
FORM 6-K
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Report of Foreign Private Issuer

**Pursuant to Rule 13a-16 or 15d-16
of the Securities Exchange Act of 1934**

Date: March 9, 2009
Commission File Number 001-31528

IAMGOLD Corporation
(Translation of registrant's name into English)

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(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

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Description of Exhibit

Exhibit

Description of Exhibit

99.1 Technical Report on Damang Gold Mine dated July 1, 2004

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

IAMGOLD CORPORATION

Date: March 9, 2009

By: /s/ Paul B. Olmsted

Paul B. Olmsted
Senior Vice-President, Corporate Development

**An Independent Technical Report on
the Damang Gold Mine, Ghana**

Report Prepared for

Gold Fields Limited and IAMGold Corporation

Effective Date: July 1, 2004
Issue Date: October 25, 2004

**Prepared under the Guidelines of National Instrument 43-101 and
accompanying documents 43-101.F1 and 43-101.CP**

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ISSUED OCTOBER 2004

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An Independent Technical Report on the Mining Assets of the Damang Gold Mine, Ghana

1 EXECUTIVE SUMMARY

Damang gold mine (“Damang”) is operated by Abosso Gold Fields Limited (“AGL”) and Gold Fields Limited (“Gold Fields”) is the majority share holder, with 71.1% of the issued shares of AGL. The proposed transaction means the acquisition by IAMGold Corporation (“IAMGold”) of the Acquired Interests from Gold Fields and its affiliates and the issue by IAMGold of the Consideration Shares to Gold Fields and its affiliates as consideration thereof, resulting in the acquisition by IAMGold of all of the interests of Gold Fields in certain of its subsidiaries which collectively hold all of the mining assets of Gold Fields located outside of Southern African Development Community (“SADC”).

Damang is located in southwestern Ghana approximately 280 km by road west of Accra, the capital, at a latitude 5°11’N and longitude 1°57’W. Damang is located 40 km north of the town of Tarkwa with good access roads and an established infrastructure. The mine is served by a main road connecting to the port of Takoradi, some 140 km to the southeast on the Atlantic coast.

Damang operates under mining lease no. ML 1409/96 granted to AGL on April 19, 1995 for a period of 30 years. It was amended on 4th April 1996 to cover an area of 52.39km². AGL also holds a number of prospecting licences.

Significant underground mining at Damang ceased in 1956 with the closure of the Abosso Mine and in 1989 Ranger Exploration examined the feasibility of retreating tailings from the mine together with an open pit extension northwards towards Damang village. Exploration drilling commenced in 1993 and open pit operations began in 1997 utilising a Carbon-in-Leach (“CIL”) plant and African Mining Services (“AMS”) as the mining contractor and Gold Fields interest commenced in 2001.

Production during the financial year to 30 June 2004 totalled some 5.2 million tonnes (“Mt”) processed ore and 303,300 ounces (“oz”) gold; all from open pit operations. The ore is hosted within Tarkwaian sedimentary rocks and is in the form of both palaeoplacer and hydrothermal mineralization. The former comprise of Banket conglomerates and the latter dipping tabular quartz veins.

Steffen, Robertson and Kirsten (UK) Ltd.

Registered in England and Wales

Reg. No. 1575403

Registered Address:
21 Gold Tops,
Newport,
Gwent.
NP9 4PG

Offices in:
Australia
North America
Southern Africa
South America
United Kingdom

Ore is processed in a conventional two-stage grinding circuit using semi-autogeneous grinding (“SAG”) and ball mill combination with gravity concentration followed by a CIL recovery process.

The Damang Mineral Resource and Mineral Reserve Statement as at June 30, 2004 is given in Table 1.1 below:

Table 1.1: Damang Mineral Resource and Mineral Reserve Statement June 30, 2004

Mineral Reserves

	Mt	g/t	Koz
Proved			
o/p	2.6	0.9	80
s/p	9.1	1.4	400
Total Proved	11.7	1.3	480
Probable			
o/p	8.3	1.4	370
Total Probable	8.3	1.4	370
Total Mineral Reserves	20.1	1.3	850

Mineral Resources

	Mt	g/t	Koz
Measured			
	6.4	1.5	310
	9.1	1.4	400
Total Measured	15.5	1.4	710
Indicated			
	15.8	1.6	820
Total Indicated	15.8	1.6	820
Total Measured & Indicated	31.3	1.5	1,530
Inferred			
o/p	3.8	2.5	300
Total Inferred	3.8	2.5	300

The Mineral Resource estimate is derived from an open-pit optimization carried out using a gold price of USD 400 per ounce. After calculation of the pit shell the dilution is subtracted from the blocks and the Mineral Resource quoted is essentially the tonnage of the undiluted ore blocks which lie within the outline of the un-engineered pit shell.

The Mineral Reserve estimate is derived from an open-pit optimization carried out using a gold price of USD 350 per ounce. The Mineral Reserve is based on the CIL Plant and contractor mining. The current mine life on which the Mineral Reserves are based continues for four years until 2008.

Damang has been assessed and is operated in accordance with Ghanaian environmental requirements, administered by the Environmental Protection Agency (“EPS”) and holds the required current Environmental Permit and Environmental Certificate. Damang is compliant with its operating permit, has established a reclamation bond, and following a review by the Environmental Protection Agency (“EPA”) in 2001 was officially recognised as the best mine in Ghana in terms of environmental management and compliance.

2 INTRODUCTION AND TERMS OF REFERENCE

2.1 Terms of Reference

Steffen, Robertson and Kirsten (UK) Limited (“SRK”) is a subsidiary of the International group holding company, SRK Global Limited (the “SRK Group”). SRK has been commissioned by the directors of Gold Fields prepare an Independent Technical Report (“ITR”) on Damang in support of the proposed transaction between Gold Fields and IAMGold Corporation (“IAMGold”).

This ITR has been prepared in accordance with the rules and companion policies of the Ontario Securities Commission (“OSC”) enacted by Section 143 of the Securities Act, specifically:

- National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”);
- Form 43-101F1 (the “Form”); and
- Companion Policy 43-101CP (the “Companion Policy”).

In accordance with the applicable Rules and Companion Policies, this ITR has been prepared under the direction of the Qualified Persons (“QPs”) who assume overall professional responsibility for this ITR. The ITR however, is published by SRK, the commissioned entity, and accordingly SRK assumes responsibility for the views expressed herein. Consequently with respect to all references to QPs and SRK: ‘all references to SRK mean the QP and vice-versa’.

The ITR principally comprises a technical-economic appraisal of Damang and has been prepared in accordance with the rules and companion policies stated above, which cover the standards of disclosure for mineral projects under the OSC guidelines which came into effect on 1 February, 2001. It is the recognised format for reporting on the Toronto Stock Exchange.

2.2 Purpose of the ITR

Damang is operated by Abosso Goldfields Limited (“AGL”) and Gold Fields is the majority share holder, with 71.1% of the issued shares of AGL. The proposed transaction means the acquisition by IAMGold of the Acquired Interests from Gold Fields and its affiliates and the issue by IAMGold of the Consideration Shares to Gold Fields and its affiliates as consideration thereof, resulting in the acquisition by IAMGold of all of the interests of Gold Fields in certain of its subsidiaries which collectively hold all of the mining assets of Gold Fields located outside of Southern African Development Community (“SADC”). In this regard Gold Fields will transfer to IAMGold ownership of its interests in:

- Orogen Holding (BVI) Limited (“Orogen”): Orogen holds Gold Fields indirect interests of: 100% of St. Ives Gold Mine in Western Australia (“St. Ives”); 100% of Agnew Gold

Mine in Western Australia (Agnew); 80.7% of Cerro Corona development property in Peru (currently under option); 100% of Arctic Platinum Project in Finland; and a portfolio of other exploration properties and investments;

- Gold Fields Ghana Holdings Limited (“GF Ghana Holdings”): GF Ghana Holdings holds Gold Fields indirect interests of a 71.1% interest in and claim on loan account against AGL, which owns and operates Damang and a 71.1% interest in Gold Fields Ghana Limited (“GFGL”), which owns and operates the Tarkwa Gold Mine (“Tarkwa”) in Ghana; and
- Gold Fields Guernsey Limited, which include a portfolio of exploration properties and investments.

For the transfer of ownership Gold Fields will be issued with 351,690,218 IAMGold Shares in addition to a number of IAMGold Shares equivalent to the net cash contributions made by Gold Fields into the Acquired Companies between 24 June 2004 and the Completion Date.

SRK has been informed that Gold Fields and IAMGold have signed definitive agreements to implement the Transaction on 29 September 2004 subject to satisfaction of certain conditions precedent.

2.3 **Scope of Work**

The scope of work undertaken by SRK comprised a technical and economic review of Damang’s Life of Mine (“LoM”) Plan dated June 30, 2004 and covering the period 2005 — 2008. The review covered the following technical disciplines:

- Geology;
- Mineral Resource Estimation;
- Mineral Reserve Estimation;
- Planning and Production Scheduling;
- Mining Engineering and Open-Pit Design;
- Geotechnical Engineering;
- Mineral Processing and Metallurgy;
- Tailings Engineering and Waste Disposal;
- Environmental and Water Management;
- Capital Expenditure and Operating Costs; and
- Technical Economic Modelling.

2.4 **Sources of Information and Site Inspection**

The ITR has been prepared based on information provided to and taken in good faith by SRK by the management of Gold Fields and, specifically, Damang. SRK has not independently verified by means of re-calculation the underlying data, however SRK has:

- undertaken inspection visits to surface, processing facilities, surface structures and associated infrastructure at Damang during August and September 2004;

- held discussion and enquiry following access to key personnel based at the individual site operations and at head office;
- reviewed and, where considered appropriate by SRK, modified the Damang Mineral Resources and Mineral Reserve estimates dated June 30, 2004;
- reviewed the Damang LoM plan, supporting documentation and the associated technical-economic projections (“TePs”), including assumptions regarding future operating costs, capital expenditures and gold production; and where considered appropriate by SRK modified these; and
- examined historical information and results provided by AGL in support of, in particular, the forecasts contained in the LoM plan and two year budgets.

Key documentation provided to SRK in support of this ITR and as generated by Gold Fields is:

- the Competent Persons Report for Mineral Resources and Mineral Reserves, June 2004; and
- a Technical Report on Damang Gold Mine, Ghana, March 2002.

SRK has satisfied itself that such information is both appropriate and valid for valuation as reported herein. SRK considers that with respect to all material technical-economic matters it has undertaken all necessary investigations to ensure compliance, both in terms of level of investigation and level of disclosure. In doing so, SRK has not reproduced the information provided to it by Gold Fields without due consideration or appropriate modification.

Where fundamental base data has been provided (LoM plans, capital expenditures, operating budgets etc) for the purposes of review, SRK recognises the requirements of 43-101F 1 Item 25 and accordingly states that SRK has performed all necessary validation and verification procedures deemed appropriate in order to place an appropriate level of reliance on such information.

In preparing this report Mr Rick Skelton a QP and Principal Mining Engineer visited Damang during August 2004. In addition site visits have been undertaken by other SRK team members, qualified in disciplines other than mining engineering, during the period from June 2002 to September 2004. SRK representatives have held discussions with Gold Fields personnel and examined the geology, mineral resources, laboratory facilities, exploration methodology and potential, processing facilities, mining operations, slope stability, groundwater issues, infrastructure, terrain, tailings facilities and environment.

2.5 **Qualifications of Consultant and Qualified Persons**

The SRK Group comprises 500 staff, offering expertise in a wide range of resource engineering disciplines. The SRK Group’s independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its staff. This permits the SRK Group to provide its clients with conflict-free and objective recommendations on crucial judgment issues. The SRK Group has a demonstrated track record in undertaking

independent assessments of resources and reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and on their projects, providing mining industry consultancy service inputs.

This report has been prepared based on a technical and economic review by a team of consultants principally sourced from the SRK Group's office in the United Kingdom. These consultants are specialists in the fields of gold geology, mineral resource and mineral reserve estimation and classification; mine engineering and pit modelling, geotechnical engineering; gold processing, hydrogeology and hydrology, tailings management, infrastructure, environmental management and mineral economics.

Neither SRK nor any of its employees and associates employed in the preparation of this report has any beneficial interest in Gold Fields or its assets. SRK will be paid a fee for this work in accordance with normal professional consulting practice.

The individuals who have provided input to this ITR, who are listed below, have extensive experience in the mining industry and are members in good standing of appropriate professional institutions.

Mr Rick Skelton:	MSc, C.Eng, MSAIMM, MIMMM;
Mr Neil Holloway:	Ph.D, C.Eng, FIMMM;
Dr Ian Brackley:	Ph.D, C.Eng, FSAIMM, MIMMM;
Mr Keith Philpott:	MSc, BSc, C.Geol, Eur Geol, FGS;
Edgar Urbaez:	B.Eng, MSc;
Mr Lee Barnes:	MSc, C.Eng, MIMMM.

In compliance 43-101F1 Part 5 subsection 5.1 this ITR has been prepared by following Qualified Persons:

- the Qualified Person with overall responsibility for this independent technical report and the reported Mineral Reserve is Mr Rick Skelton who is an employee of SRK. Mr Skelton is a mining engineer with 35 years' experience in the mining industry and has supervised numerous due-diligence reviews and various technical studies on similar gold mining assets; and
- the Qualified Person with overall responsibility for the reported Mineral Resources is Mr Lee Barnes who is an employee of SRK. Mr Barnes is a mining geologist with over six years experience in the gold mining industry and has been responsible for the reporting of Mineral Resources on various gold mining properties, specifically specialising in resource estimation and classification.

SRK has previously carried out a number of consultancy commissions for Gold Fields at

Damang and these are listed in Appendix B to this report.

2.6 **Monetary Rates and Units**

All monetary units, unless otherwise stated, are quoted in US dollars (“USD”).

All units conform to metric usage except where otherwise stated. Where gold weight is not expressed in metric units it is expressed in troy ounces (“oz”) where one troy ounce equals 31.10348 grammes (“g”).

2.7 **Technical Reliance**

SRK places reliance on Damang’s QPs that all technical information provided to SRK as at July 1, 2004, is both valid and accurate for the purpose of compiling this ITR. The Damang Mineral Resource and Mineral Reserve estimates have been prepared under the direction of Mr Glen Cole MSc (Geology), MSc (Min Eng), B.Com, MSAIMM and MGSSA, Chief Geologist at Damang who is a full time employee of Gold Fields and has 16 years experience in the gold mining industry and is registered with the South African Council for Natural Scientific Professions (“SACNASP”).

2.8 **Legal Reliance**

SRK has placed reliance on representatives of Gold Fields that the following legal aspects pertaining to Damang are correct as at 1 July 2004:

- that “a statement by the Directors of any legal proceedings that may have an influence on the rights to explore for minerals, or an appropriate negative statement” has been included in the body of the various circulars relating to the proposed transaction;
- that the legal ownership and of all mineral and surface rights has been verified; and
- that no significant legal issue exists which would affect the likely viability of a project and / or the estimation and classification of the Mineral Resources and Mineral Reserves as reported herein.

2.9 **Accounting and Financial Reliance**

In consideration of all financial aspects relating to the valuation of Damang, SRK has placed reliance of the Financial Officers of Damang that the following information is accurate as at July 1, 2004:

- unredeemed capital balances;
- assessed losses;
- opening balances for debtors, creditors and stores; and
- working capital and taxation logic.

In generating the valuation of Damang, SRK has relied upon the commodity price and macro economic forecasts as included in Section 17, which have been generated by NM Rothschild & Sons (New York) (“Rothschild”), Financial Advisors to Gold Fields.

2.10 **Warranties and Limitations**

SRK’s opinion is effective July 1, 2004 and is based on information provided by Damang

and Gold Fields throughout the course of SRK's investigations, which in turn reflect various technical-economic conditions prevailing at the time of writing. These conditions can change significantly over relatively short periods of time and as such the information and opinions contained in this report may be subject to change.

The achievability of LoM plan, budgets and forecasts are neither warranted nor guaranteed by SRK. The forecasts as presented and discussed herein have been proposed by Damang's management and cannot be assured; they are necessarily based on economic assumptions, some of which are beyond the control of Damang. Future cash flows and profits derived from such forecasts are inherently uncertain and actual results may be significantly more or less favourable.

This report includes technical information, which requires subsequent calculations to derive subtotals, totals and weighted averages. Such calculations may involve a degree of rounding and consequently introduce an error. Where such errors occur, SRK does not consider them to be material.

2.11 **Disclaimers and Contingency Statements for US Investors**

The United States Securities and Exchange Commission (the "SEC") permits mining companies, in their filings with the SEC, to disclose only those mineral deposits that a company can economically and legally extract or produce from. Certain terms are used in this report, such as "resources", that the SEC guidelines strictly prohibit companies from including in filings.

Mineral Reserve estimates are based on many factors, including, in this case, data with respect to drilling and sampling. Mineral Reserves are derived from estimates of future technical factors, future production costs, future capital expenditure and future gold price. The Mineral Reserve estimates contained in this report should not be interpreted as assurances of the economic life of Damang or its future profitability. As Mineral Reserves are only estimates based on the factors and assumptions described herein, future Mineral Reserve estimates may need to be revised. For example, if production costs increase or product prices decrease, a portion of the current Mineral Resources, from which the Mineral Reserves are derived, may become uneconomical to recover and would therefore result in Mineral Reserve estimates with lower tonnages and contained gold.

The LoM plans, the TePs and the Financial Model ("FM") include forward-looking statements in compliance with the requirements of NI 43-101. These forward-looking statements are necessarily estimates and involve a number of risks and uncertainties that could cause actual results to differ materially.

3 PROPERTY DESCRIPTION AND LOCATION

3.1 Location and Access

Damang is located in southwestern Ghana approximately 280km by road west of Accra, the capital, at a latitude 5°11'N and longitude 1°57'W. Damang Gold Mine is located 40 km north of the town of Tarkwa with good access roads and an established infrastructure. The mine is served by a main road connecting to the port of Takoradi, some 140 km to the southeast on the Atlantic coast (Figures 3.1 and 6.1).

3.2 Mining Leases

Damang operates under mining lease no. ML 1409/96 granted to AGL on April 19, 1995 for a period of 30 years. It was amended on 4th April 1996 to cover an area of 52.39 km² (Figure 4.1). AGL also holds a number of prospecting licences as shown in Table 3.1.

Table 3.1: Prospecting Licenses

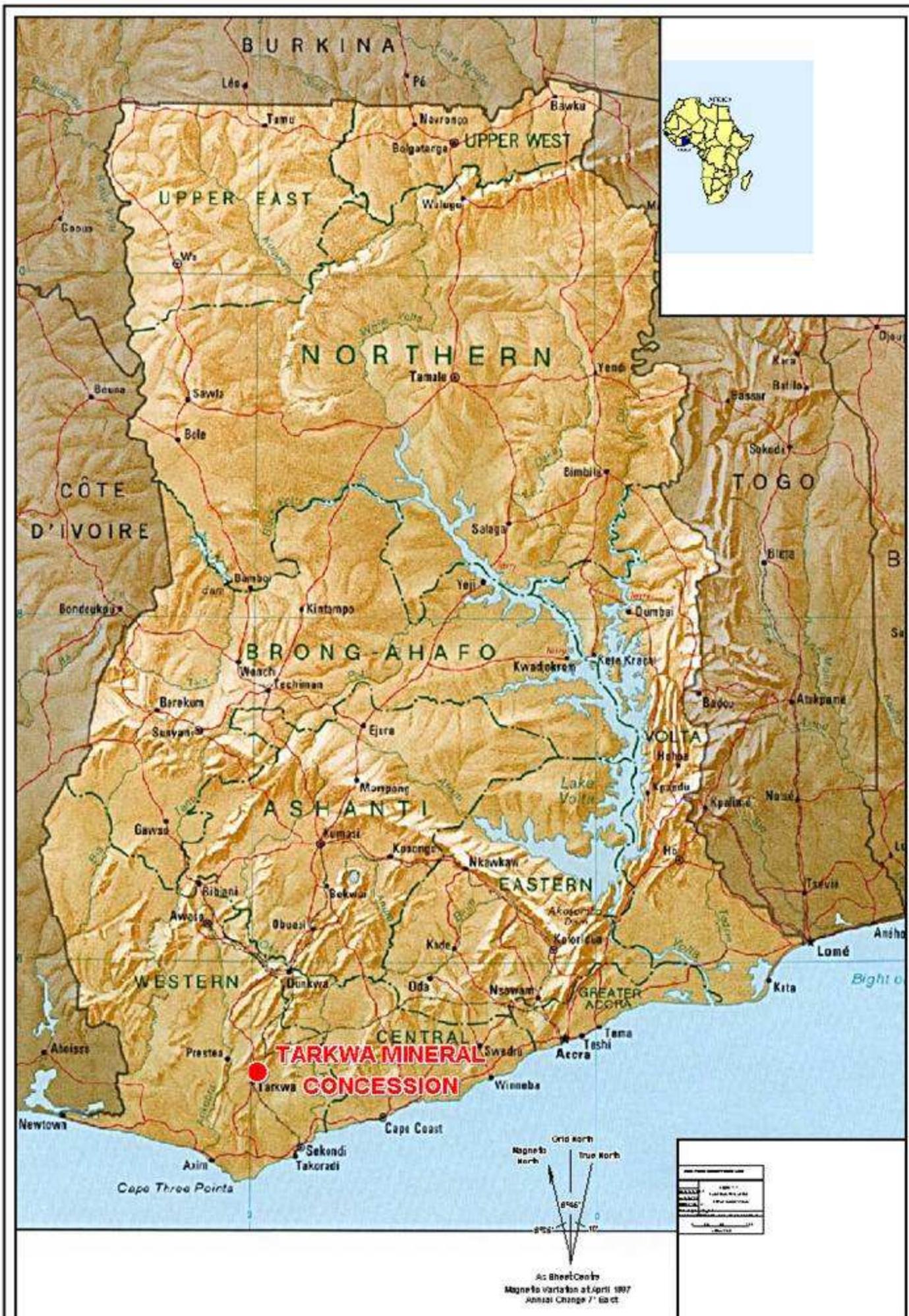
Name	License Number	Current Status	Date Granted	Expiry Date	Area (km ²)
Bonsa Forest / Western Areas	P/L 2/151	Application made for conversion to Mining Lease	November 21, 1994	April 7, 2004	27.85
Bonsa River FR	P/L 2/376	Current	February 24, 2003	February 23, 2005	27.85
Subiri	P/L	Application is with Minister	<i>NYA</i>	<i>NYA</i>	38.78
Huni Valley	P/L	Application Lodged July 29, 2004	<i>NYA</i>	<i>NYA</i>	104.4
Saponso	P/L 6/231	Current	September 25, 2001	February 18, 2006	28.05
Nyankumasi	P/L 6/26R	Renewed August, 2003	JV option commenced on January 25, 1999	July 2005.	19.4
Total					238.5

3.3 Information on Equity

AGL is the legal entity holding the Damang concession mining rights. Gold Fields is the operator of the mine and majority share holder with 71.1% of the issued shares of AGL. IAMGold, through its wholly owned subsidiary Repadre Capital Corporation, holds 18.9%, and the Ghanaian Government a 10% free carried interest, as required under the Mining Law of Ghana.

The Government of Ghana has a 10% non-participating interest in all exploration and mining ventures with the right to purchase an additional 20% equity interest in the mining venture at a fair market price.

Figure 3.1: Locality map



As Sheet Code
Magnetic variation at April 1997
Annual Change 7' East

Royalties of 3% - 12% of mineral revenue are paid to the Government of Ghana. The current 3% royalty rate is based on a 30% operating ratio. Where the operating ratio is below 30% the rate is still 3%, but the unused margin can be carried forward to reduce the operating ratio in subsequent years. Where the operating ratio is over 30% but less than 70%, the rate of royalty is 3% plus 0.225% of every one percent by which the operating ratio exceeds 30%. Where the operating ratio is 70% or more, the rate is 12%. The formula for calculating the operating ratio is revenue versus operating costs and capital cost allowances (royalty payments, and taxes imposed on income are not allowable operating costs).

Companies may export gold to any foreign refiner upon approval of the Government. The Government has a pre-emptive right to purchase the gold production at fair market value, although this right has never been exercised. Offshore foreign currency retention accounts for the receipt of foreign currency, including the proceeds from gold production, are permitted.

3.4 **Environmental Liabilities**

Environmental issues and liabilities are discussed in Section 14.

4 ACCESSIBILITY, CLIMATE AND INFRASTRUCTURE

4.1 Topography, Climate and Vegetation

The Damang area is characterized by gently rolling hills incised by an extensive drainage network with low lying swamp areas. Maximum local topographic relief is approximately 80 m.

A tropical climate with average monthly temperatures between 21°C and 32°C is characterized by two distinct rainy seasons from March-July and September-November. Average rainfall near the site is some 2030 mm. Although there may be minor disruptions to operations during the wet season there is no long term constraint on production due to climate at particular times of the year.

Extensive subsistence farming occurs throughout the area with cocoa, plantain, pineapple, cassava, maize, yam and some oil palm and coffee being the principal crops.

Deforestation has degraded the natural vegetation in the area of the mine to secondary forest, scrub and cleared land. No primary forest occurs on the mine site.

4.2 Local Infrastructure and Economy

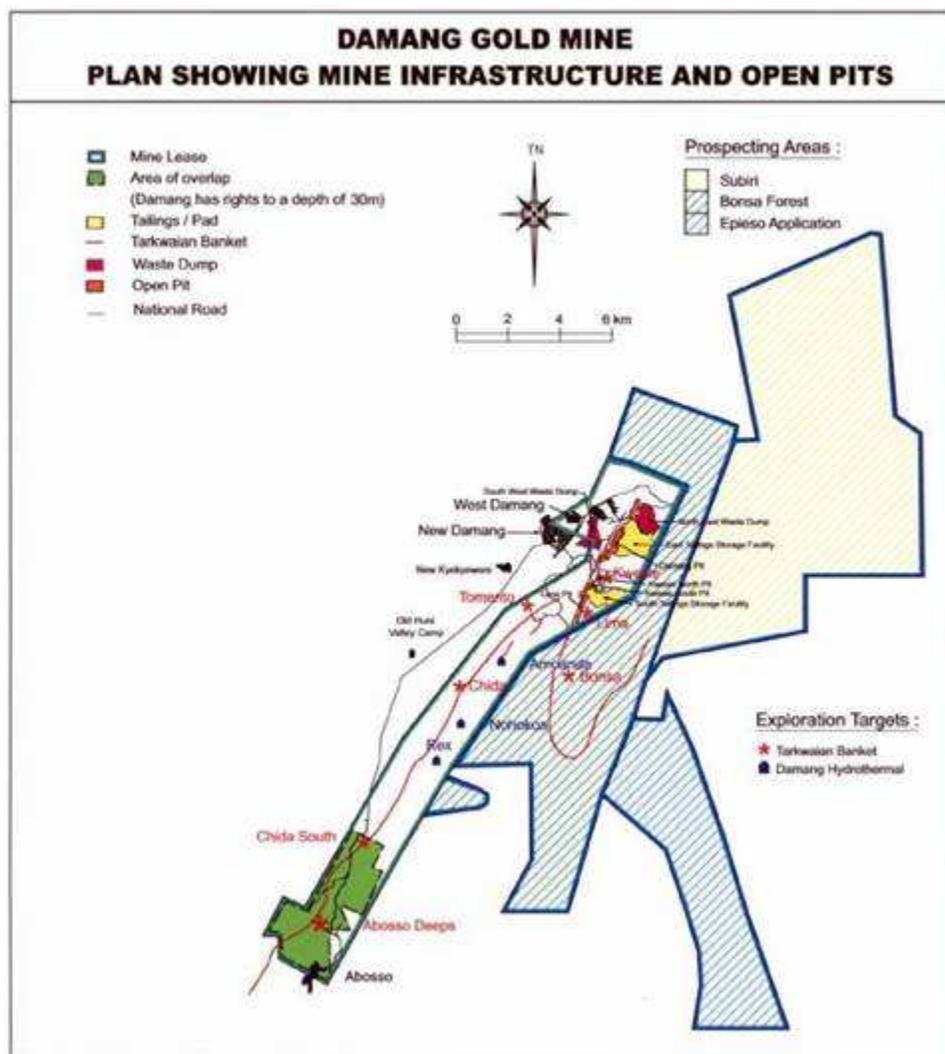
The village of Damang was relocated from the pit area and is now situated on the Damang-Tarkwa road some 1.5 km from the mine. Damang is connected to the national hydro-electric power grid, but has its own back-up power system with a peak capacity of 17.5 megawatts (“MW”) and an operating capacity of 14.5 MW.

A main asphalt road connects Takoradi with Tarkwa and fuel requirements are sourced from the Shell Ghana bulk storage facility. Three 40,000 litre tanks are kept full on site at all times if possible as part of the backup power station.

Raw water for the plant is provided from the Damang diversion and bores. There is also potential to recover water from the Ayaasu River if required.

Domestic communications are provided by way of a microwave link and landline. International communications are provided by a direct satellite link and land lines.

Figure 4.1: Mine infrastructure



5 HISTORY

5.1 Ownership and Operations

Small scale gold mining activities in the area date back to the late 19th Century, but the most significant operation on the Damang lease area comprised the now abandoned Abosso Mine which exploited Banket conglomerates to a depth of approximately 850 m. It operated from 1882 until 1956 with a recorded production of about 2.7 million ounces (“Moz”) of gold from ore with an average grade of 9.8 g/t. Other underground mines to the north, particularly Adjah Bippo and Cinnamon Bippo which produced significant quantities of gold between 1882 and 1918, were incorporated into the Abosso Mine holdings after 1920.

From 1989, Ranger Exploration, initially with other partners, firstly examined the feasibility of retreating tailings from the Abosso Mine and then the northeast extension of the Banket conglomerates towards Damang village. Here artisanal miners were exploiting alluvium shedding from two low ridges. Gold appeared to be associated with both Banket conglomerates and a flat lying quartz vein system.

Pitting and trenching carried out between 1990 and 1992 demonstrated near surface mineralization over a 3 km strike length and this was followed by drilling in 1993. By early 1996 a three million ounce resource had been estimated and a feasibility study demonstrated that open pit mining would be viable to a depth of about 200 m.

Operations commenced in August 1997, following the relocation of 3,000 local people and the diversion of streams and a railway line. Gold production started in November of the same year utilising a CIL plant with a throughput of 3.0 Mtpa. AMS acted as mining contractors to Ranger during this period.

In October 2001, Gold Fields and RIC signed an agreement to purchase Ranger’s 90% interest in Damang, and then in 2003 IAMGold merged with RIC giving IAMGold an 18.9% interest in Damang.

5.2 Historical Production

Production for the past seven years is as shown in Table 5.1 below:

Table 5.1: Historical Production of Damang

Financial Year (July to June)	Ore Processed (Mt)	Metal Production (oz Au)
2004	5.2	308.3
2003	4.9	299.4
2002	4.5	306.7
2001	4.5	322.4
2000	4.1	347.8
1999	3.7	269.7
1998	1.7	132.5

5.3 **Historical Exploration**

Historical exploration is outlined in Section 6.

5.4 **Historical Mineral Resource and Mineral Reserve Statements**

As an operating mine, the Mineral Resource and Mineral Reserve estimates at Damang are updated annually as at June 30. Reconciliations are carried out systematically at Damang between actual production and the Mineral Resource and Mineral Reserve estimates on a monthly and annual basis. These are described further in Section 10.

6 GEOLOGY

6.1 Regional Geology

The Damang orebodies are located within the Tarkwaian System which forms a significant portion of the stratigraphy of the Ashanti Belt in southwest Ghana. The Ashanti Belt is a north-easterly striking, broadly synclinal structure made up of Lower Proterozoic sediments and volcanics underlain by the metavolcanics and metasediments of the Birimian System. The contact between the Birimian and the Tarkwaian is commonly marked by zones of intense shearing and is host to a number of significant shear hosted gold deposits including Prestea, Bogoso and Obuasi.

The Tarkwaian unconformably overlies the Birimian and is characterized by lower intensity metamorphism and the predominance of coarse grained, immature sedimentary units which from oldest to youngest are:

- Kawere Series (250 – 700 m) — poorly sorted, polymictic conglomerates and quartzites with no significant mineralization;
- Banket Series — well sorted conglomerates and quartzites with clasts generally considered to be Birimian in origin and containing significant gold mineralization, hosting the Damang orebody;
- Damang Phyllite Series (120 – 140 m) — fine grained chloritic siltstones, mudstones and schists with no significant mineralization; and
- Huni Series (1370 m) — fine grained massive quartzites with no significant mineralization.

6.2 Local Geology

Damang Mine contains mineralization hosted within Tarkwaian palaeoplacer deposits, present as individual tabular quartz pebble conglomerate units (reefs) interlaminated within quartzites and argillaceous sandstone units. Palaeoplacer mineralization has been traced from the Damang main pit (in the North) approximately 35 km to the Abosso Deeps area, in the southern part of the Damang Mineral Lease area. Abosso Deeps is situated on the western limb of the Damang Antiform and was a major producer of gold until the 1950s.

In addition to the syngenetic orebodies, epigenetic hydrothermal quartz lodes are also present within the Tarkwaian sedimentary host rocks; these lodes are accompanied by gold mineralization within the veins themselves, as well as within the quartz-sulphide-sericite alteration haloes around the individual veins. By and large, the veins occur as spaced sets of veins and higher-grade mineralization appears to be spatially associated with areas in which close-spaced vein sets are present, leading to development of pervasively altered rock between vein sets.

The Damang Extension Project (“DEP”) consists of four separate project areas, namely the Rex and Amoanda areas that host hydrothermal mineralization and the Tomento North and Tomento South areas that host Tarkwaian palaeoplacer mineralization present as quartz

pebble conglomerates. Rex is located to the east of the Chida South pit, south of Amoanda which is located south of the Tomento North and Tomento East project areas (Figure 4.1). Despite the apparent differences within the geological construction of the two mineralization styles (namely palaeoplacer and hydrothermal mineralization) the geological modelling and following geostatistical modelling follow very similar routes.

6.3 **Structure**

Damang is hosted within a north-north-westerly plunging antiform developed within Tarkwaian rocks and is located approximately 50 km northeast of Tarkwa. The antiformal closure plunges shallowly to the north, whereas the eastern and western limbs of the antiform dip steeply (40-50 degrees) to the east and west respectively. The main Damang Pit is located close to the closure of the antiform, whereas the Kwesie-Lima deposit is located within the eastern limb and the Damang Extension Project areas are all located within the western limb of the antiformal structure.

6.4 **Deposit Types and Mineralization**

6.4.1 **Palaeoplacer Mineralization**

The palaeoplacer mineralization present at Damang is similar, but not identical in character to the Tarkwaian mineralization present and exploited at Tarkwa. Mineralization at Tarkwa occurs within oligomictic, well sorted quartz-pebble conglomerates that macroscopically bear some resemblance to Witwatersrand conglomerates. Many of the conglomerates developed at Damang contain sub rounded to angular clasts and display poorer sorting compared to the conglomerates at Tarkwa. In contrast to other Precambrian quartz pebble conglomerates (such as Witwatersrand, Blind River and Jacobin), the Tarkwaian conglomerates contain volumetrically insignificant sulphides and the opaque mineralogy of these rocks is dominated by hematite and magnetite. Sulphides are typically restricted to selvages of exogamic quartz veins or dykes within the sequence. Gold is typically concentrated within the lower parts of the conglomerate units.

The Tarkwaian reef units also change character across the Damang anticline, such that the Western Limb and Eastern Limb of the Damang antiform display slightly different stratigraphics, both from east to west and also from south to north within the western limb of the Damang antiform. SRK saw evidence of significant correlation studies between the reef units present on the eastern and western limbs of the Damang antiform, as well as between the Damang and the Tarkwa areas. These, studies, completed by AGL geologists, followed detailed logging of drill holes within the project area.

The footwall sequence consists of a distinctive quartzite with well developed lamination and the presence of distinctive sedimentological structures. The first conglomerate reef (referred to as the Star) developed above this distinctive lithology, is characterized by the incidence of a big pebble oligomictic conglomerate unit that fines upwards to a quartzite unit, through a pebbly quartzitic sequence. A second polymictic conglomerate-quartzite cyclic unit characterizes the Malta Reef and a third cycle of oligomictic conglomerate-quartzite defines stratigraphics developed. For example, within the Malta Reef, the lowermost conglomerate

unit is overlain by pebbly quartzites and there are three individual cycles with conglomerates at the base within the Malta reef unit at Tomento East. At Tomento North, however, the upper two “cycles” of the Malta reef have coalesced to a single composite unit. There are also other differences with respect to the data available for modelling. The majority of the data at Tomento North is reverse circulation (“RC”) drill hole data, whilst at Tomento East there are a significant number of diamond drill hole data available for inclusion within the modelling process. Inevitably within the RC data, there is an element of “mixing” of different stratigraphic domains arising from the inability to precisely define stratigraphic contacts from drill cuttings as opposed to diamond cores.

The Damang palaeoplacers have been identified within the Tarkwa stratigraphy and represent the uppermost conglomerates at Tarkwa. The Afc, b (Main) and c (West) reefs at Tarkwa progressively onlap towards the north, such that the lowermost Star reef at Damang represents the composite assemblage at Tarkwa.

In the Kwesie-Lima area, on the eastern limb of the Damang Anticline, two reef zones are developed: the thinner, more channelized oligomictic Lima Reef and the overlying, thicker, more sheet-like, polymictic Kwesie Reef. The Lima Reef is thought to have been deposited in an incised fluvial channel system and therefore the “time unit” concept can be applied to it. However, the T1/T2 time units are rarely seen and the T3 is poorly developed indicating that the Lima area may have been an interchannel area because of footwall uplift to the south. The Kwesie Reef is thought to have accumulated in an “un-incised” sheet-flood dominated alluvial fan or apron (bajada). If it is an apron then other areas of potentially economic Kwesie Reef may be present elsewhere along strike (such as Subiri and the Bonsa Forest). The Lima Reef has reasonable gold values at Kwesie-Lima, but is diluted by a thick waste sandstone unit above it. The Kwesie Reef is subdivided into two sub-zones, a lower K1 subzone and an upper K2 subzone.

To date there is not enough information to correlate with certainty the Kwesie-Lima Reefs with the Chida-Tomento Reefs, although the Lima Reef may correlate with the Star, the K1 with the Malta and the K2 with the Gulder. A clast geochemistry study may confirm correlations. Figure 6.2 illustrates the proposed correlation of the Banket sequence between the east and west limbs of the Damang Anticline. This results from extensive regional sedimentological work conducted recently in an attempt to correlate (and interpret) the reef horizons across the entire Damang lease area.

6.4.2 **Hydrothermal Mineralization**

The hydrothermal mineralization consists of shallowly dipping tabular quartz veins. Sidewall photographs of the main Damang Pit (Huni Pit) clearly display arrays of predominantly shallowly dipping, narrow (<1 m thick) quartz vein sets, with a suggestion of the presence of more steeply inclined linking veins between the generally sub-parallel, shallowly inclined veins. Morphologically, the arrays resembled thrust fault arrays, with dominant sole and roof thrusts representing the shallowly inclined veins and steeper veins representing frontal and lateral ramps within the thrust system. Two alteration styles are recognised within the lithologies affected by the hydrothermal system. The earliest alteration

assemblage is rock. This hematite alteration is overprinted by quartz-sericite-sulphide (“QSS”) alteration spatially related to the quartz vein systems. This QSS alteration occurs as haloes around the quartz veins that may extend to approximately 1 m from the veins. Where the veins are close enough to each other, the alteration haloes may overlap, resulting in volumes of pervasively altered lithologies around densely spaced quartz veins. Gold mineralization is spatially associated with the quartz veins and associated alteration envelopes.

The geometry of the vein sets and the associated alteration haloes can be considered to define “pod-like” geometrics characterized by zones of enhanced quartz-vein and alteration coupled with enhanced gold grades. The geological modelling of the quartz vein “pods” has considered the spatial evaluation of several variables including:

- quartz vein densities by investigating the separation distance quartz veins and relating the separation distance to the grade of the intervening lithology;
- alteration assemblages and intensity of alteration, as well as correlation between gold grades and presence of alteration; and
- vein orientation, has been measured within diamond drill cores and these orientations have been used in section view to assist with the interpretation of the interpolation of veins between drill holes and consequently with the ultimate geometry of the mineralized pods.

The mineralized pods have been interpreted in cross-section views and these geometrics have been linked together to define three-dimensional entities representing individual pods, or volumes of enhanced vein density and alteration assemblages, coupled with enhanced gold grade. In the case of the Rex deposit, the drill hole data between the section lines is more dense than at Amoanda; these data confirm the continuity of mineralization the individual sections. Quartz vein pods at Rex consist predominantly of shallowly westerly dipping tabular zones. At Amoanda, a single pod with a more equant geometry dominates the total tonnage contained with the mineralized pods. However, the remaining pods have tabular, shallowly dipping forms.

Figure 6.1:-Regional geology of southwest Ghana

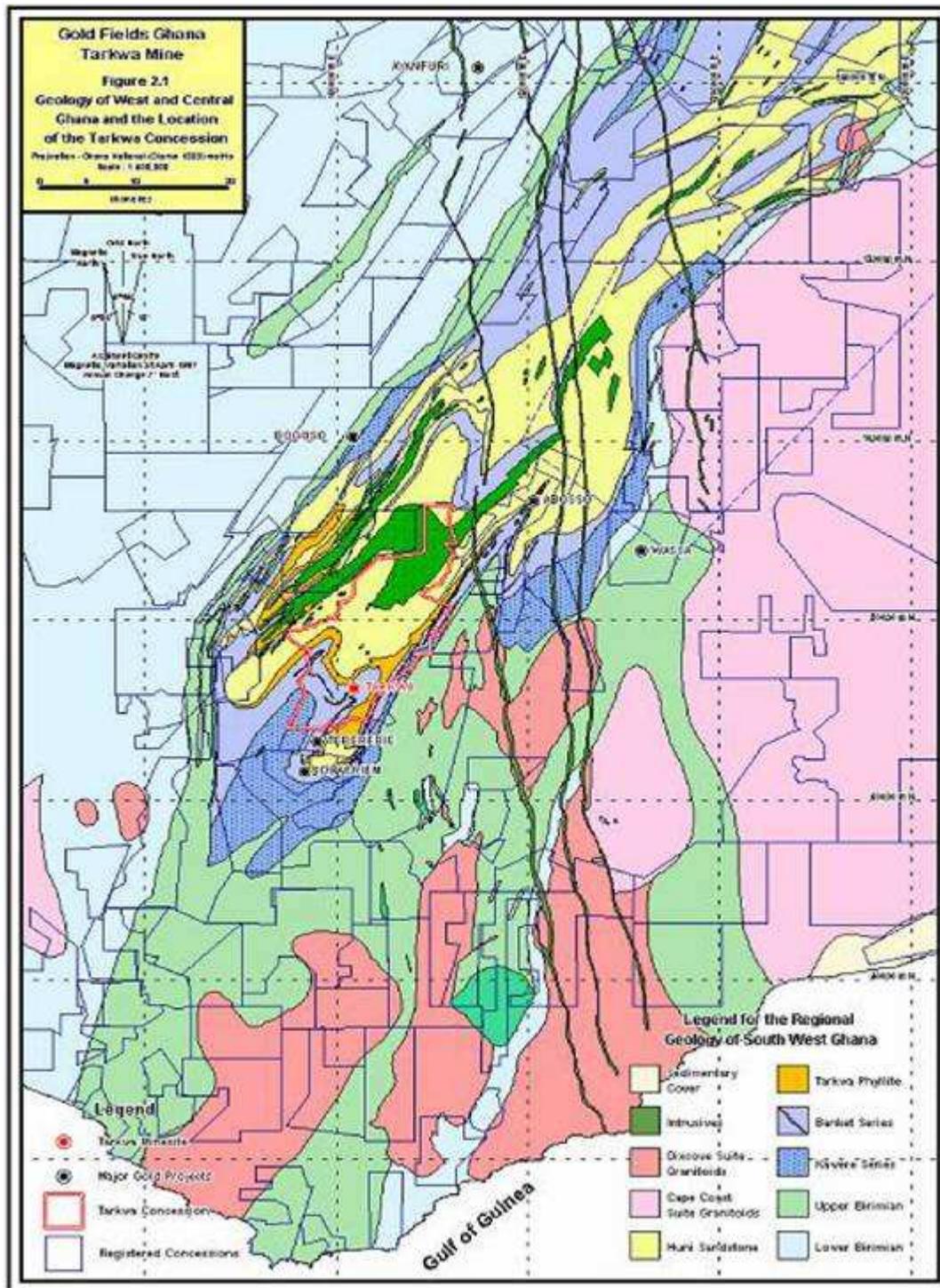
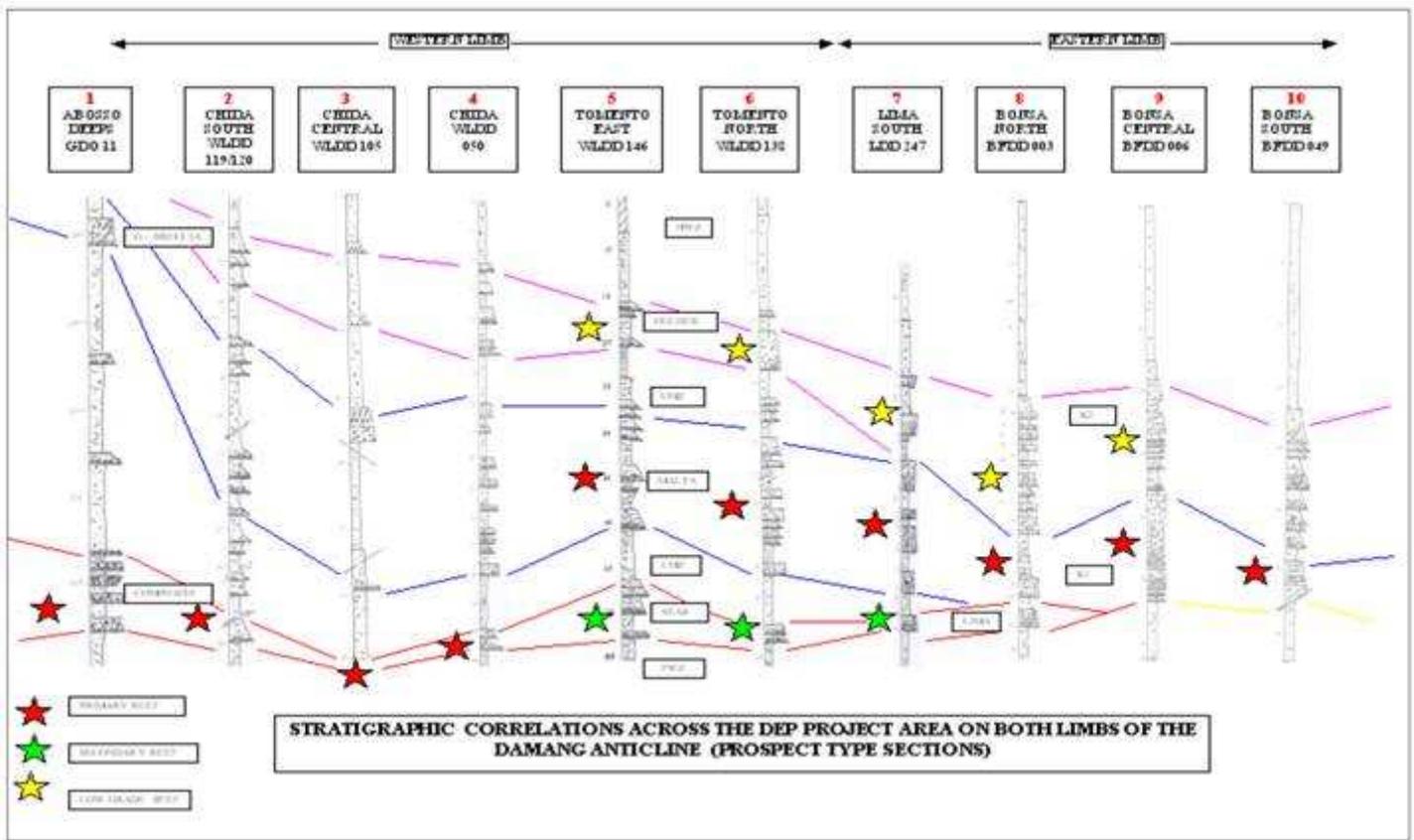


Figure 6.2: Schematic Proposed Correlation of the Banket sequence across the Damang Lease Area



7 EXPLORATION AND DRILLING

7.1 Exploration

7.1.1 Introduction

Pitting and trenching were carried out between 1990 and 1992 with drilling commencing in 1993. Exploration drilling has consisted primarily of RC with some diamond core drilling for density and metallurgical data. It is undertaken by contractors with AGL samplers assigned to collect information on penetration rates, sample recovery, the presence of water and any potentially contaminated samples. This information is recorded and utilized in resource modelling.

Diamond core drilling is carried out to develop a sound understanding of sedimentary structure and controls on mineralization, whilst RC drilling provides infill grade information once control is established.

The year to June 2004 has seen exploration and evaluation work directed toward establishing resources at known targets: Tomento North and Tomento East palaeoplacer prospects, and Amoanda and Rex hydrothermal deposits. Exploration has also been extended southward along the eastern limb of the Damang Anticline, primarily aimed at testing Banket Series rocks for both palaeoplacer and hydrothermal gold. Recent reevaluation of soil geochemical data gathered by Ranger Minerals has highlighted several targets that remain to be tested.

With mining of the Damang Pit to current design due to be completed in October 2004 and the planned treatment of low-grade ore stockpiles scheduled for the remainder of mine life, additional impetus was employed to advance known targets such as Tomento, Amoanda and Rex. The Damang Extension Project ("DEP") team was instituted in December 2003 to assist with this work. Additional sources of oxide ore were particularly targeted as the bulk of remaining stocks of low-grade ore at Damang are fresh rock material.

7.1.2 Lima South

The Lima South Project is within the AGL Prospecting Lease (PL 2055/95), north of the boundary of the Bonsa River Forest Reserve. The project falls adjacent to the active mining area of the existing Damang mine south of the AGL Mining Lease. The project and the infrastructure required for the development of the mining area are situated some 1.5 km south of the STSF. Although the site is currently only linked by small access roads for exploration and service vehicles, the Lima South pit will be a southerly continuation of the active Lima pit.

Metallurgical test work on samples from 11 holes drilled in 2002/03 indicate that the conglomerates have a similar leach profile to that seen at Tarkwa, although the dissolutions are slightly lower than those at Tarkwa. Average porosity is 0.19% and recovery increases

with finer crushing. Recovery is slightly lower at intermediate and very fine crush sizes as compared to that of Tarkwa. AGL considers CIL as the most likely treatment option for Lima South oxide ore.

Application has been submitted to the Government in December 2003 for the conversion of Prospecting Lease to a Mining Lease. Approval of the conversion by the Ghana Minerals Commission awaits the grant of an environmental permit by the EPA. AGL does not know of any significant impediment to the grant of such permit.

7.1.3 **Bonsa / Bonsa North Prospect**

The Bonsa Prospect is located along the eastern limb of the Damang Anticline and incorporates a 10 km southerly extension of the Kwesie-Lima Banket Sequence. The majority of the area is within the Bonsa River Forest Reserve. Forestry permitting issues are ongoing with current three-monthly permit renewals. To date the following work has been undertaken:

- re-interpretation of aeromagnetic data indicating a 10 km north-south strike extent of Banket stratigraphy confirmed by soil geochemistry and drill results;
- establishment of baseline and 200 m spaced cross lines over the area;
- structural subdivision of the Prospecting Licence to Northern, Central and Southern areas;
- detailed mapping of 25 m spaced pits along the cross lines over the area;
- first phase diamond drilling on 200 m spaced lines incorporating 52 diamond drill holes for 4882 m to locate and test gold potential of the Banket Reefs;
- second-phase infill diamond drilling (15 holes for 1250 m) in the Northern area to close data line spacing to 100 m;
- levelling of soil geochemistry across the Bonsa Prospect identifying an additional three target areas with potential for hydrothermal mineralisation;
- infill soil geochemistry in each of the hydrothermal target areas to close regional soil geochemistry line spacing from 500 to 100 m lines (21.6 km line cutting for 1,464 soil samples).
- identification of 3 hydrothermal targets areas that warrant further follow up;
- survey works to delineate drillhole collar and soil sample locations; and
- completion of an extensive revegetation program involving re-establishment of 13,500 tree seedlings and ongoing revegetation maintenance programs.

7.1.4 **Hydrothermal Targets**

Three hydrothermal targets in the central and southern regions of the Bonsa Forest were identified from samples returning greater than 100 ppb gold in levelled soil geochemistry. Gold-bearing hydrothermal quartz-pyrite veins in two of these areas were previously intercepted in stratigraphic drill holes. A programme of infill soil geochemistry to close the regional line spacing from 500 to 100 m is complete and involved 21.6 line km for 1,464 samples. Infill soil geochemistry confirmed hydrothermal target areas, which warrant further investigation but are currently on hold due to ongoing forestry permitting issues.

7.1.5 Subiri

Approval of Subiri Prospecting Licence application is pending an agreement between AGL and Wexford Goldfields. Sign-off of this agreement has been delayed due to tenement boundary survey discrepancies and is currently being addressed by Wexford Goldfields via independent survey consultants. The area is considered prospective for both palaeoplacer and hydrothermal gold mineralisation.

7.1.6 Other Exploration Targets

Levelling of existing soil geochemical data from the Damang, Subiri and Bonsa River Forest tenements was completed during April 2004. The levelling procedure was necessary to establish consistent data thresholds to separate anomalous values from backgrounds levels such that new exploration target areas could be identified. The levelling procedure involved a statistical manipulation of the soil geochemical data to minimize the influence of the different datasets. Review of levelled soil geochemistry data has identified a number of new target areas as follows:

1. Subiri (palaeoplacer - previously identified)
2. Golf Course
3. Huni Valley
4. Rex North
5. Rex South
6. Bonsa Central (previously identified)

Exploration follow up work for each of these anomalous areas in the Damang lease area is planned and work has begun in the Rex South area with a programme of mapping and test pitting.

7.2 Drilling

Currently, a total of 3,112 exploration holes have been drilled of which 790 have been drilled by AGL. The AGL drilling has primarily been carried out using diamond coring methods; however, the total includes 471 RC holes. Total exploration drilling to date amounts to some 231,330 m.

The following list summarizes the data available for completion of the 2004 model:

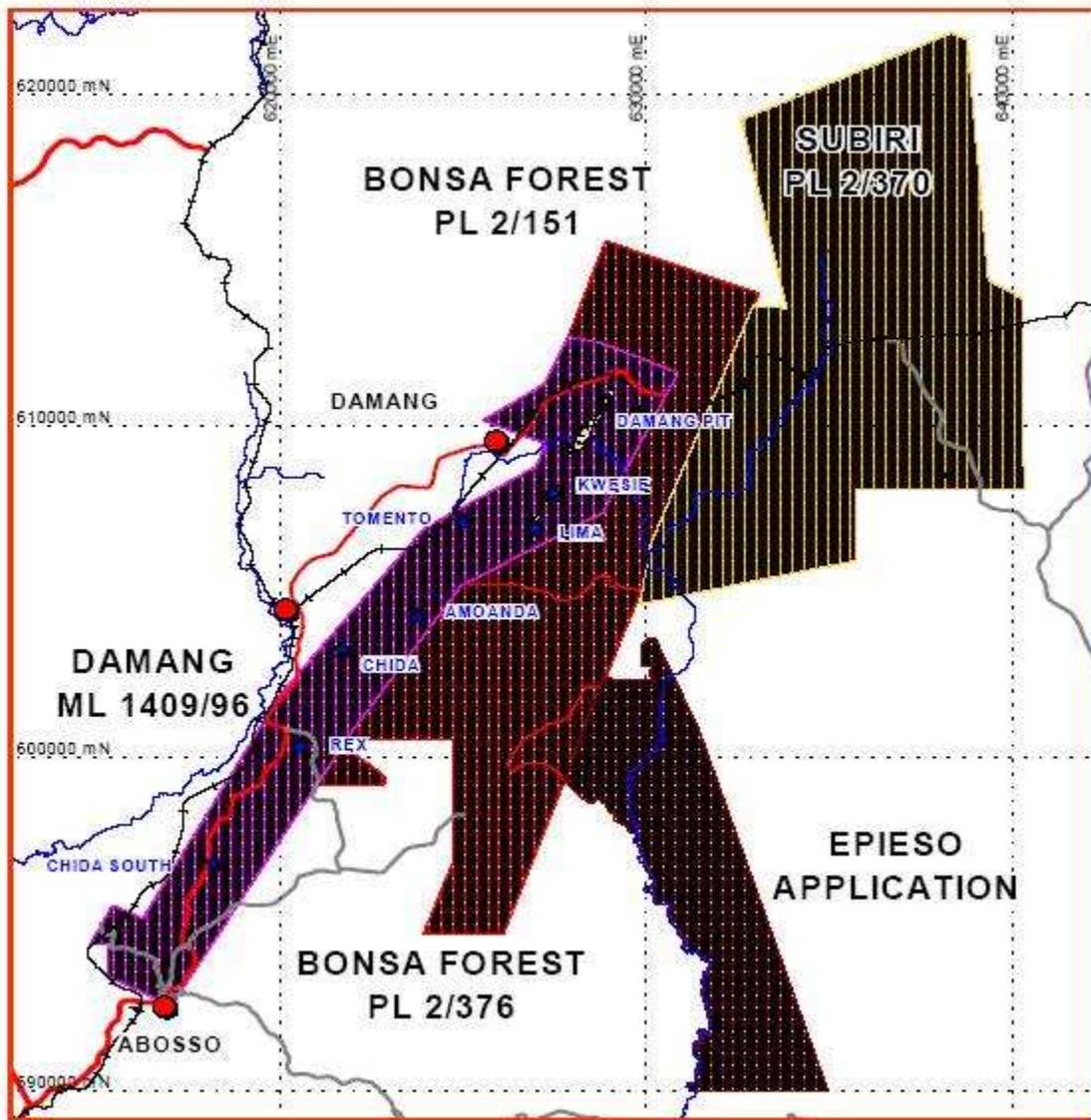
• Diamond Drilling:	1,360 holes	(142,638 m)
• Other Holes:	138 holes	(6,986 m)
• RC holes on a 40x40 m grid:	1,614 holes	(81,706 m)
• Grade control holes (RC):	79,465 holes	(953,580 m)

All grade control drill holes have also been captured in the *Acquire* geological database. The database captures the following:

- (1) The collar positions of all RC and diamond holes.
- (2) Down-the-hole survey data.
- (3) Lithological data.
- (4) Assay data.
- (5) The final stratigraphic zoning of all boreholes.

Mining software geological databases are used for final data storage and data manipulation and validation routines are carried out.

Figure 7.1: Damang Mining Lease, Prospecting Licenses and Applications



8 SAMPLING

8.1 Sampling Method and Approach

Initial exploration drilling is carried out using diamond coring with sampling at 1 m intervals from the hangingwall contact to the footwall. Samples are also taken in the footwall and hangingwall to test for low grade dilution.

Sampling during RC drilling and grade control is carried out on the basis of vertical 1 m composites with sampling starting at the hangingwall of the uppermost reef horizon and continuing below the footwall of the lowermost package. An initial split is carried out at the drill rig using a 3-tier riffle splitter and a 3.5 kg sample is bagged for analysis. Representative rock chips are collected during the drilling and logged on site by a geologist to establish the stratigraphic context of the sampling and to provide a geological description of each sample.

8.2 Sample Preparation, Analysis, Security and Data Verification

AGL has developed a stringent sample preparation and analysis regime along with a strict quality control program. All exploration drilling utilizes 50 g fire assay analysis unless otherwise prescribed. At times, bottle roll tests with catalyzed cyanide leach (800 g charge) is employed where closer spaced infill grade information is required. Samples are always under the supervision of AGL staff until submitted to the laboratory, and a system submission ensures the tracking progress in the system.

Prior to 2002 analytical services were provided by SGS Laboratories, Tarkwa; since 2002 by Transworld Laboratories in Tarkwa. Grade control drill samples are analyzed on site by Analabs West Africa Ltd.

The AGL Quality Control program consists of the following:

- field re-splits every 100th sample (a complete second sample is taken which provides information regarding fundamental sample error and repeatability of results);
- laboratory repeats every 25th sample (a second sample is taken after the first stage of comminution that indicates preparation errors);
- pulp repeats every 25th sample (Indicates analytical variance);
- blanks every 50th sample (indicates carry-over of gold between successive sample due to improper cleaning of laboratory equipment); and
- standards every 50th sample (low value, medium value and high value standards, are submitted (supplied by RockLab and Gannet) to ensure the calibration of analytical equipment is correct.

The SGS laboratory is ISO 9001 and 9002 compliant and is aiming for ISO 17025 compliance by the end of 2005. Transworld and Analabs have not yet achieved ISO compliance but are reported to be aiming to achieve this in the near future.

Periodically, sample pulps are submitted to alternate laboratories to assess the quality of analysis. The laboratories also participate in regular round robin analyses. AGL maintains an ongoing grade reconciliation program between current grade and tonnage models with actual tones mined and grades reported by the mining department.

The sampling and assay methodologies employed at Damang are standard within the mining industry for mineralization of the type associated with the Damang deposit and in SRK's opinion are carried out to a high standard and are adequate for the intended purposes. Damang carries out ongoing grade and tonnage reconciliation studies which are discussed in further detail in Section 10.5. Data are compared between the exploration drilling, grade control and belt sampling results. The underlying data supporting the resource estimate is considered by SRK to be generated and input in the corresponding resource models in satisfactory manner. Given the operating history of Damang and the ongoing reconciliation studies SRK considers the sampling and assay information to be reliable and has therefore not carried out any check sampling or assays. Reliance is therefore placed on the information provided by GFGL in this respect.

ADJACENT PROPERTIES

The mining leases held by AGL are adjacent to the mining lease held by GFGL approximately 35 km to the south. Ownership of GFGL mirrors that of AGL, and AGL conducts operations at Tarkwa to the south of Damang.

Bogoso / Prestea Gold Mine (“Bogoso”) is an open pit mining operation owned and operated by Bogoso Gold Limited which is 90% owned by Golden Star Resources Limited (“Golden Star”) and 10% by the Government of Ghana, and lies south of Bogoso Township in the west of Ghana approximately 120 km from the port of Takoradi.

Iduapriem Gold Mine (“Iduapriem”) lies 6 km south of Tarkwa and is an open pit mining operation owned and operated by AngloGold Ashanti Limited (“AngloGold”), with 10% held by the Government of Ghana.

Technical information on Bogoso and Iduapriem is available in public domain documents published by Golden Star and AngloGold respectively that are available on these companies’ websites.

Akoon Gold Mine is situated to the north of Tarkwa and was an underground operation from 1912 to 1999. Gold Coast Resources Inc. currently owns an option on this closed facility.

10 MINERAL RESOURCES

10.1 Introduction

The process of estimating the Mineral Resource at Damang involves the use of a number of factors based on historical results and planned dilution. Both exploration and grade control drill results are used for geological modelling and grade interpolation. Currently, Mineral Resources are classified according to the guidelines set out in the South African Code for Reporting Mineral Resources and Mineral Reserves (the “SAMREC Code”). SRK considers that the derivation of the Damang Mineral Resource and Mineral Reserve also conform to the definitions and guidelines prepared by the CIM Standing Committee on Mineral Resources and Mineral Reserves and approved by the CIM Council of the Canadian Institute of Mining, Metallurgy and Petroleum in August 2000 (the “CIM Standards”).

10.2 Damang Main Pit

Previously the IK7C block model, which was created in March 2001, was used for Mineral Resource reporting at the Damang Pit. In mid 2003, 16 additional diamond drillholes were completed and in November 2003 the IK7C model was updated over a 400 m strike length in the Juno 1 and Juno 2 areas. The methodology used for the resource estimation remained unchanged and the updated portion of the resource model was cut into the IK7C model to produce a new model (IK8). SRK has reviewed the updated model and the Hellman and Schofield Pty Ltd report and considers that its findings and comments on the IK7C model are still relevant to the updated model.

This model is unconstrained due to the complexity of the ore zones, which make wireframes difficult to construct although lithologies are modelled separately and grade estimated into these separately. Grade interpolation is by Multiple Indicator Kriging (“MIK”) into 20 (E-W) by 40 (N-S) by 3 m blocks. The median rather than the mean is used for the upper class indicator cut for blocks informed by less than 75% diamond drillhole data and cutting of outliers is carried out based on statistical analysis.

From previous analysis RC and diamond drillhole samples appear to be different statistical populations. Although good quality control procedures are in place, the RC samples exhibit very poor precision, however the influence of RC samples decreases with depth.

Due to the use of stockpiles and different grade and fresh / oxide ore types, accurate reconciliation is difficult at Damang. Also if grade control policy is changed slightly then this also impacts on the different ore type grades and tonnage. Reconciliation has shown in the past that the grade control model overestimates grade by approximately 5% compared to belt sampling. This may be due to dilution and losses, variable stockpile grades or biased sampling data. The resource model grade is generally slightly higher than that of the grade control model, however given that more tonnes are extracted than predicted from the resource model this is to be expected.

Tonnage factors of 0.7 for 1.1-1.8 g/t material and 0.5 for 0.5-1.1 g/t material were applied

to the IK7C Model based on reconciliation exercises. Recently a non-linear series of factors was derived that, when applied on a tonnage-weighted basis to the entire IK8 model closely approximate the 0.7 and 0.5 factors previously. Following the application of these factors tonnage reconciliation appears reasonable.

10.3 **Kwesie Lima**

In the Kwesie-Lima area two reef zones are developed: the thinner, more channelised oligomictic Lima Reef and the overlying, thicker, more sheet-like, polymictic Kwesie Reef. The Lima Reef has reasonable gold values, but is diluted by a thick waste sandstone unit above it. The Kwesie Reef is sub-divided into two sub zones, a lower K1 sub zone and an upper K2 sub zone.

Kwesie-Lima was initially drilled and trenched on 80 m spaced traverses in 1996-97 with further resource definition drilling at 20 mE by 40 mN spacing by a combination of DDH and RC drilling completed in 2002. Since then the area has been extended and has a total strike length of almost 3 km including Lima South, which is contiguous to the current Lima Pit. At Kwesie in the north, a drill spacing of 10 mE by 20 mN has been achieved and at Lima a drill spacing of 20 mE by 40 mN although this reduces to 100 mN along strike in the south.

A wireframe model incorporating the new area was developed in 2003 in which the three reefs were modelled in separate wireframes. Interpolation is by ordinary kriging into 10 mE by 20 mN by 3 mRL blocks with interpolation constrained within the wireframes. There are no extreme outliers and therefore no cutting.

AGL reports that detailed mapping during mining has indicated that, in places, reef correlations in the model are incorrect, often because of fault displacements and associated intrusives. However, overall the model provides satisfactory predictions of ore volumes and grades.

10.4 **Tomento, Amoando and Rex**

SRK has reviewed the geological modelling practices of the DEP deposits and concurs (both in the palaeoplacer and hydrothermal mineralization) that the models have been developed in an attempt to mirror or abstract the geological reality by making use of several different lines of evidence or data. It must be recognized that the models have been developed in the presence of relatively sparse data (sparse with respect to the anticipated variogram ranges), that consists of a mixture of diamond drillhole and RC data. The amount and relative detail of geological data accessible from these two data sources differs. Additionally, some of the defined pods are quite small and contain comparatively few individual samples. Despite this limitation, the models appear to be based on conservative application of sensible principles. The estimation process makes use of Simple Kriging estimates ("SK"). Ordinary Kriging ("OK") is more widespread in general application than SK, however diagnostic data from the estimates clearly shows that under the estimation conditions prevailing in the Amoanda estimates, the OK estimates are of poor quality and retain some significant conditional

biases, which should be avoided wherever possible. SRK considers that the methods used by AFL in this case are reasonable and valid.

The individual variograms derived from each of the palaeoplacer reefs and the various pods defined within the hydrothermal mineralization are for the most part quite poorly structured and difficult to interpret. The use of template models derived from one of the better informed pods is definitely justified, but enforces the assumption that the variograms of the pods share a common general form. The overall weakness of the experimental variography would preclude, in SRK's opinion the classification of any of the Mineral Resources as Measured. The impact of the variogram on the determination of recoverable resources needs to be considered as a source of risk in this project. In all cases, additional variographic information has been brought into the variogram models from grade control data sources. In the case of the hydrothermal mineralization, a short-range structure has been included by analogy with the grade control data from the main Damang Pit. SRK recommends that one of the pods should be considered as a test case and the variogram model flexed within ranges and variance levels considered reasonable within the framework of the geological models, to develop estimates of the recoverable resources presented for a range of test cases against the base case. This test can illustrate the scale of potential variability that may be realized as a result of differences that may be present in the variograms when more complete data are available.

AGL has based its estimates of the global precision of the estimate of each pod on SK results. SRK notes that this method assumes that the mean grade used in the estimation is error free. This is not the case; some error is attached to the determination of the mean and this explains why, for a corresponding neighbourhood, the kriging error variance of an SK estimate is less than that of the OK estimate. SRK suggests that it may be more relevant to undertake OK with a global neighbourhood for the determination of the global error variance of each pod, and to use this error variance to determine the confidence intervals about the mean grades for each pod. However, the statistical basis for the classification aside, the Mineral Resource classification appears reasonable with the majority of the Mineral Resource classified as Indicated.

10.5 **Reconciliation Studies**

10.5.1 **Damang Pit**

Reconciliation of Grade Control to Mill Actual

Ore loss factors applied to the IK8 resource model, the grade dilution factor applied, post-optimization and design, are discussed in Section 10.2. Those factors have been derived empirically from reconciliations over the life of the Damang Pit against resource models of the day.

On-going reconciliations of Run-of-Mine ("RoM") tonnes and grades predicted by grade control ("GC predicted") to actual tonnes mined and grades realized have been carried out by AGL. RoM ore has been defined variously as +1.6 g/t, +1.8 g/t or +2.0 g/t ore at various

times throughout the mine life. At Damang, the term Mine Call Factor (“MCF”) is the ratio of actual grade to GC predicted grade.

The history of MCFs at Damang can be broken down into several periods:

- From November 1997 to April 1999, grade control consistently over-estimated actual grades by approximately 12%. Investigations revealed a possible bias between gold grades in grade control samples and assays in resource definition drilling. Retrospective analysis has revealed that sample bias may have been a component of the problem but that errors in locations of samples drilled from natural surface prior to commencement of mining, along with poor sub-sampling procedures during early grade control sampling campaigns, were probably the main problems.
- From April to November 1999, a system of factoring of assays was introduced in an attempt to ameliorate the effect of the perceived sample bias. This resulted in under-prediction of grades from June to November 1999. During that period mining progressed to levels below the depth of pre-mining grade control drilling and sample quality appears to have improved significantly.
- From December 1999 to October 2001, grade control predicted ore grades satisfactorily.
- After October 2001, the MCF was affected by reclamation of oxide stockpiles built prior to April 1999 and by the way Kwesie-Lima ore grades were predicted by using global average grades for each of the Banket reefs. In January 2003 Kwesie-Lima Mineral Resource grades were estimated using the local block grade estimates in the resource block model rather than a global average.

Reconciliation of Grade Control to Resource Models

Resource ore tonnages and grade are derived on a monthly basis by cutting progressive month-end survey surfaces through the resource model, that is “mining the model”. Mill actual grades for material deriving from Damang Pit were estimated by applying monthly MCFs to grades predicted by grade control. Again, extraneous influences on the MCF after October 2001 need to be borne in mind.

Comparisons to the resource model have shown reasonable reconciliation for RoM tonnage and grade over the life of the mine. A trend of grade control locating greater ore tonnages at higher grades in the latter half of calendar 2003 has since reversed and since January 2004 grade control has located lower ore tonnages and grades. This almost certainly reflects uncertainty in local estimates as the working area of the pit becomes smaller and progresses to depth in areas of incomplete resource drill coverage.

Resource models have shown a fairly consistent tendency to over-predict recoverable tonnages of 1.1-1.6 g/t material most of the life of the mine. It is this historical comparison that forms the basis for the ore loss factors applied to the IK7c and IK8 resource models. Since the tonnage factors were introduced in March 2001 the comparison has improved

significantly. The deterioration from about October 2003 is almost certainly caused by the same problems that affect RoM core comparisons; the increasing impact of uncertainty in local estimates as the pit working area decreases and advances into poorly drilled areas.

10.5.2 **Kwesie-Lima**

Reconciliations of actual grade to grades predicted by the resource model are not possible for ore from Kwesie and Lima pits; the ores are always processed after blending with ore from Damang pit.

Comparison of ore tonnages predicted by the 'Lima Wireframe Model' with tonnages mined over eighteen months to June 2004 show that the differences mainly relate to differences between predicted and actual locations and volumes of intrusive dolerite dykes. Total tonnage mined is 96.5 % of predicted tonnes. This is the basis for the ore loss factor applied to estimation of Mineral Resources and Mineral Reserves at Kwesie-Lima.

10.6 **Data Analysis**

All assay data is captured electronically and in hard copy format. Basic statistics are produced after completion of wireframe modelling to check the validity of samples which lie within the geological model as well as the stationarity of the domains. 1 m composites are produced from the hangingwall intersection with a minimum of 40 cm allowed at the base to allow for shorter composite lengths. Statistics are calculated for vertical thickness, grade and metal accumulation. SRK considers the approach taken by AGL to be appropriate, given the size of the database available.

10.7 **Mineral Resource Statement**

The Mineral Resource Statement in Table 10.1 represents the Mineral Resource at Damang estimated by AGL as at June 30, 2004. In SRK's opinion the tonnage and grade estimates and classification are appropriate according to the SAMREC Code and CIM Standards.

Dilution is applied to the blocks and a pit optimization is carried out using a USD 400 per ounce gold price. After calculation of the pit shell the dilution is subtracted from the blocks and the Mineral Resource quoted is essentially the tonnage of the undiluted ore blocks which lie within the outline of the un-engineered pit shell.

The Measured and Indicated Mineral Resources are quoted inclusive of those Mineral Resources modified to produce the Mineral Reserves.

SRK recommends that the use of a constrained resource model for the Damang Pit is investigated further prior to any decision regarding the proposed Damang cut back. Although the current Mineral Resource represents a reasonable global estimate there is a risk in using it for deepening studies.

Table 10.1: Damang Mineral Resource Statement, June 30, 2004

Mineral Resource Classification	Mt	g/t	Koz
Measured			
open-pit	6.4	1.5	310
surface stockpile	9.1	1.4	400
Measured sub-total	15.5	1.4	710
Indicated			
open-pit	15.8	1.6	820
Indicated sub-total	15.8	1.6	820
Total Measured and Indicated	31.3	1.5	1,530
	Mt	g/t	KOz
Inferred			
open-pit	3.8	2.5	300
Inferred Total	3.8	2.5	300

SRK considers the approach applied in the estimation of the Mineral Resources and Mineral Reserves for the DEP should be applied at Damang as a whole. SRK also considers that there is good potential for increasing the Mineral Resources and Mineral Reserves at Damang and AGL is currently conducting exploration and evaluation programmes to this end.

SRK has not recalculated the base information supporting the Mineral Resource estimates as derived from bore-hole and assay data, this given the extensive history of Damang and geological investigations undertaken by AGL and previous owners. However, SRK has undertaken sufficient checks through the course of its investigations to enable an appropriate level of reliance to be placed on such data, as provided.

11 MINING AND MINERAL RESERVES

11.1 Mining Method

Mining at Damang is carried out by conventional open pit methods using a contractor-fleet operated by AMS, a subsidiary of Henry Walker Eltin. AMS has held the earth-moving contract since the commencement of operations in August 1997.

Ore and waste is loaded using a standard truck-shovel operation with three hydraulic excavators in backhoe configuration (one Liebherr 994 and two Liebherr 984). The truck fleet consists of 12 rear-dump Caterpillar 777D and four rear-dump 773B with an average payload capacity of 90 t and 48 t respectively. Ancillary equipment includes bulldozers, loaders, graders, water trucks and service truck vehicles supporting the drill-and-blast and haulage operations through vehicle, road and bench maintenance, dust and erosion control. Consistent with the current production schedule, mining is carried out for 7 days per week using two shift panels. Each panel operates for approximately 10 hours in duration each shift.

In the Damang pit, fresh and transitional zone materials are drilled and blasted in 6 m lifts with excavation in 3 m flitches. To optimise ore fragmentation and blast control, blasting is carried out using either electronic or standard Nonel initiation systems. The majority of oxide material is excavated without blasting.

From the Lima and Kwesie pits, which are located approximately 3.5 km from the treatment plant, oxide and transitional ore is selectively mined to provide incremental feed to the mill. Blasting is performed using standard Nonel initiation systems on wide pattern configurations. Off-highway trucks haul ore to reclaim stockpiles near to the mining area. A fleet of tipper trucks operated by Engineers and Planners Ltd then reclaims the ore and transports it to the treatment plant.

Waste material is hauled to progressively rehabilitated waste dumps or in-pit dumps. AGL has an advanced reclamation plan whereby, as areas become inactive, they are immediately rehabilitated through contouring, replacement of topsoil, seeding, planting and fertilisation.

11.2 Grade Control Procedures

In the Damang pit, grade control sampling is by drilling of vertical RC holes to create sample coverage at 5 mE x 8 mN x 1.5 mRL spacing. The uppermost 1.5 m from each drill hole is not sampled and each hole is drilled 1.5 m below the base level of the bench for which ore outlines are required. Sample data are taken into the 'MP3TM' conditional simulation and optimization routine and maximum profit models generated at 1.1 and 1.8 g/t cut-off grades using 2 mE x 5 mN x 3 mRL blocks. Ore categories recommended by MP3 TM are used as the basis for digitizing ore outlines for each 3 m flitch. Ore grades for each of the outlines are predicted by reference to the estimated block grades provided by MP3 TM.

In Kwesie and Lima pits, bulldozer rip lines are established on each 3 m floor at intervals of 10-15 m along strike, depending on the locations of faults. Footwall and hangingwall contacts of the Banket reefs are located by geological mapping and marked. Mining ore boundaries are then marked out on the pit floor and picked up by surveyors. Banket reef material is not routinely sampled. Ore grades are predicted by reference to block grades in the “Lima Wireframe Model” using the surveyed ore outlines. Check sampling of rip lines has been conducted in the past and found to generally support the resource block model grades.

11.3 **Optimization and Pit Design**

SRK worked with AGL on the DEP during the first half of 2004. SRK was provided with resource models that had been constructed by AGL for the Rex, Tomento and Amoanda deposits and SRK conducted the optimization study and derived the Mineral Reserve estimates for these three deposits. The Mineral Reserves for the Damang Pit, Kwesie-Lima deposits and the stockpiles have been derived by AGL.

In January 2004, a cut-back of the eastern and southern walls of the Juno 2 portion of the Damang pit was designed after in-house pit optimisation using the updated IK8 model. That design has been incorporated into the LoM Plan and the declared reserves include ore within the Juno 2 SE Cutback.

Based upon recent pit optimisations by SRK the current Damang pit design, including the Juno SE Cutback, is now recognised as not being optimal at a gold price of USD 350 per ounce. Nevertheless there are insufficient sample data in many locations to enable a confident update of the design of other portions of the Damang pit at this time. The 2004 declared Mineral Reserve is based upon the January 2004 update of the ultimate pit design that forms the basis for the current LoM Plan.

The Kwesie-Lima pit design and mining schedule used to define Mineral Reserves are those that underlie the January 2004 Damang LoM Plan. Pit designs and schedules for the Tomento North, Tomento East, Amoanda and Rex prospects derive from work by SRK using Whittle 4XTM and Gemcom software, a gold price of USD 350 per ounce.

11.4 **Historical Production**

Table 11.1 illustrates the historical production for the past three fiscal years (July to June) at Damang.

Table 11.1: Tarkwa Historical Production

Production History	Year ended June Units	2004	2003	2002
Production				
Ore Mined	(kt)	5,439	4,457	2,402
Head Grade	(g/t)	2.02	2.11	2.34
Waste Mined	(kt)	9,855	13,928	5,437
Strip Ratio	(koz)	1.8	3.1	2.3
Tonnes treated	(kt)	5,236	4,877	1,951
Yield	(g/t)	1.8	1.9	2.3
Gold Produced	(koz)	308	299	141

11.5 Stockpiles

The stockpiles as included in the Mineral Reserve comprise lower grade mineralisation that has been accumulated since the start of mining of the Damang Pit. The stockpile material comprises 45% of the total stated Mineral Reserve tonnage and contained metal. SRK notes that no modifying factors have been applied to the stockpile Mineral Resource to convert this to a Mineral Reserve, which it considers to be reasonable.

AGL has recently conducted preliminary test work including check surveying, an initial drilling programme and limited campaign mining / processing of material from a portion of the B3 stockpile. Whilst there are difficulties obtaining representative samples from RC drilling on stockpiles this exercise should continue to improve confidence in local estimates on the stockpiles.

11.6 Mineral Reserve Estimation

The Damang Pit Mineral Reserves are those that remain within the lower levels of the current 'final pit'. The DEP has identified the potential to develop an economic cutback to this 'final' pit and an in-fill drilling programme is in progress to further evaluate the Mineral Resources in this area. The Mineral Reserve for the Damang Pit includes the Juno 2 SE cutback, mining of which has been deferred until the evaluation of the Damang cutback has been completed. Although the Juno 2 SE Cutback design may be modified, SRK considers inclusion of this in the current Mineral Reserve to be appropriate. AGL has not included any other of the potential cutback to the Damang Pit in the current Mineral Reserve declaration. SRK has reviewed and is very familiar with the methodology used by AGL for the conversion of Mineral Resources to Mineral Reserves and generally supports the approach and methodology that has been used. SRK considers that the Mineral Reserves for Kwesie-Lima may be slightly overstated, however overall the Mineral Reserves declared should be economically extractable. The impact of a reduction in the Mineral Reserve is also likely to reduce the waste mining requirements and thereby improve the economics and the projected cash flow.

SRK also recommends that further work is carried out at Kwesie-Lima on the derivation of the Mineral Reserves so that the parameters used in the Mineral Reserve derivation are comparable to those used on the other deposits at Damang.

The Lima South deposit is within the AGL Prospecting Lease (PL 2055/95) north of the boundary of the Bonsa River Forest Reserve and an application was submitted in December 2003 for the conversion of the Prospecting Lease to a Mining Lease, which is subject to the granting of an environmental permit by the Environmental Protection Agency. SRK has been informed by AGL that it knows of no significant impediment to the grant of such permit and therefore concurs that the Lima South deposit can be declared as a Mineral Resource and Mineral Reserve as long as the position with the Mining Licence is also stated.

11.7 **Geotechnical Constraints**

AGL is committed to safe surface mining operation. In fulfilment of AGL's Environmental Impact Statement and other relevant mining legislation in Ghana, AGL has implemented geotechnical procedures and standards in support of the surface mining operations. The geotechnical program is managed by the Mining Department of AGL and supported by SRK. Geotechnical pit face mapping on accessible benches and geotechnical logging of drill cores are conducted according to standards for input into the Mining Rock Mass Classification scheme. Indicative Overall Slope Angles and Indicative Bench Stack Angles corresponding to a given rock mass rating value are inferred from standard design charts, for a required factor of safety.

Mapping of major structures and rock mass fabric are conducted on accessible benches in the pit for kinematic analysis using DIPS, a stereographic analysis tool developed by Rockscience Inc. The kinematic stable angles are compared to the empirically derived angles to arrive at the most acceptable design angles. A minimum factor of safety against failure of 1.25 is generally accepted.

Pit wall faces, upper slopes and accessible benches are regularly monitored to determine their rates of deformation. Where there is an indication of instability, survey prisms are installed and monitored with a total station. The rate of deformation is then calculated from the survey readings and appropriate operating procedures implemented.

Due to variations in the properties of the rock masses constituting the pit walls, as well as operational constraints, the overall slope angles actually achieved are less than the design angles in certain sections.

Routine review of slope angles is conducted internally by the mine and externally by SRK to update the pit designs as more geological and geotechnical information becomes available. Ground water levels are monitored from piezometers installed on the pit perimeter. Controlled blasting and surface water control form part of slope stabilization techniques employed on the mine.

AGL together with SRK has collected and analysed a considerable amount of data relevant to a consideration of optimising safe slope geometry. At the Kwesie-Lima Pits, for example, the footwall slope is generally fairly weathered and sheared and the dip will vary from 45-60°, according to strata dip. A recommendation for a 6 m wide spill berm constructed every

35 m of vertical slope height should permit safe excavation. The hangingwall slope will vary according to the thickness and disposition of each of the three reefs and the nature of the middling (sandstone or saprolitic intrusion). An overall slope angle of 30-35° in the upper slope and 42-46° in the lower slope has been recommended. Similarly, geotechnical assessments for the Rex and Tomento Pits indicate recommended overall slope angles of 30-62° dependent upon rock type. Mapping during 2004 of the Damang Pit east wall indicated a slope assessment from 55.5-59°, whereas actual slope angles (including ramps) are 47-50°. Therefore SRK considers the LoM Plan is achievable with the above assessments.

11.8 Mineral Reserve Statement

The Mineral Reserve Statement in table 11.2 represents the Mineral Reserve at Damang estimated by AGL as at June 30, 2004. In SRK's opinion the tonnage and grade estimates and classification are appropriate according to the SAMREC Code and CIM Standards.

Table 11.2: Damang Mineral Reserve Statement, June 30, 2004

	Mt	g/t	KOz
Proved			
open-pit	2.6	0.9	80
surface stockpile	9.1	1.4	400
Proved sub-total	11.7	1.3	480
Probable			
open-pit	8.3	1.4	370
Proved sub-total	8.3	1.4	370
Total Proved and Probable	20.1	1.3	850

The Mineral Reserve estimates are based on a gold price of USD 350 per ounce. The Proved Mineral Reserves are derived from Measured Mineral Resources and Probable Mineral Reserves from Indicated Mineral Resources.

SRK has reviewed the methodology used by AGL at Damang for the estimation of the 2004 Mineral Reserve. For the planning methodology applied by AGL, and for the operating cost assumptions, SRK considers that the derivation of the Mineral Reserve at Damang to be appropriate and conforms with the guidelines and definitions of the SAMREC Code and CIM Standards.

Table 11.3: Damang Mineral Reserve Sensitivities

Gold Price	(USD/oz)	300	325	350	375	400
Proved and Probable Reserve	(Mt)	16.8	18.8	20.2	21.2	22.1
Average Grade	(g/t)	1.3	1.3	1.3	1.3	1.3
Contained Gold	(KOz)	689	760	861	884	917

AGL has produced a series of Mineral Reserve sensitivities (Table 11.3) that provide an indicative estimate of the Mineral Reserves at a range of gold prices. These estimates are derived by factorising pit shells optimized at each gold price.

12.1 Introduction

The Damang milling circuit was commissioned in November 1997 at the design throughput of 3 Mtpa. A number of modifications and optimisations allowed an increase in the annual throughput to close to 5 Mtpa. The plant is a conventional two-stage grinding circuit using SAG and ball mill combination, with pebble crusher and gravity concentration, followed by a carbon-in-leach recovery process. The average throughput of the plant is currently 14,500 tpd with an average availability of 92%.

The plant is processing a blend of hard, un-weathered ore (phyllite, dolerite and sandstone) and of highly weathered oxides (laterite, saprolite). The current blend is varying between 60% and 75% fresh rock, depending on the ore grade, availability of the ore and state of the SAG liners.

Table 12.1: Fresh Ore Characteristics

Bulk Density	t/m ³	1.6 - 2.2
Specific Gravity	t/m ³	2.65
Unconfined Compressive Strength	Mpa	200
Bond Ball Mill Work Index	kWh/t	15.4
Bond Rod Mill Work Index	kWh/t	21.3
Crushing Work Index	kWh/t	50
Abrasion Test		0.65
JK Tech Parameter A		75
JK Tech Parameter B		0.37

12.2 Processing

12.2.1 Crushing

The crushing plant reduces the RoM ore from 80% passing 800 mm to about 80% passing 200 mm. The plant consists of a 2000 t/hr gyratory crusher (Krupp 1370 mm x 1880 mm or 54" x 75") driven by a 450 kW motor. The crusher is fed by a front-end loader or rear dump trucks. The feed is a combination of both fresh rocks and oxides and is fed in a ratio depending on the requirements downstream. The product from the crusher is fed into a surge hopper, which is on top of a variable speed apron feeder. The speed of the apron feeder is controlled by the surge hopper level and tends to speed up when the level is high and vice versa. Material from the apron feeder discharges onto conveyor CV1 which also discharges onto conveyor CV2. The ore is then discharged to the reclaim ore stockpile with a live capacity of about 10,000 t and total of 100,000 t.

12.2.2 Grinding and Classification

The purpose of the milling section is to produce blended leach feed with approximately 80% passing 106 mm. The section consists of a SAG mill (8 m x 5.1 m) with a power rating of 5.8 MW and a ball mill (6.1 m x 9 m) with a power rating of 5.8 MW.

Ore to the milling circuit is drawn from the bottom of the stockpile onto conveyor CV3 via

two variable apron feeders. An emergency feeder that is fed with a front-end loader is also available to be used. Lime is added onto the conveyor and together with the ore is discharged into the SAG mill. Steel balls of 140 mm diameter are also charged into the mill to effect the size reduction. The discharge from the SAG mill, which is about 80% solids, goes through a sizing regime on the trommel (12 mm openings) and the dewatering screen. The undersize from the trommel and the dewatering screens are then pumped by 14/12 centrifugal Millmax pump to the ball mill impingement box, which together with cyclone underflow and the Falcon tails is presented as feed to the ball mill. The dewatering screen oversize material which is about 80% passing 60 mm is recycled by undergoing a further size reduction to 80% passing 12mm in the HP500SX Nordberg short head cone crusher. The pebble crusher product is returned to CV3 and fed to the SAG mill.

Cyanide is added at the feed of the ball mill to maximize the gold dissolution during the grinding and reduce the accumulation of free gold in this part of the circuit.

The discharge from the ball mill is pumped through a Tech Taylor valve by a 14/12 Millmax pump (600 kW) to a cluster of sixteen 375 mm Cavex cyclones. Between 8 and 10 cyclones are in open simultaneously with an operating pressure of 100-120 psi.

A fraction of the cyclone underflow is then introduced to the gravity section (approximately 50 tonnes per hour (“tph”). The purpose of this section is to remove any free gold out of the circuit. The section consists of a vibratory screen, which is fitted with 5 mm-aperture screen cloth and two Falcon concentrators. The feed is introduced to the screen with the oversize reporting back to the ball mill and the undersize going to the Falcon distribution box. Dart plugs are used to distribute flow to one or both Falcon concentrators. The tails from the Falcon goes to the ball mill for further grinding. The Falcon concentrate is discharged in a hopper located in the gold room. The hopper content is processed daily on a Gemini table. The gravity circuit currently recovers approximately 20% of the gold.

12.2.3 Leaching and Adsorption

Gold is recovered by activated carbon. The cyclone overflow at a density of 45% solids is introduced onto the trash screen (0.8 mm apertures) and the undersize presented as leach feed. At this stage about 40% of the gold is dissolved. Cyanide at 250 ppm and oxygen is added to the CIL tank (15.25 m diameter by 17.48 m high). Hydrogen peroxide is dosed to tanks 1 and 2 to maintain dissolved oxygen at 14 ppm and 10 ppm respectively. There are six tanks that operate in series and the nominal capacity is 3000 m³ giving a retention time of approximately 3 hours per tank. The required cyanide concentration is always adjusted to ensure adequate gold extraction. The tanks are run at a pH of 9.8. Each tank is fitted with 2 cylindrical intertank screens (NKM type – 1 mm apertures) with mechanical wiper blades to keep carbon away from the screen surface and dual open impellers. Fresh carbon is introduced to tank six and is advanced to tank one in counter current flow to the pulp using a 30 kW submersible recessed impeller pump.

The slurry discharging from tank six is screened on a horizontal vibrating screen (tailings

screen) which is fitted with 1 mm aperture polyurethane mats. This screen recovers and returns to the CIL circuit any coarse carbon discharged accidentally.

The screen underflow reports to the thickener which is a 22 m diameter Superflo high rate type, and has an 11 kW motor for rake drive. The slurry entering the feed well is mixed with flocculent to aid the settling of the solids. A two-stage variable speed drive pump that is piped in series then pumps the underflow at a target density of 55% solids to the tails dams. Part of the thickener overflow is diverted to the plant while the other part is sent to the process water dam where it is mixed with the tails return water and pumped back to the plant.

12.2.4 Elution and Gold Recovery

Elution of the adsorbed gold is achieved by using a solution containing 2% cyanide and 3% caustic solution. The dissolved gold is then electroplated onto stainless cathodes.

The loaded carbon is recovered from tank 1 into the acid wash column. This is then acid washed using 3% strength hydrochloric acid followed by water flushing. The rinsed carbon is then transferred to the elution column where caustic/cyanide solution of 3% and 2% respectively is circulated through via the heat exchangers. Elution is carried out at 110°C at an operating pressure of 350 Kpa in the column. Four Allglass electro-winning cells are provided for the electro-winning circuit where the pregnant electrolyte is introduced for gold deposition. Periodically, the gold loaded stainless steel cathodes are removed from the electro-winning cells and hosed down with high pressure water. This will remove the plated gold into a hopper where it is filtered and the sludge smelted after it has been dried in an oven.

The barren carbon is transferred to the adsorption circuit or to the carbon regeneration kiln where it is regenerated at 650°C in a horizontal gas fired kiln. The regenerated carbon is collected in a quench tank and pumped back to the CIL circuit.

12.3 Historical Performance

Table 12.2 shows the historical performance of the CIL Plant at Damang for the past three years. During this time throughput has exceeded budget in two of the three years, costs have exceeded budget in the same two years, however unit costs (per tonne processed) have been under budget.

Table 12.2: Damang CIL Plant Historical Performance

FY End June	Throughput Budget (Mt)	Throughput Actual (Mt)	Costs Budget (USDm)	Costs Actual (USDm)	Costs Budget (USD/t)	Costs Actual (USD/t)
2002	4.6	4.5	25.96	25.16	5.62	5.63
2003	4.6	4.9	25.85	26.61	5.62	5.46
2004	4.6	5.2	26.68	27.93	5.80	5.33

In the LoM Plan the CIL Plant is projected to process up to 5.2 Mtpa, which is the tonnage achieved in 2004. The LoM Plan unit operating cost is based on the actual cost achieved in

2004.

A review of the performance of the CIL Plant over the past three years shows that, compared to budget, feed has been higher, grade has been marginally lower, recovery has been met and operating costs have been comparable. Overall, in SRK's opinion the basis of the LoM Plan is reasonable.

13 TAILINGS

13.1 Introduction

The tailings output of the Damang plant is 5 Mtpa and this is placed on the East Tailings Storage Facility (“ETSF”). A previous impoundment, the South Tailings Storage Facility (“STSF”) was decommissioned in early 2002 and is in the process of being vegetated and reclaimed. The ETSF was designed by Knight Piésold (Ghana) Limited (“Knight Piésold”), and the company is involved with the regular monitoring and inspection of the facility.

Both tailings facilities are located in areas with a number of natural hills and ridges, which have significantly reduced the earthworks required for construction. The facilities have been designed by specialist consultants to contain extreme rainfall events. The drying out of the deposited tailings is maximized by rotating the discharge point around the dam perimeters. This method of disposal allows the tailings to gain a higher density and strength and assists in minimizing seepage.

The ETSF containment is formed by substantial embankments of mine waste, and is effectively a co-disposal system for tailings and mine waste. The top surface area of the ETSF is 100 ha, and the maximum embankment height is approximately 25 m. The average dry density of the partially consolidated tailings on the impoundment is 1.37 t/m³. The present rate of rise is 3.8 m per annum.

13.2 Capacity

At current rates of production, the ETSF will be filled in the second half of 2005, and additional capacity will be needed. Knight Piésold is at present studying the options for raising the ETSF by 5, 12 or 18 m, and a decision will be taken in January or February 2005 on the long-term use of the ETSF or the development of a new impoundment elsewhere. The main limiting factors for substantial raising of the ETSF are the required large volumes of earthworks, and the proximity to the main pit on the west side. Although the site had a favourable initial topography, the impoundment is now at an elevation where an increase in height will require embankments to be raised around the entire perimeter.

The five metre raise to 983 m is to be constructed during 2004/5, providing additional capacity for approximately 15 months, to the latter part of 2006. The additional capacity provided by a new facility, or by a further raising of the ETSF, must be available in the second half of 2006. The initial capital cost of a new impoundment will be approximately USD3M and the additional cost of closure will be a further USD2M present day prices.

13.3 Tailings Water Quality

The tailings are not acid generators, and the tailings water does not contain high levels of metals. As a result, the limited seepage from the tailings impoundments is of a quality within acceptable limits. Water from the pool on the surface of the impoundment is returned to the plant as make-up water, and there is no discharge to the river. There is minor seepage at the downstream toe of the ETSF, but no acid generation, and metal concentrations and

cyanide concentrations are within regulatory and recommended international limits. Water from the STSF goes into two sedimentation ponds, and discharges from these ponds are within the standard for total suspended solids and cyanide.

13.4 **Embankment Construction**

The ETSF containment was constructed in three stages from 1999 to 2002, and was commissioned in December 2000. The fourth raise was completed between November 2002 and March 2003, to a crest elevation of 978 m. It was intended that a final raise would take place to 980 m between November 2003 and March 2004, but this was cancelled. As noted, a raise to 983 m is planned for 2004/5.

13.5 **Tailings Delivery and Deposition**

Waste material from the process is passed through a thickener to recover water and reagents before it is pumped to the ETSF. The tailing discharge from the thickener is approximately 55% solids by mass. The tailings pipes to each dam are single mild steel pipes, but are at present being replaced with 450 mm high-density polyethylene ("HDPE") pipes. Tailings are discharged from six spigots at 24 m spacings, though variations are used at times for pool control. At the time of the inspection in September 2004, the pool was small, controlled by good beaches, in spite of the relatively high rate of rise.

13.6 **Return Water System**

There is a barge-mounted pump and two other land-mounted return water pumps, one of which is for back-up. The tailings return water lines are 335 mm HDPE pipes, each laid above the ground along the side of the light vehicle access roads between the tailings dams and the process plant.

13.7 **Free Board**

The designs require that a minimum freeboard of 1 m be maintained at all times during the operational life of the mine in order to provide sufficient storage to contain a 1 in 100 year rainfall event over a 72 hour period.

13.8 **Operating Manual**

An operating manual was issued in January 2004 by Knight Piésold ("East Tailings Storage Facility Operations Manual").

13.9 **Monitoring and Auditing**

Information from monitoring of the ETSF is sent to Knight Piésold and the Ministry of Mines monthly for review, and a Knight Piésold engineer carries out a quarterly inspection. The Ministry of Mines inspects the facility at approximate annual intervals. Piezometers in the embankment are monitored for stability assessment.

13.10 **Rehabilitation and closure**

There is a detailed rehabilitation programme for the STSF, and the work has been successful, with the establishment of large numbers of oil palm seedlings and leguminous trees. The outer slopes of the north arm and the east arm of the ETSF have been regraded, topsoiled and vegetated. The rehabilitation programme continues.

14 ENVIRONMENT AND WATER MANAGEMENT

14.1 Environmental policy

The management of AGL is committed to adherence to policies and responsible operating practices which promote the conservation or enhancement of the natural and social environments in which the company operates. The Environmental Policy is included as Appendix D.

14.2 Environmental Assessment and Permitting

The mine remains in compliance with its operating permit and has formally established a reclamation bond. In a review by the EPA of Ghana in 2001, Damang was officially recognised as the best mine in the country in terms of environmental management and compliance.

14.2.1 Environmental Certificate

Damang has been assessed and is operated in accordance with Ghanaian environmental requirements, administered by the EPA, and holds the required current Environmental Permit and Environmental Certificate.

The EPA also requires the following for the duration of the operations:

- monthly monitoring returns;
- an annual environmental report; and
- an update of the Environmental Management Plan (“EMP”) at intervals of three years. (The next is required in 2005)

The EPA may suspend or revoke an Environmental Permit or Environmental Certificate if it is considered necessary.

14.2.2 New Submissions

A draft Environmental Impact Assessment (“EIA”) report has been submitted for the proposed Amoanda pit, and the response of the EPA is awaited. The Amoanda EIS includes a provisional Environmental Management Plan, Closure and Reclamation plans. The conclusion of the EIA is that all potential negative impacts will be reduced to low significance after the implementation of the proposed mitigation measures. Resettlement will be required. In 2002, AGL formalised its policies on the resettlement of people and compensation for crops.

Further EIAs must be prepared and submitted for future proposed pits in due course.

14.3 Environmental Management

Environmental management at Damang is conducted within the framework of an ISO 14001 certified Environmental Management System. An EMP has been approved for the period July 2002 to June 2005, when an updated plan must be submitted.

The Environmental Manager and the Local Affairs Manager report directly to the General Manager. There is a Sustainable Development Manager with an office in Accra, responsible for both Damang and Tarkwa Mines. Particular attention is being paid to the involvement of Non-Governmental Organisations (“NGOs”) and other third parties in sustainable development activities.

There is a large team involved with reclamation and revegetation, recruited from the local population and trained and supervised by the Environmental Department. The members of the Environmental Department are also responsible for the environmental monitoring programme.

14.4 Existing Environment

The environmental baseline data for the pre-mine environment are included in the 1991 Abooso Project Environmental Impact Statement, and the 1996 Updated Baseline Report and Addendum.

Damang is in the rain forest belt of south-western Ghana. There are areas near the mining area that are composed of secondary forest at various stages of development, but the area has been extensively disturbed by subsistence agriculture, by timber felling and by artisanal mining. The Bonsa River Forestry Reserve, adjacent to the Mining Lease Area, has been degraded in the past and is no longer primary forest.

As with the flora, the fauna has been extensively disturbed. Hunting and the destruction of habitats has reduced the numbers of larger mammals to very low levels. The 1996 update of the environmental baseline report noted 138 bird species, of which 27 are rare or uncommon, though two thirds of these were identified in the adjacent Forestry Reserve.

The AGL concessions lie within the Bonsa and Huni sub-basins of the Ankobra main drainage basin. At the mine site the general flow of the rivers is from the west to the east towards the Bonsa River. The main rivers in the area are the Tamang, Beni and Ayaasu and their tributaries. As part of the mine development programme, the rivers crossing the mine site were re-routed to the north and south of the main pit.

Groundwater resides in the weathered bedrock, which feeds the linked fractures in the lower fresh rock. This fractured zone is the source of water for the mine and several villages. The Tarkwaian Formation is one of the important water-bearing formations in Ghana, and test yields exceeded 10 m³/h in boreholes at depths ranging from 37-85 m. In the vicinity of the mine, the water use is from shallow wells to 10 m depth, and from surface water.

The predominant land-use in the area is for the production of cocoa, with a lesser quantity of mixed farming. The pressure on land is increasing as the population grows.

14.5 **Socio-Economic**

14.5.1 **Resettlement**

The development of Damang resulted in the resettlement of the communities of Damang (1998), Suromani (1998) and Kyekyewere (2000). Abosso followed best international practice in the negotiations with the local community and the authorities. The new village locations were chosen by the people. The compensation package was agreed with the affected villagers, and approved by the Land Valuation Board.

The proposed Amoanda pit will involve the relocation of existing residents, and best practice will be followed in the consultations, negotiations, agreements and subsequent implementation.

The company maintains a positive and healthy relationship with nearby communities through a formal dialogue medium called the Damang Mine Community Consultative Committee.

14.5.2 **Community Involvement**

AGL maintains, and is expanding, sustainable development programmes for the improvement of community infrastructure, sustainable livelihoods and stakeholder engagement. The Gold Fields Trust Fund, established to provide funding for local community and national assistance projects in Ghana, is used for community development projects. This fund is maintained by donations by Gold Fields of 0.5% of pre-tax profits from Ghanaian mines and USD1.00 for each ounce of gold produced by those mines.

SGS Environmental (2001) was commissioned to evaluate the socio-economic effects of the mine on the surrounding communities. The study revealed that there has been a significant improvement in living conditions in Damang town and the nearby villages of Kyekyewere, Koduakrom and Nyamebikyere as a result of the establishment of the mine and the associated socio-economic programmes. Damang has benefited most substantially, with brick houses replacing mud houses, increased employment, borehole water supply replacing stream supply, sanitation systems, increased schools, the introduction of electricity, improved roads and the establishment of the Huni Valley clinic.

14.6 **Acid Mine Drainage**

Following concerns at other mines in the Tarkwa Region, AGL initiated a program to continuously assess the potential to generate acidic drainage at the mine site. The initial program sampling was carried out over the range of ore and waste rock types and on the tailings. The analysis of the samples was carried out by SGS Environmental Laboratories of Accra Ghana and the final assessment of the data by the Mine Drainage Assessment Group (“MDAG”) of Vancouver Canada.

89 samples were tested, and sulphide values were found to be very low, ranging from zero to 0.76%, with most values less than 0.4%. Most samples had high Neutralisation Potentials, implying that they could neutralise significant acidity. 97% of samples were acid

neutralising, and only two siltstone ore samples were considered likely to be acid-generating at some time. Tests of ore and waste rock from all mine pits are collected on a quarterly basis and subjected to Acid Base Accounting (“ABA”) testing. Result to date show no indication of the potential for Acid Rock Drainage (“ARD”) generation from either the tailings or the mine wastes.

At the present stage of the operating life of the mine, environmental monitoring shows that there has been no acid-generation from the mines, the ore, the waste rock, or the tailings, and no special measures have been necessary.

14.7 **New Developments**

New environmental permitting is required for the proposed Amoanda pit and future pits, and the preparation and submission of applications is in progress. As the Amoanda pit will require the relocation of existing residents, public consultation and participation forms an important part of the permitting process.

14.8 **Tailings Storage Facility**

The current active tailings facility, the ETSF (see also Section 13) occupies an area of approximately 120 ha. The boundary of the slurry impoundment is formed by substantial embankments of mine waste, with engineered inner slopes. The rate of rise of the tailings within the impoundment is 3.8 m per annum, and the present capacity is sufficient until the second half of 2005. A lift of 5 m will be constructed during the dry season (December 2004 to March 2005), which will provide an extra 15 months. Knight Piésold is investigating the possibility of further raises, or of an entirely new impoundment.

The facility, with its bulky containment, is inherently stable, and is monitored regularly. The minor seepage from the toe is within the limits for discharge to the natural stream. As noted in Section 14.6, there is a very low potential for acid drainage, and measured cyanide contents of seepage water are always below discharge limits.

There is an operating manual for the tailings impoundment, and there are quarterly inspections by a tailings engineer from Knight Piésold.

14.9 **Rehabilitation & Decommissioning**

14.9.1 **Rehabilitation**

The mine has an active, well-managed rehabilitation plan for the mine and has a programme of continuous rehabilitation for areas no longer required for the operation of the project. To date, approximately 200 ha of land is under rehabilitation and the programme for the rehabilitation of the south tailings storage facility was initiated in 2001. Primary Completion has been approved by the EPA on 90 ha (Section 14.9.3).

At present, an updated detailed rehabilitation programme for the LoM is in preparation. It is realised that changes in the mine plan will necessitate changes in the rehabilitation plan.

Rehabilitation of disturbed land is undertaken as soon as it is no longer required for mining or associated activities. The reclamation of disturbed areas, including borrow-pits, areas cleared for construction, open-pits, waste dumps and roads is accomplished by re-contouring of disturbed areas, establishment of storm-water controls to minimise erosion, back-filling of open-pit areas where practicable, placement of topsoil and planting of indigenous grasses and trees.

The progress of re-vegetation is monitored to ensure that the re-establishment of productive natural communities is achieved, and erosion is minimised. Demonstration plots of food crops and common commercial species are established within areas of restorable lands.

In terms of the Reclamation Security Agreement with the EPA, an update of the Costed Reclamation Plan is submitted every two years, and this includes a Completion Progress Report, describing work performed in relation to tracts of “disturbed land” and the level of reclamation. When the Completion Progress Report is approved by the EPA, the value of completed reclamation works is used to adjust the basis for the Reclamation Bond (Section 14.9.3).

14.9.2 **Decommissioning**

The mining lease documents list various specific responsibilities which AGL must discharge at the termination of the lease. These include:

- leave the mining area and surface additions in good condition with respect to the ecology, conservation, reclamation, environment etc., and take all reasonable measures to leave the surface of the area in useable condition; and
- transfer to the Government of Ghana all immovable assets and those movable assets which have been fully depreciated for tax purposes.

The objectives for the reclamation of the Damang mine site are compatible with Ghana’s Mining and Environmental Guidelines and have been established as the following:

- provide a final land-use that considers the needs of local stakeholders;
- provide a site that is both chemically and physically stable;
- leave disturbed areas in a safe condition;
- minimize the long-term environmental liabilities associated with the closure of the site;
- restore as much of the Mining Area to pre-existing land use capability as is practicable; and
- reclaimed areas are to meet the needs of contributing to the long-term sustainability of the local economy.

14.9.3 **Reclamation bond**

The system of bonding used by the EPA involves an assessment of the cost to rehabilitate the land which remains disturbed at the time of the review, and subtracting from it the cost for areas already rehabilitated to an accepted standard. There are three levels of accepted

completion and associated reduced bonding costs:

Primary completion	reduced to 30%
Completion	20%
Final completion	0% (bond no longer required for this area)

For the purpose of the reclamation bonding agreement with the EPA, the costs of complete mine rehabilitation were estimated at USD6.2 M. The 2002 adjusted cost estimate, taking into account the cost estimate for the Kwesie-Lima Mine Expansion and the reduction in reclamation liability, is USD5.5M. Primary completion of USD787,687 was accepted. The amount of the security of the 2 year review period is the lesser of the initial security of USD2.2M and the adjusted cost estimate. Thus the initial security was USD2.2 M composed of an irrevocable letter of credit for USD2.0 M and a cash deposit of USD2.0 M in a joint account with the EPA.

The EPA requires the Costed Reclamation Plan to be updated at two year intervals.

HUMAN RESOURCES AND SAFETY

Damang is adequately resourced with the appropriate levels of technically qualified and experienced personnel in production and related support functions. The total number employed as at June 30, 2004 was 500, which is planned to rise to 925 in 2005.

The mine is the major employer in the area. (The population of Damang Township is approximately 3,000.) AGL aims to, wherever practicable, employ local people and contractors as well as to maintain a motivated and fairly-compensated workforce.

AGL has established a policy of hiring locally to the extent possible. As well local contractors are used wherever practicable and are required to utilize personnel recruited from local communities. Workers from the local communities are employed for casual jobs such as rehabilitation works.

A community consultation process has been established through the Damang Mine Community Consultative Committee (“DMCCC”) to ensure that the concerns of local opinion leaders are fully appreciated. The DMCCC made the recommendation that quotas for various villages were not required and that hiring should be based on the requirements of AGL and the skills available. Hiring and recruiting processes are discussed at the bi-monthly meetings of the DMCCC.

AGL also has a policy of employee development and training. The stability of the workforce over the past year indicates that AGL has created an appropriate environment for employee development. Employee turnover was 2.9% during fiscal year 2003. Resignations generally come from officials who leave to take up further study. Training of the employees include job-specific training as well as more site-wide programmes (e.g. fire-fighting).

A Health & Safety policy is documented with a Health & Safety Manager reporting to the General Manager and the latter, together with the Mining Manager and Metallurgical Manager being responsible for various areas of activity. A total of eleven managers report to the General Manager.

There have been no fatalities at the mine over the past three years.

16 TECHNICAL ECONOMIC INPUT PARAMETERS

16.1 Introduction

The following section includes discussion and comment on the technical-economic aspects of the LoM plan associated with the Damang Tax Entity. Specifically, comment is included on the basis of projections, production schedules, operating costs and capital expenditures. These have been compiled into detailed TePs on an annual basis to derive the revenue and cost inputs necessary to generate the FMs. Key aspects associated with the generation of the TePs and their derivations are discussed.

16.2 Basis of the Technical-Economic Input Parameters

The valuation of the Damang Tax Entity as presented in Section 17, has, inter alia, been based on the LoM plan and the resulting production profile an associated revenue stream from gold sales, operating costs and capital expenditure profiles as provided to SRK by AGL, and reviewed and adjusted by SRK where deemed appropriate. The generation of a LoM plan requires substantial technical input and detailed analysis and is critically dependent upon assumptions of the long-term commodity prices and the respective impact on cut-off grades, potential expansion and/or reduction in the Mineral Resource and Mineral Reserve and the return on capital expenditure programmes.

The basis of forward projections of operating costs for mature mining operations are generally based on historical performance, with certain modifications for inflation, projected improvements in productivity and other cost-reduction initiatives.

Unless otherwise stated, operating expenditures comprise:

- **Cash Cost Components** : namely direct mining costs, direct processing costs, direct general and administration costs, consulting fees, management fees, transportation, and realisation charges.
- The incremental components, including royalties but excluding taxes paid, required to yield **Total Cash Costs** . Royalties in this regard include the amount of 3% paid on gross revue to the Government of Ghana and is payable for all gold sold.
- The incremental components, including terminal separation liabilities, reclamation and *mine* closure costs (the net difference between the total environmental liability and the current bond amount) but excluding non-cash items such as depreciation and amortisation. Incrementally these cash expenditures summate to yield **Total Working Costs** .
- **Total Costs** : the summation of total working costs, net movement in working capital and capital expenditure.

In addition to long-term capital projects, the LoM capital expenditure programmes generally include significant detail based on approved expenditure programmes (typically two-years). Where warranted, SRK has made provision over and above these expenditures, specifically, for example, where no detail is available beyond this two-year period to cater for normal

on-going capital expenditure requirements.

Environmental provisions have been included in the operating costs as they are confirmed as necessary contributions to the fund ongoing environmental cost and closure provisions. Notwithstanding this approach the most likely scenario will result in expenditures from such provisions being expended on commencement of the closure programme. SRK considers that there are potential opportunities to realise salvage value on closure, although owing to the indeterminate nature of estimating such values these have been excluded from the LoM projections included herein.

16.3 **Technical-Economic Parameters**

The TePs include:

- commodity sales profiles derived from all ore sources;
- total working cost profiles as previously defined; and
- capital expenditure Profiles.

All expenditures are based in calendar years and stated in July 1, 2004 money terms.

16.4 **Special Factors and Operational Risks**

SRK has included its view on the achievement of the LoM plans and the appropriateness of the Mineral Reserve statements when presenting the data in Sections 10, 11, 12 13 and 14. At the time of writing, SRK considers these projections to be both technically and economically achievable.

In all likelihood many of the identified risks and/or opportunities will have an impact on the cash flows as presented in Section 17, some positive and some negative. The impact of one or a combination of risks and opportunities occurring cannot be specifically quantified to present a meaningful assessment. SRK has, however, provided sensitivity tables for single and multi parameters. The sensitivity range covers the anticipated range of accuracy in respect of commodity prices, operating expenditures and capital expenditure projections. These sensitivities are necessarily simplistic and are based on the current Mineral Reserve. Actual movements in respect of commodity prices, operating expenditures and capital expenditure would result in different cut-off grades, Mineral Reserve estimates and LoM Plans and therefore these sensitivities should be viewed as indicative.

16.5 **General Risks and Opportunities**

Damang operations are subject to certain inherent risks, which apply to some degree to all participants of the Ghanaian gold mining industry. These include:

- *Commodity Price Fluctuations* : These may be influenced inter alia, by demand for gold in industry and jewellery, actual or expected sales by central banks, sales by gold producers in forward transactions and production and cost levels for gold in major producing countries. In the period between January 1, 2002 and June 30, 2004 the gold price in USD terms has ranged between USD 307 per ounce and USD 415 per ounce. As at June 30, 2004 the USD gold price was USD 397 per ounce;

- ***Inflation Rate Fluctuations:*** Specifically the United States Consumer Price Index;
- ***Country Risk :*** Specific country risk including political and economic stability in the longer term as indicated by the International Country Risk Grade (“ICRG”);
- ***Legislative Risk :*** Specifically changes to future legislation (tenure, mining activity, labour, health and safety and environmental) within Ghana;
- ***Environmental Liability Risk :*** The inability of Damang to fund the balance of its environmental liabilities from estimated operating cash flows, should operations cease prior to the stated LoM period. This would result in an outstanding liability since the estimated rehabilitation expenditure exceeds the amounts available in the respective rehabilitation trust funds as at June 30, 2004. As at July 1, 2004 the total outstanding liability remaining to be funded is estimated at USD5.3M; and
- ***Mining Risks :*** Specifically Mineral Reserve estimate risks, uninsured risks, industrial accidents, labour disputes, unanticipated ground water conditions, human resource management, and safety performance.

In contrast, whilst certain of the above also reflect opportunities, SRK recognises that as of yet, an un-quantified opportunity is the beneficial application of new technology and also discovery of additional Mineral Resources.

In addition to those stated above, the individual operations are subject to certain specific risks and opportunities, which independently may not be classified to have material impact, but in combination may do so.

17 ASSET VALUATION

17.1 Introduction

The following section presents discussion and comment on the valuation of the Damang Tax Entity. Specifically, comment is included on the methodology used to generate the FM including basis of valuation, valuation techniques and valuation results.

In generating post-tax pre-finance cash flows for the purpose of valuation, SRK has relied upon Gold Fields for certain inputs to the FMs. Further, in reproducing the results of the FM in this ITR, SRK provides assurances to the Directors of Gold Fields, that the technical-economic inputs including operating costs, capital expenditure and saleable product profiles of the Damang Tax Entity, as provided to and reviewed by SRK, are accurately incorporated into the FM.

17.2 Basis of Valuation

In generating the FM and deriving the valuations, SRK has:

- incorporated an annual United States customer price index (“US CPI”) of 2% per annum as provided by Rothschild;
- incorporated a real terms gold price of USD400 per ounce as provided by Rothschild;
- assumed a nominal discount factor of 7.46% for all assets to establish a base case. (Note that this does not necessarily reflect the nominal Weighted Average Cost of Capital (“WACC”) assuming Gold Fields’ expected average tax rate; country inflation rate and debt/capital ratio);
- relied upon Gold Fields for all accounting inputs as required for the generation of the FM;
- relied upon Gold Fields that for the purpose of valuation the assumption that 100% of the sales revenue as derived from the quantum of gold production sold and the forecast USD gold price is available to the Damang Tax Entity;
- reported a Discounted Cash Flow (“DCF”) valuation, dated July 1, 2004, which includes Mineral Reserves only;
- performed sensitivity analyses to ascertain the impact of discount factors, commodity prices, total working costs and capital expenditures;
- assigned no salvage value for plant and equipment on cessation of operations;
- valued the Damang Tax Entity on a stand alone basis only; and
- not included hedging or forward sale components in the valuation.

17.3 Limitations and Reliance on Information

The cash flows reported for the Damang Tax Entity are contingent upon the current and anticipated performance of mine management, as well as the expected achievement of the operating parameters as provided to and reviewed by SRK and set out in this ITR.

The cash flow projections and valuation is based upon the anticipated operating performance as well as information provided to SRK by Gold Fields at the date hereof. It should be

understood that unforeseen developments might affect SRK's opinion, or the reasonableness of any assumptions or basis used.

The LoM plans and the FM include forward-looking statements that are not historical facts. These forward-looking statements are necessarily estimates and involve a number of risks and uncertainties that could cause actual results to differ materially. Notwithstanding this, SRK considers that at the time of compilation, the Mineral Reserves and associated depletion resulting in cash flow projections are appropriate and technically and economically achievable.

17.4 **Valuation Methodology**

The valuation methodology for the Damang Tax Entity is based on the Net Present Value ("NPV") of the ring-fenced mining asset. Supplemental information as provided by Gold Fields (balance sheet items) could then be used with the NPV to arrive at the Net Asset Value ("NAV") for the Damang Tax Entity.

The NPV has been derived using DCF techniques applied on a post-tax pre finance basis for the ring-fenced Damang Tax Entity. These are based on the various LoM production plans, including the resulting TePs (Section 16), and are solely based on Mineral Reserves.

In respect of non-LoM Mineral Resources no valuation is presented and discussion is limited to technical disclosure in accordance with the requirements of the rules and companion policies of NI 43-101.

The post-tax pre-finance cash flow is developed on the basis of the commodity price and macro-economic projections as presented in Table 17.1. SRK has developed a FM which is based on: annual cash flow projections ending December 31; and TePs stated in July 1, 2004 money terms. As the valuation date is July 1, 2004, the cash flow projection for the first period includes projections for the 6 months to December 2004.

Variances in commodity prices exist between those used to derive Mineral Reserves, the current spot market prices and that used for the financial valuation. The impacts on the individual Mineral Reserve statements are presented in the Mineral Reserve sensitivity tables as included in Section 11 of this ITR. Further, as the generation of LoM plans is constrained by the annual planning process SRK has based its review on the latest available information as presented by Gold Fields.

17.5 **Post-Tax – Pre-Finance Cash Flows**

Table 17.1 presents the post-tax pre-finance cash flows for the Damang Tax Entity. Note that this table is not representative of a financial statement as may be customary for determining the consolidated cash flow positions for a company. Further, no account is taken of movements in working capital at the corporate level, or deferrals of tax liabilities between accounting periods, as may be the case in the generation of such company level financial statements.

Table 17.1: Damang post-tax pre-finance cash flows

Financial Year Project Year	Units	Totals /Averages	2004 1	2005 2	2006 3	2007 4	2008 5	2009 6	2010 7
Production									
Mining									
RoM Tonnage	(kt)	10,819	1,368	4,679	3,771	1,002			
Head Grade	(g/t)	1.4	1.2	1.5	1.4	1.0			
Contained Gold	(koz)	475	53	219	169	33			
Processing									
Milled Tonnage	(kt)	20,080	2,603	5,206	5,206	5,206	1,859		
Milled Grade	(g/t)	1.3	1.5	1.6	1.4	1.2	0.4		
Metallurgical Recovery	(%)	89.9%	90.5%	89.1%	89.1%	90.7%	94.4%		
Recovered Gold	(koz)	769	116	236	208	184	25		
Clean-up Gold	(koz)								
Saleable Metal	(koz)	769	116	236	208	184	25		
Commodity Sales									
Gold	(koz)	769	116	236	208	184	25		
Silver	(koz)								
Commodity Prices									
Gold Price	(US\$/oz)		404	412	420	429	437		
Silver Price	(US\$/oz)								
Macro Economics									
US PPI	(%)		1.0%	2.0%	2.0%	2.0%	2.0%		
US CPI	(%)		1.0%	2.0%	2.0%	2.0%	2.0%		
Financial - Nominal									
Sales Revenue - Gold	(US\$m)	321.3	47.0	97.2	87.3	78.8	10.8	—	—
Operating Expenditures	(US\$m)	(251.0)	(35.8)	(74.6)	(71.4)	(53.9)	(15.3)	—	—
Mining	(US\$m)	(72.7)	(10.6)	(26.0)	(23.9)	(9.9)	(2.3)	—	—
Processing	(US\$m)	(144.0)	(18.1)	(38.6)	(39.7)	(36.7)	(10.9)	—	—
Overheads	(US\$m)	(16.2)	(2.4)	(4.9)	(4.3)	(4.1)	(0.5)	—	—
Realisation	(US\$m)	(1.0)	(0.1)	(0.3)	(0.3)	(0.2)	(0.0)	—	—
By - Product Credits	(US\$m)	—	—	—	—	—	—	—	—
Mineral Royalty	(US\$m)	(9.6)	(1.4)	(2.9)	(2.6)	(2.4)	(0.3)	—	—
Environmental	(US\$m)	(5.6)	(0.7)	(1.4)	(1.4)	(1.5)	(0.5)	—	—
Terminal Benefits	(US\$m)	(7.3)	—	—	—	—	(7.3)	—	—
Net Change in Working Capital	(US\$m)	5.6	(2.5)	(0.4)	0.8	0.9	6.7	—	—
Operating Profit	(US\$m)	70.3	11.2	22.7	15.9	25.0	(4.5)	—	—
Tax Liability	(US\$m)	(19.5)		-6.2	-5.2	-8.1			
Capital Expenditure	(US\$m)	(8.7)	(8.7)	—	—	—	—	—	—
Project	(US\$m)	(8.7)	(8.7)	—	—	—	—	—	—
Sustaining	(US\$m)	—	—	—	—	—	—	—	—
Final Net Free Cash	(US\$m)	42.1	2.5	16.5	10.7	16.8	(4.5)	—	—
Reporting Statistics - Real									
Cash Operating Costs	(US\$/oz)	303	278	299	324	270	524		
Total Cash Costs	(US\$/oz)	303	278	299	324	270	524		
Total Working Costs	(US\$/oz)	319	284	305	331	278	815		
Total Costs	(US\$/oz)	323	378	307	327	273	565		

17.6 NPV Sensitivities

The following tables present the NPVs of the nominal cash flows of Damang as derived from the FM. In summary they include:

- the variation in NPV with discount factors;
- the variation in NPV based on single parameter sensitivities; and
- the variation in NPV based on twin (revenue and operating expenditure) sensitivities.

Table 17.2: Damang variation of NPV with discount factors

Discount Factor (%)	NPV (USDM)
0.00%	42.1
5.00%	37.9
7.46%	36.1
10.00%	34.3
12.00%	33.0
14.85%	31.3
18.00%	29.6
20.00%	28.6
25.00%	26.3

Table 17.3: Damang variation of NPV – single parameter sensitivity

Sensitivity Range – Revenue	-30%	-20%	-10%	0%	10%	20%	30%
Sensitivity Range - Operating Expenditures	-30%	-20%	-10%	0%	10%	20%	30%
Sensitivity Range -Capital Expenditures	-30%	-20%	-10%	0%	10%	20%	30%
Currency	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)
Variation in NPV @ 0% DCF							
Revenue	(26.9)	1.3	21.7	42.1	62.5	83.0	103.2
Operating Expenditures	89.9	74.4	58.3	42.1	26.0	9.8	(7.1)
Capital Expenditures	43.9	43.3	42.7	42.1	41.5	40.9	40.4
Variation in NPV @ 7.46% DCF							
Revenue	(22.9)	1.1	18.7	36.1	53.4	70.7	87.8
Operating Expenditures	76.5	63.3	49.7	36.1	22.4	8.7	(6.0)
Capital Expenditures	37.8	37.2	36.6	36.1	35.5	34.9	34.3

Table 17.4: Damang variation of NPV – twin parameter sensitivity

NPV (USDM)	Revenue Sensitivity						
	-30%	-20%	-10%	0%	10%	20%	30%
Operating Expenditure Sensitivity							
-30%	25.0	42.4	59.6	76.5	93.4	110.3	127.1
-20%	11.4	28.7	46.0	63.3	80.3	97.2	114.0
-10%	(3.3)	15.0	32.4	49.7	67.0	84.0	100.9
0%	(22.9)	1.1	18.7	36.1	53.4	70.7	87.8
10%	(42.7)	(17.3)	5.0	22.4	39.7	57.1	74.3
20%	(62.7)	(37.0)	(11.6)	8.7	26.1	43.4	60.7
30%	(82.6)	(56.8)	(31.3)	(6.0)	12.4	29.8	47.1

18 **CONCLUDING REMARKS**

The views expressed in this ITR have been based on the fundamental assumption that the required management resources and pro-active management skills to access the adequate capital necessary to achieve the LoM plan projections for Damang are sustained.

SRK has conducted a comprehensive review and assessment of all material issues likely to influence the future operations at Damang. The LoM plan, as provided to and taken in good faith by SRK, has been reviewed in detail for appropriateness, reasonableness and viability, including the existence of and justification for departure from historical performance. Where material differences were found, these were discussed with AGL and adjusted where considered appropriate. SRK considers that the resulting TePs and FM are based on sound reasoning, engineering judgement and technically achievable mine plans, within the context of the risks associated with the Ghanaian gold mining industry.

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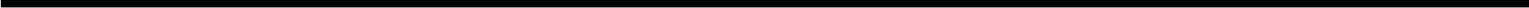
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APPENDIX A

GLOSSARY

GLOSSARY OF TERMS AND ABBREVIATIONS

<i>A1</i>	<i>Conglomerate reef</i>
<i>A3</i>	<i>Conglomerate reef</i>
<i>AA</i>	<i>Atomic Absorption</i>
<i>AARL</i>	<i>Anglo American Research Laboratories</i>
<i>ABA</i>	<i>Acid Base Accounting</i>
<i>Abrasion Index</i>	<i>Measure of how tough a rock type is with respect to wear and tear on grinding equipment.</i>
<i>AFc</i>	<i>Conglomerate reef</i>
<i>AGC</i>	<i>Ashanti Goldfields Company Limited</i>
<i>AGL</i>	<i>Abosso Goldfields Limited</i>
<i>AMD</i>	<i>Acid Mine Drainage</i>
<i>AMS</i>	<i>African Mining Services Limited</i>
<i>Analytical Variance / Precision</i>	<i>An estimate of the error induced by the analytical procedures routinely used. A measure of the repeatability of assays.</i>
<i>Ancillary equipment</i>	<i>Service equipment not directly associated with primary process.</i>
<i>AngloGold</i>	<i>AngloGold Ashanti Limited</i>
<i>ARD</i>	<i>Acid rock drainage; the result of rainwater reacting with sulphides in broken rock i.e. waste dumps.</i>
<i>Assay</i>	<i>Measure valuable mineral content.</i>
<i>Au</i>	<i>Gold</i>
<i>AVS</i>	<i>Abontiakoon Vertical Shaft</i>
<i>B2</i>	<i>Conglomerate reef</i>
<i>BFS</i>	<i>Bankable Feasibility Study</i>
<i>BGL</i>	<i>Bogoso Gold Limited</i>
<i>°C</i>	<i>Degrees Centigrade (temperature).</i>
<i>°</i>	<i>Degrees of angle from horizontal (i.e. pit slope angle)</i>
<i>CDE</i>	<i>Conglomerate reef</i>
<i>CIL</i>	<i>Carbon in Leach gold processing and recovery technology</i>
<i>Clay</i>	<i>Material with a particle size of less than 2µm.</i>
<i>CNwad</i>	<i>Weak acid Dissociable Cyanide</i>
<i>Companion Policy</i>	<i>Companion Policy 43-101CP</i>
<i>CPI</i>	<i>Consumer Price Index</i>
<i>CPR</i>	<i>Competent Person's Report</i>
<i>Cross-section</i>	<i>A diagram or drawing that shows features transected by a vertical plane drawn at right angles to the longer axis of a geologic feature.</i>
<i>Cut-off grade</i>	<i>When determining economically viable Mineral Reserves, the lowest grade of mineralised material that qualifies as ore.</i>
<i>Damang</i>	<i>Damang Gold Mine</i>
<i>DCF</i>	<i>Discounted Cash Flow.</i>
<i>DD (Diamond drilling)</i>	<i>Rotary drilling using diamond-set or diamond-impregnated bits, to produce a solid continuous core of rock.</i>
<i>Dip</i>	<i>The angle at which layered rocks, foliation, a fault, or other planar structures, are inclined from the horizontal.</i>
<i>DGM</i>	<i>Damang Gold Mine</i>
<i>DTM</i>	<i>Digital Terrain Model</i>
<i>EAP</i>	<i>Emergency Action Plan</i>
<i>EBITDA</i>	<i>Earnings Before Interest, Tax, Depreciation and Amortisation</i>
<i>EC</i>	<i>Environmental Certificate</i>
<i>EIA</i>	<i>Environmental Impact Assessment.</i>
<i>EIS</i>	<i>Environmental Impact Statement</i>
<i>ESIS</i>	<i>Environmental and Social Impact Statement</i>
<i>EMP</i>	<i>Environmental Management Plan.</i>

EPA	Environmental Protection Agency
ETSF	East Tailings Storage Facility
Feasibility Study	A definitive engineering study addressing the economic viability of bringing a deposit to the production stage; taking into consideration all associated costs, revenues and risks.
FM	Ffinancial Model
Fold	A bend in strata or other planar structure.
Footwall	A geological or mining term meaning the rock below a fault, or underlying a natural feature, or the mining floor.
Form	Form 43-101F1
G	Conglomerate reef
GAG	Ghanaian Australian Goldfields Limited
Galamsay	Informal miner or miners (Ghana)
G&A	General and Administration costs
GBX	Graphite Breccia
Gemcom	Mining software developer.
Geochemical prospecting	A prospecting technique which measures the content of certain metals in soils and rocks used to define anomalies for further testing.
Geophysical surveys	A survey method used primarily in the mining industry as an exploration tool, applying the methods of physics and engineering to the earth's surface.
GFGl	Gold Fields Ghana Limited
Gold Fields	Gold Fields Limited
Golden Star	Golden Star Resources Limited
Government	Government of Ghana
GP	Graphitic Phyllite
Grade	Quantity of metal per unit weight of host rock.
g/t	Grammes per tonne
ha	Hectare (unit of area equal to 10,000 m ²)
Hanging wall	A geological or mining term meaning the rock above a fault, or overlying a natural feature (as opposed to footwall).
HDPE	High-density Polyethylene
Host rock	The rock containing a mineral or an orebody.
IAMGold	IAMGold Corporation
ICRG	International Country Risk Grade
IDW	Inverse distance weighting.
IFC	International Finance Corporation
Igneous	A rock formed by the solidification of mineral-rich molten liquid which is intruded into bedrock or erupted from a volcano.
Indicated Mineral Resources	An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
In-situ	In its natural position (Latin).
Instrument 43-101	Canadian National Instrument 43-101 for reporting Mineral Resources and Reserves.
IRR	Internal Rate of Return.
ITR	Independent Technical Report
JORC	Australian code for reporting Mineral Resources and Reserves.

KCA	<i>Kappes, Cassidy & Associates Australia Pty Ltd.</i>
kg/h	<i>Kilogrammes per hour</i>
kg/t	<i>Kilogram per tonne</i>
km	<i>Kilometre</i>
koz	<i>Thousand Troy ounces</i>
Kriging	<i>A method of block grade interpolation which takes into account the statistical and spatial characteristics of the mineralisation.</i>
kt	<i>Thousand metric tonnes</i>
kV	<i>Kilovolts</i>
kVA	<i>kilovolt-amperes</i>
Lakefield	<i>Lakefield Research Africa</i>
Lithology	<i>The physical characteristics of rock.</i>
LoM	<i>Life of Mine. Often used to describe plans covering the life of the project.</i>
M	<i>Metre</i>
M	<i>Million</i>
m RL	<i>Metres Relative Level; level relative to a fixed datum</i>
m ³ /hr	<i>Cubic metres per hour.</i>
m ³ /s	<i>Cubic metres per second.</i>
Ma	<i>Million years</i>
Measured Mineral Resources	<i>A ‘Measured Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.</i>
Metamorphic	<i>Term applied to pre-existing sedimentary and igneous rocks which have been altered in composition, texture, or internal structure by processes involving pressure, heat and/or the introduction of new chemical substances.</i>
Micron (µm)	<i>One thousandth of a millimetre.</i>
Mineral	<i>A natural, inorganic, homogeneous material that can be expressed by a chemical formula.</i>
Mineralisation	<i>The process by which minerals are introduced into a rock. More generally, a term applied to accumulations of economic or related minerals in quantities ranging from weakly anomalous to economically recoverable.</i>
Mineralogy	<i>The science of minerals.</i>
Mineral Resource	<i>A tonnage or volume of rock or mineralisation of intrinsic economic interest.</i>
Mm	<i>Millimetre.</i>
Mm ³	<i>Million cubic metres.</i>
PER	<i>Preliminary Environmental Report</i>
Moz	<i>Million troy ounces</i>
m/s	<i>Metres per second.</i>
Mt	<i>Million tonnes</i>
Mtpa	<i>Million tonnes per annum.</i>
MVA	<i>Million volt-amps</i>
MW	<i>Megawatts.</i>
NAV	<i>Net Asset Value</i>
NGO	<i>Non-Governmental Organisation</i>
NI 43-101	<i>National Instrument 43-101 — Standards of Disclosure for Mineral Projects</i>
NPV	<i>Net Present Value.</i>
Open pit, open cut	<i>Surface mining in which the ore is extracted from a pit or quarry. The geometry</i>

	<i>of the pit may vary with the characteristics of the ore body.</i>
<i>Ore</i>	<i>Mineral bearing rock that contains one or more minerals, at least one of which can be mined and treated profitably under current or immediately foreseeable economic conditions.</i>
<i>Orebody</i>	<i>A mostly solid and fairly continuous mass of mineralisation estimated to be economically mineable.</i>
<i>Ore grade</i>	<i>The average weight of the valuable metal or mineral contained in a specific weight of ore i.e. grammes per tonne of ore.</i>
<i>OSC</i>	<i>Ontario Securities Commission.</i>
<i>Oxide</i>	<i>Gold bearing ore which results from the oxidation of near surface sulphide ore.</i>
<i>Oz</i>	<i>Troy ounce</i>
<i>P Codes</i>	<i>Porosity values</i>
<i>Ph</i>	<i>Measure of acidity / alkalinity</i>
<i>PL</i>	<i>Performance Laboratories Limited</i>
<i>Pleistocene</i>	<i>A sub-division of the Tertiary System which immediately followed the Pliocene. 1.8 million years before present to 10,000 years before present.</i>
<i>Pliocene</i>	<i>A sub-division of the Tertiary System, 5 million to 1.8 million years before present, which immediately precedes the Pleistocene.</i>
<i>Plunge</i>	<i>The angle from the horizontal of a linear geological feature on a plane.</i>
<i>PQ</i>	<i>Borehole of intermediate size.</i>
<i>Pre-feasibility Study</i>	<i>The initial stage of the feasibility study in which the accuracy of the factors involved such as costs and revenues is $\pm 25\%$.</i>
<i>Probable Mineral Reserve</i>	<i>A 'Probable Mineral Reserve' is the economically mineable part of an Indicated and in some circumstances a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.</i>
<i>Proven Mineral Reserve</i>	<i>A 'Proven Mineral Reserve' is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.</i>
<i>PSS</i>	<i>Plant Sulphides</i>
<i>Pyrite</i>	<i>Common sulphide of iron.</i>
<i>P80</i>	<i>The sieve mesh size through which 80% of the particles in a particular particle distribution will pass; normally quoted as P80 at x microns.</i>
<i>QP</i>	<i>Qualified Person</i>
<i>Quartz</i>	<i>A mineral composed of silicon dioxide, SiO₂ (silica).</i>
<i>RAB</i>	<i>Rotary Air Blast drilling. Relatively cheap and quick exploration drilling method returning rock chips using high pressure air.</i>
<i>RC</i>	<i>Reverse Circulation drilling. A drilling method using a tricone bit, during which rock cuttings are pushed to the surface through an outer tube, by liquid and/or air pressure moving through an inner tube.</i>
<i>RL</i>	<i>Reference level (elevation)</i>
<i>RoM</i>	<i>Run of mine — usually refers to the tonnage and grade of ore delivered to the processing plant.</i>
<i>Rock</i>	<i>Mineral matter of various compositions.</i>
<i>SACNASP</i>	<i>South African Council for Natural & Scientific Professions</i>
<i>SADC</i>	<i>South African Development Country</i>
<i>SAG</i>	<i>Semi-autogeneous grinding</i>
<i>Sampling and Analytical Variance/Precision</i>	<i>An estimate of the total error induced by sampling, sample preparation and analysis.</i>
<i>SAMREC</i>	<i>South African code for reporting Mineral Resources and Reserves.</i>
<i>SEC</i>	<i>Securities Exchange Commission</i>

<i>Sediment</i>	<i>Particles transported by water, wind or ice.</i>
<i>Sedimentary rock</i>	<i>Rock formed at the earth's surface from solid particles, whether mineral or organic, which have been moved from their position of origin and re-deposited.</i>
<i>SG</i>	<i>Specific Gravity</i>
<i>SGMC</i>	<i>State Gold Mining Corporation, the official state-owned national mining company; by extension, sampling carried out by this institution.</i>
<i>SGS</i>	<i>SGS Laboratory Services - Ghana</i>
<i>SK</i>	<i>Simple Kriging</i>
<i>SMU</i>	<i>Selective Mining Unit</i>
<i>South Plant</i>	<i>Teberebie heap leach plant</i>
<i>SRK</i>	<i>Steffen, Robertson & Kirsten (UK) Ltd</i>
<i>SRK Consulting</i>	<i>The SRK Group of Companies, represented herein by SRK(UK) Limited, Cardiff, United Kingdom</i>
<i>SRK Group</i>	<i>SRK (Global) Limited</i>
<i>STSF</i>	<i>South Tailings Storage Facility</i>
<i>Strike</i>	<i>The direction or bearing of a bed or layer of rock in the horizontal plane.</i>
<i>Sub-parallel</i>	<i>Roughly in line with.</i>
<i>Sulphide</i>	<i>Metallic sulphur bearing mineral often associated with gold mineralisation. Sulphide is also used to differentiate from oxide rock or ore which is softer, less dense, nearer surface and generally responds better to cyanide leaching in the processing plant.</i>
<i>Syncline</i>	<i>A sequence of rocks flexed downwards into a valley shape with a core of younger rocks</i>
<i>Synform</i>	<i>Bent or folded downwards</i>
<i>t</i>	<i>Tonne (metric) equal to 1,000 kilograms</i>
<i>t/h</i>	<i>Metric tonnes per hour</i>
<i>t/m³</i>	<i>tonnes per cubic metre.</i>
<i>Tailings</i>	<i>Fine ground wet waste material produced from ore after economically recoverable metals or minerals have been extracted.</i>
<i>TEM</i>	<i>Technical Economic Model</i>
<i>TeP</i>	<i>Technical Economic Parameters</i>
<i>TGL</i>	<i>Teberebie Goldfields Limited</i>
<i>tonnes</i>	<i>Metric tonne, equal to 1,000 kilograms.</i>
<i>tpa</i>	<i>tonnes per annum.</i>
<i>tpd</i>	<i>tonnes per day.</i>
<i>tph</i>	<i>tonnes per hour.</i>
<i>tpm</i>	<i>tonnes per month.</i>
<i>Trans</i>	<i>Transition ore material</i>
<i>Triassic</i>	<i>A geological period extending from 250 to 204 million years which marks the beginning of the Mesozoic Era.</i>
<i>TSE</i>	<i>Toronto Stock Exchange.</i>
<i>TSF</i>	<i>Tailings Storage Facility</i>
<i>TWL</i>	<i>Transworld Laboratory Services - Ghana</i>
<i>US CPI</i>	<i>United States Consumer Price Index</i>
<i>USD</i>	<i>United States Dollars (currency).</i>
<i>UTM</i>	<i>Universal Transverse Mercator projection — grid co-ordinate system</i>
<i>Variogram/Semi-Variogram</i>	<i>A graphical representation of the rate of change of grade with distance which is used to define parameters for controlling sample layout and resource modelling.</i>
<i>VRA</i>	<i>Volta River Authority</i>
<i>VT</i>	<i>Vertical Thickness</i>
<i>WACC</i>	<i>Weighted Average Cost of Capital</i>
<i>Weathering</i>	<i>Near surface alteration and oxidation of minerals and rocks by exposure to the atmosphere or ground water.</i>
<i>Wireframe</i>	<i>A mesh of triangles used to make computerised geological models.</i>

μm Micron - one thousandth of a millimetre.

PROFESSIONAL REGISTRATIONS AND QUALIFICATIONS

<i>BSc</i>	<i>Bachelor of Science</i>
<i>BSc (Eng) Mining</i>	<i>Bachelor of Science (Engineer) Mining</i>
<i>CEng</i>	<i>Chartered Engineer.</i>
<i>CGeol</i>	<i>Chartered Geologist.</i>
<i>FGS</i>	<i>Fellow of the Geological Society.</i>
<i>FIMMM</i>	<i>Fellow of the Institute of Materials, Mining and Metallurgy.</i>
<i>MIMMM</i>	<i>Member of the Institute of Materials, Mining and Metallurgy.</i>
<i>MSAIMM</i>	<i>Member of the South African Institute of Mining and Metallurgy.</i>
<i>MSc</i>	<i>Master of Science.</i>
<i>PhD</i>	<i>Doctor of Philosophy.</i>
<i>Pr Eng</i>	<i>Professional Engineer (South Africa).</i>

APPENDIX B
REFERENCES

REFERENCES

Reference Number	Title	Author	Date
# 1	Gold Fields Ghana, Damang Phase IV Bankable Feasibility Study	Lycopodium Pty. Ltd	December 2002
# 2	Damang Gold Mine & Damang Mine Resources and Reserves	Gold Fields Ghana Limited	2002
# 3	Management Information Circular	Repadre Capital Corporation	December 6 th 2002
# 4	Damang Phase IV Feasibility Study — Strategic Analysis Section — Strategic Cases 1 to 6, Main Report	Steffen, Robertson and Kirsten *SRK) Consulting	December 2002
# 5	Annual Reports	Gold Fields Limited	
# 6	An Audit if the Mineral Resources and mineral Reserves at Gold Fields, Damang Gold Mine	SRK Consulting	September 2004
# 7	Technical Report on the Damang Gold Mine, Ghana	Gold Fields Ghana Limited and IAMGold Corporation	May 2003
# 8	Damang Gold Mine Mineral Resources and Reserves, CPR	Gold Fields	2004
# 9			
# 10			
# 11			
# 12			
# 13			
# 14			

APPENDIX C
CERTIFICATES

CERTIFICATE OF QUALIFICATION

I **Lee Barnes** with a business address at Steffen, Robertson and Kirsten (UK) Limited, Windsor Court, 1-3 Windsor Place, Cardiff, CF10 3BX, hereby state that:

1. I am a Senior Mining Geologist with the firm Steffen, Robertson and Kirsten (UK) Limited (SRK).
2. I am a graduate of the University of Leeds, UK, with an honours degree in Mineral Engineering gained in 1993.
3. I obtained an M.Sc in Mineral Resources Cardiff University, UK in 1997.
5. I have practised my profession continuously for some 6 years since gaining my MSc, have variously managed, authored and co-authored over fifteen mineral resource studies, feasibility audits and due diligence review reports for a variety of mineral deposit types in many different countries and am a “qualified person” for the purpose of National Instrument 43-101.
6. I am a Chartered Engineer (UK) and a member of the Institute of Materials, Minerals and Mining (UK).
7. I am a qualified person responsible for the geology and Mineral Resource estimation sections of the report “An Independent Technical Report on the Damang Gold Mine, Ghana”, which is based on a study of:
 - all available technical reports, geological and sampling data on the project provided to SRK;
 - first hand discussions with the appropriate project geologists and other employees currently working on the project;
 - a visit to site for two days during June 2002.
8. I am not aware of any material fact or material change with respect to the subject matter of this report, which is not reflected in this report, the omission or disclosure of which makes the technical report misleading.
9. I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein, nor in the securities of AGL or Gold Fields and am independent of AGL and Gold Fields.
10. I have had no prior involvement with Damang.
11. The report has been prepared in compliance with National 43-101 and Form 43-101F1 and I have read this Instrument and Form.

October 2004



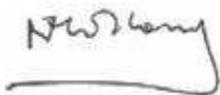
**Mr Lee Barnes MSc, CEng MIMMM
Senior Mining Geologist SRK (UK) Ltd**

CERTIFICATE OF QUALIFICATION

I **Neil Holloway** with a business address at Steffen, Robertson and Kirsten (UK) Limited, Windsor Court, 1-3 Windsor Place, Cardiff, CF10 3BX, hereby state that:

1. I am an Associate Principal Process Engineer with the firm Steffen, Robertson and Kirsten (UK) Limited (SRK).
2. I am a graduate of the University of Bristol, UK, with a joint honours degree in Geology and Chemistry gained in 1971.
3. I obtained an M.Sc in Surface Chemistry and Colloids from Bristol University, UK in 1972.
4. I obtained a PhD in Minerals Engineering from Birmingham University, UK in 1975.
5. I have practised my profession continuously for some 29 years since graduating, have variously managed, authored and co-authored over twenty mining feasibility studies, feasibility audits and due diligence review reports for a variety of mineral deposit types in many different countries and am a “qualified person” for the purpose of National Instrument 43-101.
6. I am a Chartered Engineer (UK) and a Fellow of the Institute of Materials, Minerals and Mining (UK).
7. I am the QP with respect to the Mineral Processing in the report “An Independent Technical Report on the Damang Gold Mine, Ghana”, which is based on a study of:
 - all available technical reports and minerals/process engineering data on the project provided to SRK;
 - first hand discussions with the appropriate minerals/process engineers and other employees currently working on the project;
 - a visit to site on September 9, 2004.
8. I am not aware of any material fact or material change with respect to the subject matter of this report, which is not reflected in this report, the omission or disclosure of which makes the technical report misleading.
9. I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein, nor in the securities of GFGL or Gold Fields and am independent of AGL and Gold Fields.
10. I have had no prior involvement with Damang.
11. The report has been prepared in compliance with National 43-101 and Form 43-101F1 and I have read this Instrument and Form.

September 2004



Dr Neil Holloway, CEng FIMMM
Associate Principal Process Engineer SRK (UK) Ltd

CERTIFICATE OF QUALIFICATION

I **Ian Brackley** with a business address at Steffen, Robertson and Kirsten (UK) Limited, Windsor Court, 1-3 Windsor Place, Cardiff, CF10 3BX, hereby state that:

1. I am a Principal Engineer with the firm Steffen, Robertson and Kirsten (UK) Limited (SRK).
2. I am a graduate of the University of Northampton, UK, with an honours degree in Civil Engineering gained in 1967.
3. I obtained a Ph.D in Civil Mechanics from Natal University, South Africa in 1975.
4. I have practised my profession continuously for some 37 years since graduating, have variously contributed tailings and environmental sections of over twenty mining feasibility studies, feasibility audits and due diligence review reports for a variety of mineral deposit types in many different countries and am a “qualified person” for the purpose of National Instrument 43-101.
5. I am a Chartered Engineer (UK), a Fellow of the South African Institution of Mining & Metallurgy, a Member of the Institution of Civil Engineers, a Member of the Institute of Materials, Minerals and Mining (UK),
6. I am the QP with respect to the Environmental Management and Tailings Engineering in the report “An Independent Technical Report on the Damang Gold Mine, Ghana”, which is based on a study of: -
 - all available technical reports, geological and sampling data on the project provided to SRK;
 - first hand discussions with the appropriate project engineers and scientists and other employees currently working on the project;
 - a visit to site on September 9, 2004.
7. I am not aware of any material fact or material change with respect to the subject matter of this report, which is not reflected in this report, the omission or disclosure of which makes the technical report misleading.
8. I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein, nor in the securities of GFGL or Gold Fields and am independent of AGL and Gold Fields.
9. I have had no prior involvement with Damang.
10. The report has been prepared in compliance with National 43-101 and Form 43-101F1 and I have read this Instrument and Form.

September 2004



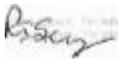
Dr Ian Brackley
Director and Principal Engineer SRK (UK) Ltd

CERTIFICATE OF QUALIFICATION

I **Rick Skelton** with a business address at Steffen, Robertson and Kirsten (UK) Limited, Windsor Court, 1-3 Windsor Place, Cardiff, CF10 3BX, hereby state that:

1. I am a Principal Consulting Mining Engineer with the firm Steffen, Robertson and Kirsten (UK) Limited (SRK).
2. I am a graduate of the Royal School of Mines, London, UK, with an honours degree in Mining gained in 1969
3. I obtained an M.Sc in Mineral Production Management from the Royal School of Mines, London, UK, in 1974.
4. I have practiced my profession continuously for some 35 years since graduating, have variously managed, authored and co-authored many mining feasibility studies, feasibility audits and due diligence review reports for a variety of mineral deposit types in many different countries and am a “qualified person” for the purpose of National Instrument 43-101.
5. I am a Chartered Engineer (UK), a Member of the Institute of Materials, Minerals and Mining (UK), and a Member of the South African Institute of Mining and Metallurgy, Johannesburg, South Africa.
6. I am the QP with overall responsibility for the technical report and specifically with respect to the Mineral Reserves and Mining Engineering in the report “An Independent Technical Report on the Damang Gold Mine, Ghana”, which is based on a study of:
 - all available technical reports on the project provided to SRK;
 - first hand discussions by others with the appropriate project mining engineers and other employees currently working on the project;
 - a visit to site on August 5 and 6, 2004.
7. I am not aware of any material fact or material change with respect to the subject matter of this report, which is not reflected in this report, the omission or disclosure of which makes the technical report misleading.
8. I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein, nor in the securities of GFGL or Gold Fields Fields and am independent of AGL and Gold Fields.
9. I have previously carried out consulting work for Gold Fields at Damang as an SRK employee, specifically reviewing the Mineral Reserves in 2002 and assisting with the Damang Extension Project in 2004.
10. The report has been prepared in compliance with National 43-101 and Form 43-101F1 and I have read this Instrument and Form.

September 2004



Rick Skelton MSc, CEng MIMMM, MSAIMM
Principal Mining Engineer - SRK (UK) Ltd

APPENDIX D
ENVIRONMENTAL POLICY

Environmental Policy

Abosso Goldfields Limited will operate its open-pit gold mine and ore-processing plant in a responsible manner that is aligned with the evolving priorities of our stakeholders. Our actions will reflect the broad spectrum of values that we share with our stakeholders and will promote our ongoing efforts to protect our employees, stakeholders, customers and the natural environment.

Abosso's commitment to best-practice environmental stewardship will be achieved by the following actions:

- Incorporate environmental controls for the prevention of pollution and use best management practices in all project stages from project design through to operations and closure.
- Regularly assess environmental conditions through all project stages, from project design through mine closure, thereby identifying all issues of environmental concern and establishing objectives and strategies for their management.
- Establish credible monitoring and verification programs to measure environmental effects and ensure compliance with legal requirements and with our environmental policy, and communicate the results in an effective manner.
- Implement management systems to ensure that there is a continuous improvement in environmental performance through the use of the Plan-Do-Check-Act model.
- Provide for the effective involvement of communities in decisions that affect them by: treating them as equals; respecting their cultures, customs and values; and considering their needs, concerns and aspirations in making our decisions.
- Provide training and resources to develop employees and build competencies related to their environmental and social responsibilities so ensuring that all employees are equipped to accept responsibility for the environment in which we operate.



GOLD FIELDS
ABOSSO GOLDFIELDS LIMITED

Brendan Walker
Vice President
Ghana Operations

/s/ Alan Thompson

Alan Thompson
General Manager
Damang Gold Mine

January 2004
