

ASX Release

Monday 31 January 2011

**SIGNATURE METALS
 LIMITED**

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1,859 million shares

ASX Symbol: SBL

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DECEMBER 2010 QUARTERLY REPORT

HIGHLIGHTS

- **Plant refurbishment nearing completion.**
- **Mechanical and electrical testing of individual areas within the plant has commenced.**
- **First production in Q1 2011**
- **Total Inferred and Indicated Resource¹ for the Konongo Gold Project increased by approximately 200,000 ounces to 1.47 million ounces of contained gold:**

Class	Tonnes	Grade (g/t)	Ounces Au
Indicated	10,506,500	2.03	687,070
Inferred	13,123,500	1.85	779,620
Total	23,355,000	1.95	1,466,690

- **Aircore drilling re-commenced with 7,729 metres drilled to date. Drilling is targetting new prospects away from the known deposits/resources.**
- **Samples have been submitted and results are awaited.**
- **Greenfields exploration continue to identify new targets with Kwakawkaw North trench returning 18 metres at 0.33g/t.**
- **Exploration Target² of 1.5 - 2.5 million ounces of gold (20 – 25 million tonnes at a resource grade of 2 - 4g/t gold).**
- **Mining Manager appointed and onsite in Ghana.**

¹Further details on the Mineral Resource, including the Competent Person statement, can be found at the end of this release.

²This 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.

KONONGO GOLD PROJECT, GHANA

The Konongo Gold Project contains 16 known gold deposits along 12 kilometres of strike of the world class Ashanti Gold Belt in Ghana (Figures 1 and 2). The project currently contains almost 1.47 million ounces of gold in JORC compliant resources (23.4 million tonnes at 1.95g/t gold in the Indicated and Inferred categories; details in Table 1). Considerable infrastructure remains on site including a 350ktpa CIL processing plant as well as access to power, water and sealed roads.

PLANT



Refurbished ore handling system and ball mill awaiting final testing.

The plant refurbishment is nearing completion with mechanical and electrical testing of individual areas commencing this month. Significant recent milestones include:

- final testing / dry commissioning of ball mill completed this week,
- final testing of ore handling system (including conveyors) in progress,
- agitators have been re-installed into the leach and adsorption tanks, along with new/reconditioned motors and gearboxes,
- smelting furnace, calcine furnace and carbon regeneration kiln delivered and installed,
- electrowinning cells delivered and being installed,
- gold room refurbishment nearing completion,
- Knelson gravity concentrator and shaking table arrived on site and being installed as gravity tower is erected,
- placement of orders for reagents

The Company will continue to keep the market informed on key milestones as it moves towards production in Q1 2011. The Company is well placed to take advantage of the current spot gold price and will give substantially higher operating margins than those anticipated when the refurbishment started.



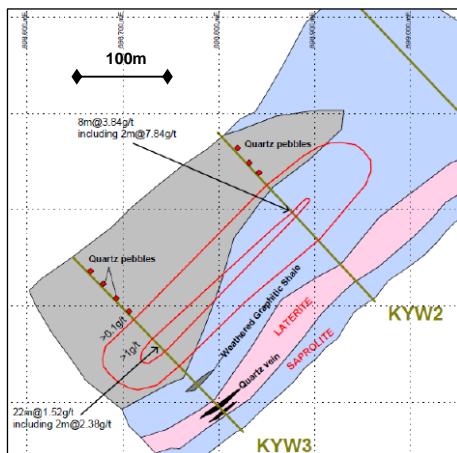
Refitting of motors to adsorption tank agitators.

EXPLORATION

During the quarter the Company commenced an aircore programme testing mineralisation identified by geological mapping, sampling and trenching as part of a sustained greenfields exploration campaign by the Company's exploration team during the last few months. Importantly these prospects lie outside the deposits identified in the project area which contain the known Mineral Resources (detailed in Table 1). The prospects being drill tested are shown on Figure 1 and include:

- **Bimma South – trench results of 2 metres at 39.8g/t gold, 2 metres at 4.80g/t gold and 54 metres at 0.22g/t gold.**
- **Kyereben – trench results of 8 metres at 3.84g/t gold (within a wider intercept of 64 metres at 0.64g/t gold), 22 metres at 1.52g/t gold and 22 metres at 1.48 g/t gold.**
- **Kyekyewere – Structural target along the Ashanti Shear Zone which hosts the +50Moz Obuasi Deposit (Anglogold Ashanti).**
- **Boabedroo West – trench results of 2 metres at 11.7g/t gold, 2 metres at 4.24g/t gold, 14 metres at 0.3g/t gold and 30 metres at 0.24g/t gold.**

Plan showing trenching results from Kyereben



To date 208 holes have been drilled for 7,729 metres. First pass drilling has been completed at the Bimma South and Kyereben West prospects and samples submitted to the lab. Assay results are pending and results will be released as soon as they are received.

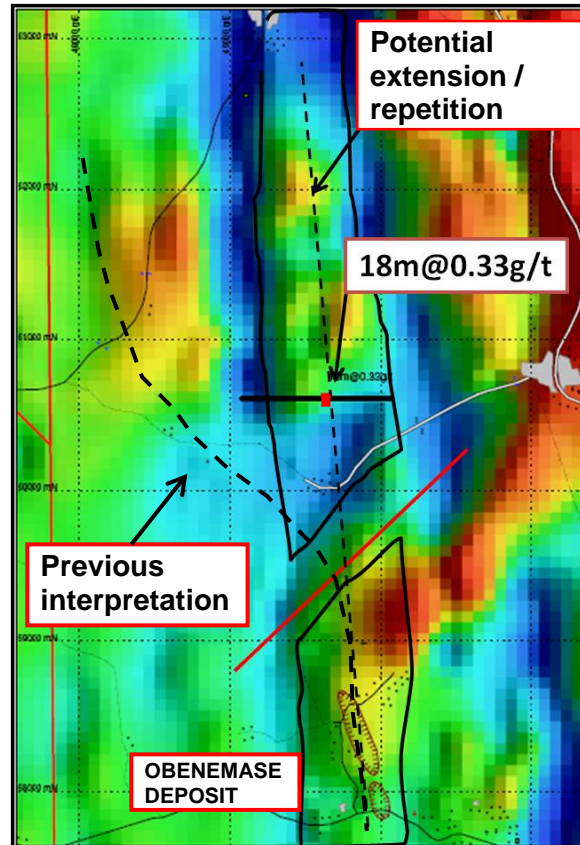


Exploration during the quarter included a detailed review of mineralisation in the Kwakawkaw-Obenemase area. Previous interpretations assumed the mineralised contact swung rapidly to the north of the Obenemase Deposit to become westerly-trending (Figures 2 and 3), with the Kwakawkaw Deposits striking east-west. Aeromagnetic data indicates that the contact, or a repetition of this contact, may continue directly to the north (based on the presence of discrete magnetic highs).

Geological investigations have shown that the absence of soil anomalism may be due to a thicker weathering profile in this area. Therefore a single trench was dug across the magnetic anomaly to test below the transported material and returned an intersection of **18 metres at 0.33g/t gold**.

The anomalous result in this trench may be a possible continuation / repetition of the Tarkwaian-Birimian contact to the north of the Obenemase Deposit. If this is the case it opens up approximately 3 kilometres of strike with the potential to host mineralisation. Follow up trenching is planned to be carried out this quarter.

Aeromagnetic image showing magnetic high north of the Obenemase Deposit and recent trench result.



RESOURCES

During the quarter the Company announced that the JORC compliant Inferred and Indicated Mineral Resource contained within the Konongo Gold Project has been **upgraded by almost 200,000 ounces (or 15%) to 1.47 million ounces of gold**. Significantly resources in the Indicated category were **increased by 119,000 ounces (21%) to over 687,000 ounces** indicating the advanced nature of the deposits within the Project.

The Total in site Mineral Resource for the project is now **23.4 million tonnes** at a **grade of 1.95g/t gold** for **1.47 million ounces of contained gold** and is classified as follows. The Mineral Resource is reported above 0.5g/t Au for oxide/transition material and 1g/t Au for fresh material whilst for tails material all material has been reported. Resources stated have been adjusted for previous open pit and underground mining where this has occurred.

Class	Tonnes	Grade (g/t)	Ounces Au
Indicated	10,506,500	2.03	687,070
Inferred	13,123,500	1.85	779,620
Total	23,355,000	1.95	1,466,690

The mineral resource for the Boabedroo Deposit was re-estimated after the inclusion of results from the recent drilling campaign which were released on 27th July and 9th August 2010. These results have contributed to increasing the overall (Indicated and Inferred) resource by over 75,000 ounces with the Indicated resource now containing over 103,000 ounces of gold (an increase of 87,000 ounces from the previous resource).

New drilling data was also used in the re-estimation of the Obenemase Deposit, with a resultant increase of almost 100,000 ounces. The deposit contains material in the Indicated and Inferred categories (detailed in Table 2) and for modelling purposes has been broken down into three deposits:

Deposit	Tonnes	Grade (g/t)	Ounces Au
Obenemase Main	4,729,500	2.90	440,460
Obenemase D Lode	960,500	2.11	65,025
Obenemase East	1,185,500	1.25	47,640
Total	6,875,500	2.50	553,125

It should be noted that no mining has been carried out on the resources stated for the D Lode or Obenemase East. The proximity of these deposits to the CIL plant (less than 1 kilometre) means that surface mining of these deposits may provide viable sources of oxide feed.

The Inferred Resource for the Kwakawkaw Deposit has been re-estimated based on extensive data compilation as well as geological mapping. The new Inferred Resource is 985,000 tonnes at 1.72g/t gold for almost 55,000 contained ounces of gold. Evaluation of the viability of this deposit has commenced immediately with pit optimisation studies. The Company plans to drill test high grade portions of this resource in coming months as well as target dip/strike extensions.

The resource statement now includes an Inferred Resource for the Southern Tails area which contains material derived from historical underground mining. As mentioned in previous announcements the Konongo Gold Project contains a significant amount of material on oversize stockpiles, low grade dumps and in tailings / battery sands adjacent to historical workings. As presented in the March 2010 Quarterly Reporting sampling of this material has returned a significant number of results above 3 g/t with results as high as 20g/t received.

Based on the Company's sampling and historical data an Inferred Resource of 275,000 tonnes at 1.56g/t gold has been estimated for the dumps in the Southern Tails area. JORC compliant resources are still being estimated for the substantial surface stockpiles in the immediate plant area.

CORPORATE

The Company is pleased to announce that it has appointed Mr Steven Wilson to the role of Mining Manager. Mr Wilson has considerable operational experience including key roles in the startup of open pit and underground mines which will be invaluable to the Company. He was most recently Mining Manager for Integra Mines and has also held senior roles with Avoca, Gold Fields and Barrick. In addition to operational roles he has considerable expertise in co-ordinating feasibility studies and mine design. Mr Wilson is currently onsite in Ghana.

Bill Oliver
Managing Director
SIGNATURE METALS LIMITED

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 control of Signature Metals Limited, that could cause actual results to differ materially from such statements.

Figure 1. Project Location

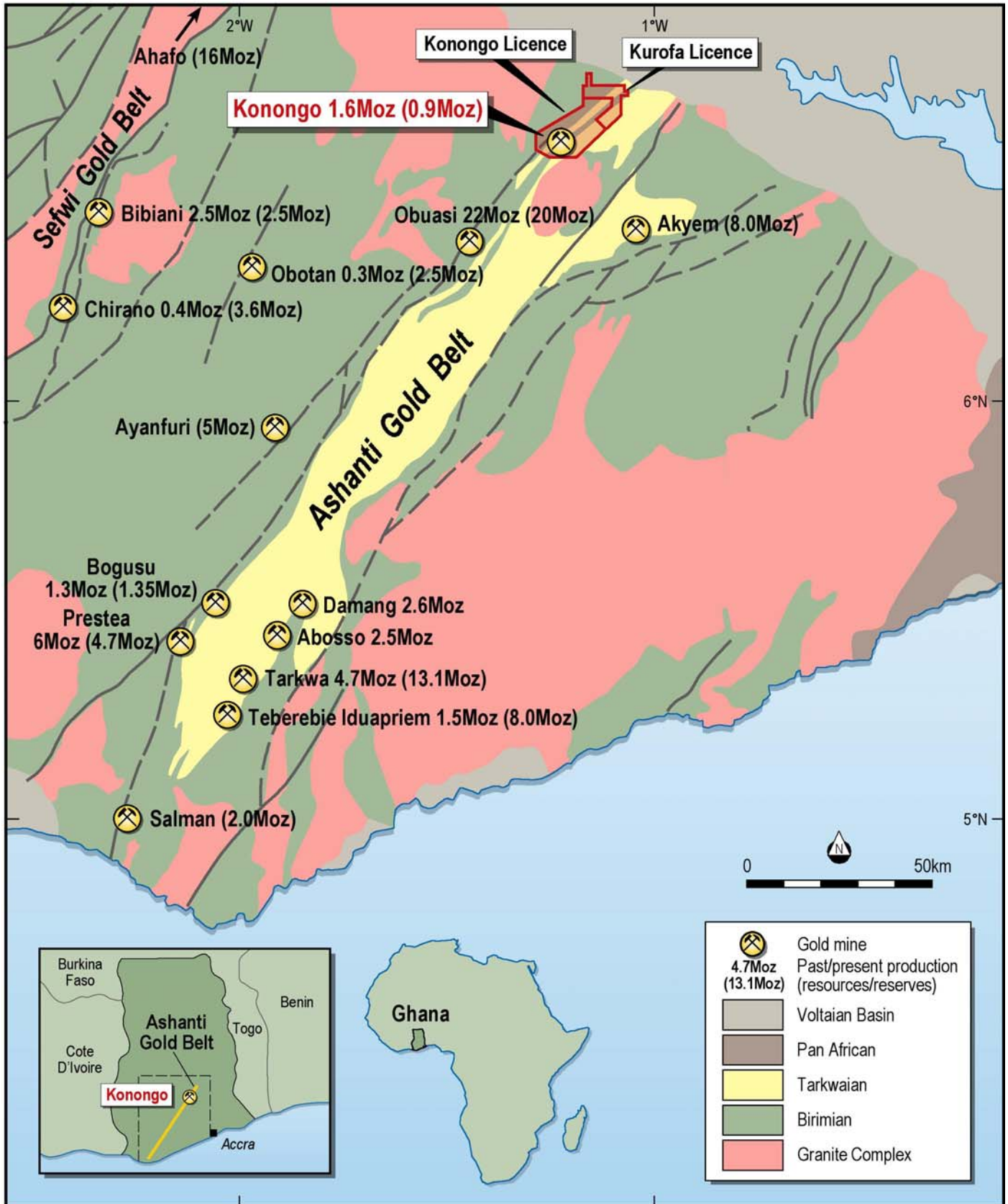


Figure 2. Deposits within the Konongo Gold Project showing development area.

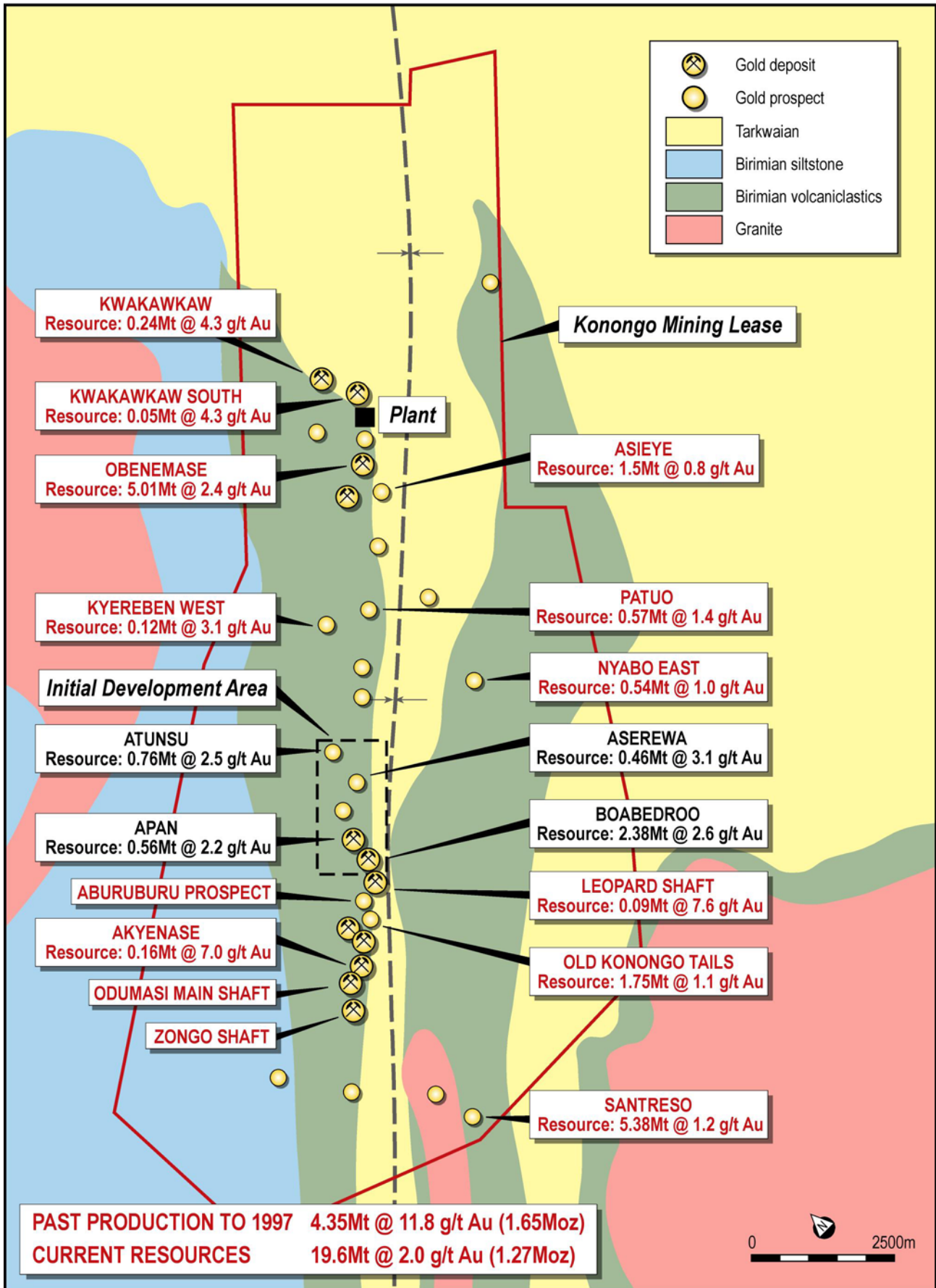


Figure 3. Plan showing results of soil geochemical surveys within the Konongo Gold Project and exploration prospects assessed to date.

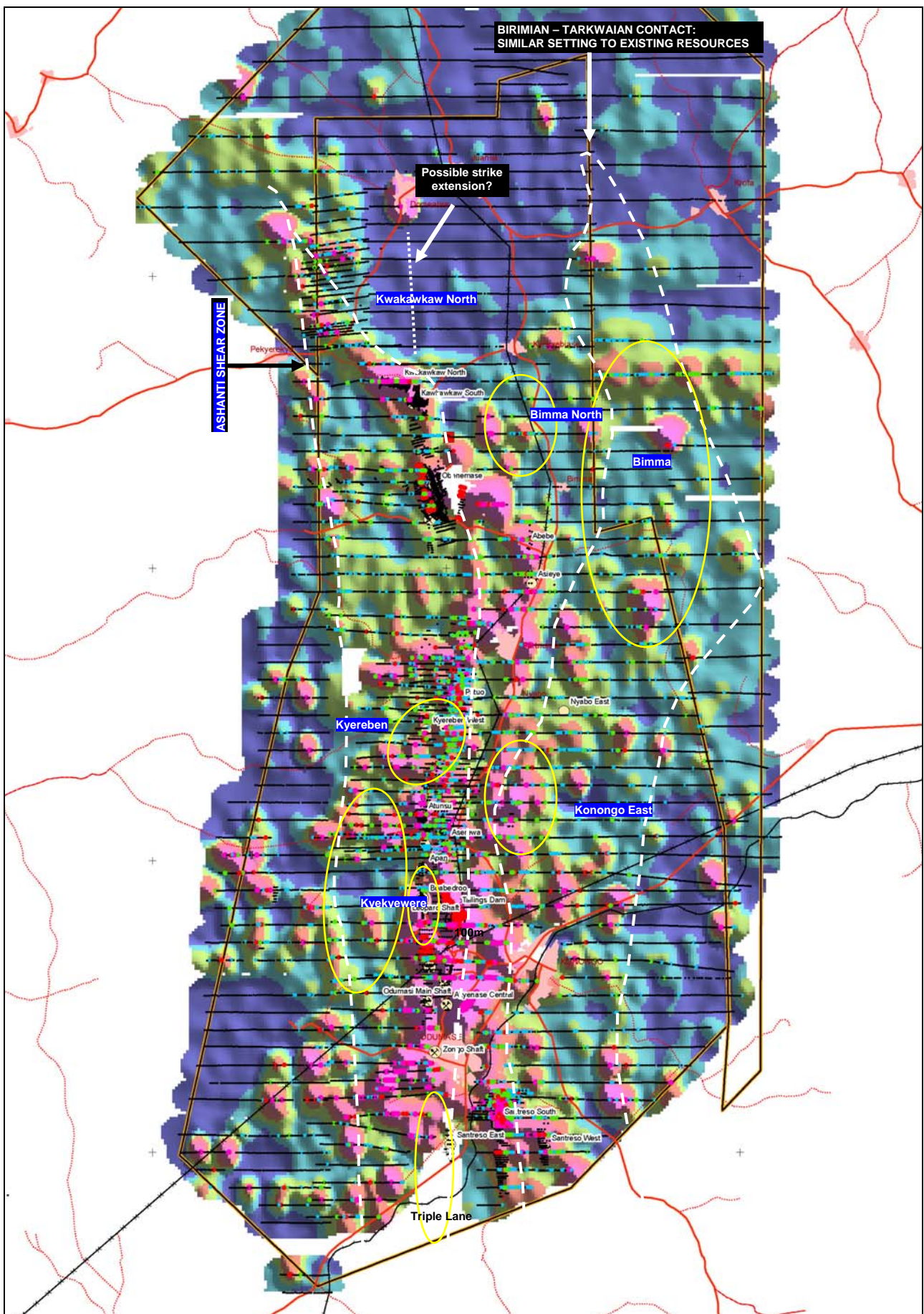


Table 1. Resources contained within the Konongo Gold Project. Re-estimated resources highlighted in bold.

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
Obenemase				3,802,500	2.91	355,440	3,073,000	2.00	197,630	6,875,500	2.50	553,125
Asieye							1,500,000	0.80	38,580	1,500,000	0.80	38,580
Kwakawkaw							985,000	1.72	54,575	985,000	1.72	54,575
Nyabo East							540,000	1.03	17,940	540,000	1.03	17,940
Patuo				128,000	1.43	5,905	445,000	1.44	20,660	573,000	1.44	26,565
Kyereben West							124,000	3.10	12,360	124,000	3.10	12,360
Aserewa				324,000	2.42	25,130	136,000	4.66	20,355	460,000	3.10	45,485
Atunsu				99,000	2.01	6,415	659,500	2.61	55,435	758,500	2.54	61,850
Apan				39,000	2.03	2,565	526,000	2.22	37,620	565,000	2.21	40,185
Leopard Shaft							95,000	7.55	23070	95,000	7.55	23,070
Boabedroo				1,359,000	2.36	103,300	2,244,000	2.36	170,490	3,603,000	2.36	273,790
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	135,805	810,000	1.25	32,555	4,330,000	1.21	168,360
Santreso South							340,000	1.16	12,680	340,000	1.16	12,680
Santreso East							700,000	1.27	28,615	700,000	1.27	28,615
Old Tailings Dam				1,177,000	1.19	45,050	575,000	0.87	16,100	1,752,000	1.09	61,150
Southern Tails							275,000	1.56	13,795	275,000	1.56	13,795
Total	0	0	0	10,506,500	2.03	687,070	13,123,500	1.85	779,620	23,355,000	1.95	1,466,690

Table 2. Resources contained within the Obenemase Deposit.

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
Obenemase Main				3,153,500	3.12	316,310	1,576,000	2.45	124,150	4,729,500	2.90	440,460
Obenemase D Lode				414,000	2.35	31,270	547,000	1.92	33,755	960,500	2.11	65,025
Obenemase East				235,000	1.04	7,860	950,000	1.30	39,725	1,185,500	1.25	47,640
Total Resource				3,802,500	2.91	355,440	3,073,000	2.00	197,630	6,875,500	2.50	553,125

The Mineral Resources presented in these tables for the Obenemase, Boabedroo, Aserewa, Atunsu, Apan and Patuo Deposits, as well as for the Old Konongo Tailings Dam is based on information compiled by Mr Peter Ball who is a Member of the Australasian 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 'Australasian 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 Distance². 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. For tailings material all material is included in 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 Australasian 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 'Australasian 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 is based on information compiled by Mr Bill Oliver. Mr Oliver is a Member of the Australasian 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 'Australasian 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 in the form and context in which it appears based on the information presented to him.