



# MANGANESE DISCOVERY AT KONONGO PROJECT

## ASX Release

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Wednesday 8 September 2010

### SIGNATURE METALS LIMITED

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### Directors / Officers:

Matthew Wood  
Bill Oliver  
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**Issued Capital:**  
1,185 million shares

**ASX Symbol:** SBL

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The Company is very pleased to announce a potentially significant manganese discovery at the Konongo Project.

Rock chip samples from manganese outcrops at surface have returned values up to 40.3% Mn (Table 1). Significantly, seven of nineteen samples returned values over 30% Mn. This is an early indication that this material may be of sufficient quality to be mined and shipped directly to customers.

The Konongo Project is located on the main highway approximately 200 kilometres north west of Accra, the capital of Ghana. Port facilities are available at Tema near Accra and at Takoradi located 300 kilometres south of Konongo. Both of these could be accessed via sealed roads.

Manganese occurrences have been mapped over 1.5 kilometres of strike and over a width of approximately 150 metres, located immediately adjacent to the Accra highway (Figure 1). The actual true thickness of the mineralised horizon is yet to be determined. The strike extent of manganese mineralisation remains open under cover to the south and north of these outcrops.

Manganese is found in specific stratigraphic horizons in the Upper Birimian sequence which have then been thickened by folding and/or faulting. Pods of surface mineralisation are also commonly formed by secondary supergene processes. Manganese occurrences are common along the Ashanti Gold Belt including the Nsuta Manganese Mine which has been operating since 1923. Current production levels from Nsuta are approximately 1 million tonnes of manganese ore per annum, which is shipped from Takoradi.

Based on the sampling results and mapping of manganese outcrops the Company has derived an **Exploration Target of 15 to 54 million tonnes at a grade of 25 to 30 % Mn<sup>1</sup>**. The Company is assessing options to maximise value from this potential resource, including joint venture and off-take funding agreements with third parties.

The Company has the first option over the rights to minerals other than gold discovered in the Konongo Mining License and is currently in discussions with the Ghanaian Minerals Commission to set up an agreement relating to the manganese rights within the Konongo

Mining License. Following completion of these discussions the Company will commence work programmes designed to test the Exploration Target presented above.

**Manganese outcrop  
at the Konongo Project**



*<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 Exploration Target is based on a strike length of between the mapped extent of 1,500 metres and 1,800 metres, a mineralised thickness of between 50 and 75 metres extending to depths of 50 – 100 metres and an SG of 4.0. The quantity and grade of the exploration target is based on exploration results to date as well as reported grades and thicknesses from manganese mineralisation in similar geological settings within Ghana. There has been insufficient exploration to define a Mineral Resource in these areas and it is uncertain if further exploration will result in the determination of a Mineral Resource.*

### **SIGNATURE METALS**

- Aiming to develop the Konongo Gold Project into a +100,000 ounce per annum gold producer.
- Konongo Gold Project consists of one mining license and one prospecting license covering 192 km<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 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 recommissioned at a fraction of the cost of purchasing a new/second hand plant. Lead time to commissioning envisaged to be six months.
- Environmental studies progressing rapidly, Environmental Impact Study to be submitted to the EPA this quarter.
- Significant Manganese Discovery

Bill Oliver  
Managing Director  
**SIGNATURE METALS LIMITED**

Figure 1. Plan showing location and grade of manganese samples.

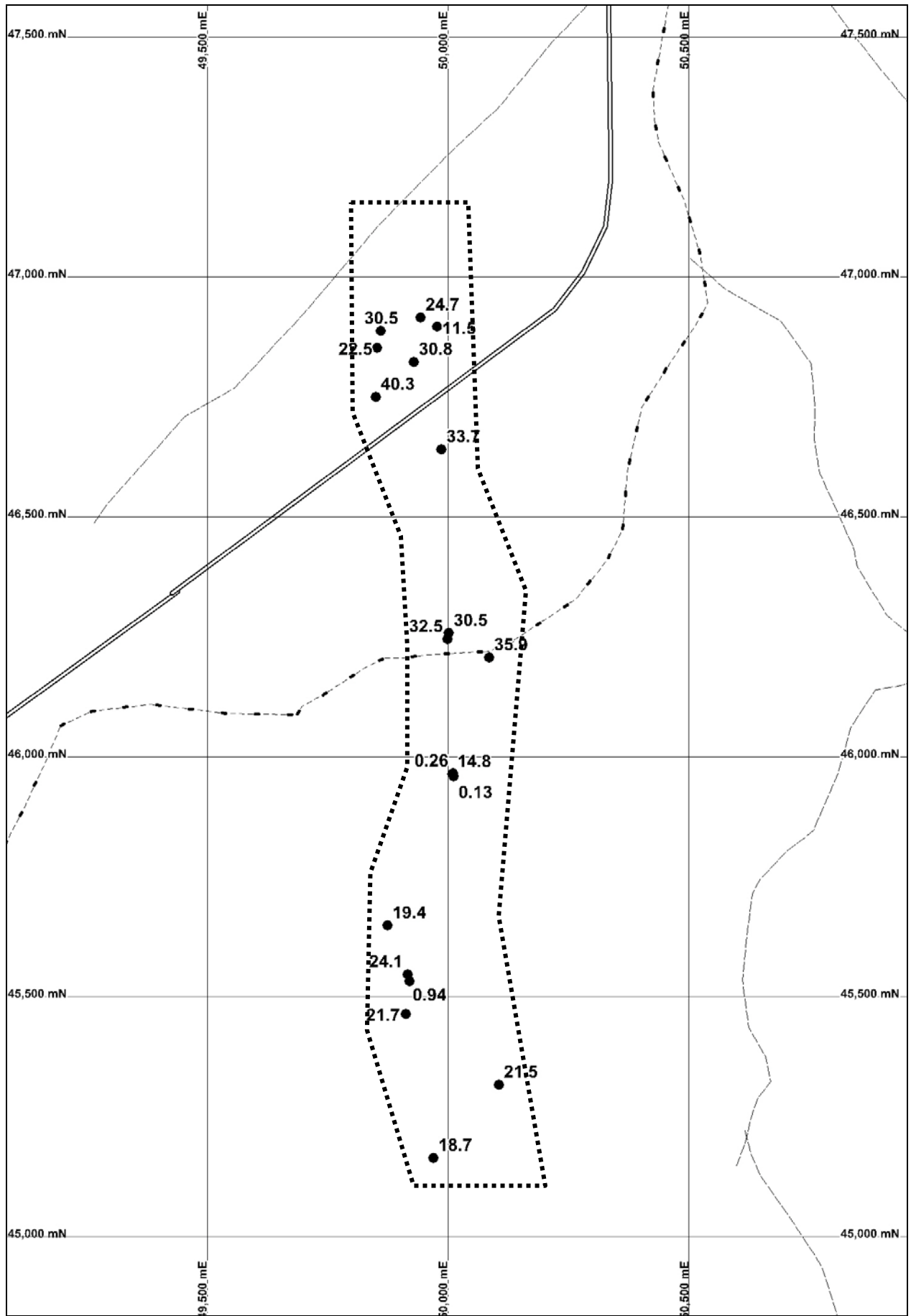
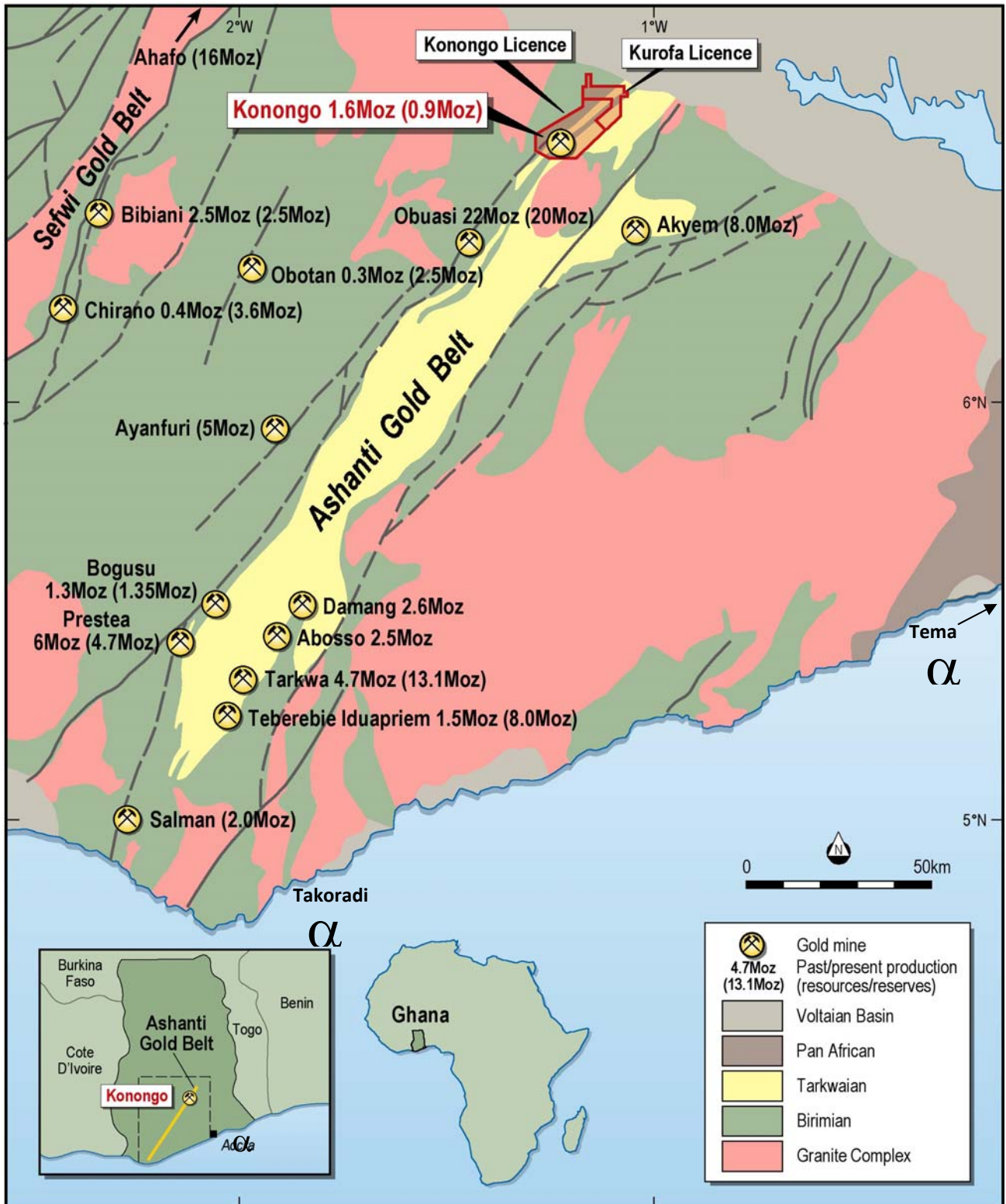


Figure 2. Plan showing the location of the Konongo Gold Project relative to infrastructure



**Table 1. Rockchip Samples from Manganese Outcrops at Konongo**

Sample Id	Project Grid		Mn %	Comments
	Easting	Northing		
300209	93621	30571	14.8	Pit sample
300210	93619	30566	0.1	Pit sample
300211	93623	30571	0.3	Pit sample
300212	93850	30685	35.9	Outcrop on road
300213	93828	30781	30.5	Outcrop on a ridge
300214	93817	30774	32.5	Outcrop on a ridge
300215	94093	31057	33.7	Outcrop
300216	94077	31232	40.3	Pit sample
300217	93301	30449	19.4	Outcrop on a ridge
300218	93257	30349	24.1	Outcrop
300219	93249	30336	0.9	Pit sample
300220	93195	30294	21.7	Outcrop on a ridge
300221	93019	30044	18.7	Outcrop on a ridge
300222	93222	30052	21.5	Outcrop
300223	94184	31225	30.8	Outcrop
300224	94261	31279	24.7	Outcrop
300225	94271	31241	11.5	Outcrop
300226	94183	31319	30.5	Outcrop
300227	94152	31301	22.5	Outcrop
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300227	94152	31301	22.5	Outcrop

**Table 2. 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.

*The information in this release which relates to Exploration Results and Exploration Targets is based on information compiled by Mr Bill Oliver. 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 the Managing Director of Signature Metals and consents to the inclusion in this release of the matters relating to Exploration Results and Targets in the form and context in which it appears based on the information presented to him.*