

**LONG SOUTH GAP – LAKE DRILLING COMMENCES****31 AUGUST 2023****KEY POINTS**

- **Track mounted diamond drill rig deployed directly on surface of Lake Lefroy**
- **Program to test a stand-out target generated by recent 2D seismic survey**
- **Along strike of known nickel channels and interpreted prospective nickel trends plunging onto the Company's nickel rights area in Long South Gap**

Lunnon Metals Limited (**ASX: LM8**) (the **Company** or **Lunnon Metals**) is pleased to confirm that diamond drilling has now commenced at the **Long South Gap** prospect, a high priority target hosted in the Company's Silver Lake-Fisher area at its Kambalda Nickel Project (**KNP**).

The drill program will be a first pass test of the highly encouraging potential "channel" anomaly identified in the recent 2D seismic survey line (see ASX announcement 21 April 2023). This anomaly is interpreted to represent at least one of multiple known nickel mineralised channels and conceptual trends prospective for nickel mineralisation. These channels and trends are interpreted to plunge from properties now held by Wyloo Metals Pty Ltd (**Wyloo**) towards, and onto, Lunnon Metals' properties.

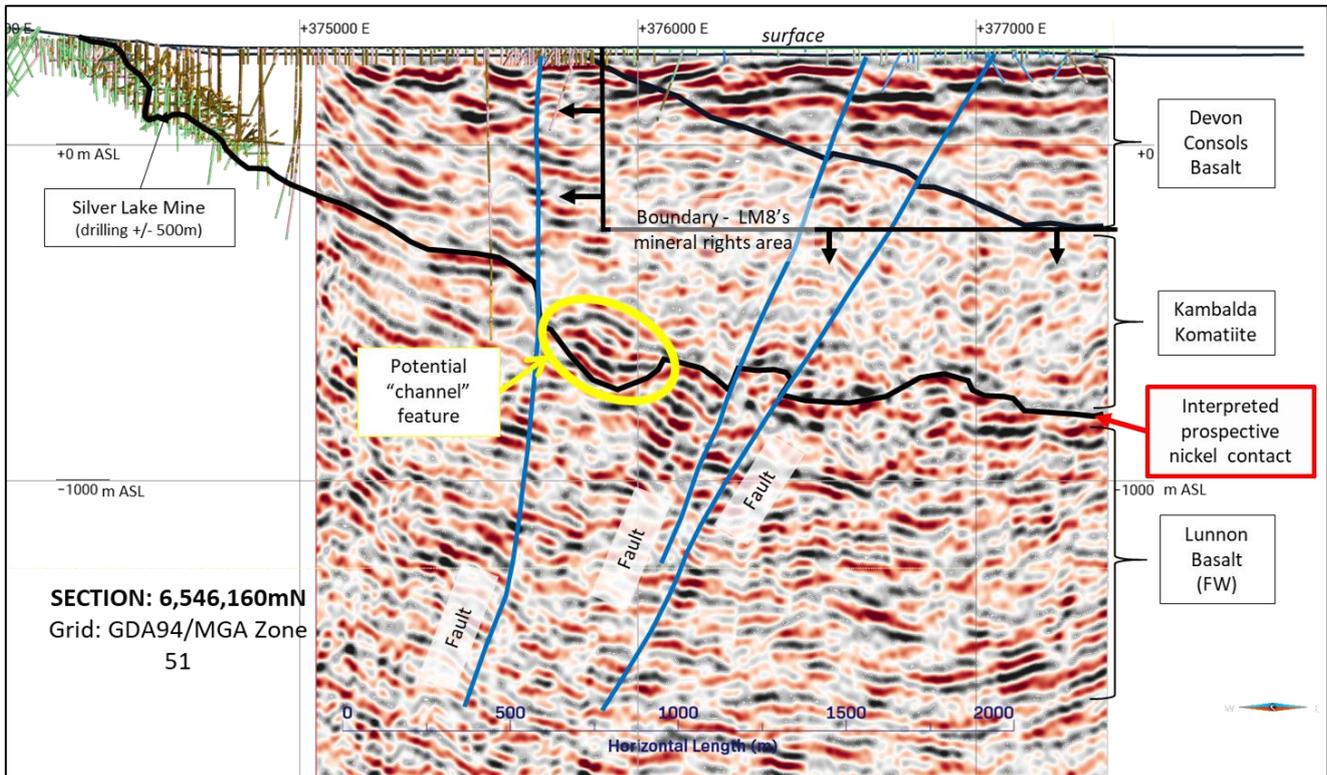


**Figure 1:** Track mounted, lake-based rig setting up to commence drilling of the Long South Gap prospect – August 2023.

**Managing Director, Edmund Ainscough, commenting said:** *"The program that we are embarking on is a comprehensive and methodical approach to complete the very first test of an area with dimensions some 3.2km by 2.4km. The size and quality of any potential prize is unknown but the Long South area is immediately adjacent to one of Australia's most prolific nickel camps, and as such it requires a technical, data driven approach to maximise our discovery chances. We are not the only company that believes significant discoveries are still possible in the Kambalda district and our own exciting search starts now!"*

## SURFACE DRILLING PROGRAM DETAILS

Diamond drilling will be completed using a track mounted, lake-based rig (see **Figure 1**) that allows flexibility in set-up / positioning and removes the need for causeway construction, whilst also significantly reducing the surface disturbance related to the activity. The program is expected to run over a number of months and will include the completion of a series of “parent”<sup>1</sup> holes from which both downhole geophysical surveys and geochemical studies will be conducted to assess and identify the potential for off-hole nickel sulphide targets in the vicinity of each completed hole.



**Figure 2:** Cross sectional image (looking north) of the April 2023 northern 2D seismic line survey combined with geological interpretation of lithology and structure of the Long South Gap project area and the high priority drill target in yellow.

The possible depth to the prospective komatiite-basalt contact ranges between approximately 750 metres and 1,000 metres below the lake surface. Parent holes will take approximately 3 to 4 weeks to complete in each case (subject to the drilling conditions encountered), with subsequent supporting surveys, immediate litho-structural logging of the diamond core, application of portable XRF analysis for geochemical data collection, and assay results all used to assist with vectoring towards potential nickel mineralisation. The program is designed to progressively improve the Company’s knowledge and fine tune the location of subsequent wedge holes, or new parent holes, to enhance the prospects of a significant discovery.

A range of potential outcomes are possible from this first series of drill holes and supporting exploration activities at the prospect area. The Company highlights that whilst direct intersection of nickel sulphides remains the primary objective in all drill holes of this type (“hitting it on the head” so to speak), each new hole furthers the understanding of the geology and structure of an area that has remained untested for over 55 years, since the discovery of nickel sulphides in Kambalda by WMC Resources Ltd (**WMC**) in 1966, despite its proximity to nickel deposits of such significant scale (see following section).

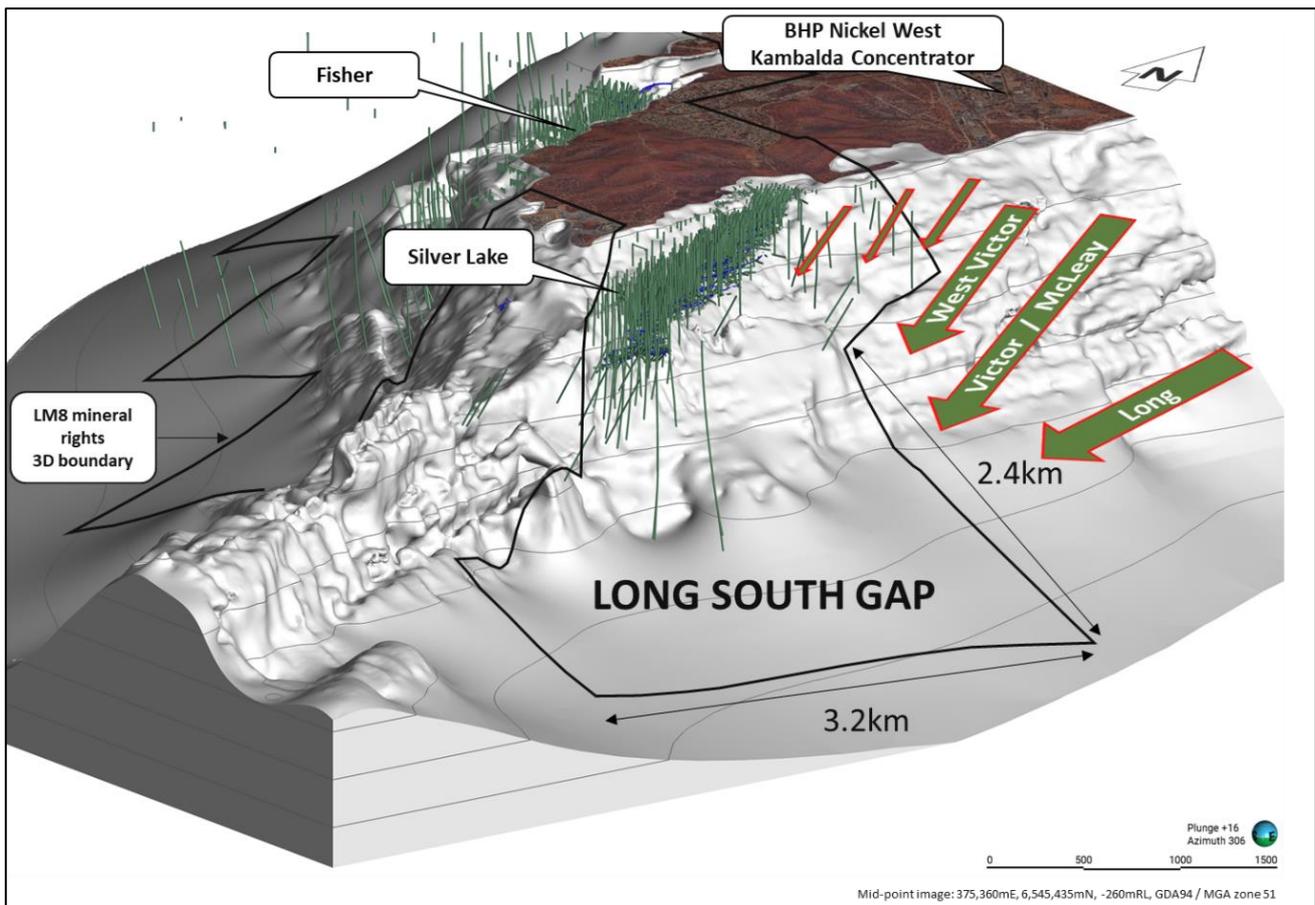
<sup>1</sup> “Parent” hole is used in this context to describe an initial diamond hole that serves as a platform for subsequent geophysical/geochemical surveys and then further diamond drilling by way of wedging from that parent, if warranted.

## GENERATION OF THE LONG SOUTH GAP PROSPECT

In April 2023, the Company announced the results of a geophysical survey using the “mini vibro-seis” seismic data collection method. The survey was successful with two 2D seismic lines completed on the surface of Lake Lefroy, to the immediate east of the historical Silver Lake mine and to the immediate south of the Long Operation. In total, these mined nickel channels have generated approximately **13.5 million tonnes<sup>2</sup>** of past ore production and over **465,500 tonnes of nickel metal<sup>2</sup>** at an average grade of **3.45% Ni<sup>2</sup>**.

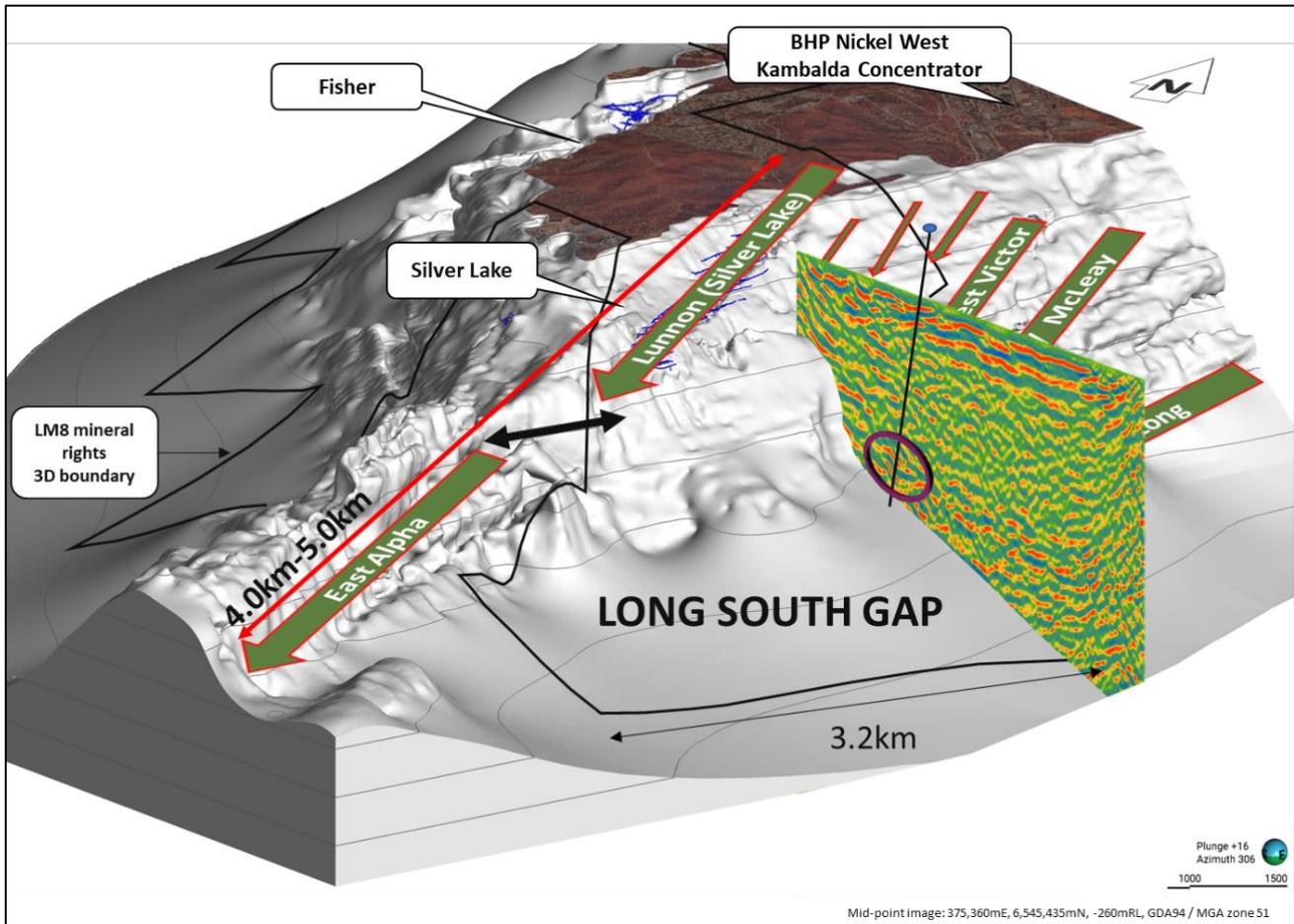
Assessment of the survey results highlighted a number of positive outcomes including:

- Excellent representation of the key prospective komatiite-basalt contact, notably shallower than expected;
- Identification of possible channel signatures (reflectors) at the komatiite-basalt contact;
- One identified possible channel signature (highlighted in **Figure 2**) has the potential to be a down plunge and fault-offset extension of one of the mineralised channels present at Wyloo’s Long Operation. These channels were successfully mined by IGO Ltd prior to the sale of Long Operation to Mincor Resources NL (namely the Long or Victor-McLeay channels, see **Figures 3 & 4**); and
- Strong correlation between 3D structures interpreted by the Company and breaks in the seismic reflection data, validating the Company’s preliminary geological model.



**Figures 3:** Isometric view looking northwest of the Long South Gap area, showing the 3D interpreted komatiite-basalt contact (silver and prior to the 2D seismic data), interpreted nickel channels and trends and previous WMC drilling in green.

<sup>2</sup> Source: historical WMC production records plus sum of relevant production from previous ASX:IGO announcements.



**Figures 4:** Isometric view looking northwest of the Long South Gap area, showing the 3D interpreted komatiite-basalt contact (silver and prior to the 2D seismic data), interpreted nickel trends, location of seismic line shown in **Figure 2** and prospective target area (purple ellipse).

## LOOKING FORWARD IN THE LONG SOUTH GAP AREA

A 3D seismic survey is planned to commence in October 2023 that will expand the extent of the successful 2D seismic surveys across the entire 3.2km by 2.4km Long South Gap area. The broader scope of this new survey is expected to generate multiple high quality drill targets, in addition to the 2D seismic target (as represented in **Figure 2** and **Figure 4**).

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

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## COMPETENT PERSON'S STATEMENT & COMPLIANCE

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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.

## DISCLAIMER

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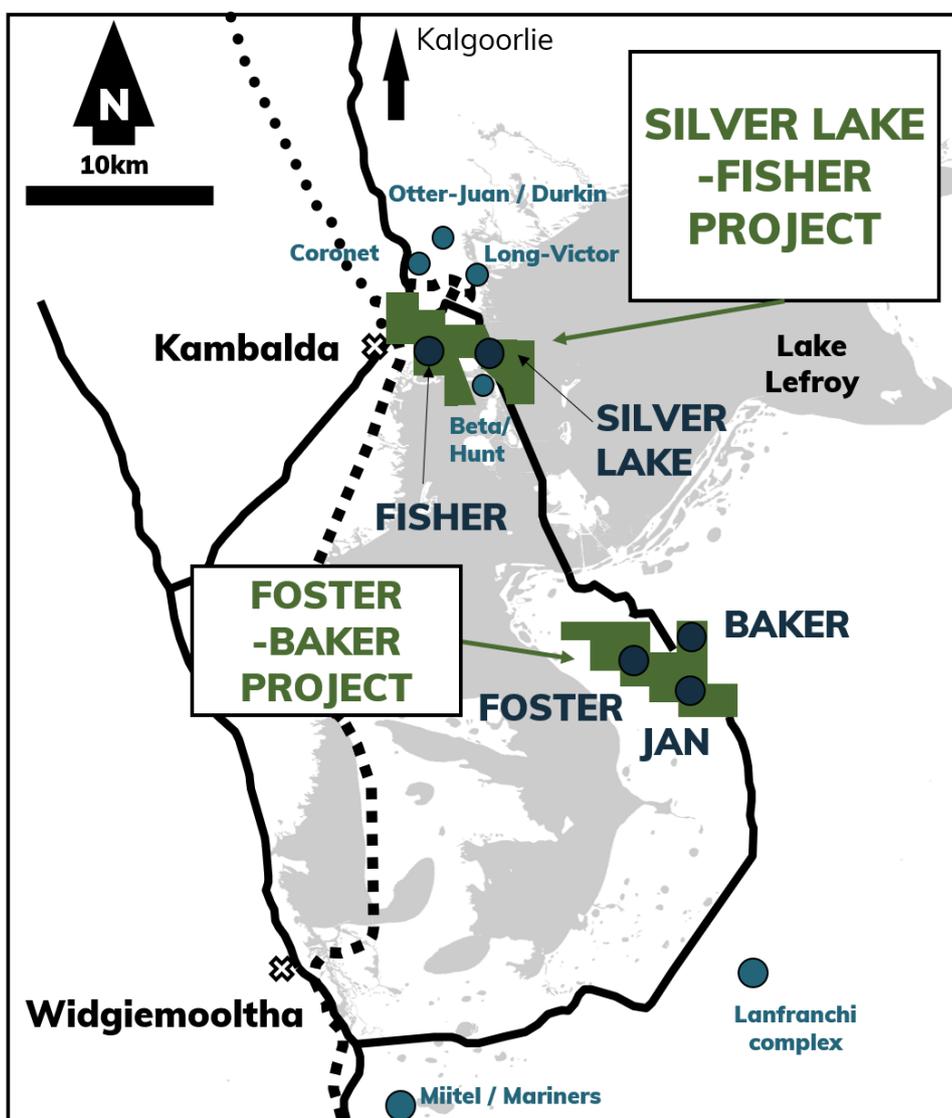
References in this announcement may have been made to certain previous ASX announcements, which in turn may have included Exploration Results, Exploration Targets, Mineral Resources, Ore Reserves and the results of Pre-Feasibility Studies. For full details, please refer to the said announcement on the 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.

## ABOUT THE KAMBALDA NICKEL PROJECT (KNP)

The Kambalda Nickel Project (**KNP**) (shown in **Figure 5**) 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+ (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 accessed 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 5:** Regional Location of the Kambalda Nickel Project and other nearby nickel deposits.