



# Haoma Mining NL

A.B.N 12 008 676 177

**Registered Office & Head Office:**

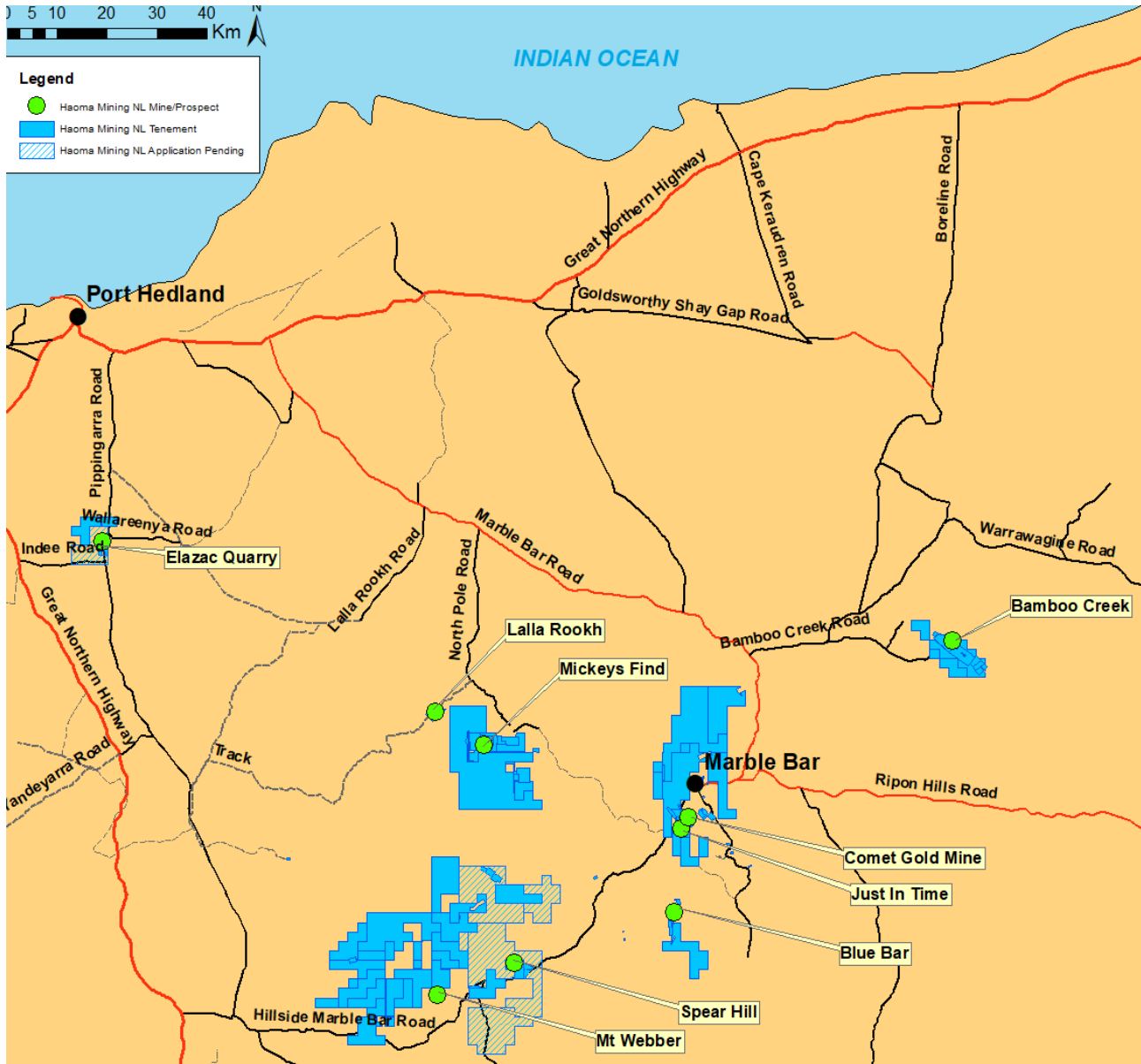
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## CHAIRMAN'S ADDRESS TO SHAREHOLDERS

By Gary Morgan, Monday March 29, 2021



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

## **Welcome to all Haoma Mining shareholders.**

Today I am going to present information on Haoma's activities covering more than the last 12 months – undoubtedly a difficult time due to Covid-19.

Haoma has achieved more since our last AGM than at any time since I have been Chairman.

Haoma has been active in many areas and aspects of its business. These include:

1. Test work activities at Bamboo Creek
2. Rare Earths including Spear Hill
3. Mt Webber and Exploration and development of Haoma's prospects near Marble Bar including Comet Mine, Just-in-Time and Blue Bar
4. Elazac Quarry at Cookes Hill
5. Ravenswood in North Queensland
6. Top Camp, Ravenswood

Today I will focus on the recent activities in relation to test work at Bamboo Creek and Rare Earths at Spear Hill. I will also discuss our iron ore activities at Mt Webber and surrounding areas and our Cookes Hill dolerite quarry and crushing facilities.

### **1. Recent Test Work at Bamboo Creek**

Test Work has continued at Bamboo Creek, The University of Melbourne and with other Melbourne consultants.

None of Haoma's achievements would have been possible without Peter Cole, his son Tristan Cole and our team at Bamboo Creek helped by Prof. Peter Scales and our other Melbourne consultants – thank you.

#### **Gold Recovered**

**In Haoma's 2020 Annual Report (top of Page 4) shareholders were advised:**

*“Based on **physical bullion recovered during tests** the ‘calculated’ gold grades of the combined ‘Kitchener’ and ‘Bamboo Queen’ low grade ores were 5.01 g/t gold and 4.48g/t gold - **average 4.75g/t gold.**”*

*Over the next 4 weeks additional equipment will be installed in the Bamboo Creek Plant. Gold will then be leached from the total 13 tonnes of Concentrates recovered by the Knelson concentrator, Spiral concentrator and Falcon concentrator (when ‘Kitchener’ low grade ore and ‘Bamboo Queen’ low grade ore were processed during November and December 2020).*

*(At Bamboo Creek there are approximately one million tonnes of stockpiled ‘Kitchener’ and ‘Bamboo Queen’ low grade ores.)”*

Over the last 4 weeks, since the above combined 'Kitchener' and 'Bamboo Queen' low grade result, tests were conducted on samples of 500gm of the following samples of Haoma ore sources. The gold grades below are the combined gold in metal concentrates and gold in aqua regia solution.

**Bamboo Creek Tailings – 17.89g/t**

**Concentrate from Bamboo Creek Tailings – 17.25 g/t**

**'Washed out' fine fraction from Mt Webber low grade iron ore (approx. 30% of are) – 7.49 g/t**

**Concentrate from 'Just in Time' ore body at Comet Mine (less free gold - 1.3g/t) – 15.77g/t**

**Spear Hill Tailings dam – 8.1g/t**

The latest results were obtained without roasting of the sample before treatment. This result means only a small quantity of additional equipment is needed at Bamboo Creek so the Bamboo Creek Tailings can be processed in bulk.



**Figure 2: Bamboo Creek Processing Plant, Pilbara WA**





**Figure 3: Bamboo Creek Processing Plant**



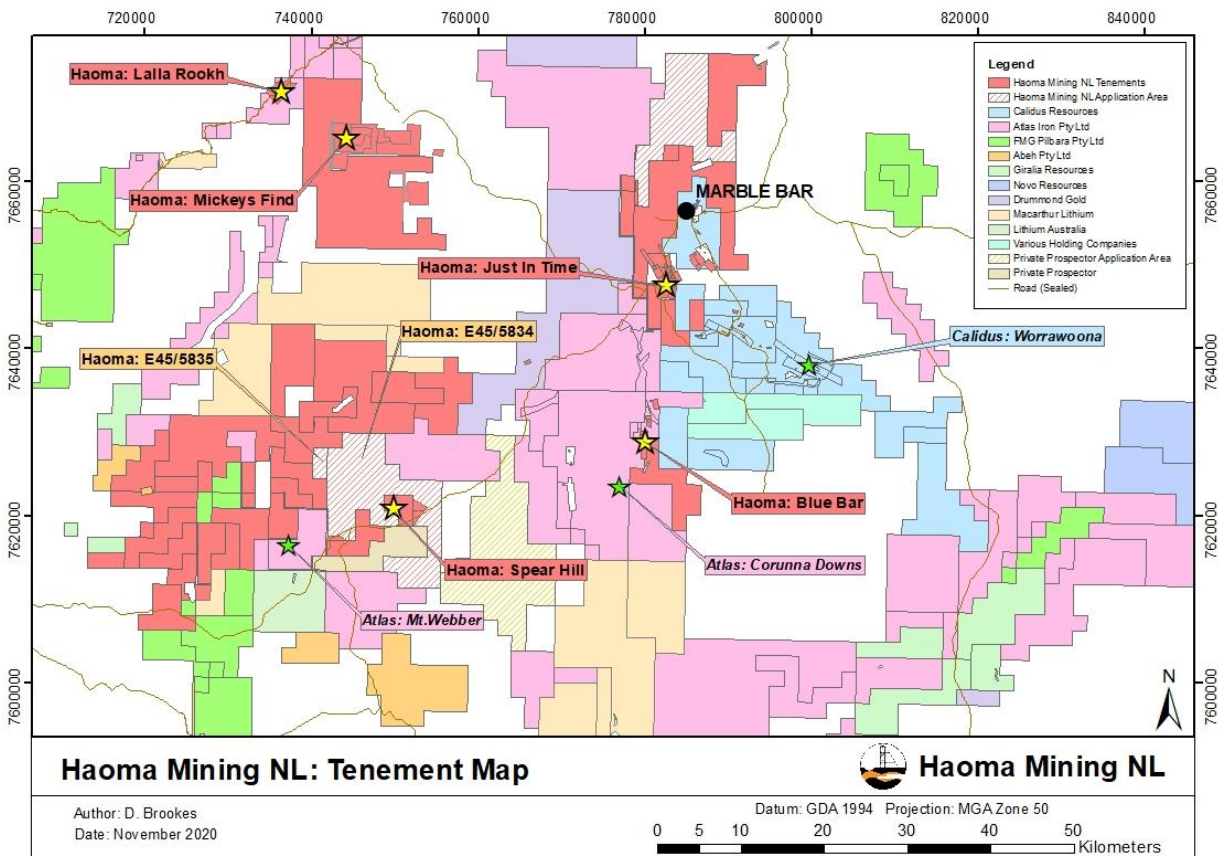
**Figure 4: Bamboo Creek Processing Plant**



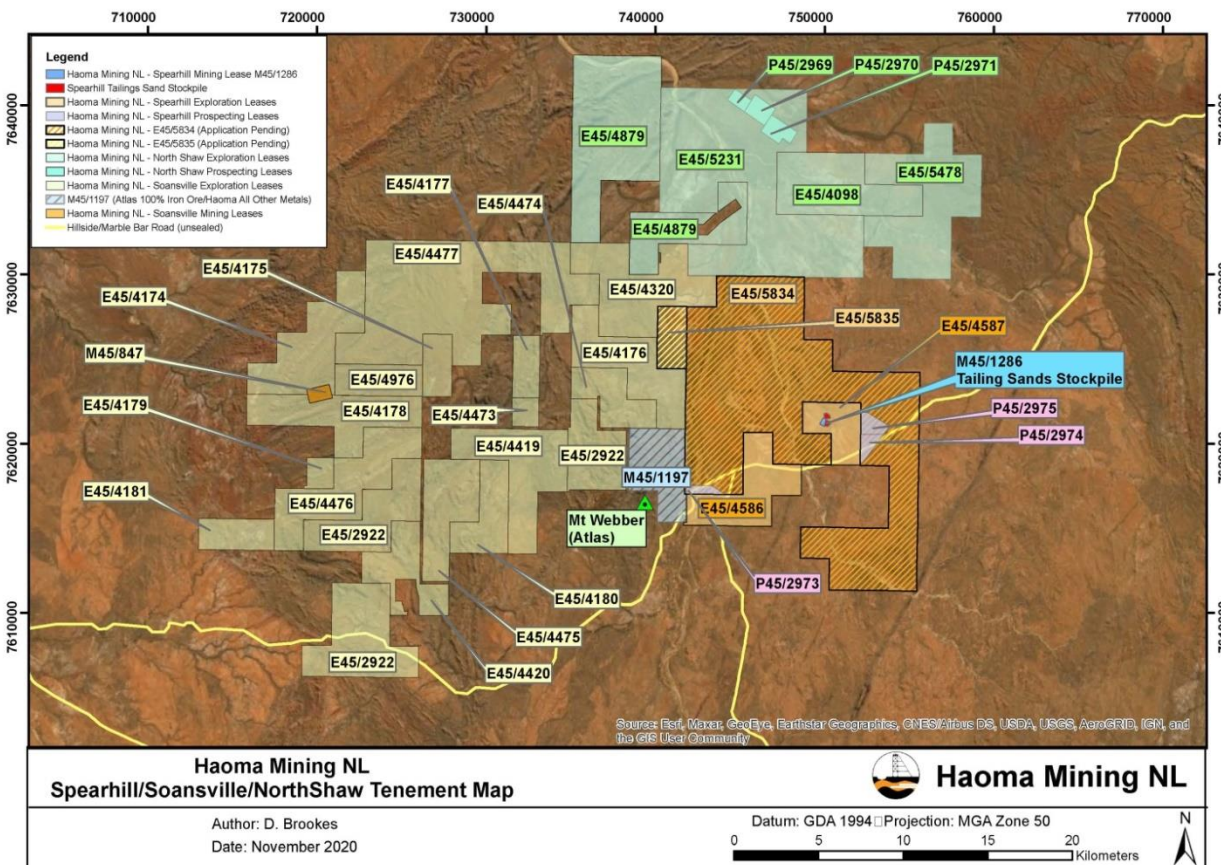
**Figure 5: Bamboo Creek Tailings Storage with Bamboo Creek Processing Plant in background**



## 2. Spear Hill Rare Earths



**Figure 6: Haoma's Marble Bar-Normay-Mt Webber-Spear Hill tenement groups showing E45/5834 (under application) and E45/5835 (under application).**



**Figure 7: Haoma's Spear Hill Tenement Group C145/2016 comprising M45/1286, E45/4586, E45/4587, E45/5834 (under application) and E45/5835 (under application) and Mt Webber M45/1197 and Haoma's iron ore tenements to the west and north**

Since **Haoma's Rare Earths Activities** update of **September 19, 2019** test work on measuring and recovering **Rare Earths** and **other elements** has continued at **Bamboo Creek** and the **University of Melbourne**.

Analysis of samples of **Spear Hill Tailing Sands** has recently been completed at independent laboratory, Australian Laboratory Services, and by XRF at Haoma's laboratory at Bamboo Creek.

Samples from **Spear Hill Tailing Sands** (See Figures 6, 7 & 8) were obtained by drilling approximately 12 metre holes to base rock. There are approximately **2 million tonnes of Spear Hill Tailing Sands** which were deposited in the 1970s by **Endeavour Resources Ltd** after recovering tin and tantalum.

**Tables 1 and 2** below show assays of **Spear Hill Stockpiles A & B** and **Spear Hill Tailing Sands**. The grades (in ppm) of numerous **Rare Earths** and **other elements (not common)** were measured by:

ALS assays from acid solutions - see following links for full results:

**Spear Hill Stockpiles A & B, ALS assay, July 6, 2019**

**Spear Hill Tailing Sands, ALS assay May 27, 2020**

**Spear Hill Tailing Sands and sample fractions, ALS assay November 20, 2020**

and

- **XRF readings at Bamboo Creek and the University of Melbourne, and**
- **Cyanide leaching of a sample of Spear Hill Tailings Sands at Bamboo Creek gave an AAS gold reading of 17.75 g/t. AAS gold readings for 6 gravity split sub-group fractions, from Spear Hill Tailing Sands, are shown in Table 3b.**

**The detailed element analysis of samples from Spear Hill Stockpiles A & B and Spear Hill Tailing Sands are presented in Table 3 below.**

Earlier exploration reports filed at the WA Department of Mines and Petroleum show the potential of areas in E45/5834 and E45/5835 to contain deposits with Rare Earths and other elements considered of value.

Different **elements considered of value** from ALS solution grades and Bamboo Creek XRF grades (ppm) are presented in **red** font in Tables 1, and 2(a) & 2(b) below.

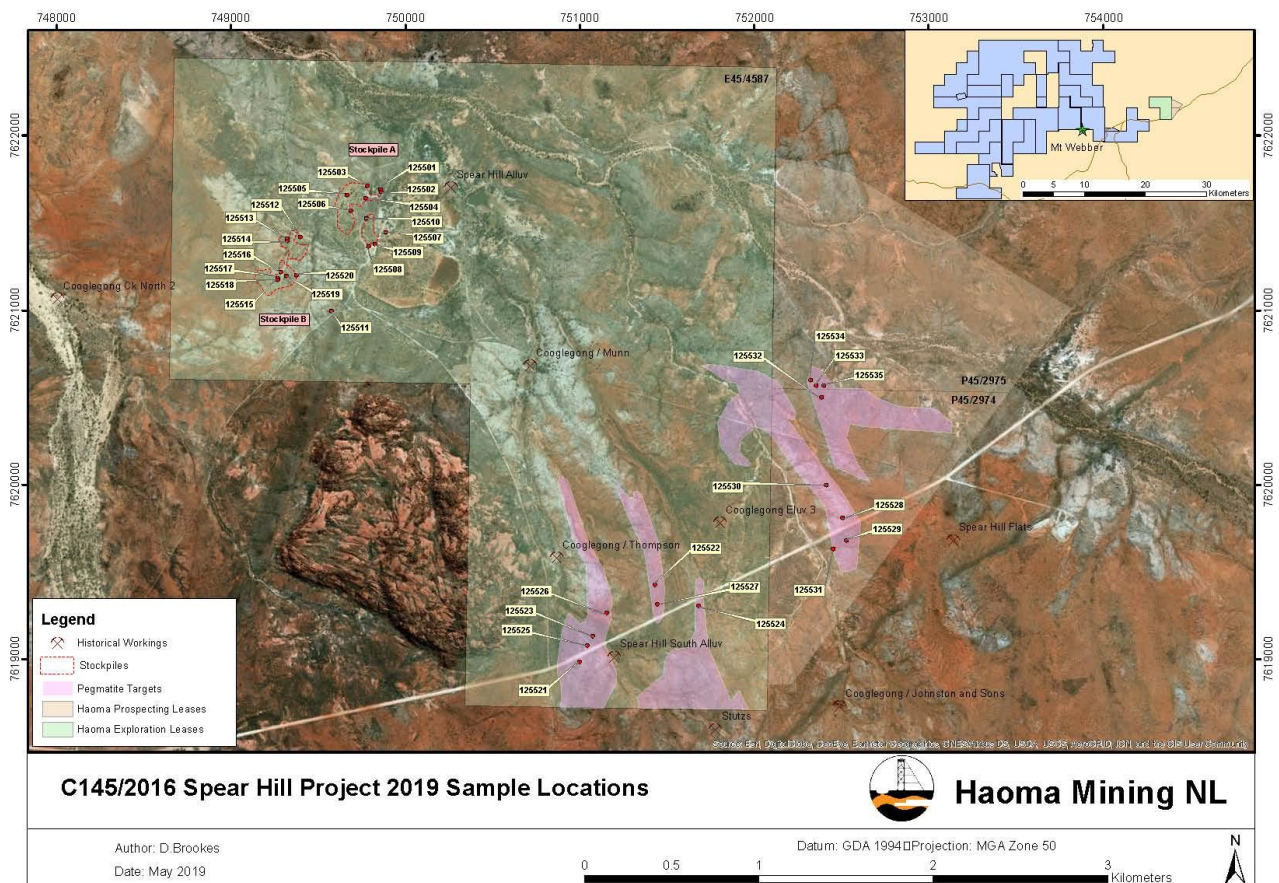
The final value of the **Spear Hill Stockpiles A & B** and **Spear Hill Tailing Sands** will depend on the **cost of extracting** the numerous **Rare Earths** and **other elements (not common)**.



**Table 1: Assays of Nuggety Gully Scree, Spear Hill Stockpiles A&B and Spear Hill Tailing Sands**

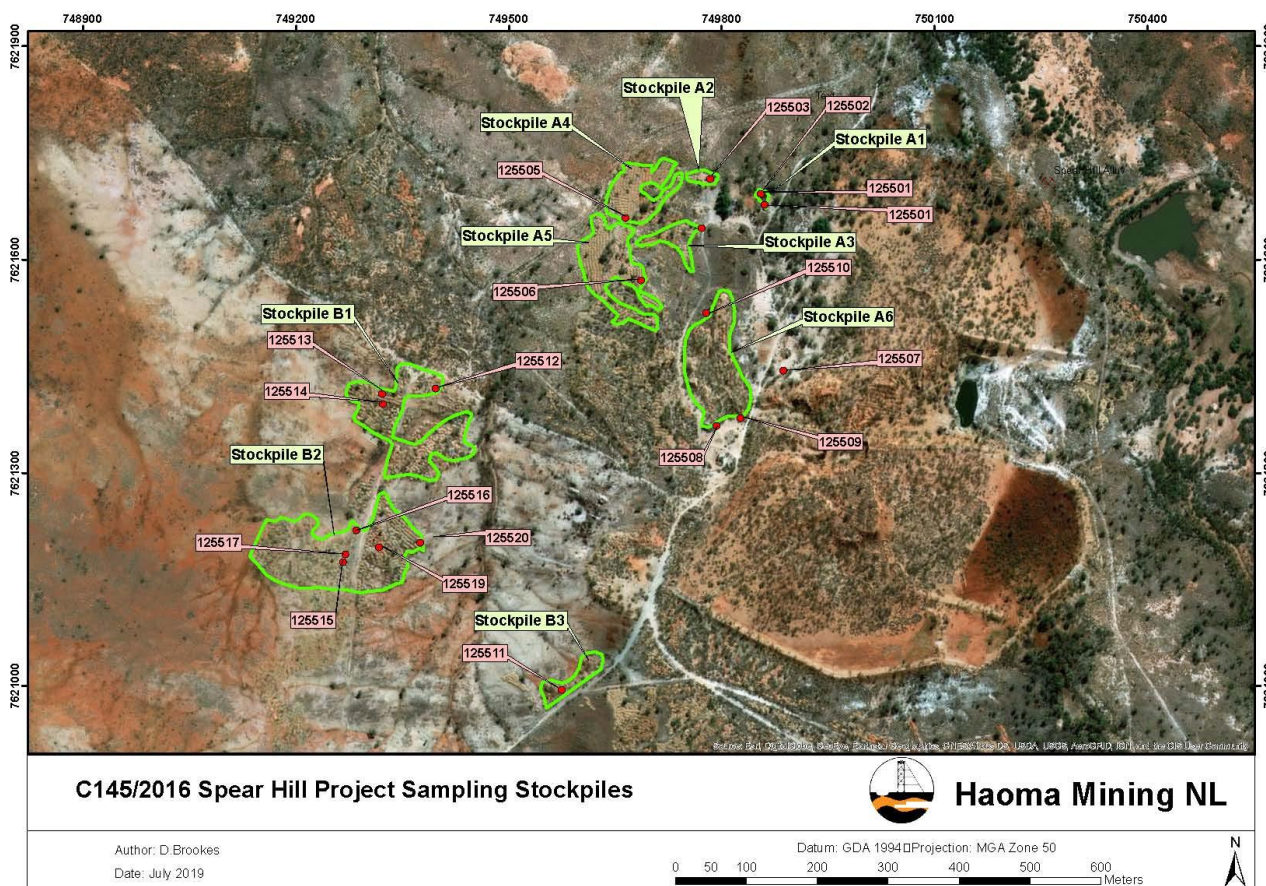
Element	Symbol	Atomic #	Nuggety Gully Scree Uni of Melb XRF May, 2019	Spear Hill Stockpiles A&B ALS July, 2019	Spear Hill Tailing Sands ALS May, 2020	Spear Hill Tailing Sands Bamboo Creek XRF Nov, 2020	Spear Hill Tailing Sands ALS Nov. 20, 2020
			(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Scandium	Sc	21	196	NR	3.2	NR	2.70
<b>Yttrium</b>	<b>Y</b>	<b>39</b>	<b>1,128</b>	<b>48.1</b>	<b>30.0</b>	<b>30</b>	<b>28.73</b>
<b>Lanthanum</b>	<b>La</b>	<b>57</b>	-	<b>26.2</b>	<b>11.1</b>	NR	<b>10.0</b>
Cerium	Ce	58	2,659	60.6	39.4	NR	33.27
Praseodymium	Pr	59	-	6.8	2.3	NR	2.07
Neodymium	Nd	60	-	21.6	8.6	NR	7.33
Samarium	Sm	62	554	5.2	1.9	NR	1.65
Europium	Eu	63	>1,000 <sup>(*)</sup>	0.3	0.5	NR	0.47
Gadolinium	Gd	64	>1,000 <sup>(*)</sup>	4.1	1.95	NR	1.92
Terbium	Tb	65	>1,000 <sup>(*)</sup>	0.8	0.4	397	0.46
Dysprosium	Dy	66	-	6.2	3.6	1,491	3.84
Holmium	Ho	67	-	1.2	1.0	NR	0.97
Erbium	Er	68	1,680	4.9	4.0	NR	3.78
Thulium	Tm	69	-	0.9	0.8	1,491	0.78
Ytterbium	Yb	70	-	8.3	7.1	NR	7.21
<b>Lutetium</b>	<b>Lu</b>	<b>71</b>	-	<b>1.4</b>	<b>1.2</b>	NR	<b>1.11</b>
<b>Other Elements (not common)</b>							
<b>Rubidium</b>	<b>Rb</b>	<b>37</b>	<b>597</b>	<b>215.4</b>	<b>235.3</b>	<b>965</b>	<b>211.96</b>
Niobium	Nb	41	149	38.0	13.9	NR	6.37
Hafnium	Hf	72	2,964	NR	5.4	835	4.97
<b>Caesium</b>	<b>Cs</b>	<b>55</b>	-	<b>8.7</b>	<b>6.1</b>	NR	<b>5.38</b>

(\*) Conclusive identification and quantification not ascertained NR: Not recorded



**Figure 8: Spear Hill Stockpiles A&B and pegmatite sample locations – May 2019**





**Figure 9: Spear Hill Stockpiles A&B sample locations July 2019**

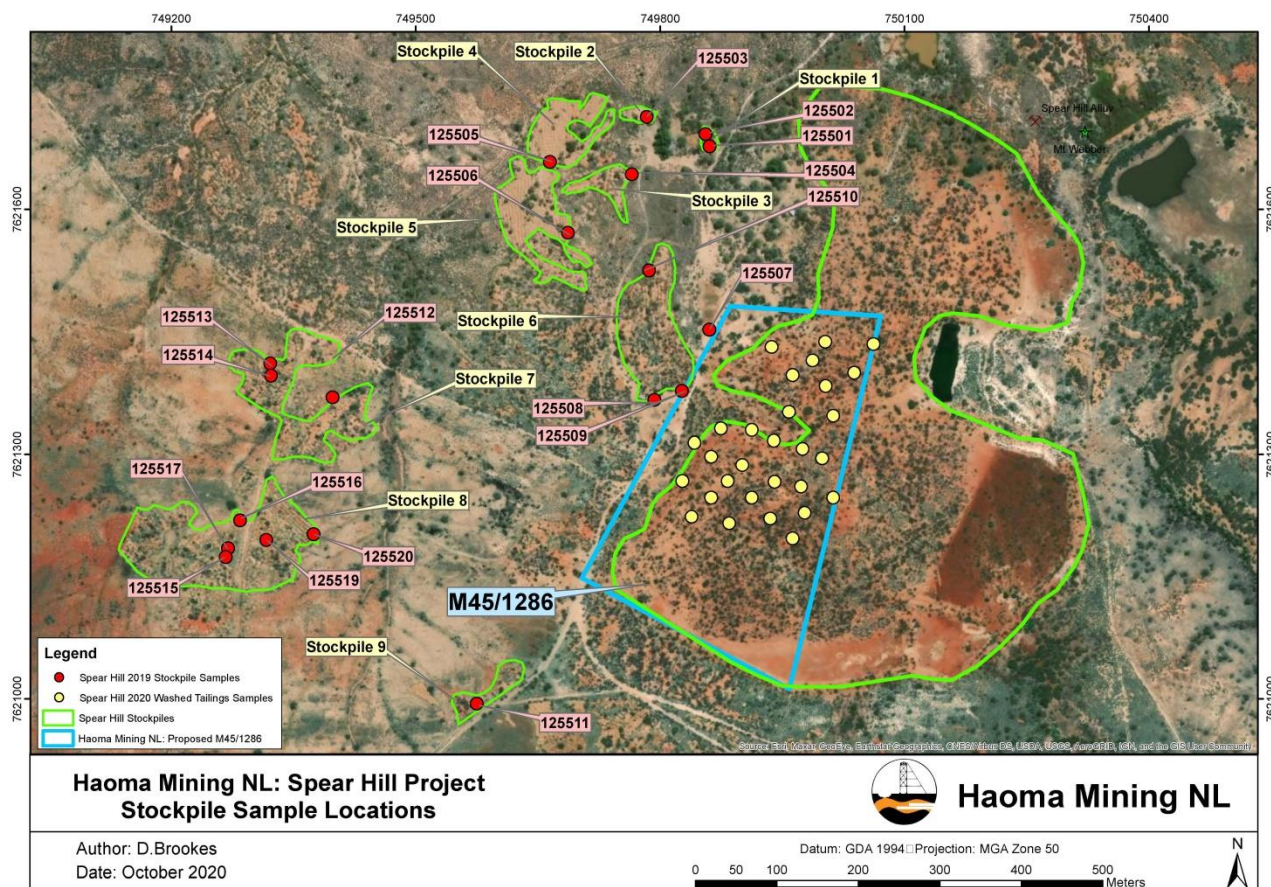


**Figure 10: Spear Hill Stockpile A**

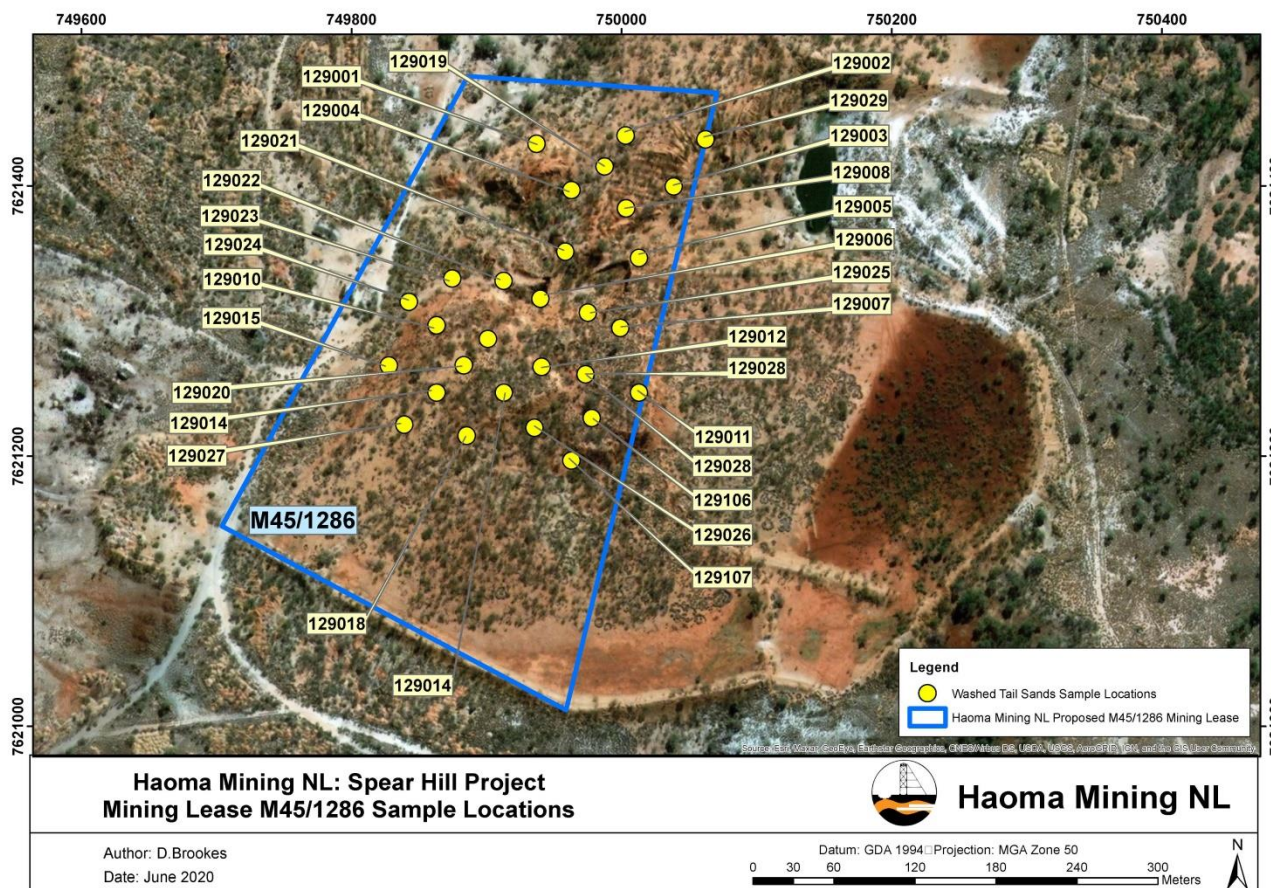


**Figure 11: Spear Hill Stockpile B (with Spear Hill in background)**



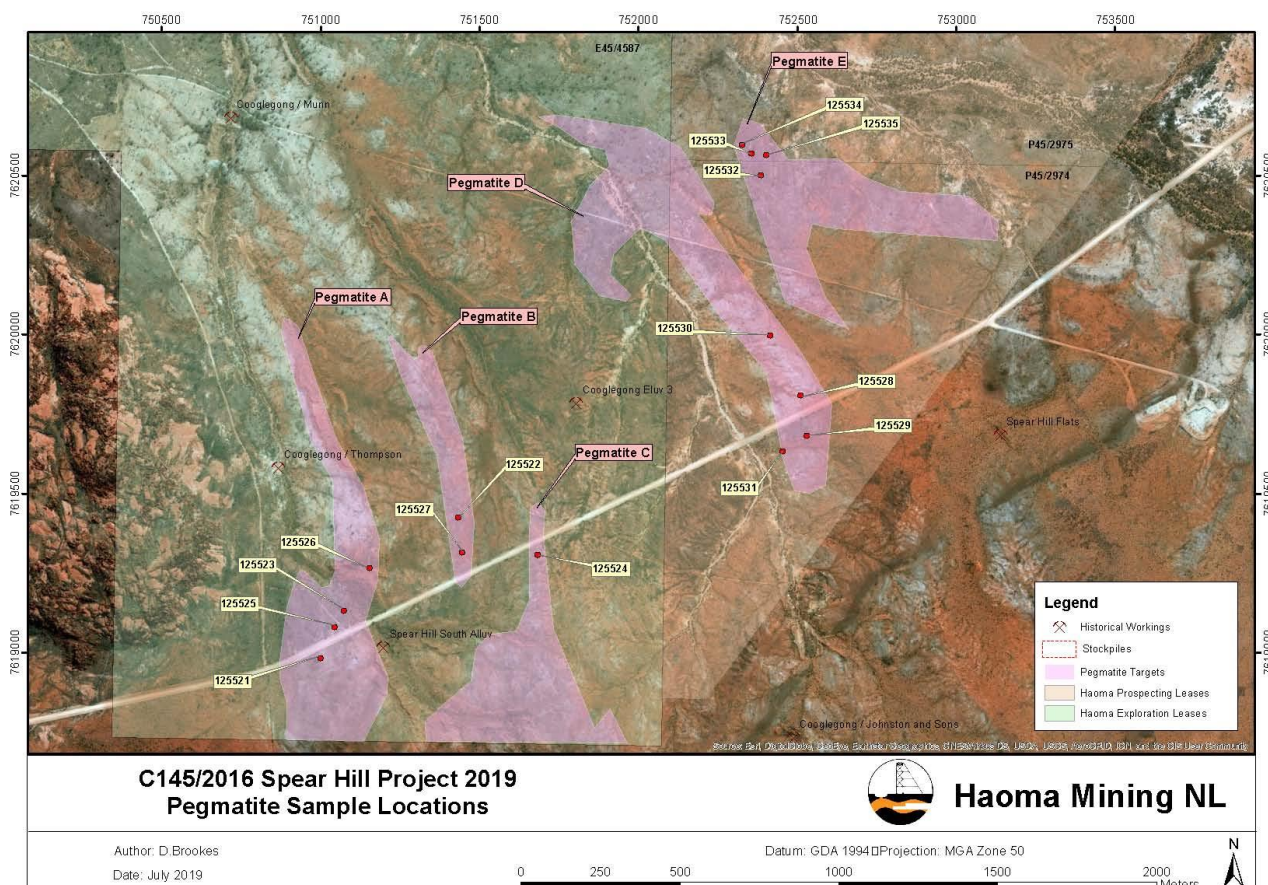


**Figure 12:** Spear Hill Stockpiles A&B sample locations (July 2019) with Spear Hill M45/1286 Tailing Sands sample locations (October 2020) shown inside blue mining lease boundary.



**Figure 13:** Spear Hill M45/1286 Tailing Sands sample locations (May 2020).





**Figure 14: Spear Hill Pegmatite sample locations (July 2019).**

**Table 2(a): Significant Bamboo Creek XRF results for each of the 6 sub-group fractions**

Element	Symbol	Feed Head grade (ppm)	Con 1 22% of Feed (ppm)	Con 2 0.74% of Feed (ppm)	Con 3 0.44% of Feed (ppm)	Con 4 0.15% of Feed (ppm)	Con 5 2.55% of Feed (ppm)	Con 6 69.36% of Feed (ppm)
Scandium	Sc	NR	-	-	509	412	-	-
<b>Yttrium</b>	<b>Y</b>	<b>30</b>	<b>307</b>	<b>100</b>	<b>2959</b>	<b>2,814</b>	<b>479</b>	<b>-</b>
Cerium	Ce	NR	2,880	504	2,287	893	2,282	2,096
Terbium	Tb	397	567	3,398	-	-	-	-
Dysprosium	Dy	1,491	1,633	-	-	-	1,301	-
Holmium	Ho	NR	-	-	-	-	362	-
Thulium	Tm	1,140	407	991	1299	2,061	691	1,533
<b>Lutetium</b>	<b>Lu</b>	<b>NR</b>	<b>-</b>	<b>778</b>	<b>-</b>	<b>1,067</b>	<b>20</b>	<b>-</b>
<b>Other Elements (not common)</b>								
<b>Rubidium</b>	<b>Rb</b>	<b>965</b>	<b>1,632</b>	<b>370</b>	<b>160</b>	<b>338</b>	<b>434</b>	<b>853</b>
Niobium	Nb	NR	-	-	466	215	-	-
Hafnium	Hf	835	484	674	-	840	498	420

NR: Not recorded



**Table 2(b): Elemental abundance (ALS) for the Spear Hill Tailings Sands along with 6 sub-group process fractions & Bamboo Creek cyanide leach assays for the same.**

Element	Symbol	Feed Head grade (ppm)	Con 1 22% of Feed (ppm)	Con 2 0.74% of Feed (ppm)	Con 3 0.44% of Feed (ppm)	Con 4 0.15% of Feed (ppm)	Con 5 2.55% of Feed (ppm)	Con 6 69.36% of Feed (ppm)
Scandium	Sc	3.1	1.2	6.2	44.0	37.8	10.4	2.7
<b>Yttrium</b>	<b>Y</b>	<b>25.65</b>	<b>37.05</b>	<b>39.7</b>	<b>1097.5</b>	<b>700.5</b>	<b>125.5</b>	<b>1.15</b>
Cerium	Ce	37.35	24.9	90.4	591.5	190.25	44.7	33.95
Terbium	Tb	0.41	0.56	0.8	19.8	8.6	1.35	0.28
Dysprosium	Dy	3.16	4.59	5.64	171.5	82.7	13.35	2.26
Holmium	Ho	0.84	1.12	1.29	46.8	25	3.97	0.53
Thulium	Tm	0.71	0.82	0.85	40.7	24.1	4.09	0.4
<b>Lutetium</b>	<b>Lu</b>	<b>1.1</b>	<b>1.03</b>	<b>1.01</b>	<b>60.8</b>	<b>38.1</b>	<b>6.43</b>	<b>0.56</b>
<b>Lanthanum</b>	<b>La</b>	<b>11.6</b>	<b>5.8</b>	<b>31.1</b>	<b>335</b>	<b>79.65</b>	<b>15.05</b>	<b>9.4</b>
<b>Other Elements (not common)</b>								
<b>Rubidium</b>	<b>Rb</b>	<b>216.5</b>	<b>399.5</b>	<b>140.75</b>	<b>79.5</b>	<b>96.4</b>	<b>133.5</b>	<b>171.75</b>
Niobium	Nb	7.3	5.45	19.35	205	91.35	16.35	5.15
Hafnium	Hf	5.35	1.9	11.4	305	105.95	17.15	3.65
<b>Caesium</b>	<b>Cs</b>	<b>5.81</b>	<b>9.04</b>	<b>5.54</b>	<b>2.87</b>	<b>3.26</b>	<b>3.81</b>	<b>4.67</b>
<b>Gold</b>	<b>Au</b>	<b>0.07</b>	<b>0.08</b>	<b>4.61</b>	<b>51.0</b>	<b>&gt;10</b>	<b>2.74</b>	<b>0.15</b>
<b>Gold (Bamboo Creek cyanide leach g/t)</b>	<b>Au</b>	<b>17.75</b>	<b>4.17</b>	<b>7.64</b>	<b>45.33</b>	<b>40.08</b>	<b>4.7</b>	<b>11.76</b>

NR: Not recorded

**Table 3: Radioactivity Analysis**

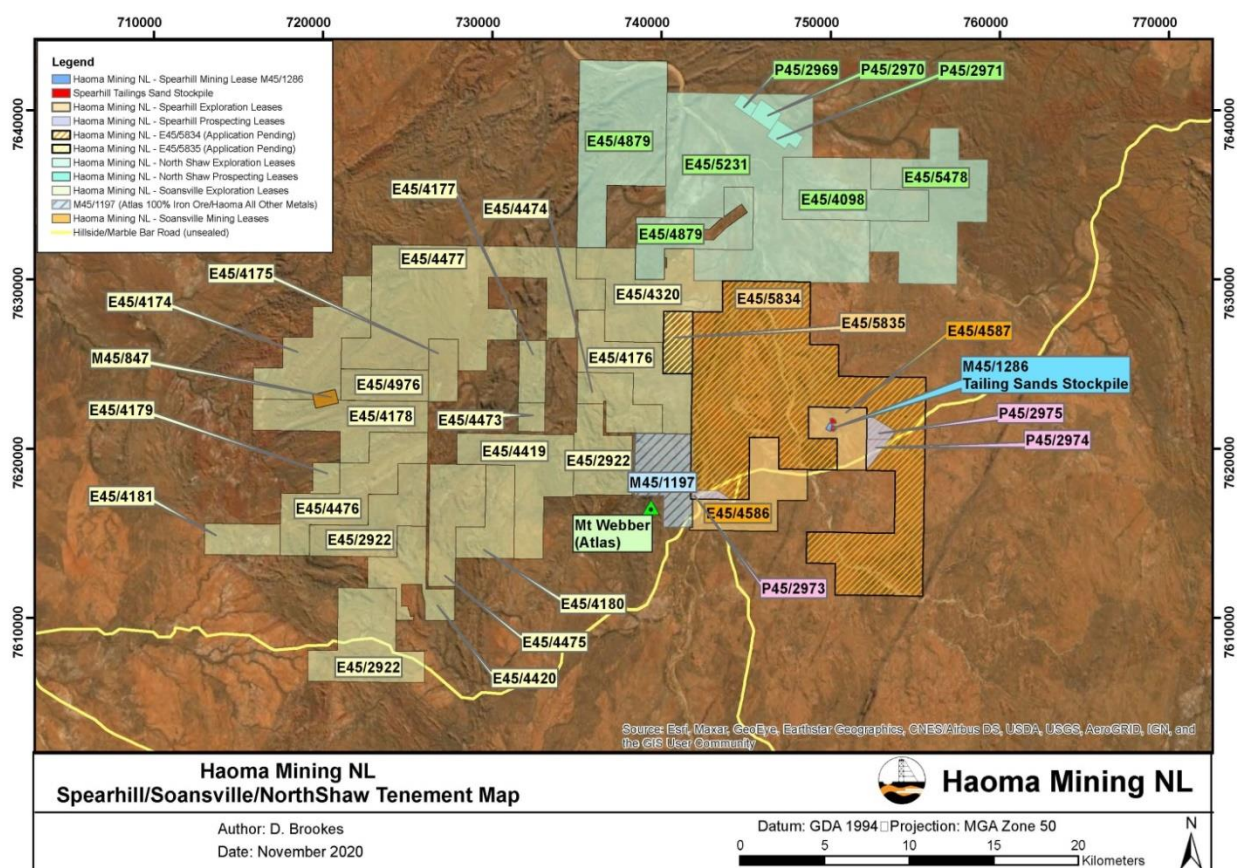
Description	Net Weight	Radioactive count (CPS)
Feed Head Grade	300.4821	1
Concentrate 1	170.1621	1
Concentrate 2	100.4921	1
Concentrate 3	59.9217	4
Concentrate 4	20.1482	1
Concentrate 5	300.2421	1
Concentrate 6	230.4821	0

### 3. Iron Ore activities at Mt Webber (M45/1197) and Haoma's iron ore tenements to the west and north

The 2012 Tenement Sale Agreement by which Haoma sold its Mt Webber iron ore rights to Atlas Iron Limited includes a 'Reserve Uplift Payment' entitlement. The uplift payment entitlement is triggered whenever reserve development work on the tenements which were subject to the Sale Agreement (E45/2186 and M45/1197) result in Atlas Iron releasing a JORC compliant iron ore reserve in excess of 24 million tonnes inclusive of any iron ore tonnes already mined.

On November 18, 2020 Atlas Iron Pty Ltd advised Haoma that at June 30, 2020 the remaining JORC ore reserve at Mt Webber within M45/1197 is 9,545,168 tonnes. Atlas also advised that it has mined 14,828,278 tonnes from M45/1197.

**The combined amount of remaining reserve and tonnes mined of 24,373,446 tonnes meant a reserve uplift payment was due to Haoma. The uplift payment of \$601,248 calculated on 373,446 tonnes at \$1.61 per Excess Reserve tonne was received in December.**





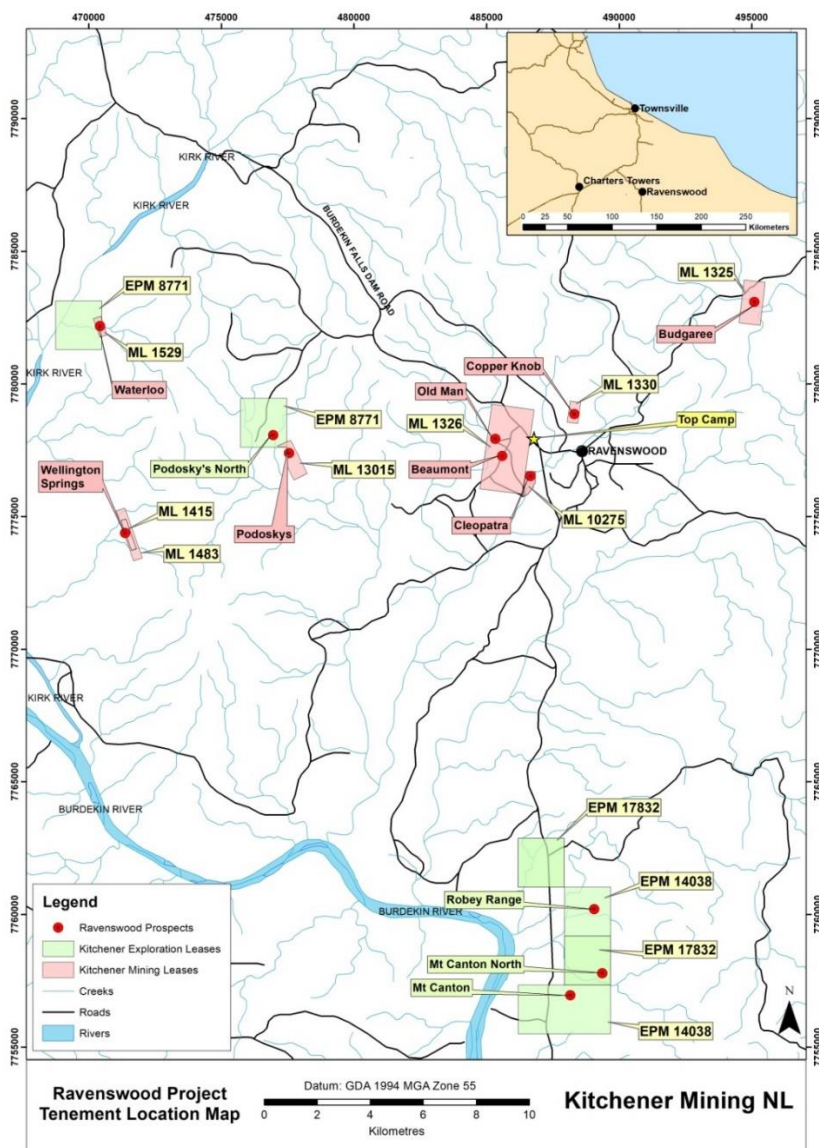
#### 4. Sales of Dolerite & other rock from Elazac Quarry, Cookes Hill (M45/1186)

Haoma owns the Elazac Quarry on M45/1186 at Cookes Hill which is operated under licence by Brookdale Contractors. Brookdale is a significant supplier of ‘hard rock’ to infrastructure projects in the Pilbara and sources ‘hard rock’ and other materials from the Elazac Quarry for this purpose.

In June 2020 Brookdale commenced blasting and mining of ‘hard rock’ from the Elazac Quarry. In the six months July to December 2020, Haoma sold 83,409 tonnes of ‘hard rock’ to Brookdale Contracting including stockpiled and newly mined rock. The revenue generated from these sales was \$306,515.

#### 5. Haoma’s Tenements at Ravenswood, Queensland

In Queensland, Haoma’s exploration activities in 2020 were significantly limited by movement restrictions imposed to control the impact of the Covid-19 pandemic. Trial processing of bulk parcels was delayed. And a proposed sampling program is now anticipated to start in Quarter 2, 2021.



**Figure 15:** Locations of samples from Ravenswood tenements

## 6. Trading at Haoma's Top Camp Road House, Ravenswood, Queensland

The facility upgrades implemented during 2017 and 2018 at the 'Top Camp' accommodation and Road House located at Ravenswood, Queensland has continued to support an increase in business. The revitalisation of mining activity in the Ravenswood district has increased the occupancy rate at Top Camp.

Top Camp is a preferred accommodation facility with many businesses conducting work in the Ravenswood area and the new 'camp kitchen' built in 2018 has been a popular addition with travellers and other visitors to the area. The Directors thank Sue Kennedy and her support team at Top Camp for the revitalisation of Top Camp and its accommodation which is now a valuable Haoma asset.

Plans for further improvements and expansion of the 'camp' are being considered.



**Figures 16(a) & 16(b): Entrance to Top Camp Road House, Ravenswood and Café area**



**Figure 17(a): Refurbished accommodation cabins at Top Camp**





**Figure 17(b): Refurbished accommodation cabins at Top Camp**

## **7. Acknowledgements:**

The Directors wish to acknowledge and express their appreciation to all those who 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, silver and Platinum Group Metals (PGM) assay problem associated with Pilbara ores; and the extraction of gold, silver, PGM and other metals 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, Steven Wilson and geologist Darren Brookes at Bamboo Creek, Gerard Poot at the Comet Gold Mine and Tourist Centre, Geoffrey Myers at the Normay Gold Mine, and Sue Kennedy and Chloe Cox at Top Camp, Ravenswood.

Gary C. Morgan  
Chairman

March 29, 2021