

#### A.B.N 12 008 676 177

# CHAIRMAN'S PRESENTATION TO SHAREHOLDERS By Gary Morgan, Tuesday March 21, 2023



**<u>Figure 1:</u>** Location map of Haoma Mining's Pilbara exploration and mining tenements and locations of Pilbara ores used in Haoma's test work.

# Welcome to all Haoma Mining shareholders

# 1. Haoma's Outlook for the next 12 months

Today's AGM is important to Haoma's Directors as we can express our thanks to all those who have over many years helped Haoma. But first I want to highlight our important achievements.

# Haoma has remained singularly minded and focused on the Elazac Process which can extract gold bullion or produce gold concentrates which also contain significant quantities of PGM, Rare Earths and Strategic Minerals from Pilbara ores.

Test work over the last 12 months on Pilbara ore samples and concentrates (which used a combination of wet beneficiation and magnetic separation) **made it possible for the Elazac Process to produce from Pilbara ores gold bullion and gold concentrates.** Gold concentrates from Bamboo Creek and Soansville ores combine with nickel, while gold concentrates from Mt Webber ore combine with iron and Spear Hill ores combine with Rare Earths and Strategic Metals.

That's really important!

#### As most of you know, measuring gold in Pilbara ores is incredibly difficult.

Laboratories throughout the world using traditional fire assays and aqua regia/acid assays of Bamboo Creek Tailings and samples from most Pilbara ores have failed to measure the gold with any level of accuracy – instead returning readings of zero gold or low gold grades (we suspect, Russia and China know how to assay and are recovering the gold).

We have plenty of examples of traditional assays by laboratories in Australia, UK, USA and South Africa underestimating gold grades. Now that we have produced the gold as concentrates and bullion there can be no question that most gold assays have been underestimated.

The next step is to gold production – more about this later.

I want to change the focus for a moment – to rare earths and health.

About 5 years ago I was diagnosed with Metastatic Prostate Cancer – Gleason 9!

My first question to **Prof. Ben Tran<sup>1</sup>**: "What is Gleason 10?" Answer: "you are not with us – and a high % on 9 go to 10 in a year or so." I then lost complete interest in the background small talk until – what next?

Prof Ben Tran: "Prostate out". My answer: "No".

Prof Ben Tran: "Weeks of chemotherapy". My answer: "No".

Prof Ben Tran: "Hormonal therapy followed by a fairly new drug - Abiraterone but not available unless – 'prostate out' followed by weeks of chemotherapy, that wouldn't be covered by Medicare".

I was determined not to have chemotherapy; it killed my father – and asked: "How much would it cost and for how long?" Answer: "About \$4,000 a month!"

I was soon part of a trial taking **Abiraterone** and discussing with **Prof Louise Emmett**<sup>2</sup>, Director of Theranostics and Nuclear Medicine at St Vincent's Hospital, Sydney, new ways of treating **Metastatic Prostate Cancer** and learning about the incredible medical uses of **radioactive rare earths e.g. Lutetium – at the time not permitted in Victoria!** 

<sup>&</sup>lt;sup>1</sup> **Prof. Ben Tran**, medical oncologist, *Peter MacCallum Cancer Centre*, is heavily involved in cancer drug development through laboratory research and clinical trials which has resulted in better cancer treatments.

<sup>&</sup>lt;sup>2</sup> **Prof. Louise Emmett** has been instrumental in developing the radiopharmacy initiative at *St Vincent's Campus*, Sydney, and has introduced multiple new radioisotopes for clinical and research purposes. Prof. Louise Emmett has published over 80 original papers in peer reviewed journals in the last 10 years.

Roy Morgan was first to contribute funds for the Australian trial using **Lutetium (Lu-177)** to treat patients with **Metastatic Prostate Cancer**, today there are over 120 trials using Lu-177 now being conducted across the world treating many other forms of cancer – the initial results indicate Lu-177 will change cancer treatment across the world and extend lives for millions of both men and women cancer suffers – but Lutetium sells for more than gold and is limited in supply!

I turned my mind to rare earths and revisited Haoma's extensive bank of test results. While doing all the Elazac Process test work on gold in the Pilbara, we had regularly identified **Rare Earths** and **Strategic Metals**.

So, with renewed interest, during the last five years I revisited **Haoma's test work which included searching for Lutetium and other 'odd' metals** – this was successfully proven in November last year when expert consultant Dr Will Goodall's special analysis of a Spear Hill Pegmatite bulk sample measured significant quantities of Heavy Rare Earths before any treatment. Measured by the **ALS Laboratory** was **108ppm Lutetium Oxide in the magnetic fraction** plus varying quantities of other rare earths including **Terbium Oxide** (65ppm), plus **Neodymium Oxide** (1,324ppm), **Dysprosium Oxide** (432ppm) and **Praseodymium Oxide** (498ppm). Further test work on samples from Spear Hill Pegmatite Lodes and surrounds are continuing.

Haoma's Elazac Process tests, in addition to measuring more gold, show we can also measure and recover **more Rare Earths and Strategic Metals** than commercial laboratories throughout the world (we suspect, except in Russia and China).

My Metastatic Prostate Cancer was defeated taking Abiraterone over three years – but was back 6 months ago. So, I began as a 'trial participant' taking Darolutamide<sup>3</sup> – in 8 weeks my Metastatic Prostate Cancer was defeated again!

#### A week ago:

Prof Ben Tran asked: "We now need **Terbium** and **Actinium for cancer sufferers** – do you have them?" My answer: "Yes"!

**Terbium** is a **Heavy Rare Earth** while **Lithium** is a **Light Rare Earth**. Terbium has many uses including being used for ion propulsion systems in space exploration, thermo-electric generators, TV screens, laser technology, magnetic products, batteries and soon health – up until recently most of the world's 10mt a year production came from Russia and China.

About a year ago Terbium Oxide sold for about \$US500/kg, today nearly \$US1,500/kg. And the \$US1,500/kg price of Terbium Oxide was before gold jumped over the last week to nearly \$US2,000/oz.

Further analysis of previous XRF readings of **different granite samples** taken last October, 100 metres from Spear Hill Pegmatite Lodes, measured Terbium from 1,400ppm to 2,800ppm.

Further test work on Granite bulk samples near the Spear Hill Pegmatite Lodes is continuing.

The changes in demand for new metals is being driven by new technology in new industries – and our Elazac Process can recover them from Pilbara ores!

Now to our thanks to those who have been critical.

Haoma appreciates in many ways its **important strategic relationships** with **Atlas Iron (Hancock Prospecting)** at Mt Webber, **Calidus Resources** (now mining and processing gold baring ore near Marble Bar) and **Pirra Lithium Pty Ltd** (soon to be 60% owned by Haoma and 40% Calidus Resources).

During the last 12months, Atlas, Calidus and Pirra Lithium have helped Haoma by providing samples (and access to samples) which Haoma has been able to process using the Elazac Process and produce significant results, some referred to in this presentation.

<sup>&</sup>lt;sup>3</sup> **Darolutamide** works by blocking androgen receptors in cancer cells from binding to androgens preventing actions that can allow cancer cells to survive and proliferate.

It is important not to forget Dave Reeves, his amazing effort in establishing Calidus Resources and Pirra Lithium is greatly appreciated, an outstanding achievement.

Haoma's achievement to develop and use the Elazac Process to produce gold bullion and gold concentrates would not have been possible without the help from many people over more than 25 years.

We would not be here today without Peter Cole, his son Tristian Cole and our skilled team at Bamboo Creek including Oisin Carey, Steve Wilson and Darren Brookes. They have been helped in so many ways by Prof. Peter Scales and the University of Melbourne, Howard Cooklin and his team at Focus Metals, Dr Will Goodall and more recently Vern Cook.

Add to this group Phil and Graham Buckley our contractors at the Elazac Quarry, our Managers at Comet and Normay and more recently our Managers at Top Camp Ravenswood – Cathy Mew and Mark Farris.

Our thanks also go to Nev Power and many past and recent FMG personnel – all so well lead by Dr Andrew Forrest, a remarkable Australian who has achieved so much in pushing change in our iron ore industry.

Finally, we thank our Company Secretary, Jim Wallace, who has helped for many years in so many important ways; and for more than 25 years Hugh Morgan, and more recently Peter Williams, have been 'believers' – both are shareholders, and both have helped on a daily basis.

Table 1: Location	Gold	PGM	Iron Ore	Nickel	Lithium	Rare Earths	Strategic Minerals		Silver, Lead, Zinc	Dolerite
Bamboo Creek	•	•		•		•	•			
Calidus Resources Tailings from Warrawoona Gold Mine – 2.5mt pa	•	•								
Mt Webber JV	•						•			
Mt Webber Region to Soansville	•			•			•			
Spear Hill and surrounds		•					•			
Marble Bar including Comet Mine	•	•				•	•		•	•
Normay/Mickeys Find							•	•	•	
Cookes Hill	•									
Pirra Lithium (to be owned Haoma 60% Calidus 40%)										
Ravenswood Queensland mining leases	•						•	•		

Table 1 below shows Haoma Mining's many locations with minerals targeted.

# 2. Recent Elazac Process Test Work at Bamboo Creek (used bulk samples of different Pilbara Ores)

The latest test results reported on February 14, 2023 follow:

- 1) Bamboo Creek tailings, of which there are about one million tonnes, and
- 2) **Tailings** from the **Calidus Warrawoona Gold Mine** of which there are about 2.5 million tonnes produced per annum.

Since the January 11, 2023, Shareholder Report, Haoma processed a 29.07kg sample of **Bamboo Creek tailings**. A resulting 1.15kg sub-sample was then processed and assayed by the Elazac Process, with the recovery of **gold bullion containing 66.01% gold (measured by XRF)** resulting in a **calculated gold grade of 32.05g/t in Bamboo Creek tailings**.

The test was repeated with another 1.15kg sub-sample which was processed and assayed by the Elazac Process with the recovery of **gold bullion containing 22.87% gold (measured by XRF)** resulting in a **calculated gold grade of 34.72g/t in Bamboo Creek tailings.** 

In December 2022 Haoma processed a 20.155kg sample of Calidus Warrawoona Gold Mine tailing's slurry. A 1kg sub-sample was processed and assayed by the Elazac Process, with the recovery of gold bullion concentrate containing 9.56% gold (measured by XRF) resulting in a calculated gold grade of 28.92g/t in the Calidus Warrawoona tailings.

The above results from processing samples of **Bamboo Creek tailings** and **Calidus Warrawoona tailings** are additional to Haoma's January 11, 2023, Shareholder Special Report which reported positive Elazac Process test results from processing a 72.168kg bulk sample of **Mt Webber iron ore waste**. This test resulted in a **calculated gold grade of 4.1g/t in Mt Webber iron ore waste**. <u>https://haoma.com.au/wp-content/uploads/2023/01/Haoma-Mining-NL-Special-Shareholder-Report-January-11-2023-1.pdf</u>

The above Elazac Process tests results (on samples of **Bamboo Creek tailings, Calidus Warrawoona** tailings, and **Mt Webber iron ore waste**) importantly used a recently modified Elazac Process which is considerably more cost efficient than previous Elazac Process tests.

The Calidus Warrawoona Gold Mine will produce about 2.5 million tonnes of tailings per annum. Haoma is entitled to recover all metals which remain in the tailings from the Warrawoona Plant.

In February and March Haoma commenced two further **bulk ore trials** with Bamboo Creek Tailings Concentrate, representing 2% of Bamboo Creek Tailings.

Sample 1 - 1.1kg sample was processed and resulted in the recovery of a polymetallic concentrate, when read by XRF measured 679g/t gold, and

Sample 2 - 44.038kg sample was processed and resulted in the recovery of a polymetallic concentrate, when read by XRF measured 272.5g/t gold.

As mentioned above, gold concentrates from at Bamboo Creek and Soansville ores combine with nickel, while gold concentrates from Mt Webber ore combine with iron and Spear Hill ores combine with Rare Earths and Strategic Metals.



Figure 2: Bamboo Creek Processing Plant, Pilbara WA.

At the Bamboo Creek Processing Plant Haoma has recently completed the **acquisition of machinery and equipment** needed to produce **gold bullion** and **gold concentrates** which also contain significant quantities of PGM, Rare Earths and Strategic Minerals.

Recent rains have resulted in there now being sufficient water in Bamboo Creek water storage facilities for processing ores over the next 12 months.



Figure 3: Bamboo Creek Tailings Storage with Bamboo Creek Processing Plant in background

# 2.1 Haoma's Pilbara Iron Ore areas and Mt Webber Joint Venture with Atlas Iron

Haoma Mining NL has a considerable number of 100% owned iron ore tenements in the East Pilbara Region (See Figure 4 below) near the Mt Webber iron ore mine on M45/1197 operated by Atlas Iron (owned by Hancock Prospecting). Haoma is at present negotiating with **Atlas Iron** who wish to explore these tenements, and if successful, export Direct Shipping Ore (DSO – iron ore) from Haoma's many tenements.



**Figure 4:** Haoma Mining tenements held and applied for in the East Pilbara Region that adjoin or are near the Atlas Iron Mt Webber iron ore mine on M45/1197, including:

- Mt Webber E45/2922,
- Soansville/Hillside Project Tenement Group (C283/1997) E45/4174, E45/4175, E45/4176, E45/4177, E45/4178, E45/4179, E45/4181, E45/4320, E45/4419, E45/4420, E45/4473, E45/4474, E45/4475, E45/4476, E45/4477, E45/4976, M45/847 and P45/3140, and
- Spear Hill Tenement Group (C145/2016) M45/1286 (under application), E45/4586, E45/4587, E45/5834 (under application), E45/5835, E45/5846 and E45/6054.



Figure 5: Mt Webber Iron Ore Mine looking south-east from E45/2922.

# 2.2 <u>Soansville District – 100% Haoma (Exploration leases 45/2922, 45/4174, 45/4175, 45/4176, 45/4177, 45/4178, 45/4179, 45/4180, 45/4181, 45/4320, 45/4419, 45/4120, 45/4473, 45/4474, 45/4475, 45/4476, 45/4477, 45/4976 and Mining Lease 45/847)</u>

In mid-2022 a helicopter reconnaissance field trip involved a flyover, inspection and sampling of three Haoma Mining tenements in the Soansville tenement group (E45/2922, E45/4475 and E45/4476). Detailed assays and petrology analysis was conducted on six rock-chip samples collected. See locations in Figure 6 below.



**<u>Figure 6</u>**: Rock chip sampling locations, collected mid-2022.

# 2.3 Iron Ore Tenements E45/4475 and E45/2922

Assays and petrology analysis conducted on samples from E45/4475 and E45/2922 confirmed Haoma's understanding that the weathered Banded Iron Formation ('BIF') is mostly composed of hematite/goethite and magnetite; and can be best identified as a 'Magnetite BIF' with very finegrained intergrowth of iron and silicate material. The iron assay of sample 10803060 (Goethite) from E45/4475 measured by XRF 66% iron with negligible phosphorus, low aluminum (<3%) and low silica (<7%). Analysis also identified that remaining gangue material in the samples was very clean and **no** fibrous material (asbestos) was detected – this observation is particularly important if 'goethite iron ore' mined were to be processed in furnaces to produce 'green steel'.



**Figure 7: Weathered** Magnetite BIF.



Figures 8 to 10: Petrology images of sample 10803059 from E45/4475 (XRF, 37%Fe) thin sections (reflected and transmitted images) at different magnetic fixations.

# 2.4 Nickel Ore Tenement E45/4476



**Figure 11:** Soansville Ni prospect location – showing extensive historical sampling to north.

Two samples were collected from E45/4476 with the objective to confirm the assay results of previous nickel samples; and to confirm outcropping nickel mineralisation and the potential for material nickel sulphide. While no sulphide materials were identified, assays confirmed high nickel values (XRF, 0.5%Ni & 0.3%Ni) but with no presence of anomalous copper or PGE (Platinum Group Metals) the results showed the nickel was very fine and 'locked in' the silicate fraction.

The samples were taken on the side of a very steep hill in an area not previously sampled. The location was 3-5 kilometres from where most previous nickel sampling was conducted in the 1970's 'nickel boom', and in the late 1990s and early 2000s by Giralia Resources, Atlas Iron and Falconbridge.

Haoma will now undertake follow up sampling and mapping to better understand and interpret the potential for a significant nickel resource at this previously under explored location.





**Figures 12&13:** Petrology images of sample 10803054 from E45/4476 (XRF, 0.3%Ni) thin sections (reflected and transmitted images) at different magnetic fixations.

# 2.5 <u>Pirra Lithium Pty Ltd - Haoma Mining and Calidus Resources Pilbara Lithium</u> <u>Exploration Venture</u>

### Shareholder Update, March 17, 2023:

Last week shareholders were advised that Haoma and Calidus Resources have signed a Binding Terms Sheet to fully combine the prospective Pilbara lithium land holdings of both companies. Both companies will vend into Pirra Lithium the remainder of lithium prospective tenements not already placed into Pirra Lithium which will mean Pirra Lithium now holds the lithium rights across the most prospective lithium ground in the Calidus and Haoma portfolios.

#### Under the Agreement, Haoma will now hold 60% of Pirra Lithium and Calidus 40%.

The full update is available from Haoma's website at <u>https://haoma.com.au/wp-content/uploads/2023/03/Haoma-Mining-NL-Shareholder-Update-March-17-2023.pdf</u>

The additional rights cover several highly prospective tenements in the West Pilbara, including E45/2983, directly along strike from the King Cole lithium pegmatite discovery of De Grey Mining (ASX: DEG).

In addition, Haoma will vend in additional tenements in the West Pilbara surrounding Global Lithium's (ASX: GL1) Archer deposit.

Calidus Otways Pty Ltd will vend in two Exploration Licenses in the promising, but highly under-explored, Northampton Inlier in WA's Midwest region. (see Figure 17).



Figure 14: Location of Pirra Lithium's project areas.

# East Pilbara, including Spear Hill

Upon formation in early 2022 Pirra Lithium had access to tenements totaling 1,063sq. km in the East Pilbara region. With the addition of several more tenements in the Marble Bar area directly adjacent to Global Lithium's Archer deposit (18Mt @ 1.0% Li<sub>2</sub>O<sup>3</sup>), the tenement package in the area now comprises 1,303sq. km (Figure 15). Most of the land package has seen no systematic exploration for lithium-bearing pegmatites.

At Spear Hill, immediately east of the Shaw River tin field, lithium pegmatites in the area, although thin, comprise more than 4.3km of strike length.

Results of the first drilling program were advised to Haoma shareholders on November 9, 2022. Twenty RC holes for a total of 1,535m were drilled to test the dip and thickness of the pegmatite and the alongstrike and down-dip extents of lithium mineralisation. The holes were drilled at -60° toward the SSW to intersect the pegmatite near to perpendicular. The drilling has confirmed that the pegmatite dips gently to the NNE and can be traced for over 250m down dip from the surface exposures. **Eleven of**  the 20 holes contained Intercepts of >0.5% Li<sub>2</sub>O. The full list of drill holes and intercepts is also shown in Table 2. Significant intercepts included:

- 2m @ 1.11% Li<sub>2</sub>O from 19m in 22PIRC026
- 2m @ 1.09% Li<sub>2</sub>O from 5m in 22PIRC020
- 2m @ 1.03% Li<sub>2</sub>O from 25m in 22PIRC031
- 3m @ 0.95% Li<sub>2</sub>O from 4m in 22PIRC021, and
- 4m @ 0.74% Li<sub>2</sub>O from 20m in 22PIRC025.

#### Table 2: Drill holes and significant intercepts for Spear Hill. Coordinates refer to MGA94, Zone 50.

Hole ID	Easting	Northing	RL	EOH	Dip	Azi	From	То	Interval	Li <sub>2</sub> O wt%	Cs	Rb	Ta
				( <b>m</b> )			( <b>m</b> )	( <b>m</b> )	( <b>m</b> )		(ppm)	(ppm)	(ppm)
22PIRC005	752513	7621414	240	48	-60	210				No sig. int.			
22PIRC008	752688	7621367	241	42	-70	210				No sig. int.			
22PIRC009	752733	7621421	241	54	-70	210				No sig. int.			
22PIRC010	752866	7621303	242	48	-60	210				No sig. int.			
22PIRC015	753055	7621057	245	90	-60	210				No sig. int.			
22PIRC016	753088	7621109	245	108	-60	210				No sig. int.			
22PIRC017	753124	7621010	244	60	-60	210				No sig. int.			
22PIRC018	753167	7621069	246	60	-60	210	25	27	2	0.71%	191	1,739	96
22PIRC019	753223	7620970	246	60	-60	210	13	15	2	0.87%	301	2,500	65
22PIRC020	753284	7620890	246	72	-60	210	5	7	2	1.09%	297	2,583	64
22PIRC021	753387	7620831	244	114	-60	210	4	7	3	0.95%	363	2,356	131
22PIRC023	752890	7621181	244	102	-60	210				No sig. int.			
22PIRC024	753410	7621078	248	66	-60	210	49	51	2	0.52%	294	1,656	34
22PIRC025	753349	7620968	247	48	-60	210	20	24	4	0.74%	255	2,936	51
22PIRC026	753417	7620940	248	71	-60	210	19	21	2	1.11%	248	2,785	109
							31	32	1	0.70%	414	2,326	285
22PIRC027	753531	7620887	247	90	-60	210	18	19	1	0.98%	265	2,518	72
22PIRC028	753564	7620946	248	48	-60	210	13	14	1	0.56%	208	1,107	137
22PIRC030	753262	7621024	247	96	-60	210	25	27	2	1.03%	221	2,393	83
22PIRC031	753491	7621016	249	60	-60	210	45	46	1	0.56%	253	1,081	27
22PIRC038	753024	7621009	244	90	-60	210				No sig. int.			



**Figure 15:** Tenement holdings and lithium rights of Pirra Lithium in the East Pilbara on a background of GSWA's state bedrock geology and linear structures layers. Also shown is **Pirra's Spear Hill** prospect, comprising lithium pegmatites, and **Global Lithium's Archer** deposit and Lipegmatites identified by Kalamazoo Resources, **Riversgold, SunMirror** AG, and Eastern **Resources.** 

# <u>West Pilbara</u>

In the West Pilbara region, Pirra Lithium now has the lithium rights to 89sq. km of tenements in the very prospective Tabba Tabba area. One of the tenements covers 10km of strike length along the Tabba Tabba shear zone, which hosts several tin and tantalum deposits and prospects, a lithium pegmatite deposit reportedly identified by FMG, and the King Col lithium pegmatite (See Figure 16). The tenements are proximal to a corridor of highly evolved fertile granites of the Split Rock super suite.

The eastern margin of one of the tenements, E45/2983, lies less than 400m along strike from De Grey's King Col lithium pegmatite discovery. The pegmatite contains petalite, spodumene, and lepidolite, with two diamond holes returning intercepts of 27.3m @ 1.14% Li<sub>2</sub>O from 12m depth and 11.5m @ 0.64% Li<sub>2</sub>O from 27m depth<sup>2</sup>.



**<u>Figure 16</u>**: Tenements and lithium rights of Pirra Lithium in the Tabba Tabba area in the West Pilbara on a background of GSWA's state bedrock geology and linear structures layers. Also shown are De Grey's King Col pegmatite and the Tabba Tabba and Strelley tin and tantalum deposits.

# Northampton area

In WA's Midwest region, Pirra Lithium has the lithium rights to 289sq. km of tenements in the very prospective Northampton Inlier (Figure 17). The lithium rights comprise one granted exploration licence and one application.

High-grade metamorphic rocks in the area are known to be intruded by granites and pegmatites containing beryl and industrial-grade mica, similar to the Gascoyne Province, where successful lithium exploration is underway. In 2007, West Australian Metals Ltd identified significant tin anomalies in soil samples using a Niton pXRF<sup>12</sup>. Although the assays are only indicative, rather than quantitative, they do suggest the presence of much higher-than-background tin concentrations associated with some granite intrusions. The Northampton Inlier also hosts numerous graphite prospects and occurrences.



**<u>Figure 17:</u>** Tenement holdings and lithium rights of Pirra Lithium in the Northampton area in the west Pilbara on a background of GSWA's state bedrock geology and linear structures layers.

# **Future work**

Following consolidation of the enlarged tenement package held by Pirra, a strategic review will be carried out to rank the various tenements in terms of their perceived perspectivity.

In the West Pilbara, initial reconnaissance work will be conducted on the tenements to determine the thickness and nature of the regolith, so that the most effective techniques can be employed for initial exploration. This work will include mapping, soil sampling and possible scout air core drilling in areas with thicker transported regolith.

In the East Pilbara, field mapping will continue in the wider area around Spear Hill to identify further lithium pegmatites.

# 2.6 <u>Rare Earth and Strategic Mineral Activities (see Figure 4 above)</u>

The above **Pirra Minerals lithium assay grades** from Spear Hill drill hole samples indicate that the area held by Pirra Lithium near Spear Hill is encouraging and indicate the potential for the area near Spear Hill to contain a commercial lithium resource. However, **the lithium minerology plus size and grade (based on drilling) still needs to be determined.** 

Of additional interest to Haoma are the **high grades of Rubidium** measured in many of the drill hole sample (see Table 2 above).

Today, **Rubidium is a Strategic Metal of significant value**. Up until now commercial rubidium is mainly recovered from processing other metals, the above rubidium assays indicate the potential for the area to contain a commercial rubidium resource.

Haoma has previously shown that the 2 million tonnes of tailings near Spear Hill (see Figure 4 above) contain a commercial rubidium resource which can be recovered using a process developed by Haoma,

see Haoma Shareholder Update, June 15, 2021. <u>https://haoma.com.au/wp-content/uploads/2021/06/Haoma-Mining-NL-Shareholder-Update-June-15-2021.pdf.</u>

Twelve months ago, Haoma shareholders were advised there are approximately **2 million tonnes of Spear Hill Tailing Sands** which in the 1970s were deposited by **Endeavour Resources Ltd** after recovering tin and tantalum.

Haoma is hopeful the WA Mines Department will soon give Haoma permission to **rehabilitate the area** containing the tailing sands with the sands be trucked to Bamboo Creek for processing.

During the last 12 months results from Haoma's Rare Earths 'activities' have upgraded previous work conducted at Bamboo Creek and the University of Melbourne.

Field work sampling by Haoma personnel of pegmatites at Spear Hill indicate they contain significant quantities of Heavy Rare Earths and Strategic Metals.

In October 2022, granite samples were taken 100 metres from the Spear Hill Pegmatite Lodes. XRF analysis of different samples measured Terbium from 1,400ppm to 2,800ppm.

**Terbium** is a **Heavy Rare Earth** while **lithium** is a **Light Rare Earth**. Terbium has many uses including used for ion propulsion systems in space exploration, thermo-electric generators, TV screens, laser technology, making magnetic products more resistant to heat degradation, batteries and soon health – up until recently most of the world's 10mt a year production came from Russia and China.

The price of Terbium Oxide last week was close to \$US1,500/kg, this was before gold jumped over the last week to nearly \$US2000/oz.

In November last year Dr Will Goodall (Haoma Consultant) prepared a report containing special analysis of a Spear Hill Pegmatite bulk sample which measured significant quantities of Heavy Rare Earths before any treatment. Measured by **ALS Laboratory** was **108ppm Lutetium Oxide in the magnetic fraction** plus varying quantities of other rare earths including **Terbium Oxide** (65ppm), plus **Neodymium Oxide** (1,324ppm), **Dysprosium Oxide** (432ppm) and **Praseodymium Oxide** (498ppm).

Further test work on samples from Spear Hill Pegmatite Lodes and surrounds are continuing.



Figure 18: Spear Hill - looking north-east towards Spear Hill from Mt Webber Lease M45/1197

## 2.7 Hard Rock Sales from Elazac Quarry, Cookes Hill (M45/1186)

Haoma's hard rock Elazac Quarry at Cookes Hill (M45/1186) is operated under licence by Brookdale Contracting.

During the Year Ended June 30, 2022, Haoma sold 407,164 tonnes of 'hard rock' to Brookdale Contractors. These sales provided revenue of \$1,326,847.

In the 8 months to February 2023, Haoma sold 173,442 tonnes of 'hard rock' to Brookdale Contracting, generating revenue of \$438,416.

Sales of Elazac Quarry hard rock is expected to be maintained as infrastructure work in the East Pilbara Region will be ongoing for the foreseeable future.

Revenues for the previous two years and for the current year to date (July to February 2023) are shown in Table 3.

During the last year Haoma outlined a deposit of 'hard rock' in the Marble Bar region which could be supplied to Brookdale Contracting.

	2021	2022	2023
July – December	\$306,515	\$957,197	\$298,557
January – June	\$337,121	\$369,650	\$139,859 <sup>(*)</sup>
Full Year / YTD	\$643,636	\$1,326,847	\$438,416

#### Table 3: Sales from Haoma's Elazac Quarry. (\*) 2 months Jan-Feb 2023.

# 3. Haoma's Activities at Ravenswood, Queensland

# 3.1 Exploration Activities

In Queensland, Haoma's exploration activities in 2022 continued to be significantly limited due to excessive wet conditions causing the delay of bulk parcel trials on ore from Haoma's Ravenswood tenements. The proposed sampling program is now anticipated to start in 2023 after the present wet season.



Figure 19: Locations of Ravenswood tenements

# 3.2 Haoma's Top Camp Road-House & Caravan Park, Ravenswood, Queensland

During 2022 refurbishment and upgrade work continued at the **Top Camp Roadhouse, Ravenswood** and is nearing completion.

The retail shop provides a range of services to both the local community and visitors to the area. New diesel and ULP fuel bowsers were installed along with a new point of sale system incorporating control of fuel delivery systems from inside the premises, improved sales reporting, and stock management. The shop product display and dining areas have been refreshed and expanded to provide greater convenience for customers.

The **Top Camp 'park amenities'** have been repaired and refurbished and new facilities (soon to include a swimming pool) added for the benefit of residents. It is expected that these modifications will support an increase in tourist visitation to the Ravenswood District. Refurbishing of eight of the thirteen permanent cabins was completed with work on the remaining 5 cabins expected to be completed in the first half of 2023. Upgrading of the two onsite houses and the block of six accommodation units was completed last year. Caravan sites have been improved with the addition of concrete pads for 'all weather' stays and the wi-fi system now covers the entire park. A tree planting program is ongoing and will provide new and much appreciated greenery and shade for visitors in future years.

A back-up generator has been connected to ensure power is always available to the Top Camp 'shop', all accommodation and 'camp' facilities.

Access roads into and around Top Camp were re-surfaced and have **not** deteriorated despite many significant rain events over the past six months.

The above upgrades and major works have been overseen by Cathy Mew and Mark Farris who in the 18 months since they took over management of Top Camp have made a major contribution to making Top Camp a popular destination; not only with locals but with contractors visiting the area for work and the travelling caravan community. We thank them for their great commitment to this project.

Following completion of the upgrades to the existing accommodation and the installation of the pool (which has been manufactured and delivered) it is anticipated that additional new accommodation (subject to Council approval) will be added to the park.

Haoma shareholders travelling through the 'district' are welcome to call in at Top Camp and stay at a 50% discounted 'cabin' rate. To book, **please call Cathy Mew on (07) 4770 2168.** 



**Figure 20:** Aerial view of Haoma's Top Camp, Ravenswood, Queensland.

## 4. Acknowledgements

The Directors wish to acknowledge and express their 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, Dr Will Goodall, Mr. Peter Williams and other consultants who have helped **Haoma perfect the Elazac Process** which can extract gold bullion or produce gold concentrates which also contain significant quantities of PGM, Rare Earths and Strategic Minerals from Pilbara ores.

The Board also acknowledges the significant efforts of those personnel working at the remote Pilbara and Ravenswood operations. These people include Tristin Cole, Oisin Carey, Gaynor Bowtell, Caitlin Hardy and Julie Peckham at Bamboo Creek, Philip Newcombe at the Comet Gold Mine and Tourist Centre, Colin Derrell at the Normay Gold Mine, and Cathy Mew and Mark Farris at Top Camp, Ravenswood.

Yours sincerely

Uzany Moregon

Gary C. Morgan Chairman

March 21, 2023