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CHAIRMAN'S ADDRESS TO 2014 HAOMA MINING NL ANNUAL GENERAL MEETING By Gary Morgan, November 27, 2014

#### Welcome to the 2014 Annual General Meeting of Haoma Mining NL.



**Figure 1**: Location map of Haoma Mining and other Pilbara mining locations

Today I am pleased to be able to meet with shareholders to present and discuss Haoma's activities over the last 12 months and outline our intentions over the next 12 months.

### Haoma's Research and Development

Our latest findings were released to shareholders (via the ASX) on November 19, 2014. <u>http://www.haoma.com.au/2014/1386692.pdf</u>

The findings are really important because:

- The Elazac Gold Extraction Process now uses a non-standard combination of traditional methods to recover physical gold and silver (and a separate precious metal concentrate), and
- Costs are expected to be similar to current traditional leaching and smelting methods.

Haoma's success involves 'parting', or separating, precious metals from poly-metallic ores and concentrates which contain significant quantities of Si, Fe, Mg, Ca, Al and to a lesser extent Ni, Ti, Cr, etc.

Mineral	%
SiO <sub>2</sub>	47
MgO	24
Fe <sub>2</sub> O <sub>3</sub>	14
CaO	7
$Al_2O_3$	5.5
K <sub>2</sub> O, NiO, Cr <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , ZrO <sub>2</sub>	Each between 0.2% and 0.7%

#### Table 1: Mineral analysis of Bamboo Creek Tailings



There have been huge advances in knowledge about micro-metallurgy and polymetallic nanoparticles. Scientific papers were published earlier this year by a group of Russian scientists. So the 'science' around **why precious metals in Pilbara ores can't be assayed, using traditional methods, is now fairly well understood.** 

However, to the best of our knowledge Haoma, with the Elazac Process, is the first to 'crack' assaying and extracting precious metals from these ores.

And the process to extract the precious metals is 'novel' or as I just said -a non-standard combination of traditional methods.

The following example of gold recovery by fire assay was published in Haoma's 2014 Annual Report. <u>http://www.haoma.com.au/2014/HaomaAnnualReport2014Complete.pdf</u>

It shows 0.02g of gold was recovered from a 200g sub-sample of Bamboo Creek Tailings using the Elazac Process followed by a traditional fire assay. The 0.02g of gold from 200g equates to a gold grade of 109g/t gold. (Platinum Group Metals grades measured in the sample were: Pt 8.4g/t and Pd 4.1g/t.).



**Figure 2**: Gold recovered (0.02g from 200g sample) from assaying a sub-sample of Bamboo Creek Tailings using the Elazac Process followed by a traditional fire assay.

In summary, Haoma's latest gold extraction results confirm previous assay findings – that is we are able to 'get the gold out' not just measure it! (See Appendix 1)



Figure 3: Haoma Mining's Pilbara tenements

## **Next Steps**

## **Bamboo Creek and the Pilot Plant**

The Bamboo Creek facilities will continue to be used as a Pilot Plant. We have been conducting bulk sample tests – mainly in the order of 2kg to 10kg lots, we are currently processing a 500kg bulk sample.

There are approximately a million tonnes of Bamboo Creek Tailings available to be processed. We have begun making minor changes to the Bamboo Creek Plant so processing of Bamboo Creek Tailings can be steadily increased to at least 400 tonnes per day.

### Normay Mine and Haoma's surrounding Mining Tenements

At the same time we plan to re-commission our Normay Mine facilities so as to begin processing nearby available ore such as at North Shaw and Mickey's Find. At Normay we have 'Vats' with a capacity to hold 100,000 tonnes of ore.

### Mt Webber

Atlas Iron has so far defined reserves of 22 million tonnes of iron ore in the Daltons Mt Webber JV tenement. If the value of the precious metals is greater than that of iron, Haoma has the right to mine those precious metals. Recent tests show recovered gold grades from Mt Webber iron ore are expected to be in excess of 1 ounce per tonne (Table 2 below).

The gold and silver will be recovered from a concentrate (Col.1 below) which will be approximately 25% of the available iron ore which can be mined from the Dalton's Mt Webber JV tenement.

# Table 2: Mt Webber Precious Metal Assays, October 2013

http://www.haoma.com.au/2014/Haoma\_ASX\_Jan31\_2014.pdf

	Mt Webber Precious Metal Assays	
Gold/Silver &	Concentrate	Mt Webber ore
PGM grades	28.2% of ore	'Head grade'
	g/t	g/t
Gold	102, 151	36
Silver	38, 42	11
Platinum	1,060	291
Palladium	410	116
Total gold/silver &		
Platinum Group Metals	1,470	454

<u>Note:</u> The sample was 2kg of Mt Webber ore from drill holes. Platinum Group Metals assays conducted by a Vale laboratory.

# <u>The Future:</u>

The 'new age' of micro-metallurgy will have a significant impact on existing mining operations. It will ensure for the future the sustainable provision of essential metals for an increasing world population – at very competitive costs to existing operations.

The influence of micro-metallurgy on the mining industry will be no less important than the development of floatation at Broken Hill in the early part of last century.

Haoma is now well placed to find a major partner. Australian mining companies have made significant production efficiency gains over the last few years using improved mining methods, ground transport and shipping logistics.

However apart from Haoma few, if any, Australian miners have implemented changes using new 'scientific' technology.

Mining of metals, not just iron ore, needs to be on larger scales. Processing followed by smelting adds significant value. This needs to take place at Australian mine sites – not thousands of miles away.

The recent fall in iron ore, coal and gold prices is of concern to all mining companies and their shareholders.

The 'game' has changed – we believe these companies will be looking for new strategic options – and will be open to the opportunities Haoma has to bring. Gold credits would be a welcome relief!

There has been a slow or maybe incredulous recognition of the advances we have made at Haoma but there is now a much increased interest in our achievements – some major iron ore miners have already had discussions with us.

### **Acknowledgements**

Finally, the Board wishes to acknowledge and express its appreciation to all those who during the last year have contributed to the company's activities in the Pilbara and Ravenswood Districts. In particular, the Board's thanks go to Mr. Peter Cole, Prof. Peter Scales, Mr. Hugh Morgan and other consultants who have contributed to help Haoma solve the gold assay problem with Pilbara ores; and the extraction of gold, Platinum Group Metals and other metals from Pilbara ores.

The Board also acknowledges the significant efforts of those personnel working at the remote Bamboo Creek and Ravenswood Districts. These people include Tristin Cole, Lee Cotton, Katie McCosker, Tim Jaques, Garry Deas and geologists David Mellor and Espen Knutsen; Trevor Corrigal, Sharlene Dalton and Daniele Specogma at the Comet Gold Mine and Tourist Centre, Geoffrey Myers at the Normay Gold Mine and Sue Kennedy and Margaret Hancock at Ravenswood.

Many Moreys

Chairman, Haoma Mining NL

#### Appendix 1: Test Results:

On September 26, 2014 Haoma announced to the ASX that Bamboo Creek and Mt Webber samples processed at CSIRO measured significant gold and silver grades. http://www.haoma.com.au/2014/Haoma\_ASX\_Sep26\_2014.pdf

Tests were completed at **CSIRO** using **conventional mining equipment and traditional assay procedures** to process 500g samples of Bamboo Creek Tailings, Mt Webber RC Drill Chips and two other ore samples which contain similar mineral 'signatures' (Si, Fe, Mg, Al, Ca and low grade Ni, Cr) as Bamboo Creek Ores (See Table 1: Mineral Analysis of Bamboo Creek Tailings). The two other ore samples tested at CSIRO returned similar gold and silver results.

Table 3:The following gold 65.29g/t, silver 93.03g/t grades were measured in the Bamboo<br/>Creek Tailings sample.

Bamboo Creek Tailings Calculated 'Head' Grade		
Precious		
metal	g/t	
Au	65.29	
Ag	93.03	
Pt	2.16 *	
Pd	6.34 *	

\* Final (total) grades for Platinum Group Metals (PGM) have not yet been determined.

Table 4:The following gold 24.19g/t and silver 85.52g/t grades were measured in the<br/>Mt Webber RC Drill Chips sample.

Mt Webber RC Drill Chips Calculated 'Head' Grade		
Precious metal	g/t	
Au	24.19	
Ag	85.52	

The gold and silver grades above are similar to results released in <u>Haoma Mining's June 2014</u> <u>Quarter Activities Report http://www.haoma.com.au/2014/Haoma Qtrly\_Q4\_Jun14.pdf</u> and <u>August 13,</u> <u>2014 Test Work Update http://www.haoma.com.au/2014/Haoma\_ASX\_Aug13\_2014.pdf</u>.

Shareholders were then advised of significant gold, silver and Platinum Group Metals (PGM) grades in Bamboo Creek Tailings and Mt Webber RC Drill Chips using **traditional assay methods** after the Bamboo Creek Tailings and Mt Webber RC Drill Chips had been treated by the Elazac Process. Final (total) grades\* for Platinum Group Metals (PGM) have not yet been determined.