

#### STRATEGIC ASSETS, MULTI-COMMODITY

Investor Presentation

5 August 2024

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#### COMPETENT PERSON STATEMENTS

The information in this presentation that relates to Geology and Mineral Resources is based on information compiled and/or reviewed by Mr John Hicks, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hicks has sufficient experience which is relevant to the style of mineralisation and the deposit under consideration, and to the activity which he is 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). Mr Hicks is Chief Geological Consultant of the Company. Mr Hicks is taking responsibility for the quality of the resource estimation data and the collection and processing of the 2023 resource estimation data. Details for the Competent Persons responsible for the individual Mineral Resource estimates are disclosed in the respective Mineral Resource estimates contained in the report.

The information in this presentation that relates to metallurgical testwork, process opex and process plant capex is based on information compiled and/or reviewed by Mr Peter Allen, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Allen has sufficient experience which is relevant to the metallurgy and processing method under consideration, to qualify as a Competent Person as defined in the JORC Code. Mr Allen is a full-time employee of GR Engineering Services Limited. Mr Allen has consented to the inclusion in the report of the matters based on his information in the form and context, which it appears.

The information in this presentation that relates to open pit mining methods and open pit Ore Reserve is based on information compiled and/or reviewed by Mr Craig Mann, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Mann has sufficient experience which is relevant to the mining methods and modifying factors under consideration, to qualify as a Competent Person as defined in the JORC Code. Mr Mann is a full-time employee of Entech Pty Ltd. Mr Mann has consented to the inclusion in the report of the matters based on his information in the form and context, which it appears.

The information in this presentation that relates to underground mining methods and underground Ore Reserves for Silver Swan and Golden Swan is based on information compiled and/or reviewed by Mr Charles Walker, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Walker has sufficient experience which is relevant to the mining methods and modifying factors under consideration, to qualify as a Competent Person as defined in the JORC Code. Mr Walker is a full-time employee of Entech Pty Ltd. Mr Walker has consented to the inclusion in the report of the matters based on his information in the form and context, which it appears.

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, Chief Geologist, who was a full-time employee at Poseidon Nickel, and is a Member of The Australian Institute of Geoscientists and Mr David Reid who is a full-time employee of Golder Associates Pty Ltd and is a Fellow of the Australasian Institute of Mining and Metallurgy. Steve Warriner and David Reid have sufficient experience which is relevant to the style of mineralisation and the deposit 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). Mr Warriner and Mr Reid consented to the inclusion in the report of the matters based on his information in the form and context, which it appears.

The information in the updated Gold Tailings Project which relates to Mineral Resources is based upon details compiled by Ian Glacken, who is a Fellow of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Ian Glacken is an employee of Optiro Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and the deposit under consideration, and to the activity which he is 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). Mr Glacken consented to the inclusion in the report of the matters based on his information in the form and context, which it appears.

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.

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

#### 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

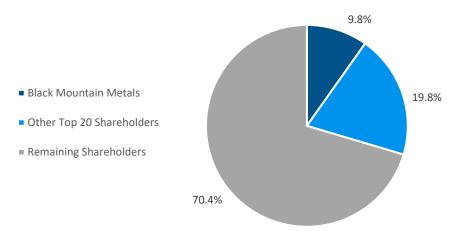
Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change, without notice, as are statements about market and industry trends, which are based on interpretation of current market conditions. Forward looking 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.

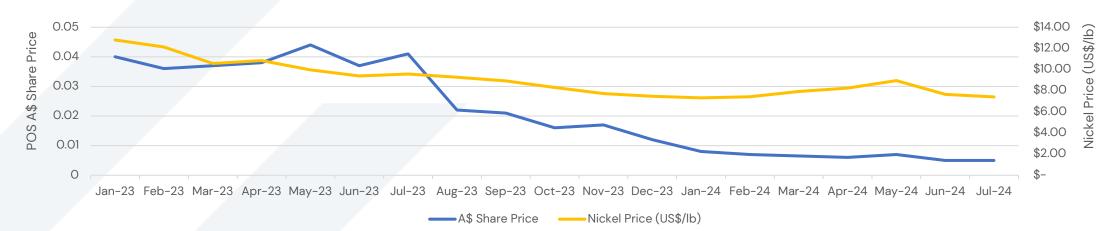
## **CORPORATE STRUCTURE**

Capital Structure/Enterprise Value								
ASX Code	POS							
Shares on Issue	3.7B							
Share Price (2 August 2024)	\$0.004							
Market Cap	~\$15M							
Cash (30 June 2024)	\$1.4M							

Shareholder Split (No. Shares)



#### Share Price Performance (1.5 years)



### **EXPERIENCED BOARD & MANAGEMENT**

**Board of Directors** 

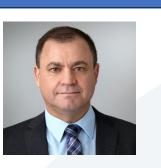
#### Combined >100 years of metals exploration and mining experience



**PETER HAROLD** Non-Executive Chair

Peter is a process engineer with over 30 years corporate experience in the minerals industry, specialising in financing, marketing, business development and general corporate activities.

He was previously the founding Managing Director of Panoramic Resources. operator of the Savannah and Lanfranchi nickel mines.



PETER MUCCILLI Non-Executive Director

Peter is a geologist with over 30 years of extensive exploration, development and operational experience in the resources sector, particularly nickel, gold, zinc and lead.

Peter was formerly Managing Director and Chief Executive Officer for Mincor Resources NL.





Non-Executive Director

Warren is a highly experienced metallurgist and mineral economist who has held numerous board and senior executive positions within the resources sector.

His extensive experience includes financing, developing and operating of base metal and gold projects.



#### **BRENDAN SHALDERS**

Chief Executive Officer

Brendan is an experienced mining executive with over 20 years experience in the mining and mining services industries. He has extensive experience in strategy formation, corporate finance, risk management, leadership and business development.

Brendan was CFO at Poseidon prior to transitioning to CEO and has in depth knowledge of the Company and its projects.



**Executive Team** 

MARK MULLER Chief Consulting Geologist

Mark is a seasoned geologist with a wealth of experience spanning over 30 years, specializing in base metals and gold.

Prior to founding consulting firm MGSC, he worked for various mining companies across Australia, most recently as Geology Manager at Mincor Resources NL.

Peter Muccilli and Mark Muller are co-recipients of the 2020 AMEC Prospector of the Year Award for the discovery of Mincor's Cassini deposit

## **THREE KEY ASSETS**





#### BLACK SWAN (100%)

- Resources 28.9Mt @ 0.77% Ni for 222kt Ni<sup>1</sup>
- Strategic 2.2Mtpa mill and associated infrastructure (on C&M)
- BFS released Nov 2022, awaiting supportive nickel price
- Strategically located near Kalgoorlie, an area short gold processing capacity

#### LAKE JOHNSTON (100%)

- Resources 3.5Mt @ 1.5% Ni for 52kt Ni<sup>1</sup>
- 1.5Mtpa mill and associated infrastructure (on C&M)
- Emerging Lithium province with known lithium bearing pegmatites on POS ground



#### WINDARRA (100%)

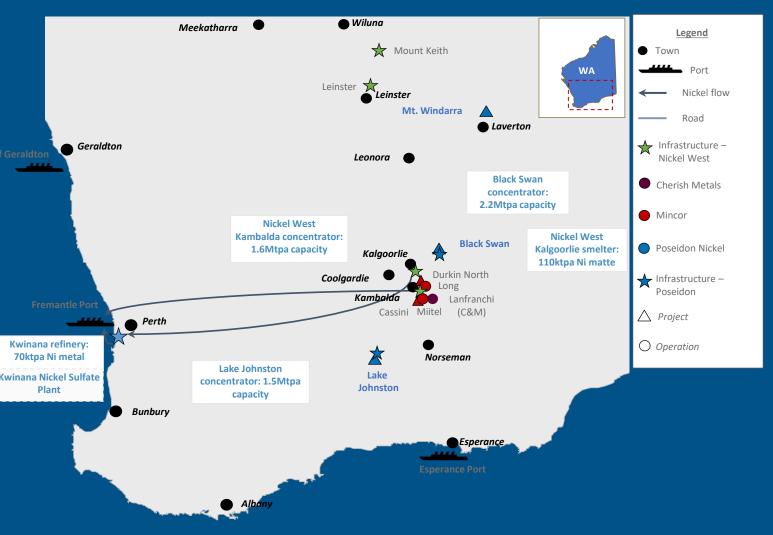
- Resources 9.7Mt @ 1.5% Ni for 148.5kt Ni<sup>1</sup>
- Strategic gold tailings resource 186kOz Au<sup>1</sup>
- Agreement with Encore Minerals to develop Windarra tailings
- Untested newly identified nickel channels
- Gold in soil anomalies identified from historic programs



### **STRATEGIC ASSETS IN MAJOR MINING REGIONS**

- Poseidon owner of two concentrators in the Kambalda region (BHP only other owner)
- Projects include significant infrastructure, regulatory approvals
- Close to road, rail and port access infrastructure
- Plants amenable to processing other commodities (i.e. Au, Li)
- Attracting interest from 3<sup>rd</sup> parties seeking processing capabilities. Advisor appointed





# BLACK SWAN (100%)

- 2.2Mtpa concentrator and associated infrastructure
- ~222kt Ni resource<sup>1</sup>
- Low cost option for 150 rooms in Kalgoorlie
- Mining, regulatory and environmental approvals in place
- Sufficient grid power and water access
- Nickel BFS released November 2022
- Proximal to nickel and gold resources without processing capability

<sup>1</sup>Refer Resource tables at end of this presentation **POSEIDON NICKEL** 

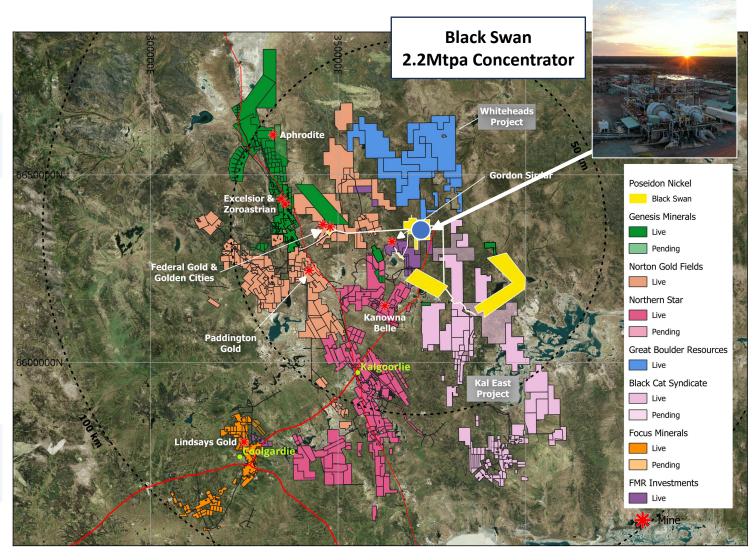


#### Black Swan – Significant Infrastructure

### **BLACK SWAN – LOCATED IN GOLD MINING REGION**

- Black Swan concentrator is amenable to processing gold<sup>1</sup>
- Surrounded by >1Moz gold resources without processing capability – a plausible low-cost option to unlock significant value
- Potential for Poseidon to partner with nearby gold peers for future production opportunity





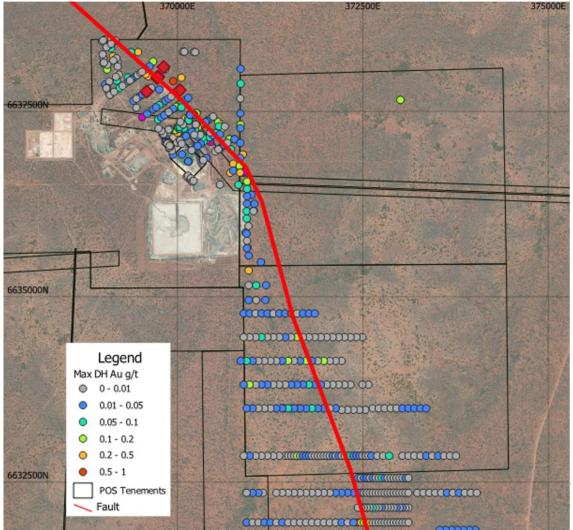
**Proximal Gold Peers to Black Swan** 

## **BLACK SWAN – EARLY–STAGE GOLD PROSPECTIVITY**

- New 6.5km long gold trend identified at Black Swan
- Gold trend marked by coincident maximum gold in hole results and gold in soil anomalies identified on neighbouring tenements to the north
- Limited gold focused exploration only 5% of drill assays have tested for gold
- Drill intersections grading up to 6.41g/t Au<sup>1</sup>
- Numerous gold nuggets located



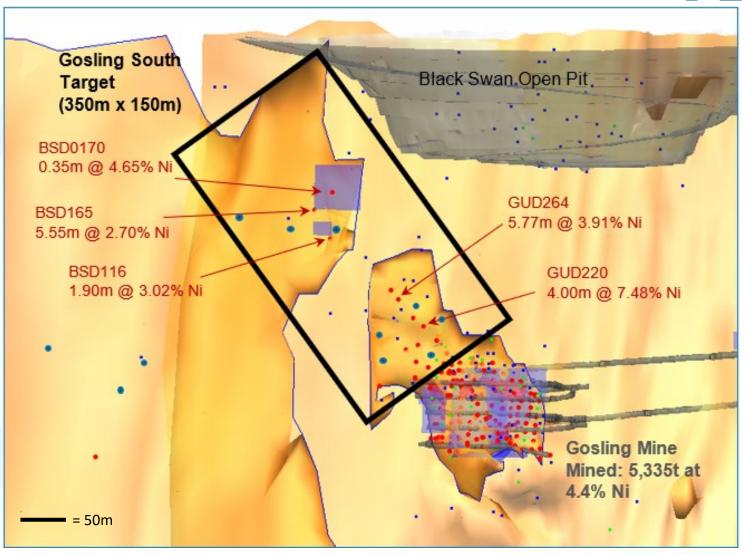
Gold nuggets at Black Swan



Maximum downhole au and interpreted fault location at Black Swan

## **BLACK SWAN – LOW COST, NEAR SURFACE NICKEL TARGETS**

- Two highly prospective near surface high-grade nickel targets, Gosling South and Cygnet South, proximal to infrastructure
- Any high-grade nickel discovery would materially improve BFS metrics
- Once the outlook for nickel improves. Company plans to undertake low-cost surface drilling to test these targets



Near Surface Nickel Targets at Black Swan<sup>1</sup>

# LAKE JOHNSTON (100%)

- 1.5Mtpa concentrator and associated infrastructure
- ~52kt Ni resource<sup>1</sup>
- 200 person camp & airstrip camp currently being used by proximal exploration peers
- Mining, regulatory and environmental approvals in place
- Asset well maintained, near term development option



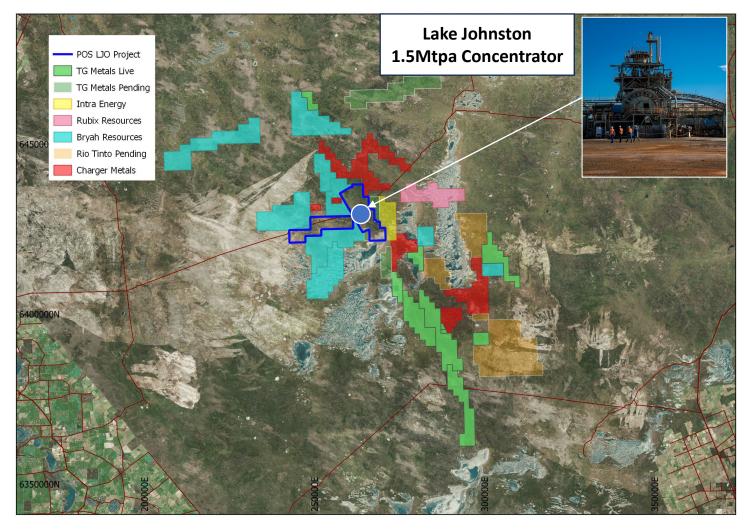
#### Lake Johnston – Significant Infrastructure

<sup>1</sup> Refer Resource tables at end of this presentation

## LAKE JOHNSTON – LITHIUM PROVINCE

- Lake Johnston concentrator is amenable to processing lithium<sup>1</sup>
- Central to a growing lithium province – no other processing option
- Spodumene discoveries by TG Metals and Charger Metals proximal
- Rio Tinto recently entered >\$50M farm-in with Charger Metals
- Potential for Poseidon to partner with nearby lithium peers for future production

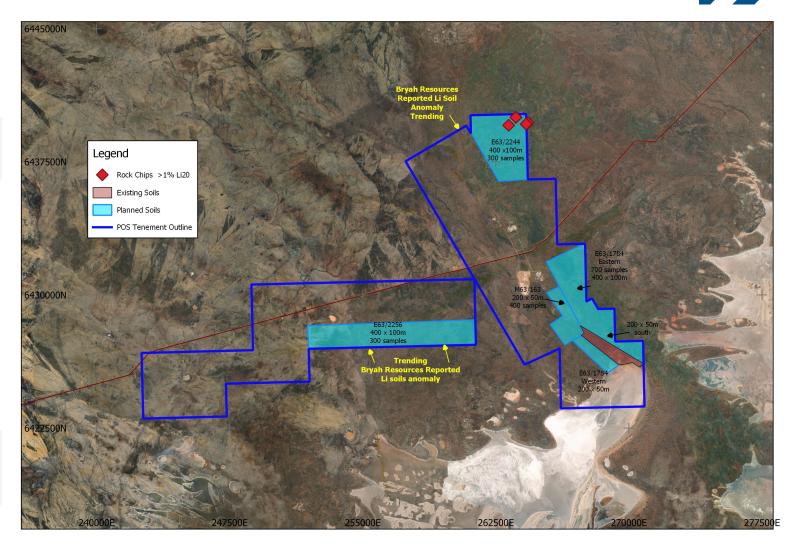
<sup>1</sup> Refer to ASX Announcement "Poseidon & Kidman Move Closer to Lithium Production" dated 27 July 2016.



Proximal Lithium Peers to Lake Johnston

## LAKE JOHNSTON – MULTIPLE LITHIUM TARGETS

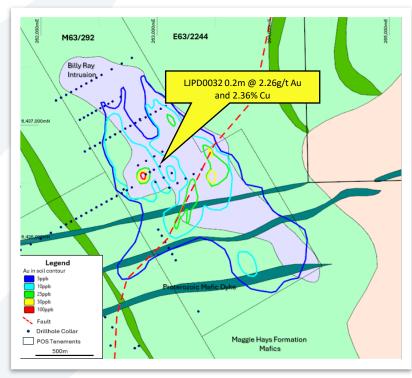
- Soil sampling identified broad lithium anomaly over 3km strike
- Promising lithium grades >100ppm Li<sub>2</sub>O in soils returned (consistent with region)<sup>1</sup>
- Farm-In Agreement on two tenements with outcropping lithium bearing pegmatites (2.80% up to 3.85% Li<sub>2</sub>O)<sup>2</sup>
- Lithium discovery highly leveraged to plant / infrastructure
- Next step to infill and expand soil sampling focusing on lithium anomalies



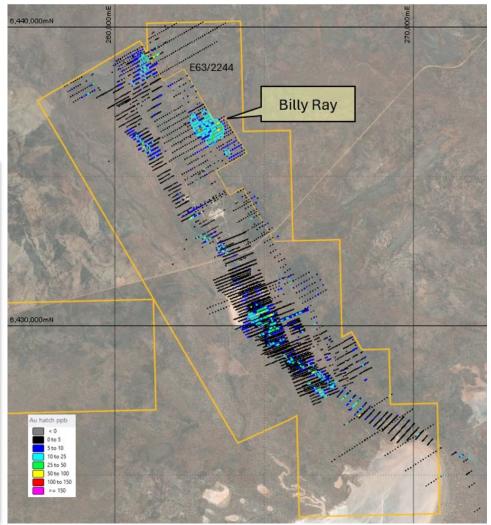
Lithium Occurrences at Lake Johnston and Proposed Soil Sampling Zones

## LAKE JOHNSTON – LARGE GOLD ANOMALY

- Large open coherent gold in soil anomaly confirmed at Billy Ray, measuring 1.2km by 0.9km, with peak value 146 ppb Au<sup>1</sup>
- Anomaly is open eastwards towards the recently acquired Mantis JV tenement, E63/2244
- Limited historic drilling focused on nickel sulphide mineralisation located along the western margin of anomaly
- Best gold intercept 0.2m
  @ 2.26g/t Au and 2.36%
  Cu from 149.62m<sup>1</sup>



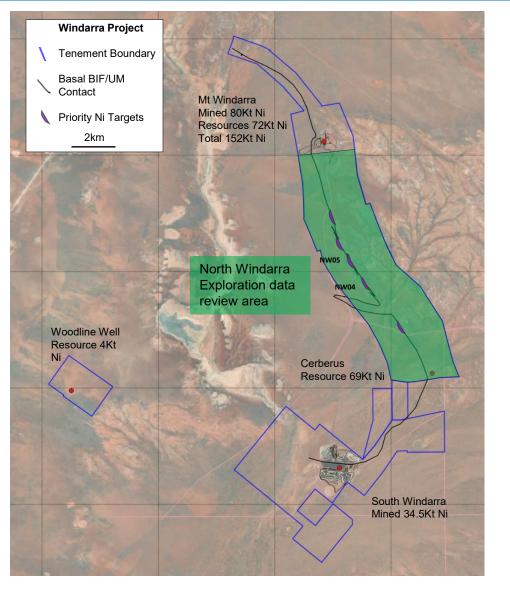
**Billy Ray Gold Anomaly** 



Geochemical soil sampling showing gold anomaly at Billy Ray

# WINDARRA (100%)

- Existing 150kt Ni resource<sup>1</sup>
- Six new nickel sulphide channels identified at Windarra
- High priority targets NW05 and NW04 poorly drill tested with potential shallow mineralisation
- Proposed gold and nickel soil sampling program with follow-up shallow reconnaissance drilling
- Only 10km of total 21km strike length assessed for nickel – 11km of opportunity remaining



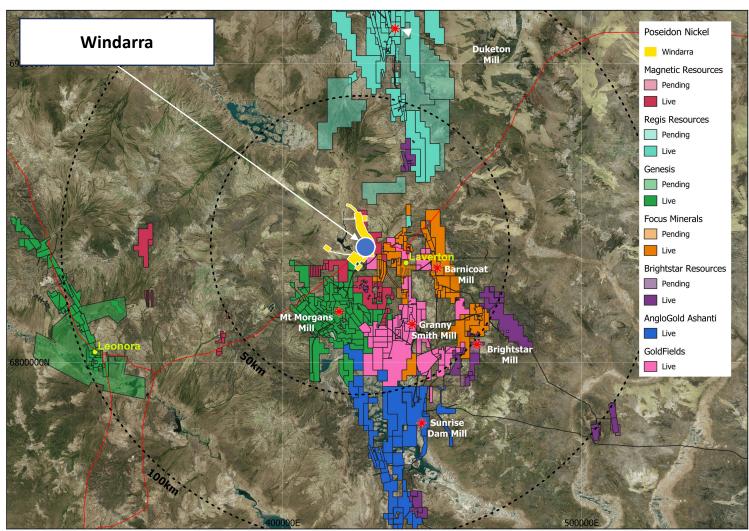
Northern Windarra Nickel Targets and Channel Structure

<sup>1</sup> Refer Resource tables at end of this presentation

#### WINDARRA – MAJOR GOLD PRODUCING REGION

- Windarra located in prominent Laverton gold mining region
- Windarra is highly prospective for gold<sup>1</sup>
- Any gold discovery at Windarra is highly leveraged to surrounding processing facilities



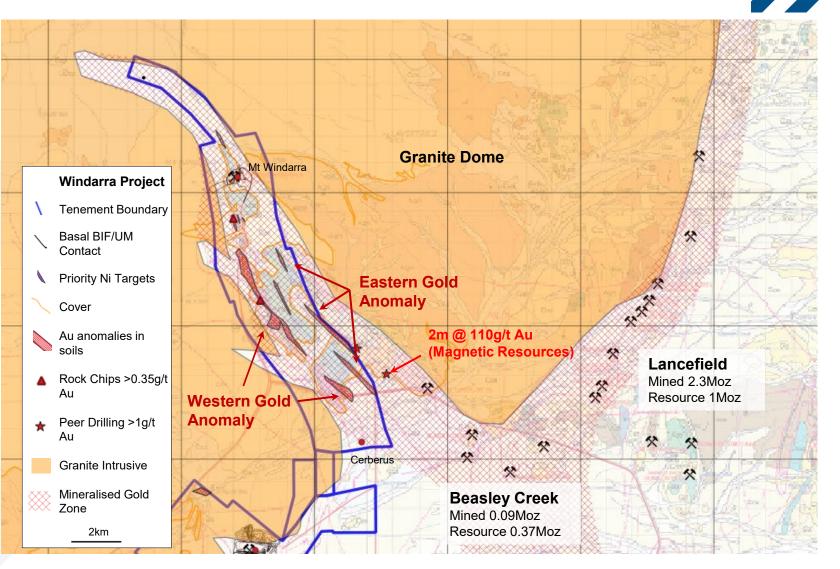


**Proximal Gold Peers to Windarra** 

## WINDARRA – MULTIPLE GOLD OCCURRENCES

- Historic gold in soil anomalies
- 2m @ 110g/t Au intersection located proximal to Windarra<sup>1</sup>
- Terminated Windarra State Agreement (2022), allows mining of other commodities
- Low-cost programs ready to advance gold exploration
- Regional players include Genesis, Regis, Goldfields, Anglo, Magnetic, Brightstar and Focus

<sup>1</sup> Refer to ASX announcement from Magnetic Resources (ASX: MAU) "Bonanza Grades of 2m @110g/t Gold from Historical Drilling at the Marabou Project" dated 18 April 2016.



#### Mineralised Gold Zone Proximal to Windarra and Windarra Gold Anomalies

### WINDARRA – GOLD TAILINGS & WATER ACCESS

- ~180,000 oz Au resource in tailings<sup>1</sup>
- Gold tailing DFS released July 2020<sup>1</sup>, Pretax NPV<sub>8</sub> \$22.8M @ A\$2,500/oz gold price
- Today's gold price >A\$3,500/oz, 40% uplift from DFS
- Recently entered agreement with Encore Minerals to process Windarra gold and nickel tailings
- Water access arrangement with Genesis progressing

1 Refer to ASX Announcement "Robust Pre-Feasibility Study Completed for Windarra Gold Tailings Project" dated 22 June 2020.



### WHY INVEST?

- Future opportunity to re-rate by progressing exploration and business development opportunities
- Significant infrastructure two processing plants with 3.7Mtpa capacity located in WA
- Multiple commodities Ni Li Au
- Black Swan advanced nickel project with gold processing optionality and exploration potential
- Black Swan (regional) Genesis, BC8, FMR Investments, Horizon, Norton Goldfields, Northern Star
- Lake Johnston nickel with material lithium and gold optionality
- Lake Johnston (regional) Rio Tinto, Bryah, Charger Metals, TG Metals, Develop, MinRes
- Windarra nickel project with diverse gold upside
- Windarra (surrounds) Goldfields, AngloGold, Genesis, Regis, Magnetic, Focus, Brightstar
- Experienced board





- T: +61 (0) 6167 6600
- E: admin@poseidon-nickel.com.au
- W: poseidon-nickel.com.au
- ASX: POS

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@POSEIDON-NICKEL

## NICKEL MINERAL RESOURCES

#### **Table 1: Nickel Projects Resources Statement**

	JORC Complia nce	Grade	MINERAL RESOURCE CATEGORY															
Nickel Sulphide Resources			MEASURED			INDICATED			INFERRED		TOTAL							
			Tonnes (Kt)	Ni% Grade	Ni Metal (t)	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)
BLACK SWAN PROJECT																		
Black Swan	2012	0.4%	800	0.78	7,000	15,100	0.73	111,000	10,400	0.69	71,000	26,300	0.72	189,000	0.02	4,000	0.03	7,900
Silver Swan	2012	1.0%	-	-	-	138	9.00	12,450	8	6.00	490	146	8.80	12,940	0.16	240	0.36	530
Golden Swan	2012	1.0%	-	-	-	112	4.70	5,200	48	2.20	1,050	160	3.90	6,250	0.08	120	0.30	480
Silver Swan Tailings	2012	NA	675	0.92	6,200	-	-	-	-	-	-	675	0.92	6,200	0.07	460	0.04	270
Stockpiles	2012	0.4%	-	-	-	1,200	0.49	5,900	400	0.53	1,900	1,600	0.50	7,800	NA	NA	NA	NA
LAKE JOHNSTON PROJECT																		
Maggie Hays	2012	0.8%	-	-	-	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	0.9%	-	-	-	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	0.8%	-	-	-	722	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	-	NA	-
TOTAL																		
Total Ni, Co, Cu Resources	2004 &2012		1,475	0.84	13,200	23,600	0.98	233,500	17,000	1.03	176,000	42,100	1.00	422,700	0.02	7,800	0.05	18,300

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

•Black Swan Resource as at 7 June 2023 (see ASX announcement "Updated Black Swan Disseminated Resource provides more nickel supporting restart" released 7 June 2023)

•Silver Swan Resource as at 27 April 2022 (see ASX announcement "Updated Silver Swan Resource underpins significant increase in high-grade Indicated resource base" released 27 April 2022)

•Golden Swan Resources as at 27 October 2021 (see ASX announcement "Golden Swan Maiden Resource" released 27 October 2021).

•Silver Swan Tailings Resource as at 15 September 2021 (see ASX announcement "Silver Swan Tailings – Maiden Resource Estimate" released 15 September 2021)

•Maggie Hays Resource as at 17 March 2015 (see ASC announcement "50% Increase in Indicated Resources at Lake Johnston" released 17 March 2015)

•Mt Windarra Resource as at 7 November 2014 (see ASX announcement "Poseidon Announces Revised Mt Windarra Resource" released 7 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 December 2011)

•Black Swan Surface Stockpiles as at 4 August 2014 (see announcement "Poseidon Announces Black Swan Mineral Resource" including surface stockpiles released 4 August 2014)

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.

#### **Table 2: Gold Projects Resources Statement**

Windarra Gold Tailings												
INDICATED												
	Tonnes (t)	AU (g/t)	Au (oz)	Ag (g/t)	As (ppm)	CU (ppm)	Ni (ppm)					
North Dam	3,902,000	0.78	98,000	1.9	1,805	365	975					
South Dam	850,000	0.50	14,000	0.6	645	355	2,533					
Total	4,752,000	0.73	112,000	1.7	1,600	363	1,250					
	INDICATED											
	Tonnes (t)	AU (g/t)	Au (oz)	Ag (g/t)	As (ppm)	CU (ppm)	Ni (%)					
Central Dam	6,198,000	0.37	74,000	n/a	435	270	0.3					

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

Windarra Gold Tailings North and South Dams Resource: no cut-off grade has been used to report the resource, as potential mining method dictates removal of the entire dams. a dry bulk in situ density of 1.6 t/m3 has been used to derive tonnages. resource numbers in Table 3A may not sum exactly due to rounding.

Windarra Gold Tailings central Dam Resource: No cut-off grade has been used to report the resource, as the potential mining method dictates removal of the entire dam down to a specified elevation. The mineralisation has been reported above a flat elevation of 446 mRL; there are tailings below this level but these have been shown by drilling to contain no gold, and it is anticipated that the proposed mining method will not treat material below this elevation. A dry bulk in situ density of 1.6 t/m3 has been used to derive tonnages. Resource totals may not sum exactly due to rounding.

Central Dam Resource as at 22 June 2020 (see ASX announcement "Gold Tailings Resource at Windarra updated to JORC 2012 Indicated" 22 Jun 2020).

North and South Dam Resource as at 23 July 2021 (see ASX announcement "Windarra Gold Tailings Feasibility Study Highlights Robust Project" 23 Jul 2021).

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