

December 2012

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## **Capital Structure**

ASX Code	HOR
Share Price	A\$0.185
Ordinary Shares	75.9m
Options	22.0m
Market Cap	A\$14.0m
Less: Cash*	A\$2.3m
Add: Debt	-
Enterprise Value	A\$11.7m

<sup>\*</sup>Cash balance as at 31October 2012

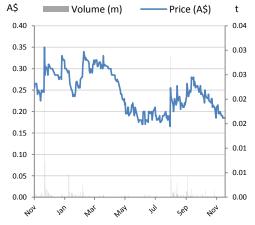
## **Directors**

Chairman	Jeremy Shervington
Managing Director	Neil Marston
Non-Exec. Director	Michael Fotios
Non-Exec. Director	Stuart Hall

# **Substantial Shareholders**

Total Top 5 Shareholders	35.3%
Panga Pty Ltd	2.9%
Nefco Nominees Pty Ltd	3.6%
Azure Capital Investments Pty Ltd	4.5%
JP Morgan Nominees Aust Limited	4.5%
Investmet Ltd and Associates	19.8%

# 1 Year Price Chart



Source: Bloomberg

# **Horseshoe Metals (HOR)**

Near-term production potential at the historic

Peak Hill copper-gold mineral field

Recommendation: Speculative BUY

# **Key Points:**

- Project covers historic mines, which produced over 54,000t copper and 300,000oz gold
- JORC-compliant resource established, with upgrades in the pipeline
- Identified pathway to production (planned scoping/feasibility studies in 2013, potential first production in 2015)
- Strong news flow from an active exploration program
- Strong management team with extensive relevant experience

Horseshoe Metals (ASX: HOR) is currently conducting an extensive drilling program over its two projects, Horseshoe Lights and Kumarina, in order to further define and expand its copper-gold resources. With a growing resource base and an experienced management team, this well-funded exploration company is looking to rapidly transition to production over the next few years.

# **Company Overview:**

Horseshoe Metals (ASX: HOR) is a copper-gold explorer primarily focused on developing its highly-prospective Horseshoe Lights and Kumarina Projects, located in the Peak Hill Mineral Fields, north of Meekatharra in Western Australia (WA). Both projects host historic copper or copper-gold mines. The geological unit hosting the Horseshoe Lights mineralisation also hosts the DeGrussa (Doolgunna) copper-gold operation owned and operated by Sandfire Resources (ASX: SFR), located 60km east of the historic Horseshoe Lights mine.

Extensive drilling has been conducted at both sites during 2012, with numerous 'ore grade' copper-gold intercepts being achieved. Further drilling is planned and steady growth in resources is anticipated. Horseshoe Lights already hosts a JORC-compliant resource of 8.6Mt at 1.06% copper and 0.13 g/t gold (91,000t Cu and 37,400oz Au) with a resource upgrade in the pipeline, plus expectations of a maiden resource to be released for the Kumarina Project in early 2013.

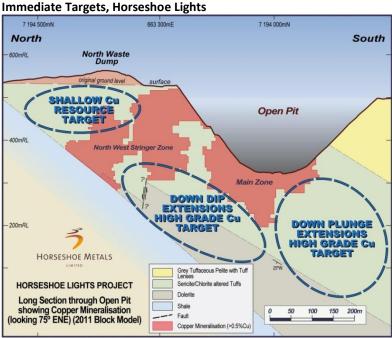
The Company is well funded to maintain momentum in the assessment of both projects and has identified a viable pathway for a timely, cost effective transition to becoming a producer.



**Growth Potential, Horseshoe Lights** 

HOR has already established a significant resource

Horseshoe Metals has established a JORC-compliant resource of 91kt copper and 37koz gold at Horseshoe Lights, which could potentially support a low cost transition to producer status for the Company by utilising third party treatment facilities. In addition management has identified potential extensions to the mineralisation system (down dip, down plunge and along strike) that continue to be tested in ongoing drilling campaigns.



Source: Horseshoe Metals

Mineralisation at Horseshoe Lights is interpreted to be a deformed volcanic-hosted massive sulphide (VMS) deposit, with supergene alteration forming a gold enriched-copper depleted cap that was the focus of past mining. Subsequent mining focussed on high grade copper zones at depth, with several fertile structures identified – the Main Zone, Northwest Stringer Zone and Motters Zone. Enhanced understanding of the controls associated with these structures is driving ongoing exploration efforts.

# **Expected Maiden Resource, Kumarina**

Horseshoe Metals has undertaken several drilling programs at the Kumarina Project during 2012. A 39 hole drill campaign completed at the Rinaldi prospect in October recorded strong results with further assays still pending from a November drill campaign. These results are expected to support a maiden resource, due in Q1 2013.

# **Regional Exploration Potential**

Horseshoe Metal's tenements cover 300km² in the prospective Peak Hill Mineral Field. The Company recently acquired multispectral imagery data over both of its projects, as well as high resolution magnetic data over the Kumarina Project and gravity survey imagery over the Horseshoe Lights Project. This data is being integrated with existing geological and geophysical data, and will be reinterpreted to generate additional regional exploration targets.

The Company is systematically testing a series of mineralised structures

Expected to release a maiden resource for Rinaldi in early 2013.



# Investment Review con't

## **Strong Funding Options and Cornerstone Investor**

The Company has strong funding support, as illustrated by the recent completion of a \$1.375 million capital raising which was backed by Horseshoe Metal's cornerstone investor, Investmet, which currently has a 19.8% stake in the Company. Investmet is a private equity firm, made up of high net worth individuals investing in resource opportunities, and has a successful track record. Investmet has indicated that it will continue to provide financial support of the Company's plans through to production.

As at 31 October 2012, Horseshoe Metals had cash at bank of A\$2.3m.

## **Experienced Management Team**

Horseshoe Metal's directors have a wealth of expertise in the junior mining industry. MD Neil Marston provides considerable financial and project management skills to the team, while Chairman Jeremy Shervington has served as a director of various ASX listed companies and operates a legal practice in WA. Michael Fotios, also a director of Investmet, is a well-known geologist with extensive experience in junior and mid-tier resource companies. Stuart Hall is also a geologist and has extensive exploration and mining experience throughout Australia and Africa.

HOR's directors have considerable expertise in the junior mining sector

As at 31 Oct 2012, HOR had A\$2.3m

cash, with an additional A\$15m in

potential funding available

## The Historic Open Pit, Horseshoe Lights



Source: Horseshoe Metals

# **Project Summary**



# **Recent Developments**

# **Horseshoe Lights**

Horseshoe Metals has already defined a JORC-compliant resource of 8.6Mt at 1.06% Cu and 0.13g/t Au for 91kt of contained copper and 37.4koz gold. These resources occur as depth and strike extensions of the historic open cut mine.

#### **Horseshoe Lights JORC-Compliant Resources**

Category	Tonnes (Mt)	Au Grade (g/t)	Cu Grade (%)
Measured	0.29	0.017	0.939
Indicated	0.32	0.027	0.88
Inferred	8.02	0.143	1.067
Total	8.63	0.13	1.06

Meaningful scale resource base already established

During 2012 the Company has continued to test possible extensions to these resources, most recently drilling low angle holes to test for shallow copper mineralisation located under the North Waste Dump, as well as testing targets north along strike of the historic open pit in three zones from west to east comprising the North West Stringer, Main and Motters zones.

Encouraging results have been achieved in the 51 holes completed during this phase of drilling with numerous 'ore grade' intercepts recorded in both shallow and deeper positions. A resource upgrade is currently in progress.

During the next phase of drilling the focus is shifting to the testing for deeper, high grade copper-gold zones, potentially located down dip and down plunge of the Main Zone. In addition, follow-up drilling will be undertaken on exploration targets outside of the immediate pit area which have not been adequately tested in past exploration programs.

Resource upgrade in progress based on extensions of known mineralisation

Exploration focus shifting to new targets

#### **Advancing Towards Production**

In parallel with its exploration efforts the Company is assessing the opportunity to transition into production. With the Horseshoe Lights Project located just 75km from Sandfires Degrussa copper mine, an option to process ore through the DeGrussa plant potentially represents a low cost, low risk opportunity to achieve a fast-track to production.

#### Kumarina

Recent exploration at the Kumarina Project has identified shallow, high grade copper mineralisation at the Rinaldi prospect, during a 39 hole RC program completed in October – with a best result of 24m at 3.1% copper. This program was testing possible extensions to mineralisation encountered at several prospects during the Company's 2011 drilling campaign.

Follow-up drilling is being completed at Rinaldi, ahead of a planned maiden JORC-compliant resource estimate to be completed early in 2013.

As the company achieves its assessment milestones, there is the opportunity for a significant share price re-rating.

Maiden resource expected at Kuminara



Horseshoe Lights and Kumarina are located in central WA

## **Project Locations**

The historic Horseshoe Lights and Kumarina gold-copper mines and associated tenements are located in the prospective Peak Hill Mineral Field, approximately 800km north-northeast of Perth and 140km north of Meekatharra. The region also hosts important high grade copper and gold mines at DeGrussa and Plutonic.

# **Horseshoe Metals Project Location** 650 000mE Ilgarari 🚫 **8** Butcherbird HORSESHOE METALS N KUMARINA **PROJECT** ▲ Wonyulgunna Hill Bangemall Basin HORSESHOE LIGHTS **PROJECT** MARYMIA **Plutonic** (Au) DeGrussa (Cu/Au) GOODIN YILGARN CRATON 7 100 000r Peak Hill Schist Collier & Edmund Basins Earaheedy Basin Black Shale MAP AREA Padbury Basin Archaean Greenstone Horseshoe & Ravelstone Formation Archaean Granites PERTH Kalgoorlie Fault Anticline/Syncline 20 30km Mooloogool Subgroup Fold, overturned syncline

Source: Horseshoe Metals

# **Project History, Horseshoe Lights**

Windplain Subgroup

Horseshoe Lights is a historic small scale copper-gold mine that operated intermittently between 1946 and 1994. In that time the mine produced 300koz gold and 54,000t copper. From 1984 the owners operated a gold plant, and in 1988 it transitioned into a copper concentrate production and a direct shipping ore (DSO) operation – with DSO representing nearly half of the mine's total production of copper (110,691t at an average grade of 26% Cu, for 28.8kt of contained copper).

While some 829 RC and 70 diamond drill-holes have been completed by previous explorers, much of this was at depths of less than 100m and minimal modern exploration was undertaken prior to Horseshoe Metals acquiring the project.

The Horseshoe Lights mine produced 300koz Au and 54kt Cu

Prior to HOR, minimal exploration had taken place since 1990

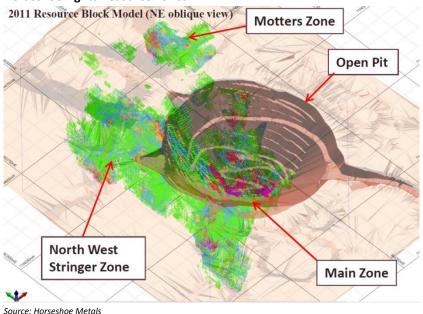


# **Exploration at Horseshoe Lights**

Mineralisation at Horseshoe Lights is interpreted to be a deformed volcanic-hosted massive sulphide (VMS) deposit, with close analogies to the DeGrussa mine, owned and operated by Sandfire Resources (ASX: SFR). Both deposits are in the Narracoota Volcanics and occur close to major structures near the edge of the Bryah Basin.

At Horseshoe Lights, supergene alteration formed a gold enriched-copper depleted cap that was the focus of the initial mining phase. Subsequent mining focussed on high grade copper zones at depth, with several fertile structures being identified – the Main Zone, Northwest Stringer Zone and Motters Zone.

## **Horseshoe Lights Resource Zones**



Drilling has outlined additional mineralisation, particularly at the North West Stringer Zone

During 2012, Horseshoe Metals has completed over 7,000m of drilling at the project, predominantly in close proximity to the historic workings. Key targets tested were:

- shallow copper mineralisation located under the North Waste Dump, and
- north along strike of the open pit in three zones from west to east comprising the North West Stringer Zone, Main Zone and Motters Zone.

Results have been particularly encouraging from the North West Stringer Zone, located immediately north and west of the Main Zone high grade mineralisation that was the focus of historic open pit mining operations. Better results from the North West Stringer Zone include:

- ▶ 18m at 4.4% Cu (from 38m), including 1m at 23.5% Cu and 4m at 8.6% Cu,
- 23m at 4.2% Cu (from 43m), including 1m at 12.6% Cu
- 24m at 3.1% Cu (from 39m), including 7m at 6.7% Cu
- 19m at 2.9% Cu (from 23m)
- 19m at 2.9% Cu (from 73m), including 2m at 20% Cu and 0.4g/t Au
- 16m at 2.5% Cu (from 73m), including 10m at 3.5% Cu

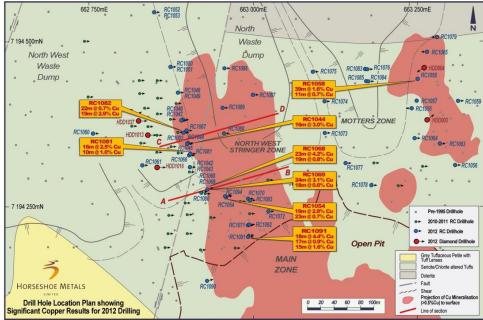
The Motters Zone, which is a shallow, parallel structure to the Main Zone situated north-east of the open pit, also returned an encouraging result of 39m at 1.6% Cu (from surface), including 4m at 3.7% Cu.

These positive results will contribute to a resource increase



The location of the 2012 holes drilled north of the open pit and the better results are illustrated on the following plan:

**Horseshoe Lights Drilling Programs** 



Source: Horseshoe Metals

# **Resource Upgrade Imminent**

The results from the first phase of the 2012 drilling program are now being incorporated into the resource model for Horseshoe Lights and a revised mineral resource estimate will be completed in the coming months.

The next phase of drilling is soon to commence, with efforts switching to:

- testing for deep, high grade copper-gold zones of sufficient grade to potentially support underground mining (particularly down dip and down plunge of the Main Zone), and
- follow-up of exploration targets outside of the immediate pit area which have not been adequately tested by previous exploration efforts. This includes a number of walk up drill targets identified during recent geophysical surveys.

Next targets include high grade underground and regional opportunities



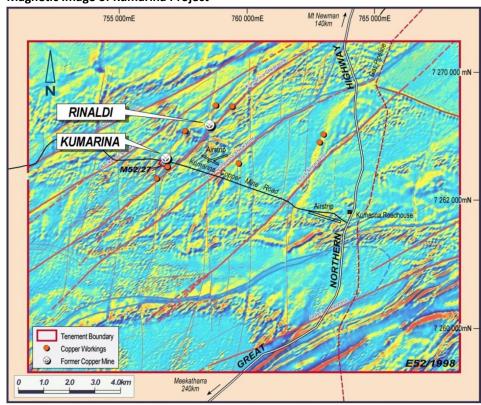
Kumarina covers a historic mining area in the Bangemall Basin that hosts a number of base metal projects

# **Kumarina Project**

The Kumarina Project comprises two tenements covering an area of ~217km² located to the northeast of the Company's Horseshoe Lights Project. The Kumarina copper deposits extend over nearly 5km as a series of pits, shafts and shallow open cuts that were discovered in 1913 and worked intermittently until 1973. Records indicate that the mines were small, but high grade copper producers.

There has been limited modern exploration carried out on the Kumarina tenements, with the most relevant being by St Barbara Limited between 1992 and 1998. This work focussed on the Kumarina and Rinaldi workings and included mapping, geochemical sampling and 51 shallow air core holes – with four holes returning significant copper (1.15% to 3.5%) in multiple lodes.

# **Magnetic Image of Kumarina Project**



Source: Horseshoe Metals

# **Exploration and Drilling Progress**

Horseshoe Metals completed two RC drilling programs in late 2011, which included identifying significant shallow copper mineralisation at the Rinaldi prospect. During 2012 further RC drilling was completed at the Kumarina Copper Mine, North Show, Review East and Rinaldi prospects. Seven diamond drill holes were also completed at the Rinaldi prospect

Significantly, drilling undertaken to the north of the Rinaldi prospect demonstrated that the copper mineralisation extends for at least 600m within a north-south fault zone. In addition, in-fill drilling at the Rinaldi prospect has recorded a number of high grade, shallow results. A follow-up RC drilling program has been undertaken, comprising both in-fill and step-out holes, with assay results expected shortly.

Completion of a maiden JORC compliant resource for the Rinaldi deposit is expected to follow in early 2013.

Drilling demonstrates that copper mineralisation extends for at least 600m along strike



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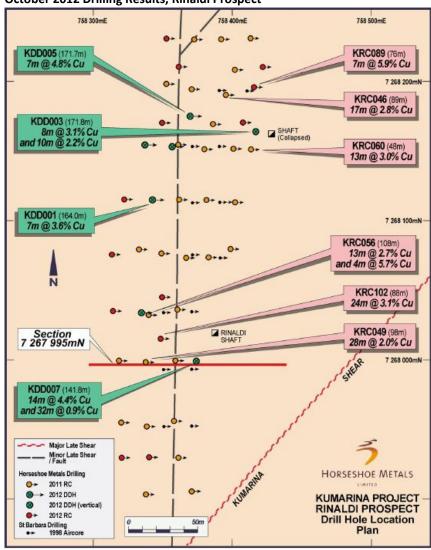
Strong shallow results

24m at 3.1% Cu (from 46m), including 3m at 12.3% Cu and 1m at 9.4% Cu,

Better results received during 2012 from drilling at the Rinaldi prospect include:

- 7m at 5.9% Cu (from 12m), including 1m at 13.6% Cu,
- 14m at 4.4% Cu (from 13m), including 4m at 9.0% Cu, and
- 7m at 4.8% Cu (from 94m), including 2m at 9.4% Cu.

October 2012 Drilling Results, Rinaldi Prospect



Source: Horseshoe Metals

# **Greenfield Exploration Targets**

Mineralisation in the region exhibits strong structural controls and this will be a focus in ongoing target generation activities. The Company recently completed an infill high resolution aeromagnetic survey at Kumarina, and when combined with the data from its 2011 aeromagnetic survey, this provides 50m line spacing coverage over the full project area.

In addition, a soil geochemical survey is being completed over much of the project area and these results will be integrated with a recently completed airborne multi-spectral survey to assist in generating new regional exploration targets in this sparsely explored area.

Regional target generation activity in progress



The Copper Market

Supply constraints sets copper up for renewed outperformance amongst base metals.

Supply growth is constrained and reliant on a few major projects and

expansions

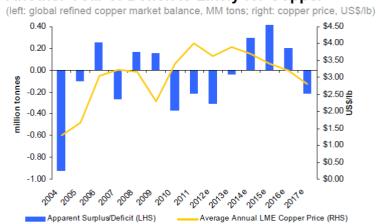
for copper

Strong investment in cable production likely to boost demand

Supply constraints sets copper up for renewed outperformance of base metals with four particular factors favouring higher prices moving forward:

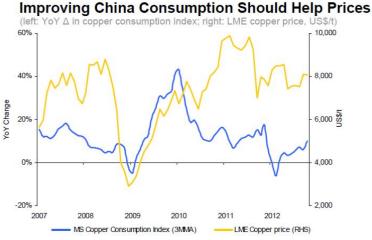
- Net long speculator volumes show that direct investors are predicting copper to outperform other LME metals in an environment of quantitative easing in the U.S., unlimited bond purchases in the EU and monetary expansion policies in Japan. The speculative long position is likely to be sustained into 2013.
- The structural deficit in terms of supply since 1Q 2010 shows seasonally adjusted market deficit of 292Kt. COMEX and LME copper stocks have also been declining since 3Q 2011. The resulting dynamics are the lowest reported stock to consumption ratio since 2008.
- Supply growth is constrained and reliant on a few major projects and expansions. BHP's announcement to suspend its plans for its Olympic Dam project expansion highlights the difficult funding environment for major CAPEX programs.
- China's demand looks set to pick up, with strong investment in cable production likely to boost the demand for copper. Power grid infrastructure represents 47% of copper demand in China, with an 88% increase in power sector investment in China's 12<sup>th</sup> 5 year plan, versus the previous 5 year plan.

# Another Year of Deficit Is Likely for Copper



Source: ICSG, Wood Mackenzie Brook Hunt, Morgan Stanley

# Demand growth will continue to be driven by China



Source: Bloomberg, CEIC Morgan Stanley



#### Conclusion

Global demand for the major industrial commodities has doubled roughly every twenty years. Demand will continue to be driven by China with demand growth likely to continue. Resource and reserve grades are declining in the existing mining districts, an entirely natural outcome of "high-grading" the known ore bodies. Against a challenging global economic backdrop, many large development projects are currently on hold or facing significant delays.

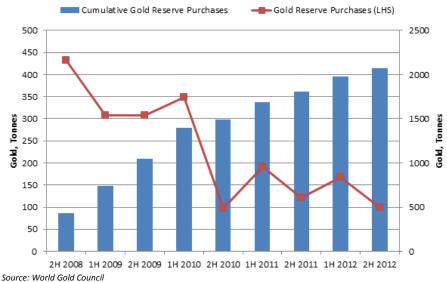
## **Gold Market Outlook**

- Central bank and political behaviour makes conditions favourable for continued price appreciation for gold; record low interest rates, purchases of mortgage backed securities, sovereign bond purchasing programs, and gold reserve net buying make for a compelling case.
- U.S. Federal Reserve quantitative easing strategies as well as the unlimited bond purchase program by the ECB in September are strong positives for gold; creating upward price pressures on the commodity.
- More recently, the announcement by the opposition party in Japan to pursue negative interest rate policies and continued monetary easing programs will continue the strong case for gold appreciation.

### **Reserve Purchasing**

- Continued net buying of gold reserves, particular in Brazil, Kazakhstan and Russia. Brazil raised its gold reserve for a second month in October to the highest level in more than 11 years, from 17.2 tonnes to 52.5 tonnes.
- There have been net gold reserve purchases for the last 4 years, with over 2,000 tonnes of gold purchased in that period.

## **Gold Reserve Purchases**



There have been net gold reserve purchases for the last 4 years

Central bank behaviour creates

continued price appreciation of

favourable conditions for the

gold

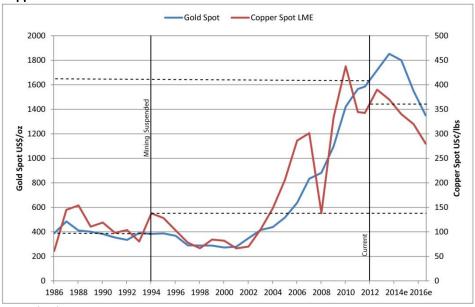


# **Commodity Pricing Backdrop**

# **Implications for Horseshoe Metals:**

- Considerable upside potential for EV/t multiple valuations of Horseshoe Metals.
- Near term production options will allow Horseshoe Metals to take advantage of strong and sustainable high prices for Cu and Au.
- Copper prices are at levels well above prevailing LME prices when mining ceased in 1994 at the Horseshoe Lights mine.
- Gold prices are around US\$1,200/oz higher than when mining ceased.
- Previous sub-economic mineralisation may be viable to extract under current pricing conditions.

## Copper and Gold Price Chart - 1986-2017E



# Source: Bloomberg

### **Pricing Environment**

The significant price differential between when operations halted at the Horseshoe Lights mine in 1994 and the current time provides a tantalising insight into the potential for emerging copper and gold projects such as Horseshoe Lights and Kumarina.



# **Directors & Management**

Non- Executive Chairman

Jeremy Shervington

Jeremy Shervington has over 26 years of experience as a director. Mr Shervington operates a legal practice in Western Australia. Mr Shervington has approximately 30 years' experience as a lawyer. He specialises in the laws regulating companies and the securities industry in Australia. Since 1985 Mr Shervington has served as a director of various ASX listed companies as well as a number of unlisted public and private companies. Mr Shervington is currently a director of the following ASX listed companies: Australian Zircon NL and Emerald Oil & Gas NL.

Managing Director
Neil Marston

**Neil Marston** has over 30 years' experience working in the resources and other industry sectors Mr Marston has served most recently as the Company Secretary and/or CFO of Grange Resources Limited and Gippsland Limited. He has extensive experience in the areas of accounting, capital raising, corporate governance and compliance, project management, mining and environmental approvals, contract negotiations and stakeholder engagement. Mr Marston is a qualified accountant and chartered secretary.

Non-Executive Director
Michael Fotios

Michael Fotios has over 28 years' experience in the mining and minerals industry. Mr. Fotios has qualifications in Geology specialising in Economic Geology with extensive experience in exploration throughout Australia working with gold, base metals, tantalum, tin and nickel from exploration to feasibility over the last 28 years. He is currently a director of the unlisted company, Investmet Limited, a non-executive director of listed gold producer and explorer, Northern Star Resources Limited, a non-executive director of listed junior explorers General Mining Corporation Limited and Pegasus Metals Limited, and has previously held positions with Homestake Australia Limited, Galaxy Resources Limited, Tantalum Australia NL (now ABM Resources Ltd) and Sons of Gwalia Limited.

Non-Executive Director
Stuart Hall

**Stuart Hall** has over 40 years' experience in the mining and minerals industry. Mr Hall is a qualified geologist having worked in Australia and Africa He has extensive experience in the areas of exploration strategy, mine geology, open pit and underground mining operations, resources/reserve estimations & reconciliation, feasibility studies, mine project development and mine management. Mr. Hall has been involved in the feasibility, construction, commissioning and management of several open pit and underground mining operations. Mr. Hall currently operates his own geological consultancy.



# **Analyst Verification**

We, Grant Craighead and Howard Humphreys, 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 290 093) may receive consultancy fees and commissions on sale and purchase of the shares of Horseshoe Metals Ltd and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

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