HORSESHOE METALS LIMITED

BOARD OF DIRECTORS

Ms Kate Stoney Non-Executive Director, CFO & Company Secretary

Mr Craig Hall
Non-Executive Director

Mr Alan Still
Non-Executive Director

Drilling Confirms Thick, Shallow Copper Mineralisation at Horseshoe Lights

Motters and Main Zone Continue to Deliver High Quality Copper Intersections Highlighting Significant Expansion Potential

- RC drilling confirms wide zones of copper mineralisation at Main Zone and Motters with significant results including:
 - > 55m @ 0.88% Cu from 22m incl. (RC1191 NW Zone)
 - o 14m @ 1.30 % Cu from 22m and
 - o 21m @ 1.15% Cu from 44m incl.
 - o 3m @ 4.33% Cu from 56m
 - > 10m @ 1.62% Cu from 252m incl. (RC1187 Motters)
 - o 2m @ 5.19% Cu from 252m and
 - > 19m @ 1.49% Cu from 269m incl. (RC1187 Motters)
 - o 11m @ 2.37% Cu from 275m incl.
- Drilling highlights <u>significant mineralised potential outside existing</u> in situ resource 128,000 t Cu metal @ 1.0% (0.5% cut-off)
- <u>Clear expansion potential identified at depth</u> within both the Motters Zone and Main Zone:
 - Motters sulphide zone open down dip and plunge below 200 metres
 - Main Zone remains open down plunge to the north and at depth below 400 metres
- Drilling expected to recommence in March with a priority focus on:
 - Oxide zone (surface to ~30m depth) Main Zone and Motters
 - North dump and Southern Stockpile infill
 - Main zone down plunge and along strike to the north
 - Motters along strike and down plunge to the south
- Review of historic scoping study results progressing on-track oxide heap leach followed by SXEW or Cu-cementation being assessed as part of review

Horseshoe Metals Limited (ASX: HOR) ('Horseshoe' or the 'Company') is pleased to provide the results of the Reverse Circulation ("RC") drilling programme completed in December 2022 at the Company's Horseshoe Lights Copper-Gold Project in Western Australia.

Drilling was completed on time and on budget and successfully achieved its primary objective by confirming and extending mineralisation and confidence levels in drilling previously completed by the Company. A full summary of the program is provided below.

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Commenting on these encouraging results from Horseshoe Lights, Director & CFO Kate Stoney said:

"These results are highly encouraging and continue to clearly highlight the significant potential to expand the oxide and sulphide zones of mineralisation at our flagship Horseshoe Lights Copper Project.

It is important to note that multiple wide zones of sulphide copper mineralisation were intersected at Motters around 200 metres below surface and outside of the existing resource base. This is significant as this zone of mineralisation was historically overlooked and regionally these copper deposits can exist down to 1000m, so we have effectively only tested around a third of the potential depth extent at Motters.

These results are extremely pleasing, and follow-up drilling is expected to recommence shortly to complete the assessment of both the oxide and down plunge zones and the significant surface material potential in the North Dump and South low-grade stockpiles."

Drilling Summary

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 operated 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 4).

The latest round of drilling and sampling activities were completed in December 2022 and consisted of 11 Holes totalling 1972m targeting the North Dump (2 holes for 94m; RC1181 to RC1182), Motters (5 holes for 1148m; RC1183 to RC1187) and Main Zone (4 holes for 730m; RC1188 to RC1191) north west extension (refer Figures 1 and 2).

Results from the programme are summarised below and in Table 1 at a 0.3% Cu cut-off, which is considered appropriate given the significant rise in copper price over the last two years. Assays from additional follow up sampling are awaited.

Main Zone

RC1180 was designed to test a gap in the detailed information on this section (Figures 1 to 4) and to confirm continuity and grade of oxide mineralisation immediately north of the open pit. A significant result (0.3% Cu cutoff) was achieved:

• 55m @ 0.88% Cu from 22m incl. 14m @ 1.30 % Cu from 22m and 21m @ 1.15% Cu from 44m

In addition, drilling on the northernmost accessible section intersected significant mineralisation and confirms Main Zone is open to the north:

• 10m @ 0.44% Cu from 145m incl. 3m @ 1.11 % Cu from 149m

Planning is underway to create drilling access on the NW waste dump to allow testing of the northern strike and down plunge extension of the mineralisation. Previous geological interpretation and magnetic data suggests the dolerite that cuts the northern end of the Motters structure does not extend far enough west to intersect the Main Zone. Future drilling will test this interpretation (Figure 5).

Motters Zone

Results confirm significant widths of **sulphide** mineralisation in two lode positions down plunge at the southern end of the Motters structure (Figures 1 and 5 to 7) where previous drilling has been limited including the following significant results (0.3% Cu cut-off) of:

10m @ 1.62% Cu from 252m incl. 2m @5.19% from 252m and
 19m @ 1.49% Cu from 269m incl. 11m @ 2.37% Cu from 275m
 (RC1187)

Future drill targeting will focus on the sparsely drilled mineralisation south along strike and down plunge from the completed drilling **below 200 metres** (Figures 6 and 7). It is significant to note Main Zone has been tested to approximately **400 metres** below surface and remains open (Figure 3).

North Dump

Drilling confirms significant oxide copper-gold mineralised material exists in the upper 10 to 12 metres of the dump (Figures 8 and 9) and further drilling will be undertaken to allow resource definition.

Proposed Work Programmes and Next Steps

The following activities at Horseshoe are planned over the coming months:

- RC drill testing Main Zone northern extension along strike and down plunge
- RC drill testing of Motters southern extension down plunge
- RC and or auger infill drilling of surface materials in stockpiles and northern waste dump
- Additional metallurgical test work on oxide copper stockpiles and targets
- Gravity recovery test work on Copper Flotation and CIP tailings
- Ongoing Review of scoping study results to incorporate potential oxide heap leach SXEW treatment

Horseshoe Lights Copper-Gold Project Existing Resource Base

- O Current in situ resource 128,000 t Cu metal @ 1.0% (0.5% cut-off)
- o 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

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

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

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

- ENDS -

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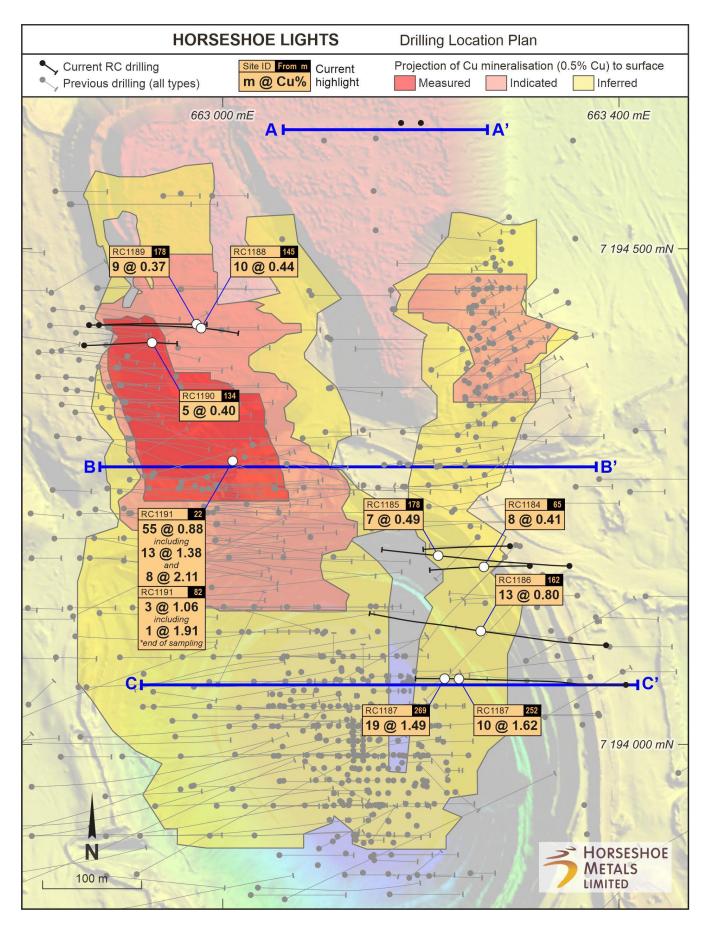


Figure 1: Drill Location Plan

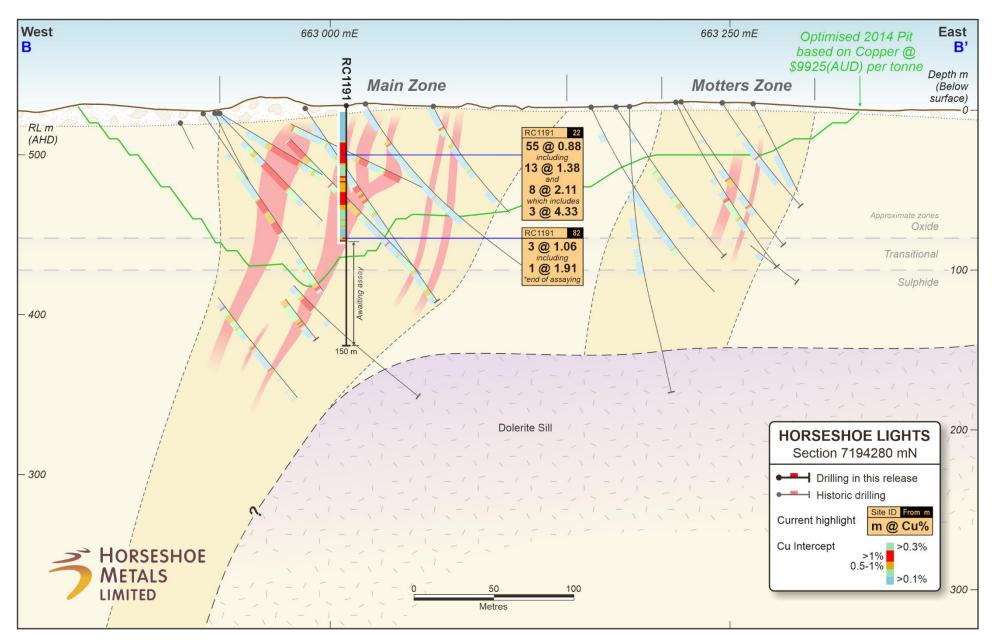


Figure 2: Cross Section 7194280mN (B-B' on Figure 1)- Significant Results Phase 3 RC Drilling (0.3% Cu cut-off)

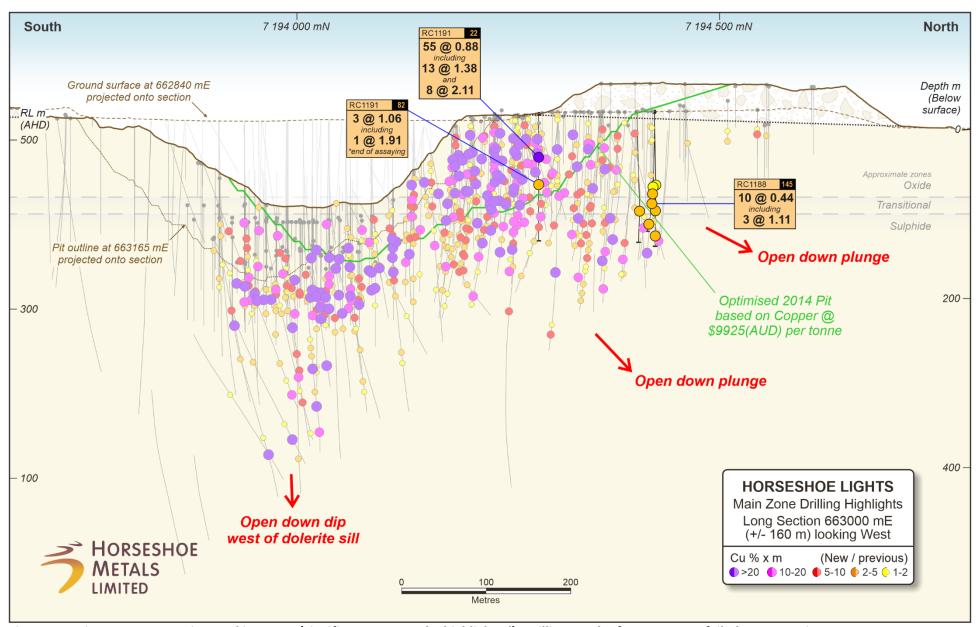


Figure 3: Main Zone Long Section Looking West (significant new results highlighted). Drilling south of 7193800 mN failed to test Main Zone or Motters

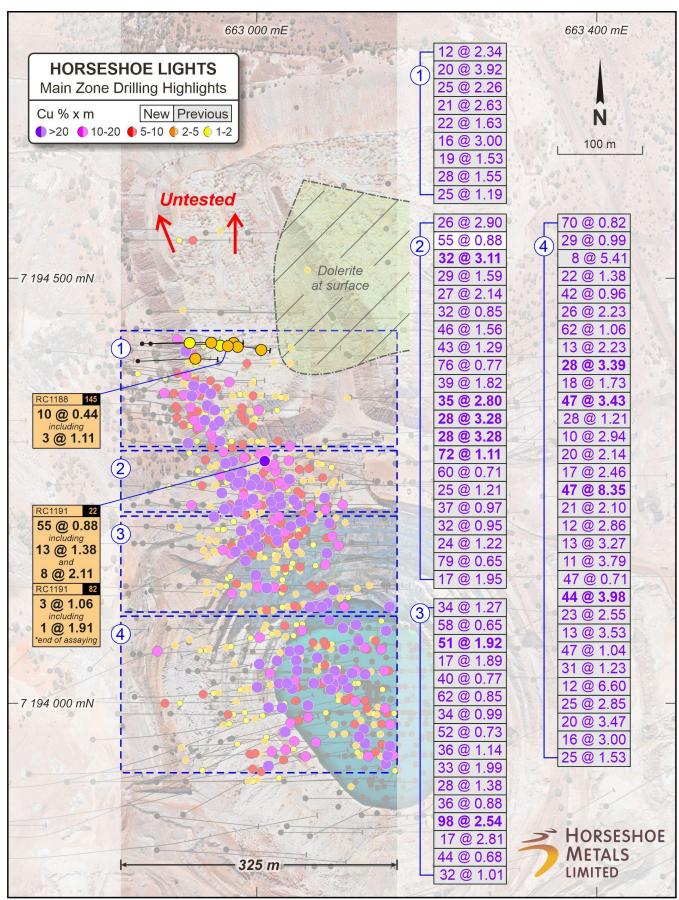


Figure 4: Main Zone Plan (significant new results highlighted)

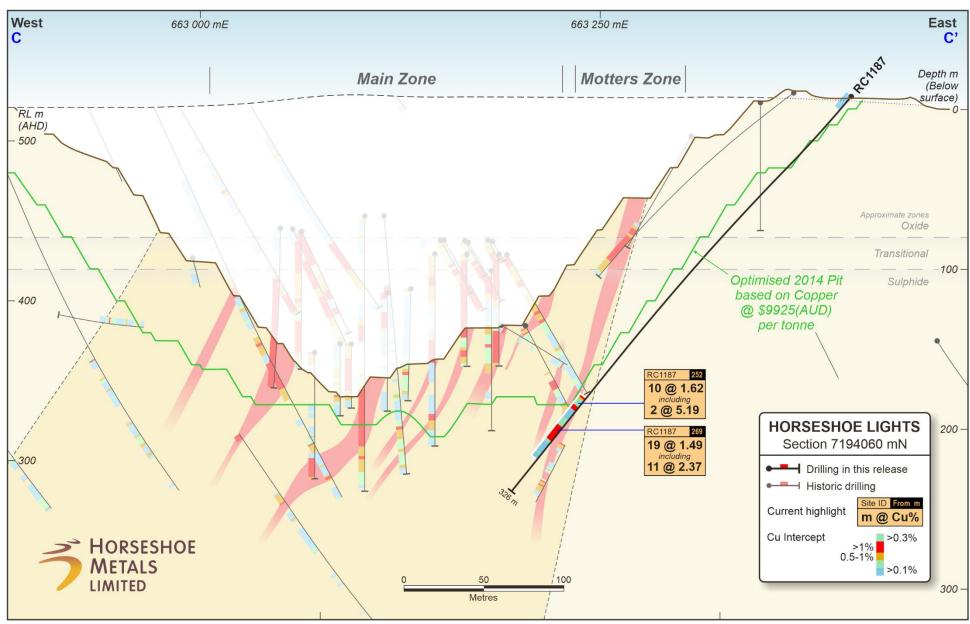


Figure 5: Cross Section 7194060mN (C-C' on Figure 1)- Significant Results Phase 3 RC Drilling (0.3% Cu cut-off)

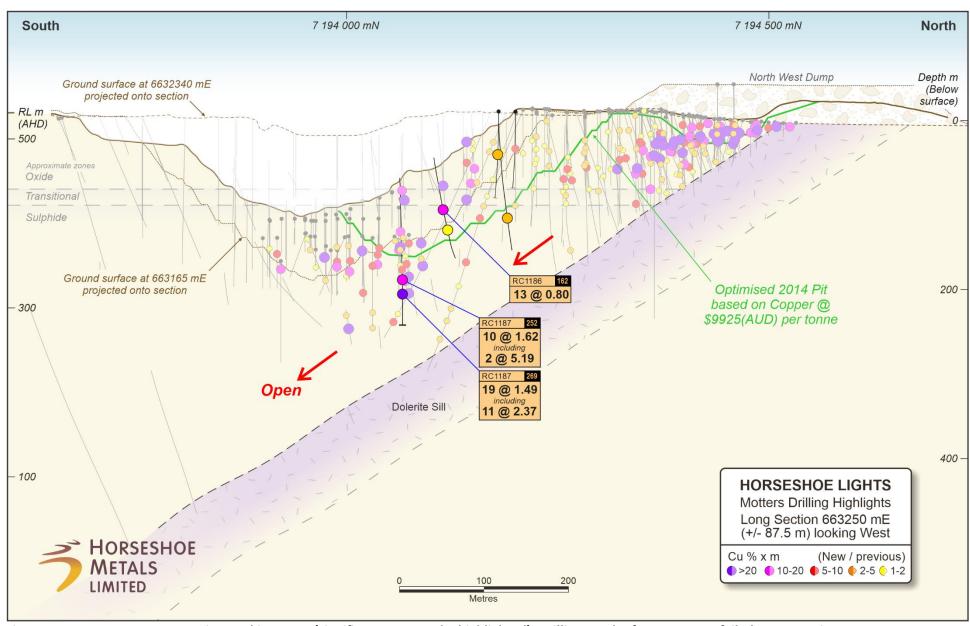


Figure 6: Motters Zone Long Section Looking West (significant new results highlighted). Drilling south of 7193800 mN failed to test Main Zone or Motters

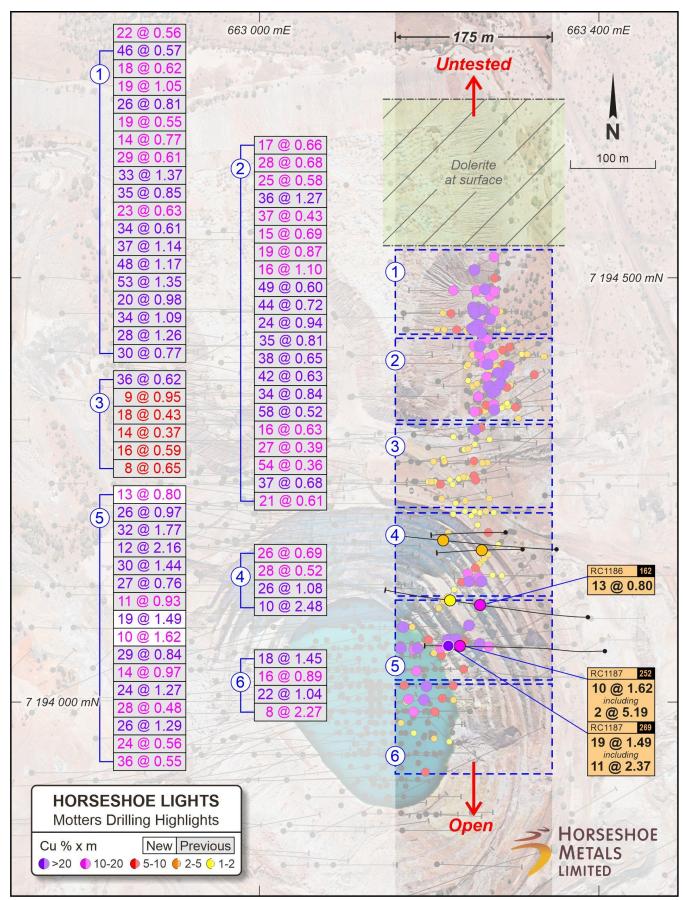


Figure 7: Motters Zone Plan (significant new results highlighted)

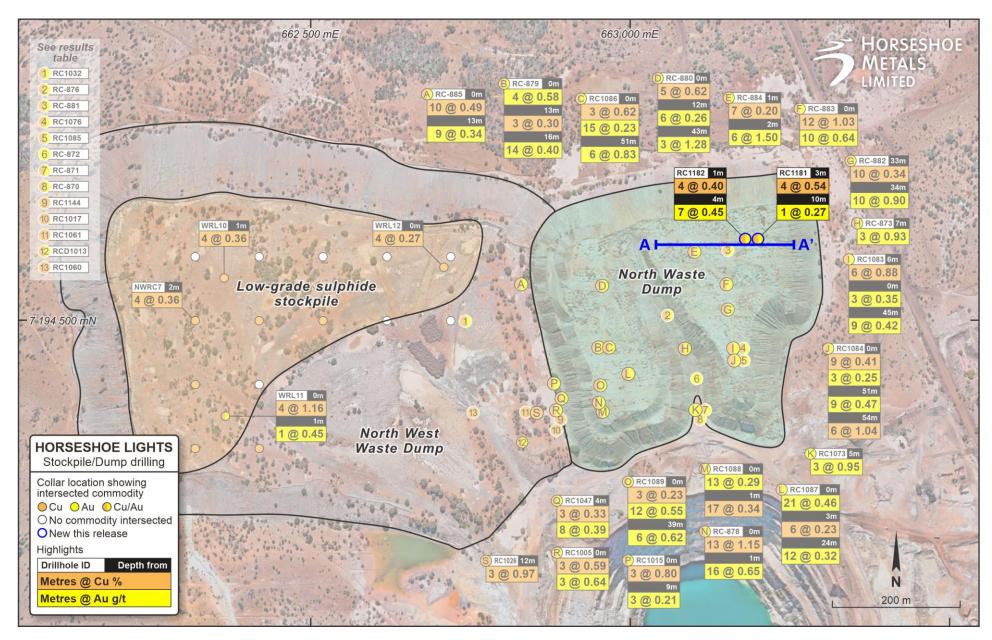


Figure 8: Significant new results North Waste Dump RC Drilling (0.2% Cu & 0.2 g/t Au cut-off)

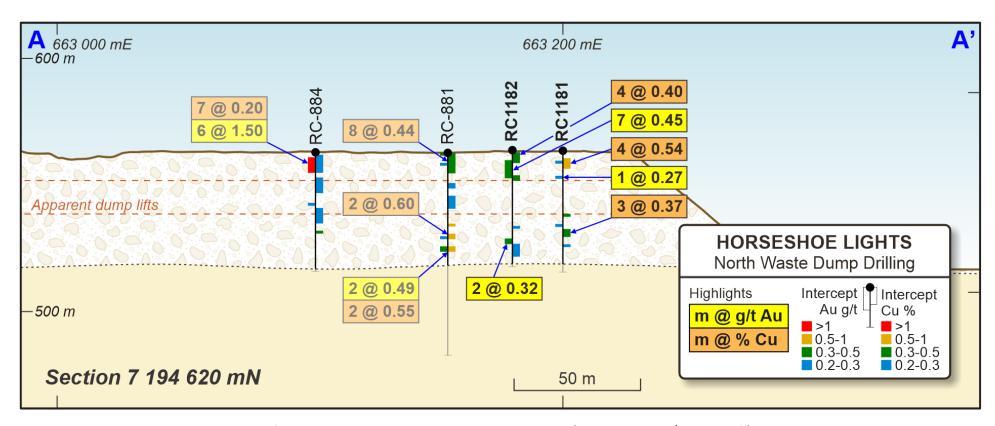


Figure 9: Cross Section 7194620mN - Significant new results North Waste Dump RC Drilling (0.2% Cu & 0.2 g/t Au cut-off)

Table 1: Summary of In Situ Results
Composited Intervals of >= 1m and >= 0.3% Cu allowing for 4m of internal dilution

						ternal dilutio		From	To	Longth	Cu 9/
Zone	Hole ID RC1183	North 7194200	East 663290	RL 532	Dip -50	Azimuth 270	Depth 126	From 37	To 38	Length	Cu % 0.37
	KCTTOS	7194200	003290	332	-50	210	120	68	69	1	0.62
								76	78	2	0.62
	RC1184	7194180	663310	533	-50	270	144	65	73	8	0.43
	KC1104	7194100	003310	333	-30	210	Including	65	70	5	0.55
							including	104	105	1	0.56
	RC1185	7194180	663350	529	-50	270	252	146	147	1	0.37
	KCTTOS	7194100	003330	329	-50	210	232	167	169		
								178	185	2 7	0.33 0.49
							including	178	181	3	0.49
							including				
Motters	RC1186	7194100	663387	526	-50	270	300	184 5	185 6	1	0.56 0.32
	KCTTOO	7194100	003307	320	-50	270	300	162	175		
								182	183	13	0.80 0.62
										1	
							la alcalia a	210	213	3	0.35
	DC4407	7404000	000407	507		070	Including	210	211	1	0.61
	RC1187	7194060	663407	527	-50	270	326	252	262	10	1.62
							including	252	254	2	5.19
							including	259	262	3	1.52
							in a localina ac	269	288	19	1.49
							including	275	286	11	2.37
	DC4400	7404400	000075	F00		1 00	1 000	296	297	1	0.31
	RC1188	7194423	662875	533	-50	90	200	4	5	1	0.42
							la alas Para	71	73	2	0.46
							Including	71	72	1	0.56
								109	111	2	0.34
								121	122	1	1.24
							la alas Para	130	138	8	0.37
							Including	130	131	1	1.46
								145	155	10	0.44
							Including	149	152	3	1.11
								184	190	6	0.37
							Including	184	185	1	0.76
	501100	=				1	Including	189	190	1	0.89
	RC1189	7194423	662865	533	-60	90	199	9	11	2	0.40
								102	105	3	0.57
							. , ,	139	146	7	0.33
Main							including	139	140	1	0.59
								160	161	1	0.34
								168	169	1	0.41
								172	173	1	0.31
1								178	187	9	0.37
	D04400	7404400	000000	F00			including	178	182	4	0.56
1	RC1190	7194403	662860	533	-60	90	181	11	12	1	0.91
1								134	139	5	0.40
								168	169	1	0.30
1	D04404	7404000	000010	FC 4	00		450	178	180	2	0.33
1	RC1191	7194286	663010	531	-90	0	150	22	77	55	0.88
							including 	23	36	13	1.38
1							including	54	62	8	2.11
1							which includes	56	59	3	4.33
1							including	71	72	1	0.71
1							including	75	76	1	0.62
1								82	85 *	3	1.06
							including	84	85 *	1	1.91

^{*} Indicates limit of assaying

Table 2: Summary of North Waste Dump Results

Composited Intervals of >= 1m and >= 0.2% Cu & >= 0.2 g/t Au allowing for 2m of internal dilution

Zone	Hole ID	North	East	RL	Dip	Azimuth	Depth	From	То	Length	Cu %	Au g/t
	RC1181	7194627	663200	564	-90	0	48	3	7	4	0.54	
								4	5	1		0.20
								10	11	1		0.27
								25	26	1	0.33	
								29	30	1		0.23
North								31	34	3	0.37	
Waste								37	38	1	0.21	
Dump	RC1182	7194627	663180	564	-90	0	46	1	5	4	0.40	
								4	11	7		0.45
								10	12	2	0.34	
								30	31	1	0.25	
								35	37	2		0.32
								37	42	5	0.20	

Historic Results (Sabminco NL 1993)

Zone	Hole ID	North	East	RL	Dip	Azimuth	Depth	From	То	Length	Cu %	Au g/t
	RC-881	7194611	663154	563	-90	0	80	0	8	8	0.44	
								0	1	1		0.41
								4	5	1		0.26
								12	14	2	0.25	
								17	22	5	0.26	
								28	29	1	0.50	
North								32	34	2	0.60	
Waste								33	34	1		0.22
Dump								37	39	2	0.55	0.49
	RC-884	7194609	663102	563	-90	0	47	1	8	7	0.20	
								2	8	6		1.50
								10	16	6	0.20	
								20	21	1		0.25
								22	28	6	0.23	
								31	32	1	0.40	

About Horseshoe Metals Limited

Horseshoe Metals Limited (ASX:HOR) is a copper and gold-focused Company with a package of tenements covering approximately 500km^2 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. The tenements immediately surrounding the Horseshoe Lights Copper-Gold Project are currently part of a Farm In/Joint Venture with Kopore Metals Limited (ASX:KMT) where KMT has recently completed minimum expenditure requirements for the first year of Farm In in early 2022

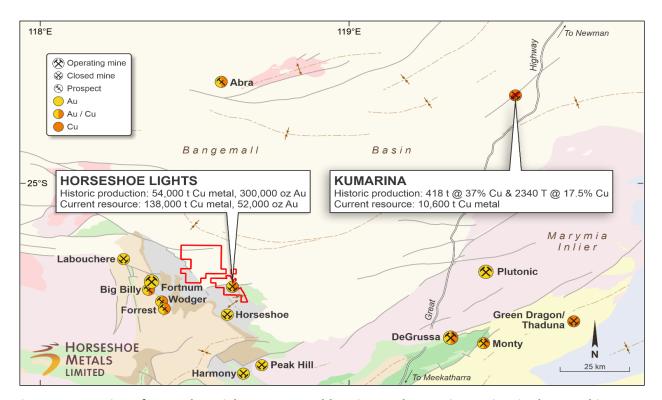


Figure 10: Location of Horseshoe Lights Copper-Gold Project and Kumarina Project in the Murchison, WA

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 4 summarises the total Mineral Resources for the Horseshoe Lights Project as at 30 June 2022.

TABLE 4 HORSESHOE LIGHTS PROJECT SUMMARY OF MINERAL RESOURCES As at 30 June 2022

Location	Category	Tonnes (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	Cu metal (tonnes)	Au metal (oz)	Ag metal (k oz)
In-situ	Measured	1.73	1.04	0.0	0.5	18,000	1,900	28.8
Deposit	Indicated	2.43	0.95	0.0	0.7	23,200	3,400	52.2
(0.5% Cu	Inferred	8.69	1.01	0.1	2.6	87,400	30,700	712.4
cut-off grade)	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% otherwise s	6 Cu cut-off g tated	rade unless	5	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 2022 is shown in Table 5 below.

TABLE 5 KUMARINA PROJECT SUMMARY OF MINERAL RESOURCES As at 30 June 2022						
Location	Category	Tonnes (t)	Cu (%)	Cu metal (tonnes)		
	Measured	415,000	1.46	6,100		
Rinaldi Prospect	Indicated	307,000	1.16	3,500		
(0.5% Cu cut-off)	Inferred	114,000	0.9	1,000		
	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 a consultant 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 Fotios 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 Fotios. 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 Fotios. 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 Fotios. 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

JORC CODE, 2012 EDITION

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. 	 HOR 2021 RC Drilling- samples were collected to best represent the source material. Samples were sent to Nagrom Perth for Au analysis by ICP-OES (Method ICP-008), 50g charge with a lower detection limit of 0.001 ppm NAGROM method – ICP008; 40gm Aqua Regia Digest- suite included AAu, Ag, Ca, Cu, Fe, Hg, Mg, Pb, S, Se and Zn. Samples were pre-screened at hole for Cu for subsequent assay by portable XRF. HOR 2022 RC Drilling- samples were collected to best represent the source material. Samples were sent to Bureau Veritas Perth for Au, Cu, Ag and S analysis by BV method AR101 with either ICP-MS or ICP-AES/MS finish. Samples were pre-screened at hole for Cu for subsequent assay by portable XRF. HOR 2021 Auger drilling- samples were collected by spiral auger bit and shafts with flights 3 ½ "in diameter. Samples were collected every metre from a collared liner base of around 50cm x 40cm, into a large labelled plastic bag, and the base swept clean before proceeding with the next metre. Sub-sampling into numbered calico bag was via an aluminium scoop collecting around 500-750gm of sample from the plastic bag, which was retained at the hole over the collar. The historical 1985 RC Vat sampling programme was undertaken by a truck mounted Mole Pioneer drilling rig owned and operated by Sanfead Drilling Contractors in Perth, using a modified rotary drill with blade bit. Samples were collected ever 2m within holes up to 6m deep, except 3 holes in Vat 3 which were sampled every 1m. HOR 2021/22 RC Drilling - Portable Niton XRF used to select sample intervals, internal checks utilised HOR 2021/22 RC Drilling Depth control was at the decimetre level, with depth checked against a metre stick HOR 2021 Auger drilling Depth control was at the decimetre level, with depth checked against a metre stick HOR 2021 Auger drilling was undertaken by experienced contractors Gyro Australia and is considered industry standard with a geochemical auger rig used to obtain 1 m samples o
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	 HOR 2021/22 RC Drilling - was undertaken as industry standard reverse circulation drilling, with iDrilling completing work with a UDR450 track mounted rig and separate 900/1150 booster. Face-sampling drill bit size was 140mm HOR 2021 Auger drilling was completed using a Landcruiser mounted post-hole style auger, capable of at least 10m drill depths. Hole diameters were 3.5". The historical 1985 RC Vat sampling programme was undertaken by a truck mounted Mole Pioneer drilling rig, using a modified rotary drill with blade bit. Size of bit not stated.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 	 HOR 2021/22 in situ RC Drilling- Visual inspection of the RC sample volume indicates sample recovery is excellent HOR 2021/22 stockpile RC Drilling- Visual inspection of the RC sample volume indicates sample recovery is

Criteria	JORC Code explanation	Commentary
	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.	 moisture and contamination. Hole sides were conditioned where possible, and sample bases cleaned before proceeding. 1985 RC Vat sampling programme- not known. HOR 2021 RC Drilling - No potential for sample bias was observed, with no fine/coarse separation HOR 2021 Auger drilling -Ground conditions for auger drilling are good and drilling returned consistent size samples. No potential for sample bias was observed, with no fine/coarse separation. 1985 RC Vat sampling programme- not known
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	 HOR 2021/22 RC Drilling - logged to a level to support appropriate Mineral Resource estimation, mining studies, and metallurgical studies. C20 stockpiles and dumps not logged HOR 2021 Auger drilling Not logged as leached Vat material is relatively homogenous. All material and sampling viewed and overseen by senior geologist. 1985 RC Vat sampling programme- not known HOR 2021/22 RC Drilling logged to a level to support appropriate Mineral Resource estimation, mining studies, and metallurgical studies. HOR 2021 Auger drilling - N/A
	The total length and percentage of the relevant intersections logged.	 HOR 2021/22 RC Drilling - All drilling logged to a level to support appropriate Mineral Resource estimation, mining studies, and metallurgical studies. HOR 2021 Auger drilling -NA.
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. 	 No diamond core drilled during this program. HOR 2021/22 RC DrillingNon-core drilling, generally sampled dry, wet samples noted; Sample preparation technique considered appropriate to sample type; Cyclone cleaning routinely carried out during drilling; No field duplication undertaken to date, further work planned; sample sizes considered appropriate to the grain size of the material being sampled. HOR 2021 Auger drilling- Whole samples collected and swept off rubber lined collar pad; Auger drilling All auger samples drilled dry for the purposes of sampling. Sample sizes considered appropriate to the grain size of the material being sampled. 1985 RC Vat sampling programme- not known RC and Auger sample analysis follows industry best practice whereby samples are sorted, reconciled, placed onto trolleys and dried at 105°C in an oven, then crushed to ~2mm and a 500-700g subsample taken by rotary division for pulverisation. The subsample was pulverised >90% passing 75µm using bowl-and-disc type mills, and ~200g of pulverised sample was taken for analysis. The technique is considered appropriate for the process of sub-sampling. 1985 RC Vat sampling programme- not known Sub sampling stages are considered appropriate for the 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. 	 In situ RC and Auger sample analysis -Residuals and original samples sources retained for checks. C20 and dump stockpiles original metre samples not retained RC and Auger sample analysis-The sample size is considered industry standard for base and precious metal mineralisation.
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	 HOR 2021 RC Drilling RC samples were submitted to Nagrom Laboratory, an ISO_9001:2015 assay laboratory and mineral processor for analysis by Method ICP008; 40gm Aqua Regia Digest- suite included Au, Ag, Ca, Cu, Fe, Hg, Mg, Pb, S, Se and Zn. Aqua Regia digest is considered an effective but partial digestion technique. C20 stockpiles analysed by ICP008 for Copper, Gold only HOR 2022 RC Drilling- samples were collected to best represent the source material. Samples were transported to Bureau Veritas (BV) Kalgoorlie for preparation then BV Perth for Au, Cu, Ag and S analysis by BV method AR101 with either ICP-MS or ICP-AES/MS finish. Samples were pre-screened at hole for Cu for subsequent assay by portable XRF. HOR 2021 Auger drilling -Auger samples were submitted to Nagrom Laboratory, an ISO_9001:2015 assay

Criteria	JORC Code explanation	Commentary
	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.	 laboratory and mineral processor for analysis by Method FA50. 1985 RC Vat sampling programme- Fire assay analysis conducted by Classic Laboratories Pty Ltd, a NATA registered laboratory. Fire assay for gold is considered a total digestion technique. Vat 2 samples assayed by ICP008 for Copper, Gold only HOR 2021/22 RC Drilling- Standards and Blanks submitted at minimum once each per hole; acceptable levels of accuracy established. C20 and Dump Stockpile drilling- Standards submitted every 50 samples, acceptable standards of accuracy established HOR 2021 Auger drilling- Auger sampling was submitted with two standards per 100 samples, and 1 blank per 100, and acceptable levels of accuracy and precision have been established. 1985 RC Vat sampling programme- not known
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. 	 HOR 2021/22 RC DrillingSignificant intersections verified by multiple Company personnel Some holes approximately twinning historic drilling Paper logs of primary data transferred to digital storage and stored, verified by alternate Company personnel; electronic records managed by Company personnel at Perth office. No adjustments have been made to the data as received from the laboratory
	and the state of t	 HOR 2021 Auger drilling- Auger significant intersections and tabulations were confirmed by alternative Company personnel from first principals. 1985 RC Vat sampling programme- not known N/A All auger drilling and sample data is captured in the field, then entered using established templates and verified in Perth office before upload into database. 1985 RC Vat sampling programme- not known No adjustments undertaken.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	 HOR 2021/22 RC Drilling-Initial collar locations are determined by handheld Garmin GPS but will be surveyed using DGPS before resource estimates are undertaken. Holes subsequently located by high definition photography, with estimated accuracy +/- 1m. Gyroscopic down hole surveys completed on holes RC1164-1180 HOR 2021 Auger drilling- Initial collar locations determined by handheld Garmin GPS but will be surveyed
	 Specification of the grid system used. Quality and adequacy of topographic control. 	 using DGPS before resource estimates are undertaken. 1985 RC Vat sampling programme- not known RC and Auger sampling- Grid system coordinates are GDA94 MGA Zone 50. RC and Auger sampling -Topographic control is available from known survey stations and Hyvista detailed aerial photography acquired in 2017. Topographic control is at the decimetre level on site. 1985 RC Vat sampling programme- not known
Data spacing and distribution	Data spacing for reporting of Exploration Results.	 HOR 2021/22 RC Drilling-Sectional E-W drilling, typically 20m spacing, otherwise various. C20 stockpile drilling now 10m x 10m upon completion of 2022 infill lines HOR 2021 Auger drilling- auger drilling used approx. 20m spacing in a diamond pattern.
	 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. 	 RC and Auger sampling- drilling spacing and results employed in this program are considered sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. No sample compositing has been applied.
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.	 HOR 2021/22 RC Drilling-Orientation of sampling has not necessarily achieved unbiased sampling of some structures, discussed in text. HOR 2021 Auger drilling-Drilling in this program is vertical and considered to represent an unbiased section of the material being sampled.
	If the relationship between the drilling orientation and the orientation of key	RC and Auger sampling- No knowledge of sampling bias

Criteria	JORC Code explanation	Commentary
	mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	 RC and Auger sampling-Prior to submission all samples were stored on-site under supervision of the Company personnel. Samples are transported to Perth by Horseshoe Metals personnel and then onto the assay laboratory in Kalamunda.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	RC and Auger sampling-No audits or reviews have been performed to date.

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 Horseshoe Lights Project comprises one Mining Lease (M52/743), one Exploration Licence (E52/3759) and 9 Prospecting Licenses. Current registered holder of the tenements is Murchison Copper Mines Pty Ltd (MCM) a wholly owned subsidiary of Horseshoe Metals Limited. Tenements E52/3759, P52/1442-50, and part of M52/743 are subject to a farm-in agreement with Kopore Metals Limited (refer ASX release 28th January 2021 – "Horseshoe West Copper/Gold Farm-in and JV Agreement"). The Kumarina project consists of two tenements, M52/27; and a mine lease application, M52/1078. MCM has 100% interest in the tenements. Unrelated party Horseshoe Gold Mine Pty Ltd (a subsidiary of Granges Resources Limited) retains a 3% net smelter return royalty in respect to all production derived from M52/743
	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.	 Mining Lease 52/743 containing the exploration results and current resources is in good standing and has been recently renewed for an additional 21 years. Prospecting Licences P52/1442-50 recently received an Extension of Term for an additional 4 years. The Company is unaware of any additional impediment to it obtaining a licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 The Horseshoe Lights deposit surface gossan was discovered in 1946 and worked at a prospect level until 1949. Open pit and underground workings were operated by Asarco from 1949 to 1954. Asarco explored the deposit by sampling surface trenches, drilling one surface diamond drill hole, underground drilling and cross-cutting underground on two levels. In 1964, Electrolytic Zinc Company conducted widespread exploration including eight diamond drill holes in a search for copper. During 1969 and 1970 Planet Metals Ltd drilled seven holes. In the period 1975 to 1977, Amax Corporation and its partner Samantha Mines investigated the Horseshoe Lights area for base metals. This investigation included drilling a further three diamond drill holes including one beneath the southern end of the main ore zone. Placer Austex Pty Ltd and Homestake Mining Company Ltd also investigated the property. Previous exploration activities during the main phase of open pit mining were completed by Horseshoe Gold Mine Pty Ltd which was a wholly owned subsidiary of Barrack Mines Ltd between 1983-89. Barrack Mines Ltd drilled 43 diamond holes for 15,353m, 638 Reverse Circulation holes for 55,343m. The area was subsequently mined as a copper mine by Sabminco until 1992/3, when production ceased. The Project was re-established by current owners Horseshoe Metals in 2010 after a long period of inactivity. A summary of resource drilling undertaken within the Project Area is summarised in an Addendum table following the JORC table documentation.
Geology	Deposit type, geological setting and style of mineralisation.	 VMS mineralisation at Horseshoe Lights occurs in the core of a NNW trending and SE plunging anticline. The mineralised envelope of the deposit itself is also SW dipping and plunging to the SSE, and was likely folded. It sits within altered basalt and mafic volcanoclastic units along the contact with overlying felsic volcanic schist. The VMS mineralisation in the mine area is constrained by the tightly folded and sheared stratigraphy, and appears to be affected by offsets along N-S and NE trending brittle faults.

Criteria	JORC Code explanation	Commentary
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 	 Refer to the body of text of this report and relevant Tables for information material to the understanding of the exploration results.
	 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	No exclusions of information have occurred.
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. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such 	 HOR 2021/22 RC Drilling- no high-grade cutting, copper results reported above 0.3% Cu C20 stockpile reported above 0.3% Cu, 0.3 g/t Au. Stockpile drilling reported above 0.2% Cu, 0.2 g/t Au HOR 2021 Auger drilling- Only 1m split samples are reported and simply length weighted and averaged over the length of the hole above the vat liner; no top cut, no minimum interval, no internal dilution considered. Results are gold only unless stated N/A
	 aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 HOR 2021/22 RC Drilling - N/A- significant copper and gold intersects reported HOR 2021 Auger drilling N/A, gold assay only
Relationship between mineralisation widths and intercept	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	 HOR 2021/22 RC Drilling- mineralisation dips around 70° to the west, east dipping holes intersect approximately perpendicular to mineralisation, vertical and west dipping holes are non-perpendicular to mineralisation HOR 2021 Auger drilling All intercept widths reported are downhole lengths, and equivalent to true widths for remnant vat stockpiles. HOR 2021/22 RC Drilling- typically reported as down hole length, true width not known, C20 stockpile drilling
lengths	 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'). 	considered true width HOR 2021 Auger drilling- downhole lengths considered true widths
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 drill hole collar locations and appropriate sectional views. 	See plans and sections
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. 	Reported results considered representative, no isolation of high-grade results.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 RC Drilling-Various, substantially covered by 2013 CSA report Horseshoe Lights Project In-situ Mineral Resources Auger drilling -1985 Vat Sampling programme detail taken from in-house memo "Horseshoe Lights Vat Sampling Programme March 1985", authored by Rosalind Wright, checked and verified by V.J. Novak, M.Sc.
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Planned activities discussed in text. Refer to diagrams in body of text.

Addendum: Resource Drilling History-Horseshoe Lights Copper-Gold Project

HolePrefix	Hole ID From	Hole ID To	Drill Type	Sample Type	Company	Date
EZ	1	8	Diamond Drilling	Unknown	Electrolytic Zinc	1966
HLRC-	1	30	Reverse Circulation	RC Cuttings	Barrack Mines Ltd	1983-1984
RC-	31	703	Reverse Circulation	RC Cuttings	Barrack Mines Ltd	1985-1988
DDH-	11	63	Diamond Drilling	Half Core	Barrack Mines Ltd	1985-1989
SH-	1	26	Pit Seep Hole	RC Cuttings	Sabminco NL	1992-1994
В	445A	565D	Pit Bench Sample	Channel Cuttings	Sabminco NL	1992-1994
RC-	704	899	Reverse Circulation	RC Cuttings	Sabminco NL	1993
DDH-	64	74	Diamond Drilling	Half Core	Sabminco NL	1993-1994
HDD	1	9	Diamond Drilling	Half Core	Horseshoe Metals Ltd	2012-2013
HDD	1013	1037	Diamond Tail	Half Core	Horseshoe Metals Ltd	2012
WRL	1	12	Reverse Circulation	RC Cuttings	Horseshoe Metals Ltd	2017
RC	1000	1144	Reverse Circulation	RC Cuttings	Horseshoe Metals Ltd	2010-2017
RC	1145	1159	Reverse Circulation	RC Cuttings	Horseshoe Metals Ltd	2021
RC	1160	1180	Reverse Circulation	RC Cuttings	Horseshoe Metals Ltd	2022