



HORSESHOE METALS LIMITED

DSO Strategy to Accelerate at Horseshoe Lights Copper Project in WA

- Horseshoe pursuing significant early cash flow opportunity from DSO sales of existing high-grade copper stockpiles
- Discussions advancing with potential copper concentrate offtake partners
- Non-dilutive offtake funding being considered
- Site activities expected to commence in early May
- Copper Surface Material resource assessment underway
- Review being undertaken of oxide and sulphide copper targets within 200km radius of Horseshoe Lights
- Horseshoe Lights Copper-Gold Project existing resource base includes:
 - **Current in situ resource 128,000 t Cu metal @ 1.0% (0.5% cut-off)**
 - **Current M15 stockpile resource 2650 t Cu metal @ 1.1%**
 - **Current Flotation tailings resource 6,800 t Cu metal @ 0.48% and 15,300oz Au at 0.34 g/t**

BOARD OF DIRECTORS

Ms Kate Stoney
Non-Executive Director,
Chief Financial Officer &
Joint Company Secretary

Mr Seldon Mart
Non-Executive Director

Mr Alan Still
Non-Executive Director

Mr Josh Merriman
Joint Company Secretary

Horseshoe Metals Limited (ASX: HOR) (the 'Company') is pleased to provide an update regarding copper development activities at the Company's Horseshoe Lights Copper-Gold Project (HSL) in Western Australia.

The Horseshoe Lights Copper-Gold Project is the original Cu/Au VMS discovery in the Bryah Basin and is located approx. 60 km west of DeGrussa Copper Mine owned by Sandfire Resources (ASX: SFR). Past production from Horseshoe Lights includes around **316,000 oz Au & 55 kt Cu metal** in two phases of mining, and the deposit contains a current *in situ* resource **128 kt Cu metal @ 1.0% (0.5% cut-off) and 36,000 oz Au** (refer Table 1).

The surface materials have previously been broadly grouped as follows (Figure 1):

Copper - Gold	Flotation tailings, Vat 2, M15/C20 Stockpiles and North Dump
Copper	Subgrade, rehandle, Low-grade oxide and sulphide stockpiles
Gold	Gold tailings, leach vats, low grade, rehandle and ROM stockpiles

Activities have focussed on the following potential development sequence utilising copper oxide surface materials:

1. *Copper concentrate offtake discussions including potential for offtake funding*
2. *Scavenging of remnant coarse DSO material, bagging and transport*
3. *Heavy Media Separation of fine DSO material from select stockpiles*
4. *Small Scale Heap/Vat Leach of oxide material followed by cementation*
5. *Large Scale Heap/Vat leach of surface oxide material followed by cementation*

The above are subject to any statutory and regulatory approvals that may be required.

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Copper Surface Materials Discussion

Offtake Discussions Advancing

Discussions are ongoing with parties that have expressed interest in offtake of the DSO and potential future concentrates, including copper cement, produced at HSL. In addition, non-dilutive staged offtake funding is being considered to provide capital for the proposed development sequence.

DSO – Scavenging Coarse Material

Significantly the copper phase of mining included early DSO copper production that has left subgrade and rehandle DSO material around the site. Areas identified and assessed as having future DSO potential include, M15, Subgrade and C20 stockpiles along with rehandle and surface pimple dumps located on the North Waste dump, Gold tailings and Southern low-grade stockpile (Figure 1 – see release dated 31 October 2023). The coarse material is easily scavenged utilising loaders and excavators equipped with sieve buckets.

Site activities are expected to commence early May after a significant rainfall event during April.

DSO Heavy Media Separation

The amenability of the fines (- 100mm) material remaining in stockpiles and pimple dumps to Heavy Media Separation (HMS) is being investigated. Samples will be taken for HMS metallurgical testing during May to determine if a high-grade concentrate can be produced utilising this relatively simple off the shelf technique.

Pilot/Small Scale Oxide Heap/Vat Leach and Cementation

Previous test work has indicated that the oxide material at HSL is amenable to acid leaching followed by either cementation of SXEW copper recovery. Significant tonnages of material exist in stockpiles (e.g. M15 – Figure 1 and Table 1) that will be further tested and assessed to determine the viability of a pilot /small scale operation to recover copper cement as a first step to assist in the feasibility study for oxide copper production at a larger scale.

Large Scale Oxide Heap/Vat Leach and Cementation

Assessment is underway to determine if the existing information available is sufficient to complete a resource calculation of surface resources outside of existing resources at M15 and the Sulphide tailings. In addition, a review of potential copper targets within 200km of HSL is being undertaken. Discussions are underway with a management group experienced in copper oxide vat/heap leach cementation operations to supervise the development at HSL.

Proposed Work Programmes and Next Steps

The following activities are planned to further investigate the surface materials:

- *Additional RC and/or auger drilling of the North Dump, gold stockpiles, copper Low-grade oxide and Low-grade sulphide stockpile stockpiles*
- *Auger drilling of the gold and copper rehandle areas*
- *Acid leaching test work on oxide copper stockpiles and targets*
- *Gravity recovery test work on Copper Flotation and CIP tailings*
- *Detailed assessment of the recovery of high-grade chalcocite, digenite and covellite DSO remnant from the historic mining phases via mechanical scavenging and/or heavy media separation.*

Updates on the above activities will be provided as they progress in the coming weeks.

For additional background on the Horseshoe Lights Project please refer to ASX releases:

12/09/2018	<i>"Exploration Update- Horseshoe Lights Project"</i>
06/08/2021	<i>"Horseshoe Lights Exploration Activities Update"</i>
10/09/2021	<i>"Horseshoe Lights Phase 1 Auger Programme Completed"</i>
13/09/2021	<i>"Horseshoe Lights Phase 1 RC Drilling Programme Completed"</i>
29/10/2021	<i>"Horseshoe Lights RC Drilling Results"</i>
26/11/2021	<i>"Horseshoe Lights Phase 1 Stockpile Results Received"</i>
21/02/2022	<i>"Horseshoe Metals Successful Relisting"</i>
03/03/2022	<i>"Horseshoe Lights Activities Update"</i>
11/03/2022	<i>"Horseshoe Lights Copper-Gold Resource Grade-Tonnage Review"</i>
21/04/2022	<i>"RC Drilling Underway at Horseshoe Lights Project"</i>
19/05/2022	<i>"RC Drilling Campaign Complete at HSL Project"</i>
11/08/2022	<i>"Significant Drilling Results in Copper-Gold Surface Material at Horseshoe Lights"</i>
31/08/2022	<i>"Outstanding Copper Results at Horseshoe Lights"</i>
11/10/2022	<i>"Review Confirms Broad Zones of Copper Mineralisation"</i>
27/10/2022	<i>"Broad Zones of Copper up to 8.3%"</i>
17/11/2022	<i>"RC Drilling Commences at Main Zone, Motters and North Dump"</i>
09/03/2023	<i>"Outstanding Copper Results – Main Zone and Motters at Horseshoe Lights"</i>
31/10/2023	<i>"High-Grade Surface Material Underpins DSO Strategy"</i>

The Board of Directors of HOR has authorised this announcement to be given to the ASX.

- ENDS -

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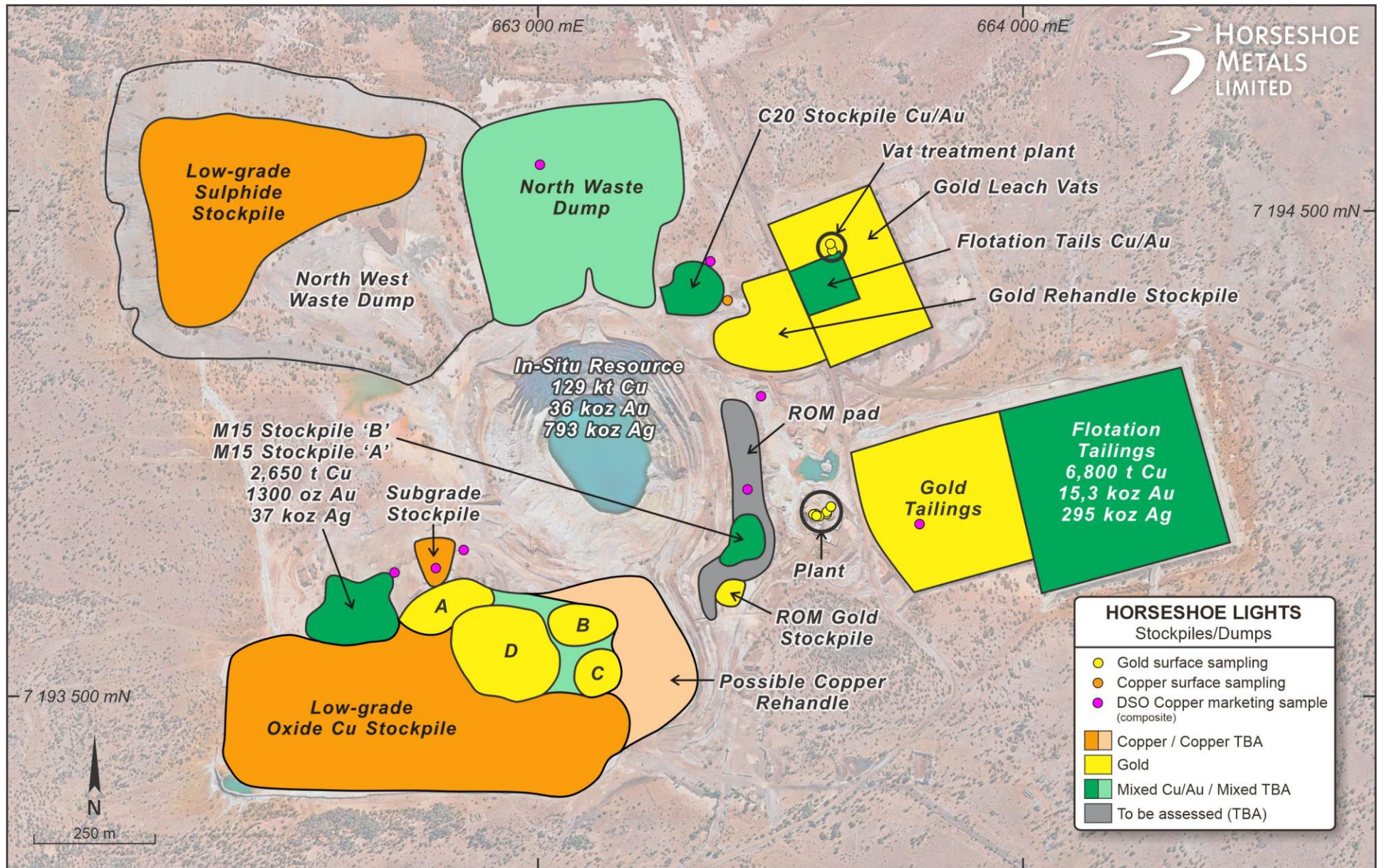


Figure 1 – Surface Stockpiles and Dumps showing Sample Locations

About Horseshoe Metals Limited

Horseshoe Metals Limited (ASX:HOR) is a copper and gold-focused Company with a package of tenements covering approximately 500km² in the highly prospective Peak Hill Mineral Field, located north of Meekatharra in Western Australian and mineral interests in South Australia. The Company manages the Horseshoe Lights Project and the Kumarina Project in Western Australia, and the Glenloth Gold Project in South Australia.

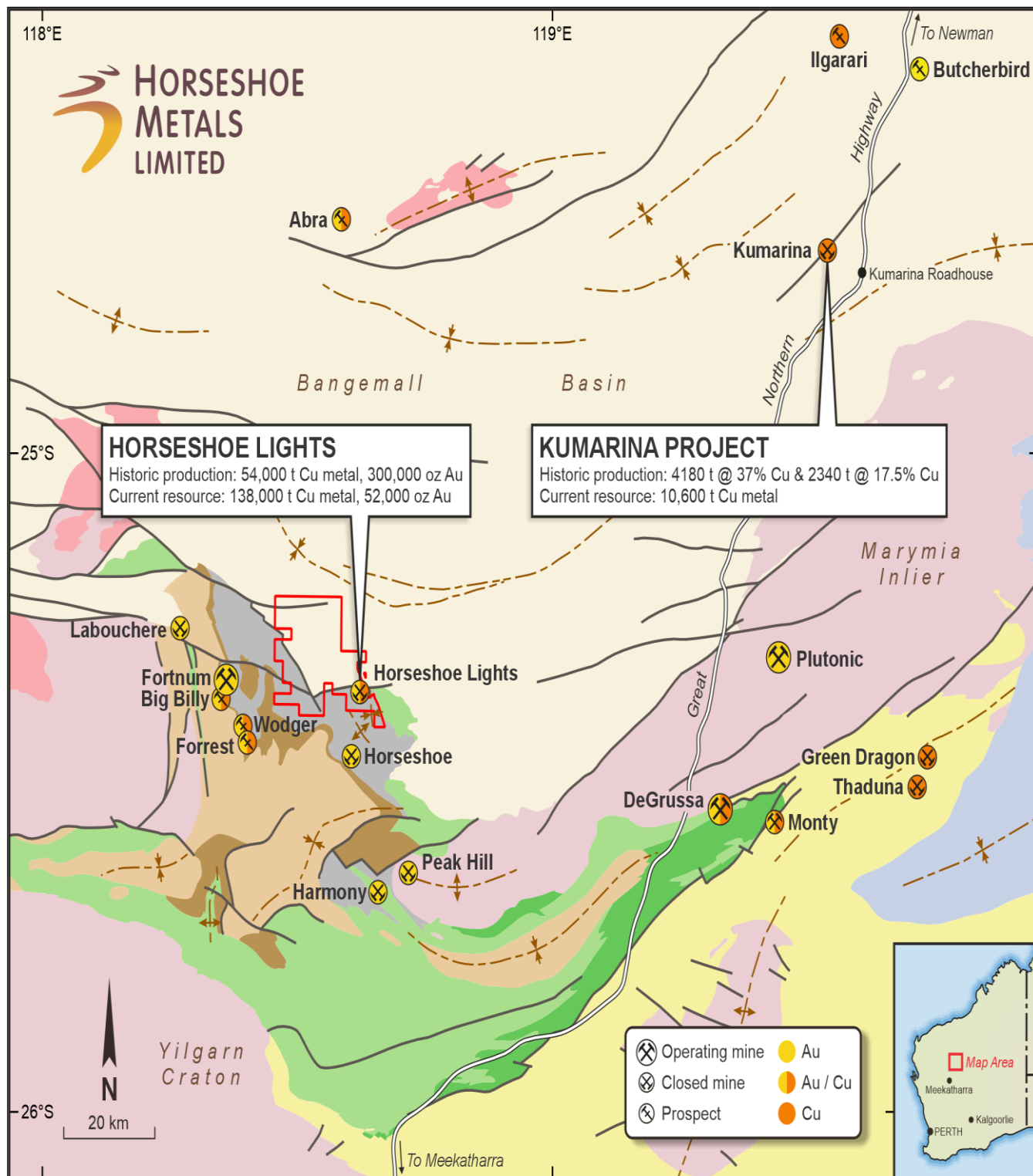


Figure 2: Location of Horseshoe Lights Copper-Gold Project and Kumarina Project in the Murchison, WA

About the Horseshoe Lights Project

The Horseshoe Lights Project includes the historic open pit of the Horseshoe Lights copper-gold mine which operated up until 1994, producing over 300,000 ounces of gold and 54,000 tonnes of contained copper, including over 110,000 tonnes of Direct Shipping Ore (DSO) which graded between 20-30% copper.

The Horseshoe Lights ore body is interpreted as a deformed Volcanogenic Hosted Massive Sulphide (VMS) deposit that has undergone supergene alteration to generate the gold-enriched and copper-depleted cap that was the target of initial mining. The deposit is hosted by quartz-sericite and quartz-chlorite schists of the Lower Proterozoic Narracoota Formation.

Past mining was focused on the Main Zone, a series of lensoid ore zones, which passed with depth from a gold-rich oxide zone through zones of high-grade chalcocite mineralisation into massive pyrite-chalcopyrite. To the west and east of the Main Zone, copper mineralisation in the Northwest Stringer Zone and Motters Zone consists of veins and disseminations of chalcopyrite and pyrite and their upper oxide copper extensions. Table 2 summarises the total Mineral Resources for the Horseshoe Lights Project as at 30 June 2023.

TABLE 1 HORSESHOE LIGHTS PROJECT SUMMARY OF MINERAL RESOURCES AS AT 30 June 2023									
Location	Category	Tonnes (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	Cu metal (tonnes)	Au metal (oz)	Ag metal (k oz)	
In-situ Deposit (0.5% Cu cut-off grade)	<i>Measured</i>	1.73	1.04	0.0	0.5	18,000	1,900	28.8	
	<i>Indicated</i>	2.43	0.95	0.0	0.7	23,200	3,400	52.2	
	<i>Inferred</i>	8.69	1.01	0.1	2.6	87,400	30,700	712.4	
	Total	12.85	1.00	0.1	1.9	128,600	36,000	793.4	
Flotation Tailings	Inferred	1.421	0.48	0.34	6.5	6,800	15,300	294.8	
M15 Stockpiles	Inferred	0.243	1.10	0.17	4.7	2,650	1,300	36.7	
Note: At 0% Cu cut-off grade unless otherwise stated						TOTAL	138,050	52,600	1,124.9

The above Mineral Resource Estimates all meet the reporting requirements of the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

About the Kumarina Project

The copper deposits at the Kumarina Project were discovered in 1913 and worked intermittently until 1973. The workings extend over nearly 5km as a series of pits, shafts and shallow open cuts. At the main Kumarina Copper Mine, the workings are entirely underground with drives from the main shaft extending for some 200m in the upper levels and for about 100m in the lower levels at a depth of 49m below surface.

Incomplete records post-1960s make it difficult to estimate the total copper production from the workings. However, indications are that the Kumarina Copper Mine was the second largest producer in the Bangemall Basin group of copper mines. Recorded production to the late 1960s is 481t of copper ore at a high-grade of 37.0% Cu and 2,340t at a grade of 17.51% Cu. An initial Mineral Resource Estimate for the Rinaldi deposit was completed by the Company in 2013 (see 30 June 2013 Quarterly Report announced on 31 July 2013). The total Measured, Indicated and Inferred Mineral Resource Estimate as at 30 June 2023 is shown in Table 3 below.

TABLE 2
KUMARINA PROJECT
SUMMARY OF MINERAL RESOURCES
AS AT 30 June 2023

Location	Category	Tonnes (t)	Cu (%)	Cu metal (tonnes)
Rinaldi Prospect (0.5% Cu cut-off)	<i>Measured</i>	<i>415,000</i>	<i>1.46</i>	<i>6,100</i>
	<i>Indicated</i>	<i>307,000</i>	<i>1.16</i>	<i>3,500</i>
	<i>Inferred</i>	<i>114,000</i>	<i>0.9</i>	<i>1,000</i>
	Total	835,000	1.3	10,600

The Mineral Resource Estimate meets the reporting requirements of the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”

Forward Looking Statements

Horseshoe Metals Limited has prepared this announcement based on information available to it. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement. To the maximum extent permitted by law, none of Horseshoe Metals Limited, its directors, employees or agents, advisers, nor any other person accepts any liability, including, without limitation, any liability arising from fault or negligence on the part of any of them or any other person, for any loss arising from the use of this announcement or its contents or otherwise arising in connection with it. This announcement is not an offer, invitation, solicitation or other recommendation with respect to the subscription for, purchase or sale of any security, and neither this announcement nor anything in it shall form the basis of any contract or commitment whatsoever. This announcement may contain forward-looking statements that are subject to risk factors associated with gold exploration, mining and production businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

Competent Persons Statement

The information in this report that relates to the Exploration Results and Mineral Resources at the Horseshoe Lights and Kumarina Projects is based on information reviewed by Mr Michael Fotios, who is a member of the Australian Institute of Mining and Metallurgy. Mr Fotios is contractor of Horseshoe Metals Limited and has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity he is undertaking to qualify as Competent Persons as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012)’. Mr Fotios consents to the inclusion of the information in the form and context in which it appears.

The information in this report that relates to the Horseshoe Lights Project surface stockpile Mineral Resources is based on information compiled by a previous employee of Horseshoe Metals Limited and reviewed by Mr Craig Hall, who is a member of the Australian Institute of Geoscientists. Mr Hall is a director and former contractor to Horseshoe Metals Limited and has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity he is undertaking to qualify as Competent Persons as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012)’. Mr Hall consents to the inclusion of the data in the form and context in which it appears. The information was previously issued in announcements released to the ASX on 26 February 2015 and 9 March 2015. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the findings are presented have not materially modified from the original market announcements.

The information in this report that relates to the Horseshoe Lights Project In-situ Mineral Resources is based on information originally compiled by Mr Dmitry Pertel, an employee of CSA Global Pty Ltd, and reviewed by Mr Hall. This information was originally issued in the Company’s ASX announcement “40% increase in Copper Resource at Horseshoe Lights Copper/Gold Project”, released to the ASX on 5 June 2013, and first disclosed under the JORC Code 2004. This information was subsequently disclosed under the JORC Code 2012 in the Company’s ASX release “Quarterly Report Period Ended 30 June 2013”, released on 31 July 2013. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the findings are presented have not materially modified from the original market announcements.

The information in this report that relates to the Kumarina Project (Rinaldi Prospect) Mineral Resources is based on information compiled by or under the supervision of Mr Robert Spiers, an independent consultant to Horseshoe Metals Limited and a then full-time employee and Director of H&S Consultants Pty Ltd (formerly Hellman & Schofield Pty Ltd), and reviewed by Mr Hall. The information was originally issued in the Company’s ASX announcement “Horseshoe releases Maiden Mineral Resource Estimate for Kumarina”, released to the ASX on 4 March 2013, and first disclosed under the JORC Code 2004. This information was subsequently disclosed under the JORC Code 2012 in the Company’s ASX release “Quarterly Report Period Ended 30 June 2013”, released on 31 July 2013. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the findings are presented have not materially modified from the original market announcements.