

LUNNON METALS LIMITED ABN: 82 600 008 848

**BOARD/MANAGEMENT** 

Mr Liam Twigger NON-EXECUTIVE CHAIRPERSON

Mr Ian Junk NON-EXECUTIVE DIRECTOR

Mr Ashley McDonald
NON-EXECUTIVE DIRECTOR

Mr Edmund Ainscough MANAGING DIRECTOR

Mr Aaron Wehrle EXPLORATION & GEOLOGY MANAGER

OFFICE Suite 5/11 Ventnor Avenue WEST PERTH WA 6005

POSTAL ADDRESS
PO BOX 470
WEST PERTH WA 6872

CONTACT DETAILS +61 8 9226 0887 info@lunnonmetals.com.au

lunnonmetals.com.au

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# KNP PROGRAMME UPDATE, WARREN RETURNS 8.72m @ 3.54% NICKEL

**4 JANUARY 2022** 

#### **KEY POINTS**

- Warren diamond hole returns 8.72m @ 3.54% Ni
- Associated DHTEM plate confirms scope of target
- Update to 2021 exploration programmes with assays now returned

Lunnon Metals Limited (**ASX: LM8**) (the "**Company**" or "**Lunnon Metals**") is pleased to provide an update on the progress of its discovery programme at the Kambalda Nickel Project ("KNP").

## WARREN DIAMOND CORE RESULTS

Diamond drill hole WRN21DD\_003, reported to the market with visual logging results on the 2 December 2021, has now returned final assay results. The intersection recorded:

- **8.72m @ 3.54% Ni** (from 353.05m) downhole including:
  - **2.33m @ 4.41% Ni** (from 359.44m) for the interval previously reported as 40-80% sulphide in rock, matrix to semi-massive nickel sulphides.

A further 0.73m @ 1.02% Ni (from 361.77m downhole) and 0.43m @ 3.07% Ni (from 367.72m downhole) were recorded in the Lunnon Basalt below (in the footwall of) the above intercepts. The Company also notes that elevated platinum and palladium assays were recorded for the same 8.72m intersection, 0.64g/t Pt and 1.43g/t Pd respectively. True widths are estimated to be approximately 90% of the drilled length.

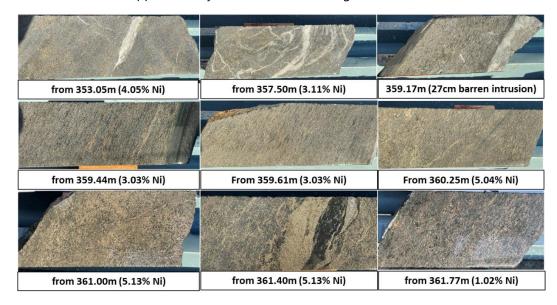


Figure 1 : Photo-mosaic core from WRN21DD\_003 – downhole depths updated with nickel grades relevant to sample shown, core width 50mm for scale.



Managing Director, Ed Ainscough, commenting said: "We made a decision to focus our more recent sample dispatch on just the mineralised zones within each drill hole, and it's starting to pay off with much quicker turnaround times for the high priority programmes. The tenor of these results at Warren is excellent whilst the DHTEM plate gives us great encouragement for the follow up drilling. We are starting to build momentum now at Warren, along with the recent success at Baker. 2022 work programmes will look to infill the gaps in the original WMC drill spacing at Warren as quickly as possible so the current 6,400t Ni Mineral Resource<sup>1</sup> can be updated."

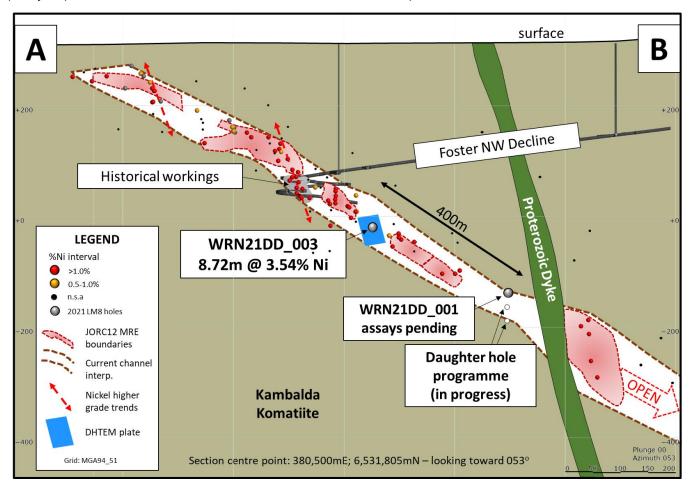


Figure 2: Long Projection of the Warren shoot/channel showing DHTEM plate location & pierce point for WRN21DD\_003 reported intersection

# **INTERPRETATION OF WARREN RESULT & DHTEM PROGRESS**

The following key observations have been made by the site geology team:

- 1. WRN21DD\_003 intersected this nickel mineralisation and the prospective contact below (deeper) than the modelled position based on the nearest historical WMC diamond holes;
- 2. DHTEM results have also been returned from surveying of WRN21DD\_003. A high conductance, late time response was modelled as a 40m x 55m plate surrounding this diamond hole at the depth of the intersected sulphides, suggestive of the extent of the nickel mineralisation in this part of the channel.

<sup>&</sup>lt;sup>1</sup> Full details of the Mineral Resource reported at Warren are included in the Prospectus and associated ITAR lodged on the ASX on 11 June 2021



- 3. Previous WMC documentation had referred to this area as a barren flanking zone between more deeply incised nickel pods that WMC's drilling intersected either side;
- 4. That theory has now been disproved by the Lunnon Metals' diamond drill hole and the DHTEM survey results, opening up the potential for this mineralisation to be an entirely new pod or potentially link with the Mineral Resource already defined up and down plunge.

The DHTEM modelled plate will now be targeted by "daughter" holes to be wedged off this parent.

#### **UPDATE - 2021 OTHER TARGETS**

In light of the success at **Baker** and **Warren**, the Company has naturally prioritised site activities around these two key opportunities. A focus for these high priority programmes has been to limit initial sampling of diamond core and RC holes to the immediate mineralised zones.

In the meantime, assay results for earlier, larger programmes associated with lower priority targets have slowly been received enabling interpretation to be completed for these first pass tests completed at the end of the September quarter and during the December quarter. An update for those where all results have now been received is as follows.

#### Jan (Near Surface)

Eight RC drillholes were completed during a hiatus in the main Warren and Baker RC programmes. These holes were designed to test lower priority, near surface targets on both the prospective nickel contact and mineralised positions in hanging wall komatiite. The following results were recorded:

Holes JAN21RC\_001, 002 and 005 returned no significant assays

JAN21RC\_003: 11m @ 0.73% Ni (18m)

• JAN21RC 004: 5m @ 0.97% Ni (39m)

• JAN21RC\_006: 6m @ 0.63% Ni (27m), 6m @ 1.02% Ni (37m) and 3m @ 0.58% Ni (45m)

JAN21RC\_007: 11m @ 0.61% Ni (52m)

• JAN21RC\_008: 4m @ 1.35% Ni (42m)

With the priority now being work programmes in Baker, Warren and the Foster mine areas, these near surface Jan targets will be reranked and reassessed. Deeper diamond drilling targeting the main Jan nickel shoots and prospective nickel contact below the Jan mine workings is planned for the first half of 2022.

# Somerset (Cooee Gap)

Four RC holes, COE21RC\_001 through to 004, drilled beneath the Somerset/Cooee Gap broad nickel soil anomaly, intersected the komatiite-basalt contact without recording any significant nickel mineralisation or structural complexity. As such the anomaly, which is the strongest and highest magnitude nickel-in-soils geochemical anomalism within the KNP, remains unexplained.

It is highlighted that these initial four holes were between 140m and 180m apart, aligned parallel to the surface expression of the prospective contact and targeted hitting this contact approximately 70m to 100m below surface where thrust repeats of the contact may have occurred.

Though no significant assays were returned from these holes, the Company takes great confidence from its initial success at both Baker and Warren, which has been achieved within and between historical WMC drilling on similar spacing. The target will be reassessed to determine further work programmes aimed at explaining the soil anomaly.



#### **Lunnon Basalt Footwall (Gold)**

Three RC holes were also drilled during a hiatus in the main Warren and Baker RC programmes. The target in this case was a conceptual gold target hosted within the Lunnon Basalt in the footwall of the prospective nickel contact in the Cooee Gap area.

Highly encouraging zones of quartz carbonate veining with associated albite+biotite+sulphide alteration in structurally deformed Lunnon Basalt and Lunnon Sediment were intersected in both RC holes LBS21RC\_013 and LBS21RC\_014 with LBS21RC\_013, returning the following three intercepts:

• 1m @ 0.79g/t Au (55m), 2m @ 0.70g/t Au (82m) and 1m @ 1.09g/t Au (93m).

The other two holes returned no significant assays.

All seven holes drilled at Somerset and Lunnon Basalt Footwall were extended in depth to ensure that they intersected the "Lunnon Sediment" horizon, a 3m to 5m wide, interflow sediment within the Lunnon Basalt, located approximately 110m below the prospective nickel contact. This Lunnon Sediment is a cherty, sulphidic rock unit and is host to the extremely high grade gold occurrences at the Beta/Hunt Mine, some 15km north of the KNP, owned and operated by Karora Resources (for example Karora Resources' Father's Day Vein discovery).

Locating and characterising this important regional marker horizon and potential gold host will enable future targeting of zones where this sediment intersects gold hosting fault structures, mapped and recorded at surface.

Figure 3 below shows the collar locations of the three programmes reported above. All other previously reported programmes across the balance of the KNP remain pending assays and interpretation.

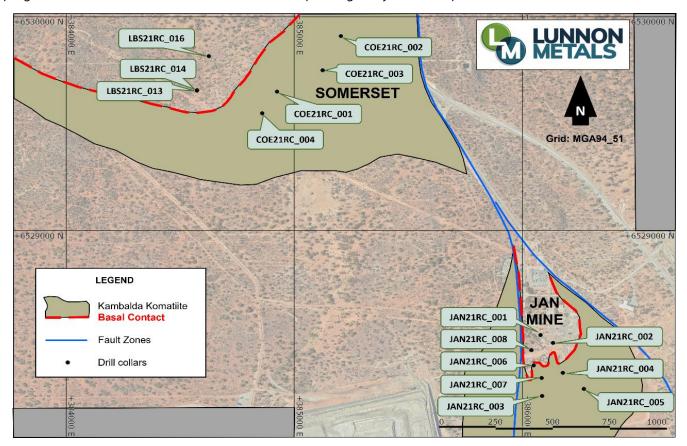


Figure 3: Plan view showing simplified key geology and location of drill collars of lower priority programmes



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

Edmund Ainscough Managing Director

Phone: +61 8 9226 0887

Email: info@lunnonmetals.com.au

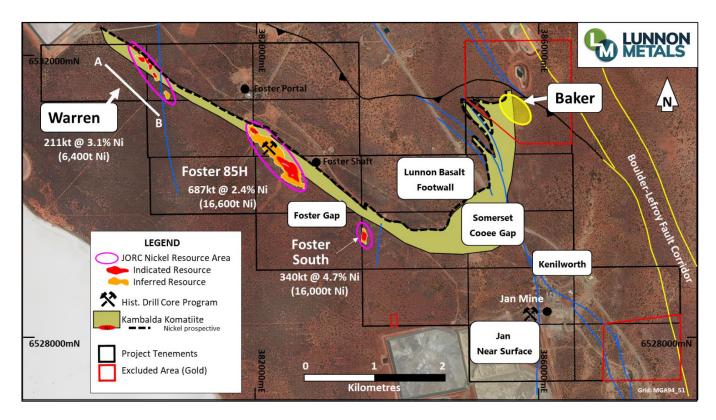


Figure 4 : Plan of the Kambalda Nickel Project showing location of all work areas, highlighting the location of the Warren long projection A-B (see Figure 2).



**Annexure 1: 2021 Drill Hole Collar Table** 

Hole ID	Easting^	Northing^	Elevation (m ASL)	Dip	Azimuth	EOH Drill Depth (m)	Hole Type	Grid
Warren								
WRN21DD_003	380,425	6,531,686	312	-70.48	40.21	396.8	Surf D	MGA94_51
Lunnon Basalt Fo	Lunnon Basalt Footwall (gold programme)							
LBS21RC_013	384,574	6,529,655	330	-60.67	34.62	192	RC	MGA94_51
LBS21RC_014	384,574	6,529,657	330	-60.42	333.8	168	RC	MGA94_51
LBS21RC_016	384,626	6,529,816	328	-61.02	291.68	120	RC	MGA94_51
Somerset		•	•	•				
COE21RC_001	384,925	6,529,650	338	-60.33	307.02	234	RC	MGA94_51
COE21RC_002	385,205	6,529,910	338	-60.13	287.43	210	RC	MGA94_51
COE21RC_003	385,125	6,529,750	338	-60.74	275.15	240	RC	MGA94_51
COE21RC_004	384,860	6,529,549	337	-60.13	287	240	RC	MGA94_51
Jan Near Surface	•	•	•	•	•		•	
JAN21RC_001	386,080	6,528,512	333	-60.47	273.01	120	RC	MGA94_51
JAN21RC_002	386,135	6,528,475	334	-60.22	245.96	168	RC	MGA94_51
JAN21RC_003	386,087	6,528,227	340	-60.54	272.45	84	RC	MGA94_51
JAN21RC_004	386,178	6,528,335	336	-60.96	302.7	108	RC	MGA94_51
JAN21RC_005	386,270	6,528,260	337	-60.61	274.13	102	RC	MGA94_51
JAN21RC_006	386,050	6,528,370	335	-60.28	270.84	60	RC	MGA94_51
JAN21RC_007	386,085	6,528,311	338	-61.3	281.49	114	RC	MGA94_51
JAN21RC_008	386,040	6,528,441	333	-55.64	271.12	102	RC	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 Drill Results - Nickel**

Hole ID	From (drill depth) (m)	Width (m)	Approx True Width (m)	Ni %	Cu %	Co %	Fe %	Mg %	Pt g/t	Pd g/t
WRN21DD_003	353.05	8.72	7.85	3.54	0.39	0.08	22.6	9.8	0.64	1.43
including	359.44	2.33	2.10	4.41	0.46	0.14	34.0	4.8	0.94	1.85
& in the footwall	361.77	0.73	0.66	1.02	0.09	0.02	10.6	8.5	0.10	0.31
\( \text{in the lootwall} \)	367.72	0.43	0.39	3.07	0.17	0.05	17.7	1.5	0.43	1.15
COE21RC_001			r	no significa	nt assays					
COE21RC_002			r	no significa	nt assays					
COE21RC_003		no significant assays								
COE21RC_004		no significant assays								
JAN21RC_001		no significant assays								
JAN21RC_002		no significant assays								
JAN21RC_003	18.00	11.00	unknown	0.73	0.05	0.02	6.1	19.4	Nota	asaya d
JAN21RC_004	39.00	5.00	unknown	0.97	0.03	0.02	8.8	15.6	NOL a	ssayed
JAN21RC_005		no significant assays								
	27.00	6.00	unknown	0.63	0.06	0.02	10.0	13.4		
JAN21RC_006	37.00	6.00	unknown	1.02	0.08	0.03	12.7	8.9		
	45.00	3.00	unknown	0.58	0.04	0.01	6.6	16.0		
JAN21RC_007	52.00	11.00	unknown	0.61	0.03	0.02	9.7	10.5		
JAN21RC_008	42.00	4.00	unknown	1.35	0.15	0.03	11.7	8.5		

# Annexure 2: 2021 Drill Results - Gold

Hole ID	From (drill depth) (m)	Width (m)	Approx True Width (m)	Au g/t		
	55.00	1.00	unknown	0.79		
LBS21RC_013	82.00	2.00	unknown	0.70		
	93.00	1.00	unknown	1.09		
LBS21RC_014	No significant assays					
LBS21RC_016	·	No significant assays				



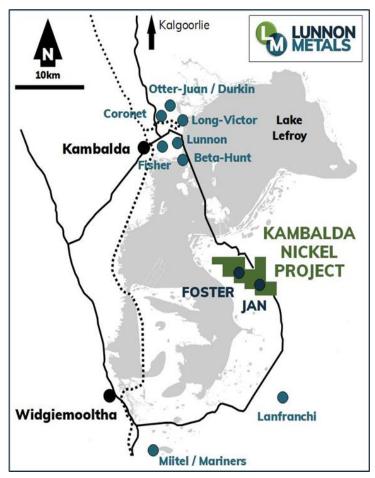


Figure 5: Regional Location of the Kambalda Nickel Project and other nearby nickel deposits

# 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>RC samples were collected on a 1.0m basis from a cone splitter mounted on the drill rig cyclone. 1.0m 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 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 trays labelled with the drill hole ID and core intervals.</li> <li>Industry prepa</li></ul>



Criteria	JORC Code explanation	Commentary
Drilling	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>DXRE</li> <li>Where a handheld XRF tool was used, it was done so to verify the presence of nickel mineralisation above a 0.5% Ni cut off. The XRF results themselves are not reported and used as a logging/ sampling verification tool only.</li> <li>Determination of materiality has been based on geological logging, visual inspection the use of the pXRF unit.</li> <li>WMC Historical data</li> <li>Sampling procedures followed by Western Mining Corporation Ltd (WMC) in the drilling, retrieval, and storage of diamond drill core both surface and underground are considered to be in line with industry standards at the time (1966 to 2001).</li> <li>The drill core was typically collected in steel core trays of 1.0m lengths comprising five to seven compartments depending on drill core diameter. The core trays were numbered with the downhole meterage for the start of the first 1 m run and the end of the last 1 m 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> <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> <li>Although no documentation is available to describe the drilling techniques used by WMC at the time it</li></ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<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</li> </ul>
	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>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</li> </ul>



	Commentary
	found that on average drill recovery was very good and acceptable by industry standards.
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.	, , ,



Criteria	JORC Code explanation	Commentary
		Thereafter a representative number of holes were re-logged to validate lithological and structural information whilst a lessor number of holes were logged for geotechnical data such as rock RQD, fracture count assessment and core recovery.
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.	RC RC sampling was carried out every 1.0m by a cone splitter on a rig cyclone. 1.0m 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 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 1.0m basis with a typical minimum of 0.3m and a typical maximum of 1.0m. 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, 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 ha



Criteria	JORC Code explanation	Commentary
		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.  • 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.  • 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:  - WMC's reputation of excellence in geoscience stemming from their discovery of nickel sulphides in Kambalda in the late 1960s;  - 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  - the first-hand knowledge and experience of the Competent Person(s) of this announcement whilst working for WMC at Kambalda between 1987 and 2001.
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 (i.e. lack of bias) and precision have been established.	<ul> <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 using 50g lead collection fire assay and analysed by ICPOES.</li> <li>These techniques are considered quantitative in nature.</li> <li>As discussed previously, CRM is inserted by the Company and the laboratory also carries out internal standards in individual batches.</li> <li>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.</li> <li>Where handheld pXRF results are referenced, the tool was used to verify the presence of nickel mineralisation in the zones disclosed, above a 0.5% Ni notional threshold. The unit is a Bruker, S1 Titan 900 model.</li> <li>DHTEM</li> <li>DHTEM</li> <li>DHTEM parameters were as follows</li> <li>Tx Loop Size range from 300m x 200m up to 690m x 290m</li> <li>Transmitter: DRTX</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Receiver: DigiAtlantis</li> <li>Probe: DigiAtlantis</li> <li>Station Spacing: 2.5m to 10m</li> <li>Tx Current range from 50A to 75A</li> <li>Base Frequency: 1Hz</li> <li>Readings: Min 3 repeatable readings per station</li> </ul>
		<ul> <li>WMC Historical data</li> <li>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 generally; however, it is expected that industry standards as a minimum were likely to have been adopted at the Foster mine, KNP area and the analytical laboratory, considering WMC's reputation for excellence in geosciences.</li> <li>The extensive Lunnon Metals re-sampling programme of historical ½ or ¼ core drill core applied the methodology and practices as recorded above for current RC &amp; DDH.</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>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> <li>Any assays results for a composited interval within a drillhole are reported on a length weighted basis.</li> </ul>
		<ul> <li>WMC Historical data</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> </ul>



Criteria	JORC Code explanation	Commentary
		• 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.
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>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 data tables are provided in the report where relevant.</li> <li>WMC Historical data</li> <li>Historical methods of drill collar survey pick-up are not known. The easting, northing and elevation values were originally recorded in local KNO ('Kambalda Nickel Operations') grid and later converted to the currently used GDA94/MGA Zone 51 grid. Both the original KNO grid coordinates and the converted coordinates are recorded in the database. A representative number of historical drill collars were located in the field and their locations cross checked via differential GPS and/or handheld GPS to validate the database collar coordinates.</li> <li>Historical hardcopy downhole survey data is generally available for all surface drillholes and the records show that single shot magnetic 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</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>mineralisation including any MRE work.</li> <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 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> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <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 drillhole depths were less than approximately 450m.</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>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 Warren the majority of historical drill holes were collared vertically and lifted/drifted in towards close to perpendicular with depth as the nickel contact was approached.</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 Laboratory's secure warehouse until collected by the Company or approved to be discarded.</li> </ul>
		<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> </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.



Criteria	JORC Code explanation	Commentary
		<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 farmin 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; M15/1577; M15/1578; M15/1579; M15/</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.	<ul> <li>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.</li> </ul>
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>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 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>



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>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, 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.	<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 nickel assay values greater than or equal to 1.0% 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 samples — size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	



Criteria	JORC Code explanation	Commentary
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 two 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 at Foster are not closed off down plunge and also have potential for further definition drilling up-plunge. 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 Warren drilling results reported in this announcement, further DDH will be planned to infill the drill spacing, collect material for metallurgical testing and provide lithostructural data to aid the geological modelling and grade estimation process. The lower priority targets drilled by RC and reported above will be reviewed and ranked for further potential follow up subject to competing priorities elsewhere on the KNP.</li> </ul>