

# ASX/MEDIA ANNOUNCEMENT

28 AUGUST 2014

**ASX Code: HOR** 

Management

Mr Neil Marston
Managing Director/Company
Secretary

Mr Michael Fotios
Non-Executive Director

Mr Alan Still
Non-Executive Director

#### **Issued Capital**

Shares: 169.0 Million

**Options:** 

5.4 Million (60c, exp 5/15) Performance Rights: 2.8 M

Share Price: \$0.02

Market Capitalisation: \$3.38 Million

Cash at Bank (31 July 2014)

\$1.1 Million

# ENCOURAGING COPPER MINERALISATION INTERSECTED AT KUMARINA

#### **SUMMARY**

- Final assay results received from recent RC drilling completed at Kumarina Project.
- Best intervals received at the Kumarina Copper Mine Prospect:
  - KRC151 11m (61-72m) @ 1.59% Cu including 1m (64-65m) @ 4.52% Cu and 2m (67-69m) @ 3.21% Cu, and
  - KRC150 2m (67-69m) @ 2.36% Cu.
- Company encouraged by drilling results which warrant further testing at depth.

Horseshoe Metals Limited (ASX:HOR) ("Horseshoe" or "the Company") is pleased to announce the final assay results from its recently completed drilling programme at the Kumarina copper project ("Kumarina Project"), located in the Gascoyne district in Western Australia (see Figure 1).

Drilling at the Snell North, Kumarina Deeps and Kumarina Copper Mine targets (see Figure 2) consisted of 14 Reverse Circulation (RC) holes totalling 2,110 metres.

All assay results have now been received and highlight results, from the Kumarina Copper Mine Prospect, include:

- KRC151 11m (61-72m) @ 1.59% Cu including 1m (64-65m) @ 4.52% Cu and 2m (67-69m) @ 3.21% Cu, and
- **KRC150** 2m (67-69m) @ 2.36% Cu

Page 1 of 20

# HORSESHOE METALS

#### **ASX ANNOUNCEMENT 28 AUGUST 2014**

The Company has been encouraged by the results of the drill programme which have shown the existence of copper mineralisation at the Kumarina Copper Mine and Snell North Prospects, and these prospects warrant further testing.

#### Kumarina Copper Mine Prospect

The Kumarina copper mine is the deepest historical mine working within the project area with underground mining recorded as occurring as deep as 49 metres from surface. The mineralisation mined reportedly consisted of chrysocolla, malachite, cuprite and chalcocite in a kaolinized fault breccia cemented by milky quartz.

Four holes (KRC150 – 152, KRC155) were drilled to test for extensions of copper mineralisation, primarily along strike to the north of the abandoned Kumarina copper mine. The collar locations are shown in Figure 5 and details of copper mineralisation intervals recorded in these holes are set out in Appendix 1 with Figure 6 showing a section through KRC151.

The intervals recorded in KRC150 and KRC151 occur predominantly as chalcopyrite hosted in quartz veins within a quartz diorite sill. It is interpreted that the mineralisation is structurally controlled as has been observed elsewhere within the project area. These results are the most encouraging drilling results recorded to date from the limited drilling undertaken by the Company in this prospect area.

KRC152 was drilled to test for a down dip extension of the mineralisation intersected in KRC151. Only low order copper anomalism (200ppm - 900ppm) was observed in KRC152 from 93-100m depth using the field portable X-Ray Florescence ("fpXRF") analyser.

All four holes drilled have been cased to enable a Down Hole Electromagnetic ("DHEM") survey to be undertaken.

#### **Snell North Prospect**

Eight holes (KRC142 – KRC149) were completed at the Snell North Prospect with the location of the drill holes shown in Figure 3 and details of copper mineralisation intervals recorded (including those previously announced for KRC142 and KRC143) set out in Appendix 1.

The latest copper intervals recorded were:

- KRC145 1m (118-119m) @ 0.10% Cu,
- KRC146 4m (26-30m) @ 0.14% Cu, and
- KRC148 1m (104-105m) @ 0.36% Cu and 1m (112-113m) @ 0.23% Cu.

At the intersection of the diorite sill and the interpreted fault zone in KRC145 (see Figure 4) only low order copper anomalism was recorded however the presence of significant ground water in this zone possibly has some effect on the copper mineralisation. Approximately 200m further to the south-west KRC148 recorded copper mineralisation at a similar depth to KRC145. Both these holes have been cased to enable a DHEM survey to be undertaken.

KRC146 which was drilled beneath the southern shaft and intersected a void, at approximately 25 metres down hole depth recorded low order copper mineralisation from 26-30 metres.

# HORSESHOE METALS

#### **ASX ANNOUNCEMENT 28 AUGUST 2014**

#### **Future Activities**

Drilling at the Snell North and Kumarina Copper Mine Prospects have shown evidence of copper mineralisation which warrants further testing at depth. Various holes at both these areas have been cased for DHEM survey ahead of the next drilling programme.

#### **ENDS**

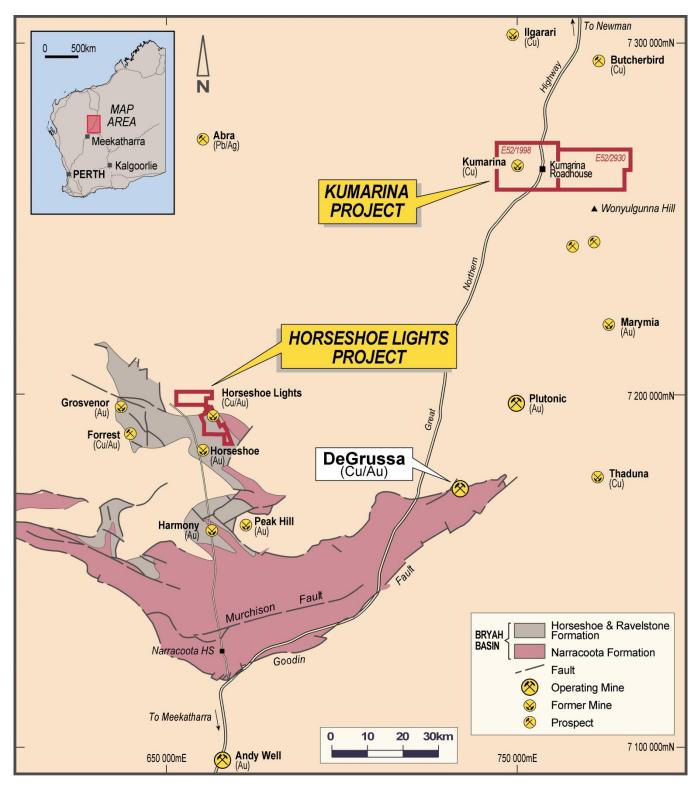


Figure 1 - Projects Location Plan



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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 over 500km<sup>2</sup> in the highly prospective Peak Hill Mineral Field, located north of Meekatharra in Western Australia. The Company's projects are the Kumarina Project and the Horseshoe Lights Project (see Figure 1).

#### **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.

A Mineral Resource Estimate for the Rinaldi deposit was completed by the Company in June 2013 (see 30 June 2013 Quarterly Report announced on 31 July 2013). The Mineral Resource Estimate meets the reporting requirements of the new 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves"

The total Measured, Indicated and Inferred Mineral Resource Estimate is **835,000 tonnes @ 1.3% Cu** for **10,600 tonnes Cu** (using a cut-off grade of 0.5% Cu).

#### **About the Horseshoe Lights Project**

The Horseshoe Lights Project includes the old 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 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, which also host Sandfire Resources' DeGrussa copper/gold mine.

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.



A Mineral Resource Estimate for the Horseshoe Lights deposit was completed by the Company in June 2013 (see 30 June 2013 Quarterly Report announced on 31 July 2013). The Mineral Resource Estimate meets the reporting requirements of the new 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves"

The total Measured, Indicated and Inferred Mineral Resource Estimate is **12.85 million tonnes @ 1.00% Cu and 0.1 g/t Au** for **128,600 tonnes Cu and 36,000 oz Au** (using a cut-off grade of 0.5% Cu).

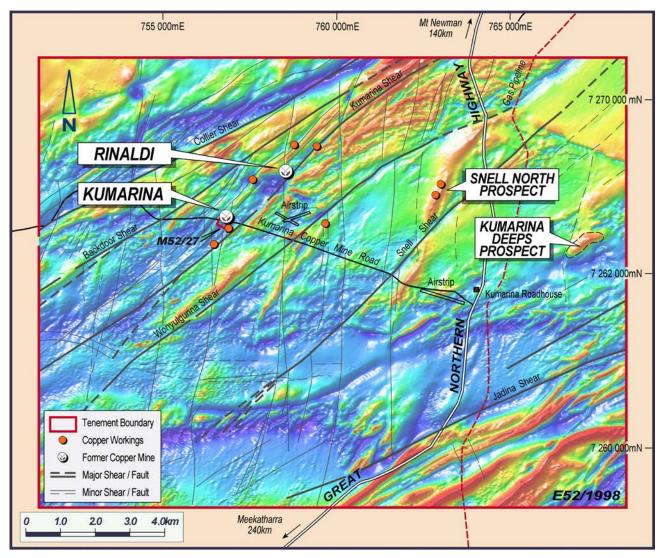


Figure 2 – Kumarina Project – E52/1998 Location Plan (overlain on Aeromagnetics)



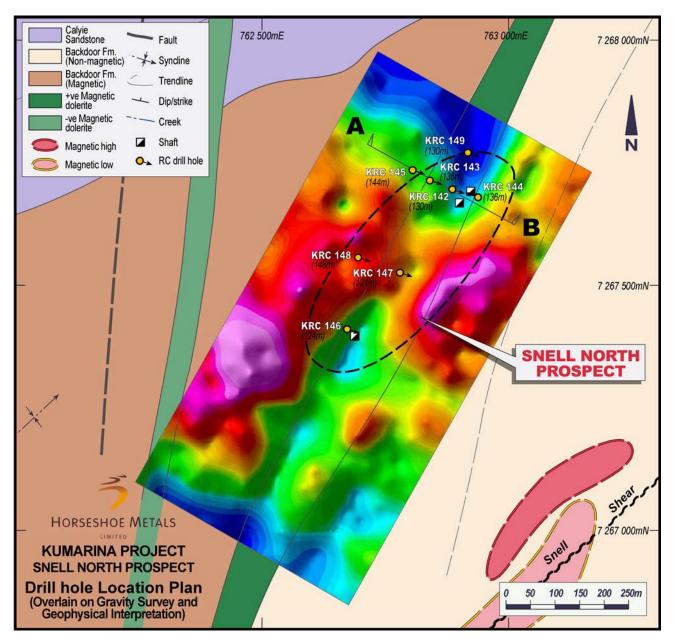


Figure 3 – Snell North Prospect - Drill Hole Location Plan



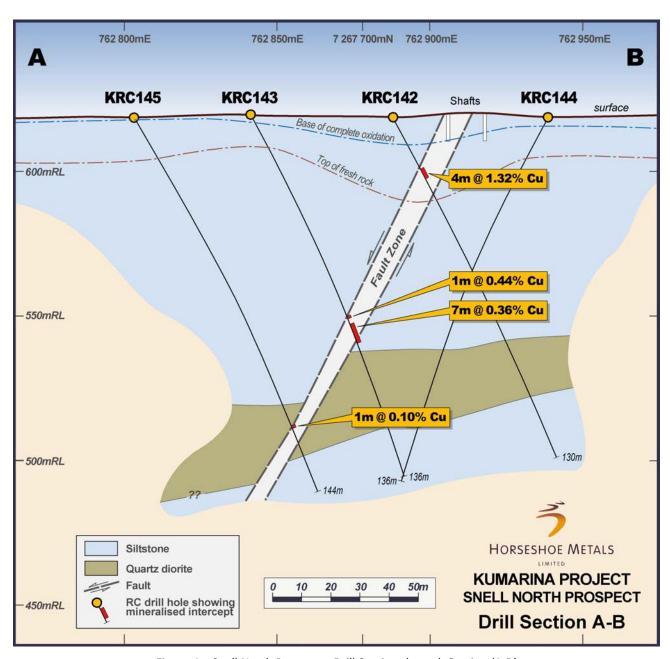


Figure 4 – Snell North Prospect - Drill Section through Section 'A-B'



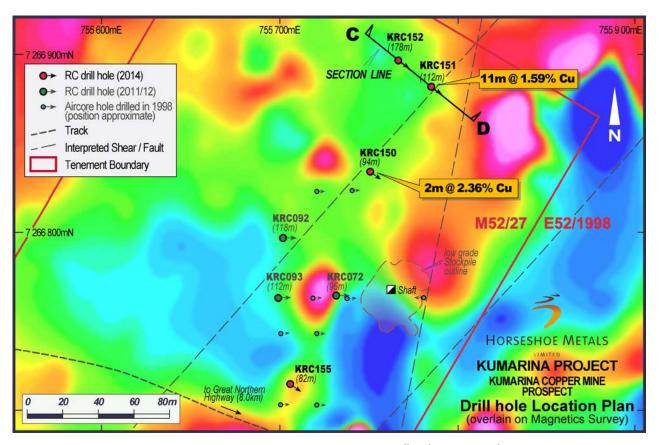


Figure 5 – Kumarina Copper Mine Prospect - Drill Hole Location Plan



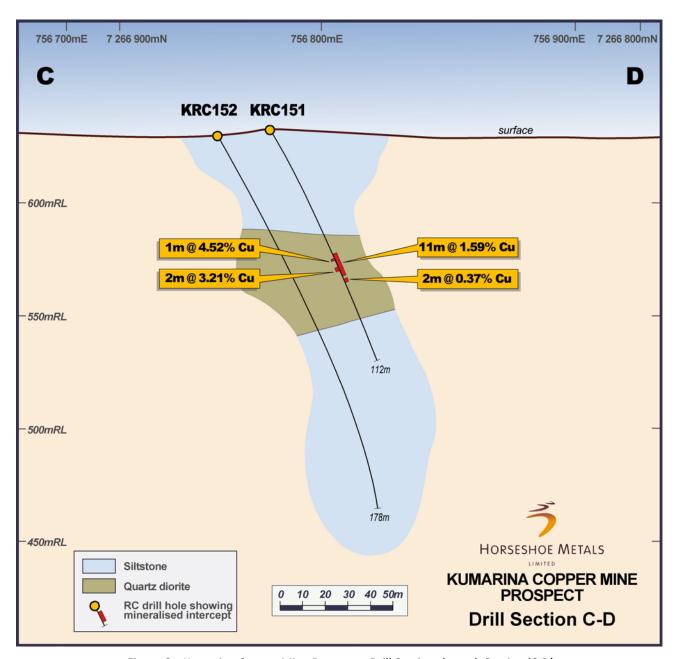


Figure 6 – Kumarina Copper Mine Prospect - Drill Section through Section 'C-D'



# APPENDIX 1 Kumarina Project RC Drilling Programme Copper Intersections

coppoc									
Hole	Easting (m)	Northing (m)	Planned Azimuth (degrees)	Planned Dip (degrees)	Hole Depth (m)	From (m)	To (m)	Interval (m)	Cu % (average)
Kumarina	Copper Min	e Prospect							
KRC150	756751	7266832	120°	-60°	94	53	55	2	0.41
						67	69	2	2.36
						72	74	2	0.55
KRC151	756785	7266882	120°	-60°	112	54	55	1	0.27
						61	72	11	1.59
Incl	uding					64	65	1	4.52
a	nd					67	69	2	3.21
						73	75	2	0.37
KRC152	752767	7266897	120°	-60°	178		No Signifi	cant Resu	lts
KRC155	756710	7266708	120°	-60°	82	No Significant Results			
Snell Nort	h Prospect								
KRC142	762886	7267695	110°	-60°	130	19	23	4	1.32
Incl	uding					20	21	1	2.67
KRC143	762841	7267713	110°	-60°	136	77	78	1	0.44
						80	87	<b>7</b> <sup>+</sup>	0.36
KRC144	762937	7267678	290°	-60°	136	No Significant Results			
KRC145	762807	7267736	110°	-60°	144	118	119	1	0.10
KRC146	762673	7267410	110°	-60°	124	26	30	4	0.14
KRC147	762780	7267526	110°	-60°	124	No Significant Results			
KRC148	762798	7267557	110°	-60°	148	104	105	1	0.36
						112	113	1	0.23
KRC149	762919	7267770	110°	-60°	130		No Signifi	cant Resu	lts

Notes:

<sup>+</sup> includes 1 x 1m interval grading <0.25% Cu

<sup>\*</sup> Insufficient geological information is available to determine the true widths of mineralisation reported.



# **Table 1 - JORC Code Reporting Criteria**

# **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC-Code Explanation	Commentary
	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.	Exploration results are collected using standard industry practices for sampling, assay methods and QAQC. Reverse circulation (RC) samples weighing approx. 3kg are collected as individual 1m samples through a cyclone which are riffle split for analysis. Each sample is analysed with a handheld Delta Premium XRF.
Sampling techniques	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	RC samples within zones of visual oxide or sulphide mineralisation or in elevated readings of copper, as determined by handheld XRF are sent for laboratory assaying as 1m cyclone split samples. The remaining intervals of the drill hole may be submitted as 3-5m speared composite samples. Any anomalous composite samples are to be re-submitted as original 1m split samples.  The handheld XRF was regularly calibrated as per manufacturer's specifications. In addition QAQC
, , ,		measures included the use of duplicates and certified reference materials on a 1:25 ratio for all XRF readings.
	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.	Industry standard practice was used for copper analysis whereby a 3kg RC drill sample representing a 1m sample interval was used to obtain a 150g pulp for analysis. Similarly for gold analysis the same sample was used to obtain a 10g charge for aqua regia analysis.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	The drill program was completed using the Reverse Circulation (RC) technique generally with a 5¼ face sampling bit.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Visual inspection of the sample volume indicates sample recovery is excellent. Any poor sample recovery or condition is noted in the drill hole database.
unii sumpie recovery	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC samples are visually checked for recovery, moisture and contamination. A cyclone splitter is used to provide a uniform sample and these are routinely cleaned. The drill contractor blew out



Criteria	JORC-Code Explanation	Commentary
		the hole at the beginning of each drill rod to remove excess water and maintain dry samples where possible.
	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.	Ground conditions for RC drilling are good and drilling returned consistent size samples. RC recoveries are high enough to preclude the potential for sample bias.
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.	Logging of RC drilling identifies all aspects of lithology, colour, weathering texture, alteration and mineralisation including percentage estimates of oxide/sulphide content. All primary recorded on site data was directly imported into a drill hole database and checked against the original data. During logging part of the RC sample was sieved, logged and placed in RC chip trays. The logging also includes references to wet samples in the comments.
999	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	The lithology data is qualitative but magnetic susceptibility was also recorded. All reverse circulation samples have been photographed in wet form and the chip trays are retained for physical inspection on-site and in the Perth office.
	The total length and percentage of the relevant intersections logged.	All RC holes are logged from start to end of hole.
	If core, whether cut or sawn and whether quarter, half or all core taken.	No core
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	All RC samples are initially cyclone split on a 1:7 ratio and only dry samples are assayed.
Sub-sampling techniques and sample preparation	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	RC sample procedure follows industry best practice whereby samples are sorted, reconciled, placed onto trolleys and dried in a gas oven at 110°C for minimum of 8 hours or until dry. Samples ranging from 300g - ≤3kg are crushed to nominal ~10mm using a jaw crusher and then pulverised using LM2, LM5 or Mixer Mill pulverisers.  Samples >3kg are Boyd crushed to a nominal ~3mm and split in half using Boyd rotary split divider, one half is then pulverised the other retain, bagged and stored. After pulverising a 150g craft geochemical (pulp) packet is taken directly from the pulveriser bowl and submitted to the laboratory for analysis.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Laboratory QAQC methods include insertion of blanks and undertaking check samples for significant assay results.



Criteria	JORC-Code Explanation	Commentary
	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.	Field duplicates are collected and submitted on a 1:50 ratio. The assay result is then compared to the original samples and is expected to fall within 2 standard deviations.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample size is considered industry standard for base metal mineralisation.
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	All samples are submitted to Nagrom laboratories. The Copper assay is derived using a mixed acid digest of nitric, hydrofluoric, perchloric and hydrochloric acids on 0.2g of sample and analysed using ICP Optical Emission Spectrophotometry.
		The gold assay was derived using an aqua regia technique where 10g of prepared sample is digested using nitric and hydrochloric acid. The sample is then solvent extracted using Methyl isobutyl ketone and read on a Graphite Furnace Atomic Absorption Spectrometer.
Quality of assay data and laboratory tests		These methods are considered adequate and effective for this style of mineralisation.
ana laboratory tests	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	The Handheld XRF used to determine sample type i.e. 1m split or composite sample is a Delta Premium. All data is collected using 30 second reading time for all 3 beams on soil mode. The instrument is calibrated according to manufacturer's specification and tested regularly using duplicates and certified reference materials every 25 <sup>th</sup> sample.
	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.	In addition to internal laboratory checks the company submits field duplicates and standards on a 1:25 ratio. External laboratory checks are planned for significant assay results but have yet to be completed.
	The verification of significant intersections by either independent or alternative company personnel.	None undertaken in this programme
Verification of sampling	The use of twinned holes.	None undertaken in this programme
and assaying	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All drilling and sample data is captured in the field electronically using established data templates and verified in Perth office before upload into database.
	Discuss any adjustment to assay data.	No adjustments undertaken.



Criteria	JORC-Code Explanation	Commentary
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.	Initial collar locations are determined by handheld Garmin GPS but will be surveyed using DGPS by licensed surveyors before resource estimates are undertaken.  Downhole surveys consisted of single shot digital camera readings obtained at collar and generally every 50m interval thereafter.
Escation of data points	Specification of the grid system used.	Grid system coordinates are GDA94 MGA Zone 50.
	Quality and adequacy of topographic control.	Topographic control was created from known survey stations and air photography in strict accordance with Mines Regulation Act 1946 by the authorised mine surveyor.
	Data spacing for reporting of Exploration Results.	Exploration drill spacing in this program range from 20m to 80m along drill sections with sections lines spaced at 40m intervals, or multiples thereof. Drill spacing is not applicable in some instances as collar locations are isolated.
Data spacing and distribution	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.	The drilling spacing and results employed in this program are consistent with previous drill spacing and results that are part of a JORC compliant mineral resource.
	Whether sample compositing has been applied.	Composite sampling over 3-5m has been employed for non- mineralised intervals.
Orientation of data in	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Exploration drilling in this program orientated perpendicular to interpreted mineralisation trend.
relation to geological structure	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	As stated above.
Sample security	The measures taken to ensure sample security.	Prior to submission all samples are stored on-site under supervision of the site geologist. Samples were transported to the laboratories by Horseshoe Metals personnel.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been performed to date.



# **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

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 Kumarina Project comprises one Mining Lease (M52/27) and two exploration licences (E52/1998 & E52/2930) covering an area of approximately 433 km² (43,300 hectares). Current registered holder of the tenements is Murchison Copper Mines Pty Ltd which is a wholly owned subsidiary of Horseshoe Metals Limited.  Murchison Copper Mines Pty Ltd has 100% interest in the tenements  There are no known historical or environmentally significant sites on the Kumarina project tenements
	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.	The Kumarina project tenements are in good standing and the Company is unaware of any impediments to it obtaining a licence to operate in the area.



Criteria	JORC-Code Explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Carpentaria Exploration Ltd (1962) There is only passing reference to exploration carried out by Carpentaria Exploration Ltd in 1962. Two diamond drillholes were drilled at the Rinaldi Deposit. One of these drillholes intersected 6.7m @ 5.59% Cu at 30m vertical depth under the main Kumarina workings.
		Westfield Minerals (WA) NL (1965)  This phase of exploration is also poorly documented but Westfield reportedly drilled a 150m drillhole beneath the deepest workings at the Kumarina copper mine but no mineralisation was intersected.
		St Barbara Mines Ltd (1992-1998)
		Exploration activities completed over the Kumarina area in 1994 by St Barbara Mines Limited focused on the Kumarina and Rinaldi workings and included geological mapping, gridding and rock sampling. In 1998, 51 aircore holes for 2,062m were completed at the Kumarina and Rinaldi workings and sample composites were assayed for Cu, Au, Ag, Co, As, Pb and Mg. Four holes intersected multiple lodes that returned assays from composited samples (6m) between 1.15 and 3.50% Cu
		Murchison Copper Mines Pty Ltd (2007-2010)
		Murchison Copper Mines Pty Ltd completed remote sensing and geophysical desktop studies over the project area. acquired and reprocessed the 1996 GSWA Bangemall 400m-500m aeromagnetic and radiometric data to provide a regional structural and lithological setting. Quickbird satellite imagery was also captured over a similar area and assessed.
		Earthscan Pty Ltd assessesd multi band ratio data sets for the classification of mineral alteration targets associated with hydrothermal alteration within the Bangemall Formation and peripheral to intrusive bodies. This provided provided critical landscape and regolith information showing areas of outcrop with interpreted mineral alteration packages of smectite clays, silica, Fe rich clays, goethite and haematite with minor carbonate.
		Target areas were identified within the Backdoor Formation sediments and mafic intrusive contact zones within NE fault structures, at major NW fault intersects and within minor NW, NE and north trending shear zones.



Criteria	JORC-Code Explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The geologic setting of the project area is one of a relatively undeformed sequence of gently north-dipping Backdoor Formation sediments capped by quartz arenite of the Calyie Formation, and intruded by mafic to intermediate sills and dykes.
		The Backdoor formation consists of mudstones, siltstones and very fine to fine grained sandstones. This formation is approximately 2600m thick within the project area with an average dip of 15° to the north.
		The mafic to intermediate intrusions vary visually between pyroxenitic gabbro, dolerite, leucodolerite, quartz dolerite, granophyric dolerite and quartz diorite. Mapping shows E-W trending sills, between 75-150m in true thickness, are relatively common and intrude at major changes in sedimentation from sandstone-dominated to siltstone-dominated sequences. The sills are interconnected by a network of "dykes" that strike NE-SW and N-S resulting in a lattice-like arrangement of intrusions over the whole project area.
		Several NE-SE striking faults showing weak brittle deformation marginal to mafic dykes have been identified and mapped. These are informally named, from north to south: Collier Fault, Backdoor Fault, Kumarina Fault, Wonyulgunna Fault, Snell Fault and Jadina Fault. The Collier, Kumarina, Wonyulgunna and Snell Faults show evidence of hydrothermal activity such as silica-kaolinite alteration, quartz veining, and hydraulic breccias. These faults have subsidiary parallel structures and are also cut by N-S cross faults
		Mineralisation discovered to date is structurally controlled and quartz hosted with slight variations for different prospects. Historic workings along the Kumarina fault extend NE-SW over nearly 3km as a series of pits, shafts and shallow open-cuts. At the Kumarina Copper Mine (M52/27) and Rinaldi, the workings are entirely underground, mostly above the water table at 17m and are hosted in approx. N-S cross fault structures proximal to junctions with the Kumarina Fault
		At the Kumarina Copper Mine, the main copper minerals are chrysocolla and malachite in the upper levels and cuprite and chalcocite with depth. In contrats the Rinaldi deposit copper minerals occur as malachite close to surface but quickly change into copper sulphide i.e. chalcopyrite relatively close to surface.



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 Appendix 1 for all information material to the understanding of the exploration results.  No exclusions of information have occurred.
	<ul> <li>easting and northing of the drill hole collar</li> </ul>	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	• dip and azimuth of the hole	
	• down hole length and interception depth	
	hole length.	
	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.	
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.	Only 1m split samples are reported and simply averaged over the mineralised interval. A 0.25% cut-off grade has been used unless otherwise noted in Appendix 1
	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 aggregations should be shown in detail.	Intercepts that consist of high grade results within a longer lower grade zone are detailed separately to avoid confusion (refer to Appendix 1)
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable.
Relationship between mineralisation widths and intercept lengths	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.	Exploration drilling in this program orientated perpendicular to interpreted mineralisation trend.
	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').	



Criteria	JORC-Code Explanation	Commentary
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.	Refer to diagrams in body of text.
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.	See Appendix 1 for all exploration 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.	In the company's opinion this material has been adequately reported in previous announcements and the detail is not relevant for reporting of these exploration results.
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).	Down Hole EM surveys and, if warranted, follow- up drilling is planned to test for further mineralisation at a number of prospect areas with the Kumarina Project tenements.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to diagrams in body of text.

# HORSESHOE METALS

#### **ASX ANNOUNCEMENT 28 AUGUST 2014**

#### Competent Persons Statement

The information in the report to which this statement is attached that relates to Exploration Results is based on information compiled by Mr Geoff Willetts, BSc. (Hons) MSc. who is a Member of the Australian Institute of Geoscientists. Geoff Willetts is a consultant to Horseshoe Metals Limited. Geoff Willetts has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Geoff Willetts consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Horseshoe Lights Project Mineral Resources is based on information compiled by Mr. Dmitry Pertel, who is a member of the Australian Institute of Geoscientists. Mr. Pertel is an employee of CSA Global Pty Ltd. The information was previously issued with the written consent of Mr Dmitry Pertel in the Company's 30 June 2013 Quarterly Report released to the ASX on 31 July 2013. The Company confirms that:

- (a) the form and context in which Mr. Dmitry Pertel's findings are presented have not been materially modified.
- (b) it is not aware of any new information or data that materially affects the information included in the 31 July 2013 ASX announcement and that all the material assumptions and technical parameters underpinning the estimate in the 31 July 2013 ASX announcement continue to apply and have not materially changed.
- (c) it is uncertain that following evaluation and/or further exploration work that the historical estimates will be able to be reported as mineral resources in accordance with the JORC Code.

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, who is a member of the Australian Institute of Geoscientists. Mr Robert Spiers is an independent consultant to Horseshoe Metals Limited and a full time employee and Director of H&S Consultants Pty Ltd (formerly Hellman & Schofield Pty Ltd). The information was previously issued with the written consent of Mr Robert Spiers in the Company's 30 June 2013 Quarterly Report released to the ASX on 31 July 2013. The Company confirms that:

- (a) the form and context in which Mr Robert Spiers' findings are presented have not been materially modified.
- (b) it is not aware of any new information or data that materially affects the information included in the 31 July 2013 ASX announcement and that all the material assumptions and technical parameters underpinning the estimate in the 31 July 2013 ASX announcement continue to apply and have not materially changed.
- (c) it is uncertain that following evaluation and/or further exploration work that the historical estimates will be able to be reported as mineral resources in accordance with the JORC Code.