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ASX CODE: LM8

# Baker initial metallurgical tests complete

# 1 SEPTEMBER 2022

#### **KEY POINTS**

- High nickel recoveries
- Very clean concentrate produced
- High in saleable nickel and copper and low in contaminates

Lunnon Metals Limited (**ASX: LM8**) (the **Company** or **Lunnon Metals**) is pleased to provide an update on the progress of metallurgical studies at the Baker Shoot, part of the Kambalda Nickel Project (**KNP**). Baker was progressed to an initial JORC 2012 compliant Mineral Resource Estimate (**MRE**) totalling 15,800t<sup>1</sup> nickel metal @ 2.8% Ni within nine months of discovery and inside 12 months of Lunnon Metals listing on the ASX.

The initial metallurgical test work at Baker has been carried out with results now received. The composite sample comprised 170kg of diamond drill core recovered at the end of 2021.

The Company is encouraged by these positive results, summarised as follows:

Composite Sample calculated head grade: 2.81% Ni, 0.27% Cu, 0.057% Co, 16.4% Fe, 20.6% MgO, 7.29% S, 18 ppm As

Results of the Rougher/Cleaner optimisation tests conducted at a grind size of P80 53 µm:

- Nickel recovery was 86% with a concentrate grade of 16.9% Ni;
- Copper recovery 95.5% with a concentrate grade of 1.88% Cu;
- Cobalt recovery 85.3% with a concentrate grade of 0.35% Co;
- o Arsenic in concentrate graded 95 ppm; and
- o Other concentrate measures included Fe:MgO ratio of 16.8 and sulphur at 36.8%;

This programme has delivered extremely promising results based on the metallurgical processing flowsheet at BHP Nickel West's (**Nickel West**) Kambalda Concentrator. The test work showed high nickel recoveries whilst producing a very clean concentrate that is low in contaminates and high in saleable nickel, copper and cobalt.

The composite sample was collected from the only three diamond holes available at the time the test work was initiated, which was **prior** to completing the geological interpretation and reporting of the first-time Baker MRE in June 2022. As a consequence, over 40% of the core samples collected originated from outside the MRE interpreted model, with this additional material predominantly being sourced from the weakly mineralised hanging wall komatiite to make up the sample weight required.

**Managing Director, Ed Ainscough, commenting said:** "These initial metallurgical results are excellent, especially when considering the core samples were collected back in late 2021 when we only had three diamond holes completed, including material that did not end up in the June 2022 MRE. Over 58 drill holes have been completed since then, including an extra 15 diamond holes. As reported, the increased data density has revealed improved widths and very high grade nickel mineralisation which gives us great confidence for the remainder of the metallurgical programme after this impressive start."

<sup>1</sup> A breakdown of the Baker Mineral Resource is included on Page 5 and appended at the end of this release.



#### **TEST WORK SUMMARY**

58 individual core samples were combined and underwent head sample characterisation, mineral characterisation, grind establishment tests and nickel sulphide flotation tests. The calculated head grade of the composite sample was 2.81% Ni, 0.27% Cu, 0.057% Co, 16.4% Fe, 20.6% MgO, 7.29% S and 18 ppm As.

A description of the process flow for the test work is contained in Table 1, Section 2, at the end of this release.

Initial grind/flotation work was carried out to understand the sample amenability to grinding and flotation response. Rougher grind/flotation sighter tests were conducted at grinds of P80 75  $\mu$ m, 106  $\mu$ m and 125  $\mu$ m. The results of the 106  $\mu$ m grind size were:

- Nickel recovery was 88.3% with a concentrate grade of 12.64% Ni;
- Copper recovery 93.7% with a concentrate grade of 1.28% Cu;
- Cobalt recovery 87.9% with a concentrate grade of 0.25% Co;
- Arsenic in concentrate graded 73 ppm;
- Palladium in concentrate graded 2.32 g/t (0.38 g/t head grade), Platinum 0.55 g/t (0.17 g/t head grade); and
- Other concentrate measures included Fe:MgO ratio of 8.36 and sulphur at 31.1%.

Once the initial results were analysed, a test work programme was developed that best approximated the treatment conditions at the Kambalda Concentrator. Rougher/Cleaner optimisation tests were conducted at a grind size of P80 53 µm, chosen in consultation with Nickel West technical personnel, to simulate the process flow at their Kambalda Concentrator. The results of these tests are reported on page 1 of this release. Insufficient sample remained for a separate palladium and platinum fire assay suite in the optimisation programme.

#### FURTHER TEST WORK

In light of the significant widths and very high grades that have been recorded at Baker since the first three diamond holes were drilled in 2021 and then the first-time Baker MRE was reported in June 2022, metallurgical sample collection has continued from the current diamond core drilling programme. Intervals identified for metallurgical test work are shrink wrapped and then stored in a freezer compartment at site until ready for shipment to the laboratory.

The MRE update planned for December quarter will see domaining of the Baker nickel mineralisation into its near surface, weathered and fresh components together with refined separate models for the different mineralisation styles observed, most notably base of flow and remobilised shear hosted nickel sulphide zones. This work will form the basis of the geo-metallurgical model from which additional domain specific test work will be undertaken on the samples collected.

The process covering the collection and handling of the metallurgical samples and the supervision of the test work that aligns with Nickel West's process flow is being managed by Mr. Barry Cloutt, an external independent metallurgical consultant who previously worked for WMC Resources in Kambalda in the 1990s and directly managed the Kambalda Concentrator. This was a period in time when the plant was receiving nickel ore from between 10 and 15 separate underground sources across the Kambalda and Widgiemooltha districts from various ore suppliers. The methodical approach adopted will ensure that future discussions with potential off-take partners are based on the highest quality geological and metallurgical information.

#### **PREVIOUS ASX REPORTING**

The Company highlights that the diamond holes utilised in the metallurgical programme have been previously reported to the ASX, with plan and cross sections provided for context at that time, as follows:

- ECO21DD\_002 & ECO21DD\_003 lodgement dated 7 February 2022; and
- ECO21DD\_004 lodgement dated 20 January 2022.



Section 6,531,240mN hosts ECO21DD\_002 (2.55m @ 7.53% Ni) and was updated recently with the result of the current infill programme (see ASX announcement dated 22 August 2022). The completed section is included below for reference.

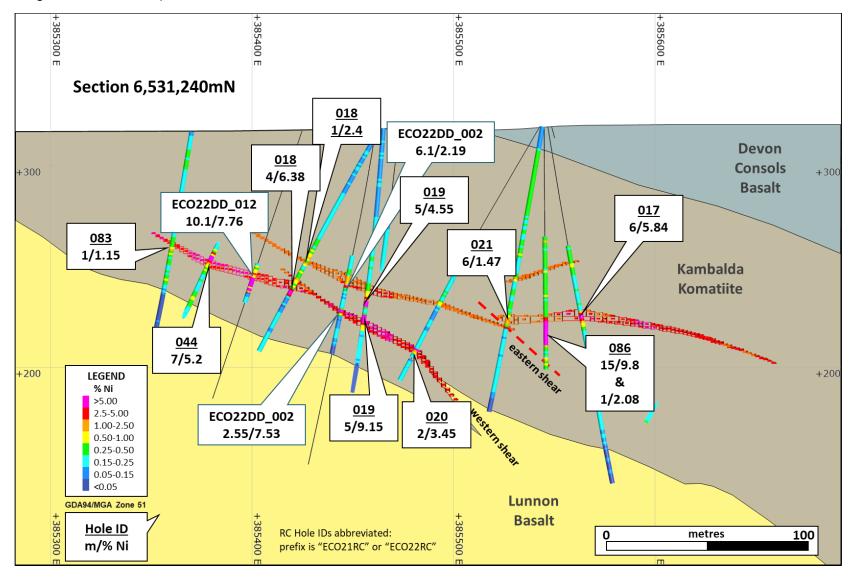


Figure 1 : Geological type cross section 6,531,240mN, host to ECO21DD\_002 - massive nickel sulphide zone from 91.15m downhole: 2.55m @ 7.53% Ni



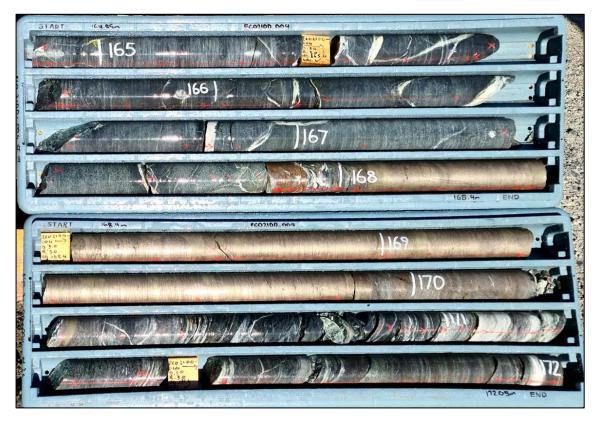


Figure 2 : Core from ECO21DD\_004 - massive nickel sulphide zone from 167.85m downhole: 2.7m @ 10.72% Ni



Figure 3: Core from ECO21DD\_003 - massive nickel sulphide zone from 122.1m downhole: 2.15m @ 5.53% Ni



Annexure 2 at the end of this release includes both the previously reported intervals for the relevant diamond holes together with the assay results for the intervals selected to form the metallurgical composite i.e. including those portions of core either not previously reported or reported but then not subsequently included in the Baker MRE.

#### **BAKER MINERAL RESOURCE**

Edmund Ainscough Managing Director Phone: +61 8 6424 8848

The Company reported the initial MRE for the Baker Shoot in June 2022, its first discovery at the KNP. The first-time Baker MRE comprised:

- 295,000 tonnes @ 2.75% Ni for 8,100 nickel tonnes in Indicated Mineral Resource; and
- 273,000 tonnes @ 2.82% Ni for 7,700 nickel tonnes in Inferred Mineral Resource.

This addition increased Lunnon Metals' global MRE across the KNP to 2.2 million tonnes @ 2.9% nickel for 64,300 contained nickel tonnes<sup>2</sup>. In contained metal terms the global MRE across the KNP has now grown by 65% since the Company's IPO in June 2021.

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

Email: info@lunnonmetals.com.au 2000mN oster Portal Baker 85H 568kt @ 2.8% Ni Warren 687kt @ 2.4% Ni (15,800t Ni) 211kt @ 3.1% Ni (16,600t Ni) (6,400t Ni) Foster N75C 413kt @ 2.3% Ni (9,500t Ni) LEGEND Foster JORC Nickel Resource Area South Kenilworth Indicated Resource 340kt @ 4.7% Ni Inferred Resource (16,000t Ni) 🛠 Hist. Drill Core Program Jan Shoot Kambalda Komatiite Nickel prospective 6528000mN 6528000mN **Project Tenements** Excluded Area (Gold) Kilometres

Figure 4: Plan of the Kambalda Nickel Project showing location of current work focus areas.

<sup>2</sup> A tabulation of the Mineral Resource for the KNP is appended at the end of this release.



#### Annexure 1: Drill Hole Collar Table

Hole ID	Easting^	Northing^	Elevation (m ASL)	Dip	Azimuth	EOH Drill Depth (m)	Hole Type	Grid
ECO21DD_002	385,464	6,531,242	318	-80.4	267.5	170	Surf RCD	MGA94_51
ECO21DD_003	385,584	6,531,204	320	-85.4	272.0	230	Surf RCD	MGA94_51
ECO21DD_004	385,622	6,531,162	320	-62.5	268.2	260	Surf 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:

#### Assay Results as previously reported for holes subsequently used for metallurgical test work

Hole ID	From drill depth (m)	Width (m)*	Ni %	Cu %	Со %	Fe %	Mg %	As ppm#	Pd g/t	Pt g/t	Cut- off Ni %
ECO21DD_002	74.35	6.10	2.19	0.18	0.04	12.57	15.15	х	0.36	0.17	1.0
including	79.00	1.45	4.70	0.32	0.09	22.31	8.73	х	0.58	0.32	2.5
ECO21DD_002	91.15	2.55	7.53	0.76	0.14	31.69	3.59	109	0.45	0.42	1.0
including	91.35	1.85	9.66	0.58	0.18	36.78	2.11	75	0.53	0.53	2.5
ECO21DD_003	110.00	14.25	1.80	0.18	0.04	13.07	14.74	10	0.38	0.10	1.0
including	122.10	2.15	5.53	0.57	0.11	28.36	7.85	10	1.28	0.26	2.5
ECO21DD_004	148.1	3.75	0.94	0.05	0.02	9.1	17.3	Х	0.16	0.08	0.5
including	148.8	1.6	1.3	0.06	0.03	10.5	16.8	х	0.23	0.13	1.0
and	155.4	2.6	1.0	0.06	0.02	8.2	16.4	Х	0.14	0.03	0.5
and	167.85	2.7	10.72	0.76	0.19	40.3	2.8	Х	1.08	0.5	1.0
including	168.0	2.25	12.51	0.82	0.22	45.3	1.2	Х	1.25	0.58	2.5

\* Down hole widths (m) approximate true widths.

# "X" assay values below detection limit of the analysis (10ppm in the case of arsenic).

#### Assay Results for intervals selected to form composite for metallurgical test work

Hole ID	From drill depth (m)	Width (m)*	Ni %	Cu %	Co %	Fe %	Mg %	As ppm#	Pd g/t	Pt g/t	Cut- off Ni %
ECO21DD_002	72.7	9.3	1.55	0.12	0.03	10.68	16.08	12	0.25	0.12	n/a
and	90.05	4.65	4.30	0.43	0.09	22.51	7.06	164	0.27	0.25	n/a
ECO21DD_003	107.2	18.8	1.55	0.15	0.03	11.94	15.41	<20	0.32	0.10	n/a
ECO21DD_004	167.6	3.6	8.08	0.57	0.15	32.30	5.34	43	0.81	0.38	n/a

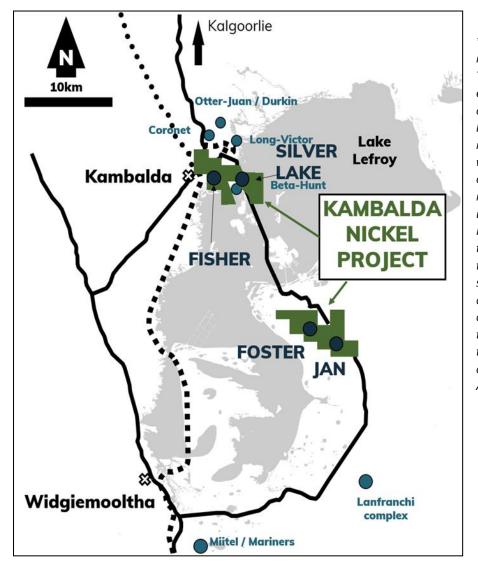


#### ABOUT THE KAMBALDA NICKEL PROJECT ("KNP")

Lunnon Metals currently holds 100% of the mineral rights at the Foster and Jan elements of the 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, inclusive of the acquisition of rights as detailed in the announcement dated 12 April 2022, is approximately 47km<sup>2</sup> in size comprising two parcels of 19 (Foster and Jan) and 20 (Silver Lake and Fisher) 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 15Moz of gold in total has been mined with WMC accounting for 5.9Moz and over 8.3Moz produced by Gold Fields Ltd since the purchase of the operation in December 2001 from WMC, making the Kambalda/St lves 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 at the Foster and Jan elements of the expanded KNP, 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 has 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.

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



#### COMPETENT PERSON'S STATEMENT & COMPLIANCE

The information in this announcement that relates to nickel geology, nickel Mineral Resources and Exploration Results, is based on, and fairly represents, information and supporting documentation prepared by Mr. Aaron Wehrle, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr. Wehrle is a full-time employee of Lunnon Metals Ltd, a shareholder and holder of employee options; 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.

The information in this announcement that relates to the reporting of nickel metallurgy, is based on, and fairly represents, information and supporting documentation prepared by Mr. Barry Cloutt, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr. Cloutt is an external and independent consultant to Lunnon Metals Ltd, and has sufficient experience that is relevant 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. Cloutt 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 as at 14 June 2022 is as follows:

KNP	<b>Cut-off</b>	lı	ndicate	d		Inferre	ed		Total	
	(Ni %)	Tonnes	Ni (%)	Ni Tonnes	Tonnes	Ni (%)	Ni Tonnes	Tonnes	Ni (%)	Ni Tonnes
85H	1.0	387,000	3.3	12,800	300,000	1.3	3,800	687,000	2.4	16,600
South	1.0	223,000	4.7	10,500	116,000	4.8	5,500	340,000	4.7	16,000
Warren	1.0	136,000	2.7	3,700	75,000	3.7	2,700	211,000	3.1	6,400
N75C	1.0	270,700	2.6	6,900	142,000	1.9	2,600	412,700	2.3	9,500
Baker	1.0	295,000	2.8	8,100	273,000	2.8	7,700	568,000	2.8	15,800
Total		1,311,700	3.2	42,000	906,000	2.5	22,300	2,218,700	2.9	64,300

Note: Figures have been rounded and hence may not add up exactly to the given totals.

#### DISCLAIMER

References in this announcement may have been made to certain previous ASX announcements, which in turn may have included Exploration Results, Exploration Targets 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 BAKER 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 	<ul> <li>All drilling and sampling were undertaken in an industry standard manner both historically by WMC Resources Ltd (WMC) and by Lunnon Metals Limited (Lunnon) since June 2021.</li> <li>Prior to the June 2022 MRE, three diamond drill holes (DD) and 36 Reverse Circulation (RC) holes were completed by Blue Spec Drilling Pty Ltd (Blue Spec) on behalf of Lunnon at the Baker prospect following protocols and QAQC procedures aligned with industry best practice.</li> <li>RC and DD drilling is ongoing and being reported as results are returned and validated.</li> <li>DD Lunnon</li> <li>Core samples were collected with a diamond rig drilling HQ (63.5mm core diameter).</li> <li>All DD core is stored in industry standard plastic core trays labelled with the drill hole ID and core depth intervals.</li> <li>Sub-sampling techniques and sample preparation are described further below in the relevant section.</li> <li>Sample sizes are considered appropriate for the material sampled.</li> <li>The 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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>DD Lunnon</li> <li>Lunnon DD holes were drilled using HQ (63.5mm core diameter).</li> <li>The DD core was orientated during the drilling process by Blue Spec, using a down hole Reflex ACTIII<sup>TM</sup> Rapid Descent Digital Core Orientation Tool, and then reconstructed over zones of interest by Lunnon field staff for structural and geotechnical logging.</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>DD core recovery is measured for each drilling run by the driller and then checked by the Lunnon 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 nickel 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	<ul> <li><u>DD:</u></li> <li>Geology logging is undertaken for the entire hole recording lithology, oxidation state, mineralisation, alteration, structural</li> </ul>



Criteria	JORC Code explanation	Commentary
	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>fabrics, and veining.</li> <li>DD orientated structural logging, core recovery, and Rock Quality Designation (RQDs) are all recorded from drill core over intervals of interest and relevance.</li> <li>Geological logging (and where required, geotechnical logging) is completed in sufficient detail to support future Mineral Resource estimation, mining and metallurgical studies.</li> <li>Metallurgical testwork is being completed in addition to the geological logging data captured are qualitative (descriptions of the various geological features and units) and quantitative (numbers representing structural attitudes, and vein and sulphide percentages, magnetic susceptibility and conductivity).</li> <li>DD core is photographed in both dry and wet form.</li> </ul>
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 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. Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>Lunnon DD</li> <li>DD core samples were collected with a diamond drill rig drilling HQ size core. After logging, sample interval mark-up, and photographing, selected sample intervals of drill core were cut in half along the length of the drill core with a diamond saw in a Discoverer &amp; Automatic Core Cutting Facility using a Corewise Auto Core Saw.</li> <li>Typically, one half of the drill core is sent to the laboratory for assay and the other half retained in its original core tray.</li> <li>In zones of potential metallurgical interest the half core sample is vacuum sealed and stored refrigerated for later use, the remaining half core is further cut into quarters with one quarter sent to the laboratory for assay and the remaining quarter retained in its original core tray.</li> <li>Holes were marked-up and sampled for assaying over mineralised and surrounding intervals 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>Specific Gravity - density measurements were taken for each mineralised DD sample for the Lunnon drill holes.</li> <li>Sample weights vary depending on sample length and density of the rock.</li> <li>Industry prepared Certified Reference Material (CRM), or standard samples, of various grades appropriate to the mineralised zones.</li> <li>Lunnon prepared blank samples are inserted, approximately every 50 samples and more frequently in the identified mineralised zones.</li> <li>Lunnon prepared blank samples are inserted, approximately every 50 samples are prepared from barren reject RC chips as verified by laboratory analysis and geological logging.</li> <li>Field duplicate samples 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>After receipt of the DD core samples by the independent laboratory the samples are dried, crushed to ~2mm, and pulverised with &gt;85% pulverised to</li></ul>
	The nature, quality and appropriateness of the assaying and laboratory procedures used and	<ul> <li>disseminated sulphides, hosted in komatiite and basalt).</li> <li>Samples were submitted to Intertek Genalysis in Kalgoorlie for sample preparation i.e. drying, crushing where necessary, and pulverising.</li> </ul>



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.	<ul> <li>Pulverised samples were then transported to Intertek Genalysis in Perth for analysis.</li> <li>Samples were analysed for a multi-element suite including, as a minimum, Ni, Cu, Co, Cr, As, Fe, Mg, Pb, S, Ti, Zn. Analytical techniques used a four-acid digest (with ICP-OES or ICP-MS finish) of hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for near total dissolution of almost all mineral species including silicabased samples.</li> <li>Within the nickel mineralised zones, the platinum group elements (Pd, Pt, Au) were also analysed using a 50g charge lead collection fire assay method with ICP-MS finish.</li> <li>These techniques are considered quantitative in nature.</li> <li>As discussed previously, CRM standard, and blank samples are inserted by Lunnon into sample batches, and the laboratory also carries out internal standards and check assays in individual batches.</li> <li>The resultant Lunnon and laboratory QAQC data is reviewed upon receipt to determine that the accuracy and precision of the data has been identified as acceptable prior to being cleared for upload to the abute prior to being cleared for upload to</li> </ul>
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>the database.</li> <li>Not relevant to samples subsequently collected from diamond core for metallurgical test work.</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>Hole collar locations are located initially by handheld GPS to an accuracy of +/- 3m. Subsequently, drill hole collar locations are then picked up by a licensed surveyor using DGPS methods following the completion of the drilling.</li> <li>All drill holes were surveyed downhole at 5m intervals using the REFLEX gyro Spirit-IQ (north seeking gyro) or EZ-Gyro systems for both azimuth and dip measurements.</li> <li>Downhole surveys are uploaded by Blue Spec to the IMDEXHUB-IQ, a cloud-based data management programme where surveys are validated and approved by trained Lunnon staff. Approved exports are then sent to MaxGeo to import directly into the Datashed database.</li> <li>The grid projection is GDA94/ MGA Zone 51.</li> <li>Diagrams and location data tables are provided herein and have been provided in the previous reporting of exploration results at Baker 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>Not relevant to samples subsequently collected from diamond core for metallurgical test work.</li> <li>However, the current drill spacing is stepping in to approximately 20m x 20m to assist possible future mine planning activities and to refine the geological and grade estimation model in areas of high grade and/or complexity.</li> <li>All holes have been geologically logged and provide a strong basis for geological control and continuity of mineralisation.</li> <li>The metallurgical test work was based on just three diamond holes that were available at the end of 2021 when the programme commenced. Subsequent to the initiation of the test work programme, the Baker MRE was completed. Reconciliation of the</li> </ul>



Criteria	JORC Code explanation	Commentary
		origin of the diamond core used in the test work programme against the Baker MRE recorded that 40% by mass of the composite sample was derived from core intervals that were not included in the June 2022 MRE.
Orientation of data in relation to geological structure	data in relation to geologicalachieves unbiased sampling of possible structures and the extent to	<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> </ul>
	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 chance of bias introduced by sample orientation relative to structures, mineralised zones or shears at a low angle to the drillhole is possible in the RC drilling however, the Optical Televiewer down hole survey program discussed above allows this possible bias to be assessed. Where drilling intercepts the interpreted mineralisation as planned, bias is considered non-existent to minimal.</li> <li>Lunnon does not consider that any bias was introduced by the orientation of sampling resulting from DD drilling techniques.</li> </ul>
Sample security	The measures taken to ensure sample security.	Not relevant to samples subsequently collected from diamond core for metallurgical test work.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>The metallurgical analysis has been conducted by IMO Pty Ltd with external and independent review of the results provided Mr. Barry Cloutt, previously the Manager of the Kambalda Nickel Concentrator when operated by WMC Resources Ltd.</li> <li>No other external audits or reviews have been undertaken at this stage of the programme.</li> </ul>



## SECTION 2 REPORTING OF EXPLORATION RESULTS FOR BAKER

Criteria	JORC Code explanation	Commentary
Criteria Mineral tenement and land tenure status	JORC Code explanation 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>Commentary</li> <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 on which the Baker prospect is located is collectively referred to as the Kambalda Nickel Project (KNP) area. Gold Fields Ltd's wholly owned subsidiary, St lves Gold Mining Company Pty Ltd (SIGM) was the registered holder and the beneficial owner of the KNP area until the Lunnon IPO in 2021.</li> <li>Lunnon now holds 100% of the rights and title to the KNP, 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 1,500m by 800m in area, and three tenements on which infrastructure may be placed in the future. The KNP area tenement numbers are as follows: M15/1546; M15/1548; M15/1549; M15/1550; M15/1557; M15/1559; M15/1553; M15/1556; M15/1557; M15/1557; M15/1577; M15/1573; M15/1576; M15/1577; M15/1577; M15/1577; M15/1578; M15/1577; M15/1577; M15/1578; M15/1576;</li> <li>Baker is hosted on M15/1548.</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> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The tenements are in good standing with the Western Australian Department of Mines, Industry Regulation and Safety.</li> <li>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.</li> <li>SIGM has conducted later gold exploration activities on the KNP area since 2001, however until nickel focused work recommenced under Lunnon 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 wedge holes), was completed in total since WMC ownership and prior to Lunnon's IPO.</li> <li>On the KNP, past total production from underground was: Foster 61,129 nickel tonnes and Jan 30,270 nickel tonnes.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The KNP 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.</li> </ul>



Criteria	JORC Code explanation	Commentary
		• The Baker area is host to nickel mineralisation and elements associated with this nickel mineralisation, such as Cu, Co, Pd and Pt.
Drillhole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth hole length.</li> </ul> </li> </ul>	<ul> <li>Past drill hole collar location and directional information has been provided within the body of related previous ASX reports and also within the relevant Additional Details Table in the Annexures of those reports.</li> <li>Currently reported drill hole collar location and directional information is provided in the Annexures to this report.</li> <li>RC and DD drilling previously reported has included plan and cross sectional orientation maps to aid interpretation.</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.	Not relevant to samples subsequently collected from diamond core for metallurgical test work.
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').	Not relevant to samples subsequently collected from diamond core for metallurgical test work.
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.	<ul> <li>Plans, long projections and sections, where able to clearly represent the results of drilling, have previously been provided in prior lodged reports.</li> <li>Isometric imagery has also previously been provided when the first-time Baker Shoot MRE was reported (14 June 2022).</li> </ul>
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 WMC Historical and current drilling completed by Lunnon (and used in the Baker MRE reported in June 2022) have been previously lodged on the ASX platform.</li> <li>Drill collar "tadpole" plots have been updated and included in the ASX announcements dated 22 and 29 August 2022.</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; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>The KNP has a long history of geological investigation, primarily for nickel, but also gold to a lesser degree.</li> <li>Historical production data recording metallurgical performance of Foster mine nickel delivered to the Kambalda Concentrator.</li> <li>Metallurgical Flotation Testwork Procedure Summary</li> <li>The Baker Shoot Master Composite consisted of the following:         <ol> <li>Receipt of 172 kg, consisting of 58 individual samples, of cut diamond drill core</li> <li>Stage crushing of the individual 58 of cut diamond drill core samples to P100 &lt;3.35mm</li> <li>Individual homogenising of each of the 58 crushed samples,</li> </ol> </li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>followed by splitting out 25% (by mass) sub-samples in preparation for compositing</li> <li>4. Combination and homogenisation of the Master Composite.</li> <li>5. Splitting of the Master Composite, as required, was carried out for the following testwork;</li> <li>a. Head sample assay for elemental characterisation</li> <li>b. Head sample mineralogical characterisation including indicative mineral associations and liberation sizes by X-Ray Diffraction and optical mineralogy. Particular attention paid to pentlandite/violarite association and violarite texture</li> <li>c. Grind establishment, to generate a reference grind time for achieving target P80 μm</li> <li>d. Flotation testwork samples</li> <li>6. Nickel sulphide flotation tests, performed as:</li> <li>a. Grind flotation test charges to target P80 μm in Perth tap water, then transferred to a flotation cell, with more water added</li> <li>b. Single-stage rougher followed by concentrate cleaner flotation tests to generate a final nickel concentrate</li> <li>d. Single-stage rougher, concentrate cleaner, concentrate recleaner flotation tests, to also generate a final nickel concentrate</li> <li>e. Flotation test product sample dewatering using a fine filter press and oven dried at 70°C</li> <li>f. Samples are either pulverised, or homogenised, split and pulverised</li> <li>g. Samples dispatched for assay analysis</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>All work programmes at Baker are continuously assessed against and in comparison to ongoing high priority programmes elsewhere at the KNP; presently Foster and Warren for example.</li> <li>Approximately 8,000m of RC and 3,000m of diamond drilling has now been completed and results are being reported as they are received. The results of this drilling will be reviewed and will lead to an updated MRE in due course.</li> <li>Subject to the outcome of future metallurgical and geotechnical studies, any updated, future Mineral Resource Estimation will form the basis of economic studies to investigate the potential to exploit the Baker Shoot in the future.</li> <li>Subject to positive ongoing results and external market and price variables, this current, and the future updated, MRE may form the basis for a development study that may lead to the future declaration of a Probable Ore Reserve from those portions of the Mineral Resource at the Indicated (or higher) classification.</li> </ul>