

# ASX Announcement

## Latest Drilling and Assay Results add to Golden Swan

27 July 2021

### KEY POINTS

- Further nickel sulphide intersections within the Golden Swan trend achieved (awaiting assay):
  - Hole PGSD051 - 4.2m nickel sulphide interval comprising 0.8m of massive sulphides and 3.4m of matrix and stringer sulphides
  - Hole PGSD059 - 5.1m sulphide interval comprising 3m of massive and matrix sulphides followed by 2.1m of stringer and coarse blebby sulphides
- Latest Golden Swan assay results received include:
  - Hole PGSD031 - 1.65 m at 2.27% Ni and 0.45% Cu
  - Hole PGSD033 - 2.75m at 1.18% Ni, 4.75m at 1.18% Ni and 8m at 1.35% Ni



Figure 1: 4.25m of massive, matrix and stringer sulphides logged in PGSD051 (awaiting assays)



**Figure 2: Massive and matrix sulphides logged in PGSD059 (sampling underway, awaiting assays)**

**Poseidon Nickel (ASX: POS) (“Poseidon”, “the Company”)** is pleased to provide an update on the progress of the Golden Swan drill program with the latest batch of assays received from two more holes.

Managing Director and CEO, Peter Harold, commented, *“Drilling continues on the resource definition program at Golden Swan with what looks to be another high-grade intersection achieved (assays pending).”*

*Assay results continue to be received for the various intersections confirming the continuity of the mineralisation within the previously defined EM plates and also from intersections outside of the known mineralised envelope indicating the prospectivity of the Southern Terrace.*

*We will continue to release drill hole data as it comes to hand, culminating in the maiden Golden Swan Resource during the September 2021 quarter.”*

## Golden Swan Resource Drilling Program

The Resource Definition drilling program commenced in late April 2021 with the aim of increasing confidence in the continuity of the Golden Swan mineralisation to JORC 2012 Inferred and Indicated levels.

## Current Drilling

Drilling to date continues to indicate a well-developed, competent felsic footwall unit that has resulted in high advance rates. As of 26 July 2021, the program remains ahead of schedule with 57 holes completed and a further two in progress for a total of 15,544m drilled. The appropriate drill hole summary table and relevant JORC 2012 Compliance Tables for the program to date is presented in Appendix 1 and 2.

Drilling continues to delineate and increase understanding of the Golden Swan mineralised zone and the Company remains on track to deliver a maiden Resource before the end of the September quarter (Figure 3).

The assays reported in this announcement are both from holes drilled outside the known mineralised envelope, and do not affect the shape of the Golden Swan mineralised area. PGSD033 was drilled to the north of the modelled plates and confirms closure of the shape at this level. PGSD031 was drilled 90m up plunge from Golden Swan as a DHEM platform and the mineralisation encountered was away from the footwall position and logged as millerite-pyrite.



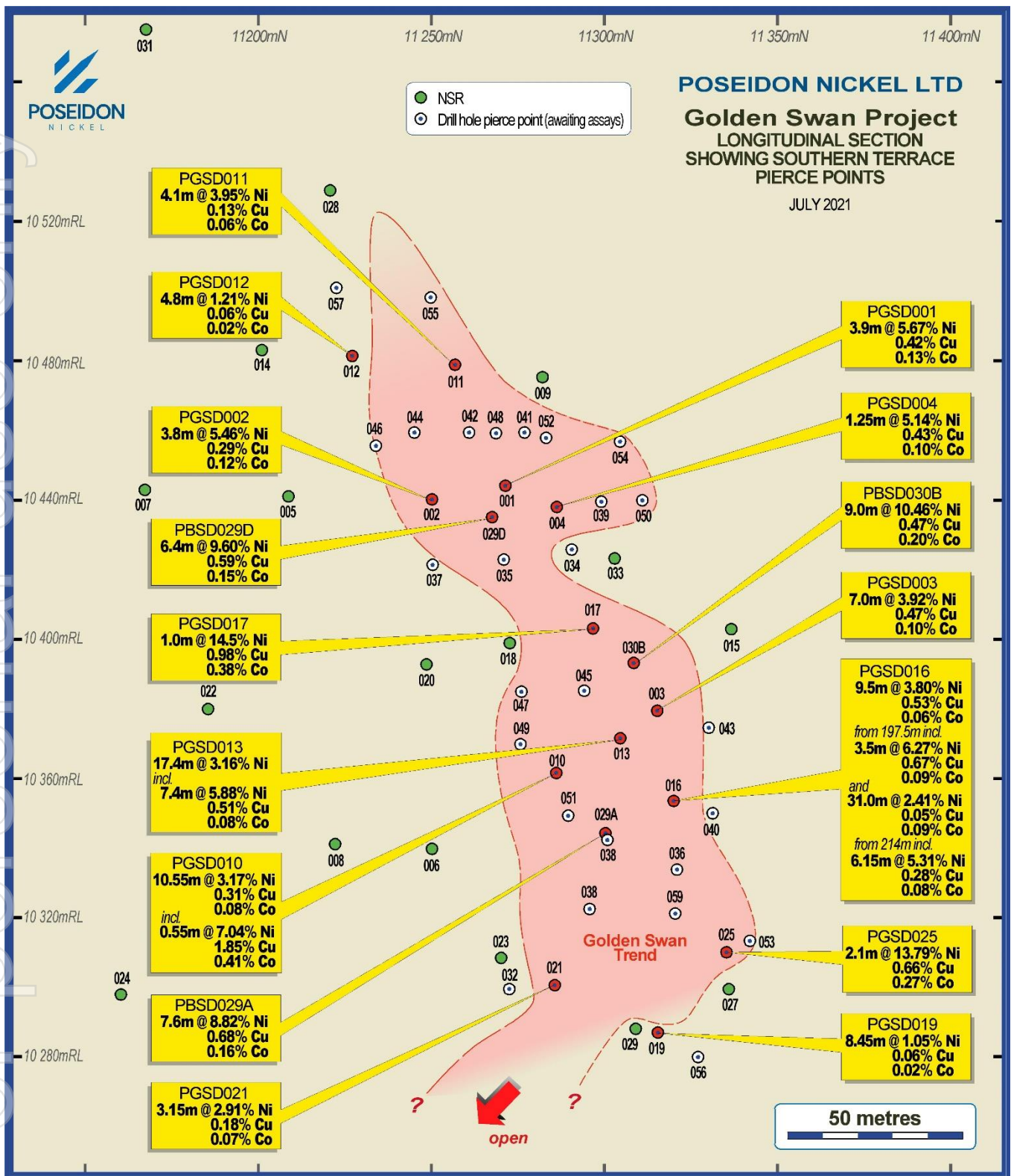


Figure 3: SIMPLIFIED GOLDEN SWAN LONG SECTION SHOWING CURRENT PIERCE POINTS AND SIGNIFICANT DRILL RESULTS

Additionally, 0.8m of massive sulphides together with 3.4m of matrix and stringer sulphides have been intersected in PGSD051 (Figure 1), with another **3m of massive and matrix sulphides with a further 2.1m of blebby sulphides in PGSD059** (Figure 2). The intersections have been logged visually as pentlandite-pyrrhotite with matrix chalcopyrite (Table 1). The Company is awaiting assay results for these intersections.

The Company advises that visual estimates of sulphide material should never be considered a proxy for laboratory analysis which are required to determine grade and widths for geological reporting. Assay results will be announced when they become available.

Table 1: Significant mineralised intersections observed in drill holes PGSD051 and PGSD059

Hole	From	To	Length	Mineralisation Description Sulphide % (visual estimation)
PGSD051	202.3	202.5	0.12	Massive Sulphides. 70% Po-Pe
PGSD051	202.5	202.8	0.16	Stringer sulphides (25% Po-Pe-Cpy) in a strongly foliated, silicified Ultramafic
PGSD051	202.8	203.5	0.47	Massive Sulphides. 70% Po-Pe-Cpy
PGSD051	203.5	204.5	0.62	Stringer sulphides (40% Po-Pe-Cpy) in a strongly foliated, silicified Ultramafic
PGSD051	204.5	205.6	0.69	Matrix sulphides (40% Po-Pe-Cpy) in Ultramafic
PGSD051	205.6	205.9	0.19	Semi massive/matrix sulphides in ultramafic. 45% Pe-Po
PGSD051	205.9	206.4	0.31	Massive sulphides. 80% Po-Pe
PGSD051	206.4	207	0.37	Coarse Blebby sulphides in orthocumulate komatiite
PGSD059	227.4	230.4		Massive sulphides. 90% Po-Pe-Cpy
PGSD059	230.4	232.5		Irregular stringer and blebby sulphides in komatiite

Table 2: All Golden Swan Assay Results to date.

HOLE ID	From (m)	To (m)	Down Hole Interval (m)	Estimated True Width (m)	Ni%	Cu%	Co ppm
PGSD001	169.85	173.75	3.9	3.87	5.67	0.42	1284
inc	169.85	172.9	3.05	3.03	6.72	0.50	1529
inc	170.45	171.15	0.7	0.70	7.31	0.85	3270
PGSD002	171.5	175.3	3.8	3.78	5.46	0.29	1174
inc	172.05	174.3	2.25	2.24	6.65	0.26	1475
inc	172.05	172.4	0.35	0.35	11.30	0.46	3320
PGSD003	179.55	186.55	7	6.06	3.92	0.47	1040
inc	180.15	185	4.85	4.2	4.55	0.29	763
PGSD004	177.6	182	4.4	4.37	2.04	0.17	395
inc	177.6	178.85	1.25	1.24	5.14	0.43	1009
PGSD008	260.3	261	0.7	0.7	1.44	0.07	224
PGSD011	167.9	172	4.1	4	3.95	0.13	558
inc	167.9	170.3	2.4	2.3	5.88	0.19	800
inc	167.9	168.5	0.6	0.6	15.20	0.09	1940
PGSD013	181.2	198.6	17.4	15.07	3.16	0.29	461
inc	181.6	189	7.4	6.4	5.88	0.51	826
inc	181.6	187	5.4	4.7	6.97	0.62	960
inc	181.6	185	3.4	2.9	8.18	0.38	1159
inc	181.6	181.9	0.3	0.26	13.80	0.61	1310
PGSD012	218	222.8	4.8	4.8	1.21	0.06	194
inc	218	218.2	0.2	0.2	4.27	0.09	555
PGSD010	191.45	202	10.55	9	3.17	0.31	754
inc	191.45	197.9	6.45	5.5	4.40	0.44	1088
inc	191.45	194.7	3.25	2.8	5.57	0.62	1572
inc	191.45	193	1.55	1.3	6.44	0.29	2349

	inc	191.45	192	0.55	0.5	7.04	1.85	4130
and		243.6	247	3.4	2.9	1.03	0.05	269
	inc	243.6	244.15	0.55	0.5	3.07	0.12	813
<b>PGSD016</b>		197.5	207	9.5	8	3.80	0.53	572
	inc	197.5	204.2	6.7	5.6	4.86	0.71	717
	inc	198.5	202	3.5	2.9	6.27	0.67	924
	inc	200	201	1	0.8	7.42	0.48	1030
and		214	245	31	26	2.41	0.12	451
	inc	219.25	233	13.75	11.6	3.91	0.19	674
	inc	221	227.15	6.15	5.2	5.31	0.28	792
	inc	222	226	4	3.4	5.69	0.29	713
<b>PGSD017</b>		182.3	183.3	1	0.9	14.50	0.98	3770
<b>PGSD019</b>		269.55	278	8.45	6.5	1.05	0.06	246
	inc	270.3	273	2.7	2.1	1.37	0.08	331
<b>PGSD027</b>		302	305	3	2.1	1.02	0.05	170
	inc	303.5	304.4	0.9	0.6	1.00	0.08	249
<b>PGSD023</b>		279	284	5	3.9	0.65	0.06	262
	inc	283	284	1	0.8	1.11	0.08	276
<b>PGSD021</b>		260.35	266	5.65	4.5	1.97	0.12	472
<b>HOLE ID</b>		<b>From (m)</b>	<b>To (m)</b>	<b>Down Hole Interval (m)</b>	<b>Estimated True Width (m)</b>	<b>Ni%</b>	<b>Cu%</b>	<b>Co ppm</b>
	inc	260.35	263.5	3.15	2.5	2.91	0.18	699
	inc	260.95	261.35	0.4	0.3	8.06	0.59	2590
and		276	283	7	5.5	1.22	0.08	297
	inc	277	281	4	3.1	1.48	0.10	347
<b>PGSD025</b>		246.3	248.4	2.1	1.6	13.79	0.66	2664
	inc	246.3	247.6	1.3	1	12.07	1.01	2546
and		247.6	248.4	0.8	0.6	16.50	0.13	2850
and		279	293	14	10.9	1.16	0.08	262
<b>PGSD033</b>		189.35	192.1	2.75	2.36	1.18	0.13	109
and		216.85	229	12.15		0.94	0.03	165
	inc	219.25	224	4.75		1.18	0.03	203
and		239	247	8		1.35	0.04	152
	inc	241	246	5		1.70	0.05	160
<b>PGSD031</b>		250.2	251.85	1.65		2.27	0.45	1995

**Assays have been received for the following holes which did contained No Significant Assays (NSA):**

*PGSD026 and PGSD029*

*Mineralisation seen within PGSD026 is <0.5% Ni and that seen in PGSD029 is away from the Southern Terrace contact and is consistent with results seen in the Black Swan flows*

**Assays are still pending for the following holes (results due in 2-4 weeks):**

*PGSD032, PGSD034, PGSD035, PGSD036, PGSD037, PGSD038, PGSD039, PGSD040, PGSD041, PGSD042, PGSD043, PGSD044, PGSD045, PGSD046, PGSD047, PGSD048, PGSD049, PGSD050, PGSD051, PGSD052, PGSD053, PGSD054, PGSD055, PGSD056 and PGSD059.*

**Holes Not Assayed**

*PGSD005, PGSD006, PGSD007, PGSD009, PGSD014, PGSD015, PGSD018, PGSD020, PGSD022, PGSD024, PGSD028, PGSD030, PGSD057 and PGSD058.*

## Prospectivity of the Southern Terrace

The Southern Terrace contact is an uneven thermally eroded surface which underlies a significant disseminated nickel sulphide mineralised horizon hosted within the Black Swan komatiite. This highly prospective stratigraphic position could host further undiscovered massive sulphide bodies along its path and remains poorly tested (Figure 4). Especially up-plunge where an ongoing review of historical drilling is showing other mineralised intercepts that appear to be on the Southern Terrace contact and warrant following up as they suggest a larger extension of mineralisation.

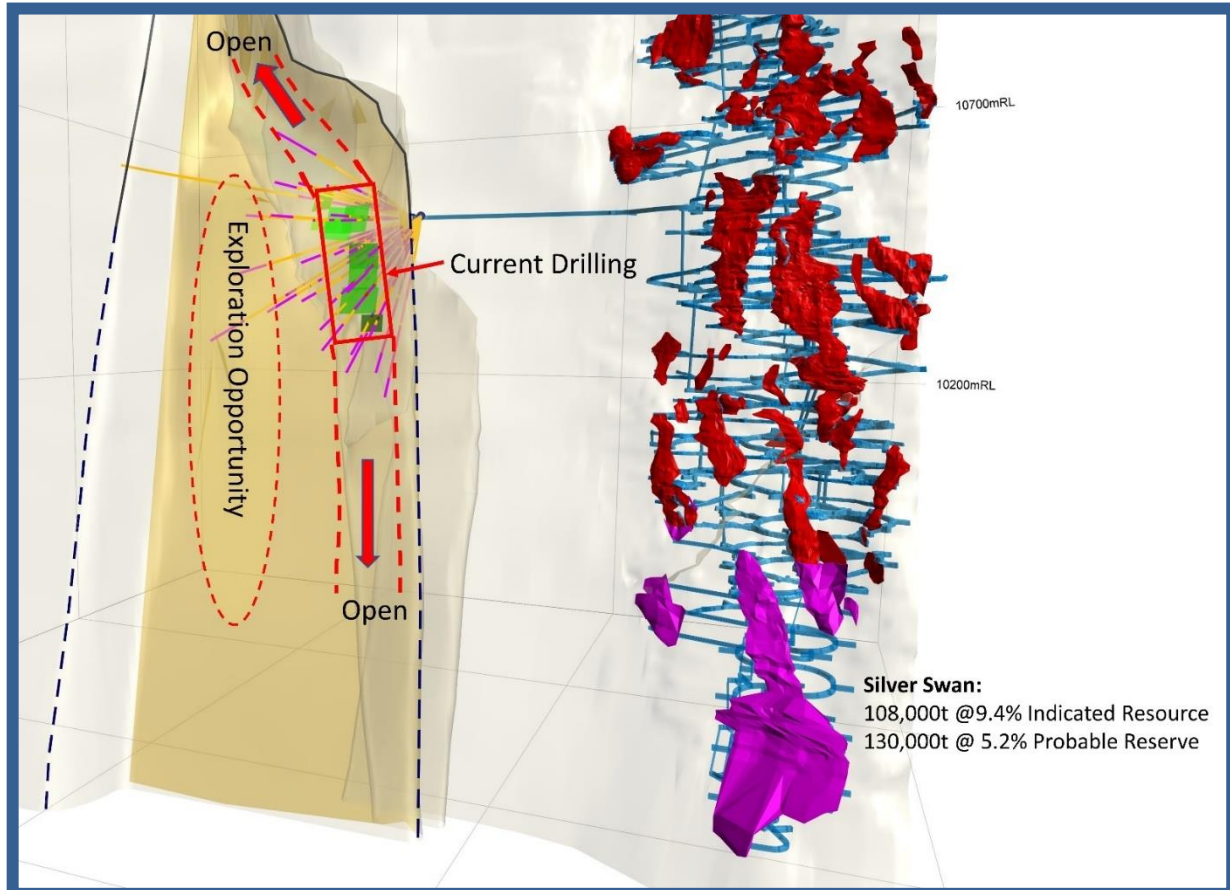


Figure 4: Silver Swan Channel, The Golden Swan Discovery And The Southern Terrace



**Peter Harold**  
 Managing Director & CEO  
 27 July 2021

For further information contact Peter Harold: + 61 (0)8 6167 6600

*This announcement was authorised for lodgement by the Board of Poseidon Nickel Limited.*



## 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 Mr Andrew Pearce, who is an employee of 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 Mr 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 Mr 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 Mr Steve Warriner, who was a full-time employee at Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists and Mr Kahan Cervoj 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 Mr 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 Mr Steve Warriner, who was a full-time employee at Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists and Mr 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 Mr 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 that relates to Mineral Resources at the Windarra Nickel Project and Gold Tailings Project is based on, and fairly represents, information compiled by Mr Steve Warriner, who was a full-time employee at Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists and Mr 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 Pearce, Mr Warriner, Mr Cervoj, Mr Weeks, Mr Glacken 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 Warriner, Mr Cervoj, Mr Weeks, Mr Glacken 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 Golden Swan underground mine.

## About Poseidon Nickel Limited

Poseidon Nickel Limited (**ASX Code: POS**) is a nickel sulphide exploration and development company with three projects located within a 300km radius of 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 where project risk capital and operating costs are low. A critical element of this strategy has been to acquire projects and operations with high levels of geological prospectivity likely to lead to potential substantial extension of the operation's life 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 Abi Rose deposit at Lake Johnston and the recent discovery of the Golden Swan mineralisation at Black Swan. The Company is also undertaking a Definitive Feasibility Study on retreating the gold tailings at Windarra given the strength of the A\$ gold price.



Appendix 1  
Table 3: Drill Hole Summary

CollarID	EAST	NORTH	RL	Dip	Azimuth (True)	TD (m)
PGSD001	10305.4	11303.3	10457.9	-6.2	63.1	210
PGSD002	10305.4	11303.3	10457.9	-5.9	69.7	213
PGSD003	10321.5	11320.8	10457.3	-30.6	55.3	206
PGSD004	10305.4	11303.3	10457.9	-6.9	56.1	218
PGSD005	10305.4	11303.3	10457.9	-6.4	76.4	257
PGSD006	10321.5	11320.8	10457.3	-29.8	68.4	275
PGSD007	10305.4	11303.3	10457.9	-6.5	82	278
PGSD008	10321.5	11320.8	10457.3	-28.3	80.9	312
PGSD009	10305.4	11303.3	10457.9	8.7	64.1	176
PGSD010	10321.5	11320.8	10457.3	-31.5	66.2	257
PGSD011	10305.4	11303.3	10457.9	8.2	71.4	197
PGSD012	10305.4	11303.3	10457.9	8.1	78.7	225
PGSD013	10321.5	11321.8	10458.3	-30.8	61	248
PGSD014	10305.4	11303.3	10457.9	7.2	85.3	243
PGSD015	10305.4	11303.3	10457.9	-17.8	49.6	231
PGSD016	10321.5	11321.8	10458.3	-32.7	51.8	266
PGSD017	10305.4	11303.3	10457.9	-18.5	56	231
PGSD018	10305.4	11303.3	10457.9	-18.7	62.6	222
PGSD019	10321.5	11321.8	10458.3	-39.2	55	308
PGSD020	10305.4	11303.3	10457.9	-17.8	68.6	261
PGSD021	10321.5	11321.8	10458.3	-37.8	61.4	317
PGSD022	10305.4	11303.3	10457.9	-16.9	79.9	330
PGSD023	10321.5	11321.8	10458.3	-38	68	287
PGSD024	10305.4	11303.3	10457.9	-26.5	80.4	389.9
PGSD025	10321.5	11321.8	10458.3	-39	48.5	293
PGSD026	10305.4	11303.3	10457.9	7.8	102	422.7
PGSD027	10321.5	11321.8	10458.3	-45	48.8	308.5
PGSD028	10305.4	11303.3	10457.9	22.3	80.1	263.9
PGSD029	10321.5	11321.8	10458.3	-43.9	54.6	323.4
PGSD030	10321.5	11321.8	10458.3	-48.5	42.8	551.2
PGSD031	10305.4	11303.3	10457.9	32	97	313.9
PGSD032	10321.5	11320.8	10457.3	-42.5	68.7	290.4
PGSD033	10305.4	11303.3	10457.8	-11.8	53.2	254.8
PGSD034	10305.4	11303.3	10457.8	-12	59.2	263.3
PGSD035	10305.4	11303.3	10457.8	-11.6	65.8	248.8
PGSD036	10321.5	11320.8	10457.3	-37.5	53.7	270
PGSD037	10305.4	11303.3	10457.8	-11.2	71.8	250
PGSD038	10321.5	11320.8	10457.3	-35	61	281.5
PGSD039	10305.4	11303.3	10457.9	-6	89.5	225
PGSD040	10321.5	11321.8	10458.3	1	97	224.9
PGSD041	10305.4	11303.3	10457.9	-34	84.4	290.5
PGSD042	10305.4	11303.3	10457.9	1.2	103.8	206.9
PGSD043	10321.5	11321.8	10458.3	-26.6	85.6	233.5

CollarID	EAST	NORTH	RL	Dip	Azimuth (True)	TD (m)
PGSD044	10305.4	11303.3	10457.9	1.1	108.9	260.9
PGSD045	10321.5	11321.8	10458.3	-25	99	212.5
PGSD046	10305.4	11303.3	10457.9	1	113.6	248.9
PGSD047	10321.5	11321.8	10458.3	-24	70.2	245.5
PGSD048	10305.4	11303.3	10457.9	1.2	91	227.9
PGSD049	10321.5	11321.8	10458.3	-28.5	105.5	260.5
9PGSD050	10305.4	11303.3	10457.9	-6	85	231
PGSD051	10321.5	11321.8	10458.3	-34.5	100	269.3
PGSD052	10305.4	11303.3	10457.9	-1	93	210
PGSD053	10321.5	11321.8	10458.3	-36	82	299.3
PGSD054	10305.4	11303.3	10457.9	-1	89	221.8
PGSD055	10305.4	11303.3	10457.9	14.6	107	220
PGSD056	10321.5	11321.8	10458.3	-40.1	51	311.2
PGSD057	10305.4	11303.3	10457.9	13.4	79.3	242.8
PGSD058	10305.38	11303.32	10457.88	-15.6	61	152.0
PGSD059	10321.54	11321.82	10458.3	-36.5	53	257.0

## Appendix 2

### Table 4: Nickel Projects Mineral Resources Statement

Nickel Sulphide Resources		JORC Compliance	MINERAL RESOURCE CATEGORY												
			Cut Off Grade	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
BLACK SWAN PROJECT															
Black Swan	2012	0.40%	9,600	0.68	64,900	21,100	0.54	113,800	30,700	0.58	179,000	0.01	4,200	NA	-
Silver Swan	2012	4.50%	108	9.4	10,130	61	9.7	5,900	168	9.5	16,030	0.19	316	0.4	679
LAKE JOHNSTON PROJECT															
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
WINDARRA PROJECT															
Mt Windarra	2012	0.90%	922	1.56	14,500	3,436	1.66	57,500	4,358	1.64	72,000	0.03	1,200	0.13	5,700
South Windarra	2004	0.80%	772	0.98	7,500	-	-	-	772	0.98	7,500	NA	-	NA	-
Cerberus	2004	0.75%	2,773	1.25	34,600	1,778	1.91	34,000	4,551	1.51	69,000	NA	-	0.08	3,600
TOTAL															
Total Ni, Co, Cu Resources	2004 & 2012	-	16,775	1.03	173,530	27,275	0.81	221,300	44,049	0.90	395,530	0.02	7,516	0.03	13,379

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 modelled to produce the Ore Reserves

- Black Swan Resource as at 22 July 2014 (see ASX announcement "Poseidon Announces Black Swan Mineral Resource" released 4<sup>th</sup> August 2014)
- Silver Swan Resource as at 5 August 2019 (see ASX announcement "Silver Swan Resource Upgrade" released 5<sup>th</sup> August 2019)
- Maggie Hays Resource as at 17 March 2015 (see ASC announcement "50% Increase in Indicated Resources at Lake Johnston" released 17<sup>th</sup> March 2015)
- Mt Windarra Resource as at 7 November 2014 (see ASX announcement "Poseidon Announces Revised Mt Windarra Resource" released 7<sup>th</sup> November 2014)
- South Windarra and Cerberus Resource as at 30 April 2013 (see ASX announcement "Resource Increase of 25% at Windarra Nickel Project" released 1<sup>st</sup> December 2011)

The Company is not aware of any new information or data that materially affects the information in the relevant market announcements. All material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

## ORE RESERVE STATEMENT

### Table 5: Nickel Projects Ore Reserve Statement

Nickel Sulphide Reserves	JORC Compliance	ORE RESERVE CATEGORY		
		PROBABLE		
		Tonnes (Kt)	Ni% Grade	Ni Metal (t)
SILVER SWAN PROJECT				
Silver Swan Underground	2012	130	5.2	6,800
Black Swan Open pit	2012	3,370	0.63	21,500
TOTAL				
Total Ni Reserves	2012	3,500	0.81	28,300

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.

Silver Swan Underground Reserve as at 26 May 2017 (see ASX announcement "Silver Swan Definitive Feasibility Study" released 26<sup>th</sup> May 2017).

Black Swan Open Pit Reserve as at 5 November 2014 (see ASX announcement "Poseidon Announces Black Swan Ore Reserve" dated 5<sup>th</sup> November 2014).

The Company completed an upgrade to the Silver Swan Indicated Resource in 2019 which was based upon the 2015 Silver Swan Resource Estimate (refer to Table 1 above for the new Silver Swan Resource estimate). At this point it is not known the impact the update to the Silver Swan Resources will have on the Silver Swan Reserve.

The Company is not aware of any new information or data that materially affects the information in the relevant market announcements for the Black Swan Open Pit Reserve. All material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed



## Appendix 3

### JORC Code, 2012 Edition – Table 1 report template

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>NQ2 core was sampled at least 10m either side of logged mineralisation by cutting the core in half using a Corewise core saw. Samples were divided into logged domains, with no individual sample being greater than 1.2m or less than 0.3m. Appropriate QAQC standards and blanks from Geostats were inserted, and duplicates taken in quarter core at selected intervals where mineralisation variability warranted it.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was conducted by Webdrill using the Diamec Smart 6 Mobile Carrier rig. The hole was drilled in NQ2 and the core was orientated using the Trucore Orientation Tool. The hole was surveyed using the DHS DeviGyro OX tool.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Core was recovered via 3m core tube used behind drill bit, and then transferred from tube to core trays. Recovery was calculated on the amount recovered versus the amount drilled. Depths and recovery were recorded on wooden blocks placed in the core trays by the driller at the end of every run. Lost core was also recorded in this way. Core recovery was good, even through frequent broken ground.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Core was logged into Geobank Mobile. Logging was done for Geology, structure, RQD and a check against drilling records for recovery. Holes were validated before being exported to the Geobank database.</li> <li>After logging, all core was photographed in both dry and wet images. The photographs are stored on site.</li> </ul>
Sub-sampling techniques and	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary</li> </ul>	<ul style="list-style-type: none"> <li>Core was sampled as half core, unless duplicates were taken which required samples to be quarter core.</li> </ul>

Criteria	JORC Code explanation	Commentary
sample preparation	<p><i>split, etc and whether sampled wet or dry.</i></p> <ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Samples have been dispatched to SGS lab in Perth.</li> <li>After crushing and pulverising they will be analysed by a 4-acid Ore grade digest with ICP-OES finish</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling was conducted by the logging geologists who are employees of Newexco.</li> <li>Data is collected using Geobank Mobile which utilises a validation function before data can be exported into the Geobank database</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All collar surveys were completed to an accuracy of <math>\pm 10</math> mm. A local grid based on seven known MGA references was created. The Department of Land Information (formerly the Department of Land Administration) benchmark UO51 on the Yarri Road opposite 14 Mile Dam was used to tie the survey control stations to the Australian Height Datum (AHD). A height datum of AHD + 1000 m was adopted for the Black Swan project</li> <li>All holes are surveyed using the DHS Devishot tool. Shots were take every 2 or 3m on in and out runs across the entire length of the hole at every survey interval. The tool is True North seeking and has an accuracy of <math>\pm 1</math> degree of dip and azimuth. In tool analysis gave an indication of whether the survey passed or failed and successive surveys were overlayed in Devi Cloud to visually check deviation between surveys with an average survey used as the base for modelling.</li> <li>The correction from True North to Mine Grid is +35 degrees to Azimuth.</li> </ul>
Data spacing	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>The holes drilled form part of a program</li> </ul>

Criteria	JORC Code explanation	Commentary
and distribution	<ul style="list-style-type: none"> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	that is intended to bring the mineral occurrence to Indicated status. The nominal spacing is 20x20m, with infill drilling to be conducted as required to comply with resource modelling requirements
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drill core is oriented using the Trucore Ori</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>NA.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews were completed during drilling</li> </ul>

## 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	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Black Swan open-pit is centred on M27/39 and extends into M27/200. Silver Swan is wholly located on M27/200. They are located 42.5km NE of Kalgoorlie. They are registered to Poseidon Nickel Atlantis Operations Pty Ltd, a wholly owned subsidiary of Poseidon Nickel Ltd, following the purchase of the assets. Golden Swan</li> <li>Historical royalties of 3% NSR exist over the minerals produced</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The Silver Swan Mine was discovered by MPI Mines Ltd, then was acquired by LionOre in 2004. Much of the exploration drilling and development was completed by these 2 companies. In turn LionOre was taken over by Norilsk in 2007 and continued mining and developing the underground mine at Silver Swan. Poseidon Nickel purchased the operation from Norilsk in late 2014</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Golden Swan deposit is a Kambalda style komatiite hosted nickel deposit.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>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:               <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The current drill hole information is listed as Table three in Appendix One of this document</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul style="list-style-type: none"> <li>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 and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>When reporting Golden Swan assay results, a cut off grade of 0.5% Ni has been used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Mineralised widths are reported as down hole lengths.</li> <li>Due to the apparent variability of the Southern Terrace, true width cannot be stated with certainty at this time.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No significant new discovery reported. All current drilling is shown on the Long Section (Figure 3) with significant intercepts highlighted on the diagram and included as Table 1. Collar location and drill dip and azimuth are included as Table 3.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Mineralised intervals &gt;0.5% from each assay received for this announcement are shown in Table 1.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No further observations to be reported at this stage.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Resource drilling on the Golden Swan deposit will be completed in FY 2021, and as part of that program further diamond drilling will be done in the area known as the Southern Terrace in order to extend the known mineralisation of the Golden Swan deposit.</li> </ul>