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# GARY MORGAN CHAIRMAN'S ADDRESS TO 2018 ANNUAL GENERAL MEETING THURSDAY, NOVEMBER 29, 2018



**Figure 1a: Location map of Haoma Mining Pilbara mining locations.** 



Figure 1b: Overview of Other Pilbara mining locations.

# Welcome to all Haoma Mining shareholders.

There is good news - over the last few days we have been processing through the Bamboo Creek Plant 'scree and alluvial' material from the Bamboo Creek Valley and producing gold nuggets and gold concentrate which will result in a gold grade of more than 1g/t.

Before discussing the issues relating to Haoma's unfortunate and protracted dealings with Atlas Iron, I want to present to shareholders a summary of all of our activities over the last 12 months on the following:

- 1. Haoma test-work with Bamboo Creek Tailing, 'scree & alluvial' material and low grade Mt Webber iron ore
- 2. Processing bulk samples of Bamboo Creek 'scree & alluvial' material through the Bamboo Creek Plant
- 3. Haoma's Conglomerates activities in the Pilbara
- 4. Haoma Mining's Mt Webber Agreement with Atlas Iron
- 5. Elazac Quarry at Cookes Hill
- 6. Haoma's activities in the Ravenswood District in Queensland
- 7. Trading Haoma Mining shares

# 1. <u>Test Work at Bamboo Creek Pilot Plant (Latest results in red, previous in blue)</u>

On August 8 and November 1 2018 Haoma released Activities Report updates on test work being conducted at the Bamboo Creek Plant processing different bulk samples (about 10kg each) of **Bamboo Creek Tailings and 'low grade' Mt Webber iron ore** (using the Elazac Process).

Over the last 5 weeks Haoma's consultants in both Melbourne and Bamboo Creek have been successful in **recovering physical gold bullion after smelting samples of**:

• 'low grade' Mt Webber iron ore (sample 10kg), and

• the fine fraction of that low grade ore (a '<100 micron fraction' screened from a 5.746 tonne sample of 'low grade' Mt Webber iron ore) – the fine fraction ('<100 micron fraction') was 24% of the 'low grade' Mt Webber iron ore processed.

**'Precious Metal Concentrates'** were recovered and then smelted at the **Bamboo Creek Laboratory** and **Siltech** PMR Pty Ltd (a precious metal refinery located in Melbourne with over 30 years of refining experience) to produce precious metal bullion.

Below are the 'results to date' – none of the tests are finished, i.e. more physical gold is expected to be recovered:

- 1) **Bamboo Creek Laboratory** recovered precious metal bullion (99.26% gold by XRF at Bamboo Creek, see sample shown in Table 1a following) from 'low grade' Mt Webber iron ore which equated to a 'head grade' of 2.79 g/t gold recovered from 'low grade' Mt Webber iron ore so far processed.
- 2) Siltech recovered precious metal bullion (76.60% gold by XRF, 82.01% gold by XRF at Bamboo Creek see sample shown in Table 1b following) from Mt Webber '<100 micron fraction'. This equated to a 'head grade' of 6.73 g/t gold in the '<100 micron fraction' from 'low grade' Mt Webber iron ore so far processed, and</p>
- 3) Siltech conducted a repeat test with some refinement which recovered a much larger quantity of precious metal bullion from Test 2. Gold grades were fairly similar (80.65% gold by XRF, 90.96% gold by XRF at Bamboo Creek average of two samples shown in Tables 1c & 1d following) from Mt Webber '<100 micron fraction'. This equated to a 'head grade' of 97.77 g/t gold in the '<100 micron fraction' from 'low grade' Mt Webber iron ore so far processed.

In October 2018 a repeat assay using the above method was conducted on a **Bamboo Creek Tailings Concentrate** sample which by XRF measured **3,396 g/t** gold. The repeat assay measured **2,537 g/t** gold based on physical gold recovered.

This repeat assay result was 'positive' as the **XRF result** and the **result based on physical gold** recovered were fairly similar gold grades for Bamboo Creek Tailings Concentrate; and we were about to produce significant quantities of concentrate from trial bulk ore samples from processing **Bamboo Creek 'scree** & alluvial' material through the Bamboo Creek Plant.

There are many millions of tonnes of **low grade iron ore** and **other Pilbara ores** available on Haoma's Pilbara mining tenements which can now be **economically processed through the Bamboo Creek Plant to produce commercial quantities of gold and precious metal concentrates.** 



<u>Table 1a:</u> Sample 123442 – 99.26% gold, 0.46% silver, 0.16% iron & 0.11% copper.



<u>Table 1b:</u> Sample 1232114 – 82.01% gold, 17.21% silver, 0.65% iron & 0.13% nickel.



<u>Table 1c:</u> Sample 1232108, total weight 0.01274g – 74.29% gold, 10.81% silver, 11.95% copper, 0.08 % iron, 1.62% lead.



<u>Table 1d:</u> Sample 1232109, total weight 0.06186g – 94.39% gold, 2.65% silver, 0.76 % iron, 0.16% nickel.

# 2. <u>Processing bulk samples of Bamboo Creek 'scree & alluvial' material through</u> <u>the Bamboo Creek Plant</u>

During October 2018 the Bamboo Creek Plant was commissioned so bulk trial samples of **Bamboo Creek Tailings** and **Bamboo Creek Valley 'scree and alluvial' material** could be processed.

The Bamboo Creek Valley 'scree and alluvial' material extends south-east from Nuggety Gully for approximately 10 km. The average width across the Bamboo Creek Valley is about half a kilometer – there are obviously many tonnes of 'scree and alluvial' material ore available for processing through the Bamboo Creek Plant.

# 2.1 Nuggety Gully (Bamboo Creek) Test Work

Nuggety Gully is located at the north western entrance to the Bamboo Creek Valley.

As previously advised in February 2018 an initial 18.6 tonne bulk test sample of Nuggety Gully 'scree and alluvial' material was collected.

A sample of 4.27 tonnes was then collected from the 18.6 tonne bulk sample. The 4.27 tonnes sample was processed through a Screening Plant to recover 2.13 tonnes of 'fines' (See below Figures 2a, 2b&2c).



**Figure 2a:** Photo of Bamboo Creek Range from M45/481, looking north-west towards Nuggety Gully



**<u>Figure 2b:</u>** Screening Plant and Dry Blower being tested in Nuggety Gully at Bamboo Creek.



# Figure 2c: Nuggety Gully Screening Plant.

A sub-sample of 15kg was collected from the 2.13 tonnes of 'fines'. This sample was then processed at the Bamboo Creek Laboratory.

A **concentrate** was recovered which represented approximately 1.9% of the 'fines' sub-sample processed.

XRF and the Refined Elazac Assay Method were used to measure the grade of precious metals in the recovered **concentrate**.

The following are gold and platinum grades back 'calculated' to the 'Head grade' of in the 4.27 tonne (sub-sample) of Nuggety Gully 'scree and alluvial' material processed:

#### 164.77g/t gold and 188.59g/t platinum.

The above back 'calculated' to the 'Head grade' precious metal grades measured in the Nuggety Gully bulk sample processed are much **higher** than precious metal grades measured when Nuggety Gully test work was conducted in **February** 2013.

Importantly the 'Dry Blower' tests processing Nuggety Gully 'Scree and Alluvial' Bulk Samples showed:

- Fine free gold could be recovered, and
- The gold grade of the recovered 'free gold' was 0.3g/t calculated back to the 'feed' to the 'dry blower'.

# 2.2 <u>Processing of Nuggety Gully 'Scree and Alluvial' Bulk Samples</u>

Because of the successful 'Dry Blower' trial result the Directors decided to recommission the 'gravity circuit' of the Bamboo Creek Plant to begin processing large trial bulk samples. (Obviously the gravity circuit would be more efficient and capable of processing more tonnes per hour than the 'Dry Blower').

As mentioned the Bamboo Creek Plant is now capable of processing bulk trial samples of Nuggety Gully Valley 'scree and alluvial' material at about 15 tonnes per hour. This will soon be upgraded to 30 tonnes per hour.

To date three gravity trials of bulk test samples of Nuggety Gully 'scree and alluvial' material have been conducted.

- 1. **Trial 1 processed 11.90 tonnes** and recovered gravity concentrate equating to **0.572 g/t gold** (Only the minus 0.85mm fine fraction of the feed was treated ie no larger nuggets were collected).
- 2. Trial 2 processed 125.09 tonnes and recovered gravity concentrate equating to 0.728 g/t gold (Only the minus 0.85mm fine fraction of the feed was treated ie no larger nuggets were collected).
- 3. **Trial 3 processed 42.84 tonnes** after modifications to the Bamboo Creek processing plant allowed the collection of coarse gold. To date gold has only been recovered from the coarse gravity concentrate (+0.85mm 12mm), this equates to **0.404 g/t gold**. Final recovery of the minus 0.85mm fraction is in progress. The expected **total gold grade will be greater than 1 g/t** with the addition of gold from fine concentrate recovered from the minus 0.85 mm fraction.



Figure 2d: Free gold recovered from gravity circuit.

We expect substantially more gold will be recovered from the gravity residual fraction using the Elazac Process.

#### 3. <u>Conglomerates in the Pilbara</u>

#### 3.1 Conglomerates at Comet Mine near Marble Bar

On **October 5, 2017** Haoma shareholders were first made aware that <u>Haoma's</u> tenements at the Bamboo Creek Mine, Comet Mine near Marble Bar and <u>Soansville, contain pyritic conglomerate</u> materials in the Hardey Sandstone Formations.



**Figure 3a:** Haoma Mining, Earth geology – Comet Mine near Marble Bar tenements.



**Figure 3b:** 1907 map of the Just-in-Time conglomerate showing the conglomerate's location.

On October 16, 2017 Haoma announced that bulk sampling at Just-in-Time Prospect recovered 'flat – watermelon seed-like' nuggets from conglomerates outcrop located at to the South West of the Comet Mine near Marble Bar. Other gold nuggets were also collected from conglomerate outcrop at the Tassie Queen Prospect located to the North West of the Comet Mine. (See Figures 4a & 4b which show photos of 'flat – watermelon seed-like' nuggets.)



Figure 4a: Nuggets collected from the Justin-Time Prospect to the South West of the Comet Mine, total weight of nuggets 33.167 grams



Figure 4b: Fine gold collected at the Tassie Queen Prospect to the South West of the Comet Mine, total sample weight 0.183

At the **Just-in-Time Prospect** nuggets were collected just below the surface of the conglomerate outcrop on a bulldozed bench prepared for the sampling. The bulk sampling was conducted along a 3.5m trench cut along the strike of the conglomerate and consequently is probably not indicative of the conglomerate bed gold content (Figure 5).



**Figure 5:** Channel sampling – Just-in-Time Prospect, Marble Bar.

The recovered 'flat – watermelon seed-like' gold nuggets were nearly 100% pure gold. We know this because Prof. Peter Scales (University of Melbourne) supervised the use of microprobe and other specialised techniques to measure the gold percentage in nuggets recovered; see Appendix 2 – <u>Haoma October 31, 2017</u> – Activities Report for the Quarter Ended September 30, 2017.

The nuggets recovered were similar to nugget discoveries by Novo Resources (TSX-V: NVO) and Artemis Resources (ASX: ARV) at 'Comet Well' and 'Purdy's Reward', and by De Grey Mining (ASX: DEG) at 'Louden's Patch' – 120 km from Purdy's Reward & a further 200 km from Haoma's discovery at the Comet Mine. (See Figure 1 and Figure 6 below which is a location map of Haoma Mining tenements and Pilbara conglomerate locations.)



**<u>Figure 6</u>**: Pilbara conglomerate locations including Haoma's numerous conglomerate locations



**<u>Figure 7a:</u>** Haoma Mining, Google earth – Comet Mine near Marble Bar tenements and Fortescue Group contact.



**<u>Figure 7b:</u>** Haoma Mining, Google earth – Comet Mine near Marble Bar tenements that contain Conglomerate Materials in the Hardey Sandstone Formations.

#### 3.2 <u>Negotiations with New Frontier Exploration (NFX) Pty Ltd</u>

Haoma has agreed with New Frontier Exploration (NFX) Pty Ltd that they will in early 2019 jointly begin trial bulk ore sampling from targeted high grade outcropping Pilbara conglomerates. The trial bulk Pilbara conglomerate ore parcels will be processed using the crushing and gravity circuit at Haoma's Bamboo Creek Plant.

New Frontier Exploration will contribute towards the Bamboo Creek Plant startup costs and pay Haoma's operating cost of processing New Frontier Exploration bulk ore parcels.

Haoma and New Frontier Exploration propose to work towards the development of a partnership or joint venture on a commercial scale covering exploration, mining and processing of Pilbara conglomerate ores from both New Frontier Exploration tenements and Haoma's tenements.

# Direct pathway to trial mining: Haoma and NFX



Haoma is a well-funded Pilbara precious metal explorer/producer with more than 30 years history in the Pilbara.

Haoma's Chairman, Gary Morgan, has been the driving force behind the vision to establish Haoma as a major Pilbara gold exploration and mining company.

Partnership with Haoma allows NFX use of the Bamboo Creek processing plant for crushing and gravity separating trial parcels of conglomerate ore from NFX held tenements and Haoma's granted exploration and mining tenements.

NFX and Haoma expect to conclude a partnership agreement and commence trial mining on time for the 2019 field season.

This partnership brings together complementary assets and skills, allowing both Haoma and NFX to advance to trial mining rapidly.





# <u>Figure 8:</u> Gold Nugget occurrences proven or potentially derived from conglomerate

#### 3.3 Callina Creek Conglomerate (P45/2986)

Callina Creek is situated about 40kms south west of Marble Bar and lies between Haoma's Comet Mine near Marble Bar and Soansville tenements. Tenement P45/2986 covers several older mining leases which have no recorded production.

It has previously been reported that fine gold and course gold has been recovered from Callina Creek conglomerate outcrop under the base of Hardy Sandstone Formation, see Figure 9 and 10 below.



Figure 9: Callina Creek (P45/2986) prospect location map



**<u>Figure 10:</u>** Cross-Section of Callina Creek conglomerate overlaid by Hardy Sandstone Formation

The **Callina Creek Conglomerate** is about 3m-10m thick, examples are shown below in Figures 11a & b.

The conglomerate matrix potentially contains significant quantities of sulphides and associated gold ranging in size from fine to very coarse. The fine-grained gold is believed to be within the fine grained quartz and banded iron formations with the coarse grained gold occurring in conglomerates typically only recovered by bulk samples. A detailed mapping and focused bulk sampling program is planned in the next 6 months to evaluate the conglomerate gold potential.





Figure 11a & b: Conglomerate at Callina Creek

# 4. <u>Haoma Mining's Mt Webber Agreement with Atlas Iron (now 100% owned</u> <u>by Hancock Prospecting Pty Ltd)</u>

Haoma's Directors are pleased Hancock Prospecting Pty Ltd now own 100% of Atlas Iron Limited.

From 2002 to April 2012 Haoma and Giralia Resources worked together with the Daltons JV.

Since April 2012 Haoma and Atlas continued the **Daltons JV** and the **Atlas & Haoma Tenement and Royalty Agreement** covering both the Mt Webber Mining Lease 45/1197 and nearby tenements including E45/2922. Details are shown in Figure 12 & 13 below.

The Mt Webber Mine on lease M45/1197 was officially opened by Atlas on July 15, 2014 after mining had commenced in December 2013 (See Figure 13 below).

During the last few years Atlas had financial problems. Although required during this period Atlas Directors and Management did not advise Haoma of all geological data and assay results from Giralia JV tenement Mt Webber mining lease M45/1197 or surrounding Daltons Joint Venture tenements under E45/2922, as would normally be expected.



**Figure 12:** Haoma Exploration tenement E45/2922 and other Haoma tenements showing North Shaw copper/gold mine, Spear Hill tin/tantalum mine, Soansville nickel/gold area (near Kingsway) and Atlas' Mt Webber iron ore mining lease M45/1197

In August 23, 2010 Haoma shareholders were advised the 'indicated' and 'inferred' reserve estimate prepared by Giralia Mineral Resource for the Mt Webber deposit.

The information provided showed **28,900,000 tonnes** were the 'indicated' reserves for the Mt Webber main 'Southern Zone'. Also shown were the 'inferred' reserves of **4,300,000 tonnes** for 'Lower Zone' and **1,900,000 tonnes** for the Northern Zone'.

Area	Category	Vol (m <sup>3</sup> )	Tonnes	Fe%	P%	SiO2%	Al2O3%	LOI%	CaFe%
Main Southern Zone	Indicated	10,300,000	28,900,000	57.9	0.097	6.69	1.49	8.17	63.05
Lower Zone	Inferred	1,500,000	4,300,000	53.7	0.046	15.29	0.81	6.50	57.43
Northern Zone	Inferred	700,000	1,900,000	55.0	0.070	8.10	3.24	8.52	60.12
TOTAL		12,500,000	35,100,000	57.2	0.089	7.81	1.50	7.99	62.16

Table 2: Mineral Resource Estimate – Mt Webber Dalton Deposit, Aug. 23, 2010

<u>Note:</u> The above CSA Mineral Resource was estimated within wireframe solids based on a nominal lower cut-off grade of 50% Fe. The resource is quoted from blocks above the specified Fe % cut-off grade. Differences may occur due to rounding.



**Figure 13:** Mt Webber Mineral Resource Image – as at August 23, 2010

In April 2012 Haoma sold its Mt Webber Dalton iron ore rights to Atlas Iron Limited. The Sale Agreement covered **24 million tonnes** of iron ore with Haoma's entitlement under the agreement for a royalty today of approximately \$1.57 for each additional tonne as a 'Dalton Reserve Uplift Payment'<sup>1</sup>.

The payment entitlement is 'triggered' when Mt Webber Dalton reserves are upgraded to be above 24 million tonnes. That is, reserve 'development work' on the Mt Webber tenements, which were subject to the Sale Agreement (E45/2186 and M45/1197), results in Atlas Iron releasing an announcement to the ASX of a JORC compliant iron ore reserve in excess of 24 million tonnes inclusive of any iron ore tonnes previously mined.

# To date the Atlas Mt Webber reserve estimate covers only the upper Main Southern Zone of the Mt Webber deposit. The lower Main Southern Zone and the Northern Zone have not been included in the reserve estimate.

<sup>&</sup>lt;sup>1</sup> The uplift payment per 'Excess Reserve' was \$1.38 per tonne. That amount is indexed by CPI from March 23, 2012. (Today the royalty is about \$1.57 per tonne.)



FIGURE 12.1. STRATIGRAPHIC UNIT AT GIBSON - DALTONS (SECTION 7617450N, LOOKING NORTH)

Figure 14: Atlas Iron Cross Section of Mt Webber (looking north)



Figure 15: M45/1209-1 areas currently being mined by Atlas Iron

Under the Dalton's Tenement Sale Agreement, Haoma was granted the right to access and explore for 'other minerals' within Mining Lease M45/1197.

If Haoma subsequently identifies a JORC Compliant Resource of a mineral other than iron within the Designated Area and Haoma proposes development of this resource then the parties to the Agreement must confer to discuss whether development of the resource can be achieved without any adverse impact on the iron ore activities.

If the parties are not able to reach agreement as to how potential conflict of activities may be resolved then the conflict will be resolved in favour of the activity with the higher Assessed Economic Value.

In my February 2018 Chairman's Address I advised Haoma shareholders that the Directors were concerned that they believed Atlas had not correctly advised Haoma regarding the reserves at Mt Webber.

On July 5, 2018 Atlas sent Haoma a copy of a draft E45/2922 Extension of Term ('EOT') application that Atlas had prepared for the Western Australia Department of Mines. The draft EOT was never completed or filed by Atlas.

The Atlas July 5, 2018 draft EOT included some information on exploration conducted by Atlas during 2013 & 2014 which **Haoma was not made aware of before July 5, 2018**.

Haoma **was aware** that Atlas had been granted a 5 year extension for E45/2922 (granted on September 5, 2013) and during 2013-2014 had drilled some RC holes on E45/2922 resulting in relatively low iron ore grades. (See Table 3 below)

However Haoma was **not aware** that in total 132 angled RC drill holes were drilled including 123 RC holes on Atlas's nearby Mt Webber iron ore Mining Lease M45/1197.

In August 2014 Haoma was advised of results from the nine (9) RC holes for 794m drilled in the north eastern section of Licence E45/2922. (See Figure 16) Highest iron ore grade measured was 59.15% Fe (MWRC1249) (See Table 3).

# However Haoma did not become aware until October 5, 2018 that during 2014 Atlas drilled an additional 123 RC holes on M45/1197 (See Figure 16).

Haoma's concerns regarding Atlas & Mt Webber as covered in correspondence and meetings with Atlas executives are clearly outlined in the Haoma Mining NL <u>'Activities Report to Shareholders 3 Months Ended September 2018. November 1,</u> <u>2018'</u>



Figure 16: Drill hole and sample locations on E45/2922 & M45/1197

					Max Fe
Hole ID	Elevation	Easting	Northing	Depth	%
MWRC1245	408.17	737924.53	7618527.89	118	50.77
MWRC1246	401.71	737993.42	7618488.46	98	58.89
MWRC1247	405.71	737864.40	7618423.73	64	39.05
MWRC1248	410.85	737833.53	7618446.56	88	54.97
MWRC1249	392.27	737803.79	7618321.29	84	59.15
MWRC1250	394.19	737775.66	7618339.40	64	51.47
MWRC1251	410.59	737888.19	7618549.10	82	41.84
MWRC1252	404.93	737957.30	7618508.92	94	56.7
MWRC1253	396.94	738027.74	7618469.25	102	53.65

Table 3: E45/2922 May/June 2014 Atlas RC drilling results

In addition not until July 5, 2018 was Haoma made aware of other information relating to exploration and other activities by Atlas involving E45/2922 (Giralia Joint Venture, Atlas 75%/Haoma 25%) and nearby Mt Webber mining lease M45/1197. Haoma is today entitled to a royalty of about \$1.55/tonne when the Mt Webber JORC compliant iron ore reserve is in excess of 24 million tonnes inclusive of any iron ore tonnes previously mined from M45/1197. (Refer to Appendix 1 & 2 attached to the Haoma Mining 'Activities Report for the Quarter Ended September 30, 2018'

https://arc-haoma.s3.amazonaws.com/uploads/2018/11/Haoma-Mining-NL-Activities-Report-to-Shareholders-3-Months-Ended-September-2018.-November-1-2018\_-1.pdf)

Included with the information received from Atlas on July 5, 2018 and later (last data received October 4, 2018) were results from a large number of 'rock chip' samples Atlas collected during 2013 & 2014 on E45/2922 & M45/1197. See Haoma Mining 'Activities Report for the Quarter Ended September 30, 2018'

Since October 16, 2018 Haoma's Directors have requested a meeting with Sanjiv Manchanda Chief Executive Officer, Atlas Iron, now 100% owned by Hancock Prospecting. To date no time for a meeting has been provided.

Haoma's future focus is to work with Atlas and define low to medium grade iron ore deposits in E45/2922. Then Haoma will use the **Elazac Process to measure and then extract significant quantities of precious metals (gold & platinum group metals, PGM) from these deposits.** 

# 5. Elazac Quarry, Cookes Hill (M45/1186)

For 10 years from 2007 **Haoma's Elazac Quarry located about 50km south of Port Hedland** was operated by BGC Contracting Pty Ltd to supply dolerite for Pilbara infrastructure construction including new airstrips, railway lines and roads.

In February 2015 BGC Contracting put the Quarry on 'care and maintenance'. The contract to operate the Elazac Quarry expired in 2017 and was not renewed by BGC.

# Haoma now controls the Elazac Quarry and at present is working with Brookdale Contractors to 'rehabilitate' M45/1186.

Total sales of Elazac Quarry dolerite (**which has low silica content**) at \$5 per tonne and other 'hard rock' for the year ended June 30, 2018 was \$323,571.

During July to November 2018 approximately 16,000 tonnes of dolerite and other 'hard rock' were removed from M45/1186 and sold. This will provide Haoma with revenue of about \$80,000.

In November 2018 Haoma was advised by Brookdale Contractors that they had been awarded a contract to supply 60,000 tonnes of dolerite to Mineral Resources for the Wodgina airstrip. The contract will be supplied during the first half of 2019 which should result in at least \$300,000 revenue from the Elazac Quarry to Haoma.

Because of the recent increase in Pilbara activities Brookdale Contractors have received enquiries for significant quantities of dolerite from the Elazac Quarry which has low silica content.

Directors expect considerable additional sales of dolerite from the Elazac Quarry over the next few years. See Appendix 1 – Cookes Hill Geology.

# 6. <u>Activities in the Ravenswood District, Queensland</u>

# Copper Knob (ML 1330) and Wellington Springs (ML 1415)

During the September Quarter Haoma's mobile crushing plant was installed and commissioned. Test bulk samples from Haoma's Ravenswood Copper Knob lease were processed. Crushing and sizing of test parcels from Haoma's Copper Knob lease **ML 1330** was conducted.

The expected outcome of test work is to establish the process of recovering a concentrate from which it is commercially viable to extract precious and other metals. It is known that the Copper Knob and Wellington Springs leases are polymetallic in nature. See Table 4 below.

In addition extensive sampling was conducted at Wellington Springs and from the Wellington Springs Tailings Dam.

All samples are at Bamboo Creek and will be assayed during the current Quarter.

![](_page_22_Picture_2.jpeg)

**Figure 17:** Haoma's Ravenswood Mobile Crusher being tested during commissioning at Copper Knob (ML1330)

During the next six months, bulk ore samples will be recovered from Haoma's other Ravenswood leases (see below) then crushed and screened by size for confirmation that ore gold grades can be successfully upgraded when sorted by 'ore size'.

ML 1325 – Eight Mile, Budgerie	ML 1529 – Waterloo
ML 1326 – Old Man	ML 10315 – Podosky's
ML 1415 – Wellington Springs	EPM 14038 – Robe Range
ML 1483 – Wellington Springs No 2	EPM 17832 – Robe Range East
ML 10275 – Elphinstone One	EPM 8771 – Barrabas

Table 4 below shows the estimated resources of Haoma's Ravenswood tenements ML1330 (Copper Knob), ML1326 (Old Man), ML1529 (Waterloo), ML1415 (Wellington Springs) and ML10315 (Podosky's).

Table 4: Ravenswood Tenement	t Exploration Data	Summary
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Prospect	Deposit Category	Tonnage estimate	Au (g/t)	Ag (g/t)	Cu (%)	Av. Depth (m)	Calculation Date		
1. ML1330 - Copper Knob									
Copper Knob	Measured	620,000	1.04	7.6	0.19	60	Estimate dated October 21,		
	Indicated	960,000	0.74	3.1	0.08	60	1999 was prepared under the		
	Inferred	580,000	0.74	2.8	0.09	60	supervision of Mr Jeremy		
Total for ML1330		2,160,000	0.83	4.3	0.12	60	Peters, a competent person under the JORC Code.		
a) Main Ser b) Oblique n grade-low c) Massive s recover A	<ul> <li>Copper Knob ore displays three differing characteristics:         <ul> <li>Main Sericite Shear zone – 2 to 6m wide, locally wider- grade +/- 2g/t Au.</li> <li>Oblique mineralised quartz veins (generally &lt; 100mm) with sulfides-hosted by granodiorite (high grade-low tonnage).</li> <li>Massive scorodite rich silicified pods with local breccia (around 4-5 g/t Au), maybe difficult to recover Au</li> </ul> </li> </ul>								
2. ML1326 - Old N	24,000 (100,000)	6.8 (3.4)				Non-JORC compliant, in-house estimation			
Old Man Resource Description Drilling has delineated a small high grade Au-Cu-Ag deposit near surface that could be developed rapidly as the prospect lies on a granted mining lease. Results of a ground magnetic survey suggest that another zone of mineralisation may exist to the south of the area currently tested by shallow drilling. This magnetic feature appears to be identical to that lying above the known mineralisation, the two areas being separated by a prominent east-west trending structural low that is thought to relate to a late stage carbonate rich dyke like body or yein stockwork.									
3. ML1529 - Wate	erloo								
Waterloo Lode	Inferred	57,000	2.78	25.7	0.55	40	Estimate dated October 1998		
Kirk Lode	Inferred	71,000	2.67	26.8	0.50	40	supervision of Mr Jeremy		
Silver Valley Lode	Inferred	14,000	1.23	13.0	0.17	40	Peters, who is a competent person under the JORC Code		
Total for ML1529	142,000	2.57	25.0	0.49	40				
Waterloo Resource Description           A number of gold reefs in the Charters Towers - Ravenswood district show enhanced gold grades at these depths (Hadleigh Castle and Sisters Gold deposits). The mineralogy (zeolites) and ore textures on the									

depths (Hadleigh Castle and Sisters Gold deposits). The mineralogy (zeolites) and ore textures on the Waterloo lodes suggest that they are formed at relatively low temperatures consequently gold deposition may be focused at greater depths where the formation temperatures were higher, further supported by the proximity to the Kirk Range Intrusive Complex.

Prospect	Deposit Category	Tonnage estimate	Au (g/t)	Ag (g/t)	Cu (%)	Av. Depth (m)	Calculation Date			
4. ML1415 - Welli	. ML1415 - Wellington Springs									
Open Cut ore	Inferred	112,000	3.01	58.0		40	Estimate dated October 17, 2000 was prepared under the			
Tailings Dam	Measured	18,500	1.25	22.8			supervision of Mr Jeremy Peters, who is a competent			
							person under the JORC Code			
Aeromagnetic da high. A small in Sarsfield deposit preferably near th	Aeromagnetic data indicates that the Wellington Springs mineralisation is adjacent to a localized magnetic high. A small intrusive body may be present at depth and is considered a similar setting to the Nolans - Sarsfield deposit. Deeper drilling on this site is required to test the nature of the underlying intrusive, preferably near the intersection with the main lode. Some low grade tailings remain on site.									
5. WIL10515 - 1 000	JSKY 5									
Podosky's South	Indicated /	21,199	5.71	9.40	-	55	Estimate was prepared in			
Lode	Inferred						September 2003 by Mr Guy			
	Inferred	10,709	5.41	11.6	-	55	Booth who is a competent			
Podosky's	Inferred	9,342	7.83	3.33	-	55	person under the JOKC Code			
North Lode										
Total for ML10315		41,250	6.11	8.60	-	55				

# 7. <u>Trading in Haoma Mining NL shares</u>

Following removal from the ASX Official List in February this year Haoma's Directors sought an alternative market platform for transacting buying and selling in Haoma shares.

In May Haoma established a share trading 'ecosystem' with PrimaryMarkets. All shareholders can access this ecosystem and either submit some or a parcel of their shares for sale at a nominated price or register their offer to purchase shares at their buy price.

All buy and sell offers are displayed in the ecosystem for buyers and sellers to view.

The link to the **PrimaryMarkets** ecosystem is provided daily in ABIX and is also available from Haoma's website.

https://www.primarymarkets.com/custom/haoma/trade-notices

![](_page_25_Picture_0.jpeg)

Haoma's Directors expect funds generated from processing different Pilbara ores through the Bamboo Creek Plant will more than cover operating costs over the next 12 months. Obviously Haoma wishes to do more than cover operating costs.

The Directors are considering different joint venture and fund raising alternatives and have approved placing up to 10 million Haoma shares at 30 cents a share with new investors if the Directors decide this is the best alternative.

If a shareholder wishes to increase their holding by subscribing to a placement of Haoma shares then I would be pleased to outline in detail our plans for which the additional funds would be used.

Yours sincerely

Many Morego

**Chairman,** Haoma Mining NL, November 29, 2018

# **Appendix 1: Cookes Hill Geology**

# Haoma's Cookes Hill Gold Deposit:

The Cookes Hill gold deposit was discovered in 1999 and is situated near the Elazac Quarry.

Haoma's tenements in the region are prospective for significant quantities of gold (Au), silver (Ag) and platinum group element (PGE). The primary prospective zone near the Elazac Quarry is referred to as Cookes Hill Prospect lying on the Mallina Shear Zone, a north east trending structure that was the subject of an extensive drilling program between 1999 and 2001. Drilling intersected shallow, gold mineralisation resulting in resource estimates of (1.3g/t Au) of approximately 50,000 to 60,000 ounces.

![](_page_26_Figure_4.jpeg)

# Figure 1: Geological Map with drilling locations near Cookes Hill and Elazac Quarry

The Elazac Quarry area comprises a dolerite-hosted quartz stockwork style of mineralisation. It has been the subject of extensive soil sample surveys, three shallow Rotary Air Blast (RAB) programs and one deep RC drilling program, together with interpretation of geological, air magnetic and satellite data. The interpretation of this data clearly shows that the gold lies on a northeast trending fault which forms a splay off the major Mallina-Mt Dove shear.

Additional soil sampling delineated a gold anomaly over a strike length of 2.6 kilometres and RAB drilling gave highly anomalous intersections (up to 1.3g/t Au) along the discovery line of 19 consecutive vertical holes drilled at 10 metre intervals. Subsequent angle hole RAB drilling confirmed the presence of a broad

(150m wide) gold mineralised, highly sulphidic quartz stockwork system extending for 300 metres along the strike of the dolerite dyke. The RC drilling indicated that the mineralisation is open at depth below 100 metres. (Figure 2 and Figure 3).

![](_page_27_Figure_1.jpeg)

**<u>Figure 2:</u>** Cookes Hill Gold deposit defined by drilling (source Taff Davies, 2001)

![](_page_27_Figure_3.jpeg)

**<u>Figure 3</u>**: Cookes Hill Gold deposit defined by drilling showing location of deposit relative to tenements (source Taff Davies, 2001)

Based on the current drilling, the Cookes Hill deposit is estimated to contain approximately 50,000 ounces of gold to a depth of 100 metres. Initial metallurgical tests show that the gold is not refractory, and most is recoverable by cyanidation after fine grinding of the ore which may increase with the use of the refined Elazac process. Although the Cookes Hill gold deposit appears constrained to within the intrusion at this location, the controlling structure continues without interruption to the south-west where soil geochemical anomalism greater than 2ppm Au is present. This gives significant encouragement that the deposit may extend at depth to the south-west and north of the Elazac Quarry.

Hole ID	From	То	Interval	Grade
	( <b>m</b> )	( <b>m</b> )	(m)	(g/t Au)
CHRC19	38	40	2	5.47
CHRC19	60	62	2	1.36
CHRC19	68	70	2	1.00
CHRC20	38	40	2	1.75
CHRC20	56	58	2	14.80
CHRC15	18	22	4	1.23
CHRC16	38	40	2	0.96
CHRC17	72	74	2	3.95
CHRC18	18	20	2	1.92
CHRC3	72	74	2	1.48
CHRC3	112	120	8	2.43
CHRC3	108	124	16	1.62
CHRC2	26	28	2	1.31
CHRC2	124	128	4	1.33
CHRC1	8	10	2	1.65
CHRC1	44	46	2	1.10
CHRC14	4	6	2	2.18
CHRC14	48	50	2	2.14
CHRC5	16	26	12	2.02
CHRC5	76	88	12	2.32
CHRC6	2	4	2	3.96
CHRC6	8	12	4	1.11
CHRC6	26	28	2	1.56
CHRC6	40	64	24	1.41
CHRC4	4	6	2	1.71
CHRC4	30	32	2	1.63
CHRC4	90	102	12	1.72
CHRC4	126	128	2	1.80
CHRC9	34	36	2	1.03
CHRC9	62	64	2	2.10
CHRC9	110	112	2	1.50
CHRC9	116	130	14	1.79
CHRC8	10	34	24	1.28
CHRC8	68	70	2	2.15
CHRC8	80	96	16	1.21
CHRC7	26	28	2	1.16
CHRC7	34	48	14	1.22
CHRC12	20	22	2	2.98
CHRC10	6	10	4	1.20
CHRC10	32	42	10	1.00
CHRC11	38	40	2	1.00

Table 1 below shows the significant RC drilling results greater than 0.9g/t Au over at least 2m intervals.

**Table 1:** RC Drill Hole results where Au g/t > 1.0

In addition to the above the recent geological studies have shown the potential for **conglomerates** to lie beneath the Malina Formation unit containing mineralisation which has not been tested. The Malina Formation is interpreted to be an interbedded medium to fine grained siltstones and sandstones is deeper than the 2001 RC drilling program intersected. Despite being a significantly harder rock unit Haoma believes with further sampling followed by drilling may add significant additional gold resources.

![](_page_29_Figure_1.jpeg)

Figure 4: Cookes Hill Geology Map