



**Breakaway  
Research**

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### Company Information

ASX Code	HOR
Share Price	A\$0.17
Ord Shares	75.9m
Options	22.0m
<b>Estimated MCAP</b>	<b>A\$12.5m</b>
Cash (March 13)	A\$0.7m
Total Debt	-
<b>Enterprise Value</b>	<b>A\$11.8m</b>

### Directors

Non-Ex. Chairman	J. Shervington
Managing Director	Neil Marston
Non-Executive Director	Michael Fotios
Non-Executive Director	Stuart Hall

### Substantial Share Holders

Investmet Limited	18.0%
Azure Capital Limited	5.3%
Directors	4.9%
Wyllie Group	1.5%

### Company Details

Address	Unit 6/11, Colin Grove West Perth WA 6005
Phone	+618 9481 5866
Web	www.horseshoemetals.com.au

### 1 Year Price Chart



Source: Bloomberg

# Horseshoe Metals Limited (HOR)

*HOR is advancing towards a critical mass to evaluate development options for Horseshoe Lights*

## Recommendation: Speculative BUY

### Company Update

### Key Points

- **Maiden resource of 0.84Mt at 1.3% Cu for the Rinaldi deposit, lifting the Company's global copper resource to 101,600t**
- **Horseshoe Lights resource being updated following 2012 drilling**
- **Planned 2013 drilling at Horseshoe to focus on deeper Cu-Au zones**
- **2013 drilling at Kumarina to focus on dolerite sill/fault zone, with Kumarina Deeps also being tested**
- **Soil geochemistry identified new targets at Kumarina**
- **Geophysics expected to identify new targets at Horseshoe Lights**

*HOR has announced a Maiden Mineral Resource 10,600t at its Rinaldi Prospect within the Kumarina Project located 108km NE of Horseshoe Lights. Most of the Rinaldi resource is in the Measured and Indicated categories and is less than 120m from the surface. The mineralisation remains open at depth. Rinaldi is one of many targets within the Kumarina Project and the exploration potential is very high for adding significant copper resources.*

*Quantification of Rinaldi has boosted the Company's global copper resource to 101,600t, which is approaching critical mass for potential development.*

### Investment Thesis

HOR's tenements are located within the highly prospective Bryah Basin, which was formed from strike-slip tensions in a back-arc setting. Key characteristics of the basin are eruption of tholeiitic lavas and formation of gold and/or copper deposits. Historical production from Horseshoe Lights was 54,000t of Cu and 313,000oz of gold. There are numerous copper workings in the Kumarina Project where very high grades of copper are recorded.

There has been considerable drilling at Horseshoe Lights but historically most historical holes have been shallow (less than 100m). At Horseshoe Lights, high-grade copper extends below the pit floor. HOR has already defined a resource of 8.6Mt at 1.06% Cu and 0.13g/t Au. At the historic open cut mine, high-grade copper mineralisation extends below the pit floor and the Company has embarked on systematic drilling, in conjunction with modern geophysics, to better delineate this mineralisation and find new zones.

Overall, the Company is working towards a critical mass that would justify reopening mines at Horseshoe Lights and Kumarina. Exploration continues at both projects and positive news flow is expected throughout 2013.

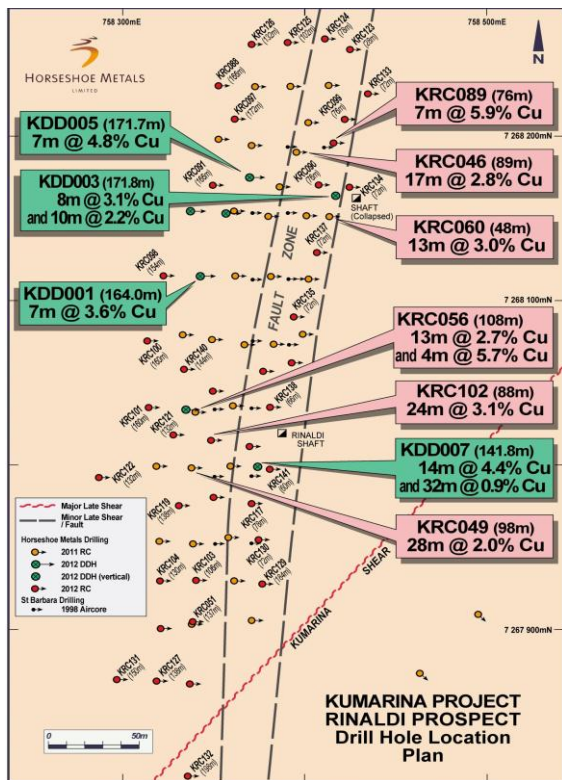
## Company Update

### Kumarina Project

*Extensive old mine workings bode well for deeper discoveries.*

Copper deposits were discovered at Kumarina in 1913, and intermittently worked until 1973. Mine workings extend over 3km with most production from underground, but at shallow depth; with 100m drives off the lower level of the Kumarina Copper Mine at a depth of 49m below surface. The delineation of an initial mineral resource of 835,000t at 1.3% copper at the Rinaldi Prospect (see Figures 1 and 2), is an excellent start. Mineralisation generally occurs as chalcopyrite and pyrite as blebs and veinlets within quartz veins hosted within the fault zone. Less common copper minerals are chalcocite and bornite.

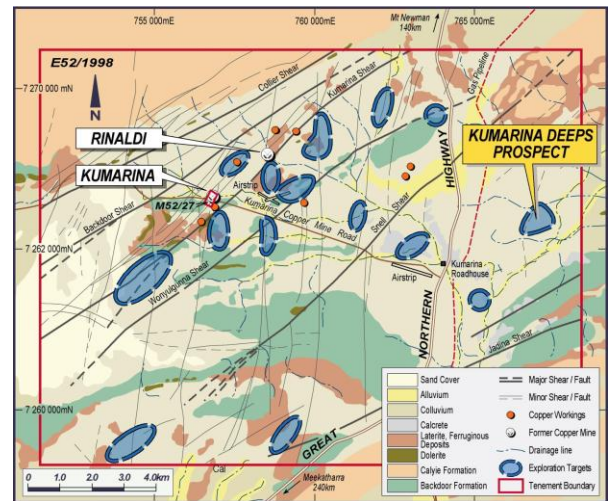
**Figure 1:** Very encouraging drilling results from the 2011 and 2012 drilling programmes that probed the Rinaldi Prospect Fault Zone.



Source: HOR

*Drill programmes testing extension of known mineralisation and testing new anomalies should provide positive news flow through 2013.*

**Figure 2:** Map showing the prospective areas identified from soil geochemistry within Kumarina Project, some of which are along strike from Rinaldi.



Source: HOR

During 2012, the Company drilled seven diamond drill holes with each drill hole intersecting visible copper and individual one-metre assay results of up to 15.2% copper being recorded. The work program during 2013 will test for extensions of this mineralisation along the host north-south fault zone. A small number of drill holes have intersected copper in a dolerite sill. Future drilling will probe the faulted contact between the sill and fault zone as a preferential site for mineralisation. A recently completed soil sampling survey over most of the licence area has identified several anomalies some of which are co-incident with north-south faults as shown in Figure 2. The company plans to drill test some of these anomalies during 2013.



The Kumarina Deeps Prospect shown in Figure 2 is an interesting exploration target which HOR will drill test in the coming months once site access clearances are in place.

Armed with results from soil sampling surveys and images produced from modern geophysics, the 2013 field season should be very efficient with a large number of well-defined targets to follow-up with reconnaissance drilling.

### Horseshoe Lights Project

At the Horseshoe Lights deposit, shoots of high-grade copper and gold ore occur as co-products in a sub-vertical pattern of zonation. The current resource is mainly JORC inferred. With 0.6Mt of Measured and Indicated resources, the result of the 2012 drill programmes will see an increase in the confidence level for defined resources.

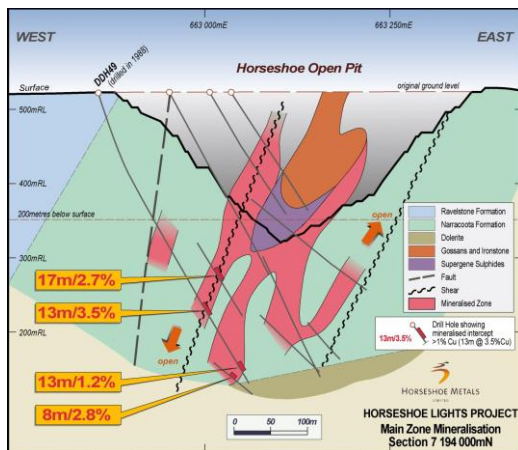
Assay results from the 2012 65-hole drill programme, diamond and RC; have not been incorporated into the current resource. A resource upgrade is due within weeks and is expected to provide positive news for shareholders.

The potential to extend mineralisation at depth and significantly increase resources is shown in the figures below.

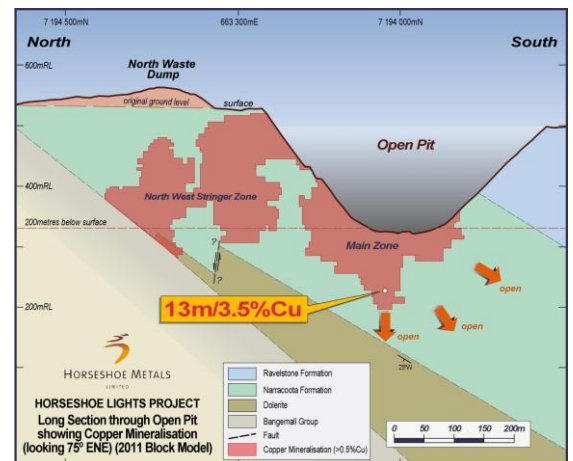
*Revised resource statement due soon-significant upward revision expected.*

**Figure 3:** Cross Section at Horseshoe Lights showing Main Zone mineralisation. In the Main Zone high-grade direct-shipping chalcocite mineralisation passed into pyrite-chalcopyrite ore.

**Figure 4:** In the late 1980s chalcocite was dug from the pit floor for direct shipment to a smelter. As can be seen from this long section, high-grade copper extends below and laterally from the pit.



Source: HOR



Source: HOR

*Potential for oxide copper in waste and low-grade stockpiles.*

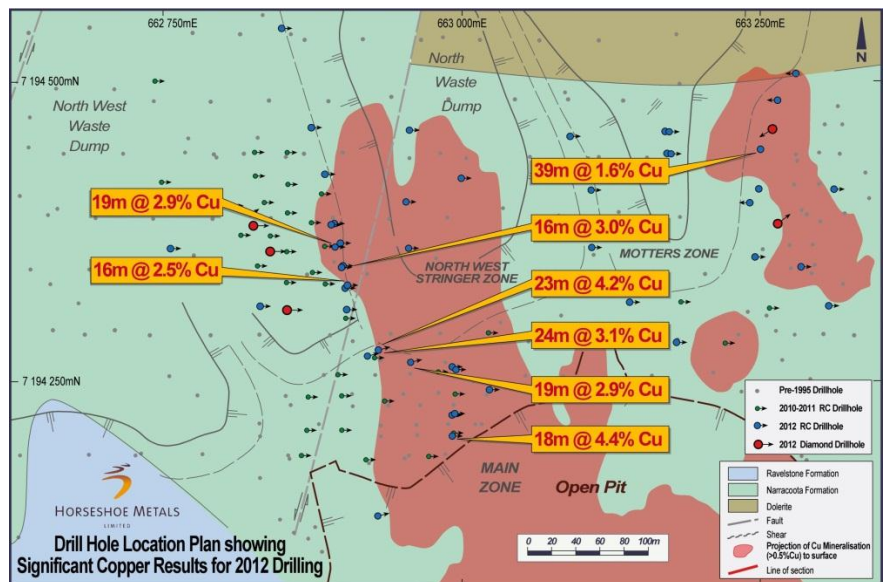
In addition to the hard rock resources that represent mineralised extensions of the historic open cut deposit, there are a number of potential resources locked up in the existing tailings dam and low-grade stockpiles. This material was regarded as too low grade for treatment at the time of mining. In 1995 it was estimated that 1.95Mt of tailings and stockpiles contained some 12,500t of copper. Any oxidised copper mineralisation in the tailings dam or low-grade stockpiles may now be recoverable through leaching at relatively low operating cost.

Recent testwork has demonstrated that the copper tailings readily leach, demonstrating the potential for a relatively low cost operation to commence on site.

Continuing exploration at Horseshoe Lights during 2013 has the potential to create significant value for shareholders. The prospectivity of the region is high and a paucity of deep drilling, the meaningful level of historic production, the presence of large structures and excellent exploration results enhance the likelihood of positive results.

Figure 5 and 6 illustrate some of the better results from the 2012 drilling campaign, as well as new targets generated in the immediate mine environs.

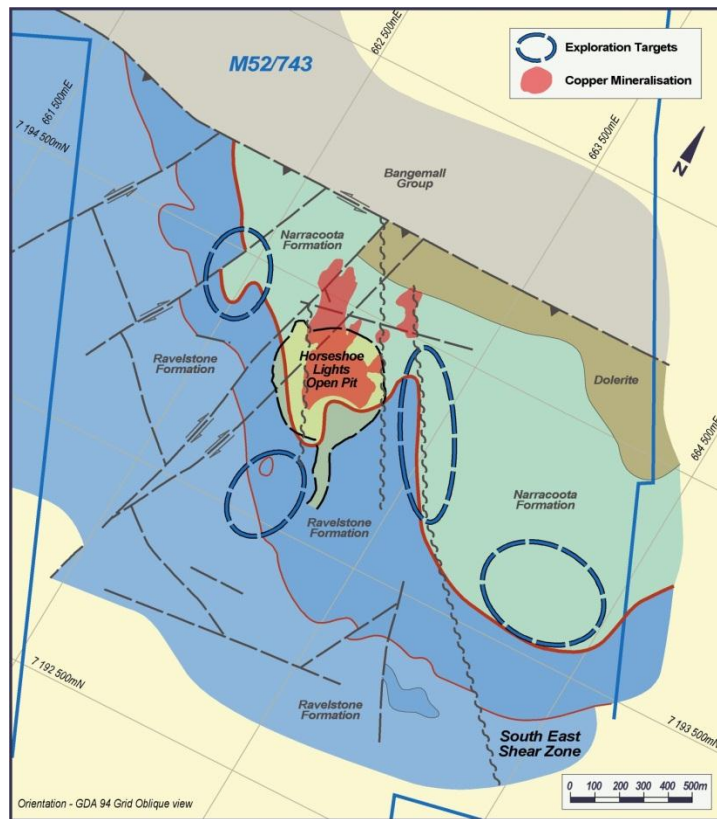
**Figure 5:** Plan of near surface high-grade copper drill results. Note the extensive area of mineralisation projected to surface north of the pit.



Source: HOR



**Figure 6:** Multi factor defined drilling targets. One thing in common with all four targets is a paucity of drilling at depth.



Source: HOR

## The Future

*Potential for early cash flow from copper leaching.*

The resource upgrade will also enable management to refine its development options. There are likely a number of these options available - perhaps starting with a modest copper leaching facility treating oxide ore, tailings and stockpile material. This option has potential for generating early cash flow in an affordable, low risk manner.

*An initial copper production of 10-20,000tpa is a reasonable target.*

A typical production figure for a junior copper miner is output of 10,000 to 20,000 tonnes of contained copper per annum. On this basis, HOR seems well placed to work towards delineating three to five years of production from tank or heap leaching. The process would possibly incorporate a SX/EW circuit to produce premium value cathode copper. At the same time, it might be possible for HOR to strike a deal with a third party to toll treat primary sulphide ore; Sandfire Resources NL (SFR) with its DeGrussa processing facility just 75km away comes immediately to mind.

*Economic Assessment in 1H-2013.*

Following the revision in JORC resources, the company will complete a Mining Study as a cornerstone of a Preliminary Economic Assessment (PEA) during 1H-2013. Should the PEA be suitably encouraging the company will begin a Feasibility Study in 2H-2013.

2013 is shaping up to be a watershed year for HOR. By the end of this year, the Company will have a strong understanding of the opportunity for the Horseshoe Lights and Kumarina Projects to be advanced through the Feasibility Study and mine development processes.



### **Analyst Verification**

We, Grant Craighead and Nick Raffan, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

### **Disclosure**

Breakaway Investment Group (AFSL 290093) may hold direct and indirect shares in the Image Resources. It has also received a commission on the preparation of this research note.

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