
Roundtop	M 63/282	PLJA013	AC	260519	6436573	1364	-90	0	29
Roundtop	M 63/282	PLJA014	AC	260574	6436615	1364	-90	0	62
Roundtop	M 63/282	PLJA015	AC	260681	6436259	1364	-90	0	39
Roundtop	M 63/282	PLJA016	AC	260727	6436287	1364	-90	0	34
Roundtop	M 63/282	PLJA017	AC	260777	6436300	1364	-90	0	29
Roundtop	M 63/282	PLJA018	AC	260812	6436337	1364	-90	0	35
Roundtop	M 63/282	PLJA019	AC	260868	6436371	1364	-90	0	47
WUU Regional	M 63/282	PLJA020	AC	260924	6435967	1364	-90	0	36
WUU Regional	M 63/282	PLJA021	AC	260965	6435991	1364	-90	0	15
WUU Regional	M 63/282	PLJA022	AC	261004	6436015	1364	-90	0	8
WUU Regional	M 63/283	PLJA023	AC	261074	6435634	1354	-90	0	16
WUU Regional	M 63/283	PLJA024	AC	261120	6435673	1354	-90	0	32
WUU Regional	M 63/283	PLJA025	AC	261165	6435687	1354	-90	0	32
WUU Regional	M 63/283	PLJA026	AC	261230	6435310	1354	-90	0	54
WUU Regional	M 63/283	PLJA027	AC	261277	6435341	1354	-90	0	42
WUU Regional	M 63/283	PLJA028	AC	261320	6435361	1354	-90	0	10
WUU Regional	M 63/283	PLJA029	AC	261353	6435382	1354	-90	0	17
WUU Regional	M 63/283	PLJA030	AC	261410	6435420	1354	-90	0	38
WUU Regional	M 63/283	PLJA031	AC	261486	6434893	1354	-90	0	48
WUU Regional	M 63/283	PLJA032	AC	261531	6434919	1354	-90	0	48
WUU Regional	M 63/283	PLJA033	AC	261586	6434935	1354	-90	0	59
WUU Regional	M 63/283	PLJA034	AC	261616	6434951	1354	-90	0	57
WUU Regional	M 63/283	PLJA035	AC	261450	6434872	1354	-90	0	58
WUU Regional	M 63/283	PLJA036	AC	261592	6434532	1354	-90	0	46
WUU Regional	M 63/283	PLJA037	AC	261643	6434553	1354	-90	0	53
WUU Regional	M 63/283	PLJA038	AC	261704	6434594	1354	-90	0	52
WUU Regional	M 63/283	PLJA039	AC	261745	6434616	1354	-90	0	35
WUU Regional	M 63/283	PLJA040	AC	261782	6434637	1354	-90	0	17
WUU Regional	M 63/283	PLJA041	AC	261827	6434661	1354	-90	0	20



Prospect	Lease	Hole ID	Туре	East	North	RL	Dip	Azi (True)	EOH (m)
Raggedy Ann	M 63/283	PLJA042	AC	261914	6434287	1354	-90	0	44
Raggedy Ann	M 63/283	PLJA043	AC	261962	6434315	1354	-90	0	38
Raggedy Ann	M 63/283	PLJA044	AC	262006	6434341	1354	-90	0	6
Raggedy Ann	M 63/283	PLJA045	AC	262047	6434364	1354	-90	0	8
WUU Regional	M 63/283	PLJA046	AC	262007	6433929	1354	-90	0	50
WUU Regional	M 63/283	PLJA047	AC	262067	6433954	1354	-90	0	41
WUU Regional	M 63/283	PLJA048	AC	262110	6433984	1354	-90	0	54
WUU Regional	M 63/283	PLJA049	AC	262150	6434010	1354	-90	0	18
WUU Regional	M 63/283	PLJA050	AC	262194	6434027	1354	-90	0	54
WUU Regional	M 63/283	PLJA051	AC	262251	6433641	1354	-90	0	40
WUU Regional	M 63/283	PLJA052	AC	262307	6433664	1354	-90	0	54
WUU Regional	M 63/283	PLJA053	AC	262397	6433726	1354	-90	0	47
WUU Regional	M 63/283	PLJA054	AC	262442	6433746	1354	-90	0	33
WUU Regional	M 63/283	PLJA055	AC	262478	6433770	1354	-90	0	24
WUU Regional	M 63/283	PLJA056	AC	262340	6433693	1354	-90	0	43
WUU Regional WUU Regional	M 63/283 M 63/283	PLJA057 PLJA058	AC AC	262451 262671	6433344 6433043	1354 1354	-90 -90	0	17 50
WUU Regional	M 63/283	PLJA058	AC	262717	6433067	1354	-90	0	9
WUU Regional	M 63/283	PLJA059 PLJA060	AC	263042	6432820	1354	-90	0	48
WUU Regional	M 63/283	PLJA061	AC	263089	6432852	1354	-90	0	29
WUU Regional	M 63/283	PLJA062	AC	263131	6432872	1354	-90	0	12
 WUU Regional	M 63/283	PLJA063	AC	263183	6432907	1354	-90	0	4
Johnny Turk	M 63/283	PLJA064	AC	263300	6432550	1354	-90	0	55
Johnny Turk	M 63/283	PLJA065	AC	263357	6432581	1354	-90	0	44
Johnny Turk	M 63/283	PLJA066	AC	263423	6432616	1354	-90	0	18
Johnny Turk	M 63/283	PLJA067	AC	263476	6432350	1354	-90	0	53
Johnny Turk	M 63/283	PLJA068	AC	263534	6432373	1354	-90	0	22
Maggie Hays North	M 63/283	PLJA069	AC	263852	6431849	1354	-90	0	26
Maggie Hays North	M 63/283	PLJA070	AC	263881	6431866	1354	-90	0	23
Maggie Hays North	M 63/283	PLJA071	AC	263935	6431887	1354	-90	0	21
Maggie Hays North	M 63/283	PLJA072	AC	263970	6431901	1354	-90	0	35
Maggie Hays North	M 63/283	PLJA073	AC	264006	6431915	1354	-90	0	51
Maggie Hays North	M 63/284	PLJA074	AC	263969	6431472	1350	-90	0	13
Maggie Hays West	M 63/163	PLJA075	AC	264419	6430571	1350	-90	0	69
Maggie Hays West	M 63/163	PLJA076	AC	264448	6430587	1350	-90	0	63
Maggie Hays West	M 63/163	PLJA077	AC	264494	6430599	1350	-90	0	28
Maggie Hays West	M 63/163	PLJA078	AC	264552	6430616	1350	-90	0	37
Maggie Hays West	M 63/163	PLJA079	AC	264592	6430646	1350	-90	0	8
Maggie Hays West	M 63/163	PLJA080	AC	264478	6430279	1350	-90	0	75
Maggie Hays West	M 63/163	PLJA081	AC	264532	6430293	1350	-90	0	47
Maggie Hays West Maggie Hays West	M 63/163 M 63/163	PLJA082 PLJA083	AC	264568	6430313	1350	-90 -90	0	57 48
Maggie Hays West	M 63/163	PLJA083 PLJA084	AC AC	264613 264670	6430333 6430356	1350 1350	-90 -90	0	48 54
Maggie Hays West	M 63/163	PLJA084 PLJA085	AC	264718	6430376	1350	-90 -90	0	36
Maggie Hays West	M 63/163	PLJA085 PLJA086	AC	264718	6430376	1350	-90 -90	0	64
mayyie mays west	IVI US/ 103	FLJAUOU	70	204730	0430390	1330	-90	U	04



Prospect	Lease	Hole ID	Туре	East	North	RL	Dip	Azi (True)	EOH (m)
Windy Hill	M 63/163	PLJA087	AC	264871	6430002	1350	-90	0	63
Windy Hill	M 63/163	PLJA088	AC	264916	6430021	1350	-90	0	2
Windy Hill	M 63/163	PLJA089	AC	264999	6430044	1350	-90	0	20
Windy Hill	M 63/163	PLJA090	AC	265055	6430066	1350	-90	0	38
Windy Hill	M 63/163	PLJA091	AC	265103	6430084	1350	-90	0	46
Windy Hill	M 63/163	PLJA092	AC	264978	6429608	1350	-90	0	39
Windy Hill	M 63/163	PLJA093	AC	265029	6429626	1350	-90	0	25
Windy Hill	M 63/163	PLJA094	AC	265056	6429641	1350	-90	0	2
Windy Hill	M 63/163	PLJA095	AC	265112	6429663	1350	-90	0	4
Windy Hill	M 63/163	PLJA096	AC	265172	6429686	1350	-90	0	4
Windy Hill	M 63/163	PLJA097	AC	265176	6429253	1350	-90	0	36
Windy Hill	M 63/163	PLJA098	AC	265214	6429269	1350	-90	0	48
Windy Hill	M 63/163	PLJA099	AC	265264	6429290	1350	-90	0	7
WUU Regional	M 63/163	PLJA100	AC	265437	6428928	1350	-90	0	22
WUU Regional	M 63/163	PLJA101	AC	265497	6428952	1350	-90	0	1
WUU Regional	M 63/163	PLJA102	AC	265754	6428675	1350	-90	0	28
WUU Regional	M 63/163	PLJA103	AC	265795	6428687	1350	-90	0	33
WUU Regional	M 63/163	PLJA104	AC	265846	6428707	1350	-90	0	52
WUU Regional	M 63/163	PLJA105	AC	265898	6428726	1350	-90	0	9
WUU Regional	M 63/163	PLJA106	AC	265946	6428746	1350	-90	0	4
WUU Regional	M 63/163	PLJA107	AC	266034	6428529	1350	-90	0	13
WUU Regional	M 63/163	PLJA108	AC	266104	6428550	1350	-90	0	37
WUU Regional	M 63/163	PLJA109	AC	266140	6428556	1350	-90	0	26
WUU Regional	M 63/163	PLJA110	AC	266174	6428585	1350	-90	0	25
Jaymee Ruth	M 63/163	PLJA111	AC	266336	6428319	1350	-90	0	6
Jaymee Ruth	M 63/163	PLJA112	AC	266382	6428339	1350	-90	0	3
Jaymee Ruth	M 63/163	PLJA113	AC	266435	6428354	1350	-90	0	13
Jaymee Ruth	M 63/163	PLJA114	AC	266487	6428373	1350	-90	0	33
Jaymee Ruth	M 63/163	PLJA115	AC	266540	6428395	1350	-90	0	69
Jaymee Ruth	M 63/163	PLJA116	AC	266574	6428405	1350	-90	0	29
Jaymee Ruth	M 63/163	PLJA117	AC	266902	6428170	1350	-90	0	31
Jaymee Ruth	M 63/163	PLJA118	AC	266947	6428212	1350	-90	0	37
Jaymee Ruth	M 63/163	PLJA119	AC	266986	6428247	1350	-90	0	59
Jaymee Ruth	M 63/163	PLJA120	AC	267001	6428264	1350	-90	0	47
Jaymee Ruth	M 63/163	PLJA121	AC	267041	6428309	1350	-90	0	48
Jaymee Ruth	M 63/163	PLJA122	AC	267076	6428352	1350	-90	0	13
Jaymee Ruth	M 63/163	PLJA123	AC	266847	6428112	1350	-90	0	44
Jaymee Ruth	M 63/163	PLJA124	AC	267248	6427951	1350	-90	0	22
Jaymee Ruth	M 63/163	PLJA125	AC	267284	6427990	1350	-90	0	8
Jaymee Ruth	M 63/163	PLJA126	AC	267313	6428019	1350	-90	0	58
Jaymee Ruth	M 63/163	PLJA127	AC	267349	6428067	1350	-90	0	1
Maggie Hays North	M 63/283	PLJA128	AC	263908	6431878	1354	-90	0	26
Maggie Hays North	M 63/283	PLJA129	AC	263987	6431908	1354	-90	0	7
Maggie Hays North	M 63/283	PLJA130	AC	264048	6431934	1354	-90	0	49
Maggie Hays North	M 63/284	PLJA131	AC	264028	6431494	1350	-90	0	10



Prospect		Lease	Hole ID	Туре	East	North	RL	Dip	Azi (True)	EOH (m)
Maggie Hays N	North	M 63/284	PLJA132	AC	264058	6431505	1350	-90	0	33
Maggie Hays N	North	M 63/284	PLJA133	AC	264121	6431531	1350	-90	0	7
Maggie Hays N	North	M 63/284	PLJA134	AC	264162	6431548	1350	-90	0	2
Maggie Hays N	North	M 63/284	PLJA135	AC	264202	6431565	1350	-90	0	6
Maggie Hays N	North	M 63/284	PLJA136	AC	264248	6431585	1350	-90	0	60
Maggie Hays N	North	M 63/284	PLJA137	AC	264297	6431602	1350	-90	0	10
Maggie Hays N	North	M 63/284	PLJA138	AC	264344	6431624	1350	-90	0	55
Windy Hill		M 63/163	PLJA139	AC	265311	6429318	1350	-90	0	3
Windy Hill		M 63/163	PLJA140	AC	265360	6429336	1350	-90	0	28
Raggedy Ann		M 63/283	PLJA141	AC	261994	6434337	1354	-90	0	26
Raggedy Ann		M 63/283	PLJA142	AC	262024	6434352	1354	-90	0	39
Raggedy Ann		M 63/283	PLJA143	AC	262094	6434391	1350	-90	0	1
WUU Regional	l	M 63/283	PLJA144	AC	262497	6433368	1350	-90	0	37
WUU Regional	l	M 63/283	PLJA145	AC	262541	6433396	1350	-90	0	5
WUU Regional	l	M 63/283	PLJA146	AC	262771	6433101	1350	-90	0	41
WUU Regional	l	M 63/283	PLJA147	AC	262819	6433130	1350	-90	0	50
Johnny Turk		M 63/283	PLJA148	AC	263394	6432605	1354	-90	0	34
Johnny Turk		M 63/283	PLJA149	AC	263439	6432631	1354	-90	0	23
Johnny Turk		M 63/283	PLJA150	AC	263505	6432669	1354	-90	0	3
Johnny Turk		M 63/283	PLJA151	AC	263586	6432401	1354	-90	0	48
Johnny Turk		M 63/283	PLJA152	AC	263626	6432427	1354	-90	0	17
Johnny Turk		M 63/283	PLJA153	AC	263707	6432470	1354	-90	0	11
Johnny Turk		M 63/283	PLJA154	AC	263769	6432489	1354	-90	0	12
Johnny Turk		M 63/283	PLJA155	AC	263545	6432691	1354	-90	0	1
Johnny Turk		M 63/283	PLJA156	AC	263688	6432426	1354	-90	0	17
Roundtop		M 63/282	PLJA157	RC	259831	6437333	1364	-90	0	75
Roundtop		M 63/282	PLJA158	RC	260106	6436934	1364	-90	0	100
Roundtop		M 63/282	PLJA159	RC	260526	6436574	1364	-60	250	100
Roundtop		M 63/282	PLJA160	RC	260546	6436579	1364	-90	0	100
Roundtop		M 63/282	PLJA161	AC	260613	6436644	1364	-90	0	62
Roundtop		M 63/282	PLJA162	RC	260797	6436327	1364	-90	0	100
WUU Regional		M 63/282	PLJA163	RC	261000	6436018	1364	-90	0	79
WUU Regional		M 63/283	PLJA164	RC	261204	6435722	1364	-90	0	88
WUU Regional		M 63/283	PLJA165	RC	261396	6435407	1364	-90	0	59
WUU Regional		M 63/283	PLJA166	RC	261595	6434939	1354	-90	0	100
WUU Regional		M 63/283	PLJA167	RC	261807	6434653	1354	-90	0	88
WUU Regional		M 63/283	PLJA168	RC	262164	6434017	1354	-90	0	79
WUU Regional	l	M 63/283	PLJA169	RC	262437	6433746	1354	-90	0	100
Johnny Turk		M 63/283	PLJA170	RC	263679	6432425	1354	-90	0	100
Maggie Hays V		M 63/163	PLJA171	RC	264609	6430626	1350	-90	0	100
Maggie Hays V	Vest	M 63/163	PLJA172	RC	264702	6430362	1350	-90	0	100
Windy Hill		M 63/163	PLJA173	RC	264906	6430005	1350	-90	0	88
Windy Hill		M 63/163	PLJA174	RC	265077	6430075	1350	-60	250	100



Appendix 2

Checklist of Assessment and Reporting Criteria Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques Drilling techniques	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. 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.	 Air core and reverse circulation drilling was used to obtain 1m drill samples that were placed on the ground in 20m rows. Four metre composite samples were created using a spear to collect sample from each pile and produce a representative 1 to 2kg sample. Each sample was crushed and pulverized and a 0.2g sample digested with a mixture of nitric, hydrochloric, perchloric and hydrofluoric acids before analysed via ICP-OES (SGS method GE_ICP40Q20). All samples >0.4% Ni were resampled on one metre intervals and resubmitted for analysis. The holes were drilled with a 95 mm hole diameter, using a blade bit and face sampling hammers. The majority of holes were vertical. Holes that were angled were drilled at -60 towards 250 and orientated using a compass and clinometer. Collar locations were established using a handheld GPS using GDA MGA zone 51 co-ordinate system.
Drill sample recovery	 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. 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. 	grade was recognized.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral 	 All drill chip samples were logged into Geobank Mobile by Geolithic Pty Ltd field staff at the time of drilling. Logged chips were washed prior to recording geology (including lithology,



Criteria	JORC Code explanation	Commentary
	 Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	weathering, mineralogy and alteration). Holes were validated before being exported to the Geobank database. • All holes were logged in full.
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. 	 Air core and RC samples were collected using a spear directly from the sample piles to give a 1-2kg composite sample over 4m. Field duplicates were carried out every 100 samples, and Certified Referenced Materials (CRM) were used every 100 samples.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Samples were dispatched to SGS laboratories in Perth. After crushing and pulverizing they were analysed by 4-acid exploration grade digest with ICP-OES finish CRMs standards and field duplicate samples were submitted at a rate of 1 in 50 throughout the course of the program. Analysis of the results demonstrate a high degree of reliability can be assigned to the SGS analytical results. No portable analysis tools were used in the determination of assay results.
Verification of sampling and assaying Location of data points	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 Sampling was conducted by the logging geologists and field staff who are contractors to Geolithic Pty Ltd. Data was collected using Geobank Mobile which utilises a validation function before data can be exported into the Geobank database. No adjustments have been made to the assay data. Collar locations were picked up after drilling using a hand-held GPS ±5m. The grid used is GDA 94 MGA Zone 51. No downhole surveys were conducted on the vertical holes.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate 	 The air core holes were generally spaced 50m apart on approximately 400m line spacing, utilising previously cleared lines. The results being reported are mostly on 4m composite samples.



Criteria	a J	JORC Code explanation	Commentary
	•	for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	
Orienta of data relation geolog structu	n in n to pical	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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.	 Drill sample orientation is considered appropriate with respect to the geology being tested. Bias introduced by drilling orientation is considered insignificant due to the depth of cover and lower penetration of residual bedrock
Sample securit		The measures taken to ensure sample security.	 All samples were placed in prenumbered calico bags and secured with a draw string. The calico samples were then placed in a polyweave bag and sealed with a cable tie annotated with sample numbers and then placed in a bulky bag. Samples were collected by a transport company from site and transported to SGS Perth for assay.
Audits review		The results of any audits or reviews of sampling techniques and data.	No audits or reviews were completed during drilling



Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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 reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Western Ultramafic Unit covers a strike length of 17km and extends through tenements M63/282, M63/283, M63/284,M63/163 and E63/1784. Mining tenements M63/282, M63/283, M63/284 and M63/163 are all 100% owned by Poseidon Nickel Limited. E63/1784 is a joint venture between Poseidon Nickel (80%) and Essential Metals Limited (20%). They are located 160km west of Hyden and straddle the Hyden-Norseman Road.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Maggie Hays and Emily Ann nickel mines were discovered by LionOre. Much of the exploration drilling and development was completed by LionOre which was taken over by Norilsk in 2007. Norilsk Nickel continued mining and developing the underground mines on and off until 2013. Poseidon Nickel purchased the operation from Norilsk in December 2014.
Geology	 Deposit type, geological setting and style of mineralisation. 	The Emily Ann, Maggie Hays and Abi Rose nickel deposits are hosted within the Central Ultramafic Unit are intrusive-style massive and disseminated nickel deposits. The Western Ultramafic Unit, however, is considered to be a Kambalda-Style Komatiite.
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:	 The Lake Johnston drill hole database has developed and been maintained in different software formats for 30 years. It contains data captured by 6,523 drill holes by numerous companies over this period. The latest drill hole information pertaining to this announcement that has not been previously reported is listed as Table 1 in Appendix 2 of this document.
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	 When reporting nickel assay results, a cut- off grade of 0.4% Ni has typically been used to create weighted averages. No metal equivalents are used.



Criteria	JORC Code explanation	Commentary
	 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. 	
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'). 	Nickel widths are reported as down hole lengths at Lake Johnston.
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. 	 Appropriate maps and sections related to this latest Lake Johnston drilling have been included with the announcement.
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. 	 Significant intersections from the recent AC and RC programs are tabulated in Table 1 of the report. Both low and high grades and widths are reported.
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. 	No further substantive exploration data is necessary to support this announcement.
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. 	Further sampling on one meter intervals has been undertaken to determine the extent and grade of the nickel anomalism. Results are awaited