

# ASX & Media Release 23 January 2018 ASX: AZM

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#### **Investment Highlights:**

#### Wa Gold Project:

- 2.1Moz Mineral Resource
- 624,000oz, 2.14g/t Au Ore Reserve
- 2,400km² regional-scale footprint
- Widespread anomalism
- Numerous early to advanced stage targets
- Ibaera Capital Fund LP earning up to a 47.5% direct project interest
- Excellent infrastructure incl. grid power to gate
- 13.4% of Ghana neighbour, Castle Minerals Limited (ASX: CDT)(~10,000km²)

#### **Issued Capital:**

699M ordinary shares35M 3c opts exp 13.11.2021

#### **Directors & Management:**

Chairman: Michael Atkins

Managing Director: Stephen Stone

Non-Executive Director: Geoff M Jones

Company Secretary: Dennis Wilkins

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# Robust Anomalies at Duri and Butele Highlight Project-Wide Gold Endowment

### **Duri and Butele**

- 940 auger holes delineate high-tenor, 2km and 1.6km long, open-ended geochemical anomalies at Duri and Butele
- Exceptional peak values to 1.51g/t Au (Duri) and 1.68g/t Au (Butele)
- Size, continuity, structural and lithological settings analogous to Kunche-Bepkong flagship deposits

# **Bepkong North-West**

- Bepkong North-West status substantially elevated
- Characteristics of multi-deposit, orogenic gold camp
- Numerous RAB and aircore holes ending in low-level mineralisation provide walk-up RC targets

# Drilling results imminent

- First phase now completed in A\$6M combined ~47,000m RC, diamond, aircore and auger drilling campaigns planned for 2018 to boost resources and reserves to reposition Project for development
- Fully funded and managed by partner, Ibaera Capital
- Results from a just completed 3,000m aircore drilling at Manwe and Josephine South available in coming weeks
- 2,000m aircore programme underway at Butele and 2,000m RC programme commences early February

"The first substantive work under the new A\$17 million Azumah-Ibaera funding partnership has highlighted the widespread gold endowment throughout the extensive 2,400km² Wa Gold Project. Using Ibaera's fresh approach to target generation, prioritisation and testing, targets at Duri, Butele and Bepkong North-West have been rapidly enhanced and along with other high-priority targets will provide the exploration focus for this year's planned 47,000m combined auger, aircore and RC drilling programmes" said Azumah Managing Director, Stephen Stone.



Gold explorer Azumah Resources Ltd (ASX: AZM) advises that a recently completed 940-hole auger drilling programme at its Wa Gold Project, Ghana (Project) has confirmed and enhanced extremely robust geochemical anomalies striking 2km and 1.6km at the Duri and Butele targets respectively, whilst the status of the Bepkong North-West target has been substantially elevated following a review and reinterpretation of historical aircore data (refer Figures 1, 2, 3 and 4).

Importantly, these three areas are yet to be tested by RC drilling and therefore represent compelling walk-up opportunities to increase current Mineral Resources of 2.1Moz (refer Table 2).

The tenor of the geochemical gold anomalism at the Duri and Butele targets is very high in the context of the levels of anomalism observed generally in the prospective Wa Lawra greenstone belt with peak values of 1.51g/t Au (Duri) and 1.68g/t Au (Butele) obtained.

The structural and lithological setting of the targets is also strongly analogous to that of the Kunche-Bepkong deposits, being in themselves classic orogenic gold deposits that have only been tested to relatively shallow depth.

These latest results reflect a fresh approach by new partner and private equity fund, Ibaera Capital Fund LP (Ibaera), to target generation and assessment within a Project known for its enviable gold endowment. With anomalism so widespread over the 2,400km<sup>2</sup> of consolidated tenure, the rigorous prioritisation being applied is an essential requirement.

# 2018 targets, funding and programmes

This reported work is the first under the new and transformative Azumah-Ibaera partnership and its A\$6M multi-target, high-intensity exploration campaigns budgeted for 2018. The aim of these will be to boost existing Mineral Resources and Ore Reserves and reposition the Project for funding and development.

A combined ~47,000m of reverse circulation (RC), diamond, aircore and auger drilling is planned at numerous prospects comprising the Project's growing pipeline of quality targets (Figure 1).

The first phase drilling strategy is aimed at increasing Mineral Resources in close proximity to the flagship Kunche, Bepkong and Julie deposits while also providing sufficient definition to deliver a maiden Mineral Resource for deposits occurring along the emerging Josephine-Manwe trend.

Additional RC drilling will follow-up the many high-grade intercepts obtained by Azumah at an array of other targets including Julie West, Julie East, Danyawu and Alpha-Bravo-Charlie.

## Recently completed and planned drilling

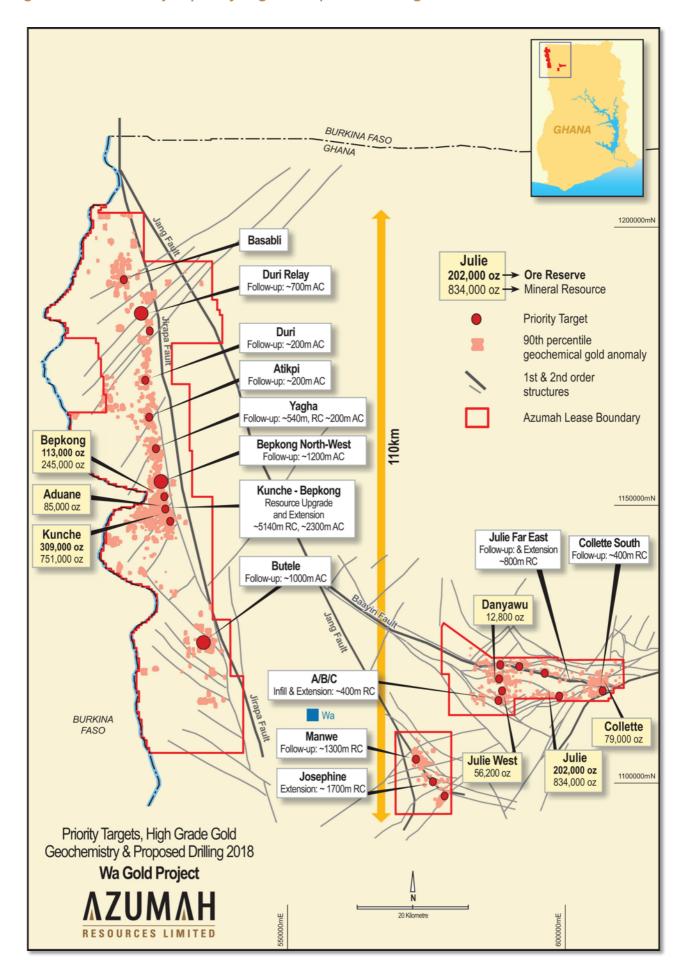
Results are due in coming weeks from a recently completed, 3,000m aircore programme at the Manwe and Josephine South targets.

A 2,000m aircore programme will commence shortly at the Butele target to be followed in early February by a 2,000m RC programme.

The rig will then move to the Kunche area where drilling will be focused on extending the existing Mineral Resources in proximity to the planned open pit.

AZUMAH

Figure 1: Wa Gold Project priority targets and planned drilling in 2018





### **Duri Relay**

The Duri Relay target, ~40km north of the flagship Kunche deposit, is a discontinuous 5km arcuate zone of anomalism draped around the Duri granite to the west. It is associated with a prominent north-west trending structural feature and links up two separate segments of a north-south trending fault structure. Historical drilling of the two segments returned high-grade intersections to the north (Basabli) and south (Duri), indicating that the structures are fertile.

Recently completed infill geochemical auger sampling was undertaken mainly in the northern extent of the Duri Relay target where anomalism swings around to the north-west. This is considered an optimal orientation for wide zones of mineralisation due to dilation arising from the competency and chemical contrast of the local rocks.

Together with previous auger sampling there is now defined in this north-west trending area a ~2km x 700m zone of more coherent, high-tenor anomalism with an exceptionally high peak value of 1,511ppb Au (1.5g/t Au). Drilling below a similarly anomalous value sample collected at Bepkong resulted in the discovery of the 'blind' 245,000oz Bepkong Mineral Resource (refer Table 2).

The anomalism here comprises several sub-parallel, north-west trending zones across the width of the target. These wrap around a major lithological contact between metasediments and the Duri granitic intrusion with several north-east orientated fault structures cutting through the north-west trending anomalism. This is not unlike the structural setting at Kunche-Bepkong and the combination of these features indicates that the Duri Relay target, especially its northern zone, represents a classic setting for orogenic gold mineralisation.

Max Au (ppb) Azumah Lease Boundar < 10 Structure 10 to 100 100 to 1000 > 1000 1511 Max Gold ppb Drillhole Type ▲ AC | RAB Geochem Type 1511 (1.51g/t) Duri Granite Jirapa Fault Granite 1444 (1.44g/t) Gold-in-Auger Anomaly 140 **Duri Gold Target** Wa Gold Project ΛΖυΜΛΗ

Figure 2: Duri Relay target anomalous geochemistry with recent and historical auger results



#### **Butele**

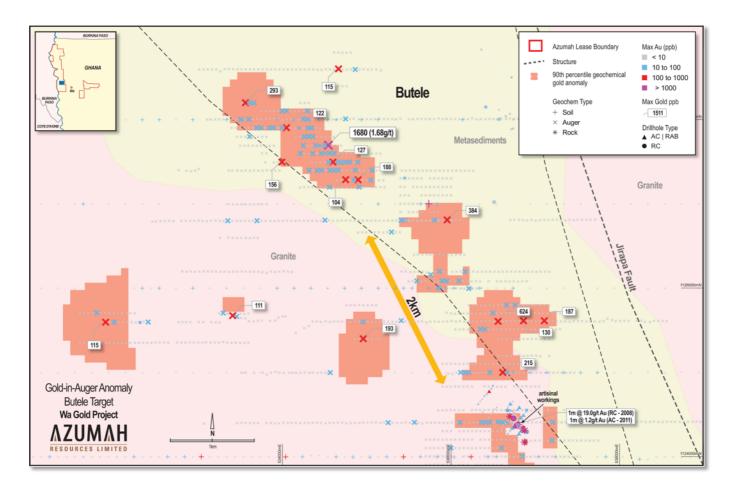
At Butele, 25km south of the Kunche deposit, auger sampling of the saprolite horizon, immediately above the fresh rock interface, has delineated a north-west trending zone of strongly anomalous gold geochemistry. Within the broader well-defined 6km x 700m anomaly there lies a much stronger 1.6km x 300m wide domain of anomalism containing an exceptionally high peak value of 1,680 ppb Au (1.68 g/t Au).

The Butele anomalism remains open to the north-west and south-east and is expected to grow with further auger drilling.

Ibaera's view is that an anomaly of this scale, tenor and continuity is considered consistent with a 'gold camp' (i.e. it may contain multiple deposits) rather than an individual deposit and, based on evidence elsewhere within the Project area, is also indicative of underlying primary mineralisation.

The anomaly is also proximal to a major and similarly trending fault structure and spans the lithological contact between metasediments and granitic intrusives. As for the structural setting at Kunche-Bepkong and at Duri, the structural and lithological setting of Butele is considered favourable for wide zones of mineralisation due to dilation arising from the competency and chemical contrast.

Figure 3: Butele target anomalous geochemistry, recent and historical auger results





# Bepkong North-West

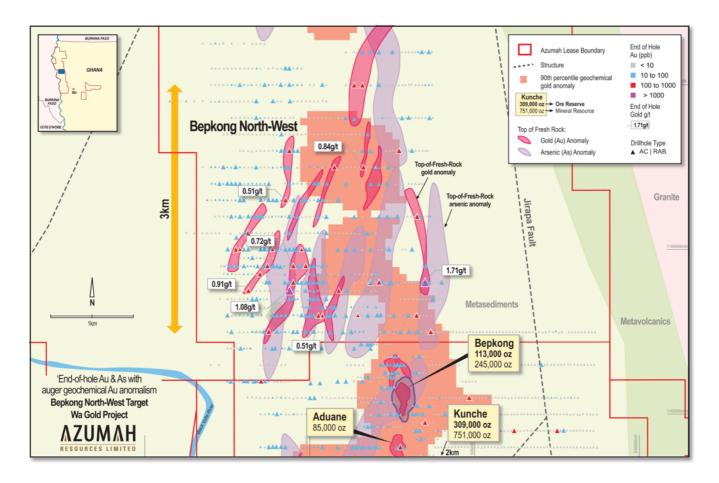
The status of the Bepkong North-West target, 2km to the north-west of the planned Bepkong open pit, has been substantially elevated following an analysis of all historical aircore and RAB drilling sampling data from the Project.

The review focussed on identifying the geochemical signature at the 'top of fresh bedrock' (i.e. where the drill experienced blade-refusal) in an attempt to identify zones of primary mineralisation and associated alteration. The purpose of this is to reduce the search space and provide focus within a much broader zone of near-surface geochemical anomalism.

Interestingly, data analysis and filtering of the bottom of aircore and RAB hole assay values revealed a number of coherent, north-east trending, sub-parallel mineralised trends. These are associated with primary alteration zones that are 500m – 1,000m long and 100m – 300m wide but, importantly, have never been tested by RC drilling. They are also characterised by a strong gold-arsenic association and most likely also correlate with key structures in the area.

Also of note is that many of the aircore and RAB holes across these structures ended in +0.5g/t Au mineralisation and therefore present immediate walk-up drill targets.

Figure 4: Bepkong North-West aircore and RAB drilling, 'top-of-fresh-rock' / bottom-of-hole anomalous gold and arsenic geochemistry





#### **Ibaera Funding Transaction**

On 1 September 2017 Azumah executed a transformative Earn-In and Shareholders Agreement (EISA) with Perth managed private equity group, Ibaera Capital GP Limited, whereby Ibaera can earn in two stages over two years up to a 47.5% direct interest in Azumah's Wa Gold Project for an expenditure of US\$13.5 million (~A\$17M). The terms of the EISA set out the basis for the parties to boost Mineral Resources, Ore Reserves and to deliver a study supporting a decision to proceed to production within the next two years (refer ASX release dated 2 September 2017. Ibaera's investment in the Project was preceded by a review of some two hundred other international resource projects and a very thorough due diligence on the Project itself over several months. Ibaera does not presently hold and will not earn any equity in Azumah Resources Limited.

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#### **About Azumah**

Azumah Resources Limited is an ASX-listed (ASX: AZM) company focused on exploring and developing its regional scale Wa Gold Project in the Upper West Region of Ghana, West Africa.

Three main deposits have been discovered and extensively drilled at Kunche and Bepkong, adjacent to the Black Volta River and Ghana's border with Burkina Faso, and at Julie ~80km to the east. Several satellite deposits, including Aduane and Collette, have also been delineated.

To date, the Company has delineated a JORC 2012 Mineral Resource of 2.1Moz of gold grading 1.5g/t Au, including 1.4Moz Measured and Indicated grading 1.7g/t Au, with these evenly distributed between Kunche-Bepkong and Wa East (Julie deposit). Within this a JORC 2012 Ore Reserve of 624,000oz Au (9.1Mt at 2.14g/t Au) has been defined.

Extensive metallurgical test work has been undertaken to confirm a high average overall gold recovery of ~92% for the combined Kunche, Bepkong and Julie deposits.

Mineral Resources have been progressively grown through a focused, systematic approach to exploration of the Company's 2,400km² licence holdings, which encompass large tracts of prospective Birimian terrain, the rocks that host the majority of West Africa's gold mines. Much of this is covered in soil, alluvium or laterite so most discoveries have been 'blind'. Azumah anticipates Mineral Resources will grow substantially as it continues to test its large pipeline of target areas and specific prospects.

Azumah's exploration strategy has been driven by its need to boost Mineral Resources to increase the existing Ore Reserve base from 624,000oz towards 1.0Moz. This would more solidly underpin a development decision and improve funding capability.

Azumah has two 15-year Mining Leases over its key deposits (Ghana government holds a 10% free carried interest in their 'rights and obligations' and is also entitled to a 5% gross gold royalty).

No technical, social or environmental impediments to development have been identified, no communities need to be relocated and rehoused and there is strong support from key stakeholders for the Project. The Project benefits from excellent regional infrastructure including grid power to site, good quality bituminised and non-bituminised roads, easy access to water, a 2km sealed airstrip at the regional centre of Wa and good general communications.



#### References

All references to Mineral Resources and Ore Reserves pertain to ASX releases dated 2 September 2014, 23 March 2015 and 12 October 2016 respectively. Also refer to Tables 1 and 2 herein. The Company confirms that all material assumptions underpinning the production targets and forecast information continue to apply and have not materially changed other than a positive material reduction in capital costs (refer ASX release dated 9 May 2016). For further information on Azumah Resources Limited and its Wa Gold Project please visit its website at www.azumahresources.com.au which contains copies of all continuous disclosure documents to ASX, Competent Persons' Statements and Corporate Governance Statement and Policies.

### **Competent Persons' Statements**

The scientific and technical information in this report that relates to the geology of the deposits and exploration results is based on information compiled by Mr Stephen Stone, who is a full-time employee (Managing Director) of Azumah Resources Limited. Mr Stone is a Member of the Australian Institute of Mining and Metallurgy 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Stone is the Qualified Person overseeing Azumah's exploration projects and has reviewed and approved the disclosure of all scientific or technical information contained in this announcement that relates to the geology of the deposits and exploration results.

Table 1: Ore Reserves Summary – JORC Code 2012

	Prov	/ed	Pro	bable	Te	otal	Gold To Mill
(As at August 2014)	Tonnes (Mt)	Grade g/t Au	Tonnes (Mt)	Grade g/t Au	Tonnes (Mt)	Grade g/t Au	Gold oz
Kunche	4.91	1.92	0.05	3.11	4.97	1.94	309,000
Bepkong	1.79	1.84	0.11	1.97	1.90	1.85	113,000
Julie	0.29	2.45	1.93	2.89	2.21	2.84	202,000
Total	7.00	1.92	2.09	2.85	9.08	2.14	624,000

Values have been rounded.

Table 2: Mineral Resource Estimate – JORC Code 2012 – Updated October 2016

		Measured	d		Indicated			Inferred			Total	
Deposit	Tonnes (M)	Grade g/t Au	Gold oz									
Kunche	8.42	1.7	468,000	2.24	1.4	99,000	4.86	1.2	183,000	15.52	1.5	751,000
Bepkong	2.22	1.8	128,000	1.70	1.3	73,000	1.17	1.2	44,000	5.09	1.5	245,000
Aduane							1.77	1.5	85,000	1.77	1.5	85,000
Julie	0.89	1.4	41,000	10.06	1.6	507,000	5.98	1.5	286,000	16.93	1.5	834,000
Julie West				0.38	4.2	52,000	0.03	4.0	4,000	0.41	4.2	56,000
Danyawu				0.07	5.5	13,000				0.07	5.5	13,000
Collette							1.69	1.5	79,000	1.69	1.5	79,000
Total	11.52	1.7	637,000	14.45	1.6	744,000	15.50	1.4	681,000	41.49	1.5	2,063,000

Note: Values have been rounded. A lower cut-off of 0.5g/t Au was used for Kunche, Bepkong, Aduane, Julie and Collette, and a lower cut-off of 1.0g/t Au was used for Julie West and Danyawu.



Statements of Competent Persons for the various Mineral Resource Estimates, Ore Reserve Estimates and Process Metallurgy can all be found on the Company's website at: <a href="http://www.azumahresource.com.au/projects-competent\_persons.php">http://www.azumahresource.com.au/projects-competent\_persons.php</a>

# Forward-Looking Statement

All statements other than statements of historical fact included on this website including, without limitation, statements regarding future plans and objectives of Azumah, are forward-looking statements. Forward-looking statements can be identified by words such as 'anticipate", "believe", "could", "estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of Azumah that could cause Azumah's actual results to differ materially from the results expressed or anticipated in these statements.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained on this website will actually occur and investors are cautioned not to place any reliance on these forward-looking statements. Azumah does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained on this website, except where required by applicable law and stock exchange listing requirements.

# Appendix 1: Wa Gold Project - JORC Code 2012 Edition - Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The sampling described in this report refers to samples from power auger drilling.  For the Auger drilling, the thickness of the regolith horizons were recorded, with samples from each layer screened with a hand-held XRF analyser in the field. Approximately 1-2kg of sample was collected by scoop from the drill spoil piles from the bottom of the hole, which was the interface between the regolith and weathered bedrock. Drill holes which did not penetrate the transported cover were not sampled.  The bottom of hole samples from the auger drilling were sent to SGS laboratories in Tarkwa for bleg analysis BLL61N, using cyanide extraction of a 2kg bulk sample with ICP-MS finish, with a detection limit of 1ppb.

Drilling techniques  Drill sample recovery	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information  Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the samples.	Appropriate quality assurance/quality control (QAQC) protocols were followed, including submission of field duplicates and insertion of commercial standards for all types of sampling. Field duplicates, certified standards and blank samples were inserted at a ratio of 1:50 samples.  Sample preparation at the laboratory included:  Drying the sample at 105°C for 4 hours. Crushing the sample to less than -6mm (if required). Splitting the sample using a riffle splitter.  Pulverising the sample for 4 minutes to achieve 85% of sample passing -75µm in grain size.  All auger holes were drilled using an Azumah owned and operated Landcruiser mounted power auger fitted with a standard auger blade bit and auger flutes, up which the sample travels to the surface. All auger holes were vertical and targeted the lower saprolite/upper saprock.  Provisions are made to log sample recovery and quality by the geologist on site.  The trained drilling and sampling crew limit the sample loss and wall contamination through careful rotation of the auger bit and flutes, resulting in acceptable sample recovery and clear differentiation of lithology horizons.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Sample recovery was the same for all samples.
	Whether core and chip samples have	Auger drilling is not used in Mineral
Logging	been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resources	Resource Estimation.  However, all samples were logged geologically and have been incorporated into the Azumah Resources database.
Logging	been geologically and geotechnically logged to a level of detail to support	Resource Estimation.  However, all samples were logged geologically and have been incorporated

	rotary split, etc and whether sampled wet	from the drill spoil piles.
	or dry.	Samples were generally dry.
Sub-sampling techniques and sample	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were collected in the field by scoop. The entire sample was sent for analysis, so no sub-sampling was required.
preparation		Samples were crushed to -6mm and riffle or cone split to obtain a representative fraction. Samples were then dried and ground to 85% passing 75 microns using laboratory mills for FAA505 of BLL61N analysis.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Field QA/QC procedures included insertion of field duplicates and commercial standards for auger and trench drilling. Standards, duplicates and blanks were inserted in every batch (1 per 50 samples).
		Laboratory QA/QC procedures included:
		<ul> <li>Every 50th sample was screened to check grinding results (% passing 2mm and 75 microns).</li> <li>1 reagent blank was inserted every 50 samples, 1 preparation process blank was inserted every 50 samples and 1 weighed replicate was inserted every 50 samples.</li> </ul>
		1 preparation duplicate (re-split) every 50 samples and 2 certified reference materials (CRMs) every 50 samples.  Repeat analyses are completed whenever an analytical batch fails to meet the
		laboratory standards or when requested by a client.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling	Duplicate samples are taken for all drilling and trenching approximately every 20 samples. The duplicate versus original sample results is considered satisfactory.
	Whether sample sizes are appropriate to the grain size of the material being sampled	Sample size is considered appropriate for auger drilling.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The auger programmes were analysed by cyanide extraction of a bulk 2kg sample, with low level Au AAS finish, which is considered appropriate for geochemical sampling.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and	All samples were analysed using a hand held Innov-X XRF analyser, however this data is qualitive, and for exploration purposes only and would not be used for



	model, reading times, calibrations factors	Mineral Resource Estimation.
	applied and their derivation, etc.	Mineral Resource Estimation.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Field QA/QC procedures included the insertion of field duplicates, blanks and commercial standards.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	All assay results were received electronically from the laboratory and digitally merged into the database.
	The use of twinned holes.	Twinned holes are not practised in auger drilling or trenching.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Field data was all recorded as hard copies. Geological logging and sample intervals were recorded in digital form using a logging computer or Excel templates. This data was imported into a SQL database for validation and QC. The analytical data was imported into SQL database with all related metadata and QA/QC information.
	Discuss any adjustment to assay data.	No adjustments were made, other than for values below the assay detection limit. These values have been entered as the negative of the detection limit.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	The collar locations of all holes were initially surveyed using a hand-held GPS (accurate to ±2m).
	Specification of the grid system used.	The grid system is WGS84 Zone 30 North.
	Quality and adequacy of topographic control.	The topographic surfaces of all properties were created using a GeoEye image and Digital Surface Model. This was corrected and validated using DGPS drill hole points collected in the field.
Data spacing and	Data spacing for reporting of Exploration Results.	DURI: Auger holes were drilled 50m apart, and infilling line spacing to 100m.
distribution		BUTELE: Auger holes were drilled 50m apart, and infilling line spacing to 100m.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Auger drilling and trenching is not used in Mineral Resource Estimation.
	Whether sample compositing has been applied.	Auger samples were single point samples from the bottom of hole.
Orientation of	Whether the orientation of sampling	The auger fences were designed



		a detailed condition of the first terms of the second seco	
	n o	achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	perpendicular to the targeted structure.
		If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified in the data based on the interpreted mineralised structures.
Sample security		The measures taken to ensure sample security.	Chain of Custody is managed by Azumah staff (geologists and technicians). Samples are stored on site and delivered to the SGS Laboratory at Tarkwa. Samples submission sheets are in place to track the progress of every batch of samples.
Audits conversely and a series of the series	or	The results of any audits or reviews of sampling techniques and data.	Sampling techniques are consistent with industry good practice. Data was validated by CSA Global during loading into the database. Checks included Depth from, Depth to, sample interval, hole depth and overlapping sample intervals. Any data which failed the checking process is returned to Azumah for validation. Global consistency was also checked at a later stage by plotting holes on sections using the database and reconciling assays against the geology.

# Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Work programmes in this report are located in the following leases:  • Butele – PL10/18  • Basabli – PL10/13  • Duri – PL10/14  • Lawra North – PL10/41  All license areas are located in the Upper West Region in the north-west corner of Ghana.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing with no known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous mapping and exploration works were completed by BHP-Utah (1990's), AGEM (late 1990's) and Semafo (late 1990's). All exploration activities have been completed by Azumah since

		2006.
Geology	Deposit type, geological setting and style of mineralisation.	The Project covers approximately 70% of the Paleoproterozoic Upper and Lower Birimian units, typically known as the Wa-Lawra greenstone belt, within Ghana. Gold mineralisation occurs as follows:
		Kunche: Brittle quartz lode/breccia-hosted with higher grade Au mineralisation associated with zones of intense silicification, smokey quartz veins, arsenopyrite and pyrrhotite.
		Bepkong and Aduane: Increased ductile shearing and dismemberment of quartz veins. Greater than 1 g/t Au mineralisation occurs within translucent quartz veins and arsenopyrite.
		Julie: Quartz veining and lodes within sheared granodiorite host. Au mineralisation is associated with silicification, pyrite, chalcopyrite, carbonate, sericite and haematite alteration.
		Collette: Quartz veining with at least 3 orientations. Au mineralisation is associated with silicification, arsenopyrite, pyrite, haematite alteration and glassy translucent quartz veining.
Drill Hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  • easting and northing of the drill hole collar  • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  • dip and azimuth of the hole  • down hole length and interception depth  • hole length.  If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Multi-element assays and other details of individual auger soil geochemistry samples are not tabulated here, as the information required for understanding and interpreting geochemical results of this type is contained in the maps incorporated into or the text of the announcement, or is not considered anomalous or relevant.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high	No average weighting or cut offs have been applied to the data in this report.



	grades) and cut-off grades are usually Material and should be stated.	
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No applicable
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No applicable
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	No applicable
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	No applicable
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	No applicable
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to diagrams in body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The ranges displayed on the maps in this report are considered acceptable for exploration purposes. All relevant exploration data has been included in the maps.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;	Geochemistry:  Surface sampling, mapping and geochemistry were completed by BHP and Azumah.  The geochemical database contains data for



geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.

51,680 soil samples and 228,673m of combined auguring and AC drilling.

## Airborne Geophysics:

A high resolution aeromagnetic and radiometric survey was completed over the central region of the Wa-Lawra Belt (over the Vapor PL) with line spacing of 100m and sensor height of 40m. The Wa-Lawra Belt geophysical data has been interpreted at 1:100,000 scale by Southern Geoscience Ltd. The processed imagery has provided a base for a new regional geological interpretation.

#### Ground Geophysics:

Magnetics: A ground magnetic survey conducted in 2006 was plagued by data acquisition problems and the data were rejected as being of insufficient quality for interpretation.

#### Induced Polarisation:

SAGAX Afriques completed a gradient induced polarisation survey (IP) over the Kunche and Bepkong deposits. The anomalies were interpreted to be caused by disseminated sulphides and quartz veining. The IP survey outlined several linear zones with a similar geophysical response, particularly a prominent linear anomaly west of Kunche. Three dominant orientations were interpreted as a dextral reverse shear model.

Several other geophysical targets were identified and require drill testing.

#### Metallurgical Test Work:

Extensive metallurgical test work has been undertaken on the Kunche, Bepkong and Julie deposits. There has been only minor work completed on Collette and no work on Aduane.

Metallurgical test work performed on the Kunche, Bepkong and Julie ores has included:

- Comprehensive head analysis.
- Comminution.
- Gravity concentration.
- Direct cyanide leaching.
- Carbon kinetics.
- Thickening.
- Rheology.
- Oxygen uptake.
- Cyanide detoxification.
- Variability testing.

In addition, Julie ore test work has included:

		<ul> <li>Bulk sulphide flotation.</li> <li>Ultra-fine grinding (UFG) of concentrate.</li> <li>Cyanide leaching of UFG flotation concentrate and of flotation tailings.</li> <li>QEM*SCAN® analysis of Julie concentrate products.</li> <li>Collette testing only includes:</li> <li>Gravity concentration.</li> <li>Direct cyanide leaching.</li> <li>Potential Deleterious Substances:</li> <li>Both Kunche and Bepkong mineralisation contains small quantities of organic carbon, arsenic in the form of arsenopyrite, and other</li> </ul>
		sulphide mineralisation.  In general, this does not appear to have a significant deleterious effect on gold extraction. The limited number of Kunche primary variability composites that do exhibit a reduction in extraction have been included in the correlation equation for gold recovery.
		Preliminary testing indicates the flotation/regrind circuit designed for the Julie primary ore may also benefit some of the Kunche primary ore and further test work is planned on some Kunche primary ore samples.
		Julie mineralisation contains sulphides which is predominantly pyrite and relatively unreactive. Approximately 35% of the gold is associated with pyrite which can be recovered by flotation and fine grinding of concentrate prior to extraction by cyanide.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or	At Duri, a programme of RC drilling is currently being designed to test mineralisation extent around the recent anomalous results.
	large-scale step-out drilling).	At Butele, a programme of AC has been planned to follow up the northeast trending auger anomaly, along with RC holes targeting specific higher results.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to diagrams in body of text.