



# HORSESHOE METALS LIMITED

ASX ANNOUNCEMENT

30 July 2021

## QUARTERLY ACTIVITIES REPORT

Horseshoe Metals Limited (ASX:HOR) (**Horseshoe, HOR or the Company**) is pleased to present its Quarterly Activities Report for the period ending 30<sup>th</sup> June 2021.

### HIGHLIGHTS

- Auger drilling programme designed to assess grade of gold leach vats and tailings
- Kopore Metals Limited accelerate activities to earn up to 70% joint venture interest by spending up to \$3 million on Horseshoe tenements surrounding the Horseshoe Lights mine in Western Australia.
- Kopore activities include heritage clearance, detailed drone aeromagnetic survey, geophysical assessment, and planned auger assisted soil geochemical sampling.
- Kopore identifies two priority targets and additional conceptual targets from magnetic interpretation
- Application for Acid Storage Facility submitted in preparation for Copper development opportunities
- Metallurgical test work programme to finalise flow sheet for retreatment of copper tailings and surface stockpiles ongoing
- Horseshoe camp refurbishment substantially complete and in operation
- Updated mine compliance reporting nearing completion
- Auger and RC Drilling at Horseshoe to commence post-quarter end.

### EXPLORATION AND EVALUATION

**Horseshoe Lights Copper/Gold Project, WA (HOR: 100%)** (GRR: 3% NSR Royalty on M52/743– refer to Appendix 1)

Horseshoe Metals Limited ('**Horseshoe**', or the '**Company**') own the the Horseshoe Lights Project in the Bryah Basin region of Western Australia, which includes the previously mined Horseshoe Lights copper-gold mine, approximately 150km north of Meekatharra in Western Australia and 75km west of Sandfire Resources NL's (ASX:SFR) DeGrussa copper-gold mine (see Figure 1).

#### BOARD OF DIRECTORS

Mr Craig Hall  
*Non-Executive Director*

Mr Alan Still  
*Non-Executive Director*

Ms Kate Stoney  
*Non-Executive Director,  
Company Secretary*

#### HORSESHOE METALS LIMITED

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## Horseshoe Lights Copper-Gold Project, WA (HOR 100% and excluded from Kopore JV)

Activities during the quarter advanced proposed exploration activities at Horseshoe Lights, with a programme of shallow auger drilling designed to assess grade of various surface stockpile materials.

This includes previously unassessed vat leach gold-bearing material from shallow open pit mining activities conducted in the early 1990's prior to Barrack Mines gold production via CIP treatment. In addition, the programme will test the perimeter of material constructed to constrain these vats and previously unassessed material which forms the construction of the gold tailings and copper flotation tailings dam (refer Figures 3, 4).

The Company is also planning RC Drilling at Motters, north and east of the current pit, and expects to commence this programme post quarter end, working with a drilling contractor completing other programmes for clients in the Murchison. An initially proposed RC programme has been modified slightly to drill improve access and after further assessment of the target zone

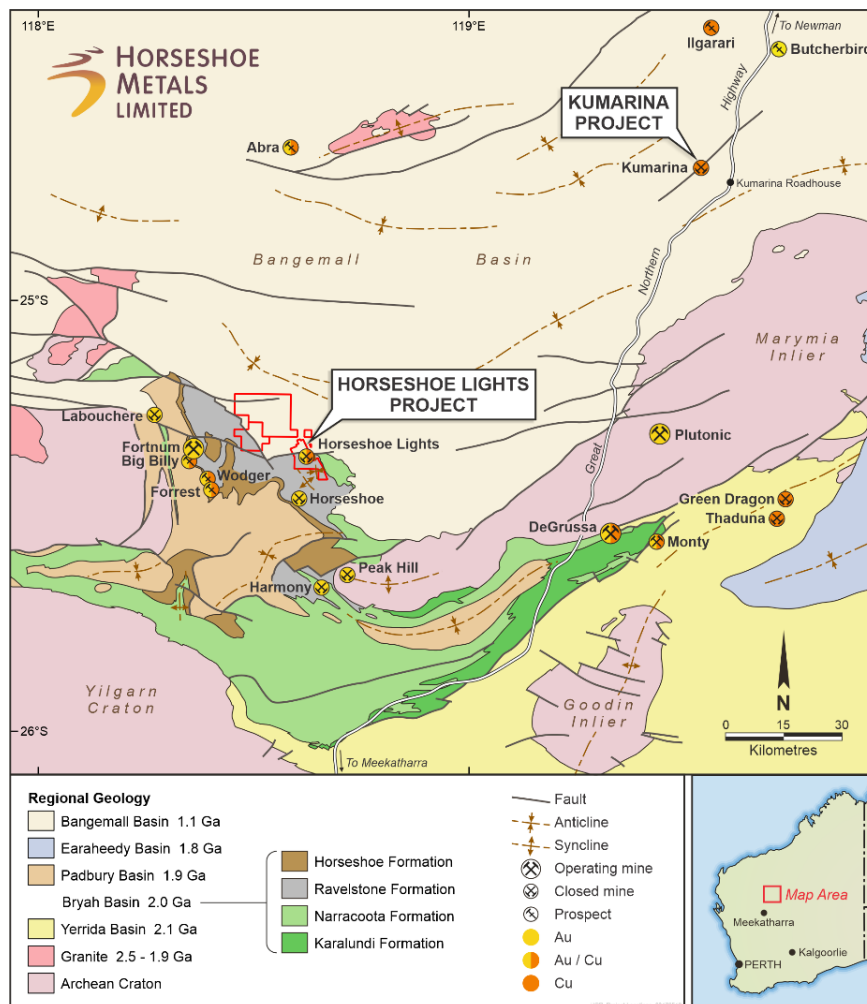
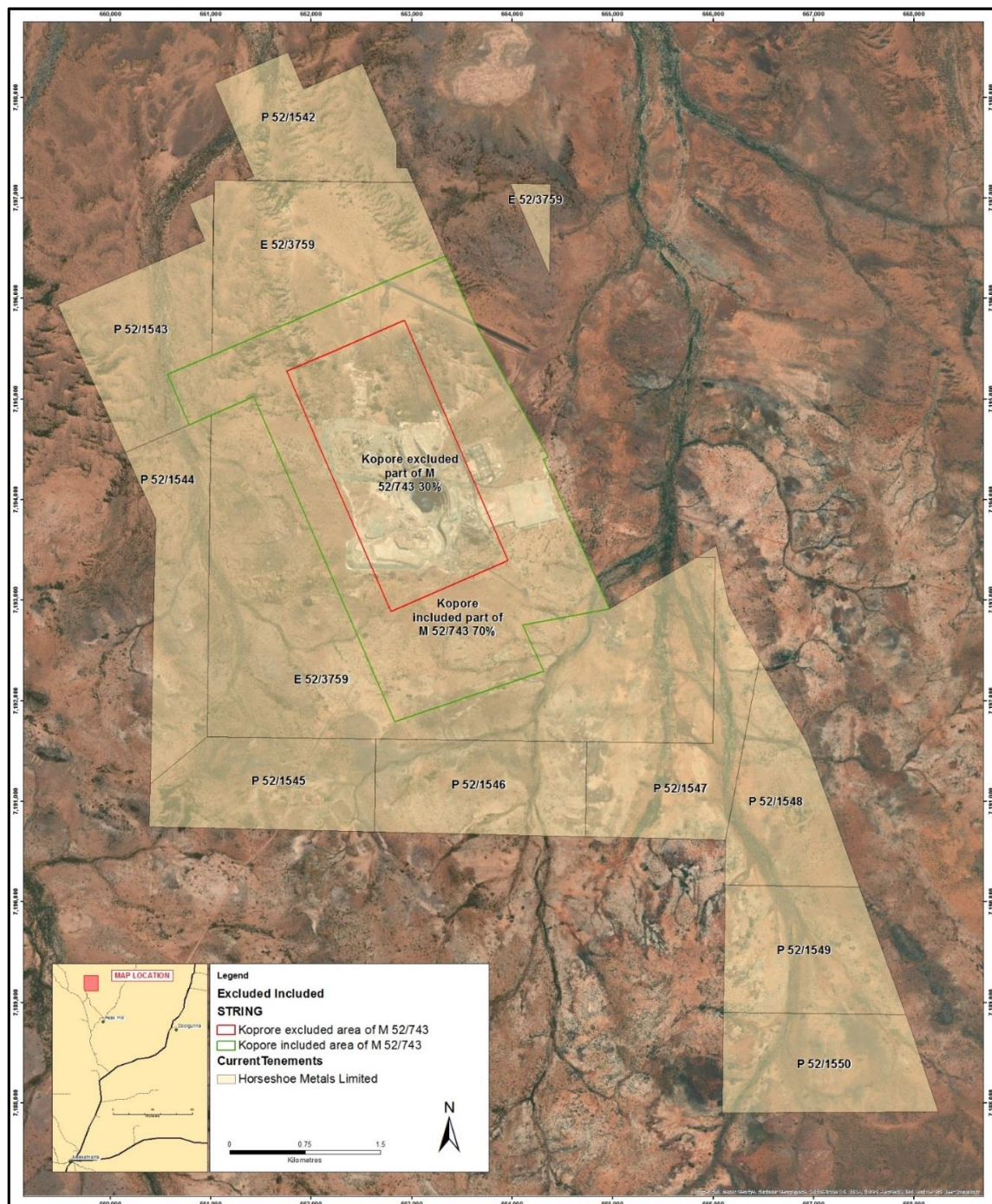


Figure 1: Location of Horseshoe Lights and Kumarina Projects, WA

An application for an Acid Storage Facility was submitted to relevant authorities for assessment, in preparation for Copper development opportunities. In conjunction with these development advances, an updated Mine Closure Plan is nearing completion for submission during the September quarter.

Metallurgical test work programme to finalise flow sheet for retreatment of copper tailings and surface stockpiles is ongoing, and awaits additional inputs from the planned auger drill programme.

The refurbishment of the existing accommodation camp at the Horseshoe Lights mine is substantially complete, allowing drilling and exploration staff to be accommodated on-site and avoid significant daily travel. Further rooms will be brought online following delivery of additional furniture, fixtures and equipment allowing for additional personnel to be accommodated on site.



**Figure 2: Location of Horseshoe Lights Project tenements in the 'Agreement Area', with Kopore 'Exclusion Zone' within M52/743 highlighted in red**



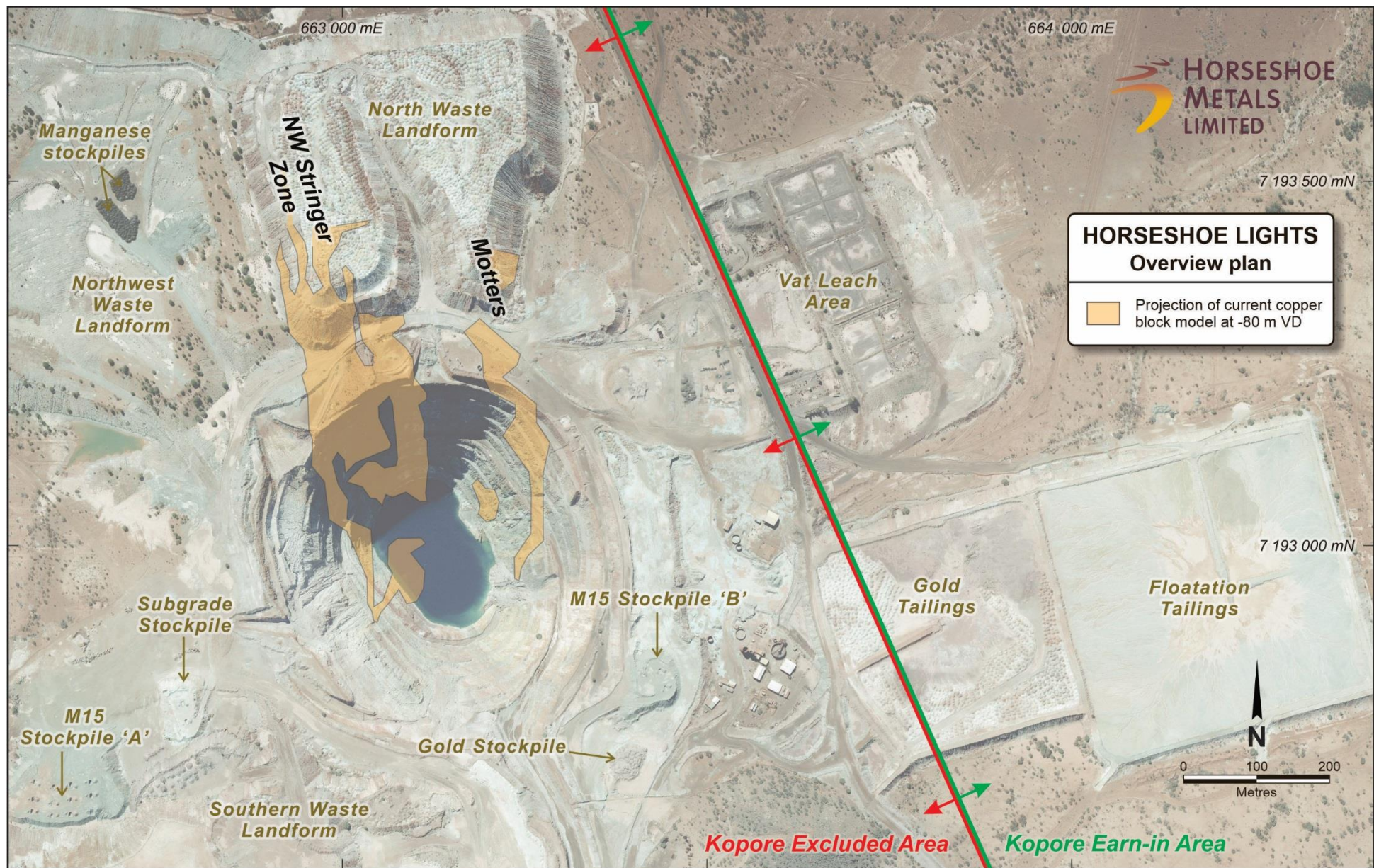
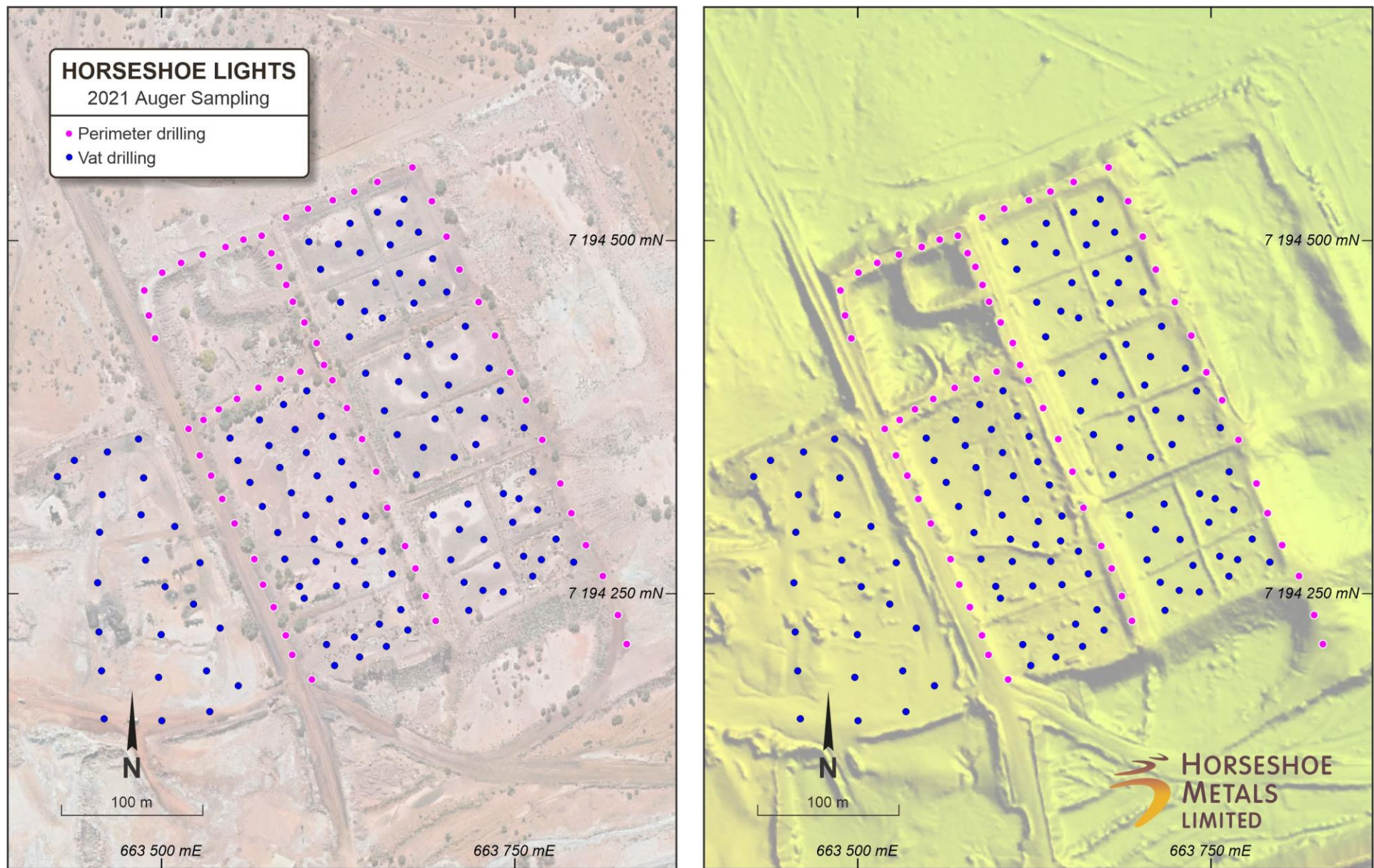


Figure 3: Overview of Horseshoe Lights Mine Area, highlighting surface landforms and stockpiles, with Motters Zone highlighted. Surface landforms containing metal concentrations outside the Kopore Excluded Area remain the assets of Horseshoe to develop. Vat Leach Area detailed in Figure 4 following.





**Figure 4: Location of Planned Gold Vat Leach Auger drilling, with drilling of internal vat material denoted by blue collars, and surrounding perimeter construction material in magenta. Left image shows aerial photography, right image highlights the relief of the same area via high quality DTM.**

### **Horseshoe West JV** (*Kopore earning to 70% on tenure surrounding the mine*)

Horseshoe's wholly-owned subsidiary, Murchison Copper Mines Pty Ltd (**MCM**) has commenced a farm-in and joint venture (JV) with a wholly-owned subsidiary of Kopore Metals Limited (ASX:KMT), providing for an earn in and joint venture in relation to certain tenements (area of 32.4km<sup>2</sup>) surrounding the historical Horseshoe Lights Copper-Gold Mine (**Horseshoe Lights Mine**).

The JV relates to an area of largely unexplored land surrounding the Horseshoe Lights Mine (**Agreement Area**) (see Figure 2) external to the defined Horseshoe Lights Copper-Gold Project resources and infrastructure (refer Figure 3 and Table 1).

Excluded from the Agreement Area is part of M52/743 upon which, the historical open pit and existing copper resource is located (shown as the "Excluded Zone" in Figures 2 & 3) as well as waste dumps and stockpiles tailings from the historical operation. Kopore will not acquire any rights in respect of minerals contained in the Excluded Zone or such waste dumps and stockpiles, which will continue to be owned by MCM.

Kopore released an exploration update on 29<sup>th</sup> July 2021 on the project area with the following highlights:

- Horseshoe West Airborne Magnetic Survey Completed
- Initial targets identified from geophysical investigation
- Heritage Survey completed and Auger Program of Works (POW) Approved
- Auger Program to commence in early Q3.

During the quarter Kopore commissioned a detailed close-spaced drone airborne magnetic with 25m line spacings and a sensor height of 25m across an area of approximately 9.8km<sup>2</sup> to provide ultra-high-resolution magnetic detail. Perth-based geophysicists Southern Geoscience were then invited to process and model the data and have identified two priority targets and additional conceptual targets.

Priority Mag Target 1 consists of a discrete bullseye anomaly of approximately 300m diameter associated with an interpreted western margin of a northwest-southeast trending syncline. The depth to interpreted magnetic target is approximately 150m, with local historical shallow drilling programs (<40m depth) not intersecting the identified magnetic conductor.

Priority Mag Target 2 is an inferred NW/SE parallel structure to the west of the Horseshoe Lights copper/gold mine interpreted based on a similar magnetic signature to the historical high-grade copper-gold mine

Four additional conceptual targets have been identified by the Kopore Team for investigation, based upon the recent airborne magnetic drone survey and historical airborne magnetic and gravity surveys.

Kopore are planning to commence an auger drilling program in early mid Q3 2021 after receiving Program of Works approval, with the programme comprising approximately 460 holes, at a spacing of 60x100m spacing and is aiming to test for surface expression of potential gold, base metal, or pathfinder anomalism. The auger program will cover the surface expression of Mag Targets 1, 2, and 3. An indigenous heritage survey was conducted and reported at Horseshoe West during the quarter, with three small avoidance areas noted within the planned auger program area, which has been subsequently adjusted accordingly.



### **Glenloth Gold Project (EL6301 and rights to explore and develop ML5848, ML5849, ML5885 & MPL62):**

At Glenloth, within the Central Gawler Craton (CGC- refer Figure 5) the Company has planned a 20 hole, 1,500m RC drilling programme to be completed in two phases testing at least seven priority targets within EL6301 (refer Figure 8). The first phase of this drilling will be completed during the September quarter. The Company has access to a base camp to facilitate the start of drilling operations.

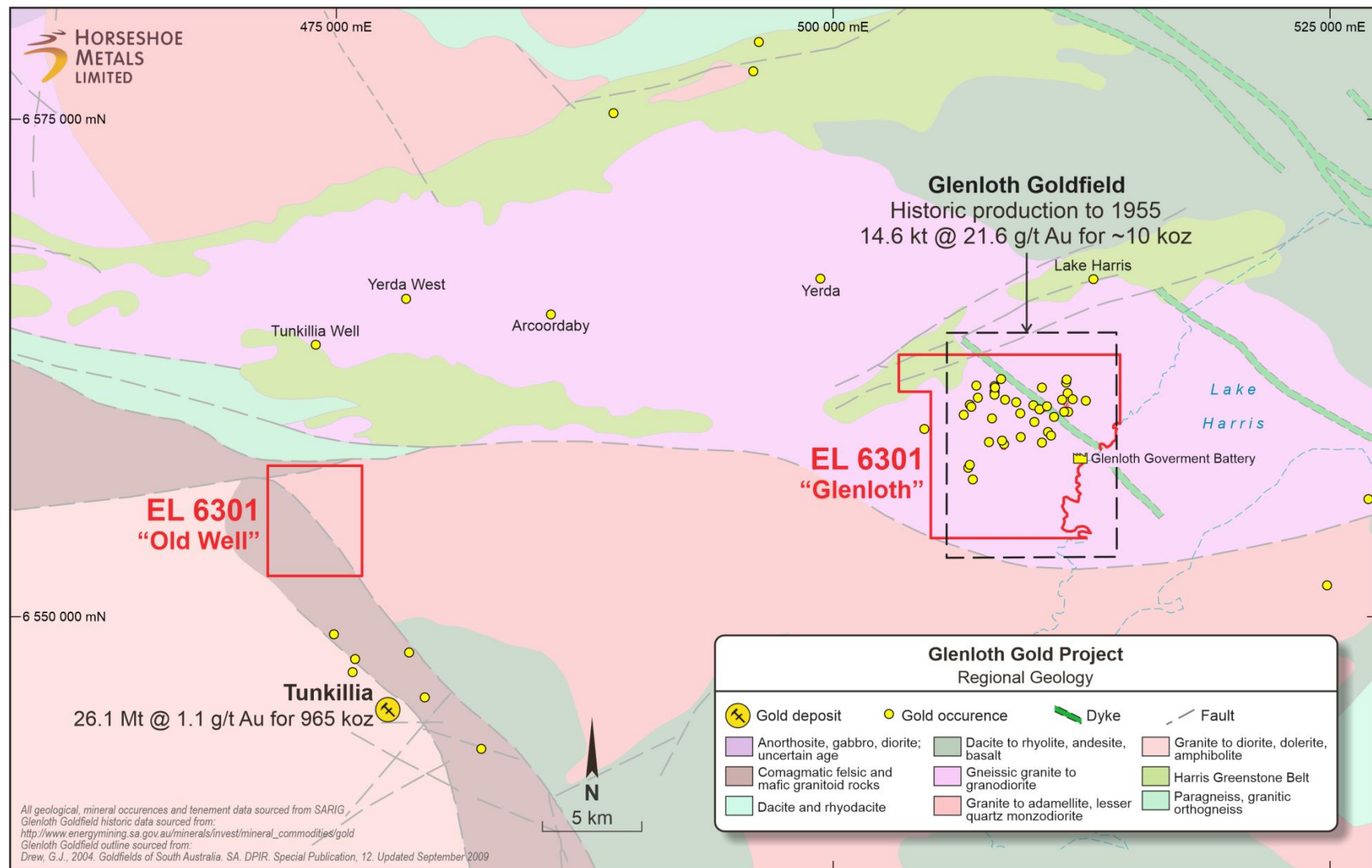
The Company is awaiting approval of an Exploration PEPR (Program for Environment Protection and Rehabilitation) from Department for Energy and Mining (DEM) in South Australia to allow Phase 1 RC drilling to commence on EL6301. PEPR approval is expected from DEM in the next few weeks with RC drilling expected to commence shortly thereafter.

The Company considers the Glenloth Project as a value-based entry into a dominant position of a very prospective area; that previous exploration of the both areas was piecemeal and inadequate; and that larger, high grade gold deposits could be uncovered by systematic exploration and a more considered approach to drilling.

The CGC has outstanding potential for the discovery of significant gold deposits, as indicated by the Tunkillia deposit (965,000 ounces gold resource, refer Figure 6), which adjoins the western portion of EL6301 and proximal to the historical mining centre of Tarcoola, where historic production and current resource total approximately 190,000 ounces. Both Tarcoola and Tunkillia are now owned by Barton Gold Pty Ltd. In addition, Barton Gold also owns the Challenger Gold deposit (located 250km north-west of Glenloth) which historically produced more than 1,000,000 ounces.



**Figure 5: Location of Glenloth Gold Project and Mt Gunson Copper Project in South Australia, in relation to significant local deposits**



**Figure 6: Location of Glenloth Gold Project tenure with regional geology, with known gold occurrences and significant resources**

**Glenloth Historic Production:**

[http://www.energymining.sa.gov.au/minerals/invest/mineral\\_commodities/gold](http://www.energymining.sa.gov.au/minerals/invest/mineral_commodities/gold)

**Glenloth Goldfield Location:**

<https://sarigbasis.pir.sa.gov.au/WebtopEw/ws/samref/sarig1/image/DDD/SP020.pdf> p79

**Tunkillia Resource:**

[https://bf312df2-d40f-41f6-911f-db568b550fea.filesusr.com/ugd/2ed3d8\\_0eaa54ba304f4190888f7463a3baf2c.pdf](https://bf312df2-d40f-41f6-911f-db568b550fea.filesusr.com/ugd/2ed3d8_0eaa54ba304f4190888f7463a3baf2c.pdf)



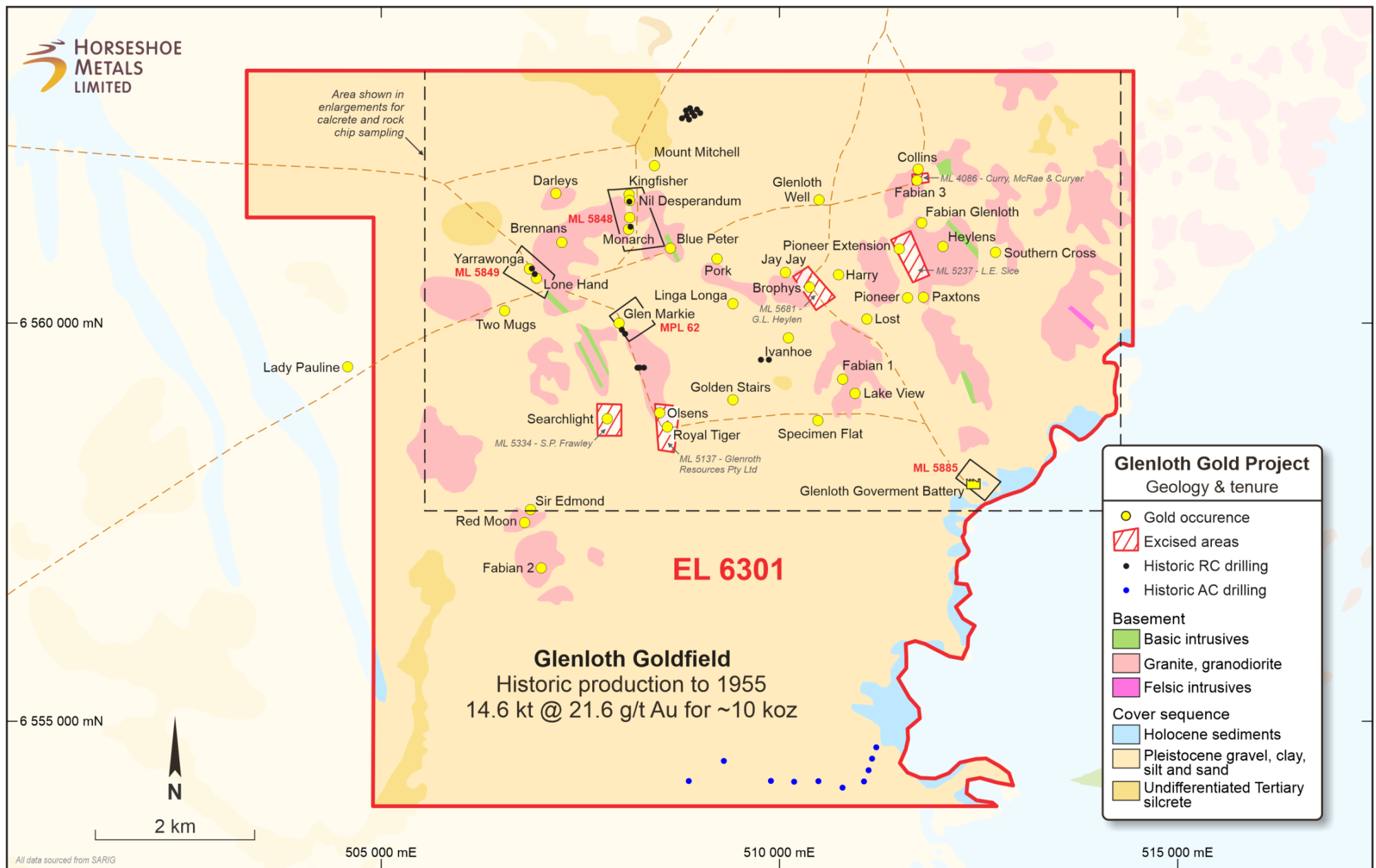


Figure 7: Location of Glenloth Goldfield tenure with regional geology, with named gold occurrences

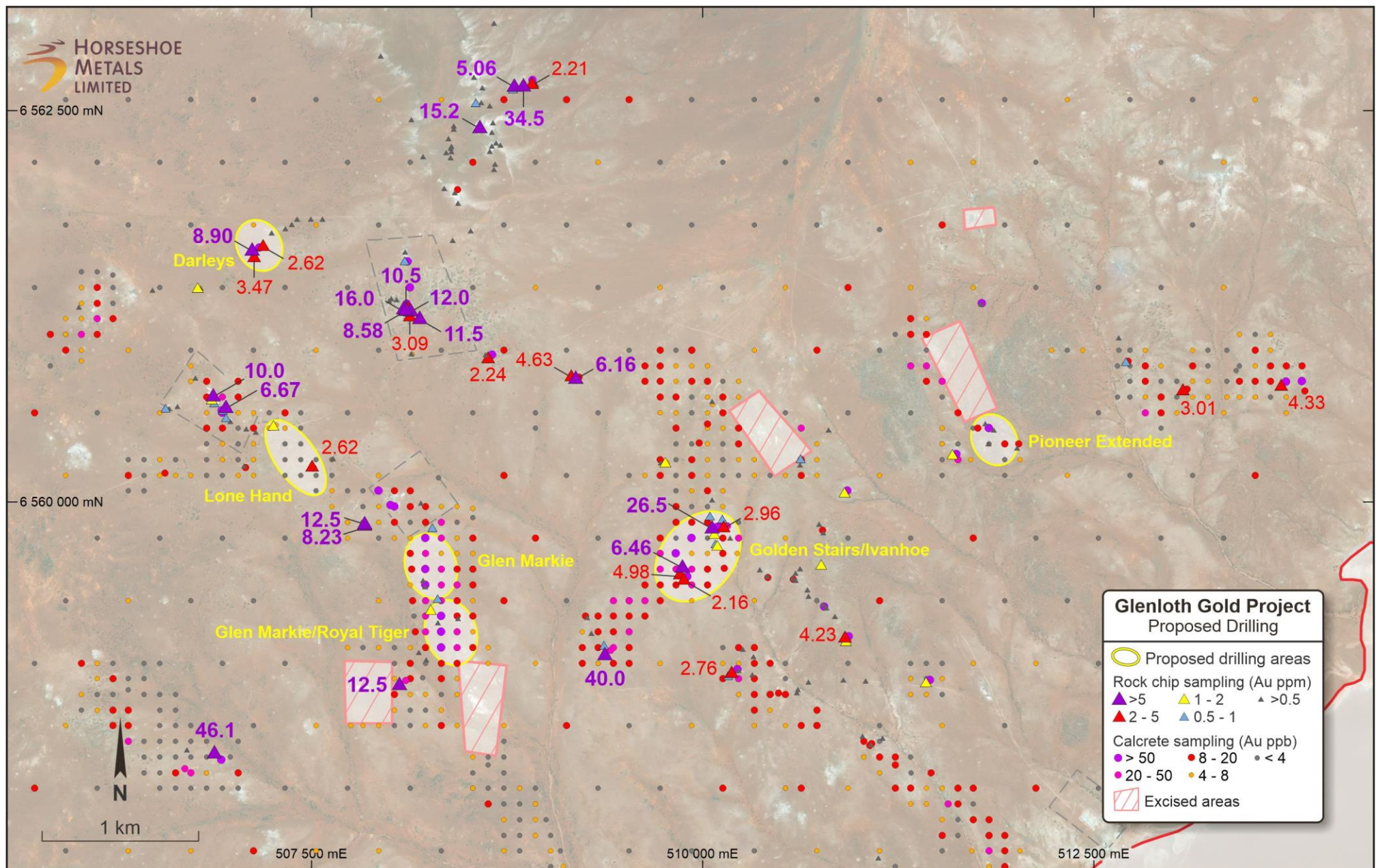


Figure 8: Centres of proposed RC Drilling, overlain on anomalous rockchip and calcrete sampling within inset area of EL6301, Glenloth Goldfield tenure



### **Kumarina Copper Project, WA (HOR: 100%)**

The Kumarina Project consists of a mining lease and mining lease application covering approximately 3.2km<sup>2</sup>. The Project is located 95km north of Sandfire Resources NL's DeGrussa copper-gold mine in the Gascoyne region of Western Australia (see Figure 1). The Company has applied for a mining lease (MLA52/1078) to cover the Rinaldi resource (refer Table 2), contiguous with M52/27. The Company is progressing a Project Agreement as part of the application process with the Native Title Party and its lawyers. No active field work was undertaken during the quarter.

### **Mt Gunson Copper Project, SA (HOR earning to 50%)**

Horseshoe has the right to earn up to a 50% interest in a right to produce copper at Mt Gunson Copper Mine through contribution to expenditure and has the immediate rights to 50% of all surplus cashflow from any copper operation conducted under the agreement with a partner whom operates under agreement with the licensor.

The initial term of the agreement between the partner and the Licensor, who holds the tenements, expired on 29 June 2020 and can be extended by CMM for a period of a further two years to 29 June 2022. Further extension beyond 29 June 2022 can be negotiated during the term of this lease. The Company is currently re-negotiating the terms of an extension with the partner and the Licensor.

## **CORPORATE**

The Company is actively working through a process with the ASX in relation to reinstatement of the Company's shares. As background, the ASX has outlined certain conditions to be met by the Company prior to reinstatement to official quotation, subject to compliance by 17 May 2021 with those conditions' precedent, as set out in the Company's release dated 10th March 2021.

In part, the ASX required the Company satisfy the requirements of Listing Rule 12.1 by:

- a) completion of its Phase 1 exploration program comprising surface sampling, auger/air core drilling, RC drilling, camp refurbishment and geological mapping at the Horseshoe Lights Project, and geological mapping & geochemistry and RC drilling at the Glenloth Project; and
- b) announcement of the results of the Phase 1 exploration program and confirmation it is proceeding with Phase 2.

While the Company was very active in achieving outcomes within the timeframe available, the Company is requesting an extension to the date of the 17<sup>th</sup> May 2021 as certain outcomes could not be achieved due to procedural requirements with various stakeholders and government departments. The Company will update shareholders on the revised expected reinstatement to quotation date as soon as it has confirmation.

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

-ENDS-

### **Enquiries**

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**Non-Executive Director**

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## About Horseshoe Metals Limited

Horseshoe Metals Limited (ASX:HOR) is a copper and gold-focused Company with a package of tenements covering approximately 500km<sup>2</sup> 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.

### 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 1 below summarises the total Mineral Resources for the Horseshoe Lights Project as at 30 June 2021.

<b>TABLE 1</b> <b>HORSESHOE LIGHTS PROJECT</b> <b>SUMMARY OF MINERAL RESOURCES</b> <b>AS AT 30 JUNE 2021</b>								
Location	Category	Tonnes (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	Cu metal (tonnes)	Au metal (oz)	Ag metal (k oz)
<b>In-situ Deposit</b> (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
	<b>Total</b>	<b>12.85</b>	<b>1.00</b>	<b>0.1</b>	<b>1.9</b>	<b>128,600</b>	<b>36,000</b>	<b>793.4</b>
<b>Flotation Tailings</b>	<b>Inferred</b>	<b>1.421</b>	<b>0.48</b>	<b>0.34</b>	<b>6.5</b>	<b>6,800</b>	<b>15,300</b>	<b>294.8</b>
<b>M15 Stockpiles</b>	<b>Inferred</b>	<b>0.243</b>	<b>1.10</b>	<b>0.17</b>	<b>4.7</b>	<b>2,650</b>	<b>1,300</b>	<b>36.7</b>
Note: At 0% Cu cut-off grade unless otherwise stated					<b>TOTAL</b>	<b>138,050</b>	<b>52,600</b>	<b>1,124.9</b>

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 2021 is shown in Table 2 below.



<b>TABLE 2</b> <b>KUMARINA PROJECT</b> <b>SUMMARY OF MINERAL RESOURCES</b> <b>AS AT 30 JUNE 2021</b>				
<b>Location</b>	<b>Category</b>	<b>Tonnes (t)</b>	<b>Cu (%)</b>	<b>Cu metal (tonnes)</b>
<b>Rinaldi Prospect</b> (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>
	<b>Total</b>	<b>835,000</b>	<b>1.3</b>	<b>10,600</b>

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 Craig Hall, who is a member of the Australian Institute of Geoscientists. Mr Hall is a 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 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 Horseshoe Lights Project surface stockpile Mineral Resources is based on information compiled by a previous employee of Horseshoe Metals Limited, and reviewed by Mr Hall. 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 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.

# Appendix 1: Tenement Schedule (ASX Listing Rule 5.3.3)

SUMMARY OF MINING TENEMENT INTERESTS AS AT 30 June 2021					
Location	Tenement No.	Interest At Beginning Of Quarter (%)	Interests relinquished, reduced or lapsed (%)	Interests acquired or increased (%)	Interest At End Of Quarter (%)
Horseshoe Lights, WA	M52/743	100% <sup>1</sup>	-	-	100% <sup>1</sup>
Horseshoe Lights, WA	L52/42	100%	-	-	100%
Horseshoe Lights, WA	L52/43	100%	-	-	100%
Horseshoe Lights, WA	L52/44	100%	-	-	100%
Horseshoe Lights, WA	L52/45	100%	-	-	100%
Horseshoe Lights, WA	L52/66	100%	-	-	100%
Horseshoe Lights, WA	P52/1542*	100%	-	-	100%
Horseshoe Lights, WA	P52/1543*	100%	-	-	100%
Horseshoe Lights, WA	P52/1544*	100%	-	-	100%
Horseshoe Lights, WA	P52/1545*	100%	-	-	100%
Horseshoe Lights, WA	P52/1546*	100%	-	-	100%
Horseshoe Lights, WA	P52/1547*	100%	-	-	100%
Horseshoe Lights, WA	P52/1548*	100%	-	-	100%
Horseshoe Lights, WA	P52/1549*	100%	-	-	100%
Horseshoe Lights, WA	P52/1550*	100%	-	-	100%
Horseshoe Lights, WA	E52/3759	100%	-	-	100%
Horseshoe Lights, WA	E52/3906	100%	-	-	100%
Horseshoe Lights, WA	E52/3908	100%	-	-	100%
Horseshoe Lights, WA	E52/3909	100%	-	-	100%
Horseshoe Lights, WA	ELA52/3939	0%	-	-	0%
Kumarina, WA	M52/27	100%	-	-	100%
Kumarina, WA	MLA52/1078	0% <sup>2</sup>	-	-	0% <sup>2</sup>
Glenloth, SA	EL6301	100%	-	-	100%

## Notes:

- Horseshoe Gold Mine Pty Ltd (a wholly owned subsidiary of Grange Resources Limited) retains a 3% net smelter return royalty in respect to all production derived from M52/743
  - The Company has applied for a Mining Lease to cover the Rinaldi resource within E52/1998, contiguous with M52/27
- Currently under application for Extension of Term for additional 4 years