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# FIRST DIAMOND HOLE CONFIRMS HIGH TENOR OF MASSIVE NICKEL SULPHIDES AT EAST COOEE

16th December 2021

### **HIGHLIGHTS**

- 1.9m of high tenor massive nickel sulphides in core
- Planned RC infill drilling complete, high grade mineralisation remains open
- Prospect to be renamed "Baker"

Lunnon Metals Limited (**ASX: LM8**) (the "**Company**" or "**Lunnon Metals**") is pleased to provide an update on the progress of activities at the East Cooee - Hanging Wall ("ECO-H/W") prospect.

### **RC INFILL DRILL OUT**

2021 RC infill drilling is now complete at the ECO-H/W prospect, an emerging opportunity at the Kambalda Nickel Project ("KNP"). Diamond drilling following up recently reported RC hole ECO21RC\_042 (see ASX announcement 3<sup>rd</sup> December 2021) has now also intersected significant mineralisation as follows:

1.9m of massive nickel sulphides from 168m downhole (ECO21DD\_004)

This diamond hole intersected the target zone approximately 10m away, and down dip from, the 6m of massive nickel sulphides reported to the market in the RC infill drill hole. The core will now be logged and subject to final geological interpretation, 1.9m should approximate a true width. Portable field XRF readings support the presence of nickel associated with the visually identified sulphides.



Figure 1: Core from ECO21DD\_004 - massive nickel sulphide zone from 168m downhole



**Important Note**: in relation to the reporting of visual mineralisation, the Company highlights that visual estimates of sulphide abundance, even when confirmed by portable XRF analysis in the field, cannot be considered a substitute for laboratory analysis. Assay results are required to determine the exact widths and grades of the nickel sulphide mineralisation identified. When these results are available, the Company will provide an update to the market.

Managing Director, Ed Ainscough, commenting said: "It's satisfying to see the diamond core confirm the high tenor of nickel mineralisation in the recent RC hole we reported. We will learn a lot from detailed geological logging of the mineralisation and structure and there will be follow up RC and diamond in the new year to chase up the areas where the mineralisation is not yet closed off. The results from the diamond and RC programmes, when they come, should be a bright start to 2022."

### **DETAIL OF MINERALISED ZONE**

A geological description of the intersection in ECO21DD\_004 is as follows:

December 1			Visual estimates		
Down hole depth (m)	Interval (m)	Host	Sulphide % in rock	Mineralisation description	
168	1.9	Massive nickel sulphide mineralisation	>95%	High tenor, banded massive nickel sulphides; pyrrhotite, pentlandite, pyrite ± chalcopyrite	

### **ANALYSIS & PROGRAMME UPDATE**

Figure 2 below has been updated to represent the location of the pierce point of ECO21DD\_004 on the aerial image whilst Figure 3 presents a cross section through the line of drilling containing RC hole ECO21RC\_042 and the new diamond hole ECO21DD\_004.

Initial observations indicate that the massive nickel sulphides intersected in ECO21DD\_004 are likely related to a structure represented by the larger DHTEM conductive plate that is at an angle to the stratigraphy, as shown in Figure 3, and that the high tenor nickel mineralisation associated with this plate may not be closed off along strike.

The thicker mineralisation recorded in RC hole ECO21RC\_042 may also represent the junction between the gently dipping and laterally persistent hanging wall mineralisation and the mineralised structure, coincident with the DHTEM plate, which may have remobilised the nickel sulphides along the resultant intersection "hinge line".

The opportunity represented by the target mineralised zone is at shallow depths (100m-165m below surface), close (350m-400m) to an existing open pit and the immediate hanging wall komatiite rock has been recorded as a competent unit, all positive factors for future studies into the opportunity that this nickel mineralisation represents.

Now that the RC infill drilling has been completed, the drill collar location details are included in Annexure 1 at the end of this report for future reference when results are reported in 2022. Drilling will be suspended for a short Christmas/New Year break before resuming in mid-January 2022.



#### **PROJECT RENAMED - BAKER**

As was the tradition in the Kambalda nickel district during WMC operations, now that the main RC infill programme is complete and a diamond hole has confirmed the presence of massive nickel sulphides, the prospect will be renamed with the surname of the driller who was in charge of the drill rig when the nickel deposit was first identified.

In the case of ECO-H/W this was Blue Spec Drilling's Graeme Baker and the prospect will now be renamed **Baker**. All future reporting in regard to this nickel opportunity will therefore reference Baker not ECO-H/W.

Ed Ainscough, said: "Lunnon Metals itself is ultimately named after a driller, Jack Lunnon, who intersected the very first nickel in drillhole KD1 at Kambalda 56 years ago next month. We like this tradition and Graeme and Blue Spec have done a great job getting us to this point at East Cooee, so it is fitting that this exciting project will be "Baker" from now on".

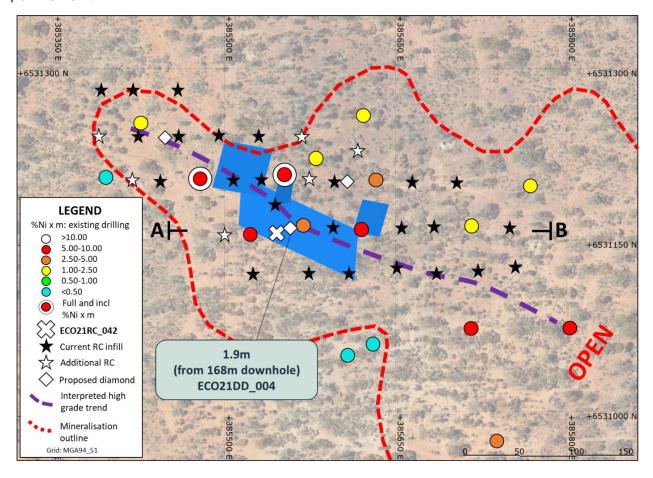


Figure 2: Plan of the Baker area illustrating pierce points of RC infill drill holes, previous drilling<sup>1</sup> to date, ECO21DD\_004, other planned diamond holes and re-modelled DHTEM plates (blue rectangles), Figure 3 cross section shown as A-B

<sup>&</sup>lt;sup>1</sup> see ASX announcements dated 1<sup>st</sup> & 19<sup>th</sup> October 2021 & 12<sup>th</sup> November 2021 for additional details of previous drilling referenced or illustrated



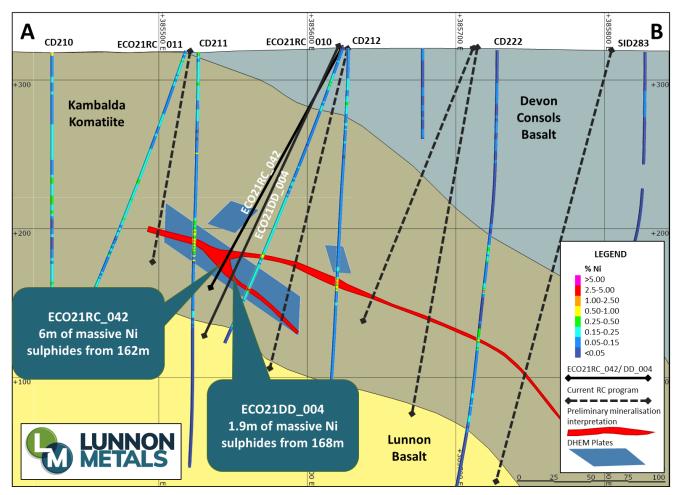


Figure 3 : Diagrammatic cross section A-B (6,531,160mN) through drill line hosting ECO21RC\_042 and ECO21DD\_004 diamond hole (looking north: Grid:MGA94\_51)

### **NEXT STEPS**

In line with previous communications, assay results for this diamond hole and the recent RC infill programme at Baker will likely not be received until late January 2022 at the earliest but will be reported in batches as the results are returned and interpreted.

Preliminary geological interpretation has already begun so that the Company can get a head start on the planned Mineral Resource estimation work. ECO21DD\_004 and future diamond core will also feed in to the necessary geotechnical and metallurgical assessments of that process. A maiden Mineral Resource will be reported as soon as possible in 2022.

This announcement has been approved for release by the Board of Lunnon Metals Ltd.

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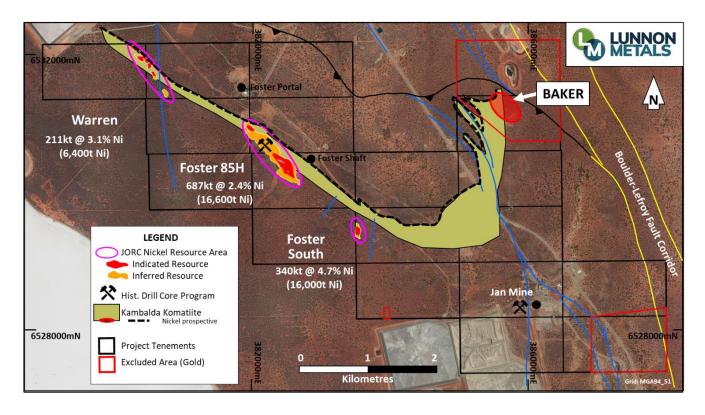


Figure 4: Plan of the Kambalda Nickel Project showing location of Baker



Annexure 1: 2021 Baker - Drill Hole Collar Table - RC and RC with DD tails (RCD)

Hole ID	Easting ^	Northing^	Elevation (m ASL)	Dip	Azimuth	EOH Drill Depth (m)	Hole Type	Grid
ECO21RC_014	385,415	6,531,280	317	-61.0	271.6	84	RC	MGA94_51
ECO21RC_015	385,420	6,531,280	317	-88.4	12.8	84	RC	MGA94_51
ECO21RC_016	385,460	6,531,280	317	-87.3	23.2	102	RC	MGA94_51
ECO21RC_017	385,549	6,531,240	319	-80.9	89.1	180	RC	MGA94_51
ECO21RC_018	385,465	6,531,240	318	-60.3	270.7	126	RC	MGA94_51
ECO21RC_019	385,467	6,531,240	318	-85.3	268.3	132	RC	MGA94_51
ECO21RC_020	385,546	6,531,240	319	-60.0	273.7	144	RC	MGA94_51
ECO21RC_021	385,547	6,531,240	319	-79.8	274.3	144	RC	MGA94_51
ECO21RC_022	385,460	6,531,200	318	-80.7	277.4	114	RC	MGA94_51
ECO21RC_023	385,581	6,531,202	320	-56.7	272.5	180	RC	MGA94_51
ECO21RC_024	385,584	6,531,202	320	-65.3	270.7	174	RC	MGA94_51
ECO21RC_025	385,683	6,531,204	322	-55.6	272.2	216	RC	MGA94_51
ECO21RC_026	385,750	6,531,200	320	-60.9	271.7	204	RC	MGA94_51
ECO21RC_027	385,753	6,531,200	320	-75.0	271.2	258	RC	MGA94_51
ECO21RC_028	385,457	6,531,200	318	-68.4	271.2	114	RC	MGA94_51
ECO21RC_029	385,627	6,531,164	322	-78.4	269.1	222	RC	MGA94_51
ECO21RC_030	385,712	6,531,160	321	-70.5	274.2	198	RC	MGA94_51
ECO21RC_031	385,714	6,531,160	321	-80.7	272.2	252	RC	MGA94_51
ECO21RC_032	385,805	6,531,160	320	-76.1	272.2	300	RC	MGA94_51
ECO21RC_033	385,535	6,531,155	320	-75.8	194.9	216	RC	MGA94_51
ECO21RC_034	385,653	6,531,120	322	-61.9	272.5	198	RC	MGA94_51
ECO21RC_035	385,655	6,531,120	322	-75.4	273.5	240	RC	MGA94_51
ECO21RC_036	385,712	6,531,160	321	-69.2	241.7	222	RC	MGA94_51
ECO21RC_037	385,714	6,531,160	321	-74.9	217.6	270	RC	MGA94_51
ECO21RC_038	385,805	6,531,160	320	-65.9	245.9	258	RC	MGA94_51
ECO21RC_039	385,805	6,531,160	320	-75.7	233.4	300	RC	MGA94_51
ECO21RC_040	385,599	6,531,204	320	-80.3	270.0	150	RC	MGA94_51
ECO21RC_041	385,683	6,531,207	321	-59.6	290.8	174	RC	MGA94_51
ECO21RC_042	385,623	6,531,160	322	-60.6	269.1	186	RC	MGA94_51
ECO21RC_044	385,413	6,531,279	317	-55.3	221.9	120	RC	MGA94_51
ECO21DD_002*	385,464	6,531,242	318	-80.4	267.5	170	RCD	MGA94_51
ECO21DD_003*	385,584	6,531,204	320	-85.4	272.0	230	RCD	MGA94_51
ECO21DD_004	385,622	6,531,162	320	-62.5	268.2	260	RCD	MGA94_51

<sup>^</sup>For current drilling, as pegged coordinates, final survey pick up of collar positions to occur on a campaign basis in the future.

## Annexure 2: 2021 Baker - Drill Results

All drill holes tabulated in Annexure 1 above are pending assays.

<sup>\*</sup>diamond holes yet to be completed/logged



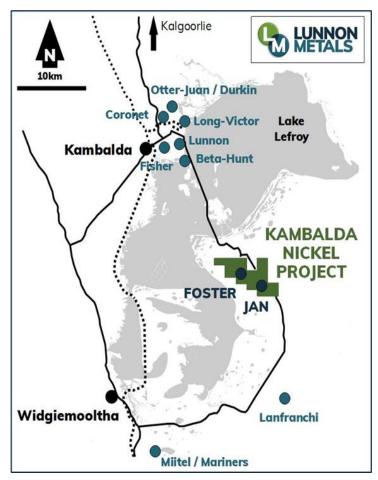


Figure 5: Regional Location of the Kambalda Nickel Project and other nearby nickel deposits

# ABOUT THE KAMBALDA NICKEL PROJECT ("KNP")

Lunnon Metals holds 100% of the mineral rights at KNP, subject to certain rights retained by St Ives\*. Full details of the Company's IPO and the transactions involved are in the Prospectus submitted to the ASX dated 22 April 2021 and lodged with the ASX on 11 June 2021.

KNP, shown in its regional location in Figure 5, is approximately 23 km<sup>2</sup> in size comprising 19 contiguous granted mining leases situated within the Kambalda Nickel District which extends for more than 70 kilometres south from the township of Kambalda ("Tenements").

This world-renowned 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 15 Moz of gold in total has been mined with WMC accounting for 5.9 Moz and over 8.3 Moz produced by Gold Fields Ltd since the purchase of the operation in December 2001 from WMC, making the Kambalda/St Ives district a globally significant gold camp in its own right.

\*St Ives retains rights to explore for and mine gold in the "Excluded Areas" on the Tenements as defined in the subsisting agreements between Lunnon Metals and St Ives. This right extends to gold mineralisation which extends from the Excluded Area to other parts of the Tenements with select restrictions which serve to prevent interference with, or intrusion on, Lunnon Metals' existing or planned activities and those parts of the Tenements containing the historical nickel mines. St Ives enjoys select rights to gold in the remaining areas of the Tenements in certain limited circumstances as described in detail in the Company's Solicitor Report attached to the Prospectus submitted to the ASX dated 22 April 2021 and lodged with the ASX on 11 June 2021.



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

Any information in this announcement that relates to geology, nickel Mineral Resources, the East Cooee Exploration Target 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; 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.

### **MINERAL RESOURCES**

The detailed breakdown of the Company's Mineral Resources is as follows:

Foster	Mine		Indicated			Inferred			Total	
Shoot	Cut-off (Ni %)	<u>Tonnes</u>	<u>% Ni</u>	Ni metal	<u>Tonnes</u>	<u>% Ni</u>	Ni metal	<u>Tonnes</u>	<u>% Ni</u>	Ni metal
85H	1%	387,000	3.3	12,800	300,000	1.3	3,800	687,000	2.4	16,600
Foster South	1%	223,000	4.7	10,500	116,000	4.8	5,500	340,000	4.7	16,000
Warren	1%	136,000	2.7	3,700	75,000	3.7	2,700	211,000	3.1	6,400
Tot	al	746,000	3.6	27,000	491,000	2.4	12,000	1,238,000	3.2	39,000

### **DISCLAIMER**

References in this announcement may have been made to certain previous ASX announcements, which in turn may have included exploration results and Mineral Resources. 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.



# **JORC TABLE 1**

# **SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g., 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.  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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	<ul> <li>All drilling and sampling were undertaken in an industry standard manner.</li> <li>Reverse Circulation (RC) and Diamond Drill holes (DDH) at the Kambalda Nickel Project (KNP) were completed by Blue Spec Drilling Pty Ltd (Blue Spec) on behalf of Lunnon Metals following protocols and QAQC procedures aligned with industry best practice.</li> <li>DDH</li> <li>Core samples were collected with a diamond rig drilling HQ3 (61mm) from surface within weathered and saprolite material before casing off within hard rock and completing the hole with NQ2 (51mm) diameter core.</li> <li>All DDH have been reconstructed and orientated over zones of interest, logged geologically, and marked up for assay at a typical minimum sample interval of 0.3m to ensure adequate sample weight and a typical maximum sample interval of 1.0m, constrained by geological boundaries.</li> <li>After logging and photographing, selected sample intervals of drill core were cut in half with a diamond saw, with one half sent to the laboratory for assay and the other half retained.</li> <li>Sample weights vary depending on sample width and density of the rock.</li> <li>All DDH core is stored in industry standard core trays labelled with the drill hole ID and core intervals.</li> <li>Industry prepared independent standards and blanks are each inserted, approximately every 50 samples.</li> <li>The independent laboratory then takes the samples which are dried, crushed and pulverized prior to analysis as described below.</li> <li>For sample weights &gt; 3kg the sample is dried, crushed to 2mm, split and pulverized up to 3kg (with the coarse reject retained).</li> <li>Sample sizes are considered representative and appropriate for this type of drilling.</li> <li>DDH core samples are appropriate for use in a resource estimate.</li> <li>Portable XRF</li> <li>Where a handheld XRF tool was used, it was done so to verify the presence of nickel mineralisation. The XRF results themselves are not reported and used as a logging/sampling verification and sulphide spec</li></ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>1m run on the lip of the core tray and typically included core blocks within the core trays demarcating the depth meterage of rod pull breaks.</li> <li>The drillhole number and the 'from' and 'to' depth of the contained drill core was labelled on the front of the core tray. The earlier drilling was collected in wooden, and hybrid wooden/steel core trays and occasionally depths recorded in feet.</li> <li>DHTEM</li> <li>DHEM surveys were conducted using the DigiAtlantis system and DRTX transmitter. The readings were recorded at 2.5m to 10m intervals. The survey used loops ranging from 300m x 200m to 690m x 290m in orientations designed relative to the target and stratigraphic setting.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	<ul> <li>DDH were drilled from surface using HQ3 (61mm) diameter in weathered, broken ground before casing off and drilling NQ2 (51mm) to end of hole.</li> <li>Although no documentation is available to describe the drilling techniques used by WMC at the time it is understood that the various drilling types used conventional drilling methods consistent with industry standards. None of the diamond drill core was oriented.</li> </ul>
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.	<ul> <li>DDH core recovery is measured for each drilling run by the driller and then checked by the Company's geological team during the mark up and logging process.</li> <li>No sample bias is observed.</li> <li>There is no relationship between recovery and grade nor bias related to fine or coarse sample material.</li> <li>There are no available records for sample recovery for diamond drilling completed by WMC; however, re-logging exercises completed by Lunnon Metals of both underground and surface diamond drillholes from across the KNP between 2017 and 2021 found that on average drill recovery was very good and acceptable by industry standards.</li> </ul>
Logging	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.  Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.  The total length and percentage of the relevant intersections logged.	<ul> <li>DDH:         <ul> <li>Geology logging is undertaken for the entire hole recording lithology, oxidation state, mineralisation, alteration, and veining.</li> <li>DDH structural logging, recovery of core, hardness, and Rock Quality Designation (RQD's) are all recorded from drill core over intervals of interest.</li> <li>Geological logging (and where required, geotechnical logging) is completed in sufficient detail to support future Mineral Resource estimation, mining and metallurgical studies to be undertaken with confidence.</li> <li>Additional metallurgical testwork will be completed if warranted in the future in addition to the geological logging and element assaying detailed below.</li> <li>General logging data captured are qualitative (descriptions of the various geological features and units) and quantitative (numbers representing structural attitudes, vein and sulphide percentages, magnetic susceptibility and conductivity).</li> <li>DDH core is photographed in both dry and wet form.</li> </ul> </li> <li>WMC Historical data</li> <li>There is no available documentation describing the logging</li> </ul>



Criteria	JORC Code explanation	Commentary
		procedures employed by WMC geologists at the Foster nickel mine or in the KNP area generally; however, the historical graphical hardcopy logs and other geoscientific records available for the project are of high quality and contain significant detail with logging intervals down to as narrow as 0.01m. The geological logs document lithology, textures, structures, alteration, and mineralisation observed in drill core captured both graphically and in a five-character logging code (Lunnon Metals notes that a previous logging legend employed at WMC's Kambalda nickel operations utilised a 3 letter code which is often represented on hard copy plan and cross sections of an older vintage and which was converted by WMC to the latter 5 character code at some later time). Stratigraphy is also captured in a three-character logging code. Sample intervals are recorded on the graphical log. These logging legends are well documented in lieu of a recorded procedure.  In regard geotechnical logging or procedures, there is no record of any formal relevant procedures or logging and based on personal experience of the Competent Person, such logging was not routinely completed prior to the introduction of Regulation 10:28 in the WA Mine Safety and Inspection Act, requiring the same in approximately 1996.  Based on the personal experience of the Competent Person(s) to this announcement, having worked for WMC in Kambalda between 1987 and 2001, it is known that WMC had a rigorous and regimented system for storing and archiving the graphical logs physically, microfilmed, and drafted on to master cross sections, plans, and long sections as well as capturing the interval data (logging and assays) digitally in database format.  Lunnon Metals sourced historical diamond core from the St Ives Kambalda core yard on Durkin Road where relevant to its investigations. A selection of high priority drillholes was typically identified based on proximity to the proposed area of interest. Thereafter a representative number of holes were re-logged to vali
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.  If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	<ul> <li>DDH</li> <li>DDH core samples were collected with a diamond drill rig drilling NQ2 or HQ3 core. After logging and photographing, diamond core was cut within a Discoverer® Automatic Core Cutting Facility using a Corewise Auto Core Saw.</li> <li>DDH core was cut in half, with one half sent to the laboratory for</li> </ul>
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.  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.	<ul> <li>assay and the other half retained.</li> <li>Holes were sampled over mineralised intervals to geological boundaries on a nominal 1.0m basis with a typical minimum of 0.3m and a typical maximum of 1.0m.</li> <li>Field QAQC procedures involve the use of certified reference material (CRM) and blank material, each inserted approximately 1 in every 50 samples.</li> <li>Field duplicates were collected at a rate of 1 in 25 samples by cutting the core into quarters and submitting both quarters to the laboratory for analysis.</li> <li>At the assay laboratory, each sample was dried, split (if sample weight was &gt;3kg), crushed, and pulverised.</li> </ul>



Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation  Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for the style of mineralisation (potentially nickeliferous massive, matrix and disseminated sulphides, hosted in komatiite and basalt; and altered quartz veins/shear structures considered potentially auriferous in all lithological types).  WMC Historical data  All historical core that was relevant to the mineralisation drilled and sampled by WMC as sighted by Lunnon Metals was sawn with half or quarter core sampling practices. It is assumed that all samples reported or otherwise contributing to any estimation of nickel mineralisation by Lunnon Metals were processed with this standard
		methodology.  • Portions of drill core distal to the main high-grade mineralisation were sometimes 'chip sampled' by WMC. Lunnon Metals has chosen not to utilise such samples in any estimation of grade or
		<ul> <li>mineralisation.</li> <li>WMC typically sampled in interval lengths relevant to the underlying lithology and mineralisation such that sample interval lengths may vary from between minima of 0.05 m and maxima up to 2.00 m within any mineralised zone, shoot or nickel surface of interest. Intervals of no mineralisation or interest were not sampled. Review of historical drill core during re-logging and re-sampling exercises by Lunnon Metals indicated that there were no areas of interest relevant to nickel mineralisation that were not half or quarter core sawn and sampled by WMC and that the sample sizes were appropriate for the type, style and thickness of mineralisation being tested with sample breaks corresponding to lithological or mineralisation breaks being the norm. Although faded through time, sample depth intervals are evident as marked on the remaining half core as observed by Lunnon Metals and these correlate to sample interval depths in the original paper graphical drill logs and the database.</li> <li>While the WMC procedure for logging, sampling, assaying and QAQC of drillhole programs was not available at the time of this announcement it is interpreted that it was of high quality and in line with industry standards at that time.</li> <li>It is the opinion of the Competent Person(s) that the sample preparation, security, and analytical procedures pertaining to the above-mentioned historical WMC drilling are adequate and fit for purpose based on: <ul> <li>WMC's reputation of excellence in geoscience stemming from their discovery of nickel sulphides in Kambalda in the late 1960s;</li> <li>identification of procedures entitled "WMC QAQC Practices for Sampling and Analysis, Version 2 - adapted for St Ives Gold" dated February 2001 and which includes practices for nickel; and</li> <li>the first-hand knowledge and experience of the Competent Person(s) of this announcement whilst working for WMC at</li> </ul> </li> </ul>
	The nature, quality and	Kambalda between 1987 and 2001.  • Samples were submitted to Intertek Genalysis in Kalgoorlie for
	appropriateness of the assaying and	sample preparation i.e. drying and pulverising.
	laboratory procedures used and	Pulverised samples were then transported to Intertek Genalysis in



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Perth for analysis. Samples were analysed for a multi-element suite including Ni, Cu, Co, Ag, Cu, As, Co, Fe, Mn, Pb, S, Zn. Analytical techniques used a four-acid digest (with ICPMS finish) of hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for near total dissolution of almost all minerals species including silica-based samples. Where considered necessary, Au was analysed using 50g lead collection fire assay and analysed by ICPOES. These techniques are considered quantitative in nature. As discussed previously, CRM is inserted by the Company and the laboratory also carries out internal standards in individual batches. The resultant Lunnon Metals and laboratory QAQC data is reviewed upon receipt to determine that the accuracy and precision of the data has been identified as acceptable.  Portable XRF Where handheld portable XRF results are referenced, the tool was used to verify the presence of nickel mineralisation in the zones disclosed. The unit is a Bruker, S1 Titan 900 model.  DHTEM DHTEM parameters were as follows Tx Loop Size range from 300m x 200m up to 690m x 290m Transmitter: DRTX Receiver: DigiAtlantis Probe: DigiAtlantis Station Spacing: 2.5m to 10m Tx Current range from 50A to 75A Base Frequency: 1Hz Readings: Min 3 repeatable readings per station  WMC Historical data There is no data available at the time of this announcement pertaining to the assaying and laboratory procedures nor the historical field or laboratory quality assurance and quality control (QAQC), if any, undertaken by WMC drilling programs at the Foster nickel mine or in the KNP area and the analytical laboratory, considering WMC's reputation for excellence in geosciences. The extensive Lunnon Metals re-sampling programme of historical % or ¼ core drill core applied the methodology and practices as
Verification of sampling and assaying	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.	<ul> <li>recorded above for current DDH.</li> <li>In essence, the Lunnon Metals re-sampling programme of historical ½ or ¼ core drill core is a form of verification of the historical assay results.</li> <li>Significant intersections have not been independently verified and no twinned holes have been completed.</li> <li>Logging and sample intervals are uploaded by Company geologists once logging is completed into internal cloud hosted datasheets and then to a database managed by Maxwell Geoservices Pty Ltd (maxgeo).</li> <li>Assays from the laboratory are checked and verified by maxgeo database administrator before uploading.</li> <li>No adjustments have been made to assay data.</li> </ul>



Criteria	JORC Code explanation	Commentary
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.  Specification of the grid system used.  Quality and adequacy of topographic control.	<ul> <li>Any assays results for a composited interval within a drillhole are reported on a length weighted basis.</li> <li>■ Diamond core data - Lunnon Metals has undertaken exhaustive analysis of historical WMC underground and surface diamond drilling to inspect and visually validate significant drill assays and intercepts that inform any interpretation of nickel mineralisation including any MRE work.</li> <li>■ Firstly, confirmation is made of the sample ID and visual presentation of the core (to match logged lithology). Then the resampling exercise of remaining ½ or ¼ core drill core represents an independent duplicate style of data verification of the original nickel assay results obtained by WMC as stored in the database. The analysis of the duplicate samples is undertaken through Intertek's laboratory in Perth using four-acid digest with ICP-OES or ICP-MS finish with appropriate company and laboratory analytical QAQC procedures.</li> <li>No significant anomalies have been identified and the Competent Person is satisfied that the original data is representative of the geology and mineralisation modelled; thus no adjustments to assay data have been deemed necessary or made.</li> <li>No twin holes have been completed to date. No non company personnel (other than in the assay laboratory processes) or alternative company personnel have been involved in the exercise due to the small size of the company and the robustness of the procedures detailed herein.</li> <li>Lunnon Metals notes that the Kambalda style of nickel mineralisation is highly visible permitting the nickel grade to be relatively accurately estimated by experienced geologists; this is a practise that is not uncommon in the nickel mining industry.</li> <li>DDH hole collar locations are located by handheld GPS to an accuracy of +/- 3m.</li> <li>All drill holes were surveyed downhole at 5m intervals using the REFLEX gyro spirit-IQ system (north seeking gyro) for both azimuth and dip measurements.</li> <li>Downhole</li></ul>
	to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.  Specification of the grid system used.  Quality and adequacy of topographic	<ul> <li>procedures detailed herein.</li> <li>Lunnon Metals notes that the Kambalda style of nickel mineralisation is highly visible permitting the nickel grade to be relatively accurately estimated by experienced geologists; this is a practise that is not uncommon in the nickel mining industry.</li> <li>DDH hole collar locations are located by handheld GPS to an accuracy of +/- 3m.</li> <li>All drill holes were surveyed downhole at 5m intervals using the REFLEX gyro spirit-IQ system (north seeking gyro) for both azimuth and dip measurements.</li> <li>Downhole surveys are uploaded to the IMDEXHUB-IQ, a cloud-based data management program where surveys are validated and approved by the geologist before importing into the database.</li> </ul>
		Diagrams and location data tables are provided in the report where



Criteria	JORC Code explanation	Commentary
		<ul> <li>instruments were used. A representative number of these hardcopy downhole survey records have been cross checked against the digital records in the database.</li> <li>No new downhole surveys have been conducted however Lunnon Metals has corrected where necessary incorrect data in the database where down hole measurements from the hardcopy data were incorrectly processed.</li> <li>No other significant errors or inconsistencies were deemed present or capable of being detrimental to any interpretation of nickel mineralisation including any MRE work.</li> </ul>
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 for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied  Whether sample compositing has been applied.	<ul> <li>The DDH programme at KNP comprises drillhole spacings that are dependent on the target style, orientation and depth. Drillholes are not drilled to set patterns or spacing at the exploration stage of the programme.</li> <li>If follow up drilling is warranted with the objective of progressing the prospect towards a data density sufficient to support a future Mineral Resource estimation, spacing may vary from 40m x 40m to 40m x 20m, again subject to the target style dimensions, orientation and depth.</li> <li>All holes have been geologically logged and provide a strong basis for geological control and continuity of mineralisation.</li> <li>No Mineral Resource or Ore Reserve estimations are presented for the area the subject of the exploration results.</li> <li>No sample compositing has been applied except in the reporting of drill intercepts within a single hole, as described in this table.</li> <li>WMC Historical data</li> <li>The typical drill spacing for the early WMC drill traverses is approximately 120m apart with drillhole spacing along the traverses between 10m and 80m (close spacing where present was due to between one and four wedge holes from each parent hole). These traverses were sometimes infilled to about 60m spacing where</li> </ul>
Orientation of data in relation to geological structure	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.	<ul> <li>drillhole depths were less than approximately 450m.</li> <li>The preferred orientation of drilling at KNP is designed to intercept the target approximately perpendicular to the strike and dip of the mineralisation where/if known. Subsequent sampling is therefore considered representative of the mineralised zones if/when intersected.</li> <li>At Foster, a significant number of historical drill holes were collared vertically, but then lifted and rotated to intersect the nickel contact as close to perpendicular as possible.</li> <li>The chance of bias introduced by sample orientation relative to structures, mineralised zones or shears at a low angle to the drillhole is possible, however quantified orientation of the intercepted interval allows this possible bias to be assessed. Where drilling intercepts the interpreted mineralisation as planned, bias is considered non-existent to minimal.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples are collected by Company personnel in calico bags, which are in turn placed in bulka bags which are secured on wooden pallets and transported directly via road freight to the laboratory with a corresponding submission form and consignment note.</li> <li>The laboratory checks the samples received against the submission form and notifies the Company of any missing or additional samples. Once the laboratory has completed the assaying, the pulp packets, pulp residues and coarse rejects are held in the</li> </ul>



Criteria	JORC Code explanation	Commentary
		Laboratory's secure warehouse until collected by the Company or approved to be discarded.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>WMC Historical data</li> <li>There is no documentation available at the time of this announcement which describes the historical sample handling and submission protocols during the WMC drilling programmes; however, it is assumed that due care was taken with security of samples during field collection, transport and laboratory analysis. The historical drill core remaining after sampling was stored and catalogued at the KNO core farm (now Gold Fields, St Ives' core farm) and it remains at this location to the present day.</li> <li>All drill core retrieved from the core farm and samples collected as part of the Lunnon Metals historical drill core re-sampling programme was done so by the Lunnon Metals Exploration Manager, the Site Representative and/or the Lunnon Metals Field Services Superintendent over a period of time. Once samples had been collected Lunnon Metals staff personally transported the samples on a daily basis in a closed and secure vehicle directly to the Intertek sample preparation facility in Kalgoorlie along with the requisite sample submission forms. Occasionally, collected samples remained overnight at the core farm in a secure locked room before being transported to Intertek Kalgoorlie.</li> <li>No external audits or reviews have been undertaken at this stage of the programme.</li> </ul>
		<ul> <li>WMC Historical data</li> <li>Cube Consulting Pty Ltd are independent of Lunnon Metals and have been previously retained to complete the grade estimation for nickel mineralisation models and MRE exercises but also to review and comment on the protocols developed by Lunnon Metals to deal with, and thereafter utilise, the historical WMC Resources' data, in particular the re-sampling and QAQC exercise completed by Lunnon Metals such that the data is capable of being used in accordance with current ASX Listing Rules where applicable and JORC 2012 guidelines and standards for the generation and reporting of MREs.</li> <li>Cube has documented no fatal flaws in the work completed by Lunnon Metals in this regard.</li> </ul>



# **SECTION 2 REPORTING OF EXPLORATION RESULTS**

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.	<ul> <li>The property is located on granted Mining Leases. Although all of the tenements wholly or partially overlap with areas the subject of determined native title rights and interests in the two Ngadju determinations, the company notes that the original grant of the right to mine pre-dates 23 December 1996 and as such section 26D of the Native Title Act will be applied to exempt any future renewals or term extensions from the right to negotiate in Subdivision P of the Act.</li> <li>The complete area of contiguous tenements that are the subject of this announcement is collectively referred to as the Kambalda Nickel Project ("KNP") area. Gold Fields Ltd's wholly owned subsidiary, St Ives Gold Mining Company Pty Ltd (SIGM) was the registered holder and the beneficial owner of the Project area until the Lunnon Metals IPO.</li> <li>The rights to nickel and gold on the Project area were governed by an Option and Joint Venture Agreement ("JVA") executed between Lunnon Metals and SIGM which, in summary, granted rights to nickel and gold to Lunnon Metals in such a manner and form as if Lunnon Metals were the tenement holder, until such time as the JV farm-in commitments were met at which point the requisite percentage interest (initially 51%) was to be transferred to Lunnon Metals.</li> <li>Lunnon Metals and SIGM subsequently varied the JVA and executed a Sale and Purchase Agreement whereby Lunnon Metals, upon listing on the ASX, now holds 100% of the rights and title to the Project, its assets and leases, subject to certain select reservations and excluded rights retained by SIGM, principally relating to the right to gold in defined areas and the rights to process any future gold ore mined at their nearby Lefroy Gold Plant.</li> <li>The KNP comprises 19 tenements, each approximately 1,500 m by 800 m in area, and three tenements on which infrastructure may be placed in the future. The KNP area tenement numbers are as follows:</li> <li>M15/1546; M15/1553; M15/1575; M15/1577; M15/1577; M15/1579</li></ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	In relation to nickel mineralisation, WMC, now BHP Nickel West Pty Ltd and a wholly owned subsidiary of BHP Ltd, conducted all relevant exploration, resource estimation, development and mining of the mineralisation at Foster and Jan mines from establishment of the mineral licences through to sale of the properties to SIGM in December 2001.



Criteria	JORC Code explanation	Commentary
		<ul> <li>SIGM has conducted later gold exploration activities on the Project area since 2001, however until nickel focused work recommenced under Lunnon Metals management, no meaningful nickel exploration has been conducted since the time of WMC ownership and only one nickel focussed surface diamond core hole, with two 'daughter' wedge holes, have been completed in total since WMC ownership.</li> <li>Total production from Foster was 61,129 nickel tonnes and from Jan was 30,270 nickel tonnes.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	• The relevant area is host to both typical 'Kambalda' style, komatiitic hosted, nickel sulphide deposits and Archaean greenstone gold deposits such as routinely discovered and mined in Kambalda/St lves district.
Drillhole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:  • easting and northing of the drillhole collar  • elevation or RL (elevation above sea level in metres) of the drillhole collar  • dip and azimuth of the hole  • down hole length and interception depth hole length.	<ul> <li>Drill hole collar location and directional information is provided within the body of the report and also within the relevant Additional Details Table in the Annexures.</li> <li>DDH drilling reported herein is included in plan and cross sectional orientation maps where relevant.</li> </ul>
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	<ul> <li>Grades are reported as intervals recording down-hole length and interpreted true width where this estimation is able to be made.</li> <li>Any grades composited and reported to represent an interpreted mineralised intercept of significance are reported as drill-length weighted averages over that intercept.</li> <li>The Company currently considers that grades above 0.5% Ni are worthy of consideration for individual reporting in any announcement of additional details tables provided.</li> <li>Composite nickel grades may be calculated typically to a 0.5% Ni cut-off with intervals greater than 1.0% reported as "including" in any zones of broader lower grade mineralisation.</li> <li>Other composite grades may be reported above differing cut-offs however in such cases the cut off will be specifically stated.</li> <li>Reported intervals may contain internal waste however the resultant composite must be greater than either the 0.5% Ni or 1.0% Ni as relevant (or the alternatively stated cut-off grade).</li> <li>As per other Kambalda style nickel sulphide deposits the Lunnon Metals composites reported may include samples of very high nickel grades down to lower grades approaching the 0.5% Ni or 1.0% Ni cut-off as relevant.</li> <li>Gold assay results, if reported, are done so to a minimum cut-off grade of 1.0g/t Au and maximum internal dilution of 1.0m.</li> <li>No top-cuts have been applied to reporting of assay results.</li> <li>No metal equivalent values have been reported.</li> <li>Other elements of relevance to the reported nickel mineralisation, such as Cu, Co, Fe, Mg and the like, are reported where the nickel grade is considered significant.</li> </ul>



Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drillhole 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 (e.g. 'down hole length, true width not known').	•	In regard nickel exploration, the general strike and dip of the Lunnon Basalt footwall contact and thus the zones of contact nickel sulphides are considered to be well defined by past drilling which generally allows for true width calculations to be made regardless of the density or angle of drilling. For nickel and gold exploration, drillhole design seeks to plan the drill holes to be approximately perpendicular to the strike of mineralisation. Reported intersections are approximate, but may not be true width, as drilling is not always exactly perpendicular to the strike/dip of mineralisation. Improved estimates of true widths will only be possible when all results are received, and final geological interpretations have been completed.
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 drillhole collar locations and appropriate sectional views.	•	Plans, long projections and sections, where able to clearly represent the results of drilling, are provided in the main body of the report.
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.	•	Drill collar locations of drilling completed by Lunnon Metals are shown in tables and figures if relevant, the intersection point of all results of that drilling, including those with no significant assays, are provided in this report.  If relevant, drill holes with pending assays are also shown in figures. The report is considered balanced and in context.  The Company highlights the historical drill database contains more than 5,000 drillholes and more than 100,000 nickel assays (and more than 145,000 gold assays) and thus summary tables are provided in the Appendices A through D to the independent Technical Assessment Report attached to the Company's Prospectus lodged with the ASX on 11 June 2021. These Appendices note and record:  o nickel drillholes with significant assays i.e. the number of drillholes containing at least one assay value greater than or equal to 1.0% Ni versus total number of holes in the database;  number of nickel assay values greater than or equal to 1.0% in the database;  number of drillholes containing at least one assay value greater than or equal to 1.0 ppm Au versus total number of holes in the database; and  number of gold assay values greater than or equal to 1.0 ppm in the database.
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;	•	Drilling across the KNP is on-going.  The KNP has a long history of geological investigation, primarily for nickel, but also gold to a lesser degree.  Datasets pertinent to the KNP that represent other meaningful and material information include:  Geophysics - multiple ground and aerial based surveys of magnetic, gravity, SAM, characteristics  Geochemistry - nickel and gold soil geochemistry datasets across the KNP

potential

contaminating substances.

deleterious

or

Historical production data recording metallurgical performance of

Foster mine nickel delivered to the Kambalda Concentrator



Further work  The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	summarised in the Prospectus dated 22 April 2021 and announced
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