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AngloGold Ashanti

Technical Report Summary

Obuasi

A Life of Mine Summary Report

Effective date: 31 December 2021

As required by § 229.601(b)(96) of Regulation S-K as an exhibit to AngloGold Ashanti's Annual Report on Form 20-F pursuant to Subpart 229.1300 of Regulation S-K - Disclosure by Registrants Engaged in Mining Operations (§ 229.1300 through § 229.1305).

Date and Signatures Page

This report is effective as at 31 December 2021.

Where the registrant (AngloGold Ashanti Limited) has relied on more than one Qualified Person to prepare the information and documentation supporting its disclosure of Mineral Resource or Mineral Reserve, the section(s) prepared by each qualified person has been clearly delineated.

AngloGold Ashanti has recognised that in preparing this report, the Qualified Person(s) may have, when necessary, relied on information and input from others, including AngloGold Ashanti. As such, the table below lists the technical specialists who provided the relevant information and input, as necessary, to the Qualified Person to include in this Technical Report Summary. All information provided by AngloGold Ashanti has been identified in Section 25: Reliance on information provided by the registrant in this report.

The registrant confirms it has obtained the written consent of each Qualified Person to the use of the person's name, or any quotation from, or summarisation of, the Technical Report summary in the relevant registration statement or report, and to the filing of the Technical Report Summary as an exhibit to the registration statement or report. The written consent only pertains to the particular section(s) of the Technical Report Summary prepared by each Qualified Person. The written consent has been filed together with the Technical Report Summary exhibit and will be retained for as long as AngloGold Ashanti relies on the Qualified Person's information and supporting documentation for its current estimates regarding Mineral Resource or Mineral Reserve.

MINERAL RESOURCE QUALIFIED PERSON	Emmarentia Maritz
Sections prepared: 1 - 11, 20 - 25	/s/ Emmarentia Maritz
MINERAL RESERVE QUALIFIED PERSON	Douglas Atanga
Sections prepared: 1, 12-19, 21 - 25	/s/ Douglas Atanga

Responsibility	Technical Specialist
ESTIMATION	Kwadwo Sarpong
EVALUATION QAQC	Linda Acheampong
EXPLORATION	Raymond Trornu
GEOLOGICAL MODEL	Kwadwo Sarpong
GEOLOGY QAQC	Augustine Boachie
GEOTECHNICAL ENGINEERING	Dawuda Konadu
HYDROGEOLOGY	Godwyll Quansah
MINERAL RESOURCE CLASSIFICATION	Linda Acheampong
ENVIRONMENTAL AND PERMITTING	Nixon Asante
FINANCIAL MODEL	Andrews Buadi
INFRASTRUCTURE	Awie Frey
LEGAL	Juliet Manteaw-Kutin
METALLURGY	Kwaku Buahin
MINE PLANNING	Douglas Atanga
MINERAL RESERVE CLASSIFICATION	Douglas Atanga

Consent of Qualified Person

I, Emmarentia Maritz, in connection with the Technical Report Summary for "Obuasi Mine, A Life of Mine Summary Report" dated 31 December 2021 (the "Technical Report Summary") as required by Item 601(b)(96) of Regulation S-K and filed as an exhibit to AngloGold Ashanti Limited's ("AngloGold Ashanti") annual report on Form 20-F for the year ended 31 December 2021 and any amendments or supplements and/or exhibits thereto (collectively, the "Form 20-F") pursuant to Subpart 1300 of Regulation S-K promulgated by the U.S. Securities and Exchange Commission ("1300 Regulation S-K"), consent to:

- the public filing and use of the Technical Report Summary as an exhibit to the Form 20-F;
- the use of and reference to my name, including my status as an expert or "Qualified Person" (as defined in 1300 Regulation S-K) in connection with the Form 20-F and Technical Report Summary;
- any extracts from, or summary of, the Technical Report Summary in the Form 20-F and the use of any information derived, summarised, quoted or referenced from the Technical Report Summary, or portions thereof, that is included or incorporated by reference into the Form 20-F; and
- the incorporation by reference of the above items as included in the Form 20-F into AngloGold Ashanti's registration statements on Form F-3 (Registration No. 333-230651) and on Form S-8 (Registration No. 333-113789) (and any amendments or supplements thereto).

I am responsible for authoring, and this consent pertains to, the Technical Report Summary. I certify that I have read the Form 20-F and that it fairly and accurately represents the information in the Technical Report Summary for which I am responsible.

Date: 30 March 2022

/s/ Emmarentia Maritz

Emmarentia Maritz

Consent of Qualified Person

I, Douglas Atanga, in connection with the Technical Report Summary for "Obuasi Mine, A Life of Mine Summary Report" dated 31 December 2021 (the "Technical Report Summary") as required by Item 601(b)(96) of Regulation S-K and filed as an exhibit to AngloGold Ashanti Limited's ("AngloGold Ashanti") annual report on Form 20-F for the year ended 31 December 2021 and any amendments or supplements and/or exhibits thereto (collectively, the "Form 20-F") pursuant to Subpart 1300 of Regulation S-K promulgated by the U.S. Securities and Exchange Commission ("1300 Regulation S-K"), consent to:

- the public filing and use of the Technical Report Summary as an exhibit to the Form 20-F;
- the use of and reference to my name, including my status as an expert or "Qualified Person" (as defined in 1300 Regulation S-K) in connection with the Form 20-F and Technical Report Summary;
- any extracts from, or summary of, the Technical Report Summary in the Form 20-F and the use of any information derived, summarised, quoted or referenced from the Technical Report Summary, or portions thereof, that is included or incorporated by reference into the Form 20-F; and
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Date: 30 March 2022

/s/ Douglas Atanga

Douglas Atanga

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1 Executive Summary

1.1 Property description including mineral rights

Obuasi Gold Mine (Obuasi) is owned and operated by AngloGold Ashanti Limited and is a production stage property. All required mineral rights to the property are held by the company. The mine is an underground operation, and it has been in operation since 1897 (more than 120 years). It has been owned and operated by AngloGold Ashanti since 2004.

The mine is in the municipality of Obuasi, in the Ashanti region of Ghana, about 240km northwest of the capital Accra and 60km south of Kumasi.

Obuasi has a long mining history dating back to 1897. It has been owned and operated by various operators during this time. The current operator became involved in 2004 following the merger of the former AngloGold Limited of South Africa and the Ashanti Goldfields Company Limited of Ghana. However, for several years leading up to 2014, the mine began to struggle due to ailing infrastructure and outdated methodologies. It was realised that significant rationalisation and/or replacement of current infrastructure would be necessary to enable the delivery of better utilisation and productivity metrics. In 2014, a Feasibility Study (FS) commenced that considered the optimum mining methodology and schedules for the underground mine, based on modern mechanised mining methods and refurbishment of underground, surface and process plant infrastructure. During this time, Obuasi operated in a limited operating phase with underground activities essentially restricted to continued development of the Obuasi deeps decline and underground infill drilling. The limited operating phase was brought to a halt after an incursion by illegal miners on Obuasi's concession in February 2016 at which point the mine was placed under care and maintenance. The study however continued and in 2016, a favourable FS was completed (the June 2016 Obuasi Optimised Feasibility Study; also referred to as the P300 study). The study indicated a strong technical and economical case with an anticipated 20-year life of mine (LOM). In 2018, approval was received from the AngloGold Ashanti board and the government of Ghana to proceed with the project. The redevelopment project kicked off in 2019.

The Obuasi concession previously covered an area of 474km^2 and had 80 communities within a 30km radius of the mine. This was reduced to 201km^2 in March 2016 and subsequently reduced to 141.2km^2 in January 2021. This 141.2km^2 comprises of three mining leases including the Obuasi mining lease covering 87.5km^2, the Binsere 1 mining lease covering 29.0km^2 and the Binsere 2 mining lease covering 24.7km^2. The Obuasi mining lease will expire on 4 March 2054 and the Binsere leases in April 2028. The leases are covered by a development agreement and tax concession agreement with the government of Ghana and all leases are renewable.

The redevelopment project started in 2019 and underground development recommenced in 2019, with the first stope mined in October 2019 and first gold poured later that same year in December 2019. In 2020, production ramped up to 2,000 tons per day (tpd) and a further ramp up to 4,000tpd was planned for 2021. However, underground mining activities were voluntarily suspended following a sill pillar failure on 18 May 2021 which resulted in a fatality. A detailed review of the mining and ground management plans were initiated and conducted by a cross-functional internal team and supported by independent third-party, Australian Mining Consultants (AMC). Following this review, a comprehensive series of protocols were introduced to supplement existing operating procedures and underground ore mining resumed in October 2021. For the remainder of 2021, underground ore was used only to replenish the Run-of-Mine (ROM) stockpile. Gold production from underground ore sources was therefore expected to re-commence in January 2022. The safe production ramp up to the full mining rate of 4,000tpd is expected to be achieved by the end of the first half of the 2022.

1.2 Ownership

Obuasi is owned by AngloGold Ashanti Limited.

The mine is operated by AngloGold Ashanti Ghana Limited which is a wholly owned subsidiary of AngloGold Ashanti.

1.3 Geology and mineralisation

The mine is located within the Obuasi concession area in southwestern Ghana along the north-easterly striking Ashanti volcanic belt. The deposit is one of the most significant Proterozoic gold belts discovered to date. The Ashanti belt predominantly comprises sedimentary and mafic volcanic rocks and is the most prominent of the five Birimian Supergroup gold belts found in Ghana.

The Birimian was deformed, metamorphosed, and intruded by syn- and post-tectonic granitoids during the Eburnean tectonothermal event around two billion years ago. Folding trends are dominantly north-northeast to northeast. Elongate syn-Birimian basins developed between the ridges of the Birimian system, and these were filled with the Tarkwaian molasse sediments made up primarily of conglomerates, quartzose and arkosic sandstones and minor shale units. Major faulting has taken place along the same trends.

The Lower Birimian metasediments and metavolcanics are characterised and defined by argillaceous and fine to intermediate arenaceous rocks. These rocks are represented by phyllites, metasiltstones, metagreywackes, tuffaceous sediments, ash tuffs and hornstones in order of decreasing importance. Adjacent to the shear zones, these rocks are replaced by sericitic, chloritic and carbonaceous schists, which may be graphitic in places. Multiple lodes are a common feature.

Mineralised shears are found in close proximity to the contact with harder metamorphosed and metasomatically altered intermediate-to basic Upper Birimian volcanics. The competency contrast between the harder metavolcanic rocks to the east and the more argillaceous rock to the west is thought to have formed a plane of weakness. During crustal movement, this plane became a zone of shearing and thrusting coeval with the compressional phases.

Gold mineralisation is associated with, and occurs within, graphite-chlorite-sericite fault zones. These shear zones are commonly associated with pervasive silica, carbonate and sulphide hydrothermal alteration and occur in tightly folded Lower Birimian schists, phyllites, metagreywackes and tuffs, along the eastern limb of the Kumasi anticlinorium.

Two main ore types are present, namely quartz vein and sulphide ore. The quartz vein type consists mainly of quartz with free gold in association with lesser amounts of various metal sulphides containing iron, zinc, lead and copper. This ore type is generally non-refractory. The sulphide ore type is characterised by the inclusion of gold in the crystal structure of arsenopyrite minerals. Higher gold grades tend to be associated with finer grained arsenopyrite crystals; the sulphide ore is generally highly refractory.

1.4 Status of exploration, development and operations

Exploration, development, and operations recommenced during 2019 as part of the redevelopment project and production ramped up to 2,000tpd in 2020. These activities were temporarily halted in May 2021 due to the sill pillar failure incident. Development and exploration were gradually restarted again in August 2021 and underground ore mining steadily resumed in October 2021.

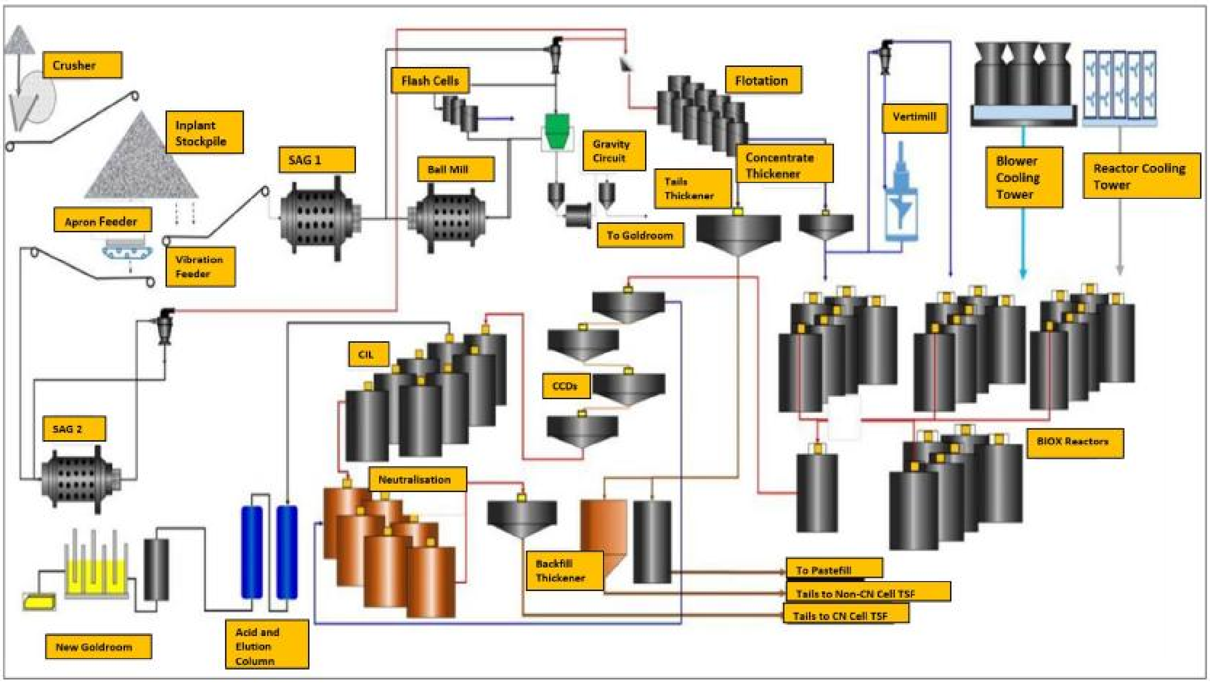
1.5 Mining methods

Obuasi is an underground operation utilising both vertical shafts and declines as main access routes to the underground workings. The mine has seen extensive historical mining activities with varying applications of different mining methods to date. The current LOM design employs mostly the Long Hole Open Stoping (LHOS) mining method for ore extraction. LHOS is a highly selective and productive method of mining that can be employed for orebodies of varying thicknesses and dips. The three main distinct variations of the LHOS used at Obuasi are Longitudinal Retreat Stoping (LRS), Longitudinal Open Stoping (LOS), and Transverse Open Stoping (TOS). The Blind Upper Stoping (BUS) is a form of LRS or TOS used for partial sill pillar recovery.

1.6 Mineral processing

The plant is configured for both conventional and flash flotation and BIOX™ treatment which is required for the refractory sulphide ore. The gravity gold recovery system also integrated with Knelson concentrators and Inline Leach Reactors (ILR).

A schematic representation of the South Treatment Plant



1.7 Mineral Resource and Mineral Reserve estimates

The exclusive Mineral Resource is reported exclusive of the in situ component of the Mineral Reserve and includes that portion of the Mineral Resource which was not converted to Mineral Reserve. Further study and design, change in costs and/or gold price is required to develop economic extraction plans for the exclusive Mineral Resource. A large proportion of the exclusive Mineral Resource is Inferred Mineral Resource and will require drilling to upgrade its confidence.

The exclusive Mineral Resource occurs in all areas but is mostly from underground sources. Anyinam and Gyabunsu-Sibi are surface sources (open pits), and they constitute about 1% of the total Mineral Resource. The remainder are underground sources, and the highest proportion is from Cote D'Or. However, there is no Mineral Reserve for Cote D'Or, Block 14 or the two open pits.

Exclusive gold Mineral Resource

Obuasi		Tonnes	Grade	Contained gold	
as at 31 December 2021	Category	million	g/t	tonnes	Moz
	Measured	2.57	7.97	20.45	0.66
	Indicated	25.81	7.04	181.57	5.84
	Measured & Indicated	28.37	7.12	202.02	6.50
	Inferred	50.15	7.47	374.66	12.05

The Mineral Reserve for Obuasi as of 31 December 2021 totals 30.80Mt at 8.34g/t for 8.26Moz, consisting of 4.73Mt at 7.79g/t for 1.19Moz Proven Mineral Reserve, and 26.07Mt at 8.45g/t for 7.08Moz Probable Mineral Reserve.

The Obuasi Mineral Reserve estimate is based on the development of appropriately detailed and engineered LOM plan. The mine design and planning process incorporates realistic modifying factors and the use of appropriate cut-off grades for the individual mining Blocks and considers relevant geotechnical inputs and major equipment and infrastructure capacities. The 2021 Mineral Reserve was based on the review of the mine design on 2020 updated Block models for the southern mining blocks (Sansu, B8L, B10, B11, B1, and B2) and 2021 models for the northern blocks (Cote D'Or and Adansi).

The AngloGold Ashanti Corporate gold price of $1,200/oz was used in the Mineral Reserve estimates. The Mineral Reserve estimate is entirely from underground Mineral Resource with no surface potential included.

Gold Mineral Reserve

Obuasi		Tonnes	Grade	Contained gold	
as at 31 December 2021	Category	million	g/t	tonnes	Moz
	Proven	4.73	7.79	36.88	1.19
	Probable	26.07	8.45	220.14	7.08
	Total	30.80	8.34	257.02	8.26

1.8 Summary capital and operating cost estimates

The key capital cost expenditure relates to Mineral Reserve development (ORD), surface and underground infrastructure development, mining fleet replacement, process infrastructure upgrades and site process water improvement projects. Total capital cost is estimated at $1,427M. Non sustaining capital expenditure of about $174M is associated with the Obuasi Deeps Decline (ODD), Kwesi Mensah vent shaft (KMVS) development and the Obuasi phase 3 redevelopment project items.

Mining costs are based on agreed rates with the mining contractor (UMA) and includes owner geology and mine technical costs. Mining cost averages about $79/t. However, this varies from block to block depending on location and mining method. Processing costs have been determined based on total material to be milled. Milling cost is estimated to be $42/tonne. General and administration costs are calculated based on per tonne milled.

Closure cost is estimated at $255m. This is inclusive of a total security provision of $50.2m ($20.2m cash deposit and $30m bank guarantee).

A royalty payable to the government of Ghana (GOG) of 3% of gold revenue is applied for a 10-year concession period. AngloGold Ashanti signed a tax and redevelopment agreement with the government of Ghana in 2017 and 2018 respectively. In these agreements, a royalty rate of 3% and corporate tax rate of 32.5% apply within a 10-year concession period. Beyond this concession period, standard rates of 5% and 35% apply for royalty and income tax respectively. An agreed schedule of input duties is applicable for an initial period of six years ending 31 December 2023.

1.9 Permitting requirements

In terms of permitting requirements, there are currently no significant encumbrances and Obuasi holds valid mining leases and environmental permits for all projects planned under the Obuasi Redevelopment Project.

1.10 Conclusions and recommendations

Obuasi has been in operation since 1897 and all available, appropriate data has been used for Mineral Resource and Mineral Reserve compilation. This includes the geological and survey data collected over several decades prior to the merger of AngloGold and Ashanti Goldfields in 2004. The risk associated with the inclusion of this data has been mitigated by a comprehensive data validation project completed between 2015 and 2018 (for geological data) and by reduced Mineral Resource confidence (such as the downgrades of Indicated to Inferred Mineral Resource for Cote D'Or). The verification of historical survey data, used for depletion and sterilisation, is an ongoing project and will continue as areas become accessible and further infill drilling and verification work becomes possible.

The Obuasi Mineral Reserve was derived from the complete LOM plan which is based on a full mine design review and production schedule. The mine design and production schedule have considered the required infrastructure and all relevant mining constraints to arrive at appropriate productivities. The mine plan is designed to optimise ounces produced as early as possible and with due regard to geotechnical considerations and available infrastructure. This is fundamentally in tandem with the Obuasi P300 FS which provided the basis for the project redevelopment.

The key economic parameters including capital and operating costs have been considered in completing the Mineral Reserve estimates. These economic factors and costs have been reviewed and acceptably reflect the latest available information of the operations and are in line with best industry practices.

All permitting requirements and regulatory approvals have been obtained for the operations and there are no outstanding permits that would cause a material impact on the Mineral Reserve estimate.

A gold price of $1,200/oz used to represent the long-term price was provided by the AngloGold Ashanti Corporate office and group guidance and is seen to be sound and reasonable.

The socio-economic and/or political factors in the local and general community are acceptably managed. The Obuasi sustainability department runs several community projects within its catchment area and there are regular engagements with community leaders.

In the opinion of the QP, the Obuasi Mineral Reserve statement is sound, and the QP is not aware of any information that materially will affect the outcome of this work.

2 Introduction

2.1 Disclose registrant

This Technical Report Summary was prepared for the registrant, AngloGold Ashanti Limited.

2.2 Terms of reference and purpose for which this Technical Report Summary was prepared

The purpose of this Technical Report Summary is to report the Mineral Resource and Mineral Reserve for Obuasi.

Terms of reference are following AngloGold Ashanti Guidelines for the Reporting of Exploration Results, Mineral Resource and Ore Reserve (hereinafter referred to as the Guidelines for Reporting) and based on public reporting requirements as per Regulation S-K 1300. Although the term Mineral Reserve is used throughout S-K 1300 and this document, it is recognised that the term Ore Reserve is synonymous with Mineral Reserve. AngloGold Ashanti uses Ore Reserve in its internal reporting.

The Technical Report Summary aims to reduce complexity and therefore does not include large amounts of technical or other project data, either in the report or as appendices to the report, as stipulated in Subpart 229.1300 and 1301, Disclosure by Registrants Engaged in Mining Operations and 229.601 (Item 601) Exhibits, and General Instructions. The qualified person must draft the summary to conform, to the extent practicable, with the plain English principles set forth in§ 230.421 of this chapter. Should more detail be required they will be furnished on request.

The following should be noted in respect of the Technical Report Summary:

- All figures are expressed on an attributable basis unless otherwise indicated
- Unless otherwise stated, $ or dollar refers to United States dollars
- Group and company are used interchangeably
- Mine, operation, business unit and property are used interchangeably
- Rounding off of numbers may result in computational discrepancies
- To reflect that figures are not precise calculations and that there is uncertainty in their estimation, AngloGold Ashanti reports tonnage, content for gold to two decimals and copper, content with no decimals
- Metric tonnes (t) are used throughout this report and all ounces are Troy ounces
- Abbreviations used in this report: gold – Au
- The reference co-ordinate system used for the location of properties as well as infrastructure and licences maps / plans is latitude longitude geographic co-ordinates in various formats, or relevant Universal Transverse Mercator (UTM) projection.

AngloGold Ashanti requires that the Mineral Reserve that is an outcome of the business planning process is generated at a minimum of a Pre-Feasibility Study (PFS) level.

2.3 Sources of information and data contained in the report / used in its preparation

Sources of information include internal information generated as part of the mine's business planning process (which is the overarching process to generate Mineral Resource and Mineral Reserve at the operation) as well as various reports and publications (as cited in the reference section of this report).

Most data used in preparation of this report comes from drilling and other non-drilling geological data collected over several decades by both the previous owners of the mine and AngloGold Ashanti (owners since 2004). A comprehensive data validation project was undertaken between 2015 and 2017 to improve the confidence in the historic data and to demonstrate that the database is an accurate representation of the data collected.

2.4 Qualified Person(s) site inspections

The QP for Mineral Resource and the QP for Mineral Reserve are both employed by AngloGold Ashanti Ghana Ltd and are based at the mine site.

2.5 Purpose of this report

This is first time reporting of the Technical Report Summary for this operation. There are no previously filed Technical Report Summaries for this operation. Reporting in this Technical Report Summary is related to Mineral Resource and Mineral Reserve.

3 Property description

3.1 Location of the property

Obuasi is in the municipality of Obuasi in the Ashanti region of Ghana, 260km northwest of the capital Accra and 60km south of Kumasi, the regional capital. The closest town is Obuasi (the mine is within 5km of the centre of town).

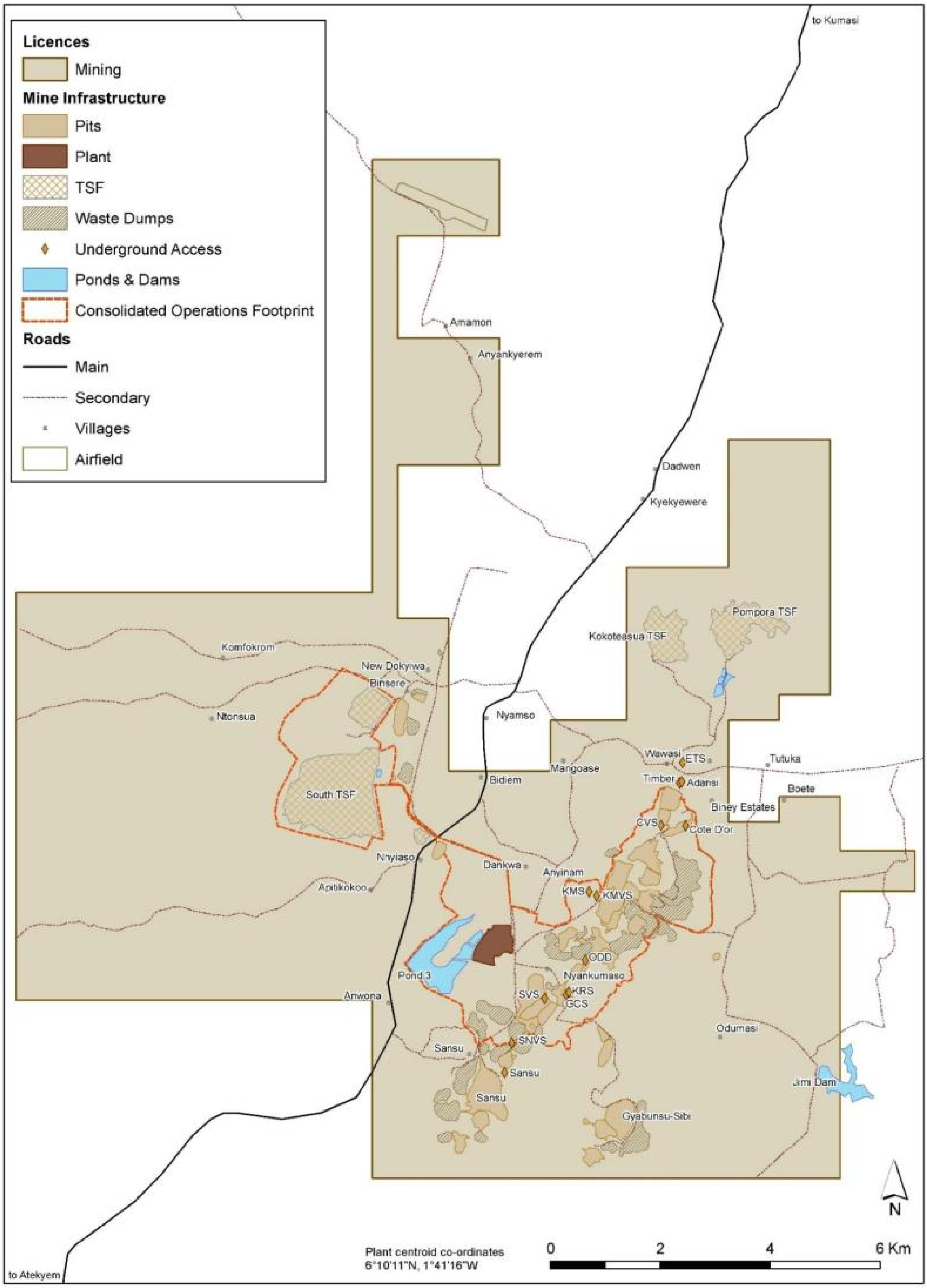
Ghana is an English-speaking country in West Africa that is bounded by the Gulf of Guinea (Atlantic Ocean) to the south, and the countries of Ivory Coast, Burkina Faso and Togo to the west, north and east respectively. Ghana has a population of approximately 31 million people (worldometers info, 2019) and its capital is Accra which is located on the coast. Other major towns include Kumasi, Takoradi, and Obuasi. Ghana has two seaports, the largest at Tema (25km from Accra) which has 12 deep water berths, one oil tanker berth and is capable of supporting facilities for cargo traffic. Takoradi is the secondary port in Ghana but is still a major facility – handling most of the export traffic from Ghana. Ghana is divided into 16 administrative regions and 275 districts of which Obuasi is part of the Obuasi West district in the Ashanti Region.

Ghana is a stable presidential constitutional democracy with multi-party politics that is dominated by two parties: the National Democratic Congress and the New Patriotic Party. Nana Akufo-Addo of the New Patriotic Party was elected and then appointed president of Ghana in 2017 and was re-elected president in 2020 (BBC News, December 2020).

Ghana's climate is tropical with two main seasons: a wet and a dry season with the south experiencing its wet season from March to mid-November.

Ghana is a resource rich country and has significant gold mining, agricultural (coca) and oil resources. In 2020 Ghana produced 140 tonnes of gold making it the seventh largest gold producing country in the world, and the largest in Africa (Ghana Gold Production, CEIC Data, October 2020). Its 2020 estimated GDP is $73.6B with a per capita GDP of $8,343. Its currency is the Cedi which on the 31 of December 2021 had an exchange rate to the US dollar of 6.25:1. Ghana has an emerging economy however there is a rapid increase in the deficit and public debt and there are infrastructure challenges e.g., energy and transport.

Map showing the location, infrastructure, and mining license area for Obuasi.



The coordinates of the mine, as represented by the plant, are depicted on the map and are in the UTM co-ordinate system.

3.2 Area of the property

The current area of the property is 141.2km^2.

3.3 Legal aspects (including environmental liabilities) and permitting

The Constitution of Ghana as well as the Minerals and Mining Act, 2006 (Act 703) (GMM Act) provide that all minerals in Ghana in their natural state are the property of the state and title to them is vested in the President on behalf of and in trust for the people of Ghana, with rights of reconnaissance, prospecting, recovery, and associated land usage being granted under license or lease.

The grant of a mining lease by the Ghana Minister of Lands and Natural Resources (LNR Minister) upon the advice of the Minerals Commission is subject to parliamentary ratification unless the mining lease falls into a class of transactions exempted by the Ghanaian Parliament.

The LNR Minister has the power to object to a person becoming or remaining a controller of a company which has been granted a mining lease if the LNR Minister believes, on reasonable grounds, that the public interest would be prejudiced by the person concerned becoming or remaining such a controller. Except as otherwise provided in a specific mining lease, all immovable assets of the holder of a mining lease vest in the state upon termination, as does all moveable property that is fully depreciated for tax purposes. Moveable property that is not fully depreciated is to be offered to the state at the depreciated cost. A holder must exercise his rights subject to such limitations relating to surface rights as the LNR Minister may prescribe.

The concession previously covered an area of 474km^2 and had 80 communities within a 30km radius of the mine. This was reduced to the 201km^2 in March 2016. in January 2021 a further reduction was approved by the Minister, bringing the total size of the lease to 141.2km^2. The Obuasi Mineral Resource and Mineral Reserve are constrained within these mining leases and AngloGold Ashanti Ghana has the surface rights to the necessary portions of the mining license required for mining and infrastructure.

Following the latest reduction of the lease area, Obuasi holds three mining leases including the Obuasi mining lease comprising 87.5m^2, the Binsere 1 mining lease covering 29.0km^2 and the Binsere 2 mining lease covering 24.7km^2.

At the time of compiling this report, there were no known risks that could result in the loss of ownership in part, or in whole, of the Mineral Resource and Mineral Reserve. The Obuasi mining lease will expire on 4 March 2054 and the Binsere 1 and 2 leases are valid until 8th April 2028. All the leases are renewable.

In terms of existing agreements, Obuasi does not have a Joint Venture (JV) partner and is wholly owned by AngloGold Ashanti. There is no known heritage or environmental impediments over the leases and all required permits are in place. AngloGold Ashanti Ghana declared force majeure on 9 February 2016 with the incursion of Illegal mining activities on 5 February 2016 but law and order were restored with the arrival of the military and police in October 2016. The force majeure condition was lifted in mid-February 2017, and it is deemed that there is a low probability of this re-occurring. The Company has a security agreement with government in which the government has agreed to provide security for the mine especially against illegal mining.

The tenure is secure at the time of reporting. Any future permits are reasonably expected to be granted and there are no known impediments to obtaining or retaining the right to operate in the area.

There are no known legal proceedings that may influence the rights to prospect or mine.

Obuasi has all governmental/statutory requirements and permits in place as required and future permits can be reasonably expected to be obtained.

3.4 Agreements, royalties and liabilities

Royalties are based on a sliding scale as covered by the tax concession agreement with the government of Ghana. The percentage rate payable is dependent on the gold price per ounce.

The property is not owned or operated by any other party than the registrant.

The AngloGold Ashanti closure planning standard and Ghanaian mining law require that the future risks and liabilities associated with closure are identified and managed appropriately to ensure that they are left in a condition which is safe, stable and minimises adverse impacts on people and the environment. Hence, rehabilitation and closure liabilities are considered and included in the mine closure costs and plans. The Company is required to post a reclamation bond based on approved work plan for reclamation. The estimated rehabilitation cost as per approved Environmental Impact Statement is $137.3 million. Out of the cost estimate, AngloGold Ashanti Ghana is required to post a reclamation bond of $50 million which is split into the cash deposit of $20 million currently held in an account with Stanbic Bank™ and a bank guarantee of $30 million (the Guarantee Amount). The bank guarantee is currently provided by Stanbic Bank and United Bank for Africa (UBA) in proportions of $20 million and $10 million respectively.

4 Accessibility, climate, local resources, infrastructure and physiography

4.1 Property description

Obuasi is in the municipality of Obuasi in the Ashanti Region of Ghana. It is near Obuasi town, with a population of about 200 thousand people. The area has a rich mining history with good availability of mining personnel.

The mine can be accessed by paved road network from Kumasi and by road or chartered air transport from the capital Accra.

The topography of the Obuasi area is controlled by the strike of the Ashanti gold belt which results in a hill formation running in a northeast and southwest direction of the concession area for a length of 18km. The lowest and highest elevations of the entire concession area are respectively 50m and 540m above sea level with low-lying areas in the south, southwest and west of the concession. Topography does not affect mining activities.

The climate in the region of the mine is defined as equatorial savannah and is characterised by high temperatures and humidity that remain relatively constant throughout the year. There are two well-defined wet seasons; the main wet season is between mid-March and the end of July, followed by a short wet season characterised by light rains between September and November. The wet seasons are separated by a relatively short, dry period in July and August, with the main dry season from December to March. The monthly average temperatures range from 24°C to 33°C, with February recorded as the hottest month. The average annual precipitation over the last 69-years is 1,600mm, with annual precipitation ranging from a minimum of 1,089mm to a maximum of 2,240mm.

The operation is provided electricity by the national grid. There are also emergency diesel-powered generators available. The mine is permitted by the Water Resources Commission to extract water from the Jimi Dam and treated for domestic use, whilst underground water is extracted for operational use.
The mine has sufficient land area for expansion of facilities such as tailings storage facilities (TSF) and waste dumps.

Overall, the surface rights are deemed to be sufficient for the mining operations and it is deemed that none of the aforementioned conditions will impact significantly on mining activities (i.e., topography, access to the properly, climate and so forth).

5 History

The Obuasi deposit was discovered in 1897 and has a long history of successful commercial gold production (over 120 years). It was owned by Ashanti Goldfields until the merger in 2004 with AngloGold to become AngloGold Ashanti.

The historical ounce production from the mine is presented below. It is separated into tailings, open pit, underground or plant cleaning sources. The cleaning exercise was undertaken from 2015 to 2017 during the care and maintenance phase and the gold mainly came from carbon sludge. In total more than 30Moz has been produced from the deposit.

Historical ounce production from 1897-2017 (koz)

	1897-2001	2002	2003	2004	2005	2006	2007	2008	2009	
Tailings	767	42	44	31	32	41	36	34	34	
Open pit	3,430	23	34	19	29	29	29	30	9	
Underground	24,400	472	435	343	331	318	296	293	339	
Plant cleaning	-	-	-	-	-	-	-	-	-	
Total	28,597	537	513	393	391	387	360	357	381	
	2010	2011	2012	2013	2014	2015	2016	2017	Total	Proportion of Production (%)
Tailings	18	0	-	4	24	-	-	-	1,106	3.3%
Open pit	6	3	10	14	-	-	-	-	3,665	11.0%
Underground	293	309	270	221	148	-	-	-	28,467	85.5%
Plant cleaning	-	-	-	-	-	53	2	2	56	0.2%
Total	317	313	280	239	172	53	2	2	33,293	100.0%

In the years prior to 2014, the mine began to struggle due to ailing infrastructure and outdated methodologies. In November 2014, the mine decided to enter into a Limited Operating phase. At this time, a FS was initiated that aimed to determine more optimum mining methods and schedules based on modern mechanised mining methods and refurbishment of underground, surface, and process plant infrastructure. It was recognised that a significant rationalisation and/or replacement of current infrastructure was needed to enable the delivery of improved utilisation and productivity metrics.

Following an incursion by illegal miners in February 2016, the mine was placed under care and maintenance. However, with law and order restored, the FS was finalised in March 2016, with a schedule for the potential restart of underground production. In 2018 approval was granted from the AngloGold Ashanti board and the Ghanaian government to redevelop the mine. The Obuasi redevelopment project commenced in 2019 and first gold was poured during December 2019.

With the first gold pour, the reconciliation of produced grade and tonnage resumed. The Mineral Resource and Mineral Reserve estimates and performance statistics on actual production for 2020 and 2021 are presented below.

Reconciliation of produced gold for 2020 and 2021

	Year	
Reconciliation entity	2020	2021
Mineral Resource model (oz)	184,895	119,553
Grade control model (oz)	184,174	122,271
Percentage (%)	99.6	102.3

	Year	
Reconciliation entity	2020	2021
Mining Feed (oz)	161,381	126,124
Plant Accounted (oz)	148,326	131,096
Percentage (%)	92	104

It is considered that the current Mineral Resource and Mineral Reserve estimates are performing adequately. The Mineral Resource estimates are performing well against the grade control estimates. In 2020, the plant accounted for 92% of the mining feed and, in 2021, for 104%. The mining feed is based on the grade control model estimates.

6 Geological setting, mineralisation and deposit

6.1 Geological setting

The Ashanti Region of Ghana, in which Obuasi is located, lies in the eastern margin of the Pre-Cambrian West African craton.

This craton consists of Lower Proterozoic volcanic and flysch sediments which make up the Birimian system, overlain in part by the molasse sediments of the Middle Proterozoic Tarkwaian. The Ashanti belt is the most prominent of the five Birimian Supergroup gold belts found in Ghana and is a 300-km wrench fault system that propagated from Dixcove in the southwest to beyond Konongo in the north-east.

The Paleoproterozoic rocks in the vicinity of Obuasi consist of volcano-sedimentary rocks of Birimian and Tarkwaian Series. The Birimian Series consists of the Sefwi group in the bottom of the stratigraphic column and the Kumasi group above it. These rocks are cut by voluminous intrusives, mostly granitoids of different ages. The Sefwi group forms the Lower Birimian Ashanti greenstone belt; and consists mostly of andesites and basalts interlayered with metasediments and gabbros (WAXI II, 2013). A syntectonic granitoid intrusion dated at 2,170Ma is being considered as a minimum age for the Sefwi group, while the maximum age of this group is still a matter of discussion. The Kumasi group contains mainly metaturbidites with graphitic interlayers and minor metavolcanics. Detrital and magmatic zircon geochronology revealed that sedimentation of this group is associated with minor volcanism during the Upper Birimian is between 2,154Ma and 2,125Ma (WAXI II, 2013).

The youngest Paleoproterozoic Tarkwaian Series consists mostly of metasediments (meta-conglomerates, quartzites) and phyllites interlayered with dolerite sills in the upper part. The Tarkwaian Series rocks lie unconformably on the Sefwi Group within the Ashanti greenstone belt. The occurrence of Tarkwaian Series rocks on Kumasi basin sediments has not been reported. Re-interpretation of zircon geochronology revealed that the deposition of the Tarkwaian Series occurred in a short period between 2,107-2,097Ma. It is also constrained by intrusions of metagabbro sills dated at 2,102 plus-minus 13Ma (Adadey et al., 2009) and by granitoids at 2,097 plus-minus 2Ma (Oberthur et al., 1998).

The Paleoproterozoic granitoids are usually divided into belt-type of Lower Birimian age (e.g. Sekondi granitoid, 2,174 plus-minus 2Ma and Dixcove suite) and basin-type of Upper Birimian age emplaced from 2,116 plus-minus 2Ma to 2,088 plus-minus 1Ma (Hirdes et al., 1992; Davis et al., 1994). Hydrothermally altered and auriferous basin-type granitoids are ubiquitous in the vicinity of Obuasi along the western flank of the Ashanti belt, at Anyankyerim, Nhyiaso, Yao Mensakrom and Esuajah (Ayanfuri); all have intrusion ages within error of 2,105 ±2Ma. Geochemistry shows that the belt-type granitoids are juvenile additions to the Paleoproterozoic crust, while the basin-type granitoids are a result of crustal recycling and partial melting of an existing crust (WAXI II, 2013).

With the exception of some late granitoids and dolerite dykes, all other lithologies have undergone regional metamorphism that generally does not exceed upper greenschist facies. Muscovite, chlorite, actinolite and epidote define a general metamorphic assemblage (Oberthur et al. 1994). Calculated P-T ranges imply conditions of 340°C to 460°C at 2kb to 5kb based on the stability of the mineral assemblage (Schwartz et al. 1992). Peak metamorphic conditions occurred along the Ashanti Fault and have been estimated at 520°C and 5.4kb (John et al., 1999). The metamorphism has been dated on metamorphic titanites within the basin-type granitoids at 2,092 ±3Ma (Oberthur et al., 1998).

The Obuasi deposit comprises three identifiable trends, namely the Main trend, the Binsere trend about 5km to the northwest of the Main trend and the Gyabunsu trend about 3km to the southeast of the Main trend. The bulk of the auriferous deposits occur in the Main trend.

Five major shear zones have been identified within the Main trend with the Obuasi Fissure being the most prominent extending roughly NE-SW over a strike length of about 8km and mainly dipping towards the northwest at 65 to 90 degrees. The other identifiable mineralised structures within the Main trend are the Cote D'Or, the Ashanti, the Insintsiam, the 12/74 and various footwall and hanging wall mineralised structures. These secondary shears branch off the main shear in an anastomosing structural pattern.

Gold mineralisation is associated with, and occurs within, graphite-chlorite-sericite fault zones. These shear zones are commonly associated with pervasive silica, carbonate and sulphide hydrothermal alteration and occur in tightly folded Upper Birimian schists, phyllites, meta-greywackes, and tuffs, along the eastern limb of the Kumasi anticlinorium (i.e., the Kumasi Group). They are found near the contact with harder metamorphosed and metasomatically altered intermediate to basic Lower Birimian volcanics (the Sefwi Group). The contact between the harder metavolcanic rocks to the east and the more argillaceous rock to the west is thought to have formed a plane of weakness. This is because of the contrast in competency at the contact between the lithological units. During crustal movement, this plane became a zone of shearing and thrusting coeval with the compressional phases.

There are two broad styles of gold mineralisation at Obuasi which includes free milling quartz vein gold and sulphide rich disseminated gold lodes which form alteration haloes around the quartz vein lodes.

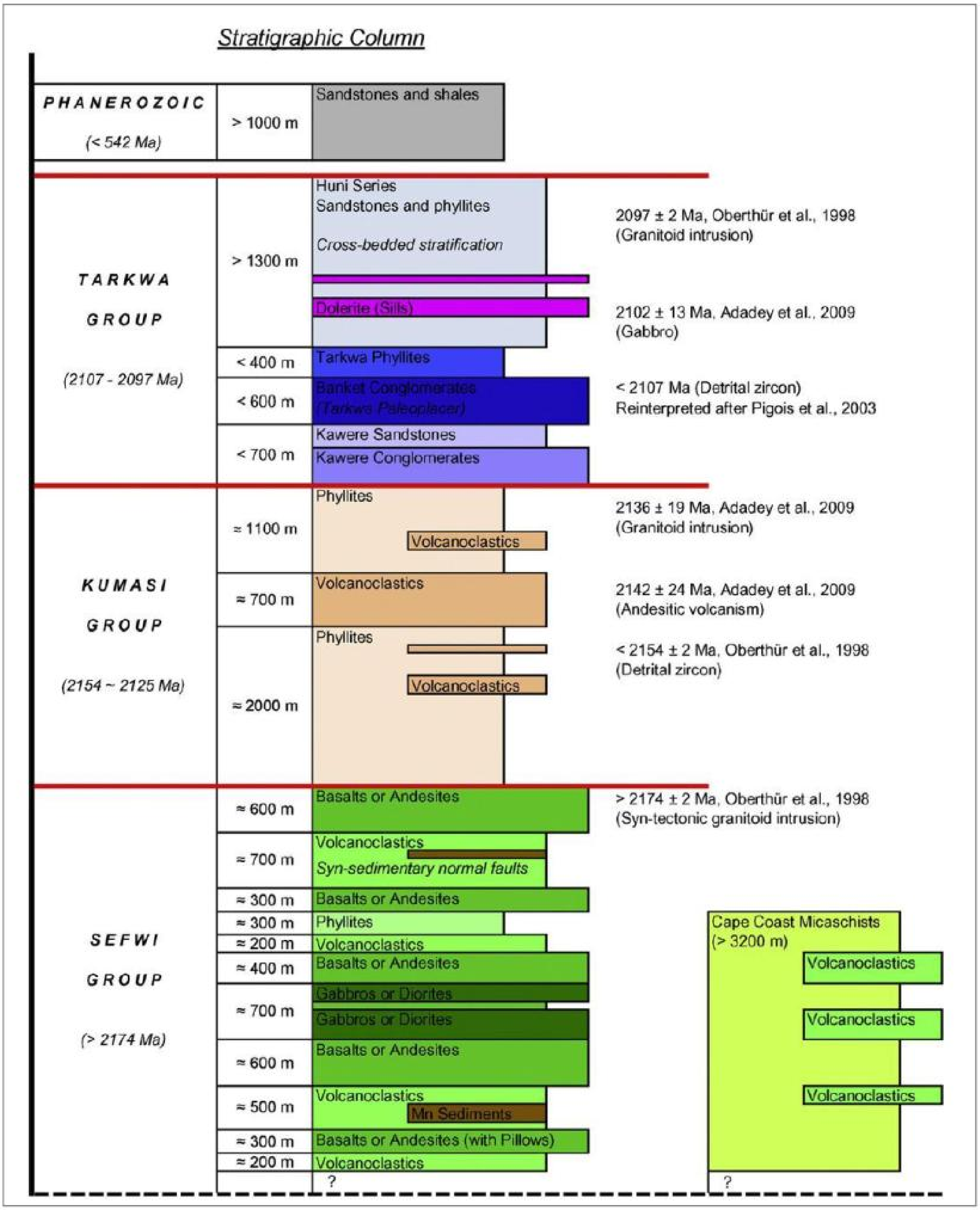
6.2 Geological model and data density

The geological model is constructed using geological data that has been obtained through underground geological mapping, cross-cut and reef drive sampling and exploration and grade control drilling. This information is then used to build an understanding of the local geology of the deposit and to extrapolate the models to depth and beyond data to guide the exploration program.

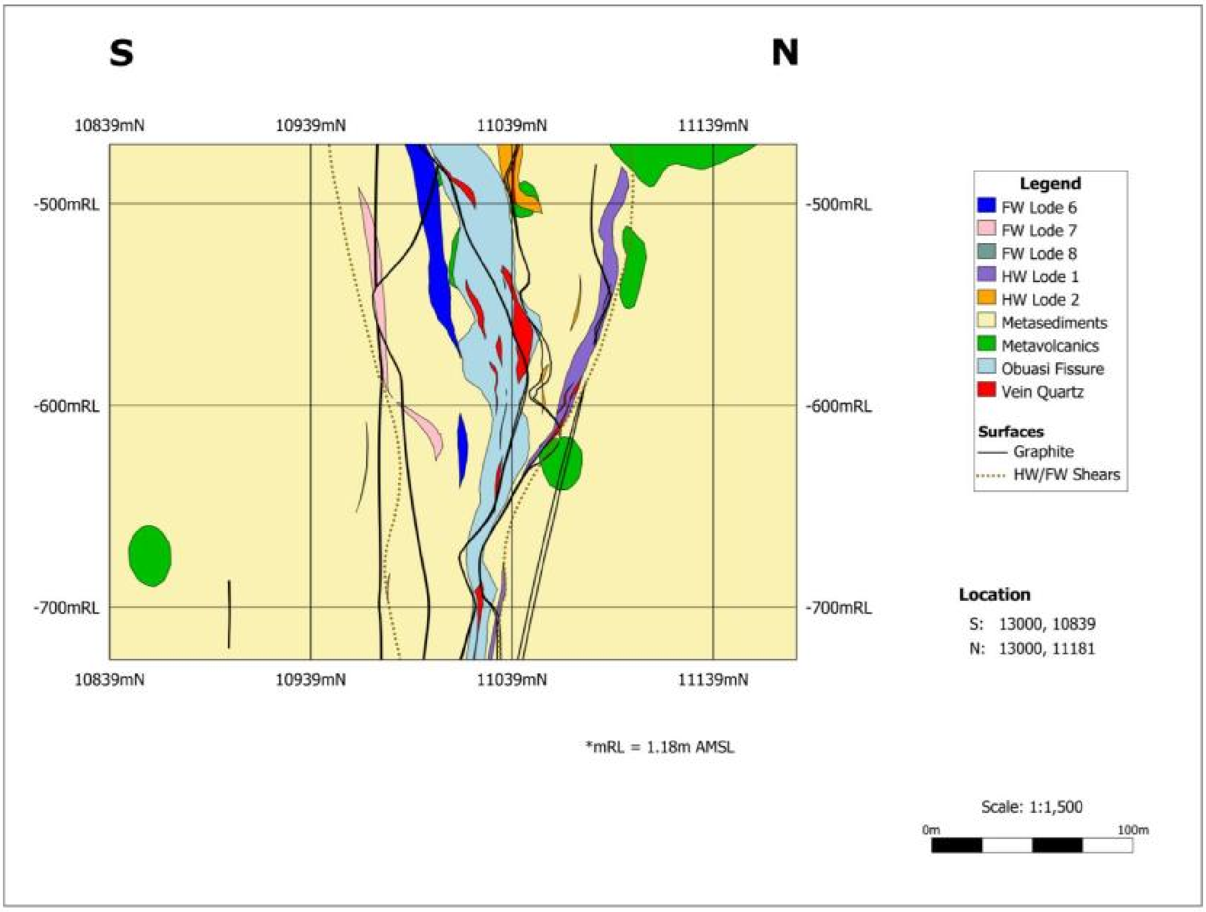
The mine has been exploited for over 120 years and the amount of geological data available is substantial and varied. The data has been collected over many years and the data density varies from close spaced grade control sampling (around 10m x 10m to 20m x 20m) to wider spaced exploration drilling ranging from about 50m x 50m up to 200m x 200m. Prior to 2014, all available data was converted to digital format and imported into a Fusion™ database. A review of the Obuasi Fusion™ database was undertaken in 2014 to ascertain the level of error associated with the database. Conclusions drawn was that the errors were varied and systematic and would necessitate a methodical approach to rectify the issues identified. A comprehensive data validation project commenced and in the ensuing years (2015-2017), the hard copy records were sourced, and a detailed validation exercise was undertaken. This, together with mine reconciliation records and a comprehensive QAQC program, implemented since 2005, improves confidence in the pre-2014 data. For all newly collected data, QAQC procedures are in place to ensure quality and reliability (as described in the following sections) both at collection and at the laboratory. The data density, distribution and reliability of information is considered sufficient to support statements concerning the mineralisation.

The Obuasi deposit is an orogenic gold deposit and the geological concepts being applied, and forming the basis of the exploration program, centres around this and the shear-hosted nature of the deposit. The first broad zone marks the boundaries of gold occurrence within which the shearing has occurred resulting in the Main Fissure and other hangingwall and footwall mineralised lodes. These are further separated into quartz and sulphides as deemed appropriate. Most of the shearing are parallel to the general strike of the deposit. The mineralisation dips steeply which informs the drilling orientations so that they are appropriate (attempts are made to intercept mineralisation perpendicularly). Mineralisation models are extrapolated beyond data along strike and depth (as deemed appropriate and representative of the geological concepts). Extrapolations beyond 100m are not included in the Mineral Resource estimates but are rather deemed exploration upside (not declared as Mineral Resource, but only used internally by the company to represent an exploration target or upside potential).

Stratigraphic column for the southwest of Ghana (Perrouty et al, 2012)



A typical S-N geological cross-section for Block 8 (X=13000mE)



6.3 Mineralisation

The mineralisation is classified into two types: sulphide hosted, and quartz lode hosted. Sulphide-hosted mineralisation is dominated by arsenopyrite (60-95% of all sulphides) with lesser amounts of pyrite, pyrrhotite, marcasite, chalcopyrite, and micrograins of native gold (Oberthur et al. 1994). This ore type has been responsible for half the gold production at Obuasi (Milesi et al. 1991). The larger arsenopyrite grains are zoned with gold-poor cores, gold-rich inner rims, and gold-poor outer rims. Gold within the sulphide mineralisation is refractory and locked in the sulphide lattice. The quartz lode hosted mineralisation is associated with spatially variable but exceptionally high-grade visible gold in quartz veins / lodes (up to 4m widths). The visible gold is within microfractures overprinting the quartz lodes. These lodes mainly comprise quartz but also minor amounts of ankerite and host rock fragments. The mineralised microfractures contain muscovite, gold, graphite and accessory minerals like galena, chalcopyrite, sphalerite, bournonite, boulangerite, and aurostibine (Oberthur et al. 1994).

The mineralised zones have a strike length of approximately 8km and extend to depths ranging from about 1,000m in the south of the mine (near Sansu) to 2,200m in the north of the mine (Blocks 11 and 14). The width of the mineralisation varies across the deposit. It is thicker in the south (20m to 40m) than in the north (10 to 20m) and narrows with depth where it is around 2 to 8m thick. The mineralisation is associated with, and occurs within, graphite-chlorite-sericite fault zones. These shear zones are commonly associated with pervasive silica, carbonate and sulphide hydrothermal alteration and occur in tightly folded Lower Birimian schists, phyllites, meta-greywackes, and tuffs. The most significant mineralised zone encountered on the property is called the Obuasi Fissure. It is steeply dipping and strikes for approximately 8km. Although the structure itself has high continuity, it is variably mineralised with the best mineralisation plunging at about 45 degrees to the north. Various hangingwall and footwall mineralised lodes splay off the Obuasi Fissure.

They can be very well mineralised (especially close to the Obuasi Fissure), but their continuity decreases with distance away from the Fissure and generally eventually pinch out. Other identifiable and more continuous mineralised structures within the Main Trend are the Cote D'Or, the Ashanti and the Insintsiam. However, these secondary shears branch off the main Obuasi Fissure in an anastomosing structural pattern. These mineralised lodes are persistent and deep seated, forming in shear zones controlled by thrust faulting along the contact between the Lower Birimian phyllites and Upper Birimian metavolcanics. The mineralised zones generally comprise of quartz mineralisation surrounded by sulphides. In the south and at shallower levels, the sulphide mineralisation dominates. It is thick and well developed surrounding less continuous and narrower quartz zones. Towards the north, and at depth, the mineralisation narrows, and quartz start to dominate especially at depth, where it is much more continuous with little surrounding sulphides.

7 Exploration

7.1 Nature and extent of relevant exploration work

A substantial amount of exploration work has been carried out for the mine over several decades. Prior to the redevelopment of the mine in 2019, underground diamond drilling was carried out by an in-house drilling department and combined with systematic underground mapping and extensive reef drive and crosscut channel sampling. Since redevelopment, underground mapping activities have continued, but crosscuts and reef drives are no longer sampled. It has been fully replaced by diamond drill sampling which is being done by drilling contractors Boart Longyear™ and Westfield Drilling Limited™.

During 2021, infill drilling focused on 41 and 32 levels, while the expensed drilling targeted the George Cappendell Shaft (GCS) top (Block 8). The GCS top area has extensive historical mining; however, the block has further opportunity for Mineral Resource identification and definition with the planned drilling program. The upside potential focused on between 900 Level to 1400 Level. The strategy is to make use of the existing stockpile cuddies along the main decline and drill from 8 Level towards 14 Level. A total of 10,998m have been planned for the area, results are showing that continuity and grades are improving as the drilling extends down dip and plunge.

The focus of the definition and infill drilling during 2021 was to upgrade areas in Blocks 8L and 10 from Inferred to Indicated Mineral Resource and ultimately prepare it for mining by completing the last phase of grade control drilling. The strategy is to use 32 and 41 Level as the main drilling platforms and target the area below 32 and 41 Level respectively.

The Block 10 area being drilled lies along the trend of a flat plunging shoot of approximately 380m vertical extent, where the current geological interpretation shows wider mineralisation with multiple lodes. A total of about 32,000m is being drilled on 41 Level. Results from the drilling show that the dip of the Obuasi Fissure, which is the main drill target, appears to steepen and roll over an easterly plunging felsic igneous body. High-grade mineralised quartz veins seem to be concentrated around the margins of this felsic igneous body creating a drill target at depth. Where tighter spaced drilling has already been done into the area, elevated metal content has been observed.

The shear zone, within which the mineralisation in Block 8 is focused, is around the 12/74 fissure which links the Obuasi Fissure to the east with a network of carbonaceous shears on the margin of the Sansu dyke to the west. The Obuasi and 12/74 fissures splay apart at the eastern end of Block 8 with the Obuasi Fissure continuing in a WNW direction. A total of about 16,000m is being drilled from the 32 Level platform targeting the mineralisation below the platform. Results show a continuous Obuasi Fissure below 32 Level but with strong display of pinch and swell characteristics.

Both drilling and non-drilling geological data are collected for the mine. The non-drilling data include mapping data and reef drive- and crosscut sampling. For crosscuts, sampling was carried out on both the north and south walls of the crosscuts along channel cuts of about 1.0m from the floor. Three channels were sampled on each wall (at the bottom, middle and top). Only the mid channel samples are currently extracted from the database. For reef development, face cut samples were taken across the entire reef at the development face, at 5-metre intervals. Since redevelopment, crosscuts and reef drives are no longer sampled and it has been fully replaced by diamond drill sampling. However, the past crosscut and reef drive samples form a substantial and useful dataset and are therefore still used.

The reef drive samples are not considered adequate for grade estimation, but they do supply useful information for geological interpretation and are therefore included for wireframe modelling. In contrast, the crosscut channel samples are deemed to be representative and of adequate quality to be included in grade estimation. The introduction of grade bias, because of the use of both diamond core and channel samples for grade estimation, has been highlighted as a potential concern. Yet, bias tests conducted to date, suggest that the bias between channel and diamond (DD) core grades are within acceptable limits and that they may be used together for grade estimation (see Section 8.1 for more information). With time, as mining progresses, there will be less reliance on channel sampling as all new sampling is by DD core drilling.

Over the years, extensive underground mapping has been completed and this practice has been continued. All mapping information (old and new) is considered during geological wireframe interpretation and includes rock types (such as metasediments, metavolcanics, graphite, or quartz); the contacts between these or the positions of geological structures. Prior to 2019, conventional mapping was undertaken by washing of the development headings and observing the faces as well as the side walls. The rock types were noted, and the boundaries marked out. The attitudes of the geological structures and contacts were measured, and reference pegs put in place. Currently, a new mapping software, 3DM Analyst Mine Mapping Suite™ (3DM, Datamine™), is used in conjunction with the conventional method to map all geological structures and contacts. Pictures are taken underground, geo-referenced and exported to the 3DM software. The structures, as well as the lithological contacts, are then digitised to generate strings which can be used to guide geological interpretation.

The data acquired from the drilling and non-drilling data include lithology, structure, alteration, mineralisation, geotechnical and rock characteristics, this is captured electronically where it is combined with the assay information to give an extensive database of geological data per mapping and sampling point. Since 2020, density data is also routinely collected for a representative subset of all new drill samples. The geological data collected are deemed to be to a level of detail that supports Mineral Resource estimation.

Obuasi is a large deposit covering a strike length of about 8 km and extend down to depths of about 2 km in some areas. Exploration activities have been undertaken in most areas over many decades. Since drilling recommenced about three years ago for the redevelopment project, exploration, and infill during have focused on the south of the mine in the two active blocks (Sansu and Block 8) as well as on 41 level in Blocks 1 and 10. Sansu and Block 8 extend for about 2 km and drilling have focused on the central parts of the Sansu block and, in Block 8, at shallower levels near the ODD decline and around current active mining areas deeper down. The 41-level drilling is being done in Blocks 1 and 10 and will eventually target a strike length of around 1.9km. No recent exploration has been done for the remaining blocks (Blocks 2, Cote D'Or, Adansi, Block 11 and Block 14).

The primary geological data collected over time include bulk density, geological data (lithology, alteration, mineralisation etc), survey data (downhole and collar), gold grade assays and quality control samples. All data is captured into a Fusion™ remote database. A data validation program was completed to validate all pre-2019 data stored in the Fusion™ database. Currently, all logging data is captured electronically (directly onto tablets); collar and downhole surveys are electronically transferred as well as laboratory assay results. Several validation checks are completed before the data is authorised and approved for geological modelling and grade estimation. Checks include items such as "completeness" (all required data, including the meta data and table data); checks on the spatial information (collar and survey) and interval checks (such as overlapping intervals or duplicates). Once the data is authorised, it is directly extracted from the Fusion™ database for modelling and estimation (directly imported into the modelling software using ODBC links and SQL views). The Fusion™ database is stored on a site-based server which is regularly backed up (daily; weekly and monthly). The monthly backups are in turn stored offsite at the Gold House office, Accra, in a safe box which is housed in a safe room. The Fusion™ database also remotely synchronises with a server located off site in the corporate office in Johannesburg.

No data from other parties or sources are used in Mineral Resource estimation.

7.2 Drilling techniques and spacing

Prior to the mine going into care and maintenance (2016), underground DD drilling was carried out by the in-house diamond drill department. The rigs used were the LM90™ and the LM75™ electric-hydraulic rig with NQ sized core. Currently, only DD core drilling is being done.

It is outsourced to two drilling contractors namely Westfield Drilling Limited™ (Westfield) and Boart Longyear. Westfield operates two rigs (of ESD-9 type) which drills NQ2 sized core while Boart Longyear operates 3 rigs (one LM110™, one LM90 and one LM75) which also drills NQ2 sized core. The core is oriented by both contractors using a TRUCORE™ Core Orientation Kit (Boart Longyear) or a REFLEX ACT III™ system (Westfield) which digitally records the orientation of the core sample and other key data.

Logging is conducted as per an in-house procedure which is compliant with company guidelines. The logging is done with sufficient detail on lithology, structure, alteration, mineralisation, and rock mass quality to support the geological modelling, estimation, mining, metallurgical and technical studies required to support the Mineral Resource and Mineral Reserve estimation. Data is electronically captured (on handheld tablets) and stored in the Fusion™ Remote database. Half-core and sample chip trays are retained for the purposes of further reference and detailed logging as required. Since 2019, only DD core samples are being collected. However, the previously collected channel samples are still retained and used in Mineral Resource estimation.

Logging is both qualitative and quantitative in nature. Core photography is conducted in-house; is electronically stored and takes place before core cutting as well as after core cutting in the case of half-core sampling.

Logging is completed over the entire length of each drillhole.

Both Westfield and Boart Longyear use the REFLEX EZ-TRAC™ survey tool for downhole surveys. Downhole surveys are taken at 6m, 30m then every 30 meters down the hole and at the end of the hole. REFLEX EZ-TRAC™ was also used in the past (pre-2019). The downhole survey data is provided electronically through either the IMDEX HUB-IQ™ software hub or as CSV files. The data is validated by the project geologist before it is imported into the Fusion™ database. Any anomalous results are queried and resolved or excluded.

DD and reverse circulation (RC) samples informed the open pit estimates. For underground estimation, DD and channel samples were used. Channel samples are no longer collected and have been fully replaced by DD.

Details of average drill hole spacing and type in relation to Mineral Resource classification

Category	Spacing m (-x-)	Type of drilling				
		Diamond	RC	Blasthole	Channel	Other
Measured	15x15	Yes	Yes	-	Yes	-
Indicated	60x60	Yes	Yes	-	Yes	-
Inferred	90x90	Yes	Yes	-	Yes	-
Grade/ore control	15x15	Yes	Yes	-	Yes	-

7.3 Results

AngloGold Ashanti has elected not to provide drilling results for its operating mines as drilling at these operations are generally done to provide incremental additions, or conversions to already reported Mineral Resource and therefore they are not seen as material. While these increase confidence in our Mineral Resource as well as add LOM extensions, the incremental additions that occur on a yearly basis are not material to that operation or the company as a whole. In cases where the drilling projects are supporting a non-sustaining addition, these projects are commented on in the project section of the report (Section 1.4 and/or Section 7.1). In our major greenfield projects, if any single drill result is considered material, and may change the reported Mineral Resource significantly, then it will be reported.

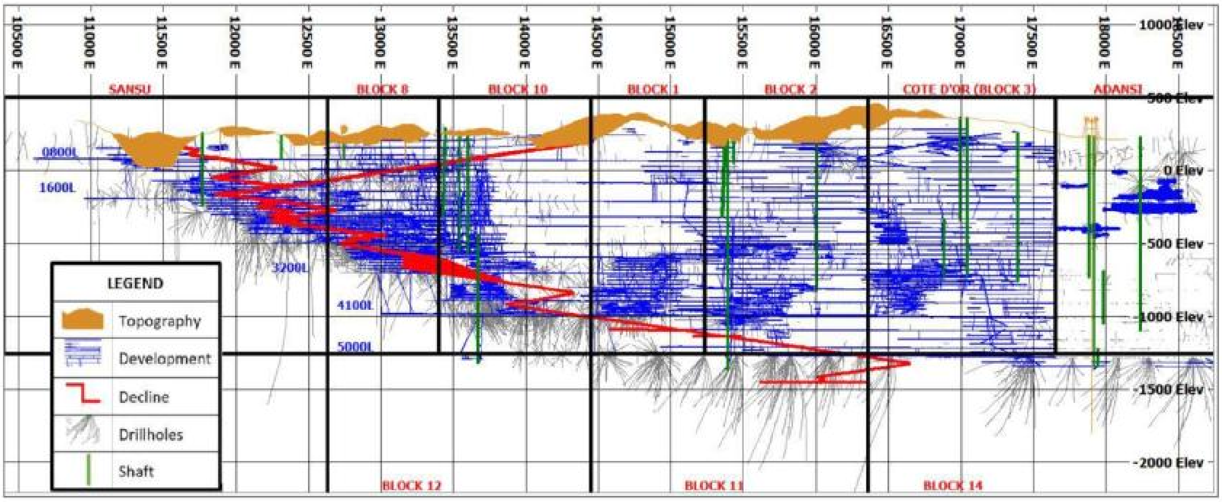
As such, this report is not being submitted in support of the disclosure of exploration results and therefore no disclosure of drilling or sample results is provided.

7.4 Locations of drill holes and other samples

The Obuasi deposit is large, extending over 8km along strike and 2km in depth, with mining taking place for more than 120 years. Due to its extent, for practical purposes, the deposit is subdivided into various

blocks. The extent to which each block has been drilled, is illustrated below. It is showing the full mine extent along strike, in relation to the shafts, main Obuasi decline and primary development. It is presented in local grid. Currently mining is taking place in Sansu and Block 8 with exploration drilling in Blocks 1 and 10. Block 2, Cote D'Or and Adansi are older, more extensively mined areas, but no activity is currently taking place in these areas. No mining has yet taken place in the deeper Blocks 11 and 14.

Section showing the underground areas with the locations of drillholes, shafts, declines and development (in local grid)



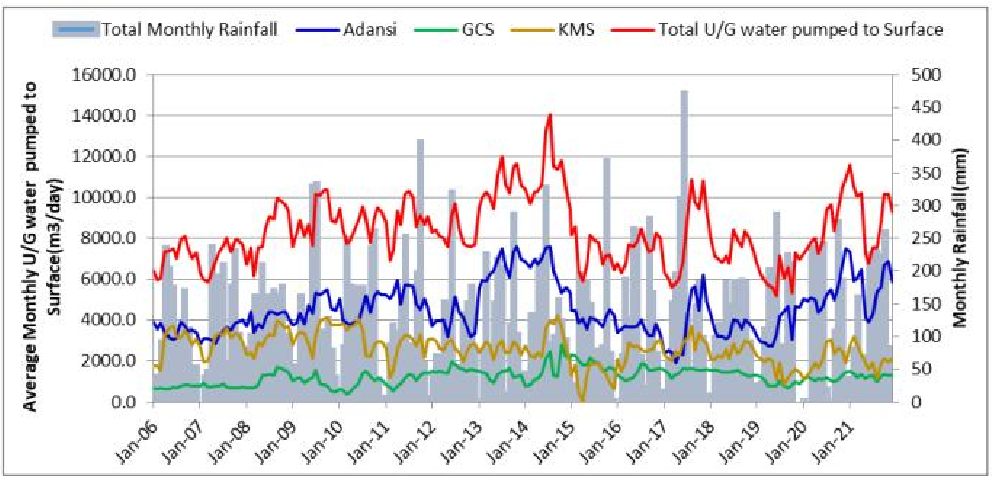
7.5 Hydrogeology

Rainfall and underground pumping

Mean annual rainfall at the site is about 1,580mm, of which about 75-80% falls within a seven-month wet season from April to October. The figure below shows that, for the past 15 years (2006-2021), the mine pumping rate varied seasonally with a minimum of about 5,218m^3/day (60l/s) in June 2019 and a maximum of about 14,049m^3/day (163 l/s) reported in June 2014. In addition to a general increase in pumping during the wet season, short term increases in the pumping rate also correlate with discrete high rainfall events, which suggests that a significant portion of the water is derived from discrete recharge sources.

Available historical records and anecdotal information indicate that, since the aerial mine footprint area was expanded to its maximum extent in the early 1980s, the overall pumping rate has remained fairly constant, varying only and with rainfall patterns (seasonal and longer-term trends). The overall pumping rate has not increased significantly as a result of deepening of the mine workings.

Rainfall and pumping



Water quality – ground and surface water sampling

Environmental sampling at Obuasi is conducted both for surface water and groundwater. Surface water is sampled by the grab method where containers are used to collect the samples from the water bodies. Groundwater sampling is conducted in monitoring boreholes across the mine for the purpose of monitoring specific facilities. All boreholes are purged before sampling with submersible low flow pump (Grundfos® Redi-Flo2). Underground water from pump stations is also periodically sampled and analysed. Physical parameters including pH, electrical conductivity, Oxidation-Reduction-Potential, and turbidity is checked and recorded on field sampling sheets.

In line with the mine's sampling protocols, 10% duplicates and blanks are taken for every sampling regime. Samples are preserved for parameters that are not analysed immediately to ensure that the chemical composition of the sample at the time of analysis is the same as it was at the time and place of sampling.

As part of the Obuasi water management strategy to reduce pumping from underground by recharge reduction, identifying sources of recharge was of concern. In line with that, and as part of the feasibility study work, about 149 and 139 water samples were taken for hydrochemical and isotopic analysis respectively. These samples were from underground workings, surface water, pit lake/ponds/dams, monitoring and water supply wells. The main objective was to identify sources of recharge to underground workings. Chemical composition analysis of all water samples were undertaken as a basis for understanding the interaction between the surface and groundwater using Piper and Durov plots, coupled with oxygen-18 and deuterium isotopic analysis of all the 139 water samples. Stable isotopes were used to understand the interrelationships between rainfall, surface water groundwater and pit lakes/ponds. Sampling locations were grouped for the purpose of evaluation and interpretation as:

- Surface water: water sampled from rivers, streams and springs.
- Underground water: water sampled within underground workings.
- Groundwater: water sampled from monitoring and water supply wells.
- Pit lakes/pond/dam water: water sampled from pit-lakes, ponds and dams.

Chemical compositions of all groups were presented as a basis for understanding the interaction between surface and groundwater. Piper and Durov plots were developed for all groups of water occurrence in the sampling program.

The hydrochemical analytical results are presented as descriptive statistical parameters (i.e., maximum, minimum, and average in the table below.

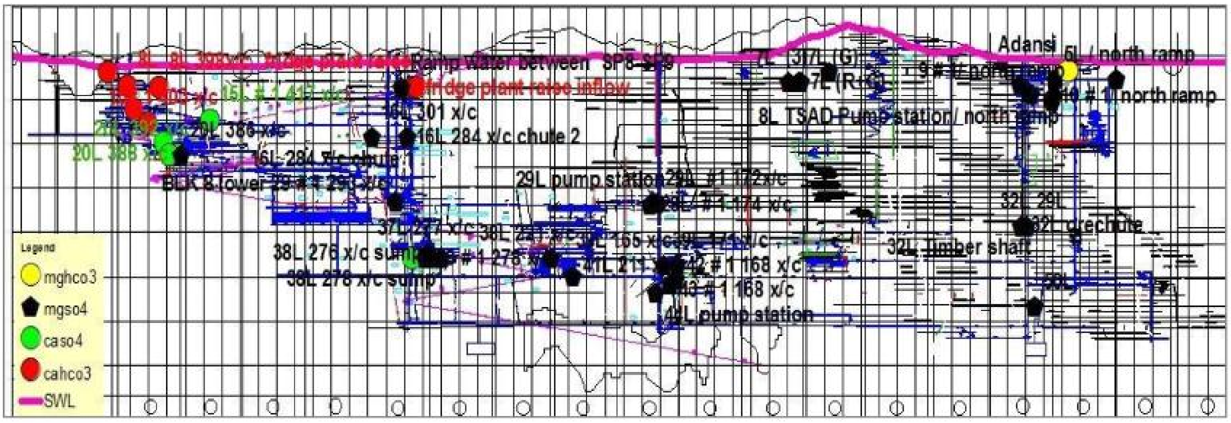
Summary of major hydrochemical parameters of samples

Parameter	No	1	2	3	4
	Water	Surface water	Under-ground	Groundwater	Pit lakes/ ponds/dams
pH	Max	7.8	8.4	7	7.9
	Min	6.8	5.7	3.8	6.8
	Avg	7.3	7.8	6.2	7.4
EC (umho/cm)	Max	2,780	5,330	1,868	4,890
	Min	61	352	27	233
	Avg	706	2,452	291	1,563
TDS (mg/l)	Max	2,272	6,144	1,380	5,016
	Min	46	194	26	84
	Avg	574	2,494	215	1,380
Total Hardness (mg/l)	Max	1,427	4,915	587	2,151
	Min	33	129	11	89
	Avg	410	1,825	118	817
Total Alkalini as CaCO3 (mg/l)	Max	260	504	235	248
	Min	23	24	1	38
	Avg	110	186	74	125

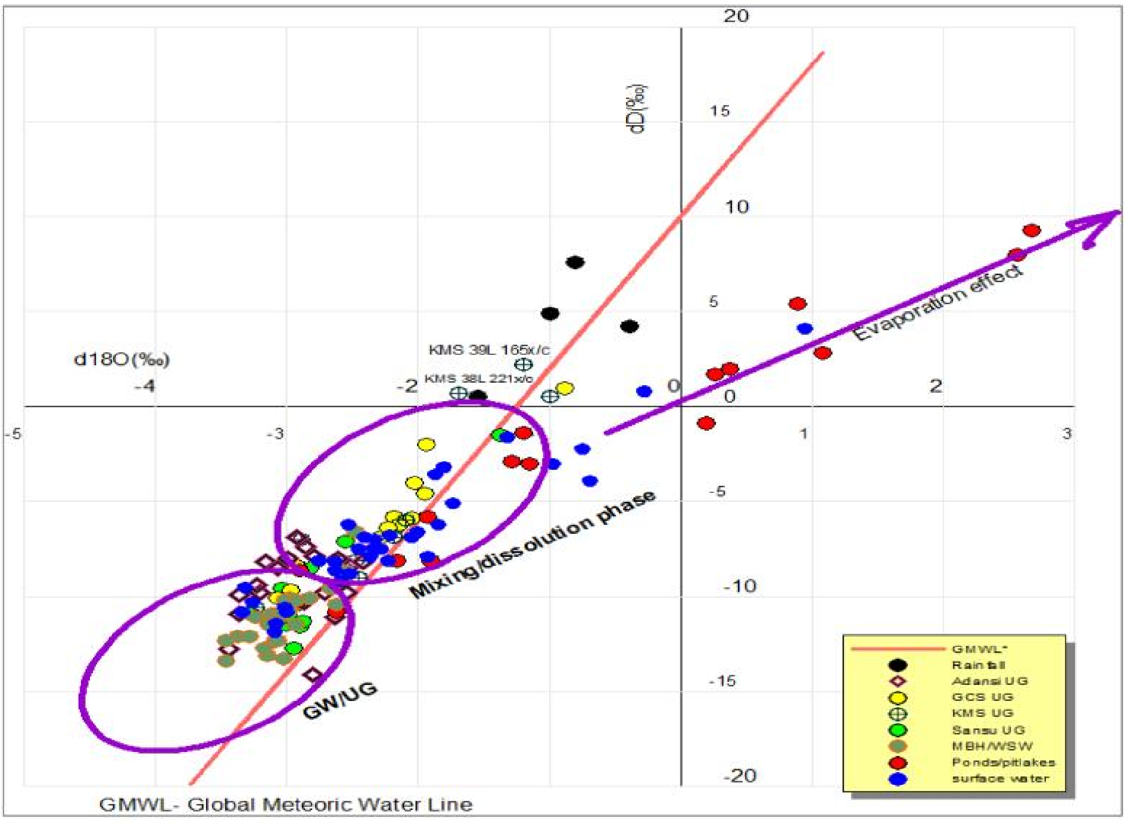
The Piper and Durov plots showed Ca and HCO_3 as most dominant ions in surface water samples whereas Mg and SO_4 were dominant in underground samples with 14% of the samples being of $CaHCO_3$, 7% $CaSO_4$, 4% $MgHCO_3$ and 75% $MgSO_4$. It was evident that $CaHCO_3$ types of water within the underground workings were mostly recharged from the surface water. Isotopic signatures of some underground samples tend to plot in the same zone as the rainfall data implying recent rainfall recharged these areas (as presented in the figures below).

Three types of water were identified within the underground workings:
- Underground water: in situ groundwater.
- Mixture of underground water and surface water.
- Mixture of underground and rainfall.

Underground water types for underground sampling points



Underground isotopic plots



Aquifer system

The mine occurs in basement metasedimentry and metavolcanic rocks (predominantly phyllites), beneath a well-developed regolith zone which may be up to 70 m thick in some places. Gold mineralisation is associated with major northeast striking graphite-chlorite-sericite fault zones. The northeast structural trend also exerts a major influence on the hydrogeology, with strongly enhanced permeability along strike. Compartmentalisation along the main structural strike is also evident due to cross-cutting faults, though the effect of these has become reduced with time because of the inter-connected nature of the workings along their 8km strike length.

The aquifer system is defined on the basis of its permeability, saturation and extent. The underground geological settings restrict the groundwater flow to joints, fractures or other openings within the rock formations. The weathered zone which covers part of the mine catchment has a variable porosity as a result of variation in lithology from weathered to hard rock. This produces localisation of aquifer and perch aquifers. The lithology has a variety of primary and secondary porosity and is therefore permeable ranging from partly saturated to unsaturated.

Hydraulic conductivity values for all major units of the stratigraphy have been defined based on results of pumping tests and the subsequent interpretation of constant discharge and recovery tests using the Jacob's method (which forms the standard technique or pumping test data interpretation). It was then detailed from using FEFLOW™ for groundwater modelling. The hydraulic properties of the different units were initially entered based directly on the 'average' values for each lithology derived from pump tests. They were then iteratively adjusted within the limits of the minimum and maximum values derived from the tests until optimum model convergence was achieved.

The values ultimately used in the calibrated numerical model are summarised in the table below. The fractured bedrock unit is discretised to represent the discrete formations with different K values.

Hydraulic conductivities of main hydrogeologic units

Hydrostratigraphic unit	Hydraulic conductivity	Specific storage (1/m)
Laterite	1.70E-05	0.0001
Saprolite:Highly weathered phylite	2.00E-05	0.0001
Saprolite/Saprock: Moderately weathered phyll	9.00E-05	0.0001
Fresh Phylite	1.76E-05	0.0001
Phylite	5.00E-09	0.0001
Deep Phylite	1.26E-10	0.0001
Volcanics	5.00E-10	0.0001
Volcano-clastics (Upper-Birimian)	4.00E-10	0.0001
Quartzite (Tarkwaian)	3.00E-10	0.0001
Tarkwaian	4.50E-10	0.0001
Granite	1.00E-10	0.0001

Due to the mode of initial deposition of meta-sedimentary units of the fresh phyllite zone, anisotropy between horizontal and vertical hydraulic conductivity may occur. In addition, foliations and folds observed in the deep fractured bedrock may have an effect on the flow direction. In the absence of any specific basis for incorporating anistropy within this layer into the model, it was assumed however that vertical hydraulic conductivity is equivalent to horizontal conductivity.

Recharge

Virtually all groundwater inflows are now derived from ongoing infiltration and recharge over the mine area. There is virtually no regional-scale groundwater flow in the basement rocks away from the immediate mine area. There is no longer any significant component of groundwater storage removal, even as the workings are deepened.

Groundwater levels observed in recently constructed environmental monitoring wells suggest that the area of dewatering influence extends past the 8km NE-SW strike length of the mine but is limited to 0.5 to 1 km to the north-west and south-east and is mostly limited to an area about 7- 8km^2 in extent.

Historical and recent underground flow mapping and field observations suggest significant mine water inflows are derived from infiltration through the overlying mined out pits, with the remainder derived from infiltration over the general area of drawdown influence, including holding ponds and other surface water infrastructure. Historical mapping has also indicated infiltration contribution from the Rusty Monkey and Sansu pits which are now partially backfilled.

Typical natural recharge rates have been estimated through a number of previous studies, as summarised in the table below. These provide a range of values for recharge as a percentage of mean annual precipitation (MAP) which extends from 11 to 22.7%.

Recharge estimates from previous studies

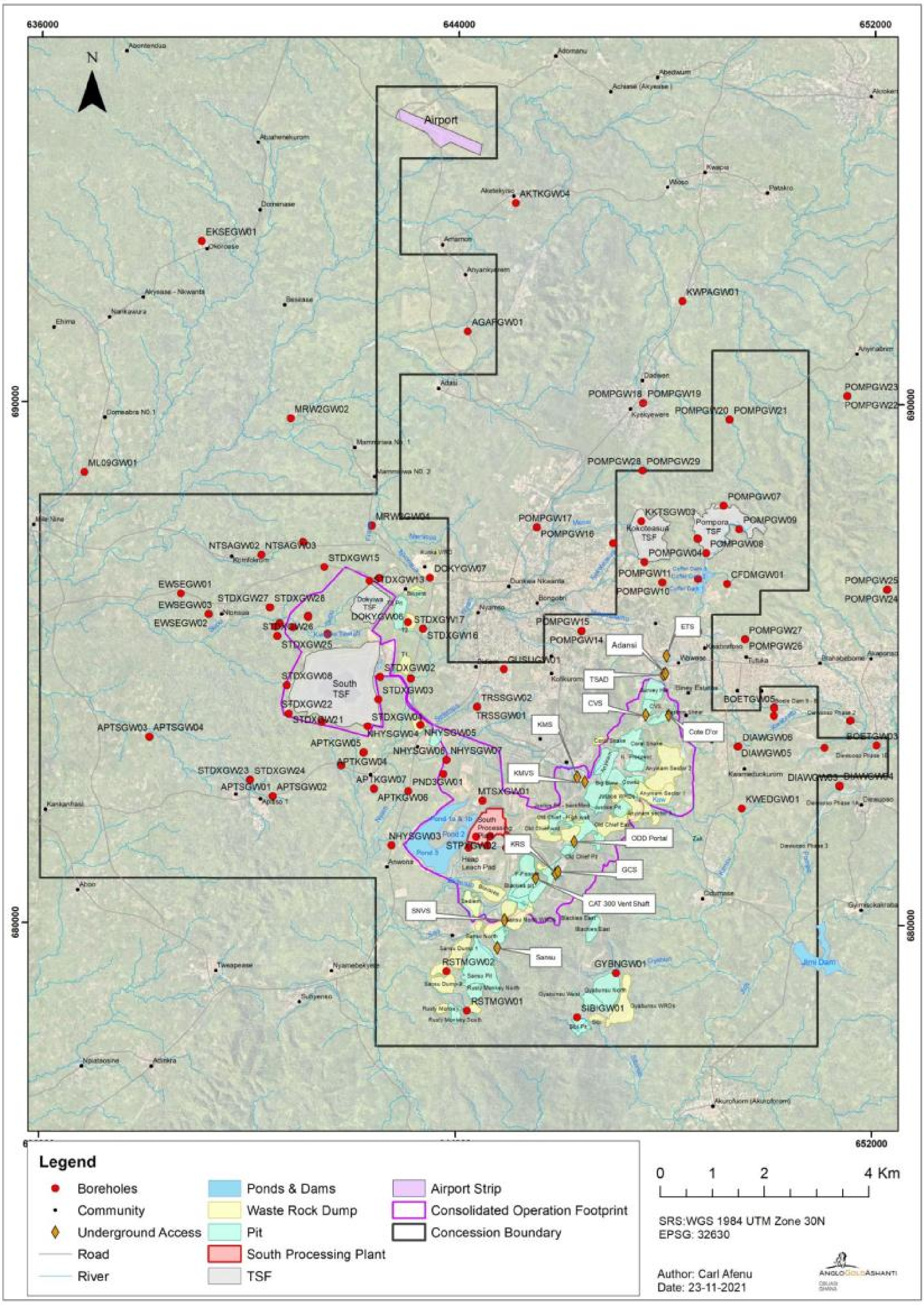
Source	Methodology	Recharge (mm/yr)	Recharge (%MAP)
Golder,2010	Chloride	389	22.7
Kuma, 2007	Soil moisture	299	17
	Baseflow analysis	192±30mm	12
SRK, (2011)	Numerical model	173(natural)	11
		225 (waste rock)	14

Groundwater Discharge

Natural groundwater discharge at the mine occurs along the axes of surface water drainage channels in the form of river base flow. Very little surface water flow monitoring has been undertaken historically at the mine and hence the contribution of base flow to the stream hydrographs across the site is not well understood.

In the sector of the Obuasi concession, which has been subject to underground mine development, the most important mechanism of groundwater discharge is essentially artificial and relates to the pumping of water from underground sumps. Within the mine, groundwater inflows are conveyed via a complex system of gutters, raise bores and cascade dams to the lowest level within each sector of the mine. The water is then pumped to surface from collection sumps. The rainfall and pumping figure presented earlier on in this section, shows monthly pumping rates in conjunction with monthly rainfall. Average daily pumping rates to surface is estimated to be of the order of 97L/s over the period 2006-2021.

Obuasi monitoring wells and infrastructure



7.6 Geotechnical testing and analysis

The geotechnical evaluations involve assessment of all available geotechnical data which includes rock mass and structural data from geotechnical logging of DD core and mapping of underground exposures together with laboratory testing of intact rock properties.

Geotechnical parameters are logged to provide sufficient data for determination of all the major rock mass classification systems including Rock Mass Rating (RMR), Rock Tunnel Quality Index (Q and Q') and Geological Strength Index (GSI). The parameters logged include rock types, geotechnical intervals, core recovery within geotechnical intervals, RQD, number of discontinuities, fracture infill types, number of joint sets, fracture frequency, Qualitative Strength Index (QSI), etc. An example of the rock mass logging parameters and the coverage of geotechnical logging/mapping data are shown below.

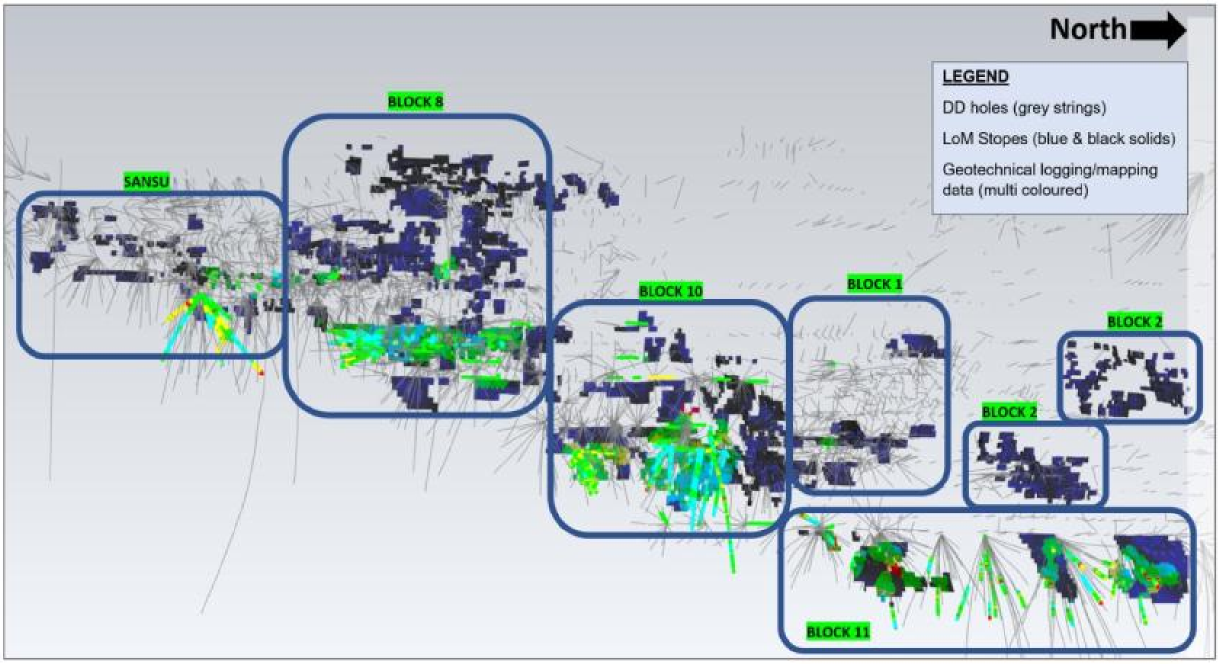
Example of geotechnical rock mass core logging parameters

BHID	From (m)	To (m)	Inter-vals (m)	Major Rock Type	Weathe-ring	Reef/ Waste	QSI	Recovery (m)	RQD (m)	Reco-very (%)	RQD %
OB115875	0.00	14.30	14.3	GK	FR	W	R4	14	12.70	98	89
OB115875	14.30	28.04	13.7	GK	FR	O	R4	13.7	13.30	100	97
OB115875	28.04	28.84	0.8	QTZ	FR	O	R2	0.8	0.45	100	56
OB115875	28.84	39.80	11.0	GK	FR	O	R4	10.96	10.52	100	96
OB115875	39.80	58.54	18.7	GK	FR	O	R4	18.7	18.00	100	96
OB115875	58.54	63.80	5.3	QTZ	FR	O	R3	5.26	3.88	100	74
OB115875	63.80	68.26	4.5	CSC	FR	O	R3	3.76	2.40	84	54
OB115875	68.26	72.80	4.5	GK	FR	O	R4	4.2	3.88	93	85
OB115875	72.80	78.80	6.0	GK	FR	W	R4	6	5.88	100	98
OB115875	78.80	90.95	12.2	SCH	FR	W	R4	12.15	11.50	100	95
OB115875	90.95	97.00	6.1	SCH	FR	O	R4	6	6.00	99	99
OB115875	97.00	104.65	7.7	GK	FR	W	R4	7.65	7.38	100	96
OB115875	104.65	112.00	7.3	MV	FR	W	R4	7.21	5.32	98	72

BH ID	Joint sets	Fract (1) 0-30	Micro 0-30	Macro 0-30	Infill type	Infill Thick	JA	JWA	Fract (2) 30-60	Micro 30-60	Macro 30-60	Infill type	Infill Thick	JA	JWA
OB115875	3	6	PS	PL	B	1	B	1	35	PS	PL	B	1	B	1
OB115875	2	-	-	-	-	-	-	-	16	PS	PL	B	1	B	1
OB115875	2+	1	PS	PL	B	1	B	1	4	PS	PL	B	1	B	1
OB115875	2+	4	PS	PL	B	1	B	1	16	PS	PL	B	1	B	1
OB115875	2+	6	PS	PL	B	1	B	1	20	PS	PL	B	1	B	1
OB115875	2	-	-	-	-	-	-	-	19	PS	PL	B	1	B	1
OB115875	3	10	PS	PL	B	1	C	1	20	PS	PL	B	1	C	1
OB115875	3	6	PS	PL	B	1	B	1	8	PS	PL	B	1	B	1
OB115875	2	-	-	-	-	-	-	-	8	PS	PL	B	1	B	1
OB115875	3	8	PS	PL	B	1	B	1	17	PS	PL	B	1	B	1
OB115875	2	-	-	-	-	-	-	-	10	PS	PL	B	1	B	1
OB115875	3	6	PS	PL	B	1	B	1	10	PS	PL	B	1	B	1
OB115875	3	21	PS	PL	B	1	B	1	24	PS	PL	B	1	B	1

BH ID	Fract (3) 60-90	Micro 60-90	Macro 60-90	Infill type	Infill Thick	JA	JWA	Total fracture	FFPM
OB115875	24	PS	PL	B	1	B	1	65	5
OB115875	15	PS	PL	B	1	B	1	31	2
OB115875	4	PS	PL	B	1	B	1	9	11
OB115875	17	PS	PL	B	1	B	1	37	3
OB115875	22	PS	PL	B	1	B	1	48	3
OB115875	10	PS	PL	B	1	B	1	29	6
OB115875	15	PS	PL	B	1	B	1	45	12
OB115875	7	PS	PL	B	1	B	1	21	5
OB115875	10	PS	PL	B	1	B	1	18	3
OB115875	16	PS	PL	B	1	B	1	41	3
OB115875	10	PS	PL	B	1	B	1	20	3
OB115875	10	PS	PL	B	1	B	1	26	3
OB115875	22	PS	PL	B	1	B	1	67	9

Geotechnical logging/mapping data coverage within the mining blocks



The geotechnical logging parameters are assessed to generate rock mass classification which is used to build a 3D Mining Rock Mass Model (MRMM) for mine designs and stope stability assessment. The geotechnical rock mass model is represented by a simplistic set of domains (hangingwall, orebody, footwall) established per block, based on the dominant lithology present. Lithology of Obuasi consists of these main units: meta-sediments (schist, greywacke, carbonaceous/graphitic schist), meta-volcanics (dyke), graphite and/or quartz. The meta-sediment and meta-volcanic lithologies are intermixed throughout the hangingwall, orebody, and footwall areas. An example of rock mass classification for a logged borehole is shown below.

Example of rock mass classification derived from geotechnical core logging parameters

Borehole ID	From	TO	ROCK TYPE	RMR	MRMR	Q'				
						RQD/ Jn	Blk Size Class	Jr/Ja	Joint Strength Class	Q'
OB115875	0	14.3	Greywacke	52	38	10	Fair	1	Fair	9.87
OB115875	14.3	28.04	Greywacke	57	42	24	Good	1	Fair	24.2
OB115875	28.04	28.84	Quartz	41	30	9	Fair	1	Fair	9.37
OB115875	28.84	39.8	Greywacke	53	39	16	Good	1	Fair	16
OB115875	39.8	58.54	Greywacke	55	40	16	Good	1	Fair	16.01
OB115875	58.54	63.8	Quartz	48	35	18	Good	1	Fair	18.44
OB115875	63.8	68.26	Carbonaceous Schist	42	31	6	Poor	0.6	Poor	3.59
OB115875	68.26	72.8	Greywacke	51	37	9	Fair	1	Fair	9.5
OB115875	72.8	78.8	Greywacke	55	40	25	Good	1	Fair	24.5
OB115875	78.8	90.95	Schist	53	39	11	Fair	1	Fair	10.52
OB115875	90.95	97	Schist	54	40	25	Good	1	Fair	24.79
OB115875	97	104.65	Greywacke	53	39	11	Fair	1	Fair	10.72
OB115875	104.65	112	Dyke	47	34	8	Fair	1	Fair	8.04

Rock strength has been derived mainly from point load tests conducted on site. 948 rock samples from DD core were tested for point load strength. Samples were selected from the major rock types within geotechnically logged core from the various mining blocks. Uniaxial compressive strength (UCS) values were derived from the point load test results.

Summary of point load test results by mining blocks

Major Rock Type	Average UCS from Point Load Test for Rocks in Individual Mining Blocks						Average UCS (MPa)	Mine Range (MPa)
	Block 1 Lower	Block 2	Block 5 & 6	Block 8 Upper	Block 8 Lower	Block 9 & 10		
Schist	125.8	113.3	N/A	104.8	133	146	125	80 - 160
Carbonaceous Schist	67.4	70.4	53.1	72.8	80.2	82.3	71	60 - 90
Greywacke	155.1	120.5	N/A	142.9	155	149.3	145	120 - 180
Quartz	121.3	112.1	133.3	91.6	142.6	124.4	121	120 - 180
Schist/Quartz	40.1	43.5	N/A	98.95	120.83	144.4	90	40 - 145
Phyllite	N/A	N/A	N/A	90.1	N/A	103.6	97	80- 110
Dyke	N/A	133.6	118.7	N/A	176.3	143	143	120 - 180
Graphite								0 - 15

Uniaxial compressive strength and elastic properties were analysed by an external, approved rock mechanics laboratory on some selected rock samples from the active mining blocks. Currently, active mining blocks at Obuasi include Sansu, Block 8 and Block 10. Rock samples were selected from the major rock types within defined geotechnical domains of logged DD core for laboratory testing.

Thirty (30) rock samples were tested at the University of Mines and Technology (UMaT) Geotechnical Laboratory at Tarkwa (Ghana) for uniaxial compressive strength (UCS) according to ASTM: D2938-95 method specification. Fifteen (15) rock samples were tested for uniaxial compressive strength with elastic modulus & poisson ratio by means of strain gauges according to International Societies of Rock Mechanics (ISRM's) specification at Rocklabs Limited (a division of SOILLAB PTY LTD), Pretoria, South Africa. Single stage triaxial tests were conducted on 15 sets of samples at different confining pressures. For each set of triaxial tests, elastic properties were determined at each stage of confinement by means of strain gauges. The triaxial compression tests with elastic properties testing by means of strain gauges were done according to ISRM's specification at Rocklabs, South Africa. Twenty-eight (28) samples were tested for Brazilian tensile strength according to the ISRM's Specification at Rocklabs, South Africa. No direct shear tests on structural defects have been conducted. Shear strength parameters for structural defects are estimated from back-analysis of post-failure assessment of mined excavations/stopes.

Quality and validity assessment of the laboratory test results for UCS, triaxial compressive strength and Brazilian tensile strength has not yet been conducted.

The currently available laboratory tests for rock properties do not cover all the major rock types (schist, phyllite, greywacke, carbonaceous/graphitic schist, dyke, and quartz) across all mining blocks on the mine. The limited number of the UCS tests completed does not give a full representation of the known rock strength within all mining blocks. Hence, additional rock samples from the current DD program will be sent to external laboratories for rock strength properties testing to complement the existing dataset. A satellite geotechnical laboratory equipped with MATEST UCS equipment, which has been certified by the Ghana Standard Authority (GSA), has been set-up on the mine to undertake uniaxial compressive strength (UCS) tests of rock samples to generate sufficient rock property data for all the major rock types within the active mining blocks.

Summary of rock properties test results for the active mining blocks

Mining Block	Rock Type	Density (g/cm³)	UCS (Mpa)	Tensile Strength (Mpa)	Young Modulus (Gpa)	Poisson Ratio	m_i
Sansu	Greywacke	2.8	92.5	20.2	59.3	0.3	16.9
	Schist	2.7	55.1	14.4	67.1	0.3	9.9
	Carbonaceous Schist	2.6	58.3	17	63.7	0.2	10.1
	Dyke	2.9	83.5	13.3	51.9	0.2	7.5
	Quartz	Not Available					
	Graphite	Not Available					
Block 8	Greywacke	Not Available					
	Schist	2.6	59.7	15.9	50.3	0.2	2.9
	Carbonaceous Schist	2.7	63.5	11.3	58.8	0.3	9.6
	Dyke	3	62.2	13	69.9	0.3	Not Available
	Quartz	2.7	50.7	Not Available			
	Graphite	Not Available					
Block 10	Greywacke	2.9	304.7	17.5	67	0.3	Not Available
	Schist	2.8	141.2	15	69.5	0.3	3.7
	Carbonaceous Schist	2.6	75.7	10.4	61.3	0.3	5.9
	Dyke	3	117.6	12.8	62.2	0.3	9.2
	Quartz	2.6	89.3	Not Available	96.6	0.3	
	Graphite	Not Available					

Rocscience RSData™ software is used to derive the rock mass properties by analysing the intact rock strength characteristics and constitutive behaviour to determine strength envelopes and other material parameters. The derived material strength properties are used as input parameters for numerical modelling. Material strength properties derived by RSData™ are directly imported into numerical modelling software for numerical analysis.

It is generally asserted that meta-sediment and meta-volcanic units are of fair rock mass quality, while the graphite is of poor rock mass quality. The graphitic shear zone represents the main weakness and is a major driver of the potential failure mechanism because most of the stope and/or development failures observed are associated with presence of graphitic shears. However, the analysis of available geotechnical rock mass data coupled with field observations confirms that generally the rock mass quality of Obuasi decreases with depth.

8 Sample preparation, analysis and security

8.1 Sample preparation

DD core, RC chips and rock chip channel sampling (in crosscuts and reef drives) are the main sample types collected historically at Obuasi. Since 2019, only DD core samples are collected (although RC pre-collars were drilled during 2020; they are not used to drill mineralised areas and are not sampled). Although channel sampling is no longer being done, the previously collected samples are still used. There are usually three cross-cut samples at each location - one at the bottom, one in the middle and one at the top. Only the middle one is used.

The DD, cross-cut and reef drive samples are all used for wireframe modelling whereas only cross-cut and drill samples are used for grade estimation. All samples are analysed by the laboratory using a portable XRF instrument (a Bruker™ CTX). The main elements from the pXRF analyses currently being utilised include As, Si, Fe and S.

For RC (pre-2019), the sampling processes included sampling using multi-stage riffles to give a 25% split. If necessary, this was coned and quartered to give a sample of about 2kg to be sent to the laboratory for analysis. The sample condition is recorded in the logging sheet with reference to wet/dry and recovery.

For face chip sampling (pre-2019), the sampling processes included sampling of both the north and south walls of the cross cuts along channels cut 1m vertically from the floor (perpendicular to the geological domain) based on geological contacts and changes in the mineralisation. The weight of sample was approximately 1.5kg, obtained by cutting a continuous even groove 1.3cm deep and 2.5cm wide. Sampling was at various intervals generally ranging from 0.5m to 3m. This practice of sampling (face chip) has ceased but historical results is still used for modelling and estimation where appropriate.

For DD core samples, the zones to be sampled are clearly marked by the geologist based on the visual identification of quartz and/or arsenopyrite mineralisation, the presence of shearing or alteration and the presence of visible gold. The geologist marks the direction along which the core should be split, after considering the attitude of the bedding or foliation relative to core axis. Sampling is generally carried out at a maximum of 1m drill length intervals, with different geological units being sampled separately. In prior years, before the start of the redevelopment project, sampling was done at various intervals and could be as long as 3m with the average length at around 1.5m. All samples (old and new) are currently composited to 1.5m intervals (with minimum length of 0.3m). Datamine™ is used for the composting, with the Mode 1 method of compositing being used, which forces all samples to be included in one of the composites by adjusting the composite length, while keeping it as close as possible to the interval length of 1.5m. The appropriateness of the composite length is continuously reviewed.

For exploration drilling, the core samples are sawn into two halves, one portion is broken up and bagged for submission for assay while the other half is placed in the core tray to be stored for future reference. The grade control cores are wholly sampled. The samples are recorded onto the logging application and registered with barcode tickets before they are dispatched to the laboratory.

Sample sizes are considered appropriate to the grain size of the material being sampled.

Spatial data (collar and downhole surveys) are collected (as described in previous sections) for each drillhole and stored in the database.

Average bulk densities are used (2.65 g/cm^3 for quartz and 2.89 g/cm^3 for sulphide rocks). These are based on a bulk density study done in 2007 (Boachie, A., 2007). It was done across the mine, but based on few samples and, as such, required further confirmatory work. The routine collection of density data from drill core was instituted in late 2020 with the aim of improving on the bulk density confidence. The data collected so far, supports the values currently being used (based on the 2007 study) and shows low density variability within rock types.

DD core (and previous face chip samples) are logged in full to collect lithology, structure, alteration, mineralisation, and geotechnical information prior to undertaking the sampling.

Drillhole planning aims to take into consideration the geometry of the orebody, to ensure drillhole/orebody intersection is at right angle to the mineralisation. However, this is not always fully achievable given the limited availability of sites for drilling underground. Underground holes are often of a "fan" nature and hence, don't always optimally intersect the orebody. As all holes are surveyed, intersection angles are known and true widths can be calculated and are reported (not drillhole lengths, unless otherwise stated).

Exploration DD half-core samples are permanently retained (throughout the LOM). If the need arises to dispose of these, it requires approval, through a written disposal permit from the AngloGold Ashanti Ghana environmental department.

Pulp rejects from the laboratory are retained for 3 months, in case re-assay is required. All these samples are stored at the geology coreyard, where a purpose-built shed has been built to store and protect the core from the elements. This facility has 24/7 security.

Core recovery is measured for all core and is recorded in the Fusion™ database. The core depths are checked against the depth marked on the core blocks to calculate the core recovery. Any core loss is recorded in the database. Overall core recoveries are generally good and more than 90%.

The introduction of grade bias, because of the use of both DD core and channel samples for grade estimation, has been highlighted as a potential concern. Yet, bias tests conducted to date, suggest that the bias between channel and DD core grades are within acceptable limits and that they may be used together for grade estimation. In the Sansu area, comparison of the mean grades of the drillhole and channel samples within a suitable test area, showed differences of between 1% and 8% for adequately informed domains. With time, as mining progresses, there will be less reliance on channel sampling as all new sampling is by DD.

Exploration samples are sawn into two and one half prepared and dispatched for analysis and the other half is photographed and stored for future reference. Grade control samples are wholly sampled. There are no current RC samples, but previously they were rotary split dry.

8.2 Assay method and laboratory

Prior to the merger between the former AngloGold Limited and the Ashanti Goldfields Company Limited in 2004, all samples were analysed by a mine site laboratory facility (operated and managed by the mine) situated in the plant area. After the merger, the facility continued to analyse the grade control samples, but exploration and overflow samples were sent to Australian Laboratory Services (ALS) Chemex™, an accredited laboratory, situated in Kumasi.

The current onsite laboratory facility was constructed outside the plant area and operated by TMP Ghana Limited™ (TMP) in 2012. Soon after, in January 2013, TMP was acquired by SGS, and the laboratory was then operated by SGS until the mine went into care and maintenance in 2016.

All samples are currently analysed by this same onsite laboratory facility which was refurbished in early 2019. This facility is owned by Obuasi but managed and operated by SGS Soluserv Limited (SGS Soluserv™) under a 3-year contract. SGS Soluserv is a JV between SGS Inspection and Testing Services Limited (SGS) and Soluserv (Ghana) Limited. Sample analysis recommenced in May 2019 and all samples are dispatched to this onsite laboratory. SGS Soluserv is not accredited, however, the parent company (SGS) is accredited and globally reputable.

At the laboratory, samples are placed in an oven until dry (typically for 8 hours), then passed through a jaw crusher which reduces the maximum size to less than 6mm. A rotary splitter is used to reduce the sample size to 500 grams which is then pulverised to a nominal 95% passing -75µm using an LM2 pulverize. Wet sieve tests are done for 1 in 20 samples to check for 90% to 95% passing 75µm. A 30g sub-sample is taken for analysis. It is considered that the sampling method is appropriate, is properly implemented and that the resultant samples are representative.

To minimise the potential for contamination, the jaw crusher, splitter and pulverize is flushed with barren material between each sample. The mass of the samples is also cross-checked, in and out to ensure there has been no sample loss and/or contamination.

Gold determination is by fire assay on 30g aliquots with atomic absorption spectroscopy (AAS) or gravimetric finish (gravimetric for samples greater than 100 g/t). This analytical method is considered appropriate for the style of mineralisation and is considered total.

8.3 Sampling governance

Sample recovery is measured for all core samples and is considered good (greater than 90% recoveries). It is not suspected to be a significant source of bias.

A comprehensive Quality Assurance and Quality Control (QAQC) process is in place. It includes internal QAQC processes used by the laboratory as well as an independent, external process used by AngloGold Ashanti to independently verify QAQC performance. Overall, the QAQC results showed adequate accuracy and precision with no significant contamination. In addition, ongoing production data confirms the reliability of prior sampling and assaying.

Both DD core and channel samples (cross-cut) are used for grade estimation. Due to the difference in sampling methodology, there is potentially a bias between these sample types, although the latest bias tests (completed over the Sansu area) showed that bias was within acceptable limits. Comparison of the mean grades of the drillhole and channel samples within the Sansu bias test area, showed differences of between 1% and 8% for adequately informed domains. The other source of potential bias that may exist, is between the different sample campaigns conducted over the many decades of drilling and sampling. The comprehensive data validation exercise was done to minimise this risk and, as older areas become accessible, confirmatory drilling will be completed as a further step.

Barcodes are used at all stages of core movement and sampling. Initially, the core samples are transported by the drilling contractor in barcoded trays with the hand over point being the coreyard where the core is checked and is electronically recorded as "core received".

This barcoding is retained through all the logging and sampling stages, so that an individual core trays status can be checked at any point. Samples taken for assay are also barcoded at the coreyard before dispatch to the laboratory, with the individual sample's barcode being retained throughout its preparation and assay.

When logging and sampling is complete, the laboratory collects the samples from the coreyard, and a sample dispatch sheet is signed by all parties. The dispatch of the samples is also electronically recorded as "dispatched".

A new coreyard facility was built in 2019 which is significantly more secure than the old coreyard facility. All existing core has been moved and is now stored at the new facility.

Data used to update the Mineral Resource estimates at Obuasi is stored in a Datamine Fusion™ database. Much of the older data were captured on paper sheets and were manually entered into the database. During 2015-2018 a comprehensive data validation project was undertaken that focused on validating the data in the database by comparing the database against the original input data (such as the paper logs) and any noted errors (like transcription, survey grid or input errors) were corrected.

Currently all data both logging and mapping is electronically captured and processed. It is all stored in the Fusion™ database which has numerous data checks in place to ensure veracity and requires checks and logged authorisation before data can be loaded. The data is also directly extracted from the Fusion™ database for modelling and estimation.

The geology department completes monthly audits of the laboratory processes and procedures to ensure that the delivered assays are of adequate quality and reliability and that contract conditions are being met. A more comprehensive audit by a specialist is instituted on an ad-hoc basis. Such an audit was completed in August 2021. Several continuous improvement items were identified by the auditor, but no material risks.

8.4 Quality Control and Quality Assurance

The current independent QAQC measures undertaken at Obuasi include the routine submission of Certified Reference Materials (CRMs), blanks (pulp and coarse) and duplicates (pulp and coarse) at regular intervals. Each QC type is inserted at a rate of approximately 1 in 20 (5%) for both grade control and exploration samples. This level of insertion is in line with company guidelines and is considered adequate to comprehensively test for assay accuracy, precision and contamination.

The results are analysed by the database and QAQC Specialist as received and is compiled into a monthly report. Re-assay is requested for failed samples.

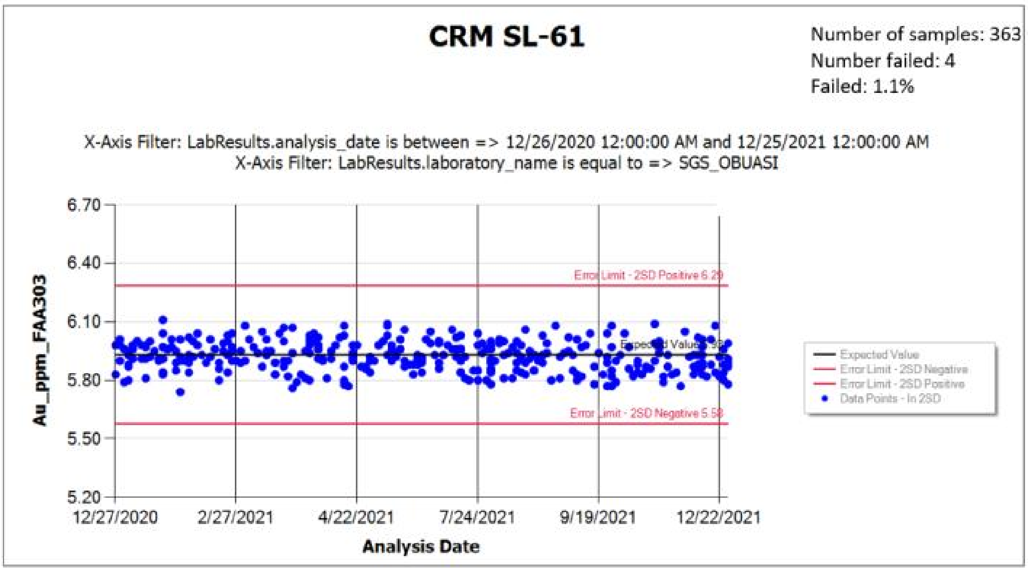
The accepted range for the CRMs is the expected value ± 2 standard deviations. The expected value and standard deviations are as per the product certificate. It is expected that, if the laboratory is performing well, less than 5% of submitted CRMs will be outside of the 2 standard deviation limits. For samples submitted during 2021, there was a 1.7% failure rate; well within acceptable limits and demonstrating good assay accuracy.

Blanks are expected to report below 0.03 g/t for coarse blanks and 0.02 g/t for pulp blanks. Very few blank failures were recorded during 2021 (less than 0.3%) which indicates no significant contamination within the laboratory.

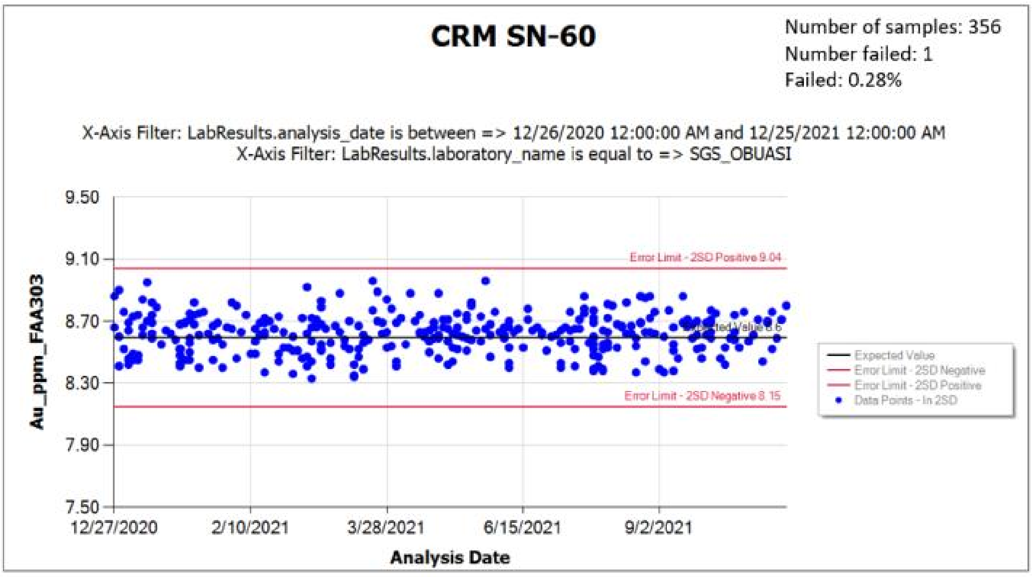
Pulp- and coarse duplicates are inserted and compared with the original assay to measure assay precision and bias. For pulps, 85% of the duplicate pairs measured precision less than 20% (as measured by a Half-Absolute-Relative-Difference analysis). It is outside the ideal limit of 90%, but still considered adequate. For coarse duplicates, 82% of the pulp duplicate pairs measured less than 10% precision. This is also outside of the ideal limit of 90% but considered acceptable given the nature and style of mineralisation.

Overall, these results show that the primary laboratory (SGS Soluserv) is achieving good accuracy and precision and that no significant contamination is occurring.

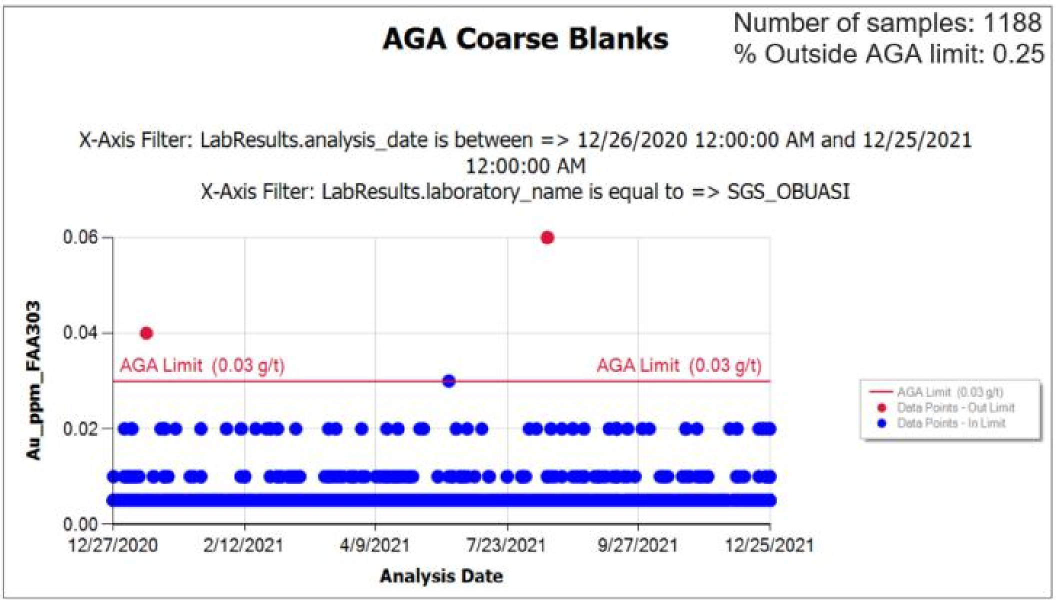
Example of Certified Reference Material SL-61 (2021)



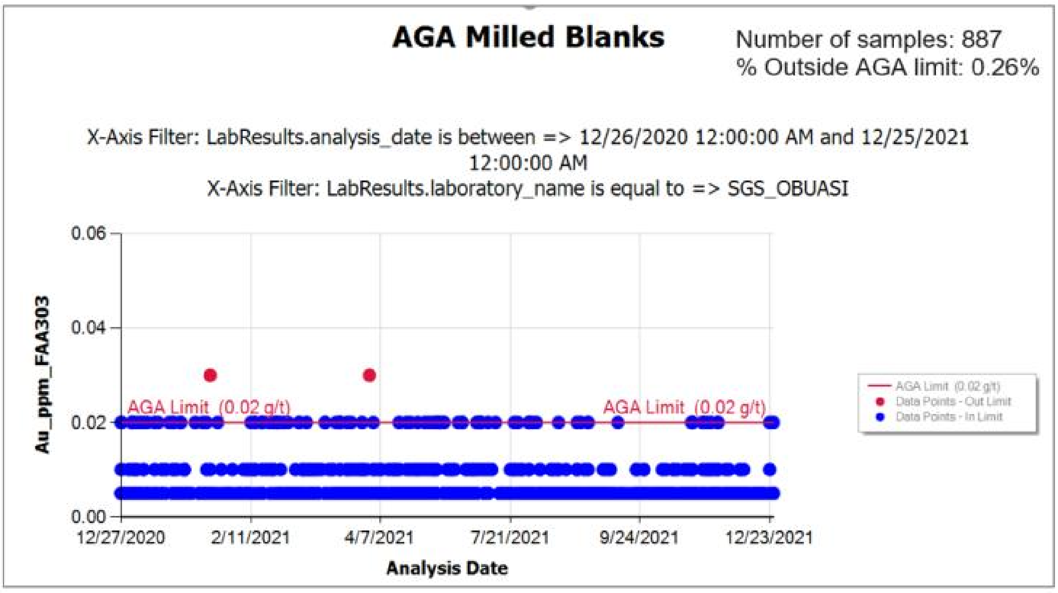
Example of Certified Reference Material SN-60 (2021)



Coarse blank control chart for 2021



Pulp blank control chart for 2021



This QAQC program is run in addition to the normal QC insertions and monitoring undertaken in house by the laboratory. The results for the QAQC samples are frequently analysed with any discrepancies dealt with in conjunction with the laboratory prior to the analytical data being imported into the database. QAQC records are available for samples collected since 2005.

Currently Intertek Minerals Limited™ (Tarkwa) is being used as referee laboratory and 10% of assays are sent to them for analysis. Like the process followed for the primary assay laboratory, CRMs, blanks, and duplicates are inserted at regular intervals into the sample stream at a rate of about 1 in 20. To date, the referee laboratories' CRM performance has been sub-standard with significantly more than 5% of the CRMs reporting outside of the two standard deviation limits. The appointment of an alternative referee laboratory is currently being investigated.

8.5 Qualified Person's opinion on adequacy

The QP considers that sample preparation, security and analytical procedures are adequate. Industry standard practices are followed by the laboratory for sample preparation and analysis. Rigorous QAQC processes are applied (internal and external) to check for contamination and ensure that sample results are reliable and representative. Laboratory audits are completed to identify any non-conformances and external check assaying is done on a quarterly basis. The handover point of the samples to the laboratory is a secure core yard facility and samples are directly transported to the laboratory which is within the mine perimeter (less than a kilometre away from the core yard) and is also a secure facility.

The analytical procedures used do not deviate from conventional industry practice.

9 Data verification

9.1 Data verification procedures

For all new sampling (i.e., samples collected since 2019), several data controls are in place to ensure adequate data quality, processing, and handling. All drilling data are collected, validated, managed, and delivered to end users using the Datamine Fusion™ mining and geological database management system (GDMS). The database is managed by an experienced database and QAQC specialist. Primary data elements used for Mineral Resource estimation include density, geological data (lithology and mineralisation), survey data (downhole and collar), gold grade assays, etc. All data is captured electronically. Logging data is captured directly onto handheld tablets; collar and downhole surveys and assay results are electronically received and transferred. Data validation checks are completed before the data is authorised and approved for geological modelling and grade estimation. Checks include items such as "completeness" (all required data collected including the meta data and table data); checks on the spatial information (collar and survey) and interval checks (such as overlapping intervals or duplicates). Once the data is authorised, it is directly extracted from the Fusion™ database for modelling and estimation (directly imported into the modelling software using ODBC links and SQL views).

The handover point for DD samples is the core yard (drill contractors' hand over the core to the company). The core is stored in a secure facility and a core library is in place for easy access of core. All drill core is photographed with a digital camera before sampling to create a permanent record of the initial rock condition. The photographs are stored and linked to the drilling intervals. The core is oriented, and logging captured electronically using handheld tablets. Several validations are included in the capture software which prevents erroneous data entry. Approximately 30% of the logs are verified and reviewed by a senior geologist.

Data collected prior to 2019, and collected over several decades, were included for Mineral Resource estimation. A comprehensive data validation project was completed from 2015 to 2018 to validate all pre-2019 data stored in the Fusion™ database. The historic data underwent several phases of validation which aimed at checking the database information against the original scanned logs and checking for other issues such as grid conversions, collar issues, transcription issues, duplicate data, magnetic declination adjustments and so forth. A significant proportion of these drill core samples were also re-logged (most notably in Block 11).

In addition to these measures, the QP has physical access to the logging area and is well versed in the methodology of data capture. She has access to the Fusion™ database into which the data is captured. A process map has been created that clearly defines individual parties' accountabilities, the handover points, and steps to be followed to ensure security of samples and the quality of results. The QP was involved in the drafting of the processes, has taken time to review the process and is convinced that it is accurate and meets industry standards.

9.2 Limitations on, or failure to conduct verification

There is considered to be no limitation on or failure to conduct required verification. Both Mineral Resource and Mineral Reserve QP's are based at the mine site and can conduct verification as required. This is done as part of their routine job tasks.

9.3 Qualified Person's opinion on data adequacy

The QP considers that the data used is adequate for Mineral Resource and Mineral Reserve estimation. The sample preparation, analysis, quality control, and security procedures have changed over time to meet evolving industry practices. It is reasoned that practices, at the time the information was collected, were industry-standard and includes the geological and survey data collected over several decades prior to the merger of AngloGold and Ashanti Goldfields in 2004. The risk associated with the inclusion of the historic sampling data has been further mitigated by a comprehensive data validation project completed between 2015 and 2018. Verification work continues as areas become accessible and further infill drilling becomes possible.

It is worth noting that there is a reliance on historical survey information for depletion and sterilisation of the Mineral Resource in areas that have been historically mined over many decades but are currently not accessible. The verification of this information is an ongoing project. However, in some areas with a high degree of uncertainty (such as Cote D'Or), the Mineral Resource was classified into the Inferred Mineral Resource category to reflect reduced confidence.

10 Mineral processing and metallurgical testing

10.1 Mineral processing / metallurgical testing

The Obuasi Feasibility Study (FS) metallurgical test work program did not test multiple different flowsheets but tested and optimised the existing sulphide treatment plant (STP) flowsheet. The test work program was truncated and focused primarily on testing and optimising the condition for the gravity and flotation (i.e., flash, and bulk flotation) circuits and excluded the regrind, mesophuile BIOX batch amenability test (BAT), settling, neutralisation and BIOX carbon-in-leach (CIL) test works. This was supported by the consistently good performance of the BIOX circuit at Obuasi (typically 93% - 95%) and the relatively poor performance of the gravity and flotation circuits.

As the operations reach steady state Mineral Resource model predictions will be reconciled to the actual process plant recoveries to determine performance levels. The metallurgical process is also not new and Obuasi has a long track record of production to support the metallurgical assumptions used.

10.2 Laboratory and results

The FS test results were derived from historic plant recoveries, original as built data and test work program done by SGS Lakefield, South Africa on samples from the Block 8L and 10 grade control drilling programs, which provided an opportunity to reassess the stage recoveries based on representative samples of future ore sources. Upside allowance was made for higher grade ore and forecasted improved process control. SGS is a global giant in metallurgical test works and is ISO/IEC 17025 accredited.

Block 8L master composite confirmatory test: flotation conditions

Product	Grind Size	Activator Dosage	Collector Dosage	Co-collector Dosage	Frother Dosage	Flotation Time	Pulp Density
	P_{80} (µm)	Rate (g/t)	Rate (g/t)	Rate (g/t)	Rate (g/t)	(min)	(% w/w)
Flash Flotation	425	150	125	30	25	3	60
Rougher Flotation	106	100	180	65	40	30	30
Cleaner Flotation						25	10

Master composite confirmatory test: gravity recoverable gold test

Product	Mass Pull	Feed	Assay Grades Concentrate		Tailings	Stage Recovery to Concentrate	
	Fraction (%)	Au (g/t)	Au (g/t)	S^{2-} (%)	Au (g/t)	Au (%)	S^{2-} (%)
Flash Flotation	4.1	7.0	96.7	11.7	3.36	55.1	55.0
Rougher Flotation	12.3	2.4	16.5	3.5	0.32	87.8	90.7
Cleaner Flotation	59.4	16.5	27.2	5.7	0.87	97.9	97.5

Summary master composite confirmatory test

Test	Assay Head	Calculated Head	Residue	Mass Pull to Concentrate	Concentrate Grade	Stage Recovery	Incremental Recovery
	Au (g/t)	Au (g/t)	Au (g/t)	Fraction (%)	Au (g/t)	Au (%)	Au (%)
Flash Flotation	7.0	7.21	3.38	4.11	96.7	55.1	55.1
Gravity Concentration	3.38	3.69	2.40	0.39	316	33.8	15.2
Rougher Flotation	2.40	2.31	0.32	12.3	16.5	87.8	26.1
Cleaner Flotation	16.5		0.87	59.4	27.2	97.9	-0.6
Overall Recovery							95.8

Master composite confirmatory test: products

Product Stream	Mass	Assay Grade		Recovery
	Fraction (%)	Au (g/t)	S^{2-} (%)	(%)
Gravity Concentrate	0.39	316		15.2
Final Flotation Concentrate	11.4	52.2	7.9	80.6
Final Tails[1]	88.2	0.35	0.06	4.2

Block 8L master composite: diagnostic leach test data

Diagnostic Component	Description	Fraction
Cyanide Soluble	Free milling gold that could be extracted via direct cyanidation (i.e. free and exposed gold).	31.1%
Preg-robbed	Gold that was 'preg'-robbed, but recoverable via CIL processing.	9.5%
Hydrochloric Acid Leach	Gold that could be extracted via a mild oxidative pre-leach, (i.e. gold associated with calcite, dolomite, pyrrhotite, haematite etc.)	0.1%
Nitric Acid Leach	Refractory gold associated with sulphide minerals (i.e. pyrite, arsenopyrite etc.)	24.3%
Roast	Gold associated with carbonaceous material such as kerogen	33.0%
Silica/Gangue	Gold locked in quartz and silicates	2.0%
Total		100%
CIL Recoverable Gold		40.6%
Refractory Gold		24.4%

All elements have been factored into the approved process route as per the FS and original plant design so no significant effect to economic extraction efficiencies and recovery targets. Recovery targets beyond the FS also considered historical data since the plant was originally commissioned and upon reaching stable operations after the redevelopment project, optimisation exercises will be pursued as by way of continuous improvement.

10.3 Qualified Person's opinion on data adequacy

It is the opinion of the QP that the supporting technical information is adequate for this Technical Report Summary. The 2016 FS provided the base information upon which subsequent mine design reviews, schedules and analysis have taken place. In addition, historical data support the assumptions and procedures used.

11 Mineral Resource estimates

11.1 Reasonable basis for establishing the prospects of economic extraction for Mineral Resource

There are no geological parameters that are deemed to negatively impact the prospects for economic extraction. The processing plant is designed to appropriately recover both ore types including the quartz and sulphide ores and no deleterious elements have been identified during the long history of mining and processing at Obuasi.

The mining method is LHOS. Development recommenced in early 2019 and stope mining in late 2019. The ODD (Obuasi Deeps Decline) is currently used as the main access into the mine. In future, material movement will utilise the Kwesi Renner Shaft (KRS) rock winder in the early years whilst the Kwasi Mensah Shaft (KMS) ore handling system will complement the later years of production. Surface trucks will rehandle material from the KRS and KMS bins to the run of mine (ROM) pad or waste dump.

Stope and mine design have been based on a detailed geotechnical assessment of the relevant mining areas including review of the intact rock strength and rock mass characterisation programs. Geotechnical modelling was undertaken of mined out areas to determine appropriate regional support and the stoping sequence to control stress.

Hydrogeological data for the underground operations is limited but show pumping rates roughly following a seasonal trend with higher inflow rates during the rainy season. In general, the mine appears fairly dry because of substantial under draining of the current workings by underlying excavations. An independent review was undertaken by Australian Mining Consultants (AMC, Perth) during April 2015 of the conditions on site and SRKs geotechnical assessments. AMC concluded that there are no fatal flaws in the geotechnical assessments or associated mine and stope design recommendations.

The existing process plant (STP) was refurbished in 2019. The STP circuit contains a single-toggle jaw crusher, semi-autogenous grinding (SAG) and Ball mills as coarse grinding circuits coupled with gravity and flash flotation units, conventional flotation circuit coupled with fine grinding unit and thickening units, Biological Oxidation (BIOX), CCD/Neutralisation, Conventional CIL.

The engineering parameters used are summarised in Section 11.2 and support the prospects for economic extraction.

Appropriate infrastructure is available at Obuasi for mining including sufficient water, power, and site access for reasonable and realistic prospects for economic extraction. The infrastructure to support mining has been in place for a number of decades, the current project being undertaken to resume mining at Obuasi has included significant capital to upgrade and rehabilitate existing infrastructure to support a world class operation. These include underground ventilation system, conveyor systems, material and human hoisting infrastructure, crusher and associated conveyors, SAG and Ball Mills, flotation, thickeners, BIOX, CIL, elution and electrowinning and tailings management facilities. These facilities are powered by electricity from the National grid and an onsite 20MW emergency gensets facility and serviced by site water and air reticulations.

Currently Obuasi holds 3 mining leases of which the extents are:

- Obuasi mining lease comprising 87.5km^2
- Binsere 1 mining lease 29.0km^2
- Binsere 2 mining lease 24.7km^2
- Totalling 141.2km^2

The concession previously covered an area of 474km^2 and had 80 communities within a 30km radius of the mine. This was reduced to the current 201km^2 in March 2016. In January 2021 a further reduction was approved by the Minister, bringing the total size of the lease to 141.22km^2. The Obuasi Mineral Resource and Mineral Reserve are contained within these mining leases and AngloGold Ashanti Ghana has the surface rights to the necessary portions of the mining license required for mining and infrastructure.

Presently there are no anticipated environmental or social factors that are considered a risk to economic extraction. While historically there have been issues with illegal miners, more recently these incursions have been curtailed with active support from local and national government. They will continue to be closely monitored and managed. Costs for environmental rehabilitation and social sustainability projects are included in the cost model and modifying factors.

There is a transparent quoted derivative market for the sale of gold and the cost of selling and refining gold are included in cost models and modifying factors. Marketing parameters are not considered an impediment to the reasonable and realistic prospects for the economic extraction of the Mineral Resource.

The economic assumptions and parameters used are considered sufficient to support reasonable and realistic prospects for economic extraction.

For the underground Mineral Resource, the gold price used was $1500/oz. It was used together with the appropriate cost assumptions (as per the Mineral Reserve) to calculate the appropriate cut-off grades for the Mineral Resource. The cut-off grades varied by block and was typically between 3.15g/t and 4g/t. The cost assumptions, and other factors that went into the cut-off grade calculations, are expanded on in the Section 12.2. The only difference between the Mineral Resource and Mineral Reserve cut-off grade inputs, was the gold price assumption ($1200/oz for Mineral Reserve versus $1500/oz for Mineral Resource).

Cut-off grades were incorporated via the Mineable Shapes Optimiser™ (MSO) software tool. The shape optimiser creates and evaluates three dimensional envelopes of material using the cut-off grade and other relevant factors such as the minimum size, shape, dilution, and orientation of the mining units. The reported Mineral Resource is constrained within these mineable shapes.

The economic assumptions used for the open pit Mineral Resource are somewhat outdated (based on work done in 2013). A slightly different gold price assumption of $1600/oz was used and there is limited information available on the cost assumptions and pit optimisation parameters used. However, the open pit Mineral Resource contribution is small (around 1% of the total Mineral Resource) and therefore, this is not considered material. A review of this work will be considered for the next round of reporting.

Annually, the gold prices used are determined by the Mineral Resource and Ore Reserve Steering Committee (RRSC) of AngloGold Ashanti. Two different prices are determined - one for Mineral Resource and one for Mineral Reserve and these are used across all operations. The source and rational for the selected commodity prices are discussed in further detail in the Mineral Reserve section of this report.

All available, appropriate data has been used for Mineral Resource estimation. This includes historical geological and survey data collected over several decades prior to the merger of AngloGold and Ashanti Goldfields Company in 2004. The risk associated with the inclusion of the historical geological data has been mitigated by a comprehensive data validation project completed by a team of geologists between 2015 and 2018, which included the re-logging of all available holes below 50 level.

With regards to the historical survey data, given the mine's long history, there is uncertainty in the reliability of some of the previous mining volumes. Certain measures have been taken to lessen this risk including large-scale sterilisations for unreachable or extensively mined areas, or downgrades to the Inferred Mineral Resource category to reflect reduced confidence. However, verification of this historical information is ongoing and there may be additions and subtractions over time as further assessments are made, areas become accessible and more detailed investigations can be undertaken.

The economic extraction relies on a "futuristic" gold price assumption ($1,500/oz) and constraining the Mineral Resource to mineable shapes (as generated by the Mineable Shapes Optimiser). An annual exploration budget is included in the mine's business plan for the purposes of upgrading the Inferred Mineral Resource to Indicated and ultimately to Measured Mineral Resource.

11.2 Key assumptions, parameters and methods used

The Mineral Resource is reported exclusive of Mineral Reserve in this Technical Report Summary and is reported as at 31 December 2021. The exclusive Mineral Resource is defined as the inclusive Mineral Resource less the in situ Mineral Reserve before dilution and other factors are applied.

The majority of the Mineral Resource is from underground sources with only a small proportion from open pits, namely, Anyinam and Gyabunsu-Sibi. The Anyankyirem open pit was returned to the government during 2021 and removed from the Mineral Resource.

The surface Mineral Resource is constrained by pit optimisation and the underground Mineral Resource by optimised stope shapes. These shapes maximise the recovered Mineral Resource value above a cut-off while also catering for practical mining parameters. The cut-off grades are based on a gold price assumption of $1,500/oz for underground and $1,600/oz for open pit Mineral Resource.

The Mineral Resource tonnages and grades are estimated and reported in situ and stockpiles are reported as broken material.

The parameters under which the Mineral Resource was generated, is presented below. It includes the cut-off grades, the high-level costs informing the cut-off grade calculations and the other MSO parameters. The shape optimiser creates and evaluates three dimensional envelopes of material using the cut-off grade and other relevant factors (such as the minimum size, shape, dilution, and orientation of the mining units). The reported Mineral Resource is constrained within these mining units and all material within these shapes are reported (i.e., the cut-off grade is considered for shape creation itself and no further cut-off grade is applied when reporting from these shapes).

Parameters under which the Mineral Resource was generated

Inputs	Block 1	Block 2	Block 8	Block 10	Adansi	Cote D'Or	Sansu	Block 11	Block 14
Gold Price									
Gold Price ($/oz)	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Costs									
Mining cost ($/oz)	67.71	70.99	63.08	73.56	70.99	70.99	59.52	98.01	98.01
Processing cost ($/oz)	42.06	42.06	42.06	42.06	42.06	42.06	42.06	42.06	42.06
G&A ($/oz)	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92
Royalty (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%
Metallurgical Recovery									
Metallurgical Recovery (%)	87%	87%	87%	87%	87%	87%	87%	87%	87%
Cut-off grades									
MSO optimising cut-off grade (g/t)	3.26	3.34	3.15	3.40	3.34	3.34	3.06	4.00	4.00
Mineral Resource cut-off grade (g/t)	3.26	3.34	3.15	3.40	3.34	3.34	3.06	4.00	4.00
Other MSO parameters									
Dynamic Dip and Strike Control	Used (mineralisation wireframes for stope dip and strike control)								
Sub Stope Definition Method	Used (Combination of Proportional Shapes; Alternating Sequence, Horizontal Proportional Division Type with 5 Divisions)								
Stope Sections (m)	Fixed at 15m or 20m increments								
Stope Levels	Aligned with development levels or proposed development levels								
Stope Width (m)	Apparent Width Method (Min 4m, Max 100m, Min Pillar 8m)								
Stope Dilution (m)	Applied (ELOS Dilution; Near/Far Method; Single Values of 0.5 m for Near and Far)								
Stope Dip Angles (degrees)	Min 60, Max 180, and Max Change 20								
Stope Strike Angle (degrees)	Min -45, Max 45, and Max Change 5								

The geological model includes 3D wireframes representing the weathering profile (for the open pit models), the main rock types (metavolcanics, metasediments, graphite, and quartz), the shear boundaries, the mineralised lodes within the shears and, for the Obuasi Fissure, a further subdivision of the sulphides into low, medium, and high-grade zones.

The mapping, drillhole, channel and reef drive sample data informs the interpretations. For the open pits, Datamine™ software (explicit modelling) is used, and for the underground areas, Leapfrog™ software (implicit modelling). The main units (Obuasi Fissure and Cote D'Or) are geologically continuous, but the Cote D'Or is very narrow, and the Obuasi Fissure is variable mineralised. Numerous hangingwall and footwall mineralised lodes splay off the Obuasi Fissure. They are often well mineralised (especially close to the Obuasi Fissure), but generally their continuity decreases with distance away from the fissure (eventually pinching out). The quartz zones are less continuous (they pinch and swell) in the south of the mine and at shallower levels, but they become very continuous and dominate at depth. The data density is considered sufficient to assure the continuity of mineralisation and geology to a conclusive level for Measured Mineral Resource and to a reasonable level of certainty for Indicated Mineral Resource. The Inferred Mineral Resource data density is low and is based on limited geological evidence; evidence that is only sufficient to establish that geological and grade or quality continuity are more likely than not.

The geological information informing the interpretations are deemed to be of sufficient detail, quality, and reliability to support Mineral Resource estimation. The geological logs include detailed descriptions of lithology, alteration, structure, weathering, mineralisation style and geotechnical characteristics. In addition, underground mapping, which records lithological and mineralisation contacts and structures, is completed, and incorporated into the geological models. Geological logging and mapping are completed by qualified and experienced Geologists and about 30% of the logs are reviewed by a senior geologist to ensure reliability and consistency. The data is electronically collected and stored in the Fusion™ database. Pre-2019 data was validated by a re-logging exercise and the data validation project undertaken by a team of geologists between 2015 and 2017.

Obuasi has a long history of commercial mining and there are no obvious geological, mining, metallurgical, environmental, social, infrastructural, legal, or economic factors that are deemed to have a significant effect on the prospects of the deposit.

In addition, it is also considered that there are no known geological data that could materially influence the estimated quantity and quality of the Mineral Resource.

In terms of the estimation techniques for the underground areas (which form the bulk of the Mineral Resource), 3D wireframe models of the mineralisation and key lithologies are developed. The resulting wireframes are then used to code the drillhole samples before compositing. The lode, quartz and grade domain wireframes are used to define the estimation domains. There are several domains for each block including those representing the quartz and the surrounding low, medium and high-grade sulphides of the main Obuasi Fissure and several more for the Cote D'Or shear and other hangingwall and footwall lodes, also separated into quartz and surrounding sulphides where appropriate.

The samples are composited to 1.5m intervals within the specified domains using the Mode 1 method of compositing in Datamine™ that forces all samples to be included in one of the composites by adjusting the composite length, while keeping it as close as possible to the interval length of 1.5m.

Top capping exercises are done for each block to identify suitable capping thresholds (to prevent very high samples from overestimating the average grade of an area). The grade capping (top capping) applied differs from block to block. It is kept to a minimum as far as is possible and is usually less than 0.5% of the samples in a particular domain. Histograms, log-probability, and mean-and-variance plots are used to decide on appropriate values. The means and Coefficient of Variation (CV; standard deviation divided by the mean) before and after capping are compared. Generally, the top caps employed, resulted in a reduction to CVs to below 1.5 with the means not changing by more than a few percent. This was true of all domains with exception of the quartz domains, which are much more variable due to the coarse gold nature of the free gold mineralisation.

Semi-variograms are calculated and modelled to represent the grade continuity. Each block is done separately. In general, the greatest continuity is along the strike (sometimes with a plunge), the second direction of continuity is down dip, and the shortest direction, along the thickness of the orebody. Typically, the variogram ranges along strike vary between 50m to 90m and down dip, between 30m and 70m. Along the shortest direction, it is typically 10m to 30m. The modelled nuggets are variable and typically range from around 10% to 40% of the population variance.

The optimal set of estimation parameters are determined by kriging neighbourhood analyses (KNAs). kriging efficiency (KE) and slope of regression (PSlope) are used to investigate conditional bias for a given set of estimation parameters. Kriging efficiency compares kriging variance against block variance. If the kriging variance is low compared to the block variance, the degree of smoothing is minimised, and the grade tonnage relationship is best reflected. The slope of regression statistic describes the linear relationship between actual and estimated grades. If the slope statistic is close to one, then an unbiased relationship is expected.

For most of the areas and domains, a search of 100m x 100m x 50m meters was used and the search ellipses were oriented to the approximate strike and dip of the mineralisation (with a plunge in some cases). Minimums and maximums were selected based on the KNA optimisations (completed per block and domain) and were typically between 5 to 10 composites (as minimums) and 30 to 80 composites (as maximums).

Gold grades are estimated into the block model using ordinary kriging for a parent/panel size of 20mE by 5mN by 15mRL (with exception of Block 11 which was slightly larger at 30m x 5m x 15m). Negative weights are used and a discretisation of 5m x 5m x 5m meters is employed in all cases.

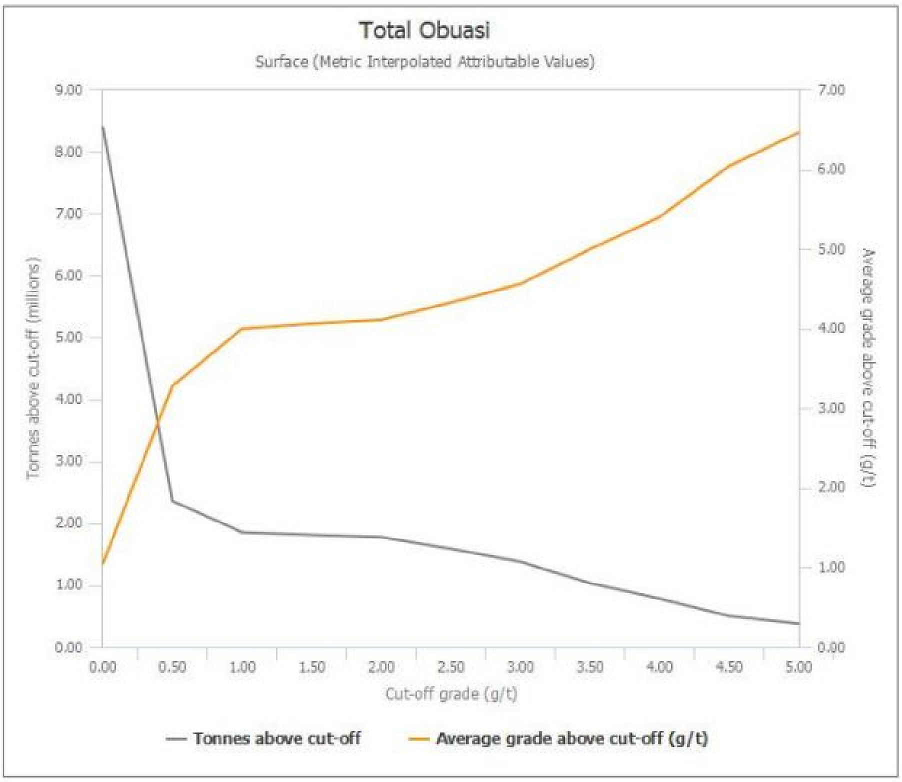
The bulk of open pit mining from Obuasi took place in the 1990s and production declined over the years from 39 open pits. Since 2013, there has been no open pit mining activity and the surface Mineral Resource is very small (approximately 1% of the total Mineral Resource) and is limited to two open pits: Anyinam and Gyabunsu-Sibi. These do not form part of the Mineral Reserve. The Anyankyirem open pit (which was part of last year's Mineral Resource) was returned to the government during the year and therefore removed from the Mineral Resource.

The open pit Mineral Resource declaration is based on model updates and pit optimisations completed in 2013. Limited documentation is available for this work. However, the broad assumptions and the model data (block models, wireframes, sample data etc.) are available. The wireframing and grade estimation was done using Datamine™ software. Wireframing was explicit (by linking strings interpreted on a section-by-section basis). Wireframes were generated for the mineralised zone and oxidation horizons to represent oxidised, transitional, and fresh material. The densities were applied by oxidation horizon. Estimation was by ordinary kriging into block models of size 30mN by 30mE by 10mRL. Due to the lack of documentation, further details around the estimation parameters used are not available. This includes details around variogram parameters, searches, grade capping strategy, classification criteria etc. For pit optimisation, it is known that the cut-off grade of 1g/t was determined from a gold price assumption of $1,600/oz and the mining costs being achieved at that time for the Sibi open pit. Given that this work was completed some years ago, some of the assumptions used are now outdated and some key information about the estimation techniques are unavailable. However, the open pit Mineral Resource comprise about 1% of the total Mineral Resource and is not part of the Mineral Reserve. The lack of complete information is therefore not considered material but is planned to be addressed for the next statement (by appropriate model updates, the generation of comprehensive supporting documentation and pit optimisations using more up to date economic assumptions).

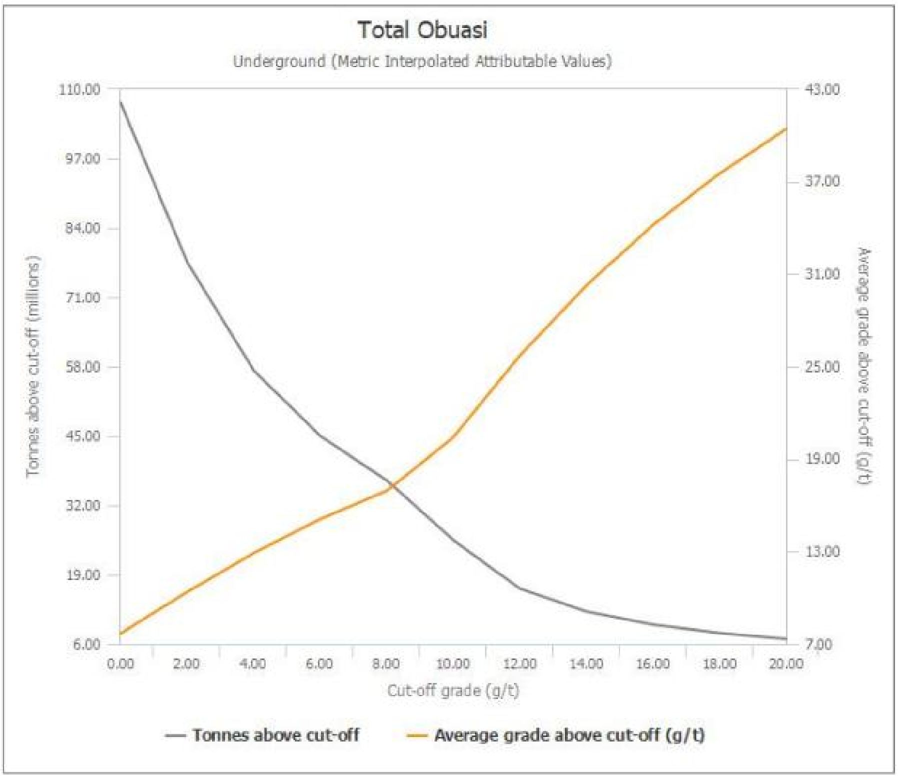
The grade-tonnage curves presented below show the tonnes and grade above cut-offs for the inclusive Mineral Resource (Section 21.1), ranging from 0g/t to 5g/t for open pits and 0g/t to 20 g/t for underground.

The graphs are separated into surface (above) and underground (below) Inclusive Mineral Resource:

Obuasi inclusive Mineral Resource grade and tonnage curve (surface)



Obuasi inclusive Mineral Resource grade and tonnage curve (underground)



The estimation technique used at Obuasi is ordinary kriging and the primary estimation unit size is 20mE by 5mN by 15mRL. This estimation unit size is representative of the underground mining units and is considered appropriate given the style of mineralisation and mining methods. Compositing by length is employed and the influence of extreme grades are restricted by grade capping. Sample spacing is highly variable across the deposit and ranges from 10mE by 10mN (for grade control areas) up to 200mE by 200mN (for exploration targets). However, for Mineral Resource, the maximum extrapolation from data points is 100 m. Any areas beyond this, are considered to be upside potential rather than Mineral Resource.

No correlations were made between variables as only gold grade is interpolated for Mineral Resource estimation.

Computer programs used are Leapfrog™ Geo (version 5.0.4) for the wireframes and Datamine™ Studio RM (version 1.5.62) for the block modelling and estimation. Supervisor™ (version 8.13) is used for statistical analysis, variogram modelling and kriging neighbourhood analyses.

The ordinary kriging estimates are compared with the input data visually; by means of a global mean comparison; by sectional plots comparing the number of composites, model grades and composite grades and grade tonnage curves (theoretical change-of-support curves versus actual curves). Prior to the mine going on care and maintenance, mine reconciliation was completed monthly whereby the Mineral Resource estimates were compared with grade control estimates, mining, and production data. This practice recommenced in 2020. The mine reconciliation for the year (up to the suspension of mining in May) showed acceptable performance.

There are no co-products, by-products or deleterious elements considered at present.

11.3 Mineral Resource classification and uncertainty

Several criteria were considered to classify the Mineral Resource into the Inferred, Indicated and Measured Mineral Resource categories.

The sample types used for Mineral Resource estimation are considered appropriate for the geological, chemical, physical, and mineralogical properties of the mineral occurrence. Since 2019, only underground DD samples are being collected and it is considered the preferred sample type. Prior to 2019, other types of samples were also collected and, of these, only the channel and reef drive samples are considered. Reef drive, channel, and DD samples are all used for geological wireframe modelling, but only the channel and DD samples are used for grade estimation. There is a potential risk of sample bias between the channel and DD samples. However, all bias test work conducted to date, suggests that the bias is not material and within acceptable limits.

For all new sampling (i.e., samples collected since 2019), several data controls are in place to ensure adequate data quality, processing, and handling. All drilling data are collected, validated, managed, and delivered to end users using the Datamine Fusion™ mining and geological database management system (GDMS). The database is managed by an experienced database and QAQC Specialist. The database is stored on a site-based server which is regularly backed up (daily) with monthly backups stored off site (permanently). Primary data elements used for Mineral Resource estimation include density, geological data (lithology and mineralisation), survey data (downhole and collar), gold grade assays, etc. All data is captured electronically. Logging data is captured directly onto handheld tablets; collar and downhole surveys and assay results are electronically received and transferred. Data validation checks are completed before the data is authorised and approved for geological modelling and grade estimation. Checks include items such as "completeness" (all required data collected including the meta data and table data); checks on the spatial information (collar and survey) and interval checks (such as overlapping intervals or duplicates). Once the data is authorised, it is directly extracted from the Fusion database for modelling and estimation (directly imported into the modelling software using ODBC links and SQL views).

The handover point for DD samples is the core yard (drill contractors' hand over the core to the company). The core is inspected for quality and cleanliness before accepting the core. The desired quality controls are specified in the contract with the drilling contractor. The core is not accepted if specified quality is not achieved. If the quality issue can be corrected, the drill contractors are asked to correct and return the core. In extreme cases (where issues cannot be corrected), re-drilling must be done. Weekly meetings are held with the drill contractors to communicate any quality of other issues.

Core recovery is measured and marked by the drill contractors and checked when receiving the core. A barcoding system is in place for core trays and samples to ensure electronic tracking. The core is stored in a secure facility and a core library is in place for easy access of core. All DD core is photographed with a digital camera before sampling to create a permanent record of the initial rock condition. The photographs are stored and linked to the drilling intervals. The core is oriented, and logging captured electronically using handheld tablets. Several validations are included in the capture software which prevents erroneous data entry. Approximately 30% of the logs are verified and reviewed by a senior geologist.

Zones to be sampled are clearly marked by the geologist based on the visual identification of quartz and/or arsenopyrite mineralisation, the presence of shearing or alteration and the presence of visible gold. The samples are recorded onto the electronic logging app and registered with barcode tickets before they are dispatched to the laboratory. All samples are dispatched to the onsite laboratory, which is owned by the company, but is being managed and operated by SGS Soluserv Limited (SGS) under a 3-year contract. Gold determination is by fire assay and atomic absorption spectroscopy (AAS) finish (except where gold grade is more than 100 g/t, then a gravimetric finish is used). The contract with SGS specifies several minimum controls to be adhered to by the laboratory and several additional controls are in place to monitor the quality of assaying. This includes a comprehensive Quality Assurance and Quality Control program which includes the routine insertion of Quality Control (QC) materials into the sample stream. QC materials comprise Certified Reference Materials (CRMs), blanks, crusher and pulp duplicates and check assay. These programs are run in addition to the normal QC insertions and monitoring undertaken in-house by the laboratory themselves. The laboratory makes the results available to the client electronically through their monthly reporting and Laboratory Information Management System (LIMS). The LIMS system also has some security and validation features, and it stores audit trails of any manual adjustments of results which must be explained. Other controls include monthly review meetings between the Company and the Contractor; monthly laboratory audits conducted by the Company to identify any non-conformance issues (which the contractor is expected to amend urgently) and a requirement for the laboratory to participate in international round robins and other proficiency laboratory tests. The results received by the onsite laboratory are deemed to be accurate and precise with no significant contamination introduced.

Data collected prior to 2019, and collected over several decades, were included for Mineral Resource estimation. There is some risk associated with the inclusion of this data (particularly for the data collected prior to the merger in 2004 as the records and QAQC information available for this data is more limited). To account for the uncertainties related to the estimates based on historical data without QAQC information, the highest level of confidence assigned to these areas was the Indicated Mineral Resource category (although in some places, the amount of data was sufficient for Measured Mineral Resource). It is only the blocks in which recent work (with QAQC) has been undertaken, where Mineral Resource has been classified into the Measured Mineral Resource category (i.e., Sansu, Block 8 and Block 10). In addition to these measures, a comprehensive Data Validation project was completed from 2015 to 2018 to validate all pre-2019 data stored in the Fusion™ database. The historic data underwent several phases of validation which aimed at checking the database information against the original scanned logs and checking for other issues such as grid conversions, collar issues, transcription issues, duplicate data, magnetic declination adjustments and so forth. A significant proportion of these drill core samples were also re-logged (most in Block 11). In conclusion, because of the re-logging and the data validation project, the current database is considered an accurate reflection of the data collected.

The bulk densities used are based on a 2007 study which included 1,004 samples of which 627 samples were from ore material. The samples were taken across the entire underground mining area, but it has been questioned whether the amount of data collected lends sufficient confidence to the Bulk Density estimates across the entire mine. To improve on the situation, since late 2020, the routine collection of density measurements (for a representative sub-set of all new drill core samples) was implemented. To date, new density information collected in early, active areas (including Sansu, Block 8 and Block 10) supported and improved the confidence in the bulk densities determined from the 2007 study. Hence, for these early areas, no further consideration of the density in classification was deemed necessary. For the other blocks, significant differences in densities were not anticipated and it was considered that the highest confidence level of Indicated Mineral Resource adequately catered for any uncertainties in density that may be uncovered (but is not anticipated) in these future areas.

Ordinary kriging is used for Mineral Resource estimation and the block size and domaining approaches are considered suitable given the style of mineralisation and mining methods.

The reported Mineral Resource was considered to have reasonable prospects for economic extraction. This was considered by constraining the Mineral Resource to a gold price of 1500 $/oz. The gold price was designed to reflect the company's upside vision for the gold price and to capture any ore that is potentially economic to mine at a future realistic price. It was determined by examining long term price trends and validating against peer companies. The Mineral Resource is constrained by mineable shapes generated by a process designed to produce the optimal size, shape, and location of stopes for underground mine design using an input block model with grades or values. The process mimics what an engineer would do, and it provides a stope-shape that maximises recovered Mineral Resource value above a cut-off (based on the gold price assumption) while also catering for practical mining parameters. The cut-off grade calculations were considered reasonable and replicated those used for the Mineral Reserve (with the only difference being the gold price used).

Due consideration was given to the geological, mining engineering, processing, metallurgical, legal, infrastructural, environmental, marketing, socio-political and economic assumptions in assessing the potential viability of the Mineral Resource. None of these were considered impediments to the viability.

A process called the 15% rule was used to generate sampling data spacings for separation of the Mineral Resource into the Inferred, Indicated and Measured Mineral Resource categories. This process is described in the Guidelines for Reporting. The technique provides an average grade above cut-off estimate with less than 15% relative error and 90% confidence. For an Indicated Mineral Resource, annual production and for a Measured Mineral Resource, quarterly production should meet these criteria. The study concluded that a minimum definition grid of 60m x 60m x 1m was required for an Indicated Mineral Resource and 20m x 20m x 1m for a Measured Mineral Resource. The Inferred Mineral Resource targets a 90m x 90m x 1m spacing.

It is deemed that the spacing identified for the Measured Mineral Resource using the 15% rule is adequate to confirm geological and grade continuity. The Measured Mineral Resource is considered to be that part of the Mineral Resource for which quantity and grade are estimated based on conclusive geological evidence and sampling. The level of geological certainty associated with it is sufficient to allow application of modifying factors in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit.

For the Indicated Mineral Resource, the spacing identified using the 15% rule is considered adequate to establish geological and grade continuity with reasonable certainty. The Indicated Mineral Resource is considered to be that part of the Mineral Resource for which quantity and grade are estimated based on adequate geological evidence and sampling. The level of geological certainty associated with the Indicated Mineral Resource is considered sufficient to allow application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

The quantity and grade of the Inferred Mineral Resource estimates are estimated based on limited geological evidence and sampling. The level of geological uncertainty associated with the Inferred Mineral Resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Limited geological evidence means evidence that is only sufficient to establish that geological and grade or quality continuity are more likely than not.

The survey data used to deplete and sterilise the Mineral Resource is historical and have been collected over several decades. It is therefore a source of uncertainty in the older areas. The verification of this historical data and Mineral Resource sterilisations are ongoing and will continue as areas become accessible and further infill drilling and verification work becomes possible. The Mineral Resource confidence for some of the areas was downgraded to reflect this uncertainty and a lower confidence category for the Mineral Resource was assigned. It includes the Cote D'Or block for which all Indicated Mineral Resource was downgraded to Inferred.

Estimates of confidence levels to support the disclosure of uncertainty surrounding Mineral Resource classification have not been used, but it is deemed that all sources of uncertainty associated with each class of Mineral Resource have been considered.

The most prominent factors and sources of uncertainty are judged to be related to drill spacing, the inclusion of the historic data for Mineral Resource estimation, the potential sample bias introduced due to the use of both channel and diamond core samples and the use of historical survey data for depletion and sterilisation.

Drillhole spacing is used as the basis for classification and downgrading is considered from this point based on any additional factors that may warrant an increase in uncertainty in an area, such as the quality of historical survey data. The decision to downgrade is largely subjective based on empirical evidence.

11.4 Mineral Resource summary

The cut-off grade used for the Mineral Resource has been estimated based on the costs of the operation and a gold price of 1,500 $/oz. This gold price was provided by the company. It was designed to reflect the company's upside vision for the gold price, while providing an economic margin, and to capture any ore that is potentially economic to mine at a future realistic price. It was determined by examining long term price trends and validating against peer companies.

The Mineral Resource is reported in situ and exclusive of Mineral Reserve as at 31 December 2021.

Exclusive gold Mineral Resource

Obuasi		Tonnes	Grade	Contained gold	
as at 31 December 2021	Category	million	g/t	tonnes	Moz
Anyinam	Measured	0.00	2.50	0.01	0.00
	Indicated	0.45	3.54	1.59	0.05
	Measured & Indicated	0.45	3.53	1.60	0.05
	Inferred	1.02	4.23	4.32	0.14
Gyabunsu-Sibi	Measured	0.05	4.00	0.21	0.01
	Indicated	0.05	3.48	0.16	0.01
	Measured & Indicated	0.10	3.76	0.37	0.01
	Inferred	0.28	3.97	1.13	0.04
Above 50 Level - Block 1	Measured	-	-	-	-
	Indicated	5.79	5.50	31.80	1.02
	Measured & Indicated	5.79	5.50	31.80	1.02
	Inferred	2.40	5.90	14.15	0.45
Above 50 Level - Block 2	Measured	-	-	-	-
	Indicated	6.72	8.75	58.76	1.89
	Measured & Indicated	6.72	8.75	58.76	1.89
	Inferred	3.06	5.09	15.58	0.50
Above 50 Level - Block 8	Measured	1.57	7.73	12.13	0.39
	Indicated	3.56	4.42	15.75	0.51
	Measured & Indicated	5.13	5.43	27.88	0.90
	Inferred	2.92	4.51	13.17	0.42
Above 50 Level - Block 10	Measured	0.17	9.27	1.57	0.05
	Indicated	3.00	7.81	23.41	0.75
	Measured & Indicated	3.16	7.89	24.97	0.80
	Inferred	4.41	5.58	24.63	0.79
Above 50 Level - Adansi	Measured	-	-	-	-
	Indicated	2.27	11.30	25.68	0.83
	Measured & Indicated	2.27	11.30	25.68	0.83
	Inferred	2.66	9.53	25.39	0.82
Above 50 Level - Cote d'Or	Measured	-	-	-	-
	Indicated	-	-	-	-
	Measured & Indicated	-	-	-	-
	Inferred	24.71	7.85	193.88	6.23
Above 50 Level - Sansu	Measured	0.77	8.46	6.53	0.21
	Indicated	2.86	4.83	13.81	0.44
	Measured & Indicated	3.63	5.61	20.35	0.65
	Inferred	2.48	4.19	10.41	0.33

Below 50 Level - Block 11	Measured	-	-	-	-
	Indicated	0.57	10.90	6.16	0.20
	Measured & Indicated	0.57	10.90	6.16	0.20
	Inferred	2.47	16.81	41.52	1.34
Below 50 Level - Block 14	Measured	-	-	-	-
	Indicated	0.55	8.05	4.47	0.14
	Measured & Indicated	0.55	8.05	4.47	0.14
	Inferred	3.72	8.19	30.48	0.98
Total	Measured	2.57	7.97	20.45	0.66
	Indicated	25.81	7.04	181.57	5.84
	Measured & Indicated	28.37	7.12	202.02	6.50
	Inferred	50.15	7.47	374.66	12.05

11.5 Qualified Person's opinion

It is considered that the issues relating to relevant technical and economic factors likely to influence the prospect of economic extraction, can all be resolved with further work. Verification of historical depletion and sterilisation information is ongoing and is a long-term undertaking. Some early opinions can be formed regarding the likelihood of re-entering a particular area for mining, but this can only be fully verified once these areas become accessible.

12 Mineral Reserve estimates

12.1 Key assumptions, parameters and methods used

3D Datamine™ Mineral Resource models for each of the mining Blocks are used as the basis for the Mineral Reserve estimates. The selected point of reference for reporting the Mineral Reserve is as of 31 December 2021. Mineral Reserve estimation considers mining criteria for the economic cut-off grade and minimum mining width (between 2.5m to 4m) for the anticipated mining method. All design and scheduling work are undertaken to an applicable level of detail by mine planning engineers in consultation with other technical specialists using Datamine Studio UG™ and Enhanced Production Scheduler™ (EPS) software.

The cut-off grade parameters used site projected mining, processing, and general and administrative (G&A) costs. The gold price of $1,200/oz has been used based on guidance provided by AngloGold Ashanti corporate. The cut-off grade also considers the processing recovery factor (87% applied for all blocks), mining dilution and recovery, and tonne-kilometer (tkms) of all Blocks as well as fill type.

Stopes are designed using the MSO™ software where the outputs are further optimised by manual edits. The stope shapes are generated at section intervals of 15m to 20m based on geotechnical guidance for each Block. MSO™ allows the class field to be assigned to each stope generated. The mine design is reviewed taking into consideration the updated stope shapes, existing development, and future infrastructure need.

A LOM plan is generated which considers fleet and infrastructure capacities. All mining Blocks are designed for LHOS mining method. The Obuasi Mineral Reserve is reported from the LOM plan and only includes Measured and Indicated Mineral Resource. Mineral Reserve in the Measured Mineral Resource category was classified as Proven Mineral Reserve. This is because of improved confidence in mining in the currently active blocks supported by the completion of key ventilation and material handling infrastructure.

The Mineral Reserve tonnages and grades are estimated and reported as delivered to plant (the point where material is delivered to the processing facility) and is therefore inclusive of ore loss and dilution parameters.

Appropriate modifying factors were applied to each mining Block. The modifying factors applied include dilution factors, mining recovery factors, and cut-off grades (COG). Dilution factors range from 12% to 17% depending on the mining method applied and geotechnical considerations. Unplanned dilution was included by applying a 0.5m skin as an equivalent linear over break slough to the hanging wall and footwall during the MSO processing. Geotechnical design parameters were considered and signed-off during the P300 FS. These parameters were considered in the stope design process. Mining recovery applied is 95%. Assumed metallurgical recovery of 87% was used in the COG calculation. However, in the mining and milling plan, there is usually a minimal variation due to metallurgical recovery model which takes into consideration the head grade of the processed ore.

The cut-off grade parameters used site projected costs and a gold price of $1,200/oz provided by AngloGold Ashanti corporate. Obuasi mine has a long history of mining from which a comprehensive set of data is available for use.

The LOM plan considers available access, material handling capability of the primary hoisting shafts, and horizontal trucking of ore and waste to the surface ROM stockpile.

Underground mining is contracted to Underground Mining Alliance (UMA) that provides the requisite expertise to achieve the mine plan. AngloGold Ashanti management team runs the mine operations with the required technical, operational, supervisory, skilled, and general personnel. A contractors team headed by a project manager supported by operational, technical, supervisory, and administrative staff provides the operational workforce. The processing plant is managed by AngloGold Ashanti and the underground mobile fleet is managed by the contractor.

The modifying factors used for the Mineral Reserve estimates are those adopted from the P300 FS. These factors were reviewed against historical performance parameters and compared with empirical analysis conducted by SRK and considered to be reasonable.

The modifying factors applied include dilution factors, mining recovery factors, and cut-off grades. Dilution and mining recovery factors used for the Mineral Reserve estimates are based on historical performance parameters and geotechnical guidance. The mine has a long history of mining from which a comprehensive set of data is available for use. The cut-off grade parameters used site projected costs and a gold price of $1,200/oz provided by AngloGold Ashanti corporate.

Mineral Reserve Modifying Factors

as at 31 December 2021	Primary Commodity Price ($/oz)	Cut-off grade g/t Au	Dilution %
Above 50 Level - Block 2	1,200	4.18	17.0
Above 50 Level - Block 8	1,200	3.93	17.0
Above 50 Level - Block 10	1,200	4.25	12.0
Above 50 Level - Adansi	1,200	4.18	17.0
Above 50 Level - Côte d'Or	1,200	4.18	14.0
Above 50 Level - Sansu	1,200	3.82	17.0
Below 50 Level - Block 11	1,200	5.01	12.0

as at 31 December 2021	% MRF (based on tonnes)	% MRF (based on g/t)	% MCF	MetRF %
Above 50 Level - Block 1	95.0	100.0	100.0	87.0
Above 50 Level - Block 2	95.0	100.0	100.0	87.0
Above 50 Level - Block 8	95.0	100.0	100.0	87.0
Above 50 Level - Block 10	95.0	100.0	100.0	87.0
Above 50 Level - Adansi	95.0	100.0	100.0	87.0
Above 50 Level - Côte d'Or	95.0	100.0	100.0	87.0
Above 50 Level - Sansu	95.0	100.0	100.0	87.0
Below 50 Level - Block 11	98.0	100.0	100.0	87.0

12.2 Cut-off grades

Cut-off grades (CoG) are calculated in line with AngloGold Ashanti's Guideline for the Calculation of Cut-off Grades, 2014 (Cut-off Grades Guideline) to include ore development, production, processing, and G&A costs.

The CoG estimation used LHOS mining method as the basis of the estimation. The estimation of CoG includes all the respective operating costs associated with mining including the lateral ore development associated with the stope. To simplify the CoG calculation, the physicals were determined per ore tonne with previous designs providing information to support the estimation of physicals used.

The CoG per Block was determined as in situ (un-factored) and extracted (factored) with the extracted value used in the design process since it accounted for the impact of dilution and mining recovery in the costs. The costs used for the CoG were estimated based on agreed rates for various activities as provided by UMA and which had some aspects reviewed using the 2021 business plan (8+4) submission. The key cost assumptions such as processing, and G&A were also reviewed using the 2021 business plan. The mining cost however was estimated for each mining Block to account for the associated tkms, and the individual Block Modifying factors. The haul truck tonne-kilometres is important as it's a key driver of haulage cost.

The P300 FS modelled and provided the optimal routes for material handling for the various Blocks. This was considered in the calculation of the tkms.

The modifying factors are based on site inputs and industry standards compiled on-site by the P300 feasibility study team.

The key financial assumptions used in determining the cut-off grades are:

- Gold price of $1,200/oz, provided by AngloGold Ashanti Corporate,
- Royalty 3%,
- Mill recovery of 87%,
- Mining cost (Averaging $79/t but varies per Block),
- G&A $22.92/t,
- Processing $42.06/t.

12.3 Mineral Reserve classification and uncertainty

3D Datamine™ Mineral Resource models for each of the mining Blocks are used as the basis for the Mineral Reserve estimates. Mineral Reserve estimation considers mining criteria for the economic cut-off grade and minimum mining width for the anticipated mining method. All design and scheduling work are undertaken to an applicable level of detail by mine planning engineers in consultation with other technical specialists using Datamine Studio UG™ and Enhanced Production Scheduler™ (EPS) software.

The cut-off grade parameters used site projected mining, processing, and G&A costs. The gold price of $1200/oz has been used as per AngloGold Ashanti's Guidelines for Reporting. The cut-off grade also considers the processing recovery factor (87% applied for all blocks), mining dilution and recovery, and tonne-kilometer (tkms) of all Blocks as well as the fill type. Processing recovery factor applied was based on historic plant recoveries and test work program carried out by SGS Lakefield, South Africa on samples from Block 8L and Block 10 grade control drilling program. Mining dilution and recovery factors were based on P300 FS.

Stopes are designed using MSO™ software where the outputs are further optimised by manual edits. The stope shapes are generated at section intervals of 15m to 30m based on geotechnical guidance for each Block. Inter-level spacing are between 20m to 25m spacing. The stope design evaluation considered all existing and current geotechnical data and underground observations. In areas of thicker graphite zones (greater than 0.3 m) along the longitudinal stope contacts, tactical adjustments in the form of reduced strike spans and re-slotting may be required. In the more adverse areas (stacked stopes, presence of extensive graphitic schist) sublevel heights may need to be reduced.

P300 FS stope design dimensions and modifying factors recommendations

Block	Mining Method	Sublevel Spacing (m)	Max Stope Length (m)	Stope (Orebody) Width (m)	Mining Recovery (%)	Dilution Factor (%)
Block 8 (blocks 8L,8U & GCST)	Longitudinal	20	20 - 30	5-15	95	20
	Transverse	25	15 - 20	>15	95	12
Block 10 (blocks 9&10) 38L and above	Longitudinal	20	20 - 30	3-10	95	20
Block 10 (blocks 9&10) Below 38L	Longitudinal	20	20 - 30	5-10	95	20
	Transverse	25	15 - 20	>15	95	12
Block 11	Longitudinal	20	15 - 20	3-7	95	20
Sansu	Longitudinal	22	20 - 30	5-10	95	20
	Transverse	22	15 - 20	>10	95	12
Block 1	Longitudinal	20	20 - 25	5-10	95	20
	Transverse	20	15 - 20	>10	95	12
Block 2 (blocks 2,3 & 4, Adansi, Cote D'or)	Longitudinal	20	15 - 20	5-10	95	20

The MSO allows the class field to be assigned to each stope generated. The mine design is reviewed taking into consideration the updated stope shapes, existing development, and future infrastructure need. A LOM plan is generated which considers fleet and infrastructure capacities. All mining Blocks are designed for LHOS mining method.

The Mineral Reserve reported from the LOM plan has been derived from the Measured and Indicated Mineral Resource and is exclusive of any Inferred Mineral Resource. With caution, the Mineral Reserve estimate was based on approved economic factors, updated Mineral Resource models and appropriate modifying factors.

The Mineral Reserve is classified as Proven and Probable Mineral Reserve based on the confidence levels determined in the Mineral Resource and the level of understanding of historical performance the appropriate modifying parameters. Obuasi has a long history of mining with available data that support the modifying factors being applied.

The entire Probable Mineral Reserve have been derived from only Indicated Mineral Resource. All Measured Mineral Resource declared as Mineral Reserve have been classified as Proven Mineral Reserve. This is due to the improved confidence in undertaking mining activities over the last two years in the key Blocks that are currently active.

Mineral Reserve only include Measured and Indicated Mineral Resource.

The Mineral Resource is exclusive of the Mineral Reserve.

12.4 Mineral Reserve summary

Annually, the gold prices used for determining Mineral Resource and Mineral Reserve are determined by the Mineral Resource and Ore Reserve committee (RRSC). Two different prices used for determining Mineral Resource and Mineral Reserve. These prices are provided in local currencies and are calculated using the historic relationships between the dollar gold price and the local currency gold price.

The Mineral Resource price reflects the company's upside view of the gold price and at the same time ensures that the Mineral Resource defined will meet the reasonable prospects for economic extraction requirement. Typically, the price is set closer to spot than the Mineral Reserve price and is designed to highlight any Mineral Resource that is likely to be mined should the gold price move above its current range. A margin is maintained between the Mineral Resource and ruling spot price, and this implies that Mineral Resource is economic at current prices but that it does not contribute sufficient margin to be in the current plans.

The Mineral Reserve price provided is the base price used for mine planning. AngloGold Ashanti selects a conservative Mineral Reserve price relative to its peers. This is done to fit into the strategy to include a margin in the mine planning process. The company uses a set of economic parameters to value its assets and Business plan, these economic parameters are set on a more regular basis and reflect the industry consensus for the next five years. These are generally higher than the Mineral Reserve price and enable more accurate short term financial planning. Finally, the company uses a fixed price to evaluate its project and set its hurdle rate. This price and the hurdle rate are set by the board and changed when indicated due to significant changes in the price of gold.

The determination of the Mineral Resource and Mineral Reserve prices are not based on a fixed average, but rather an informed decision made by looking at the trends in gold price. The gold prices and exchange rates determined are then presented to the RRSC for review, in the form of an economic assumptions proposal document once a year (generally the second quarter of the year). After review and approval by the committee, it is sent to AGAs Executive Committee ("EXCO") for approval. The prices for copper, silver and molybdenum are determined using the same process used for gold. The Obuasi Mineral Reserve is estimated using a gold price assumption of $1,200/oz. The cut-off grades for the various mining Blocks are estimated by considering modifying factors specific to each Block. Processing and G&A costs are calculated per tonnes milled and applied for all Blocks.

The Obuasi Mineral Reserve is mainly from underground ore sources. Seven (7) mining Blocks comprising Sansu, Block 8, Block 10, Block 11, Block 1, Block 2 and Adansi make up the key mining blocks from which the Mineral Reserve is derived.

With caution AngloGold Ashanti uses Inferred Mineral Resource in its Mineral Reserve estimation process and the Inferred Mineral Resource is included in the pit shell or underground extraction shape determination. As such the Inferred Mineral Resource may influence the extraction shape. The quoted Mineral Reserve from these volumes includes only the converted Measured and Indicated Mineral Resource and no Inferred Mineral Resource is converted to Mineral Reserve.

Gold Mineral Reserve

Obuasi		Tonnes	Grade	Contained gold	
as at 31 December 2021	Category	million	g/t	tonnes	Moz
Above 50 Level - Block 1	Proven	-	-	-	-
	Probable	2.02	7.46	15.06	0.48
	Total	2.02	7.46	15.06	0.48
Above 50 Level - Block 2	Proven	-	-	-	-
	Probable	2.41	8.16	19.64	0.63
	Total	2.41	8.16	19.64	0.63
Above 50 Level - Block 8	Proven	3.80	7.72	29.34	0.94
	Probable	7.78	5.98	46.47	1.49
	Total	11.58	6.55	75.80	2.44
Above 50 Level - Block 10	Proven	0.00	8.75	0.01	0.00
	Probable	8.40	7.06	59.33	1.91
	Total	8.40	7.06	59.34	1.91
Above 50 Level - Adansi	Proven	-	-	-	-
	Probable	0.72	17.78	12.78	0.41
	Total	0.72	17.78	12.78	0.41
Above 50 Level - Sansu	Proven	0.93	8.09	7.53	0.24
	Probable	2.22	6.01	13.33	0.43
	Total	3.15	6.62	20.86	0.67
Below 50 Level - Block 11	Proven	-	-	-	-
	Probable	2.53	21.18	53.54	1.72
	Total	2.53	21.18	53.54	1.72
Total	Proven	4.73	7.79	36.88	1.19
	Probable	26.07	8.45	220.14	7.08
	Total	30.80	8.34	257.02	8.26

The Obuasi Mineral Reserve was derived mainly from underground ore sources and does not include any material from ROM stockpile, tailings, or open pit.

For the Mineral Reserve the reference point is as delivered to the processing plant and it is quoted as at 31 December 2021.

12.5 Qualified Person's opinion

Obuasi has a long history of mining with comprehensive historical stope performance database that support the modifying factors being employed in the Mineral Reserve estimates. As a result, there is no expectation the modifying factors that are used will significantly change over time to have any adverse impact on the Obuasi Mineral Reserve estimates.

13 Mining methods

Obuasi is an underground operation utilising both vertical shafts and declines as main access routes to the underground workings. The mine has seen extensive historical mining activities with varying applications of different mining methods to date. The current LOM design employs mostly the LHOS mining method for ore extraction. LHOS is a highly selective and productive method of mining that can be employed for orebodies of varying thicknesses and dips. The three main distinct variations of the LHOS used at Obuasi are longitudinal retreat stoping (LRS), longitudinal open stoping (LOS), and transverse open stoping (TOS). The blind upper stoping (BUS) is a form of LRS, or TOS used for partial sill pillar recovery.

TOS is designed in areas of the orebody that are greater than 15m in thickness. Stopes are accessed by a cross-cut in the centre of the stope and then a tee along the hanging wall contact on the extraction level (lower) and on the upper level is developed to create the initial slot for stope blasting. Stope heights are on average 20m to 25m with a stope length along strike of 15m to 20m. Primary TOS stopes are the initial stopes in the mining sequence which are surrounded by fresh rock. Secondary stopes are stopes that have at least one wall of cured paste fill or hydra fill from an adjacent primary stope.

LRS is designed in areas of the orebody that are less than 15m in thickness can be also known as LOS. In LRS or LOS, stopes are accessed by a single ore drive along strike on the extraction level (lower) and on the upper level. Stope heights are on average 20m with a current geotechnical constrained stope length along strike of 20m. Stoping is by way of a continuous cycle of production drilling, blasting to a slot, tele-remote mucking, then filling with cemented pastefill. A curing time for the cement is required before mining the next stope along strike or underneath.

BUS has been designed in the upper crown pillar areas remaining at the top of the mining sequence within the mining Blocks. This top stoping lift completes a bottom-up mining sequence from historic production, undercutting older completed mining sequences from above. The BUS method was initially intended for partial extraction of the sill pillar stopes by drilling up holes and leaving in situ pillars 5m above. With most of the blocks now being planned to be filled with paste, this has been reviewed to be mined fully without leaving any thin pillar between the sill stopes and the upper stoping horizon. This is considered a safe way to recover sill pillars rather than leaving a 5m skin which has the potential of collapsing uncontrollably.

Mining methods are selected based on their suitability for various orebody geometries and expected ground conditions. Designs are varied in order to accommodate local conditions, changes in geometry, minimise waste development and dilution, and maximise ore grade and Mineral Resource recovery.

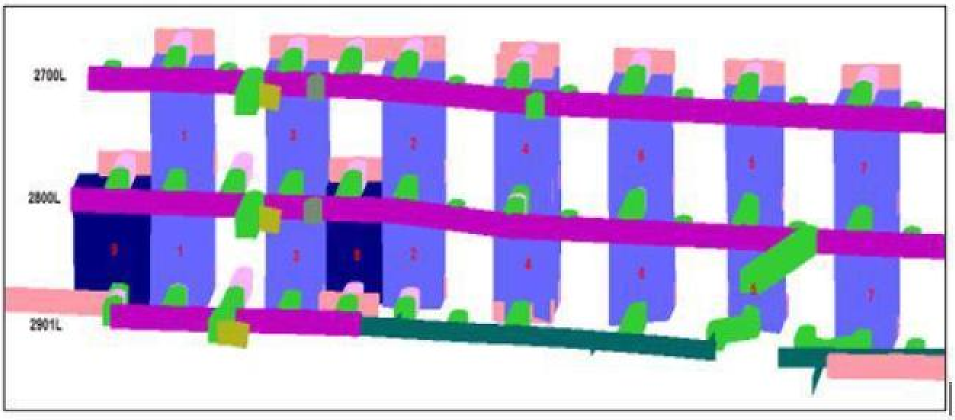
Stopes are designed for either transverse open stoping or longitudinal retreat stoping. Geotechnically, an ore body width of greater than 15m is designed for transverse open stoping and less than 15m is designed for longitudinal stoping. The P300 FS determined the strike lengths using Mathew's stability graph. Other factors that may dictate the mining method include proximity to historically mined stopes and the nature of geological structures within the orebody.

The figure below provides a schematic of the TOS method, with the numbered blue stopes showing the primary stope extraction sequence, whereby double lifts one stope above another are mined at the same time. This improves the ratio of ore that can be mucked conventionally from the lowest draw point and increases the size of the pastefill cycle, both of which benefit the production rate from any given ore block. The white shapes between the numbered blue represent the secondary stopes which will be mined in a

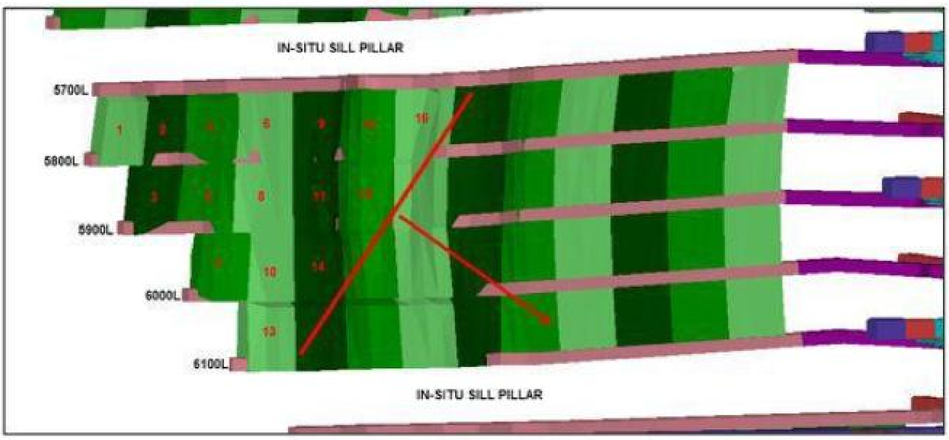
similar manner. The purple drives running parallel to the orebody are the footwall access drives from which the green coloured cross-cuts are developed to the hanging wall of the orebody. Finally, the pink coloured development along the hanging wall represents the "T" design from where the raise and slot are drilled in order to open up the stope.

An example of the LRS method along with an underhand extraction sequence for a portion of Block 11 is shown below. The mining sequence is such that a mining front (represented by the diagonal red line) is created and then retreated in the direction of the arrow so that rock stress build up is minimised in localised areas and is directed into the solid unmined mass below the mining front.

Example TOS design for Block 8L and LRS design for Block 11



(A): Example TOS Design for Block 8L



(B): Example of LRS Design for Block 11

The LOM design is aligned with the P300 FS and updated regularly in accordance with the AngloGold Ashanti mine planning cycle. Mine development is targeted at accessing critical infrastructure and stoping fronts in order for the mine to ramp up production from the current 2,000tpd to 4,000tpd by quarter 4 2022. Production is then planned to increase by a gradual increment to 4,500tpd by 2023. Beyond 2023, production is to be sustained at an average of 5,000tpd to 5,500tpd to the end of LOM. A fleet of Sandvik™ load-haul-dump (LHDs) and trucks are used for material loading and transport from the various underground working areas through ore passes and internal decline systems that connects all levels to the either the ODD or the various hoisting shafts. The fleet is a typical underground metalliferous mine mobile mechanised fleet. Key to the applicability and effectiveness of this fleet is the central access provided by the ODD.

This roadway allows efficient access to all regular mining fleet and specialised mining equipment (i.e., raisebore rigs, exploration, and grade control DD rigs) and key equipment in support of fixed plant and infrastructure projects.

Exploration and grade control drilling activities are continuing to upgrade Mineral Resource to either Indicated or Measured Mineral Resource. To this end exploration drill cuddies are designed and prioritised for development in the LOM plan.

The geology across Obuasi consists of three main units: meta-sediments (phyllite, greywacke, carbonaceous/graphitic schist), meta-volcanics (dyke), graphite and/or quartz. It is generally agreed that meta-sediment and meta-volcanic units are of fair rock mass quality, while graphite is of poor rock mass quality. The geotechnical evaluation focused on each mining block, and the conditions in the adjacent mined-out areas which are considered to be mining analogues. The context of each block is different, based on proximity to mined-out areas, size, and geometry. The stope design evaluation considered all existing and current geotechnical data and underground observations. Ultimately, the established rock mass properties for each of the major rock types (per major Block) were used as an input to an empirical stope design method. Additional inputs to account for stress were reviewed against numerical models, and the impact of prevailing structures in each mining block.

The mine is predominantly hosted by phyllites beneath a well-developed regolith zone up to 70m in thickness. The northeast/southwest striking mineralised fault zones exert a dominant influence on the hydrogeology, with preferential permeability controlled by structures along strike. The available hydrogeological data for the underground operations do show that the pumping rates roughly follow a seasonal trend: the water inflow rates are higher during the rainy season. This is potentially due to high permeability between the open pits and underground workings. The catchment area of the open pits helps to collect and channel water to the underground voids. In general, the mine appears fairly dry as a result of substantial under draining of the current workings by underlying excavations.

Before designing the selected blocks with Studio UG™, economic cut-off grade evaluation sensitivity was carried out to know areas of economic value. Inaccessible areas or areas of severe ground deterioration have been excluded in the stope designs.

13.1 Requirements for stripping, underground development and backfilling

Obuasi operates an underground mine only.

The main Obuasi decline (ODD) is situated on the southern side of Obuasi and currently is the main access ramp to the active Blocks of the mine where production and development are ongoing. The decline is planned to reach approximately 1.6km vertical distance from the surface, reaching the base of the high-grade Block 11. From the decline, access drifts have been designed into the central parts of the mine and linking the main Kwesi Mensah (KMS) hoisting shaft. The northern part of the mine is accessed through the Cote D'Or decline which links Cote D'Or and Adansi Blocks.

Geotechnical considerations

The P300 FS Geotechnical work on Obuasi started in August 2014 with SRK Consulting (Canada) being the main architect, supported by the AngloGold Ashanti Obuasi geotechnical team. Four major mining blocks (Sansu 3, Block 8 Lower, Block 10, and Block 11) and five minor mining blocks (Block 1, Block 2, Block 9, Adansi, and CDOR were assessed. The study with SRK ended in December 2014. Australian Mining Consultants (AMC) were contacted to review the SRK work. However, between September 2015 and December 2015, Randgold Resources Limited (RRL) during a due diligence of the mine contracted Dempers and Seymour Pty Ltd (D and S) and SKCA Pty Limited/PIRAN Mining (with Beck Engineering as an associate Consortium to carry out stress modelling) to also conduct a geotechnical assessment on three major mining blocks (Block 8 Lower, Block 10 and Block 11) on its behalf. AMC Consultants Pty was again asked by AngloGold Ashanti to review the recent work done by RRL and form a considered view on the expected ground conditions and mining at depth, and the stress environment in the future production areas of Obuasi to optimise the Obuasi FS.

The outcome of AMCs comprehensive review including an alignment of views across numerous geotechnical consultants were incorporated into the overall mine design process resulting in significant improvement to the P300 FS mine design. These included an assessment of the rock mass condition and other geotechnical parameters such as stope dimensions and support designs.

The P300 FS geotechnical work is also based on the recently consolidated mining block names or boundaries which define Sansu mining block as the combined Sansu 1, 2, and 3; Block 8 as the combined GCS Top, Block 8U and Block 8L; mining block 10 comprises of Block 9 and Block 10, whilst mining block 2 combines blocks 2, 3 and 4. The other mining blocks such as Block 1, Cote D'Or, Adansi, and Block 11 remain unchanged. Therefore, unless otherwise stated, the geotechnical assessments are based on the consolidated Block names as represented above.

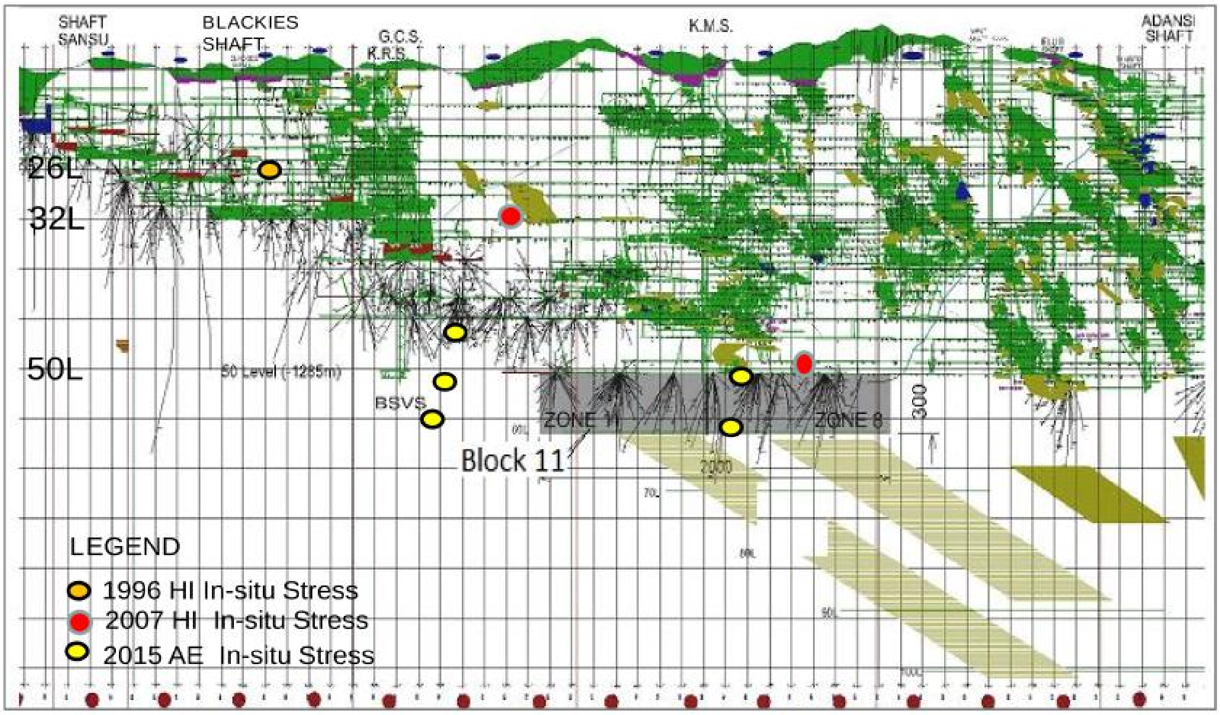
Currently, P300 FS is being implemented and since the commencement of the operations various empirical and numerical analyses have provided a better understanding of the various active working areas.

Mine stress modelling

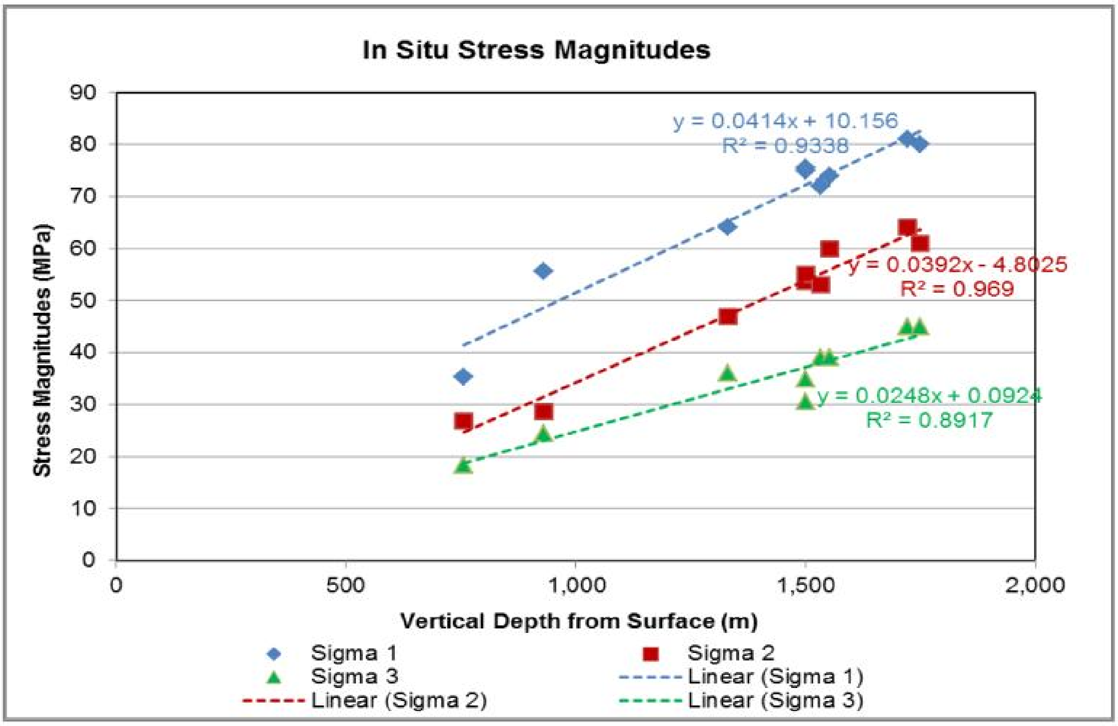
In situ stresses are an important requirement for understanding and predicting rock mass behaviour. Initial measurements were carried out by AMC in 1996 at 26S 333 cross-cut in the Block 8L area. A second measurement was conducted in August 2007 in 50S 131 cross-cut and 32S 249 cross-cut. This was carried out by Rock Mechanics Technologies™ (RMT) from the UK using the CSIRO™ Hollow Inclusion (HI) 12 Gauge Cell. The various measurements show general good agreement of bearing and dip between tests.

RRL in December 2015 conducted in situ stress measurements as part of the due diligence specifically targeting Blocks 10 and 11 using Western Australian School of Mines™ (WASM), acoustic emission (AE) technique a methodology that can be undertaken for a specific target area remotely, without the need for direct personnel access. A total of five target areas were selected, three associated with Block 10 and two associated with Block 11.

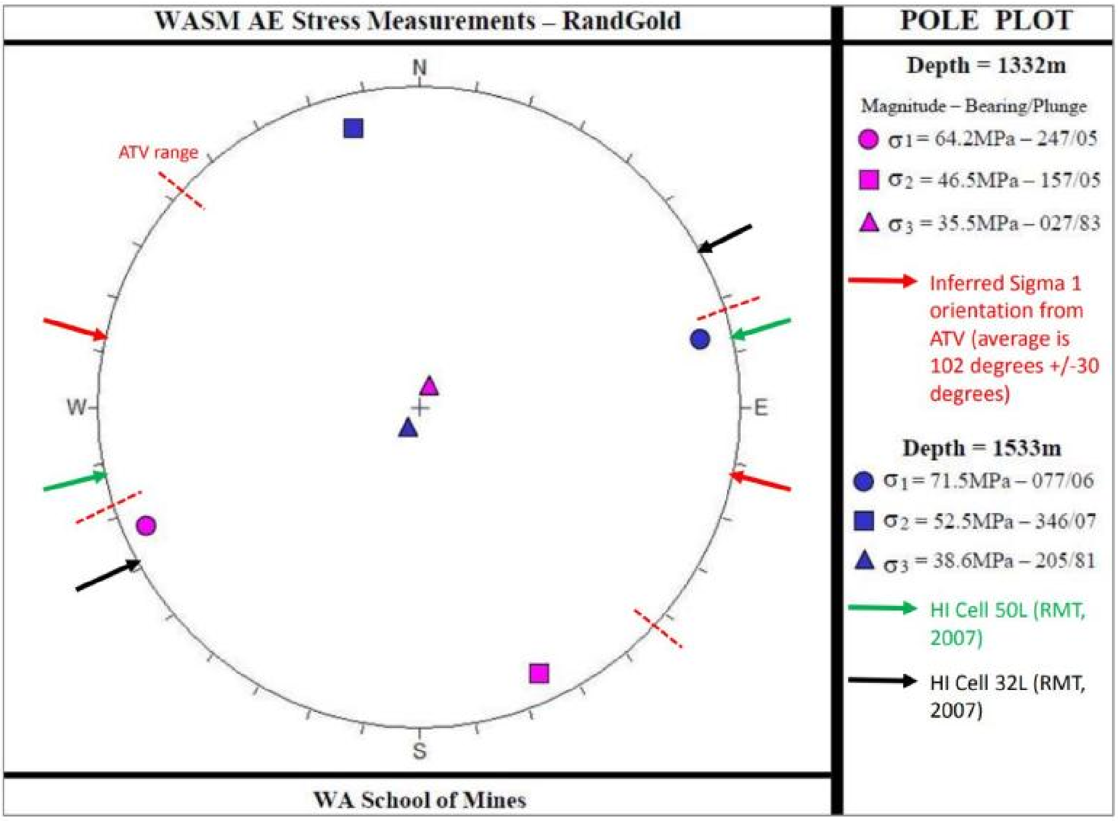
Obuasi in situ stress measurement locations



Relationship of Principal Stress with Depth



WASM AE stress measurements: pole plot



In terms of the relationship of principal stress measurements with depth, as shown above, the WASM AE orientation results compared well with the HI Cell results. However, there is a slight difference with the WASM AE magnitudes when compared with the HI Cell result and this might be due to possible depth difference and/or rotation effects due to rock strength and/or structure.

The in situ stress field used in the assessment was based on the overcoring results of HI cells completed by RMT (2007) as the 2015 measurement completed by RRL was considered less reliable.

With the mine now in active operations, another in situ stress measurement programme has been planned for 2022 to provide up-to-date data from which a review of mining sequence and support requirements can be undertaken.

Stope dilution estimates

Stope dilution assessment was carried out per mining Block based on the mining method employed. Two approaches were used to arrive at the dilution percentages for each mining method (LOS and TOS).

In the case of LOS, the varying orebody widths (5m, 10m, and 15m) were considered since mining width has a great impact on dilution. Empirical models using equivalent linear overbreak/sloughage (ELOS, Clark 1998) were used by SRK. ELOS calculation using measured volumes and overbreak information from the cavity monitoring survey (CMS) and stope performance back-calculated from CMS reconciliations by AngloGold Ashanti Ghana were applied. A database of approximately 50 CMS reconciliations from stopes mined using longitudinal and transverse open stopes from current mining blocks were considered in the assessment.

External dilution recommendations

Stope type	CMS back-analysis	SRK empirical analysis	Recommended range
5m Longitudinal	27-45%	26-40%	25-29%
10m longitudinal	5-62%	15-25%	18-25%
15m longitudinal	14-43%	12-16%	16-22%
15m transverse (primary)	5-17%	5-11%	7-12%

Dilution applied for the various blocks in the Mineral Reserve estimates

Block	Main stope type	Dilution Applied
Obuasi Underground - Above 50 Level - Block 1	LOS and TOS	17%
Obuasi Underground - Above 50 Level - Block 2	LOS and TOS	17%
Obuasi Underground - Above 50 Level - Block 8	LOS and TOS	12%
Obuasi Underground - Above 50 Level - Block 10	LOS	17%
Obuasi Underground - Above 50 Level - Adansi	LOS and TOS	14%
Obuasi Underground - Above 50 Level - Cote D or	LOS and TOS	17%
Obuasi Underground - Above 50 Level - Sansu	LOS and TOS	12%
Obuasi Underground - Below 50 Level - Block 11	LOS	16%

Stope dilution estimates have been applied for the LOS and TOS with pastefill (except for Sansu which uses cemented rock fill), and are based on improved mechanisation and improved mining controls such as:

- Higher orebody drill definition and understanding of graphitic structures
- Improved geology control in ore development
- Correct selection and installation of ground support
- Improved drilling accuracy and blasting practices (development and stoping)

- Strict adherence to stope designs; and
- Reduction in stope backfill cycle times and use of cemented pastefill

Ground support regimes

The ground support requirements for the mine were determined in the P300 FS based on the following: rock mass quality, graphitic shear type, prevailing stress regime and whether static loading or dynamic loading is being experienced. The support regime is, however, grouped into two categories: development and stoping support.

The approach used during the development ground support design includes: the analytical method, empirical techniques, computer modelling using the Rocscience Unwedge™ software, and observations underground.

Cable bolt support is required for stoping to control wall instability. An option exists on occasions (when deemed unnecessary) to mine without cable bolts per the geotechnical engineer's advice. All stope cable bolts are plated and tensioned to ensure maximum support effectiveness.

Backfill system

The Obuasi backfill system was redesigned during the P300 FS in response to limitations imposed by the previous system. In the previous system, stopes were often left open for excessive times resulting in time dependent failure, or alternatively un-cemented rockfill was placed in primary stopes resulting in sterilisation of ore and dilution when mining adjacent stopes.

Consequently, paste fill was identified as the preferred fill method. The paste fill system and reticulation underwent technical and engineering review by AMC, who endorsed the overall design and backfill requirements.

The system currently utilises the GCS shaft for delivery of the paste from surface to 20 Level from where further holes are drilled to 26 and 32 Levels.

Reticulation on 20 Level provides the primary underground distribution point. The 26 Level in conjunction with 2603 Level are used for distribution to Block 8L, whilst 32 Level serves as the reticulation backbone for all the Blocks to the north of GCS, including Blocks 10, 1, 2 and 11. Reticulation into the Blocks to the south of Block 8L is carried out with pipework along 20 Level to the southern operating limits of the reticulation.

The primary reticulation system design incorporates an element of redundancy, allowing for duplicate holes for the primary vertical connections from surface through to all blocks. This is to ensure high system availability and as risk mitigation when lines are temporarily blocked with cemented fill. This approach will provide flexibility and contingency to the reticulation network and increase effective system utilisation.

Assessment of planned stope shapes determined paste strength requirements for transverse stopes of up to 500 kPa, whilst the paste strength for longitudinal stopes is 300kPa with these strengths including a factor of safety of 1.25 which is suitable for non-entry mining methods.

The test work undertaken during the study demonstrated favourable results with use of an alternative fly ash binder, with an optimal blend ratio of 80:20 slag to cement binder ratio using Ghana general purpose (GP) cement at 70% solids density showing that 3% binder will be sufficient for LHOS of up to 500 kPa. For higher strengths up to 1,200 kPa, 6% binder will be required.

Ventilation and refrigeration

Obuasi is a very large and complex underground system of vertical and horizontal excavations, consistent with a mine in excess of 100 years of mining life. Historical mining operations, ore extraction methods, vast abandoned and worked out areas, past ventilation related decisions, lack of adequate / efficient ventilation controls, open voids, illegal activities affecting ventilation flows, poor maintenance of existing ventilation systems and appliances all contributed in varying degrees in the past to the condition of the overall ventilation system.

During the P300 FS, ventilation design and estimation were completed for Obuasi with due consideration of the complex nature of the operations. The design and technical assumptions were primarily focused on optimising key ventilation infrastructure (sizes) and mine air volumes to reduce the overall ventilation cost (capital and operating costs). The overall ventilation network was audited by Prysm Ventilation™ Services, South Africa with no fatal flaws found; indicating the methodology for design and macro layout is robust and appropriate to support the P300 LOM plan.

The primary ventilation design has fresh air delivered into the mine from the surface via the existing fresh air shafts (GCS, KRS, KMS, and FPS) and the decline system. The mine design incorporates new and larger ventilation raises (5.5m GCVS and 5.5m KVMS) into mining blocks to ensure the required volumes of primary fresh and return air are delivered in support of the mine plan. A system of smaller diameter raises within each block is designed to allow for effective distribution of the primary air to the secondary system. Refrigerated air is planned for all mining blocks below 29 Level.

The new GCVS consists of a 5.5m shaft fitted with bifurcated fans. This shaft is supported with a network of internal underground raises extending below 41 level. The GCVS provides primary ventilation to Sansu, Block 8 and 10.
The New KMVS surface fans and network will consist of the following:

- New 6.5m ventilation shaft extending from surface to 32 Level. This raise is designed to be vertical and will miss all existing mine infrastructure; Three centrifugal type fans fitted to trifurcated surface duct arrangement, each fan duty is 250m^3/s at 3.1kPa;
- Primary vent collection levels on 32 Level directly servicing exhaust demand for Blocks 1 and 2 as well as crushing, trucking and infrastructure areas around 41 level. Direct linkage to second collection level on 4902 Level (to accommodate the exhaust system for Block 11) and a host of other internal raises to support the effective operation of the KMVS ventilation shaft.

The newly optimised and simplified ventilation network allows for quantity allocation shifting between GCVS and the new KMVS primary systems as needed. This inherent redundancy provides system flexibility and capacity reallocation, providing risk mitigation opportunities in the event of an unplanned (or planned) fan outage.

The GCVS system was commissioned in quarter 4 2021 and KVMS-2 is planned to be completed in 2024.

Mine heat and refrigeration

A heat load assessment for the mine was undertaken during the P300FS on an annual basis over the LOM, allowing for annual cyclic ambient temperature variations specific to Obuasi. The following heat sources were used for heat load calculation purposes:

- Diesel equipment,
- Auto compression,
- Electrical equipment,
- Strata heat,
- Broken rock; and
- Groundwater.

The refrigeration requirements for Obuasi were calculated by determining the total heat load from these identified sources, applying a design target reject temperature of 31.0°C wet bulb. Prysm Ventilation Services South Africa, reviewed the work and found no fatal flaws; indicating the methodology for design and macro layout is robust and appropriate for the mine plan.

13.2 Mine equipment, machinery and personnel

A full-scale mechanised underground mining fleet is used by UMA mining contractor, to meet the mine plan. The fleet is owned by AngloGold Ashanti but is serviced and maintained by the mining contractor, under the mining contract agreement.

Six twin-boom development drill rigs (Jumbos) are being used for all lateral developments (including stope preparations for production). These drill rigs enable scaling, installation of ground support, and face drilling to be undertaken by a single unit. One boom mounted and two "horse-shoe" type production drills capable of drilling 76mm to 102mm have been selected to allow greater flexibility in current and future planned excavations sizes.

A combination of 17t and 21t Sandvik loaders are selected to match with 60t Sandvik trucks (Sandvik TH663i) for material loading and transport from the various underground working areas through ore passes and internal decline systems that connect to the ODD. The production hoisting shafts (KRS, BSVS) at the south as well as the centrally located KMS production shaft will be used for material handling to surface after completion of planned refurbishment work. Above 2900 Level, ore trucking to surface using the ODD is considered optimal until the 2400 Level haulage where a dedicated truck tip system becomes operational. For the north mining areas of Adansi and Cote D'Or, material handling will be via the Cote D'Or Decline. Other auxiliary equipment is in place to either support development or stoping activities.

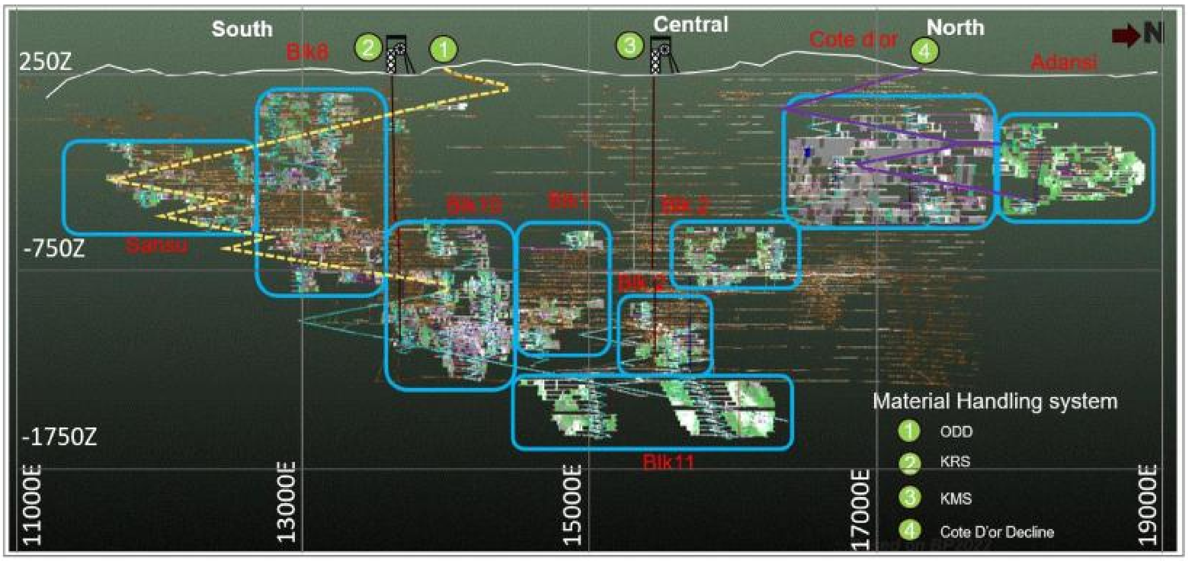
The Obuasi management team runs the mine operations with the required technical, operational, supervisory, skilled, and general personnel. A contractors team headed by a project manager supported by operational, technical, supervisory, and administrative staff provides the operational workforce. The process plant is managed by Obuasi, and the underground mobile fleet is managed by the contractor.

A workforce of some 1,458 comprising 864 Obuasi employees and 594 mining contractor employees are engaged for various roles within the operations. All significant surface activities, including ore processing, environmental management and community engagement are carried out by Obuasi staff.

13.3 Final mine outline

The Obuasi mine outline is presented below.

Obuasi mine outline



14 Processing and recovery methods

The full Obuasi FS metallurgical test work program to simulate the Obuasi process plant (STP) flowsheet from start to finish was truncated and was also performed only on Block 8 Lower and Block 10 grade control drilling samples. The key focus was on gold recovery determination and optimisation with the primary area of gold loss from the STP flowsheet being the gravity/flotation unit operation. Even though some further opportunities exist, preliminary geometallurgical modelling results however indicate good correlation with the FS metallurgical test work results. The Obuasi Mineral Resource statement assumes economic extraction through the processing plant in all cases for the other blocks.

It is however assumed that the process plant flowsheet will be modified to improve recoveries as further metallurgical test work is performed on other blocks. The assumptions on processing route and recovery are appropriate for the styles of mineralisation.

The processing methods include crushing, ore handling, coarse and fine grinding, gravity, flotation, thickening, BIOX, neutralisation, CIL and tailings/water management.

The original design capacity of the STP was 180,000 t/month (6,000 t/day). Since operations commenced, the plant has undergone several stages of modification, expansion, and reconfiguration, with the addition of some unit processes, in particular flash flotation and gravity separation, and the discontinuation of others, notably the CIL circuit treating the flotation tailings.

The key process units of the STP are:

- Single stage crushing through an open circuit jaw crusher (600mm x 600mm, single toggle jaw crusher with an upstream scalping grizzly). It should be noted that all shaft hoisted ore will go through primary crushing through underground ore handling and crushing when hoisting commences at the KMS.
- Key function of the STP primary crusher is to serve as secondary crushing unit to reduce the mills energy consumption and to crush surface ore hauled directly to the ROM pad.
- Grinding using an open circuit SAG mill (6.15m x 7.60m effective grinding length (EGL) with 3,800kW motor) followed by a ball mill (5.20m x 7.80m EGL with 3,800kW motor) operating in closed circuit with a bank of hydrocyclones. The design product size is 80 % passing 75µm;
- Within the ball mill circulating load (hydrocyclone underflow) is a feed splitter box with three controlled outlets. One outlet feeds the primary gravity circuit, consisting of three 1.2m (48 inch) Knelson Concentrators (located in a separate structure) operating in parallel and, second outlet feeds the flash flotation circuit (OK 500) whose concentrate product is giving a further grind at the Vertimill®. The last outlet of the splitter box serves as a bypass to directly feed the ball mill in case the Knelson concentrators and flash flotation units are not available.
- Knelson concentrate is cyanide leached in an In-line Leach Reactor (ILR) in a batch process with the leached gold recovered in the gold room by electrowinning.
- The hydrocyclone overflow is processed in the conventional bulk flotation circuit, which consists of rougher, scavenger, cleaner, and scavenger-cleaner stages. The rougher and scavenger flotation cells are self-aspirating while the cleaner cells are forced air. Each rougher (three-of) and scavenger (four-of) cells are 130m^3 in volume, whilst the cleaner (two-of) and scavenger cleaner (four-of) cells are each 40m^3 in volume. Flotation tailings are thickened and report to either the backfill circuit or to final tailings.
- The combined flash and conventional flotation concentrates are re-ground in a Metso VTM-1000-WB Vertimill. operating in closed circuit with a bank of hydrocyclones, ahead of bioleaching. The target regrind size is 92% passing 45µm.
- The SAG mill described above is designated SAG 1. There is another SAG mill which is designated SAG 2 (5.35m x 7.20m EGL with a 2,700kW motor) which run as a parallel process route from the same crushed ore stockpile (COS) and circuit product fed directly to the conventional bulk flotation plant but at a reduced feed rate of about 90tph. The SAG no.2 process route is what is referred to as the phase 1 circuit and incorporated with its own cyclone cluster.
- The BIOX circuit consist of four parallel trains, with each train consisting of six reactors (895m^3 live volume per tank), the first three operating in parallel (primary reactors) and the remaining three operating in series (secondary, tertiary and quaternary reactors);
- The BIOX circuit product slurry (BIOX residue) is subjected to four stages of Counter Current Decantation (CCD), each stage consisting of a 20m diameter high-rate thickener.
- CCD overflow is treated in the neutralisation circuit, consisting of six 290m^3 tanks in series operated in two stages, with limestone neutralisation in the first stage and lime neutralisation in the second. Product slurry from neutralisation reports to a neutralisation tails hopper which is pumped to the desliming thickener at the backfill tailings area.
- CCD underflow reports to the BIOX CIL circuit, which consists of a pre-oxidation stage using three 372m^3 tanks in series (for pH adjustment and oxygen conditioning) but with option of bypassing according to operational or maintenance requirements. The pre-oxidation tanks product immediately gravitates into the gold dissolution process aided by milk of quicklime from the lime mill and cyanide from the cyanide sparging plant all located within the plant perimeter.

- Loaded carbon from the BIOX CIL circuit is processed in an Anglo-American Research Laboratory (AARL) elution and electrowinning circuit, with a batch size of 12 tonne of carbon. CIL tailings is pumped to join the neutralisation tails which is thickened in another thickener, the underflow of which is pumped to the new BIOX TSF while the cyanide overflow (part of dirty water) gravitates to the OTP pond to be treated through the Rotating Biological Contactor (RBC) at the water treatment plant. This arrangement forms the basis for the dirty and clean water separation strategy for water management.
- The flotation tailings are sent to the thickening facility designated as thickener number 2 which dewaters the flotation tails to between 40% to 50% solids ready to service the paste backfill plant via the STP final tails area.
- The newly installed pastefill plant located at GCS but operated by the processing department serves the circuit product to the underground paste fill distribution system (UDS).
- The pastefill plant comes with a receiver agitated tank, thickener, and filtration unit to a cake density of about 80% solids. A combination of the cake feed, binding agent (cement), slurry and trim with water will deliver the final product at about a production rate of 150 m^3 per hour to the UDS.
- Excess water generated from the paste plant returns to the STP process stream.

The labour requirement has been developed to provide a wider range of operational and technical functions and categorised as follows:

- Stratum III - Operations/Technical Manager
- Stratum II - Superintendent
- Stratum I - High Control room operator, leading hand; and
- Stratum I - Low Operator.

The processing operations currently employ 117 personnel.

Obuasi is an operating mine, and the existing plant has been refurbished and in use since 2019.

The processing methods include crushing, ore handling, coarse and fine grinding, gravity, flotation, thickening, BIOX, neutralisation, CIL and tailings/water management. Description of Obuasi process methodologies, equipment, plant capacities, efficiencies, and personnel requirements to be employed during restart have been detailed in the FS. This Metallurgical process is a proven process route and used on other mines with success.

15 Infrastructure

Sufficient infrastructure exists and is in good condition to support the exploration drilling program. This includes water, air, and electricity reticulations underground. Also available and in good condition are hoisting infrastructure to aid in lowering drilling gear down and hoisting back to surface.

Sufficient infrastructure exists on the mine to support the current and future LOM. These include underground ventilation system, conveyor systems, material and human hoisting infrastructure, crusher and associated conveyors, SAG and Ball mills, flotation, thickeners, BIOX, CIL, elution and electrowinning and both contaminated and non-contaminated tailings management facilities. These facilities are serviced by site water, air reticulation and powered by electricity from the national grid and an onsite 20MW emergency genset.

Obuasi has well-established housing facilities for all employees. The accommodation facilities consist of six refurbished estates that accommodate all employees on site. The six estates collectively have a total of 1,307 properties. Other smaller estates which used to be owned by the mine have been relinquished to third parties for management. Primary health care for employees and their dependents is provided by AngloGold Ashanti Foundation (AGAHF) hospital situated at the northern end of the mine. The hospital also provides health services to the local community. The health facility has been reconfigured to a self-sustaining business unit, with the mine only providing support for its operations.

All necessary logistics including spares, inventory management, inventory preservation, material handling, consumables, reagents transportation, after sales and services have been considered around existing and future infrastructure requirements in estimating the Mineral Reserve

16 Market studies

Obuasi has no by-products and only gold is declared in the Mineral Reserve.

The primary product sold from the mining and beneficiation of ore at our operations, is gold doré. The accepted framework governing the sale or purchase of gold, is conformance to the loco London standard.

Only gold that meets the LBMAs Good Delivery standard is acceptable in the settlement of a loco London contract. In the loco London market, gold is traded directly between two parties without the involvement of an exchange, and so the system relies on strict specifications for fine ounce weight, purity and physical appearance.

For a bar to meet the LBMA Good Delivery standard, the following specifications must be met as a minimum:

- Weight: 350 fine troy ounces (min) and 430 fine troy ounces (max),
- Purity / Fineness: Minimum fineness of 995.0 parts per thousand fine gold,
- Appearance: Bars must be of good appearance not displaying any defects, irregularities such as cavities, holes or blisters.

Only bullion produced by refiners whose practices and bars meet the stringent standards of the LBMAs Good Delivery List can be traded on the London market. Such a refiner is then an LBMA Accredited Refiner and must continue to meet and uphold these standards in order for its bars to be traded in the London market.

Provided the bullion meets the LBMA Good Delivery standard, it is accepted by all market participants and thus provides a ready market for the sale or purchase of bullion.

Annually, the gold prices used for determining Mineral Resource and Mineral Reserve are determined by the Mineral Resource and Ore Reserve committee (RRSC). Two different prices used for determining Mineral Resource and Mineral Reserve. These prices are provided in local currencies and are calculated using the historic relationships between the gold price and the local currency gold price.

The Mineral Resource price reflects the company's upside view of the gold price and at the same time ensures that the Mineral Resource defined will meet the reasonable prospects for economic extraction requirement. Typically, the price is set closer to spot than the Mineral Reserve price and is designed to highlight any Mineral Resource that is likely to be mined should the gold price move above its current range. A margin is maintained between the Mineral Resource and ruling spot price, and this implies that Mineral Resource is economic at current prices but that it does not contribute sufficient margin to be in the current plans.

The Mineral Reserve price provided is the base price used for mine planning. AngloGold Ashanti selects a conservative Mineral Reserve price relative to its peers. This is done to fit into the strategy to include a margin in the mine planning process. The company uses a set of economic parameters to value its assets and Business plan, these economic parameters are set on a more regular basis and reflect the industry consensus for the next five years. These are generally higher than the Mineral Reserve price and enable more accurate short term financial planning. Finally, the company uses a fixed price to evaluate its project and set its hurdle rate. This price and the hurdle rate are set by the board and changed when indicated due to significant changes in the price of gold.

The determination of the Mineral Resource and Mineral Reserve prices are not based on a fixed average, but rather an informed decision made by looking at the trends in gold price. The gold prices and exchange rates determined are then presented to the RRSC for review, in the form of an economic assumptions proposal document once a year (generally the second quarter of the year). After review and approval by the committee, it is sent to AGAs Executive Committee ("EXCO") for approval. The prices for copper, silver and molybdenum are determined using the same process used for gold.

The underground mining operations is contracted to Underground Mining Alliance (UMA), a JV between African Underground Mining Services (AUMS, Australian) and Rocksure (Ghanaian). AUMS holds a 70% interest while its Ghanaian counterpart holds 30%.

Exploration and grade control drilling are undertaken by two third party contractors, Boart Longyear and Westfield Drilling Limited.

The listed contracts are with unaffiliated third parties.

17 Environmental studies, permitting plans, negotiations, or agreements with local individuals or groups

17.1 Permitting

All environmental permits have been received for the project at the time of completing this report. The permits are the Obuasi Redevelopment project and Tailings and Water Infrastructure project.

The existing legal social management requirement is the legislated 3% royalty payment to be made to the Stool lands through the central government and property rates of GHC120,000 and GHC 48,751.82 payable every quarter to the Obuasi Municipal Assembly and the Jacobu District Assembly respectively, for use in social development programs.

The Obuasi township is an integral part of the mine, as such maintaining peaceful co-existence is critical to the operations. To this end, Obuasi through its sustainability department, carries out regular engagement with the community leaders and maintains an open dialogue with the various stakeholders within the communities.

As of 31 December 2021, the extraction of the Mineral Reserve is not anticipated to have any additional socio-economic or cultural impact for which specific mitigations are required, for example, no relocation of communities, nor sensitive areas are required. Impacts from the current on-going operation of the mine are managed through dedicated budgets and teams and these operational costs are included in the Mineral Reserve estimation process. These ongoing programs include, but not limited to, the following:

- Securing the mine tenement by mitigating small-scale and artisanal mining activities within the mine concession through alternative livelihood introduction, provision of security to, and restoration of, the tenement vandalised areas and relocation of illegal miners to ceded concession.

- Engaging with stakeholders for mutual benefit and building trust through community consultative committee meetings and community forums and seminars, scheduled engagements with local, regional, and national government authorities and regulators and responding to community socio-economic challenges where possible.

For AngloGold Ashanti, investment in the community is to be achieved through the following areas:

- Art, culture and heritage.
- Social infrastructure.
- Small and medium enterprises (SME).
- Health.
- Environment.
- Education.

There are currently no sensitive areas that impact on the operations requiring specific mitigation measures to be put in place.

17.2 Requirements and plans for waste tailings disposal, site monitoring and water management

The Environmental Impact Statements for the two (2) permits details on tailings disposal using the BIOX tailings storage facility (TSF) and describes site water management philosophy.

A reclamation plan is being implemented following a signed Reclamation Security Agreement with the Environmental Protection Agency in 2018.

Waste rock generated during underground development, will be used to fill secondary voids; any excess waste rock will be disposed at a designed waste dump site, covered with topsoil and revegetated following closure. The processing tailings comprise of flotation tailings, which constitute 85% of the entire tailings stream with the rest being BIOX® tailings. The BIOX® tails is deposited at the new TSF. Flotation tailings will either be sent to the paste fill plant for paste generation for backfilling voids underground or be stored in a designed tailings dam at the south TSF. The percentage of flotation tails used for paste fill will depend on the volume of void ready for backfilling at a particular point in time with the remainder transferred to the south TSF. However, in situations where no void is ready for filling the entire flotation tails will be deposited on the south TSF.

The South TSF is an upstream laterite paddock hybrid TSF with a disturbance footprint of approximately 200ha. The South TSF was initially formed behind a compacted laterite starter wall which has been progressively raised as required since construction in 1993. The most recent raise of 1.5m was completed in August 2015.

Deposition of flotation tailings on South TSF is operated in a manner which provides a very low arsenic-no cyanide layer over the combined tailings and establishes a water-shedding surface for closure of the facility. The water-shedding surface on South TSF will require in the order of 4.9 Mt flotation tailings, after which, the flotation tailings will be deposited in the new Dokyiwa TSF flotation compartment which will be constructed later.

A decant pump and a one tower penstock located on the east side of the TSF is the primary decant method. This operational decant facility returns water to the processing facilities via the East Holding Pond. The bacteria used in the BIOX® process at the STP have a very low tolerance to trace levels of cyanide, hence all decant water returned from the TSF is treated in the STP water treatment plants prior to reuse in the STP circuit.

In this manner, no water is discharged directly from the TSF to the environment as all water is treated via the South Processing Plant (SPP) water treatment plant and discharged to the various water management ponds. Water excess to the demands of the circuit is treated through the Reverse Osmosis (RO) 250 and 500 water treatment plants operated by Veola (plant operator-Contractor) to compliant quality criteria prior to discharge to the environment.

An emergency penstock arrangement is located on the south side of the TSF to decant water and prevent overtopping of the TSF in the event of extraordinary rainfall event. A three-tower penstock has also been constructed on the north side in anticipation of directing decant water to the process water dam (PWD).
Water management at Obuasi encompasses underground dewatering, surface catchment and storm water run-off across the mine site, water storage and treatment facilities, water extraction from, and discharge to, local watercourses, and a complex process water circuit. The site water balance, which is 'positive', is complex and intimately linked with the TSF.

Significant improvements in water management and stability of the facility, including penstock improvements and buttressing of the North wall has resulted in good control of the water pool on the TSF surface and improved the stability of the facility. The minimum required distance of the pool from the TSF walls of 120m is consistently maintained and often well exceeded. Additionally, the installation of gauge posts has resulted in a more informed management approach. Management practices on the TSF to ensure its safety and stability are;

- Recording of freeboard and pool depth.
- Recording of rainfall figures and pool distances from the walls.
- Regulate, pumping and transfer of return water from the TSF and the holding pond to the plant and seepage sump back to the TSF.
- Visual inspections and recordings of the embankment, berms, canal, drain boxes and finger drains.
- Recording of piezometers to check the phreatic levels in the embankment.
- Fixing of erosion gullies on TSF service roads and embankment

The general principle and aim are to always manage the pool to the minimum size especially during the rainy season and ensuring that the TSF remains in a safe and stable condition and ensure that all monitoring systems remain in place to best practice standards. This care and maintenance plan has been developed to ensure that the TSF complies with regulatory provisions and conforms to best practices within AngloGold Ashanti tailings management framework.

Reclamation activities are scheduled over the full LOM and provide for operational synergies, particularly minimising the liability that will remain when gold production has ceased. It also allows for progressive relinquishment of the environmental liabilities outside the core operational area and the return of this land to the Obuasi community.

Reclamation practices are governed by EPA and Minerals Commission Acts and legislative instruments principally. AngloGold Ashanti Ghana is implementing an approved reclamation plan submitted to the EPA as part of the Environmental Impact Statement (EIS) for which an environmental permit has been granted. The reclamation plan is based on the methodology and closure approach as concluded in the reclamation security agreement (RSA 2018). In addition to the national regulations which AGAG is required to comply firstly, the company has also developed Corporate Closure Planning Standard (2013) and associated Closure Planning Guideline (2014) which require the reclamation and closure plans developed to mitigate site-specific closure risks and meet several overall objectives, including:

- Compliance with host country requirements and site-specific commitments (noting that where the legal requirements cannot be met or are not the optimal requirement for closure, every effort must be made to negotiate an alternative with the applicable authority).
- Mitigation and management of contamination (water, air, soil) and disturbed land.
- Minimise costs, but not at the expense of meeting other closure objectives.
- Establish sustainable land use(s) that do not compromise future public health and safety.
- Evaluate the potential use of existing structures and infrastructure for future economic benefit

17.3 Socio-economic impacts

In compliance with the stability agreement between AngloGold Ashanti Ghana and the government of Ghana, a Community Trust Fund has been established where $2 for every ounce of gold produced is paid into the fund. The fund is expected to contribute positively to the development of communities within AngloGold Ashanti Ghana catchment area.

Apart from the Community Trust Fund that is legislated, there are other voluntary programmes that AngloGold Ashanti Ghana has initiated aimed at promoting socio-economic activities within its catchment areas.

A 3-year socio-economic management plan which was launched in 2019 and ended in 2021 focused, among other things, the promotion of diversity and inclusion in AngloGold Ashanti Ghana host communities. Specifically, AngloGold Ashanti Ghana has supported the sustainable capacity development of women and girls through its Enterprise and Educational development programmes.

A longer-term socio-economic development is currently being worked on to provide investment in the areas of Science, Engineering, Technology and Mathematics (STEM) with emphasis on promoting girls' participation in these areas.

The mine has also established a $300,000 fund for the repair of cracks on buildings that may be impacted by blasting operations for communities that are near the mine.

17.4 Mine closure and reclamation

The Environment Protection Agency is the primary agency regulating environmental-related closure issues on mine sites in Ghana, including reclamation bonds and agreement of when environmental responsibility can be divested. The Minerals Commission regulates the relinquishment of mining concessions in their entirety or part thereof.

Obuasi closure plans have been well-developed and are currently being implemented according to plan. The reclamation plan is based on the methodology and closure approach as concluded in the reclamation security agreement (RSA 2018). In addition to the national regulations which AngloGold Ashanti Ghana is required to comply firstly, the company has also developed Corporate Closure Planning Standard (2013) and associated Closure Planning Guideline (2014) which require the reclamation and closure plans developed to mitigate site-specific closure risks and meet several overall objectives, including:

- Compliance with host country requirements and site-specific commitments (noting that where the legal requirements cannot be met or are not the optimal requirement for closure, every effort must be made to negotiate an alternative with the applicable authority).
- Mitigation and management of contamination (water, air, soil) and disturbed land.
- Minimise costs, but not at the expense of meeting other closure objectives.
- Establish sustainable land use(s) that do not compromise future public health and safety.
- Evaluate the potential use of existing structures and infrastructure for future economic benefit

The standard requires consultation with key stakeholders throughout the closure planning process, particularly on post-closure land uses and objectives. All closure options considered for individual disturbance areas were selected to meet the following overarching closure objectives:

- Minimise the potential for health risks arising from closure areas;
- Be technically and economically viable;
- Be compatible with surrounding land use to the extent possible; and
- Optimise land use suitability to the extent practicable.

The full closure cost is estimated at $255M.

17.5 Qualified Person's opinion on adequacy of current plans

Obuasi currently holds valid permits to operate and complies with all requirements of the permits. The closure plans have been catered for in the mine plan and there are no outstanding permit issues that the QP is aware of. The social-economic, local, and general community issues are acceptably managed, and the QP considers these plans to be adequate.

17.6 Commitments to ensure local procurement and hiring

To bolster the local economy, AngloGold Ashanti has implemented policy interventions targeted at communities within its catchment area. These interventions include:

- The AngloGold Ashanti community trust fund: an establishment that contributes positively to the development of communities within the AngloGold Ashanti Ghana catchment area,
- The AngloGold Ashanti Health Foundation: an AngloGold Ashanti Ghana supported hospital in Obuasi and the establishment of an enterprise development program.
- Local content/procurement plan: This is part of the broader social management plan aimed at creating opportunities for local businesses to increasingly participate in AGA's supply chain. This has been supported through the Commercial and Procurement department of the mine.
- A local employment programme where AngloGold Ashanti Ghana and Companies who have contract with it must fill all unskilled roles from the community through the sustainability department.

18 Capital and operating costs

18.1 Capital and operating costs

Capital (CAPEX) and operating (OPEX) expenditures were estimated based on the LOM mining schedule. The gold price, exchange rates, and others are provided by the corporate office.

AngloGold Ashanti signed a tax and redevelopment agreement with GOG in 2017 and 2018 respectively. In these agreements, a royalty rate of 3% and corporate tax rate of 32.5% apply within a 10-year concession period. Beyond this concession period, standard rates of 5% and 35% apply for royalty and income tax respectively. An agreed schedule of input duties is applicable for an initial period of six years ending 31 December 2023.

Economic criteria used, including capital and operating costs, royalties are also considered in the COGs calculation.

Capital (CAPEX) and operating (OPEX) expenditures were estimated based on the business plan and LOM mining schedule. These are updated on an annual basis.

The key cost components comprise of Ore Reserve development (ORD), underground DD program, mining fleet replacement, and an upgrade of processing infrastructure. The remaining capital costs are categorised as non-sustaining and involve capital spend on the Obuasi Deeps Decline (ODD), which is the main access ramp to the mine running through to the deepest part of the mine in Block 11 and the KMVS shaft, a major return air raise designed to support the mining of the central blocks of the mine, which is currently planned to be completed by 2024.

The other non-sustaining capital spend are associated with the Obuasi phase 3 projects involving KMS and BSVS shaft upgrades, and power and mine services upgrades.

The key operating costs are categorised into three main components: mining, processing and G&A. These costs are based on the LOM Plan (Mineral Reserve only). The top five costs for mining (excludes ORD cost), by cost element are:

- Ground support.
- Operational development.
- Electricity and power (significant contributor being ventilation refrigeration units).
- Labour (mining, mine technical and geology).
- Material handling.
- The mining cost model is based on, and built around, the current mining contractor scenario.
- The OPEX cost is approximately $79/ore tonne mined, although this varies from Block to Block.
- A similar cost breakdown for both processing operating costs and G&A are shown below.

Processing operating cost estimates were developed as a matrix based on cost type and expenditure area. The following key inputs form the basis of the operation cost estimate:

- Operating, technical services and maintenance labour,
- Electrical power draw derived from the mechanical equipment list,
- Reagent and operating consumables,
- Maintenance consumables cost,
- General and administration costs, within the process plant only,
- Mobile equipment; and
- Metallurgical analysis expenses.

All applicable freight costs associated with transporting goods to, and within Ghana, are included in the estimate.

The operating cost estimate includes the following:

- Cost of labour for staff, including all applicable other payroll and non-payroll costs.
- Labour costs for supervision, management and reporting of onsite organisational and technical activities directly associated with the processing plant.
- Labour numbers have been estimated for operating and maintaining the process plant and supporting infrastructure including the newly established paste fill plant.
- Costs of operating consumables, are based on current costs as supplied to site.
- Cost of power; which is based on a unit cost for power supplied to the site.
- Fuels, lubricants and maintenance materials used to operate and maintain the process plant and vehicles.
- Miscellaneous operating costs including safety, training, recruitment and communications; and

- Costs associated with the analysis of metallurgical samples at the onsite laboratory operated by Obuasi as well as the contract laboratory.

The top five (5) contributors of processing cost are:

- Reagents-$560M.
- Electricity and power-$279M.
- Labour-$146M.
- Service Water-$103M.
- Engineering materials-$88M.

The remaining operational cost is associated with general and administrative costs, covering key overheads, labour, contractors and general mine services. The major cost associated with G&A is labour followed by corporate recharges.

Capital budget in financial model

Sustaining Capital	LoM (2022-2037): $M
ORD Development	708
UG Infrastructure Development	198
Surface & UG Infrastructure Development	80
Mining Fleet	145
Processing Infrastructure	116
Site Process Water Improvement Projects	15
Replacement Of Sansu Emergency Faulty Genset	3.55
Lom Asset Integrity	8.20
Brownfields Exploration	80.11
Other Capital	72.42
Total	1,426.68

Other Capital (Non-Sustaining)	LoM (2022-2037) : $M
Mining Decline	65.98
KMVS Raise Boring	10.76
Obuasi Redevelopment Project Phase 3	90.23
Other	6.81
Total	173.78

Key operational costs

Mining cost	LoM (2022-2037) : $M
Labour	380.64
Explosives And Accessories Material	104.10
Support And Construction Material	96.16
Material Steel	10.08
Fuel	124.40
Electricity & Power	462.71
Mining Development & Operations	615.36
Ground Support	809.55
Load & Haul - Waste	6.03
Load & Haul - Ore	329.93
Contract - Drilling	201.80
Ore Rehandle Rom	26.64
Contract Fixed Costs Overheads	351.39
ORD and Other Capital Credit*	(1,280.40)
Contract - Hire Equipment	11.74
Services	10.07
Other	183.50
Total	2,443.70

*ORD and Other Capital Credit represents the contra entry of the amounts allocated or apportioned out of the mining cost to Obuasi underground decline capital, Mineral Reserve and SIBC underground infrastructure development.

Processing Cost	LoM (2022-2037): $M
Labour	146.11
Cement	0.28
Reagents	560.20
Engineering Materials	88.10
Fuel	45.31
Mill Liners & Spares	59.00
Electricity & Power	279.33
Contractors & Consultants	18.91
Ore Rehandle ROM	25.30
Metallurgical Analysis Expenses	18.03
Plant & Equipment Hire	3.46
Service Water	103.16
General Materials	14.17
Other	47.29
Total	1,408.64

General and Administrative cost	LoM (2022-2037): $M
Labour	399.79
Engineering Material	19.83
Fuel	11.07
Other Material	22.20
Power	40.95
Aircraft	6.73
Labour Contractor and Consultants	72.04
Mining Contractors	7.08
Plant And Equipment Rental	2.19
Water	24.79
Offsite Repairs	0.14
Services	119.78
Corporate Recharges	129.30
Other	44.17
Total	900.07

18.2 Risk assessment

Obuasi has a long history of mining activities, experiencing various mining methods, mining equipment and application of varying technical and operational management methods compounded by difficult ground conditions resulting in a large complex mine with significant footprint of disturbed areas. Existing operating workings are overlain by extensive worked out and abandoned areas, through which the new working horizons are required to integrate.

This complexity and the associated uncertainty of historical information have been mitigated by rigorous design optimisation process in historically mined areas to ensure local and regional stability. There is also a comprehensive ground control management program in place to manage any other geotechnical risks as the mine transitions deeper, and a robust management operating system to manage the operations. As such, these risks are not anticipated to impact the execution of the Mineral Reserve mine plan.

All relevant permits have been obtained for the operations. In the political space, Ghana is a peaceful country with a stable democratic system, and the mine has maintained a peaceful coexistence with the communities within its catchment area.

19 Economic analysis

19.1 Key assumptions, parameters and methods

- The following are material assumptions used for the Obuasi 2022 Mineral Reserve Business Plan: Power Rate: $0.140/kwh.
- Diesel cost: $0.988/l.
- Gold: $1200/oz.

AngloGold Ashanti signed a tax and redevelopment agreement with the government of Ghana in 2017 and 2018 respectively. In these agreements, a royalty rate of 3% and corporate tax rate of 32.5% apply within a 10-year concession period. Beyond this concession period, standard rates of 5% and 35% apply for royalty and income tax respectively. An agreed schedule of input duties is applicable for an initial period of six (6) years ending 31 Dec 2023.

19.2 Results of economic analysis

Inferred Mineral Resource has been excluded from the demonstration of economic viability in support of disclosure of a Mineral Reserve. As described in Section 21.4, AngloGold Ashanti takes into consideration the potential impact of the Inferred Mineral Resource in the planning process for the Mineral Reserve, but the cash flow analysis does not include the Inferred Mineral Resource in demonstrating the economic viability of the Mineral Reserve.

Obuasi cash flow analysis (Mineral Reserve material only)

Item	Unit	Total LOM	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Production															
Gold	Oz ('000)	7,185.1	271.3	318.3	343.8	559.0	815.7	482.2	500.2	467.4	450.2	406.2	389.3	394.4	436.8
Silver	Oz ('000)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Copper	lb ('000)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Revenue															
By product (+/-)	USD M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Revenue	**USD M**	**8,622.2**	**325.5**	**382.0**	**412.6**	**670.8**	**978.9**	**578.7**	**600.3**	**560.9**	**540.3**	**487.4**	**467.1**	**473.3**	**524.2**
Royalties	USD M	364	9.8	11.5	12.4	20.1	29.4	17.4	30.0	28.0	27.0	24.4	23.4	23.7	26.2
Operating Costs															
Mining Cost	USD M	2,444	96.4	109.9	102.8	129.7	150.7	163.4	157.0	144.4	162.0	155.2	149.5	153.6	145.9
Processing Cost	USD M	1,409	69.0	75.5	92.1	84.2	88.4	91.6	94.8	93.3	93.1	93.2	92.4	93.5	92.2
General & Admin	USD M	900	73.3	70.8	82.3	73.4	64.9	62.4	58.4	55.0	52.1	49.7	47.7	46.1	44.8
Other Operating Costs	USD M	41	3.1	3.4	3.0	3.2	3.5	2.7	2.7	2.5	2.4	2.2	2.1	2.1	2.1
Total Operating Cost	USD M	4,793	241.7	259.6	280.1	290.6	307.6	320.2	312.9	295.2	309.6	300.3	291.8	295.4	285.0
Sustaining Capital	USD M	1,427	89.9	129.6	120.8	105.2	121.4	97.1	100.6	100.4	90.6	102.0	100.2	93.5	108.2
Non-GAAP Metrics & Cash Flow															
Total AISC	USD M	**6,220**	**331.7**	**389.2**	**401.0**	**395.8**	**429.0**	**417.3**	**413.5**	**395.6**	**400.2**	**402.2**	**392.0**	**388.9**	**393.2**
Total AISC	USD/oz1	**866**	1,223	1,222	1,166	708	526	865	827	846	889	990	1,007	986	900
Other Capital (non Sust.)	USD M	174	99.3	52.1	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total AIC	USD M	**6,394**	**431.0**	**441.3**	**423.3**	**395.8**	**429.0**	**417.3**	**413.5**	**395.6**	**400.2**	**402.2**	**392.0**	**388.9**	**393.2**
Total AIC	USD/oz1	**890**	1,589	1,386	1,231	708	526	865	827	846	889	990	1,007	986	900
Closure Costs	USD M	255	20.5	18.9	15.0	16.1	12.0	1.2	1.2	2.6	0.3	3.3	6.0	3.8	3.4
Tax	USD M	226	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.6	28.2	17.5	8.6	14.9	30.8
Free Cash Flow	**USD M**	**1,383**	**-135.7**	**-89.6**	**-38.1**	**238.8**	**508.6**	**142.8**	**155.6**	**99.0**	**84.5**	**40.0**	**37.2**	**42.1**	**70.6**

Item	Unit	Total LOM	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Production																			
Gold	Oz ('000)	7,185.1	471.6	510.7	367.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Silver	Oz ('000)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Copper	lb ('000)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Revenue																			
By product (+/-)	USD M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Revenue	**USD M**	**8,622.2**	**565.9**	**612.8**	**441.5**	**0.0**	**0.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Royalties	USD M	364	28.3	30.6	22.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operating Costs																			
Mining Cost	USD M	2,444	128.0	258.4	236.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Processing Cost	USD M	1,409	88.7	86.4	80.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
General & Admin	USD M	900	43.0	40.1	35.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Operating Costs	USD M	41	2.1	2.1	1.7		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Cost	USD M	4,793	261.8	387.1	354.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustaining Capital	USD M	1,427	35.5	15.1	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-GAAP Metrics & Cash Flow																			
Total AISC	USD M	**6,220**	**297.4**	**402.2**	**371.1**	**0.0**	**0.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total AISC	USD/oz1	866	631	788	1,009	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Capital (non Sust.)	USD M	174	0.0	0.0	0.0	0.0													
Total AIC	USD M	6,394	**297.4**	**402.2**	**371.1**	**0.0**	**0.0**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Total AIC	USD/oz1	890	631	788	1,009	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Closure Costs	USD M	255	6.4	3.7	12.9	44.2	55.4	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tax	USD M	226	53.7	36.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Free Cash Flow	USD M	1,383	**180.1**	**139.4**	**35.5**	**-44.2**	**-55.4**	**-28.6**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Key metrics		
NPV0	USD M	1,382.7
NPV5	USD M	940.7
NPV10	USD M	653.3
NPV15	USD M	459.3
Cash Flow Margin	%	35%
IRR (for Projects only)	%	-

Revenues

LOM cashflow at NPV_0 is $13,082.7. This decreases to $653.3 at a discount rate of 10% and at 15% decreases to $459.3.

19.3 Sensitivity analysis

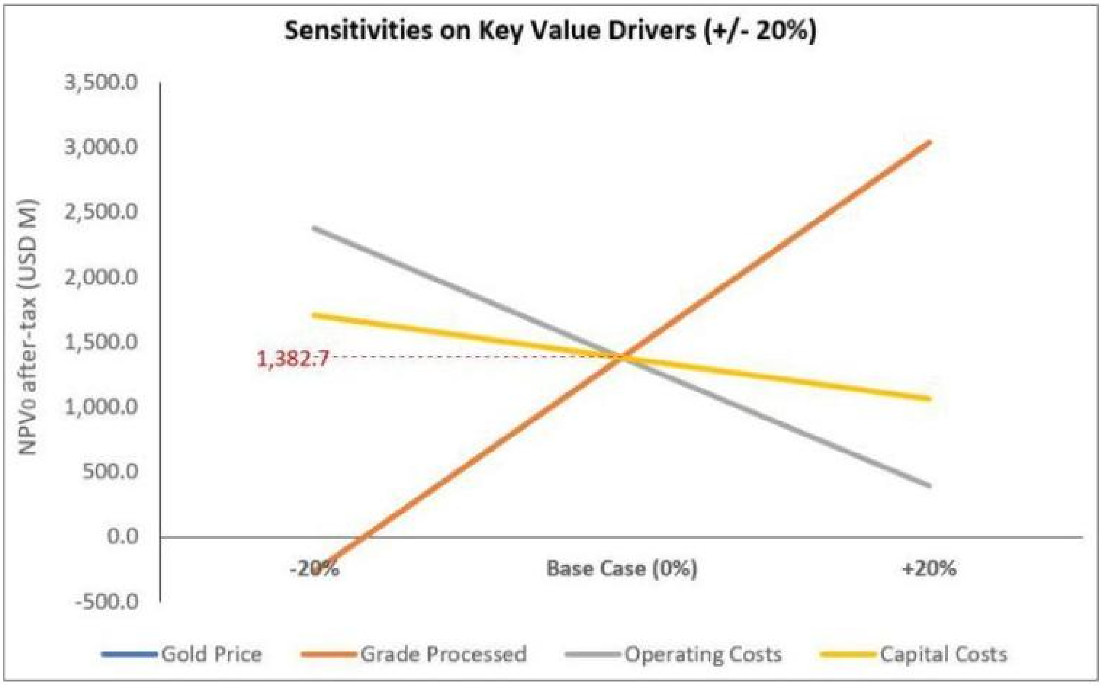
A sensitivity analysis on NPV_0 model for key value drivers (gold price, capital cost, operating cost, and processed grade) were completed on the Mineral Reserve financial model. A 20% change in either gold price or processed grade resulted in the NPV_0 change by about the same amount. However, a 20% change in operating and capital costs resulted in 72% and 23% changes to the NPV_0 respectively.

As shown below, the Mineral Reserve is most sensitive to gold price and processed grade changes. Capital and operating costs have less impact compared to price and feed grade.

Sensitivity analysis for key value drivers (numbers as after-tax NPV0, in $M)

Parameter [1]	Unit	-20%	Base Case	+20%	%Change NPV0 -20%	%Change NPV0 20%
Gold Price	USD/oz	-268.9	1,382.7	3,034.3	119%	119%
Grade Processed	g/t	-266.1	1,382.7	3,031.4	119%	119%
Operating Costs	USD M	2,376.1	1,382.7	389.2	72%	72%
Capital Costs	USD M	1,702.8	1,382.7	1,062.6	23%	23%

Obuasi Mineral Reserve sensitivity on key value drivers



20 Adjacent properties

There are concessions to the south of Obuasi owned by Adansi Gold. Edikan Gold is owned by Perseus Mining Ltd (also to the south). To the north of Obuasi, is Asanko gold mine which is a JV between Asanko Ltd and Goldfields Ltd. Goldstone Resource took over the previous Homase concession from AngloGold Ashanti Ghana in 2002/2003.

These adjacent properties do not have an important bearing on this report and no information from these properties was used

21 Other relevant data and information

21.1 Inclusive Mineral Resource

The majority of the Inclusive Mineral Resource is from underground sources with the surface sources (Anyinam and Gyabunsu-Sibi) constituting less than 1% of the Inclusive Mineral Resource. The largest contributions are from Cote D'Or (all Inferred Mineral Resource), Blocks 2, 8, 10 and 11. The remaining blocks each contribute less than 10%.

Inclusive gold Mineral Resource

Obuasi		Tonnes	Grade	Contained gold	
as at 31 December 2021	Category	million	g/t	tonnes	Moz
Anyinam	Measured	0.00	2.50	0.01	0.00
	Indicated	0.45	3.54	1.59	0.05
	Measured & Indicated	0.45	3.53	1.60	0.05
	Inferred	1.02	4.23	4.32	0.14
Gyabunsu-Sibi	Measured	0.05	4.00	0.21	0.01
	Indicated	0.05	3.48	0.16	0.01
	Measured & Indicated	0.10	3.76	0.37	0.01
	Inferred	0.28	3.97	1.13	0.04
Above 50 Level - Block 1	Measured	-	-	-	-
	Indicated	7.80	6.00	46.86	1.51
	Measured & Indicated	7.80	6.00	46.86	1.51
	Inferred	2.40	5.90	14.15	0.45
Above 50 Level - Block 2	Measured	-	-	-	-
	Indicated	9.12	8.59	78.39	2.52
	Measured & Indicated	9.12	8.59	78.39	2.52
	Inferred	3.06	5.09	15.58	0.50
Above 50 Level - Block 8	Measured	4.58	9.47	43.35	1.39
	Indicated	12.13	4.97	60.33	1.94
	Measured & Indicated	16.71	6.21	103.68	3.33
	Inferred	2.92	4.51	13.17	0.42
Above 50 Level - Block 10	Measured	0.90	9.90	8.88	0.29
	Indicated	10.67	7.07	75.44	2.43
	Measured & Indicated	11.57	7.29	84.31	2.71
	Inferred	4.41	5.58	24.63	0.79
Above 50 Level - Adansi	Measured	-	-	-	-
	Indicated	2.99	12.86	38.46	1.24
	Measured & Indicated	2.99	12.86	38.46	1.24
	Inferred	2.66	9.53	25.39	0.82
Above 50 Level - Cote d'Or	Measured	-	-	-	-
	Indicated	-	-	-	-
	Measured & Indicated	-	-	-	-
	Inferred	24.71	7.85	193.88	6.23
Above 50 Level - Sansu	Measured	1.38	9.51	13.15	0.42
	Indicated	5.40	5.20	28.06	0.90
	Measured & Indicated	6.78	6.08	41.20	1.32
	Inferred	2.48	4.19	10.41	0.33
Below 50 Level - Block 11	Measured	-	-	-	-
	Indicated	3.09	19.30	59.70	1.92
	Measured & Indicated	3.09	19.30	59.70	1.92
	Inferred	2.47	16.81	41.52	1.34
Below 50 Level - Block 14	Measured	-	-	-	-
	Indicated	0.55	8.05	4.47	0.14
	Measured & Indicated	0.55	8.05	4.47	0.14
	Inferred	3.72	8.19	30.48	0.98
Total	Measured	6.91	9.49	65.60	2.11
	Indicated	52.26	7.53	393.45	12.65
	Measured & Indicated	59.17	7.76	459.04	14.76
	Inferred	50.15	7.47	374.66	12.05

21.2 Inclusive Mineral Resource by-products

There are no Inclusive Mineral Resource by-products.

21.3 Mineral Reserve by-products

There are no Mineral Reserve by-products.

21.4 Inferred Mineral Resource in annual Mineral Reserve design

AngloGold Ashanti's planning process allows the use of Inferred Mineral Resource in Mineral Reserve determination and reporting as well as in our business planning. These two are closely aligned with the Mineral Reserve being a subset of the business planning process. It is important to note that in all AngloGold Ashanti processes, despite the use of Inferred Mineral Resource, there is never a conversion of Inferred Mineral Resource to a Mineral Reserve.

AngloGold Ashanti completes an Inferred Mineral Resource risk test on all plans. This involves setting the Inferred Mineral Resource grade to zero within the Mineral Reserve design (thereby considering a worst-case scenario whereby the Inferred Mineral Resource totally fails to deliver, and it is completely made up of waste). The Mineral Reserve design is evaluated with the Inferred Mineral Resource at zero grade, and if the design using Measured and Indicated Mineral Resource remains financially positive, it has been proven that the Mineral Reserve is robust enough to make a positive financial return and therefore satisfies the requirements of a Mineral Reserve.

With appropriate caution, a portion of the Inferred Mineral Resource was included in the business plan optimisation process. This accounts for 10% of the Mineral Reserve plan of 16 years. No Inferred Mineral Resource is considered in Mineral Reserve reporting.

Inferred Mineral Resource in Mineral Reserve design

Obuasi	Tonnes	Grade	Contained gold	
as at 31 December 2021	million	g/t	tonnes	Moz
Above 50 Level - Block 1	0.18	8.31	1.46	0.05
Above 50 Level - Block 2	0.25	6.80	1.73	0.06
Above 50 Level - Block 8	0.88	5.96	5.25	0.17
Above 50 Level - Block 10	1.45	6.83	9.90	0.32
Above 50 Level - Adansi	0.59	10.23	6.00	0.19
Above 50 Level - Sansu	0.49	6.02	2.93	0.09
Below 50 Level - Block 11	0.11	18.45	2.02	0.06
Total	3.95	7.43	29.29	0.94

21.5 Additional relevant information

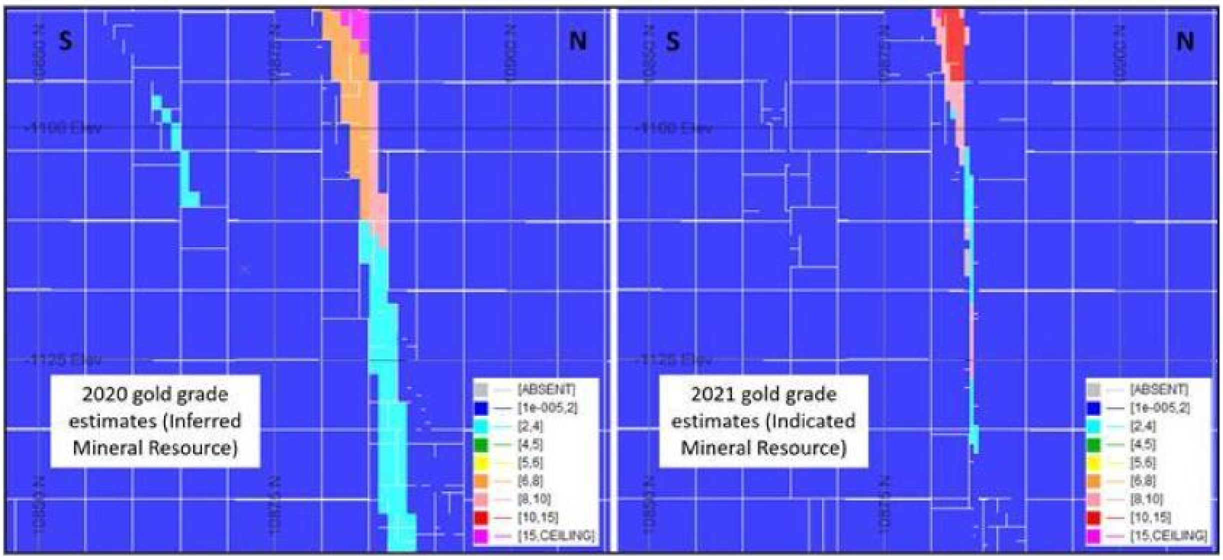
AngloGold Ashanti evaluates the conversion of Inferred Mineral Resource to Indicated Mineral Resource on an annual basis. During 2020 and 2021, Sansu, Blocks 1, 8 and 10 were drilled. Only Block 8 had Inferred Mineral Resource upgrades to Indicated Mineral Resource during both 2020 and 2021. Blocks 1 and 10 had upgrades only in 2021 and, for Sansu, no appreciable Inferred Mineral Resource was upgraded during either of the years. The conversion evaluation is presented below. For ounces, conversion rates of 22% and 121% was achieved in Blocks 1 and 10 respectively. For Block 8, the cumulative conversion achieved over the two years was 132%.

Inferred to Indicated Mineral Resource Conversion for 2021

	2020			2021			2022		
	Tonnes (t)	Grade (g/t)	Gold (oz)	Tonnes (t)	Grade (g/t)	Gold (oz)	Tonnes (t)	Grade (g/t)	Gold (oz)
Block 8									
Starting Inferred Mineral Resource	470,507	5.45	82,464	245,503	4.78	37,728	115,418	4.60	17,069
Resulting Indicated Mineral Resource (year+1)	671,009	5.47	117,984	245,582	5.19	40,977	-	-	-
Conversion between years (%)	143%	100%	143%	100%	109%	109%	-	-	-
Cumulative conversion (%)	143%	100%	143%	128%	104%	132%	-	-	-
Block 10									
Starting Inferred Mineral Resource	-	-	-	418,942	7.69	103,550	243,298	5.26	41,114
Resulting Indicated Mineral Resource (year+1)	-	-	-	319,809	12.19	125,341	-	-	-
Conversion between years (%)	-	-	-	76%	159%	121%	-	-	-
Cumulative conversion (%)	-	-	-	76%	159%	121%	-	-	-
Block 1									
Starting Inferred Mineral Resource	-	-	-	87,328	19.21	53,941	7,880	6.50	1,647
Resulting Indicated Mineral Resource (year+1)	-	-	-	43,131	8.63	11,966	-	-	-
Conversion between years (%)	-	-	-	49%	45%	22%	-	-	-
Cumulative conversion (%)	-	-	-	49%	45%	22%	-	-	-

The Mineral Resource to Mineral Reserve conversion rates for Blocks 8 and 10 were very good, but a significantly poorer conversion rate was achieved in Block 1. Compared with Block 1, Blocks 8 and 10 are more mature areas where the geology and the mineralised boundary extents are better understood. Block 1 is an immature, future mining area where drilling was focused on the base of a mineralised lode to firm up on the thickness and extents of the mineralisation. With infill drilling, it was found that the mineralisation narrowed more rapidly than interpreted from the broad, Inferred Mineral Resource confidence level drilling.

A typical S-N vertical section (in local coordinates) for Block 1 comparing the 2020 gold grade estimates with the 2021 gold grade estimates for an area upgraded from Inferred to Indicated Mineral Resource.



AngloGold Ashanti reconciles the conversion of the Inferred Mineral Resource via grade control if it is not converted to Indicated Mineral Resource before it is mined. This is seen as the final standalone measurable point of the delivery of Inferred Mineral Resource. However, no Inferred Mineral Resource was converted directly to grade control during the two years assessed.

21.6 Certificate of Qualified Person(s)

Emmarentia Maritz certificate of competency

As the author of the report entitled Obuasi Technical Report summary, I hereby state:

- My name is Emmarentia Maritz. I am the Qualified Person for the Mineral Resource.
- My job title is Chief Geologist Evaluation.
- I am member of SACNASP (South African Council for Natural Scientific Professions) with
- membership number 118345. I have a BSc Hons (Geology) degree, a BSc (Geology) degree and a MSc (Mineral Resource Evaluation).
- I have 18 years of relevant experience.
- I am a Qualified Person as defined in Regulation S-K 1300 Rule.
- I am not aware of any material fact or material change with respect to the subject matter of the report that is not reflected in the report, the omission of which would make the report misleading.
- I declare that this Report appropriately reflects my view.
- I am not independent of AngloGold Ashanti Ltd.
- I have read and understand Regulation S-K 1300 Rule for Modernisation of Property Disclosures for Mining Registrants. I am clearly satisfied that I can face my peers and demonstrate competence for the deposit.
- I am an employee in respect of AngloGold Ashanti Ltd in respect of the issuer AngloGold Ashanti Ltd for the 2021 Final Mineral Resource.
- At the effective date of the report, to the best of my knowledge, information and belief, the report contains all scientific and technical information that is required to be disclosed to make the report not misleading.

Douglas Atanga certificate of competency

As the author of the report entitled Obuasi Technical Report Summary, I hereby state:

- My name is Douglas Atanga. I am the Qualified Person for the Mineral Reserve.
- My job title is Chief Mining Engineer.
- I am a member of the AusIMM (Australasian Institute of Mining and Metallurgy) with
- membership number 334391. I have a BSc (Mining Engineering) degree.
- I have 13 years relevant experience.
- I am a Qualified Person as defined in Regulation S-K 1300 Rule.
- I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the report, the omission of which would make the report misleading.
- I declare that this report appropriately reflects my view.
- I am not independent of AngloGold Ashanti Ltd.
- I have read and understand Regulation S-K 1300 Rule for Modernisation of Property Disclosures for Mining Registrants. I am clearly satisfied that I can face my peers and demonstrate competence for the deposit.

- I am an employee in respect of AngloGold Ashanti Ltd in respect of the issuer AngloGold Ashanti Ltd for the 2021 Final Mineral Resource.
- At the effective date of the report, to the best of my knowledge, information and belief, the report contains all scientific and technical information that is required to be disclosed to make the report not misleading.

22 Interpretation and conclusions

Unmitigated risks and uncertainties that could affect the confidence in the Mineral Resource and Mineral Reserve estimates pertain to historical geological and survey data. The Obuasi Mine has been in operation since 1897 and all available, appropriate data has been used for Mineral Resource and Mineral Reserve compilation. This includes the geological and survey data collected over several decades prior to the merger of AngloGold and Ashanti Goldfields Company Limited in 2004. The risk associated with the inclusion of this data has been mitigated by a comprehensive data validation project completed between 2015 and 2018 (for geological data) and by reduced Mineral Resource confidence (such as the downgrades of Indicated to Inferred Mineral Resource for Cote D'Or). The verification of historical data is an ongoing project and will continue as areas become accessible and further infill drilling and verification work becomes possible.

23 Recommendations

AngloGold Ashanti runs a comprehensive business planning process which is framed by the Company's Strategic Options process. This sets the mine's budget requirements aligned to both the larger group and the necessities of the operation. The decisions that result from this process are ultimately approved by AngloGold Exco and the regional and mine's senior management. While the Qualified Person is an intimate part of this process, he/she does not make recommendations for the operation without it being part of the described framework.

24 References

24.1 References

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24.2 Mining terms

All injury frequency rate: The total number of injuries and fatalities that occurs per million hours worked.
By-products: Any potentially economic or saleable products that emanate from the core process of producing gold or copper, including silver, molybdenum and sulphuric acid.
Carbon-in-leach (CIL): Gold is leached from a slurry of ore where cyanide and carbon granules are added to the same agitated tanks. The gold loaded carbon granules are separated from the slurry and treated in an elution circuit to remove the gold.
Carbon-in-pulp (CIP): Gold is leached conventionally from a slurry of ore with cyanide in agitated tanks. The leached slurry then passes into the CIP circuit where activated carbon granules are mixed with the slurry and gold is adsorbed on to the activated carbon. The gold-loaded carbon is separated from the slurry and treated in an elution circuit to remove the gold.
Comminution: Comminution is the crushing and grinding of ore to make gold available for physical or chemical separation (see also "Milling").
Contained gold or Contained copper: The total gold or copper content (tonnes multiplied by grade) of the material being described.
Cut-off grade: Cut-off grade is the grade (i.e., the concentration of metal or mineral in rock) that determines the destination of the material during mining. For purposes of establishing "prospects of economic extraction," the cut-off grade is the grade that distinguishes material deemed to have no economic value (it will not be mined in underground mining or if mined in surface mining, its destination will be the waste dump) from material deemed to have economic value (its ultimate destination during mining will be a processing facility). Other terms used in similar fashion as cut-off grade include net smelter return, pay limit, and break-even stripping ratio.
Depletion: The decrease in the quantity of ore in a deposit or property resulting from extraction or production.
Development: The process of accessing an orebody through shafts and/or tunneling in underground mining operations.
Development stage property: A development stage property is a property that has Mineral Reserve disclosed, but no material extraction.
Diorite: An igneous rock formed by the solidification of molten material (magma).
Doré: Impure alloy of gold and silver produced at a mine to be refined to a higher purity.
Economically viable: Economically viable, when used in the context of Mineral Reserve determination, means that the Qualified Person has determined, using a discounted cash flow analysis, or has otherwise analytically determined, that extraction of the Mineral Reserve is economically viable under reasonable investment and market assumptions.
Electrowinning: A process of recovering gold from solution by means of electrolytic chemical reaction into a form that can be smelted easily into gold bars.
Elution: Recovery of the gold from the activated carbon into solution before zinc precipitation or electrowinning.
Exploration results: Exploration results are data and information generated by mineral exploration programs (i.e., programs consisting of sampling, drilling, trenching, analytical testing, assaying, and other similar activities undertaken to locate, investigate, define or delineate a mineral prospect or mineral deposit) that are not part of a disclosure of Mineral Resource or Reserve. A registrant must not use exploration results alone to derive estimates of tonnage, grade, and production rates, or in an assessment of economic viability.
Exploration stage property: An exploration stage property is a property that has no Mineral Reserve disclosed.
Exploration target: An exploration target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnage and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.

Feasibility Study (FS): A Feasibility Study is a comprehensive technical and economic study of the selected development option for a mineral project, which includes detailed assessments of all applicable modifying factors, as defined by this section, together with any other relevant operational factors, and detailed financial analysis that are necessary to demonstrate, at the time of reporting, that extraction is economically viable. The results of the study may serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. A Feasibility Study is more comprehensive, and with a higher degree of accuracy, than a Prefeasibility Study. It must contain mining, infrastructure, and process designs completed with sufficient rigor to serve as the basis for an investment decision or to support project financing.

Flotation: Concentration of gold and gold-hosting minerals into a small mass by various techniques (e.g. collectors, frothers, agitation, air-flow) that collectively enhance the buoyancy of the target minerals, relative to unwanted gangue, for recovery into an over-flowing froth phase.

Gold Produced: Refined gold in a saleable form derived from the mining process.

Grade: The quantity of ore contained within a unit weight of mineralised material generally expressed in grams per metric tonne (g/t) or ounce per short ton for gold bearing material or Percentage copper (%Cu) for copper bearing material.

Greenschist: A schistose metamorphic rock whose green colour is due to the presence of chlorite, epidote or actinolite.

Indicated Mineral Resource: An Indicated Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an Indicated Mineral Resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an Indicated Mineral Resource has a lower level of confidence than the level of confidence of a Measured Mineral Resource, an Indicated Mineral Resource may only be converted to a Probable Mineral Reserve.

Inferred Mineral Resource: An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an Inferred Mineral Resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an Inferred Mineral Resource has the lowest level of geological confidence of all Mineral Resource, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability. With caution AngloGold Ashanti uses Inferred Mineral Resource in its Mineral Reserve estimation process and the Inferred Mineral Resource is included in the pit shell or underground extraction shape determination. As such the Inferred Mineral Resource may influence the extraction shape. The quoted Mineral Reserve from these volumes includes only the converted Measured and Indicated Mineral Resource and no Inferred Mineral Resource is converted to Mineral Reserve. The cash flow analysis does not include the Inferred Mineral Resource in demonstrating the economic viability of the Mineral Reserve.

Initial assessment (also known as concept study, scoping study and conceptual study): An initial assessment is a preliminary technical and economic study of the economic potential of all or parts of mineralisation to support the disclosure of Mineral Resource. The initial assessment must be prepared by a qualified person and must include appropriate assessments of reasonably assumed technical and economic factors, together with any other relevant operational factors, that are necessary to demonstrate at the time of reporting that there are reasonable prospects for economic extraction. An initial assessment is required for disclosure of Mineral Resource but cannot be used as the basis for disclosure of Mineral Reserve.

Leaching: Dissolution of gold from crushed or milled material, including reclaimed slime, prior to adsorption on to activated carbon or direct zinc precipitation.

Life of mine (LOM): Number of years for which an operation is planning to mine and treat ore, and is taken from the current mine plan.

Measured Mineral Resource: A Measured Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a Measured Mineral Resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a Measured Mineral Resource has a higher level of confidence than the level of confidence of either an Indicated Mineral Resource or an Inferred Mineral Resource, a Measured Mineral Resource may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Metallurgical plant: A processing plant constructed to treat ore and extract gold or copper in the case of Quebradona (and, in some cases, often valuable by-products).

Metallurgical recovery factor (MetRF): A measure of the efficiency in extracting gold from the ore.

Milling: A process of reducing broken ore to a size at which concentrating or leaching can be undertaken (see also "Comminution").

Mine call factor (MCF): The ratio, expressed as a percentage, of the total quantity of recovered and unrecovered mineral product after processing with the amount estimated in the ore based on sampling. The ratio of contained gold delivered to the metallurgical plant divided by the estimated contained gold of ore mined based on sampling.

Mineral deposit: A mineral deposit is a concentration (or occurrence) of material of possible economic interest in or on the earth's crust.

Mining recovery factor (MRF): This factor reflects a mining efficiency factor relating the recovery of material during the mining process and is the variance between the tonnes called for in the mining design and what the plant receives. It is expressed in both a grade and tonnage number.

Mineral Reserve: A Mineral Reserve is an estimate of tonnage and grade or quality of Indicated and Measured Mineral Resource that, in the opinion of the Qualified Person, can be the basis of an economically viable project. More specifically, it is the economically mineable part of a Measured or Indicated Mineral Resource, which includes diluting materials and allowances for losses that may occur when the material is mined or extracted.

Mineral Resource: A Mineral Resource is a concentration or occurrence of material of economic interest in or on the Earth's crust in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction. A Mineral Resource is a reasonable estimate of mineralisation, taking into account relevant factors such as cut-off grade, likely mining dimensions, location or continuity, that, with the assumed and justifiable technical and economic conditions, is likely to, in whole or in part, become economically extractable. It is not merely an inventory of all mineralisation drilled or sampled.

Modifying Factors: Modifying factors are the factors that a Qualified Person must apply to Indicated and Measured Mineral Resource and then evaluate in order to establish the economic viability of Mineral Reserve. A Qualified Person must apply and evaluate modifying factors to convert Measured and Indicated Mineral Resource to Proven and Probable Mineral Reserve. These factors include, but are not restricted to: Mining; processing; metallurgical; infrastructure; economic; marketing; legal; environmental compliance; plans, negotiations, or agreements with local individuals or groups; and governmental factors. The number, type and specific characteristics of the modifying factors applied will necessarily be a function of and depend upon the mineral, mine, property, or project.

Ounce (oz) (troy): Used in imperial statistics. A kilogram is equal to 32.1507 ounces. A troy ounce is equal to 31.1035 grams.

Pay limit: The grade of a unit of ore at which the revenue from the recovered mineral content of the ore is equal to the sum of total cash costs, closure costs, Mineral Reserve development and stay-in-business capital. This grade is expressed as an in-situ value in grams per tonne or ounces per short ton (before dilution and mineral losses).

Precipitate: The solid product formed when a change in solution chemical conditions results in conversion of some pre-dissolved ions into solid state.

Preliminary Feasibility Study (Prefeasibility Study or PFS): is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a qualified person has determined (in the case of underground mining) a preferred mining method, or (in the case of surface mining) a pit configuration, and in all cases has determined an effective method of mineral processing and an effective plan to sell the product.

Probable Mineral Reserve: A Probable Mineral Reserve is the economically mineable part of an Indicated and, in some cases, a Measured Mineral Resource.

Production stage property: A production stage property is a property with material extraction of Mineral Reserve.

Productivity: An expression of labour productivity based on the ratio of ounces of gold produced per month to the total number of employees in mining operations.

Project capital expenditure: Capital expenditure to either bring a new operation into production; to materially increase production capacity; or to materially extend the productive life of an asset.

Proven Mineral Reserve: A Proven Mineral Reserve is the economically mineable part of a Measured Mineral Resource and can only result from conversion of a Measured Mineral Resource.

Qualified Person: A Qualified Person is an individual who is (1) A mineral industry professional with at least five years of relevant experience in the type of mineralisation and type of deposit under consideration and in the specific type of activity that person is undertaking on behalf of the registrant; and (2) An eligible member or licensee in good standing of a recognised professional organisation at the time the technical report is prepared. Section 229.1300 of Regulation S-K 1300 details further recognised professional organisations and also relevant experience.

Quartz: A hard mineral consisting of silica dioxide found widely in all rocks.

Recovered grade: The recovered mineral content per unit of ore treated.

Reef: A gold-bearing horizon, sometimes a conglomerate band, that may contain economic levels of gold. Reef can also be any significant or thick gold bearing quartz vein.

Refining: The final purification process of a metal or mineral.

Regulation S-K 1300: On 31 October 2018, the United States Securities and Exchange Commission adopted the amendment Subpart 1300 (17 CFR 229.1300) of Regulation S-K along with the amendments to related rules and guidance in order to modernise the property disclosure requirements for mining registrants under the Securities Act and the Securities Exchange Act. Registrants engaged in mining operations must comply with the final rule amendments (Regulation S-K 1300) for the first fiscal year beginning on or after 1 January 2021. Accordingly, the Company is providing disclosure in compliance with Regulation S-K 1300 for its fiscal year ending 31 December 2021 and will continue to do so going forward.

Rehabilitation: The process of reclaiming land disturbed by mining to allow an appropriate post-mining use. Rehabilitation standards are defined by country-specific laws, including but not limited to the South African Department of Mineral Resources, the US Bureau of Land Management, the US Forest Service, and the relevant Australian mining authorities, and address among other issues, ground and surface water, topsoil, final slope gradient, waste handling and re-vegetation issues.

Resource modification factor (RMF): This factor is applied when there is an historic reconciliation discrepancy in the Mineral Resource model. For example, between the Mineral Resource model tonnage and the grade control model tonnage. It is expressed in both a grade and tonnage number.

Scats: Within the metallurgical plants, scats is a term used to describe ejected ore or other uncrushable / grinding media arising from the milling process. This, typically oversize material (ore), is ejected from the mill and stockpiled or re-crushed via a scats retreatment circuit. Retreatment of scats is aimed at fracturing the material such that it can be returned to the mills and processed as with the other ores to recover the gold locked up within this oversize material.

Seismic event: A sudden inelastic deformation within a given volume of rock that radiates detectable seismic energy.

Shaft: A vertical or subvertical excavation used for accessing an underground mine; for transporting personnel, equipment and supplies; for hoisting ore and waste; for ventilation and utilities; and/or as an auxiliary exit.

Smelting: A pyro-metallurgical operation in which gold precipitate from electro-winning or zinc precipitation is further separated from impurities.

Stoping: The process of excavating ore underground.

Stripping ratio: The ratio of waste tonnes to ore tonnes mined calculated as total tonnes mined less ore tonnes mined divided by ore tonnes mined.

Tailings: Finely ground rock of low residual value from which valuable minerals have been extracted.

Tonnage: Quantity of material measured in tonnes.

Tonne: Used in metric statistics. Equal to 1,000 kilograms.

Waste: Material that contains insufficient mineralisation for consideration for future treatment and, as such, is discarded.

Yield: The amount of valuable mineral or metal recovered from each unit mass of ore expressed as ounces per short ton or grams per metric tonne.

Zinc precipitation: Zinc precipitation is the chemical reaction using zinc dust that converts gold in solution to a solid form for smelting into unrefined gold bars.

25 Reliance on information provided by the Registrant

Reliance in information provided by the registrant includes guidance from the annual update to AngloGold Ashanti's Guidelines for Reporting. This guideline is set out to ensure the reporting of Exploration Results, Mineral Resource and Ore Reserve is consistently undertaken in a manner in accordance with AngloGold Ashanti's business expectations and in compliance with internationally accepted codes of practice adopted by AngloGold Ashanti.

Included in this guideline is the price assumptions supplied by the Registrant which includes long-range commodity price and exchange rate forecasts. These are reviewed annually and are prepared in-house using a range of techniques including historic price averages. AngloGold Ashanti selects a conservative Mineral Reserve price relative to its peers. This is done to fit into the strategy to include a margin in the mine planning process. The resultant plan is then valued at a higher business planning price.

Gold price

The following local prices of gold were used as a basis for estimation in the December 2021 declaration, unless otherwise stated:

	Gold price	Local prices of gold			
		Australia	Brazil	Argentina	Colombia
	$/oz	AUD/oz	BRL/oz	ARS/oz	COP/oz
2021 Mineral Reserve[(3)]	1,200	1,633	6,182	134,452	3,849,000
2020 Mineral Reserve[(2)]	1,200	1,604	5,510	119,631	4,096,877
2021 Mineral Resource[(1)]	1,500	2,072	7,940	173,065	5,336,250

[(1)] Reported for the first time under Regulation S-K 1300. [(2)] Reported under Industry Guide 7.
[(3)] Reported under Regulation S-K 1300.