

# GEOTECHNICAL DIAMOND HOLE TO DE-RISK BAKER DECLINE

24 AUGUST 2023

#### **KEY POINTS**

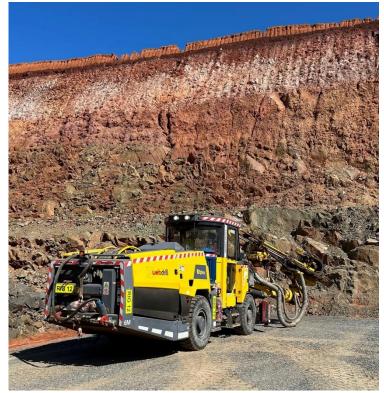
- Underground drill rig mobilised to West Idough pit
- Diamond drill hole to mirror path of planned decline
- Program to collect key geotechnical data which will complement and enhance Lunnon Metals' de-risking strategy

Lunnon Metals Limited (**ASX: LM8**) (the **Company** or **Lunnon Metals**) is pleased to announce that Webdrill Australia Pty Ltd (**Webdrill**) has been awarded a contract and mobilised to site to complete a geotechnical diamond drill hole at the Baker deposit, part of the Company's Kambalda Nickel Project (**KNP**). The drill program, which will be collared in the West Idough open pit, has been planned to collect data from a hole that mirrors the path of the decline, as designed in the recently announced Baker Preliminary Feasibility Study (**PFS**)

report (see ASX announcement 22 May 2023).

The Baker portal and decline will provide access to future underground development and production at the Baker Deposit, which has an Initial Probable Ore Reserve of 612kt averaging 2.86% Ni for 17.5kt contained nickel<sup>1</sup>. The portal site in the West Idough open pit is just 450 metres away from the nearest planned stoping areas of the Baker Ore Reserve, highlighting the Company's ability to move rapidly and at low capital cost from explorer to producer. Webdrill mobilised to site today and are currently establishing the drill site adjacent to the future Baker portal location (see **Figure 1**).

The hole is expected to take one month to complete and will then be geotechnically logged with the results feeding into the PFS underway, focussed on the 57,000t of nickel metal in Mineral Resource<sup>1</sup> hosted at the Foster nickel mine.



**Figure 1:** Webdrill crew and equipment mobilising in West Idough open pit at the future Baker portal site.

**Managing Director, Ed Ainscough, commenting said**: "Whilst we have gathered a wealth of geotechnical data already to inform our mining method selection, production rate and forecast operating cost at a future Baker underground operation, this simple step of drilling a hole to mirror the decline path aligns with our cautious, data driven approach to de-risking our assets at Kambalda. Once permitting and studies are complete, we can initiate development at a time of our choosing, offering our shareholders highly levered exposure in any future rising nickel price environment".

<sup>&</sup>lt;sup>1</sup> A detailed breakdown of the KNP Mineral Resource and the Baker Ore Reserve is appended to this report.



**Figure 2** below depicts an isometric view of the Baker decline and development design. The location of the Webdrill rig is highlighted and the geotechnical hole will mirror the path of the more northern decline as illustrated. Interested parties may wish to visit the Company's website and view the "Lunnon Metals Site Video" available at <a href="https://lunnonmetals.com.au/media/">https://lunnonmetals.com.au/media/</a> for further context to the location of West Idough open pit relative to the Baker deposit and therefore the location of this current activity.

The technical study program is progressing well and the results, if positive, will form the basis of an updated PFS for Baker and Foster that is expected to update and improve the Company's Ore Reserves. Foster's Mineral Resource in the Indicated category is currently **1.23 million tonnes grading 3.2% Ni for 39,000 tonnes of nickel metal**<sup>2</sup> and is expected to grow as the Company progresses its Historical Core Program on areas relating to remnant nickel mineralisation remaining at the end of the WMC Resources Ltd operational period.

Completing the updated PFS will quantify the current view of the nickel production potential from the KNP and better position the Company to continue detailed negotiations with potential ore tolling and concentrate purchase (**OTCPA**) partners in the immediate local area.

This release has been approved and authorised for release by the Board.

Edmund Ainscough Managing Director Phone: +61 8 6424 8848

Email: info@lunnonmetals.com.au

Pathway of the geotechnical drill hole

Location of Webdrill rig in West Idough pit.

Yr1
Yr2
Yr3
Yr4

Figure 2: Isometric of Baker decline and development with production schedule coloured by year.

<sup>&</sup>lt;sup>2</sup> A detailed breakdown of the KNP Mineral Resource and the Baker Ore Reserve is appended to this report.

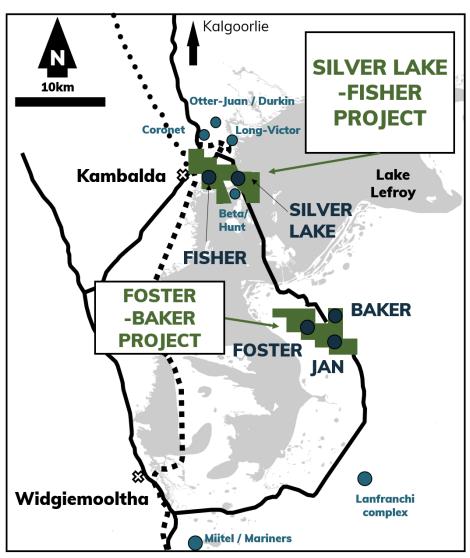


## **ABOUT THE KAMBALDA NICKEL PROJECT (KNP)**

The Kambalda Nickel Project (**KNP**) (shown in **Figure 3**) features approximately 47km<sup>2</sup> of tenements in the Kambalda Nickel District. KNP is located approximately 570km east of Perth and 50-70km south-southeast of Kalgoorlie, in the Eastern Goldfields of Western Australia. KNP comprises two project areas, Foster and Baker\* (19 contiguous mining leases) and Silver Lake and Fisher<sup>+</sup> (20 contiguous mining leases).

The world-renowned Kambalda Nickel District has produced in excess of 1.4 million tonnes of nickel metal since its discovery in 1966 by WMC Resources Ltd (**WMC**). In addition, close to 15Moz of gold in total has been mined, making the Kambalda/St Ives district a globally significant gold camp in its own right.

The KNP is assessed via public roads, well-established mine road infrastructure and the main St Ives causeway over Lake Lefroy. The KNP is broadly surrounded by tenements held by St Ives Gold Mining Co. Pty Ltd (**St Ives**), a wholly owned subsidiary of Gold Fields Limited (JSE:GFI) and the Company's major shareholder.



\*St Ives retains rights to explore for and mine gold in the "Excluded Areas", as defined in the subsisting agreements between Lunnon Metals and St Ives, and on the remaining area of the tenements, has select rights to gold in limited circumstances.

\*The Company has the exclusive rights to nickel on 19 mining leases and related access rights on one additional tenure. Gold Fields retains the rights to the other minerals (except to the extent minerals occur in conjunction with nickel mineralisation or nickel bearing ore but excluding gold).

Figure 3: Regional Location of the Kambalda Nickel Project and other nearby nickel deposits.



#### **COMPETENT PERSON'S STATEMENT & COMPLIANCE**

The information in this announcement that relates to nickel geology, nickel Mineral Resources and Exploration Results, is based on, and fairly represents, information and supporting documentation prepared by Mr. Aaron Wehrle, who is a Member of the Australasian Institute of Mining and Metallurgy (**AusIMM**). Mr. Wehrle is a full-time employee of Lunnon Metals Ltd, a shareholder and holder of employee options/performance rights; he has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Wehrle consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Any information in this announcement that relates to the mining, metallurgical and environmental modifying factors or assumptions as they may apply to the Company's Mineral Resource estimates is based on, and fairly represents, information and supporting documentation prepared by Mr. Max Sheppard, Mr. Wehrle and Mr. Edmund Ainscough, who are Competent Persons and Members of the AusIMM and full time employees of Lunnon Metals Ltd. Mr. Wehrle and Mr. Ainscough are shareholders and all three are holders of employee options/performance rights. All three employees have sufficient experience that is relevant to the style of mineralisation, the types of deposit under consideration, the activity that they are undertaking and the relevant factors in the particular location of the prospect area, the historical Foster mine and the KNP generally, to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Sheppard, Mr. Wehrle and Mr. Ainscough consent to the inclusion in this announcement of the matters based on their information in the form and context in which it appears.

The information in this report that relates to nickel Ore Reserves at Baker is based on information compiled by Mr. Sheppard, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Sheppard is a full-time employee of the Company and is the holder of employee options/performance rights. Mr. Sheppard has sufficient experience relevant to the style of mineralisation and type of 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'. Mr Sheppard consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.



#### **MINERAL RESOURCES**

The detailed breakdown of the Company's Mineral Resources as updated 31 March 2023, is as follows:

	Cut-	Indicated Ni			Inferred Ni			Total Ni		
	off (Ni %)	Tonnes	%	Ni Tonnes	Tonnes	%	Ni Tonnes	Tonnes	%	Ni Tonnes
FOSTER MINE										
Warren	1.0	345,000	2.6	8,800	100,000	2.4	2,400	445,000	2.5	11,200
Foster Central										
85H	1.0	387,000	3.3	12,800	300,000	1.3	3,800	687,000	2.4	16,600
N75C	1.0	270,700	2.6	6,900	142,000	1.9	2,600	412,700	2.3	9,500
S16C/N14C	1.0	-	-	-	64,000	5.7	3,700	64,000	5.7	3,700
South	1.0	223,000	4.7	10,500	116,000	4.8	5,500	340,000	4.7	16,000
Sub total		1,225,700	3.2	39,000	722,000	2.5	18,000	1,948,700	2.9	57,000
BAKER AREA										
Baker	1.0	638,000	3.8	24,000	291,000	2.3	6,800	929,000	3.3	30,800
Sub total		638,000	3.8	24,000	291,000	2.3	6,800	929,000	3.3	30,800
TOTAL		1,863,700	3.4	63,000	1,013,000	2.4	24,800	2,877,700	3.1	87,800

Note: All figures have been rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding. The Mineral Resource is inclusive of any reported Ore Reserves.

#### **ORE RESERVES**

The detailed breakdown of the Company's Baker Ore Reserve as at 22 May 2023, is as follows:

Baker	tonnes	Ni %	Cu %	Co %	Pd g/t	Pt g/t	As ppm	Ni metal
Proved	-	-	-	-	-	-	-	-
Probable	612,000	2.86	0.24	0.052	0.49	0.20	110	17,500
TOTAL	612,000	2.86	0.24	0.052	0.49	0.20	110	17,500

Note: All figures have been rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

The Ore Reserve is reported using the December 2022 Mineral Resource. The Ore Reserve is evaluated using a cut-off grade of 1.5% Ni, except for an incremental cut-off grade of 1.0% Ni for low grade development necessary for access to mining zones. The inputs used for the NPV in the Ore Reserve study were a A\$35,294/t nickel price (US\$24,000/t at US\$0.68:A\$1.00) and 8% discount rate.

### **DISCLAIMER**

References in this announcement may have been made to certain previous ASX announcements, which in turn may have included Exploration Results, Exploration Targets, Mineral Resources, Ore Reserves and the results of Pre-Feasibility Studies. For full details, please refer to the said announcement on the said date. The Company is not aware of any new information or data that materially affects this information. Other than as specified in this announcement and mentioned announcements, the Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcement(s), and in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement.