



HORSESHOE METALS  
LIMITED

## ASX/MEDIA ANNOUNCEMENT

11 AUGUST 2015

**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:** 169.7 Million

**Share Price:** \$0.02

**Market Capitalisation:**  
\$3.4 Million

## HIGH GRADE COPPER INTERSECTED AT HORSESHOE LIGHTS - 27 METRES @ 3.4% CU

### SUMMARY

- High grade copper mineralisation intersected in ongoing drilling at Horseshoe Lights Project, including:
  - 27 metres (from 8–35m) @ 3.4% Cu, including 3 metres (23-26m) @ 17.7% Cu and 1 metre (29-30m) @ 7.7% Cu, and  
17 metres (54-71m) @ 1.1% Cu, including 2 metres (58-60m) @ 2.3% Cu and 1 metre (65-66m) @ 3.2% Cu, in RC1135,
  - 30 metres (36-66m) @ 1.0% Cu, including 3 metres (42-45m) @ 2.2% Cu, 26 metres (73-99m) @ 0.8% Cu and 10 metres (145-155m) @ 0.9% Cu in RC1134, and
  - 14 metres (101-115m) @ 1.1% Cu, including 1 metre (103-104m) @ 2.4% Cu and 1 metre (110-111m) @ 3.7% Cu, and 9 metres (133-142m) @ 1.1% Cu in RC1136.
- Results highlight mineral resource expansion potential.
- Mineral Resource to be re-estimated on conclusion of current drill programme.

**Horseshoe Metals Limited (ASX:HOR)** (“Horseshoe” or “the Company”) is pleased to announce outstanding high grade shallow copper assay results from its ongoing resource and exploration drilling programme at its 100% owned Horseshoe Lights Copper/Gold Project (“**Horseshoe Lights Project**”) in the Gascoyne region of Western Australia (see Figure 3).

The latest assay results come from resource drill holes located in the North West Stringer Zone, where shallow, high grade oxide copper is being intersected above deeper sulphide copper mineralisation and the Motters Zone.

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The latest batch of results provides greater certainty to the robustness of the existing mineral resource block model. Importantly, copper mineralisation outside the existing resource model at the North West Stringer Zone has again been intersected, highlighting further resource expansion potential when the mineral resource is re-estimated later this year to include the results from this drilling programme.

The latest results are from in-fill and twinned drill holes and have delivered copper results which exceed results reported in nearby historical drill holes, providing the Company with further opportunities to increase its mineral resource at the Horseshoe Lights Project.

### **Latest Results – North West Stringer Zone**

Ten Reverse Circulation (“RC”) holes (RC1103-RC1106 and RC1132-RC1137) have been completed in the North West Stringer Zone in this programme to date (see Figure 1). The latest batch of laboratory assay results from five holes (RC1132-RC1136) is reported in this announcement. Full details of significant copper intersections for these holes are set out in Table 1.

Each hole intersected zones of copper mineralisation, including:

- **27 metres (8–35m) @ 3.4% Cu**, including **3 metres (23-26m) @ 17.7% Cu** and **1 metre (29-30m) @ 7.7% Cu**, and **17 metres (54-71m) @ 1.1% Cu**, including **2 metres (58-60m) @ 2.3% Cu** and **1 metre (65-66m) @ 3.2% Cu**, in RC1135,
- **30 metres (36-66m) @ 1.0% Cu**, including **3 metres (42-45m) @ 2.2% Cu**, **26 metres (73-99m) @ 0.8% Cu** and **10 metres (145-155m) @ 0.9% Cu** in RC1134,
- **14 metres (101-115m) @ 1.1% Cu**, including **1 metre (103-104m) @ 2.4% Cu** and **1 metre (110-111m) @ 3.7% Cu**, and **9 metres (133-142m) @ 1.1% Cu** in RC1136,
- **5 metres (45-50m) @ 1.2% Cu** and **11 metres (58-69m) @ 1.3% Cu** in RC1133, and
- **8 metres (103-111m) @ 1.3% Cu** in RC1132.

The results from these drill holes in the North West Stringer Zone are considered very positive as they appear to confirm and expand the extent of copper mineralisation when compared with earlier drilling results. RC1135 was drilled to test the upper portion of an unsurveyed historical drill hole (RC557B) and was collared approximately 10 metres from RC557B’s recorded location (see Figure 2).

A comparison of the significant mineralised intervals set out below shows that RC1135 has wider zones of copper mineralisation with higher grades than recorded in RC557B, which will clearly upgrade the existing copper mineral resource blocks in this part of the deposit.

| RC1135 (drilled 2015) |                  | RC557B (drilled 1988) |                  |
|-----------------------|------------------|-----------------------|------------------|
| Depth                 | Interval / Grade | Depth                 | Interval / Grade |
| 8-35m                 | 27m @ 3.4% Cu    | 12-14m                | 2m @ 0.7% Cu     |
|                       |                  | 20-22m                | 2m @ 7.6% Cu     |
| 54-71m                | 17m @ 1.1% Cu    | 50-52m                | 2m @ 0.6% Cu     |
|                       |                  | 58-60m                | 2m @ 0.4% Cu     |
|                       |                  | 64-70m                | 6m @ 1.6% Cu     |

Note: RC557B results are based on 2m composite assays and RC1135 results are based on 1m assays.



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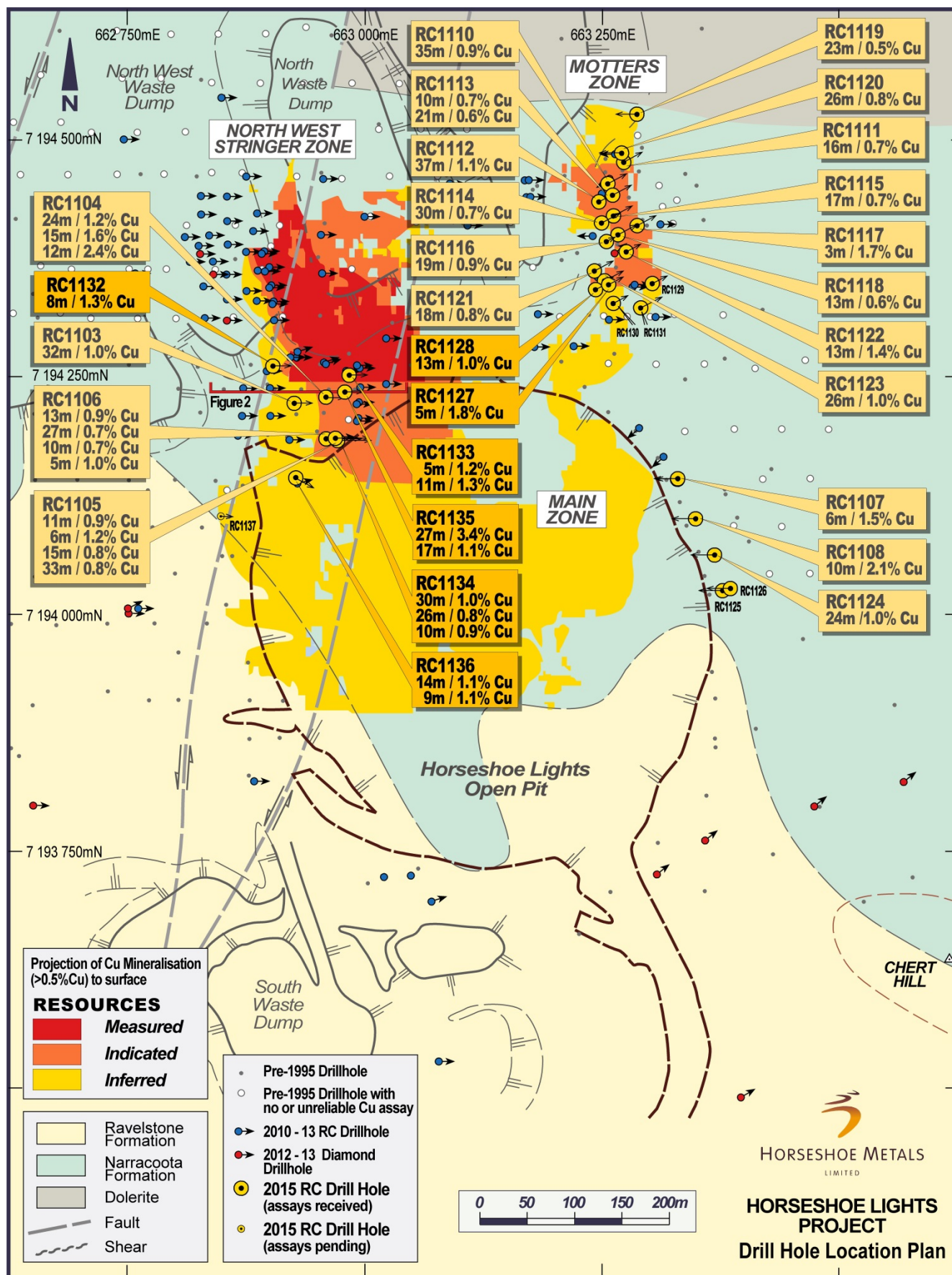


Figure 1 – Drill Hole Location Plan





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Samples for RC1137 are on site and will be submitted for laboratory analyses shortly however no XRF readings above 0.5% Cu were recorded when this hole was drilled.

These latest results confirm the benefits of the Company's strategy of in-fill drilling to add copper tonnes and grade to the mineral resource where historical holes have previously been relied upon to create the current resource block model. As a result of the Company's latest drilling results more historical drill holes will be considered for possible twinning.

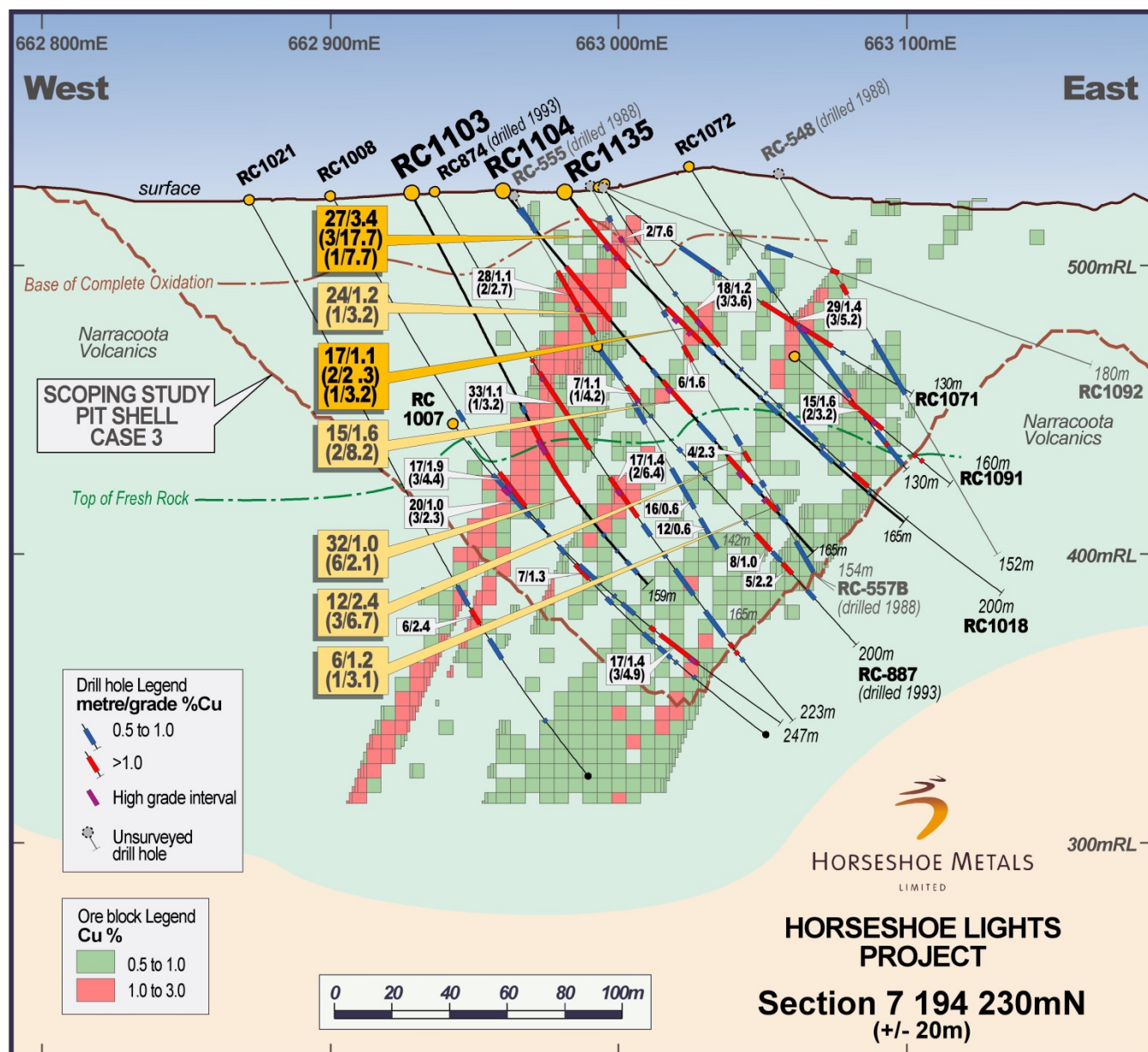


Figure 2 – Drill Section through RC1135



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### **Latest Results – Motters Zone**

The Motters Zone is a shallow zone of mainly oxide copper mineralisation which appears to be the northern extension of the “East Lode Mineralisation”, or possibly, a fault offset extension from the Main Zone of the Horseshoe Lights deposit.

Nineteen Reverse Circulation (“RC”) holes have been drilled at the Motters Zone in this programme (RC1110 - RC1123 and RC1127 - RC1131) (see Figure 1). The latest batch of laboratory results for five holes (RC1127 - RC1131) have also been received and are reported in this announcement. Details of significant copper intersections are set out in Table 1.

Two holes intersected significant zones of oxide copper mineralisation, as set out below:

- **5 metres (42–47m) @ 1.8% Cu**, including **2 metres (44-46m) @ 3.1% Cu** in RC1127, and
- **25 metres (38–63m) @ 0.4% Cu**, and **13 metres (66–79m) @ 1.0% Cu**, including **2 metres (70-72m) @ 2.8% Cu** in RC1128.

Further drilling between RC1131 and RC1107 is planned to test for the northern continuation of the East Lode Mineralisation.

### **Current Drilling Programme**

To date 3,955 metres of drilling in 35 holes has been completed at the Horseshoe Lights project.

The Company has previously announced significant assay results from drill holes RC1103-1126 (see Figure 1 and refer to ASX announcements dated 27 May 2015, 5 June 2015, 22 June 2015 and 27 July 2015 for full details).

The current drilling programme at Horseshoe Lights aims to add copper tonnes and grade to the existing mineral resource block model with a particular focus on those areas within and adjacent to the optimised pit shell from the 2014 Scoping Study (refer to ASX announcement dated 19 December 2014), where drill hole density is low or largely based upon historical drill holes.

### **Future Activities**

Drilling at the Horseshoe Lights Project is ongoing and will continue testing for further extensions of copper mineralisation identified from the current programme. At the completion of resource drilling at Horseshoe Lights the Company will update the project Mineral Resource Estimate.

**ENDS**

#### **For further information please contact:**

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**TABLE 1**  
**HORSESHOE LIGHTS PROJECT**  
**RC DRILLING PROGRAMME**  
**SIGNIFICANT COPPER INTERSECTIONS**  
(0.25% Cu cut-off)

| Hole   | Northing (m) | Easting (m) | Planned Azimuth (degrees) | Planned Dip (degrees) | Hole Depth (m) | From (m) | To (m) | Interval (m)    | Cu % (average) | Au g/t (average) |
|--------|--------------|-------------|---------------------------|-----------------------|----------------|----------|--------|-----------------|----------------|------------------|
| RC1127 | 7194354      | 663258      | 60°                       | -35°                  | 102            | 31       | 32     | 1               | 1.2            |                  |
|        |              |             |                           |                       |                | 42       | 47     | 5               | 1.8            |                  |
|        |              |             |                           |                       |                | 44       | 46     | 2               | 3.1            | 0.1              |
|        |              |             |                           |                       |                | 49       | 50     | 1               | 0.7            |                  |
|        |              |             |                           |                       |                | 64       | 66     | 2               | -              | 0.8              |
|        |              |             |                           |                       |                | 79       | 84     | 5               | 0.4            |                  |
|        |              |             |                           |                       |                | 87       | 96     | 9               | 0.5            |                  |
| RC1128 | 7194348      | 663245      | 60°                       | -60°                  | 108            | 33       | 36     | 3               | 1.2            |                  |
|        |              |             |                           |                       |                | 38       | 63     | 25 <sup>®</sup> | 0.4            |                  |
|        |              |             |                           |                       |                | 66       | 79     | 13              | 1.0            |                  |
|        |              |             |                           |                       |                | 70       | 72     | 2               | 2.8            | 0.1              |
|        |              |             |                           |                       |                | 81       | 87     | 6*              | 0.5            |                  |
|        |              |             |                           |                       |                | 90       | 91     | 1               | 0.5            |                  |
|        |              |             |                           |                       |                | 94       | 100    | 6*              | 0.8            |                  |
| RC1129 | 7194354      | 663305      | 60°                       | -60°                  | 123            | 24       | 28     | 4               | -              | 0.9              |
|        |              |             |                           |                       |                | 46       | 48     | 2               | 0.4            |                  |
| RC1130 | 7194333      | 663264      | 60°                       | -60°                  | 78             | 48       | 52     | 4               | 0.3            |                  |
| RC1131 | 7194328      | 663293      | 60°                       | -60°                  | 78             | 24       | 27     | 3               | 0.8            | 0.6              |
|        |              |             |                           |                       |                | 51       | 59     | 8               | -              | 0.8              |
| RC1132 | 7194267      | 662906      | 90°                       | -60°                  | 165            | 97       | 102    | 5*              | 0.3            |                  |
|        |              |             |                           |                       |                | 103      | 111    | 8               | 1.3            |                  |
|        |              |             |                           |                       |                | 112      | 118    | 6*              | 0.5            |                  |
|        |              |             |                           |                       |                | 129      | 139    | 10*             | 0.4            |                  |
|        |              |             |                           |                       |                | 141      | 145    | 4               | 0.4            |                  |
|        |              |             |                           |                       |                | 147      | 155    | 8               | 0.8            |                  |
| RC1133 | 7194258      | 662986      | 90°                       | -50°                  | 165            | 31       | 38     | 7               | 0.9            |                  |
|        |              |             |                           |                       |                | 45       | 50     | 5               | 1.2            |                  |
|        |              |             |                           |                       |                | 58       | 69     | 11              | 1.3            |                  |
|        |              |             |                           |                       |                | 73       | 76     | 3               | 0.6            |                  |
|        |              |             |                           |                       |                | 86       | 90     | 4               | 0.4            |                  |
|        |              |             |                           |                       |                | 117      | 123    | 6*              | 0.4            |                  |
|        |              |             |                           |                       |                | 135      | 139    | 4*              | 0.4            |                  |
|        |              |             |                           |                       |                | 141      | 147    | 6               | 0.5            |                  |
| RC1134 | 7194190      | 662973      | 90°                       | -40°                  | 165            | 36       | 66     | 30              | 1.0            |                  |
|        |              |             |                           |                       |                | 42       | 45     | 3               | 2.2            |                  |
|        |              |             |                           |                       |                | 70       | 71     | 1               | 0.4            |                  |
|        |              |             |                           |                       |                | 73       | 99     | 26 <sup>#</sup> | 0.8            |                  |
|        |              |             |                           |                       |                | 116      | 117    | 1               | 0.8            |                  |
|        |              |             |                           |                       |                | 139      | 142    | 3               | 1.0            |                  |
|        |              |             |                           |                       |                | 145      | 155    | 10              | 0.9            |                  |
|        |              |             |                           |                       |                | 161      | 162    | 1               | 0.4            |                  |
| RC1135 | 7194240      | 662981      | 90°                       | -50°                  | 165            | 8        | 35     | 27              | 3.4            | 0.2              |
|        |              |             |                           |                       |                | 23       | 26     | 3               | 17.7           | 0.2              |
|        |              |             |                           |                       |                | 29       | 30     | 1               | 7.7            | 0.3              |
|        |              |             |                           |                       |                | 36       | 38     | 2               | 0.3            |                  |
|        |              |             |                           |                       |                | 54       | 71     | 17*             | 1.1            |                  |
|        |              |             |                           |                       |                | 58       | 60     | 2               | 2.3            |                  |
|        |              |             |                           |                       |                | 65       | 66     | 1               | 3.2            |                  |



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**TABLE 1 (Cont.)**  
**HORSESHOE LIGHTS PROJECT**  
**RC DRILLING PROGRAMME**  
**SIGNIFICANT COPPER INTERSECTIONS**  
(0.25% Cu cut-off)

| Hole   | Northing<br>(m) | Easting<br>(m) | Planned<br>Azimuth<br>(degrees) | Planned<br>Dip<br>(degrees) | Hole<br>Depth<br>(m) | From<br>(m)  | To<br>(m)  | Interval<br>(m) | Cu<br>%<br>(average) | Au<br>g/t<br>(average) |
|--------|-----------------|----------------|---------------------------------|-----------------------------|----------------------|--|------------|-----------------|----------------------|------------------------|
|        |                 |                |                                 |                             |                      | 73   | 77         | 4               | 0.6                  |                        |
|        |                 |                |                                 |                             |                      | 81   | 82         | 1               | 0.6                  |                        |
|        |                 |                |                                 |                             |                      | 88   | 89         | 1               | 0.6                  |                        |
|        |                 |                |                                 |                             |                      | 99   | 100        | 1               | 0.8                  |                        |
|        |                 |                |                                 |                             |                      | 102  | 108        | 6               | 0.9                  |                        |
|        |                 |                |                                 |                             |                      | <b>106</b>   | <b>107</b> | <b>1</b>        | <b>2.4</b>           |                        |
|        |                 |                |                                 |                             |                      | 115  | 117        | 2               | 0.4                  |                        |
|        |                 |                |                                 |                             |                      | 127  | 135        | 8 <sup>#</sup>  | 0.5                  |                        |
|        |                 |                |                                 |                             |                      | 149  | 150        | 1               | 0.7                  |                        |
| RC1136 | 7194150         | 662930         | 105°                            | -50°                        | 165                  | 74   | 78         | 4*              | 0.5                  |                        |
|        |                 |                |                                 |                             |                      | 81   | 83         | 2               | 0.5                  |                        |
|        |                 |                |                                 |                             |                      | <b>101</b>   | <b>115</b> | <b>14*</b>      | <b>1.1</b>           |                        |
|        |                 |                |                                 |                             |                      | <b>103</b>   | <b>104</b> | <b>1</b>        | <b>2.4</b>           |                        |
|        |                 |                |                                 |                             |                      | <b>110</b>   | <b>111</b> | <b>1</b>        | <b>3.7</b>           |                        |
|        |                 |                |                                 |                             |                      | 116  | 123        | 7*              | 0.7                  |                        |
|        |                 |                |                                 |                             |                      | <b>133</b>   | <b>142</b> | <b>9</b>        | <b>1.1</b>           |                        |
| RC1137 | 7194109         | 662851         | 90°                             | -30°                        | 165                  | No laboratory assays received but no XRF readings above 0.5% Cu recorded |            |                 |                      |                        |

Notes: \* includes 1 x 1m interval grading <0.25% Cu  
 # includes 2 x 1m interval grading <0.25% Cu  
 @ includes 3 x 1m interval grading <0.25% Cu  
 Insufficient information available to determine true width.

**ASX ANNOUNCEMENT 11 AUGUST 2015****About Horseshoe Metals Limited**

Horseshoe Metals Limited 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 Australia. (see Figure 3).

**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 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, 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.

Table 2 below summarises the total Mineral Resources for the project as at 31 December 2014.

| <b>TABLE 2</b><br><b>HORSESHOE LIGHTS PROJECT</b><br><b>SUMMARY OF MINERAL RESOURCES</b><br><b>AS AT 31 DECEMBER 2014</b> |                  |                    |               |                 |                 |                          |                      |                        |
|---|------------------|--------------------|---------------|-----------------|-----------------|--------------------------|----------------------|------------------------|
| <b>Location</b>   | <b>Category</b>  | <b>Tonnes (Mt)</b> | <b>Cu (%)</b> | <b>Au (g/t)</b> | <b>Ag (g/t)</b> | <b>Cu metal (tonnes)</b> | <b>Au metal (oz)</b> | <b>Ag metal (k oz)</b> |
| <b>In-situ Deposit</b><br>(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>         |





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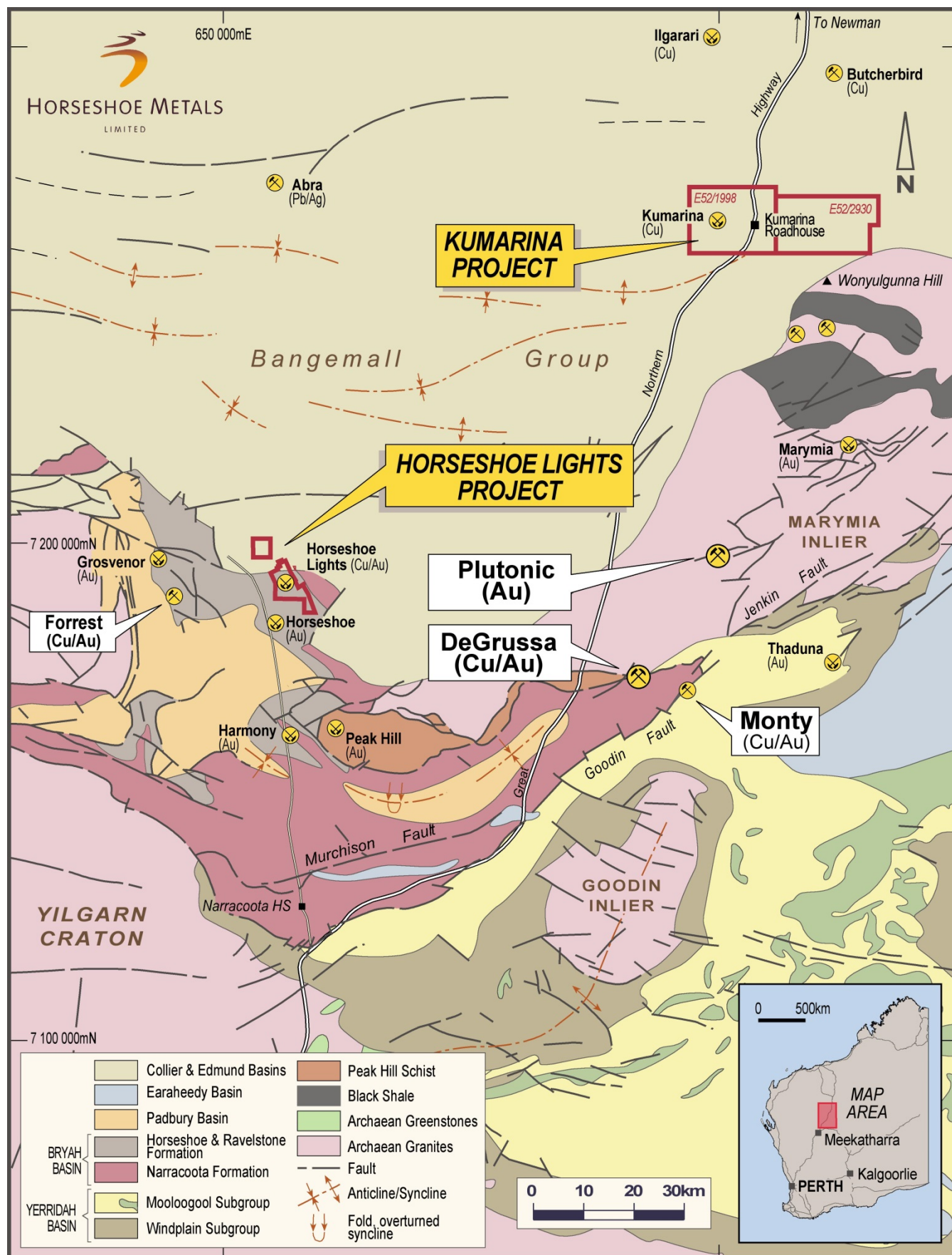


Figure 3 - Projects Location Plan



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### APPENDIX 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   |
|-----------------------|--|--|
| Sampling techniques   | <i>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.</i>   | 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 in the field.  |
|                       | <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>   | RC samples within zones of visual oxide or sulphide mineralisation or producing elevated readings of copper as determined by handheld XRF are sent for laboratory assaying as 1m riffle split samples. The remaining intervals of the drill hole are submitted as 3m speared composite samples. Any anomalous composite samples are to be re-submitted as original 1m split samples.<br><br>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. |
|                       | <i>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.</i> | 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   | <i>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.).</i>   | The drill holes were completed using the Reverse Circulation (RC) technique with a 5½" face sampling bit.  |
| Drill sample recovery | <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>   | Visual inspection of the sample volume indicates sample recovery is excellent. Any poor sample recovery or condition is noted in the drill hole database.  |
|                       | <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>   | RC samples are visually checked for recovery, moisture and contamination. A cyclone and splitter are used to provide a uniform sample and these are routinely cleaned. The drill contractor blew out the hole at the beginning of each drill rod to remove excess water and maintain dry samples.  |



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| Criteria                                       | JORC-Code Explanation  | Commentary   |
|--|--|--|
|  | <i>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.</i>                                  | Ground conditions for RC drilling were good and drilling returned consistent size samples. RC recoveries are high enough to preclude the potential for sample bias.  |
| Logging  | <i>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.</i> | Logging of RC drilling identifies all aspects of lithology, colour, weathering texture, alteration and mineralisation including percentage estimates of oxide/sulphide content. All primary data recorded on-site 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.  |
|  | <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>   | 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.   |
|  | <i>The total length and percentage of the relevant intersections logged.</i>   | All RC holes are logged from start to end of hole.   |
| Sub-sampling techniques and sample preparation | <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>   | No diamond core drilled during this program.   |
|  | <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>  | All RC samples are initially riffle split on a 1:7 ratio and only dry samples are assayed.   |
|  | <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>  | 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.<br>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. |
|  | <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>   | Laboratory QAQC methods include insertion of blanks and undertaking check samples for significant assay results.   |
|  | <i>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.</i>                          | 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.  |
|  | <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>   | The sample size is considered industry standard for base metal mineralisation.   |



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| Criteria                                   | JORC-Code Explanation  | Commentary   |
|--|--|--|
| Quality of assay data and laboratory tests | <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>  | All samples are submitted to Genalysis Laboratories (Intertek). 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.<br>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.<br>These methods are considered adequate and effective for this style of mineralisation. |
|  | <i>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.</i> | 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.  |
|  | <i>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.</i>                  | 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.   |
| Verification of sampling and assaying      | <i>The verification of significant intersections by either independent or alternative company personnel.</i>   | None undertaken in this programme  |
|  | <i>The use of twinned holes.</i>   | Some holes have been or will be drilled to twin old holes. The purpose of the broader drill program is to infill and verify mineralised intervals and grades determined from existing drilling.  |
|  | <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>  | All drilling and sample data is captured in the field electronically using established templates and verified in Perth office before upload into database.   |
|  | <i>Discuss any adjustment to assay data.</i>   | No adjustments undertaken.   |
| Location of data points                    | <i>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.</i>   | Initial collar locations are determined by handheld Garmin GPS but will be surveyed using DGPS before resource estimates are undertaken.<br><br>Downhole surveys consisted of single shot digital camera readings obtained at 6m, 18m and 30m depth and every 30m interval thereafter.   |
|  | <i>Specification of the grid system used.</i>  | Grid system coordinates are GDA94 MGA Zone 50.   |
|  | <i>Quality and adequacy of topographic control.</i>  | 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 and distribution              | <i>Data spacing for reporting of Exploration Results.</i>  | Resource drilling in this program to date used approx. 20m spacing.  |
|  | <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral</i>  | The resource drilling spacing and results employed in this program are consistent with previous drill spacing and results that are part of a JORC compliant mineral  |





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| Criteria   | JORC-Code Explanation   | Commentary   |
|--|---|--|
|  | <i>Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>  | resource.  |
|  | <i>Whether sample compositing has been applied.</i>   | Composite sampling over 3m has been employed for non-mineralised samples producing a XRF reading below 1000ppm.  |
| <i>Orientation of data in relation to geological structure</i> | <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>   | Drilling in this program is orientated generally east-west to maintain consistency and spacing with previous drilling.   |
|  | <i>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.</i> | As stated above.   |
| <i>Sample security</i>   | <i>The measures taken to ensure sample security.</i>  | Prior to submission all samples are stored on-site under supervision of the project geologist. Samples are transported to Meekatharra by Horseshoe Metals personnel and then onto the assay laboratory by licensed couriers. |
| <i>Audits or reviews</i>                                       | <i>The results of any audits or reviews of sampling techniques and data.</i>  | 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   |
|--|---|--|
| <i>Mineral tenement and land tenure status</i> | <i>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.</i> | The Horseshoe Lights Project comprises one Mining Lease (M52/743), one Exploration Licence (E52/2042), nine Prospecting Licences (P52/1203-1211) and five Miscellaneous Licences (L52/42 -45 and L52/66) covering an area of approximately 60 km <sup>2</sup> (6,000 hectares). Current registered holder of the tenements is Murchison Copper Mines Pty Ltd (MCM) which is a wholly owned subsidiary of Horseshoe Metals Limited.<br>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 some of the Horseshoe Lights Project tenements, namely M52/743, P52/1203 – 1206, E52/2042 (portion only) L52/42 – 45 and L52/66. Native title interests appear to have been extinguished in regards to Mining Lease 52/743. There are no historical or environmentally significant sites on Mining Lease 52/743. |
|  | <i>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.</i>   | Mining Lease 52/743 is in good standing and the Company is unaware of any impediments to it obtaining a licence to operate in the area.  |





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| Criteria                                 | JORC-Code Explanation  | Commentary  |
|--|--|---|
| <i>Exploration done by other parties</i> | <i>Acknowledgment and appraisal of exploration by other parties.</i> | <p>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 Anglo-Westralian Pty Ltd, a subsidiary of Asarco Incorporated 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.</p> <p>In 1964, Electrolytic Zinc Company of Australia Pty Ltd ("EZ") conducted widespread exploration including eight diamond drill holes in a search for copper. Seven of the holes intersected oxidised material above 200 m depth. Drill hole EZ7 intersected sulphide copper mineralisation between the intervals 177-204m and 290-335m. Due to the low copper grade of the drill intercepts EZ relinquished the tenements.</p> <p>During 1969 and 1970 Planet Metals Ltd drilled seven holes and achieved several intercepts grading between 0.5% and 1.0% copper. Several of the holes were abandoned short of the target depth because of difficult drilling conditions.</p> <p>In the period 1975 to 1977, Amax Iron Ore Corporation and its partner Samantha Mines NL ("Samantha") 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, Samantha and Homestake Mining Company Ltd also investigated the property.</p> <p>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 and Sabminco NL (now Grange Resources Limited) between 1990-1993. Barrack Mines Ltd drilled 43 diamond holes for 15,353m, 638 Reverse Circulation holes for 55,343m and 19 channel samples for 520m between 1983 and 1989.</p> <p>Sabminco NL drilled 14 HQ &amp; NQ diamond holes for 2672.25m and 108 Reverse Circulation holes for 9,244m between 1990 and 1993. Initial drill hole spacing was on a nominal spacing of 50 x 50m with infill as required in the pit area.</p> |



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| Criteria   | JORC-Code Explanation  | Commentary   |
|--|--|--|
| Geology  | <i>Deposit type, geological setting and style of mineralisation.</i>   | Primary VMS mineralisation at Horseshoe Lights occurs in the core of a NNW trending and SE plunging parasitic anticline, that is overturned to produce intermediate SW dips on western limbs and steep SW dips on eastern limbs. The massive and disseminated sulphide envelope of the deposit itself is also SW dipping and plunging to the SSE (150°), and was likely folded. It sits within altered basalt and mafic volcaniclastic 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 cross faults. |
| Drill hole Information   | <p><i>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:</i></p> <ul style="list-style-type: none"> <li>• <i>easting and northing of the drill hole collar</i></li> <li>• <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>• <i>dip and azimuth of the hole</i></li> <li>• <i>down hole length and interception depth</i></li> <li>• <i>hole length.</i></li> </ul> <p><i>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.</i></p> | <p>Refer to the body of text of this report and Table 1 for all information material to the understanding of the exploration results.</p> <p>No exclusions of information have occurred.</p>   |
| Data aggregation methods   | <i>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.</i>  | 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 Table 1.   |
|  | <i>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.</i>  | Intercepts that consist of high grade results within a longer lower grade zone are detailed separately to avoid confusion (refer to Table 1).  |
|  | <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>   | Not applicable.  |
| Relationship between mineralisation widths and intercept lengths | <p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>  | Exploration drilling in this program is either vertical or orientated perpendicular to interpreted mineralisation trend.   |

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| Criteria                           | JORC-Code Explanation  | Commentary   |
|------------------------------------|--|--|
| Diagrams                           | <i>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.</i>  | Refer to diagrams in body of text.   |
| Balanced reporting                 | <i>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.</i>   | See Table 1 for all exploration results.   |
| Other substantive exploration data | <i>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.</i> | 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                       | <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>  | Drilling is planned to upgrade the resources and check the extent of the mineralised zones to the east of the existing pit.  |
|                                    | <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>   | Refer to diagrams in body of text.   |

**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 an employee of 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 Horseshoe Lights Project flotation tailings and surface stockpiles Mineral Resources 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 an employee of Horseshoe Metals Limited. The information was previously issued with the written consent of Mr Geoff Willetts in announcements released to the ASX on 26 February 2015 and 9 March 2015. The Company confirms that:

- (a) the form and context in which Mr Geoff Willetts' 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 26 February 2015 and 9 March 2015 ASX announcements and that all the material assumptions and technical parameters underpinning the estimates in the 26 February 2015 and 9 March 2015 ASX announcements continue to apply and have not materially changed.

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.