

LUNNON METALS LIMITED ABN: 82 600 008 848

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## EAST TROUGH RETURNS 2.0m @ 5.07% Ni

28th September 2021

#### **HIGHLIGHTS**

- Nickel sulphides successfully confirmed on key komatiite-basalt contact
- 2.0 metres @ 5.07% Nickel within broader zone of mineralisation (5.0m @ 2.39% Nickel)
- DHTEM results will guide follow up drilling

Lunnon Metals Limited (ASX: LM8) (the "Company" or "Lunnon Metals") is pleased to report results from the Company's first phase RC programme for the East Cooee – East Trough prospect at the Kambalda Nickel Project ("KNP").

#### **EAST COOEE**

Located 2.7km to the north-northwest of Jan Shaft (historical production of >30,000 tonnes of nickel metal), Lunnon Metals was targeting an interpreted, "hooded", east-facing embayment in the komatiite-basalt contact at the East Trough prospect.

This trough was interpreted to be present from a handful of historical WMC Resources ("WMC") drill holes which appeared to have either clipped nickel sulphide mineralisation or intersected highly anomalous komatiite above a potential trough (see Figure 1 for location of the East Cooee – East Trough prospect at KNP).

The East Trough prospect is over 2.5km distance from the Foster Nickel Mine (straight line) and between 3.10km to 4.75km when measured along the prospective komatiite-basalt contact (subject to depth on this contact).

As such the East Cooee area represents a completely separate mineralised position from the Company's existing JORC 2012 compliant Mineral Resource of 39,000 nickel tonnes. RC drilling has successfully intersected the prospective contact and recorded the following significant results:

- 5.0 metres @ 2.39% Ni from 286 metres (ECO21RC\_005) including
  - o 2.0 metres @ 5.07% Ni from 289 metres

The presence of nickel sulphides on this key contact coupled with the recognition of increased structural complexity of the same contact affirms the Company's model for East Cooee – East Trough and its resultant prospectivity.

## **ANALYSIS & INTERPRETATION**

East Trough has the potential to be a separate nickel mineralised trough/channel system at the KNP. The RC results, illustrated in Figure 2 and presented in Annexures 1 and 2 confirm the following:



- This new result in ECO21RC\_005 confirms and is approximately 130m up-plunge from historical WMC drill hole CD 587 (2.25m @ 3.37% Ni from 285m down hole<sup>1</sup>).
- Lunnon's two deepest RC holes into the East Trough prospect (ECO21RC\_005 and ECO21RC\_003) both
  defined the embayment as being more deeply incised into the underlying Lunnon Basalt than previously
  interpreted.
- Holes ECO21RC\_005 and ECO21RC\_013 also intersected a double embayment with the komatiite-basalt contact in the higher embayment also recording 1.0m @ 1.11% Ni (from 255m down hole in ECO21RC\_005), indicating the presence of nickel sulphides on this contact (Figure 3 provides a cross-sectional view with the original interpretation and target area on the prospective contact represented by a red polygon and dashed black line).
- The presence of previously unrecognised and more deeply incised embayments presents additional prospective contact positions within the East Trough prospect.
- The up-plunge komatiite-basalt contact was intersected at the planned depths and recorded anomalous, but not economic, levels of nickel mineralisation. The contact in this location is interpreted to be relatively planar with the structural complexity observed at greater depths, not present.

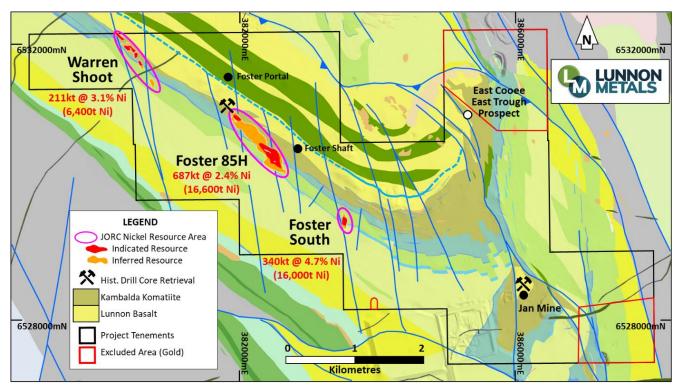


Figure 1: Plan view of the KNP illustrating the project boundary, surface geology and location of the East Trough Prospect at East Cooee relative to the existing JORC 2012 Mineral Resource at Foster Mine.

### **NEXT STEPS**

As communicated in the announcement dated 27th July 2021 ("Drilling gets underway at Kambalda Nickel Project"), the above results will form the basis of an update to the litho-structural model for the target area.

<sup>&</sup>lt;sup>1</sup> See ASX announcement dated 27<sup>th</sup> July 2021 for additional drill hole details of this and other previously quoted or referenced historical WMC drill holes.



The Down Hole Transient Electro-Magnetic surveys ("DHTEM") have been completed for the East Trough prospect holes. For hole ECO21RC\_005, whilst the survey log showed the conductive response was picking up as the significant intercept reported above was approached, an obstruction prevented the survey tool reaching the target depth. The DHTEM survey will therefore need to be repeated once the PVC casing is removed and replaced to allow the full hole depth to be surveyed. Once successfully completed, the DHTEM results will guide follow up Phase 2 drilling.

The objective of this first and subsequent follow up programmes at the East Cooee – East Trough prospect is to record sufficient new intercepts of sulphide mineralisation in the trough/channel setting to form the basis of an initial Mineral Resource estimation.

Phase 2 drilling, that may include both RC and diamond drilling, will work towards achieving this milestone.

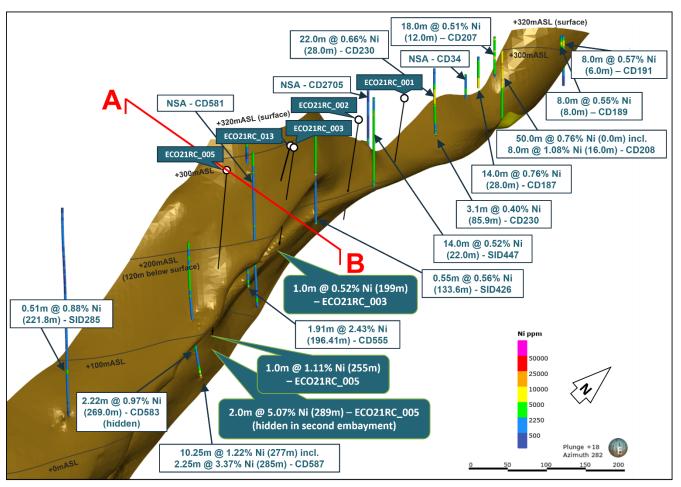


Figure 2: East Trough – East Cooee – Advanced Prospect targeting massive nickel sulphides in trough/channel setting – 80m wide slice shown. Historical WMC drilling results refer ASX announcement dated 27<sup>th</sup> July 2021<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> Trace of ECO21RC 013, no significant assays, is largely obscured by footwall basalt solid wireframe.



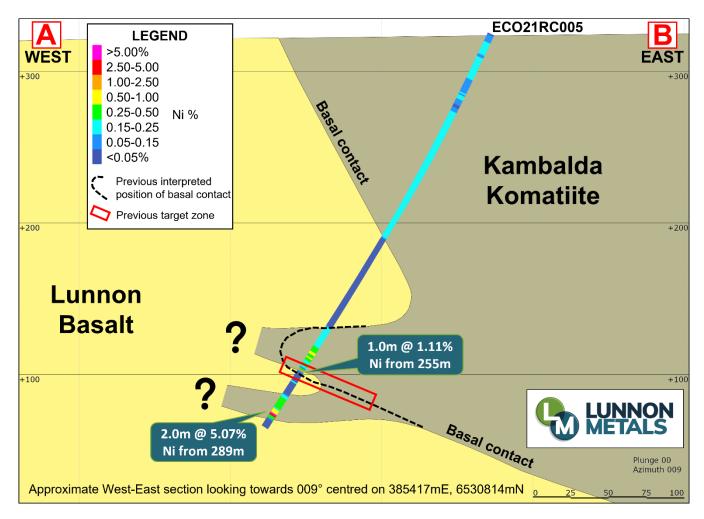


Figure 3: East Trough – East Cooee – Cross section for trace shown in Figure 2.

## **UPDATE FOR OTHER FIRST PHASE RC PROGRAMMES**

Lunnon Metals has defined three adjacent targets at East Cooee offering three different levels of opportunity. Now that assay results have finally begun to be received, the Company expects to be able to report regularly on these other first phase RC prospects at East Cooee along with the subsequent programmes that have been tested, as follows:

- East Cooee Hanging wall Mineralisation advanced prospect
- East Cooee West Trough conceptual target
- Warren Up-Plunge mineral resource extension oxide/sulphide boundary assessment
- Somerset/Cooee Gap conceptual target/DHTEM

## **UPDATE ON DIAMOND DRILL PROGRAMME**

Drilling of deep diamond holes to intersect the approximate 500m "gap" between the end of the Foster Decline and the Foster South JORC 2012 Mineral Resource position at the Foster Mine is ongoing. This drilling programme is designed to intersect the komatiite-basalt contact in positions that both test the contact directly for nickel sulphides, serve as a DHTEM platform for survey of the contact in proximity to these pierce points and



to test for the presence of later off-setting, potentially gold bearing faults/shears higher up in the stratigraphic sequence.

Detailed litho-structural logging of the core is underway as the drilling progresses and results will be reported when both nickel and gold assays are received. Completed holes will be surveyed by DHTEM as soon as survey crews become available.

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

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Annexure 1: 2021 East Cooee – East Trough Prospect Drill Hole Collar Table

Hole ID	Easting^	Northing^	Elevation (m ASL)	Dip	Azimuth	EOH Drill Depth (m)	Hole Type	Grid
ECO21RC_001	385,235	6,531,090	318.8	60.88	273.79	160	RC	MGA94_51
ECO21RC_002	385,320	6,531,012	320.5	61.37	272.71	190	RC	MGA94_51
ECO21RC_003	385,425	6,530,905	322.7	60.84	273.82	260	RC	MGA94_51
ECO21RC_005	385,505	6,530,800	324.7	64.90	279.27	300	RC	MGA94_51
ECO21RC_013	385,423	6,530,905	322.7	55.63	271.99	252	RC	MGA94_51

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

Annexure 2: 2021 East Cooee – East Trough Prospect Drill Results (>1m @ >0.5%Ni)

Hole ID	From (drill depth m)	Width (m)	Approx. True Width (m)^	Ni %	Cu %	Co %	Fe %	Mg %
ECO21RC_001			No signific	ant assa	<b>y</b> S			
ECO21RC_002		No significant assays						
ECO21RC_003	199	1.0	tbc	0.52	0.02	0.01	5.52	20.52
ECO21RC_005	241	2.0	tbc	0.53	0.02	0.01	6.18	20.48
ECO21RC_005	245	1.0	tbc	0.65	0.03	0.02	6.97	19.82
ECO21RC_005	255	255 1.0 tbc 1.11 0.39 0.02 14.01 4.93					4.93	
ECO21RC_005	286	5.0	tbc	2.39	0.10	0.03	9.10	12.93
	including				ncluding			
ECO21RC_005	289	2.0	tbc	5.07	0.14	0.06	13.54	8.06
ECO21RC_013	No significant assays							

 $<sup>^{\</sup>text{tbc}}$  – to be confirmed; insufficient drill pierce points exist on this contact to estimate mineralised true widths at this stage



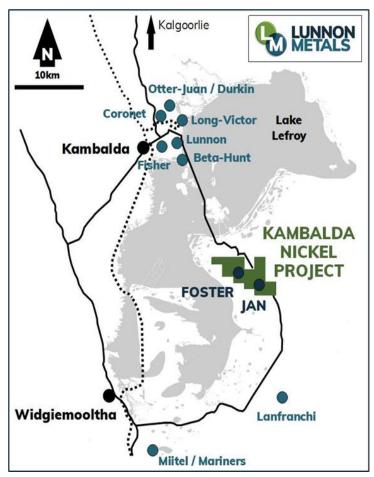


Figure 4: Regional Location of the Kambalda Nickel Project and other nearby nickel deposits

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

Lunnon Metals holds 100% of the mineral rights at KNP, subject to certain rights retained by St lves\*. 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 4, 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**

The 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	tal	746,000	3.6	27,000	491,000	2.4	12,000	1,238,000	3.2	39,000

#### **EXPLORATION TARGET**

An Exploration Target for East Cooee was estimated by the Company in 2020 in accordance with the guidelines of the JORC Code, (2012). This work identified multiple mineralised surfaces in komatiite-basalt contact trough locations, contact flanking locations, footwall positions and extensive hanging-wall surfaces.

The combined tonnage and grade potential of the Exploration Target was estimated to be in the range of 500 to 750 kt with an average grade of 1.25% to 2.5% nickel. The potential quantity and grade of the Exploration Target is conceptual in nature. In the Company's Prospectus, Optiro, in its Independent Technical Assessment Report in Schedule 3, noted that there has been insufficient exploration to estimate a Mineral Resource and it was uncertain if further exploration will result in the estimation of a Mineral Resource. Lunnon Metals confirms that this assessment is still valid pending the outcome of the planned drilling campaigns reported.

The Exploration Target is based on supporting geological information and drillhole data from WMC and geological interpretations by Lunnon Metals. Included in the data on which this Exploration Target has been prepared are the results from surface diamond drillholes across the East Cooee area, completed by WMC during the 1970s and 1980s.

The Exploration Target does not account for potential geological complexity, possible mining method or metallurgical recovery factors. The Exploration Target was estimated in order to provide an assessment of the potential scale and grade of the mineralisation intersected in drilling and supported by strong and high magnitude nickel-in-soils geochemical anomalism.



The Exploration Target was defined by using a combination of two methodologies. The first used the historical surface drilling to generate 3D models (within the Leapfrog software) of the basalt-ultramafic contact across the East Cooee area. Drillhole intercepts with lower cut-off grades of between 0.5% and 1.0% nickel were identified and tagged in the 3D modelling environment as representing either hangingwall, contact (both trough style and flanking style), or footwall mineralised domains. Solid 3D wireframes were created from these tagged drill intercepts. The wireframes were modelled to an extent that they 1) conform to the geometry of the modelled basalt-ultramafic contact; 2) are supported by adjacent drill intercepts; and 3) have dimensions no greater than what is supported by observed occurrences of those styles of mineralisation in the Foster mine environment. The Leapfrog implicit radial basis function interpolant process was used to estimate the nickel grades within the various East Cooee domains and populate block models to obtain volumes and grade above a 1.0% nickel cut-off grade. Tonnes were calculated by multiplying the volumes by a fixed density of 3.0 t/m³.

The second methodology involved Cube in December 2020, whereby they estimated an Exploration Target for the two main East Cooee hangingwall nickel lodes in the East Cooee area. Drillhole data and geological interpretations were supplied by Lunnon Metals and Cube produced the estimate using standard processes and procedures including data selection, compositing, variography, estimation by OK and model validation. Estimates were made for nickel and bulk density only. Although the estimation work completed by Cube is to a standard consistent with the JORC(2012) guidelines for the reporting of Mineral Resource, the resulting classification as Exploration Target was determined by the Company based on insufficient Reasonable Prospects for Eventual Economic Extraction (RPEEE) due to broad spaced drilling and relatively low estimated nickel grades.

Based on these two estimation methodologies a range of tonnes and grade was derived for the Exploration Target of the combined East Cooee mineralised domains. In the Company's Prospectus, Optiro, in its Independent Technical Assessment Report in Schedule 3, stated that it had reviewed the Exploration Target and considered it had been appropriately estimated and was representative of the exploration potential at East Cooee.

## **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	<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> </ul>
	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>RC samples were collected on a 1m basis from a cone splitter mounted on the drill rig cyclone. 1m sample mass typically averages 3.0kg.</li> <li>Industry prepared independent standards and blanks are each inserted, approximately every 50 samples.</li> <li>Duplicate samples were also collected from the drill rig cyclone, at a rate of 1 in every 25 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, split and pulverised up to 3kg (with the reject discarded).</li> <li>Sample sizes are considered appropriate for the material sampled.</li> <li>The samples are considered representative and appropriate for this type of drilling.</li> <li>RC samples are appropriate for use in a resource estimate.</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</li> </ul>
		trays labelled with the drill hole ID and core intervals.  Industry prepared independent standards and blanks are each inserted, approximately every 50



Criteria	JORC Code explanation	Commentary
		<ul> <li>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 pulverised up to 3kg (with the coarse reject retained).</li> <li>Sample sizes are considered appropriate for the material sampled.</li> <li>The samples are considered representative and appropriate for this type of drilling.</li> <li>DDH core samples are appropriate for use in a resource estimate.</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, facesampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>RC holes were drilled with a 5 1/2-inch bit and face sampling hammer.</li> <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>Some DDH utilised historical or new RC pre-collars of typical depths of 100m to 150m.</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>RC samples are routinely checked for recovery, moisture, and contamination.</li> <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> </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>For both RC and DDH:</li> <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>



Criteria	JORC Code explanation	Commentary
Criteria 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.  For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all subsampling 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.  Whether sample sizes are appropriate to the grain size of the material being sampled.	RC RC sampling was carried out every 1m by a cone splitter on a rig cyclone. The calico samples taken directly from the cyclone were submitted for analysis. Field QAQC procedures involve the use of certified reference material (CRM) inserted approximately 1 in 50 samples. A field duplicate, namely a second identical cone split at the cyclone, is collected every 25 samples.  DDH 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. DDH core was cut in half, with one half sent to the laboratory for assay and the other half retained. Holes were sampled over mineralised intervals to geological boundaries on a nominal 1m basis with a typical minimum of 0.3m and a typical maximum of 1m. Field QAQC procedures involve the use of certified reference material (CRM) and blank material, each inserted approximately 1 in every 50 samples. 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.  RC & DDH At the assay laboratory, each sample was dried, split (if sample weight was >3kg), crushed, and pulverised. Sample sizes are considered appropriate for the style of mineralisation (potentially nickeliferous massive, matrix and disseminated sulphides,
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and 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	<ul> <li>hosted in komatiite and basalt; and altered quartz veins/shear structures considered potentially auriferous in all lithological types).</li> <li>Samples were submitted to Intertek Genalysis in Kalgoorlie for sample preparation i.e. drying and pulverising.</li> <li>Pulverised samples were then transported to Intertek Genalysis in Perth for analysis.</li> <li>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.</li> <li>Where considered necessary, Au was analysed</li> </ul>



Criteria	JORC Code explanation	Commentary
	(i.e. lack of bias) and precision have been established.	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.
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>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 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> <li>Any assays results for a composited interval within a drillhole are reported on a length weighted basis.</li> </ul>
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole 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>RC and 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> <li>The grid projection is GDA94/ MGA Zone 51.</li> <li>Diagrams and location table are provided in the report where relevant.</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 RC and 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.</li> </ul>



Criteria	JORC Code explanation	Commentary
		No sample compositing has been applied except in the reporting of drill intercepts within a single hole, as described in this table.
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>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>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 nonexistent 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 bag 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 Laboratory's secure warehouse until collected by the Company or approved to be discarded.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audits or reviews have been undertaken at this stage of the programme.

## **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 A 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 Lunnon Metals IPO.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <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 right 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 Project area 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 Project area tenement numbers are as follows:          M15/1546; M15/1548; M15/1549; M15/1550; M15/1557; M15/1557; M15/1573; M15/1575; M15/1577; M15/1573; M15/1575; M15/1577; M15/1577; M15/1579; M15/1570, M15/1577; M15/1577; M15/1579, M15/1570, M15/1570.     </li> <li>There are no known impediments to potential future development or operations, subject to relevant regulatory approvals, over the leases where significant results have been reported.</li> <li>The tenements are in good standing with the Western Australian Department of Mines, Industry Poculation and Sofoty.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Regulation and Safety.</li> <li>In relation to nickel mineralisation, WMC, now BHP Billiton 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.</li> <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, has been</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>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 Ives 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.</li> <li>RC and 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 downhole 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 are reported to a minimum cutoff 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</li> </ul>



Criteria	JORC Code explanation	Commentary
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').	<ul> <li>significant.</li> <li>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.</li> <li>For nickel and gold exploration, drillhole design seeks to plan the drill holes to be approximately perpendicular to the strike of mineralisation.</li> <li>Reported intersections are approximate, but may not be true width, as drilling is not always exactly perpendicular to the strike/dip of mineralisation.</li> <li>Improved estimates of true widths will only be possible when all results are received, and final geological interpretations have been completed.</li> </ul>
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 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.	<ul> <li>Drill collar locations of drilling completed by Lunnon Metals are shown in figures and all results of that drilling, including those with no significant assays, are provided in this report.</li> <li>If relevant, drill holes with pending assays are also shown in figures.</li> <li>The report is considered balanced and in context.</li> <li>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:         <ul> <li>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;</li> <li>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</li> <li>number of gold assay values greater than or equal to 1.0 ppm in the database.</li> </ul> </li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk	<ul> <li>Drilling across the KNP is on-going.</li> <li>The KNP has a long history of geological investigation, primarily for nickel, but also gold to a lesser degree.</li> </ul>



Criteria	JORC Code explanation	Commentary
	samples — size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>Datasets pertinent to the KNP that represent other meaningful and material information include:</li> <li>Geophysics - multiple ground and aerial based surveys of magnetic, gravity, SAM, characteristics</li> <li>Geochemistry - nickel and gold soil geochemistry datasets across the KNP</li> <li>Historical production data recording metallurgical performance of Foster mine nickel delivered to the Kambalda Concentrator.</li> </ul>
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).	<ul> <li>The planned 2 year (June 2021 - June 2023) work programme is summarised in the Prospectus dated 22 April 2021 and announced on the ASX on 11 June 2021.</li> <li>In general terms, the current nickel mineral resources are not closed off down plunge and also have potential for further definition drilling upplunge. Whilst some testing of these areas can be achieved via surface diamond and/or RC drilling, typically it would be undertaken from underground drill platforms which are yet to be established.</li> <li>In relation to the drilling results reported in this announcement, DHTEM surveys will test for the presence of proximal EM anomalies (or plates) that may represent concentrations of nickel sulphides. Subject to completion of these surveys and analysis of the results, RC and DDH (drill type will be subject to the estimated depth to target) will be planned to directly target these EM plates, if warranted.</li> </ul>