

## INITIAL RESULTS FROM EXPANSION STUDY

### ASX Release

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Monday 6<sup>th</sup> September 2010

**SIGNATURE METALS  
LIMITED**

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**Issued Capital:**  
1,185 million shares

**ASX Symbol:** SBL

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Signature Metals Limited is pleased to announce preliminary results from an internal scoping study into the expansion of production at the Konongo Gold Project. The Company anticipates being able to increase the plant throughput to **700,000 tonnes per annum** with relatively modest capital expenditure in the order of **US\$3-4 million**. This would lift gold production to between **40,000 and 60,000 ounces per annum** at head grades between 2 and 3 g/t. The increased throughput would also result in a reduction of operating costs in the order of 5 to 15%.

The proposed expansion is based on purchase and installation of a SAG mill or ball mill to operate in circuit with the existing ball mill. Additional tankage would be added to the leach circuit to increase capacity whilst maintaining the same residence time. The total capital cost for purchase of these items as well as their installation is estimated to be approximately US\$3-4 million.

The expansion would be centred around the existing 350,000 tonne per annum CIL plant on site and is therefore dependent on the successful refurbishment of the existing plant. Since no serious equipment defects have been identified in the works to date the Company can now start a pre-feasibility study on the expansion of the plant with confidence. This study will include more detailed costings for capital items, further financial modelling and discussions with potential suppliers. No purchase commitments will be made until after commissioning of the existing plant has been completed.

The expansion of the existing plant would be the first step on the way to the Company's aim of making the Konongo Gold Project a 100,000 ounces per annum producer. The Company is continuing to study other options to achieve this goal, as well as carrying out aggressive exploration programmes to test the Company's Exploration Target of 1.5 to 2.5 million ounces of gold and unlock the considerable potential present within the Konongo Gold Project.

The Company also continues to increase the feedstock available for the re-commencement of production at Konongo. In addition to the JORC resources quoted in Table 1 the Konongo Gold Project contains material on oversize stockpiles, low grade dumps and in tailings/battery sands adjacent to historical workings.



From sampling and surveying of the stockpiles and dumps the Company can now report that the total inventory of this material is approximately **400,000 to 500,000 tonnes** at grades between **1.5g/t and 5 g/t gold**. It should be noted that the tonnages and grades stated do not currently comply with JORC reporting criteria however the assay results clearly demonstrate the economic potential of the material. The tonnage is derived from surveying of the stockpiles and dumps and using an SG of 1.7. The grade is estimated from surface sampling of the stockpiles/dumps (300 samples in total).

Due to the low cost of reclaiming these stockpiles and dumps it is likely that this material will be processed during the initial phase of production. Based on metallurgical testwork to date the company expects recoveries in the range of 60% to 90% from processing of these stockpiles and dumps.

With consultants also working on resource updates for the Boabedroo, Kwakawkaw and Obenemase Deposits the Company will have a large degree of flexibility in scheduling mining operations at the Konongo Gold Project which will substantially decrease operating risks associated with the project.

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- Aiming to develop the Konongo Gold Project into a +100,000 ounce per annum gold producer.
- The Konongo Gold Project consists of a mining license and prospecting license covering 192km<sup>2</sup> in the Ashanti Gold Belt of Ghana. Extension of mining license to 2023 recently granted.
- Past production from Konongo Gold Project of 1.6 million ounces at a head grade of 11.8g/t gold.
- JORC Resources of over 1.27 million ounces (Table 1).
- Exploration Target<sup>1</sup> of 1.5 - 2.5 million ounces of gold (20 – 25 million tonnes at a resource grade of 2 - 4g/t gold).
- Exploration programmes progressing well, with over 15,000 metres of drilling completed and a substantial number of high grade results received.
- Mining designs and schedule being re-optimised to maximise operating margins.
- Onsite CIL plant being refurbished at a fraction of the cost of purchasing a new/second hand plant. Lead time to commissioning scheduled within six months.
- Environmental studies progressing rapidly. Environmental Impact Study to be submitted to the EPA this quarter.

Bill Oliver  
Managing Director  
**SIGNATURE METALS LIMITED**

*<sup>1</sup>This exploration target is conceptual in nature and relates to defined exploration targets/areas where mineralisation has been identified but resources have not been delineated. The quantity and grade of the exploration target is based on past production records and in comparison with currently defined Mineral Resources contained within the project. There has been insufficient exploration to define a Mineral Resource in these areas (aside from the resources presented earlier) and it is uncertain if further exploration will result in the determination of a Mineral Resource different to the JORC-Code compliant resource presented earlier. Signature Metals has an exploration strategy to systematically test these areas to determine if Mineral Resources are present.*

*This release contains certain forward looking statements. These forward looking statements are based on management's expectation and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors some of which are outside the forward control of Signature Metals Limited, that could cause actual results to differ materially from such statements.*

**Table 1. Resources contained within the Konongo Gold Project. Re-estimated resources highlighted in bold.**

Deposit	Measured			Indicated			Inferred			Total		
	Tonnes	Grade (g/t)	Contained Ounces	Tonnes	Grade (g/t)	Contained Ounces	Tonnes	Grade (g/t)	Contained Ounces	Tonnes	Grade (g/t)	Contained Ounces
<b>Obenemase</b>				<b>3,267,000</b>	<b>3.08</b>	<b>323,605</b>	<b>1,739,000</b>	<b>2.37</b>	<b>132,695</b>	<b>5,006,000</b>	<b>2.83</b>	<b>456,300</b>
Asieye							1,500,000	0.80	38,580	1,500,000	0.80	38,580
Kwakawkaw							344,000	4.31	47,675	344,000	4.31	47,675
Nyabo East							540,000	1.03	17,940	540,000	1.03	17,940
<b>Patuo</b>				<b>128,000</b>	<b>1.43</b>	<b>5,905</b>	<b>445,000</b>	<b>1.44</b>	<b>20,660</b>	<b>573,000</b>	<b>1.44</b>	<b>26,565</b>
Kyereben West							124,000	3.10	12,360	124,000	3.10	12,360
<b>Aserewa</b>				<b>324,000</b>	<b>2.42</b>	<b>25,130</b>	<b>136,000</b>	<b>4.66</b>	<b>20,355</b>	<b>460,000</b>	<b>3.10</b>	<b>45,485</b>
<b>Atunsu</b>				<b>99,000</b>	<b>2.01</b>	<b>6,415</b>	<b>659,500</b>	<b>2.61</b>	<b>55,435</b>	<b>758,500</b>	<b>2.54</b>	<b>61,850</b>
<b>Apan</b>				<b>39,000</b>	<b>2.03</b>	<b>2,565</b>	<b>526,000</b>	<b>2.22</b>	<b>37,620</b>	<b>565,000</b>	<b>2.21</b>	<b>40,185</b>
Leopard Shaft							95,000	7.55	23070	95,000	7.55	23,070
<b>Boabedroo</b>				<b>192,500</b>	<b>2.63</b>	<b>16,295</b>	<b>2,184,500</b>	<b>2.58</b>	<b>180,900</b>	<b>2,377,000</b>	<b>2.58</b>	<b>197,195</b>
Akyenase Central				58,000	4.00	7,460	96,000	8.80	27,160	154,000	6.99	34,620
Santreso West				3,520,000	1.20	135,810	810,000	1.25	32,555	4,330,000	1.21	168,365
Santreso South							340,000	1.16	12,680	340,000	1.16	12,680
Santreso East							700,000	1.27	28,610	700,000	1.27	28,610
<b>Old Tailings Dam</b>				<b>1,177,000</b>	<b>1.19</b>	<b>45,050</b>	<b>575,000</b>	<b>0.87</b>	<b>16,100</b>	<b>1,752,000</b>	<b>1.09</b>	<b>61,150</b>
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,804,500</b>	<b>2.01</b>	<b>568,235</b>	<b>10,814,000</b>	<b>2.03</b>	<b>704,395</b>	<b>19,618,500</b>	<b>2.02</b>	<b>1,272,630</b>

The Mineral Resources presented in this table for the Obenemase, Boabedroo, Aserewa, Atunsu, Apan and Patuo Deposits, and the Old Konongo Tailings Dam, is based on information compiled by Mr Peter Ball who is a Member of the Australian Institute of Mining and Metallurgy and is the Manager of Data Geo. Mr Ball has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ball consents to the inclusion of this table in the report in the form and context in which it appears based on the information presented to him.

The Mineral Resources for the Obenemase, Boabedroo, Aserewa, Atunsu, Apan and Patuo Deposits were derived from solid models of mineralised zones defined by geology and Au grade. Au grade was estimated into block models created from these zones using Inverse Distance<sup>2</sup>. Tonnage was assigned by weathering condition (oxide, transition, fresh) using default SG values generated from historical drill core measurements. The Mineral Resources are classified according to geological continuity, grade continuity and geostatistical parameters relating to sample density. The Mineral Resource is reported below the recorded extents of open cut mining at a 1.0g/t cutoff for fresh rock material and a 0.5g/t cutoff for oxide & transition material. Material recorded as being mined by underground methods has also been removed from the Mineral Resource.

Other Mineral Resources presented in this table have been compiled and reviewed by Mr Bill Oliver from publically stated JORC-compliant information originally prepared in 2005 by RSG Global for Mwana Africa's AIM-listing document. This information, in the opinion of Mr Oliver, complies with the reporting standards of the 2004 JORC Code. Mr Oliver is a Member of the Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Oliver is a Director of Signature Metals and consents to the inclusion of this table in the form and context in which it appears based on the information presented to him.