



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

NAME OF APPLICANT: Barberton Mines Proprietary Limited

MINING RIGHT: MP 30/5/1/2/2/10219 MR (189 MR)

MINING WORK PROGRAMME

**SUBMITTED FOR A MINING RIGHT AMENDMENT
(Section 102 Application)**

**AS REQUIRED IN TERMS OF SECTION 24 READ
TOGETHER WITH REGULATION 11(1) (g) OF THE
MINERAL AND PETROLEUM RESOURCES
DEVELOPMENT ACT (ACT 28 of 2002)**

STANDARD DIRECTIVE

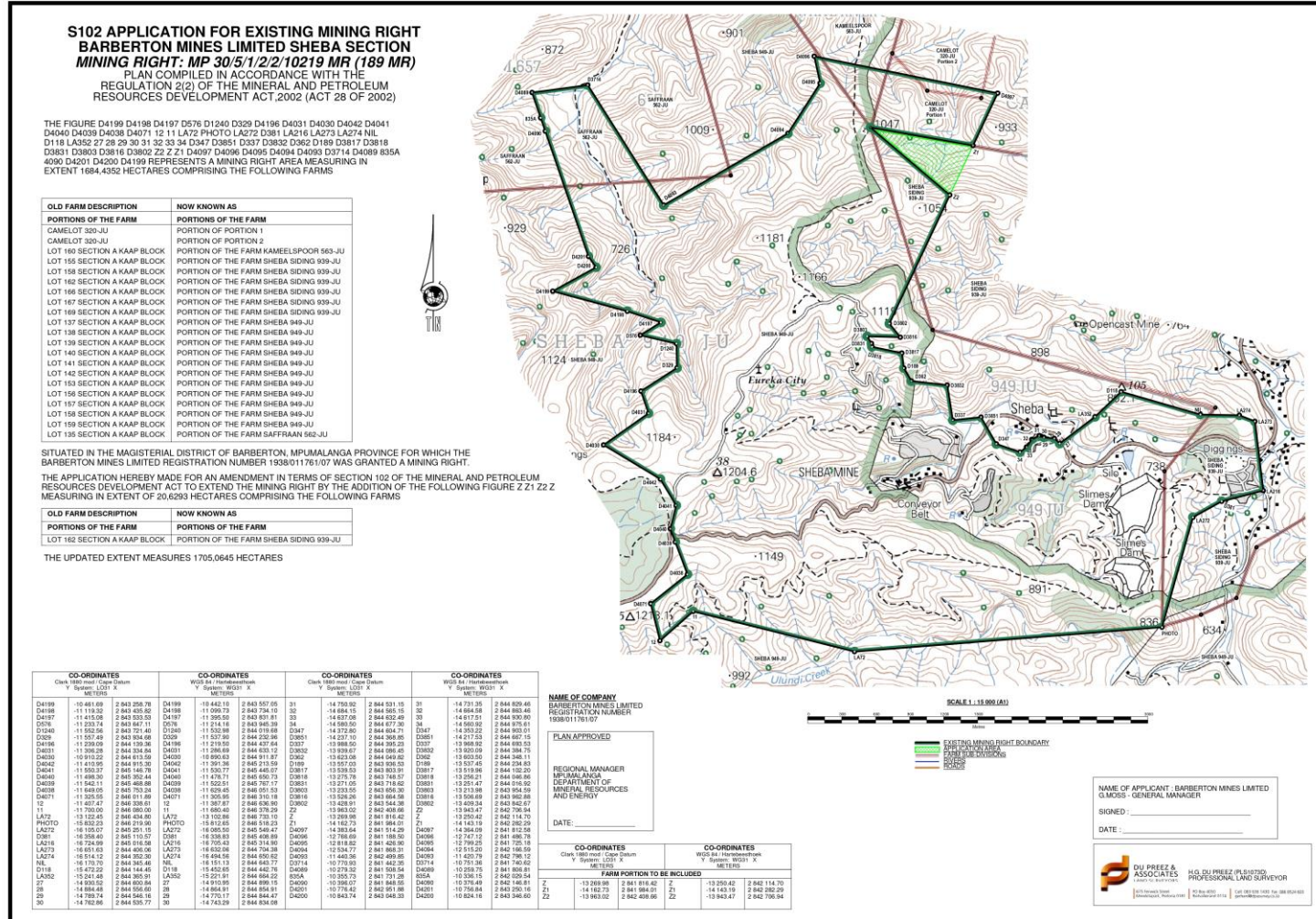
All applicants are herewith, in terms of the provisions of Section 24 and in terms of Regulation 11 (1) g of the Mineral and Petroleum Resources Development Act, directed to submit a Mining Work Programme, strictly under the following headings and in the following format together with the application for a mining right.

1. REGULATION 11.1.(a): FULL PARTICULARS OF THE APPLICANT

ITEM	COMPANY CONTACT DETAILS
Company Name	Barberton Mines (PTY)Ltd
Tel no	013 712 8500
Fax no	013 712 9060
Cellular no	N/A
E-mail Address	gregm@bmines.co.za
Postal Address	PO Box 121 Barberton Mpumalanga 1300

ITEM	CONSULTANT CONTACT DETAILS (If applicable)
Name	Dunrose Trading 186 (PTY)Ltd t/a Shango Solutions
Tel no	+27 (0)11 678 6504
Fax no	+27 (0)11 678 9731
E-mail address	info@shango.co.za
Postal address	PO Box 2591, Cresta, 2118

2. REGULATION 11.1.(b): PLAN SHOWING THE LAND AND MINING AREA TO WHICH THE APPLICATION RELATES (the plan required in terms of Regulation 2(2)). A detailed map is attached.



3. REGULATION 11.1.(c): THE REGISTERED DESCRIPTION OF THE LAND TO WHICH THE APPLICATION RELATES

The land relating to the application comprises the following:

OLD FARM DESCRIPTION	NOW KNOWN AS	LPI CODE
PORTIONS OF THE FARM	PORTIONS OF THE FARM	
CAMELOT 320-JU	PORTION OF PORTION 1 OF THE FARM CAMELOT 320-JU	TOJU00000000032000001
CAMELOT 320-JU	PORTION OF PORTION 2 OF THE FARM CAMELOT 320-JU	TOJU00000000032000002
LOT 160 SECTION A KAAP BLOCK	PORTION OF THE FARM KAMEELSPoor 563-JU	TOJU00000000056300000
LOT 155 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA SIDING 939-JU	TOJU00000000093900000
LOT 158 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA SIDING 939-JU	TOJU00000000093900000
LOT 166 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA SIDING 939-JU	TOJU00000000093900000
LOT 167 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA SIDING 939-JU	TOJU00000000093900000
LOT 169 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA SIDING 939-JU	TOJU00000000093900000
LOT 137 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 138 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 139 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 140 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 141 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 142 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 153 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 156 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 157 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 158 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 159 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA 949-JU	TOJU00000000094900000
LOT 135 SECTION A KAAP BLOCK	PORTION OF THE FARM SAFFRAAN 562-JU	TOJU00000000056200000
FARM PORTIONS TO BE INCLUDED VIA SECTION 102		
PORTION OF THE FARM	PORTION OF THE FARM	
LOT 162 SECTION A KAAP BLOCK	PORTION OF THE FARM SHEBA SIDING 939-JU	TOJU00000000093900000

But excluding any area within 100m of any public road, railway, cemetery, residential area or public area.

4. REGULATION 11.1.(d): THE DETAILS OF THE IDENTIFIED MINERAL DEPOSIT

The Barberton Greenstone Belt (BGB) is part of the oldest nuclei of the Kaapvaal Craton and is host to significant gold mineralisation. It consists of a well-preserved (ca. 3 570–3 220 Ma) volcano-sedimentary sequence, surrounded by various generations of granodiorite gneisses and potassic granites (Dziggel et al., 2007). The spatial and temporal relationships between plutonism, metamorphism and deformation are complex but preserve an almost complete inventory of a Mesoarchaeon arc-trench system (Kisters et al., 2010).

The Barberton Greenstone Belt consists of the lowermost Onverwacht Group, the Fig Tree Group and the uppermost Moodies Group. These units, shown in Figure 1 and Figure 2, are characterised as follows:

1. The **Onverwacht Group** is characterised by ultramafic meta-volcanics overlain by an upper unit consisting of mafic and felsic meta-volcanics. The Swartkoppie Formation occurs at the top of the Onverwacht Group. This formation contains a fuchsitic-bearing carbonatised ultramafic schist, which is particularly significant as being the host of the gold mineralisation (Pretorius, 2018).
2. Directly overlying the Onverwacht Group is the **Fig Tree Group**, a sequence of finegrained sedimentary rocks consisting of turbiditic greywackes, shales and banded iron formations (BIF). Although, volcanics and tuff flows are also present within the Fig Tree Group, mainly within the uppermost formation that overlies the lower sedimentary formations (Pretorius, 2018).
3. Overlying the Fig Tree Group is the **Moodies Group**, an upward fining sequence of continental terrigeno-clastic sedimentary lithologies. The main lithologies occurring within this group are arenites, shales and jaspelite while minor units of amygdaloidal andesites are found in areas (Pretorius, 2018).

The Sheba section straddles the contact between the arenites of the Moodies Group to the north (Eureka Syncline) and the Fig Tree Group's greywacke and shale to the south (Ulundi Syncline) similar to the stratigraphic occurrence of the adjacent Fairview Mine. The contact is marked by the presence of the regionally identifiable Sheba Fault. The two synclines are refolded due to the immense force present during the deformation events, resulting in back-to-back isoclinal folds that dip steeply to the south. Tight isoclinal, thrust fault-related anticlines of the Onverwacht Group schist

(Zwartkoppie Formation) occur within the Fig Tree Group's greywacke.

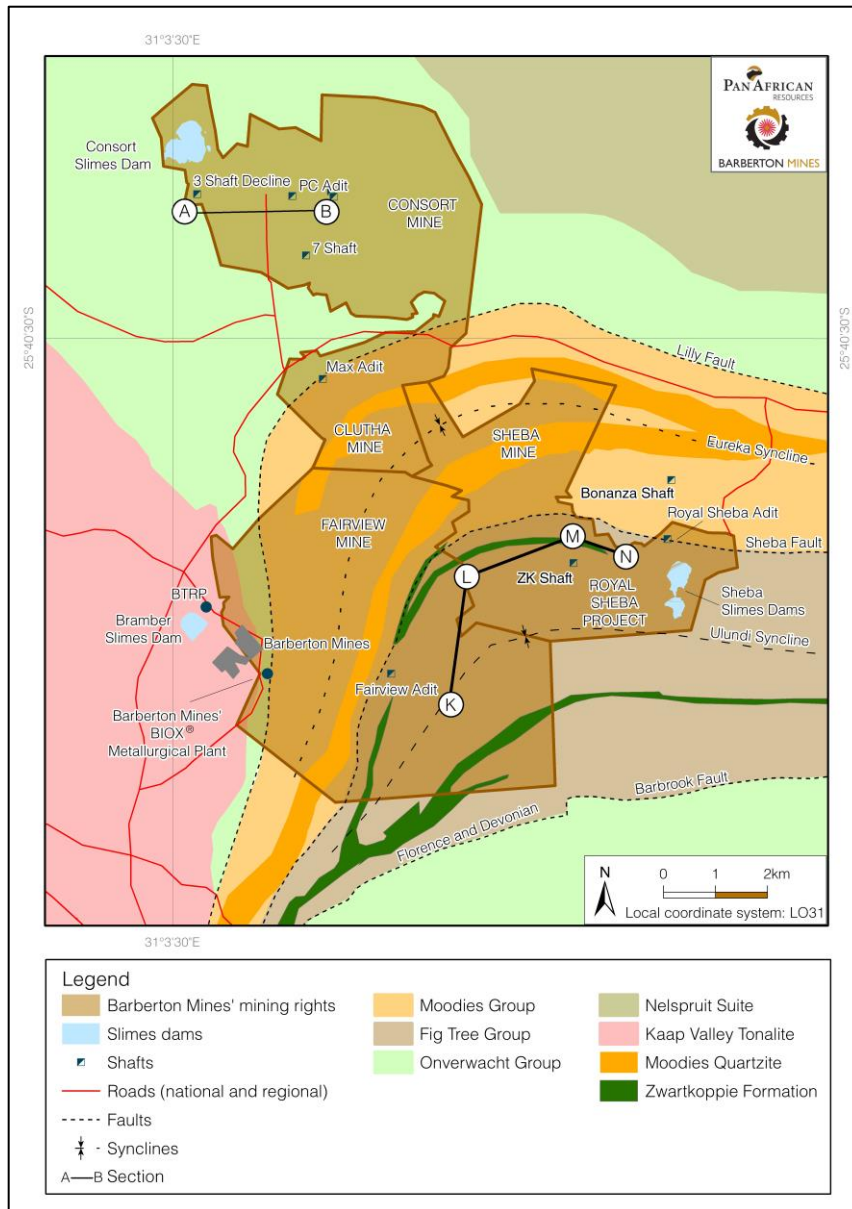


Figure 1: Geology of the BGB and location of Fairview, Sheba and New Consort Mines (Pan African Resources, 2023).

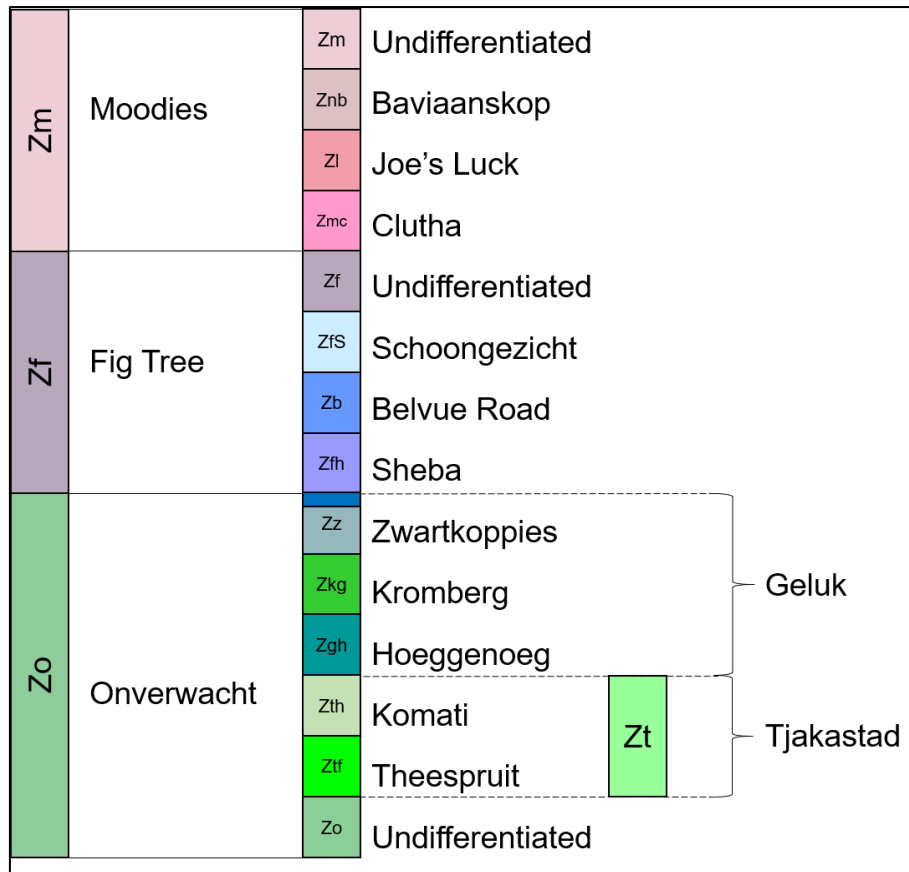


Figure 2: Simplified stratigraphic column of the Barberton Greenstone Belt (data from SACS, 1980).

Multiple deformation events have created the complex structural nature of the Barberton Greenstone Belt, whereby the lower Onverwacht Group has been thrust over, folded and inter-fingered with the Fig Tree Group. The Sheba Mine area is located on the Sheba Fault Zone which is a thrust surface on which these two inter-fingered groups are thrust on top of the younger Moodies Group to the north (**Error! Reference source not found.** and Figure 3).

The orebodies are structurally controlled and complexly deformed and are recognised as anticlinal stacks and thrusts developed in the vicinity of the Sheba Fault Zone (Figure 3). The orebodies such as those developed at Sheba Mine are considered an epigenetic hydrothermal shear zone hosted lode gold deposit.

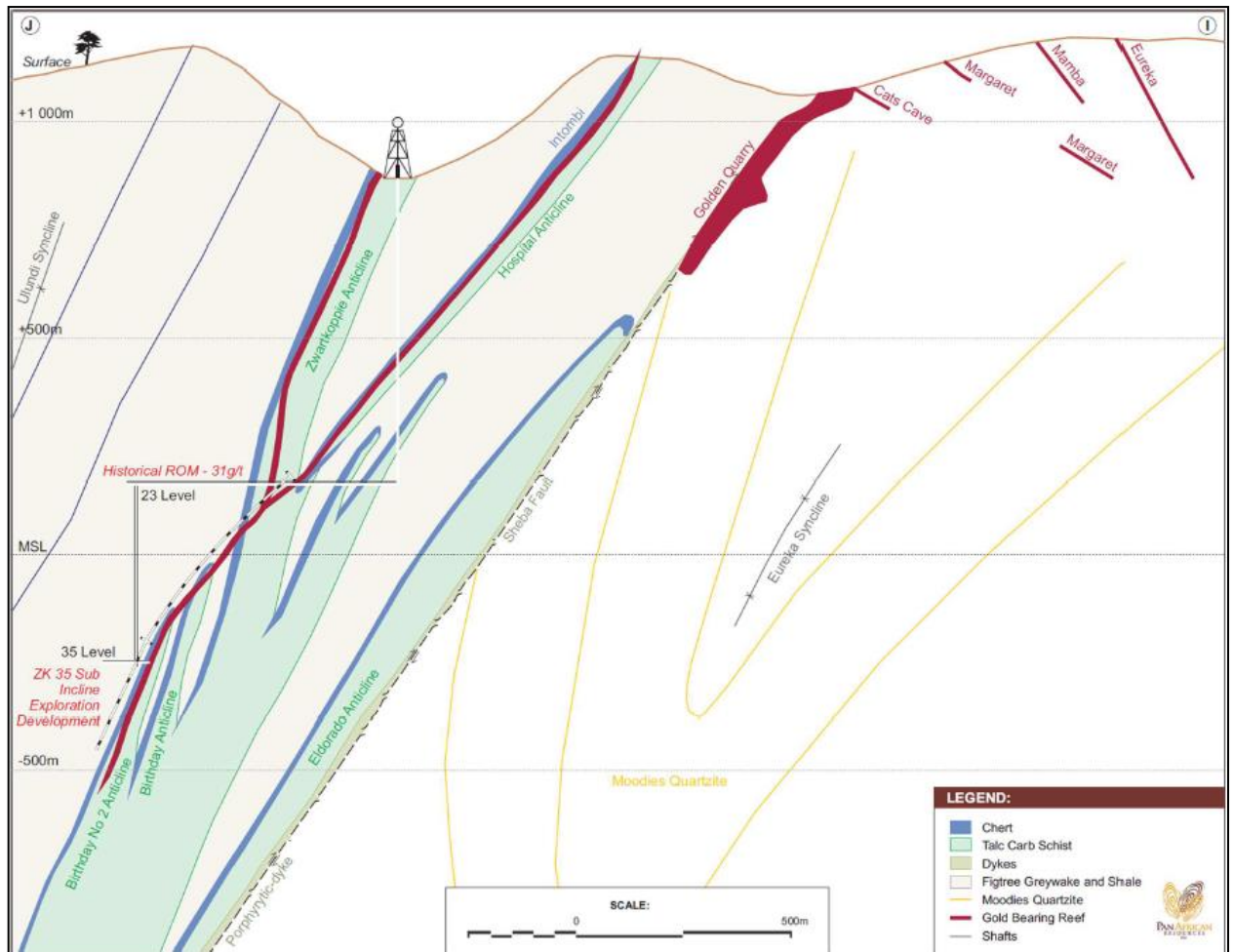


Figure 3: Sheba Mine, schematic cross section facing west (generated by Barberton Mines Proprietary Limited (BML) geological department).

The main orebodies mined at the Sheba Mine include the Main Reef Complex (MRC), Zwartkoppies (ZK), Royal Sheba, Thomas, Joe’s Luck and Victory Hill. The structural locations of some of the orebodies are shown in Figure 4. Should the mineralisation be continuous to the north of Sheba Mine, it is proposed that these same orebodies are present within the proposed tenement area.

It has been demonstrated that the thrust-ramp / anticlinal orebodies, including the MRC and ZK, developed along the contact between the Onverwacht and Fig Tree groups continue at depth. In addition to these significant gold lenses, fractures in the brittle Moodies Group such as the Mamba and Eureka orebodies are auriferous, and these may continue northwards, Gold reefs are also developed on the Sheba Fault and are likely to be present along the strike of the fault.

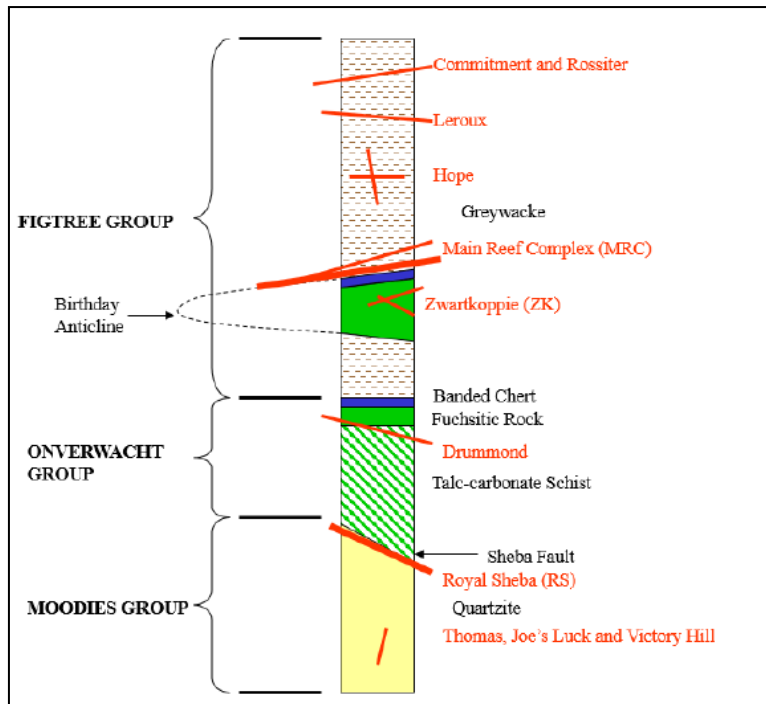


Figure 4: Structurally controlled occurrences of the orebodies in Fairview and Sheba mines (generated by BML geological department).

4.1. Resource Particulars

ITEM	DETAIL
Type of Mineral	Gold and Silver
Locality	The Sheba Mine is located 13 km north-northeast of the town Barberton.
Extent of Area Required for Mining	1 705.0645ha
Extent of Area Required for Infrastructure, etc.	98.8 ha are required for surface infrastructure (Synergistics Environmental Services, 2010).
Depth of Mineral below Surface	The orebodies extend from surface to a depth of 1 200m, but are predicted to extend to greater depths (2 000 m).
Geological Formation	The Sheba Fault Zone is currently being mined at the Sheba Mine. This fault zone defines the contact between the Moodies Group and the older Onverwacht and Fig Tree groups, all of which form part of the Barberton Greenstone Belt.

4.2. Detail of Persons who Compiled the Resource Statement

ITEM	DETAIL
Name	Mr Hendrik Pretorius
Qualification	BSc (Hons) degree in Geology from the University of Johannesburg as well as a Graduate Diploma in Mining Engineering (GDE) from the University of the Witwatersrand.
Profession	Group Technical Services Manager
Experience	20 years' experience in economic geology, Mineral Resource management and mining (surface mining and shallow to ultra-deep underground mining)
Professional Body	South African Council for Natural Scientific Professions (SACNASP)
Registration Number	400051/11

4.4. Exploration Results (Supporting Geological Reports to be Listed and Appended)

Significant exploration work was performed prior to the issuer acquiring the property. The only drilling undertaken by the issuer was in the form of delineation drilling within the underground development and workings for the purpose of mineral resource expansion.

Barberton Mine Limited (BML) is currently reprocessing a number of residue deposits on its surface right areas. This reprocessing has two main objectives, namely gold recovery from the deposits and environmental clean-up.

The AMIRA Project study conducted by the University of Western Australia in the 1990's attempted to recreate the regional deformational regime that occurred during the original mineralising event in Barberton and formed the basis of Barberton's regional geology and detailed account of the structural geology. The findings and recommendations from this study have been considered in BML's exploration strategy framework. The AMIRA Project recommends that surface drilling be carried out on several targets/anomalies. A surface drilling programme has been approved to investigate the most prospective targets and access their greenfield resource potential. In addition, the University of Stellenbosch is currently conducting a structural study to delineate zones of potential fluid flow during the mineralising event. This study is designed to assist BML with target generation.

The exploration strategy is centred around underground diamond drilling as well as exploration development. The targets can be classified as either extensions of known orebodies or targeting new areas that could have potential mineralisation.

Sheba is utilising diamond drilling to test extensions of the ZK orebody and the Sheba West orebodies (Figure 5). A further project is to test the zone along the footwall of the Birthday No.2 anticline and the zone along the Zwartkoppie (ZK) horizon as well as the immediate footwall of that horizon. This whole zone hosted a number of orebodies in the adjacent Fairview Mine and previous diamond drilling and development in Sheba Mine confirmed economic mineralisation in this zone (Figure 6). The downdip extensions of the ZK and MRC orebodies remain

the principal exploration targets due to their extensive gold mineralisation and demonstrated continuity.

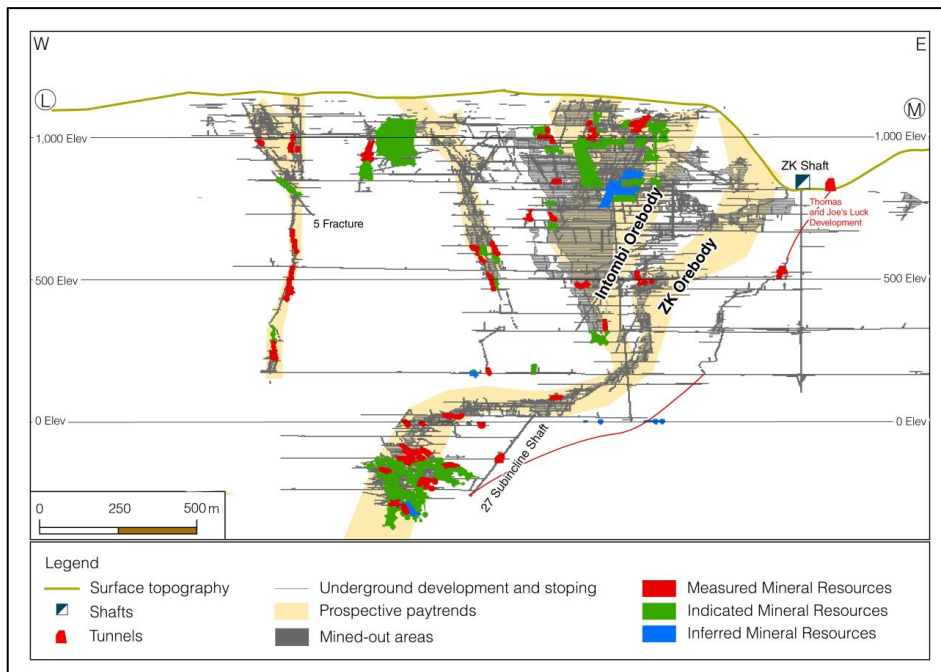


Figure 5: Simplified geological section of Sheba Mine.

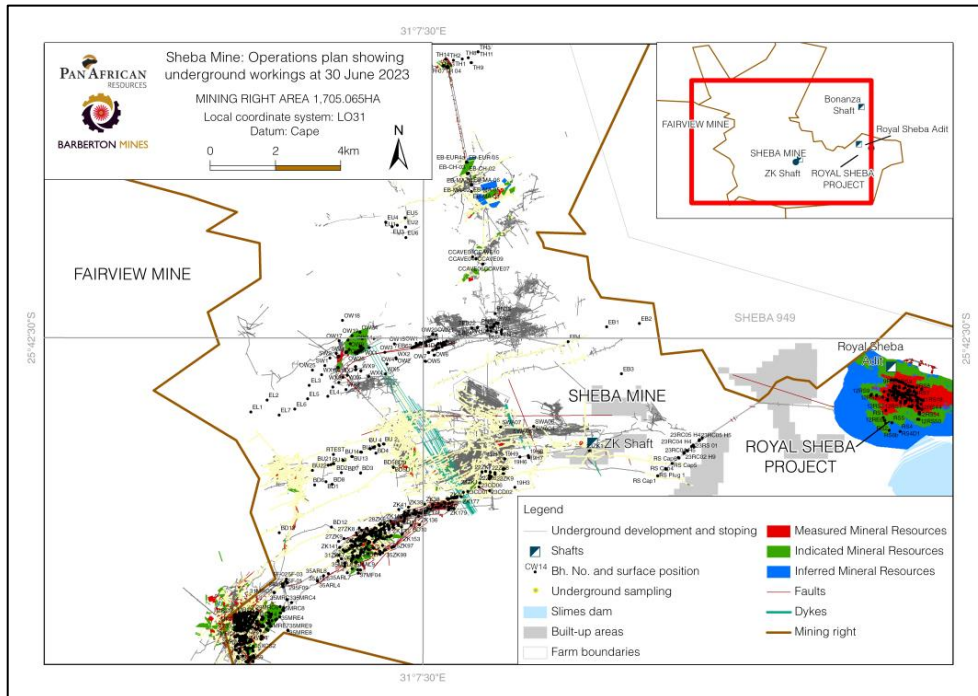


Figure 6 : Sheba Mine's underground development, stoping, infrastructure and Mineral Resources.

The most recent reports relating to the Barberton Mines areas are:

1. Pan African Resources (2023) Integrated Annual Report, 137 pp (Appendix 1)
2. Pan African Resources (2023) Mineral Resources and Mineral Reserves Report, 87 pp. (Appendix 2)

4.5. Information Required in terms of Regulation 8 (in cases where the application was preceded by a Prospecting Right)

Not applicable as this Mining Work Programme is submitted for an amendment to an existing Mining Right.

4.6. Mineral Resource Maps

Mineral Reserves and Mineral Resources are declared on the Sheba Mine. Figure 7 details the areas identified with potential mineral resources in the Sheba Mine. Mineral Resource maps for Sheba Mine are presented in Figure 8 and Figure 9.

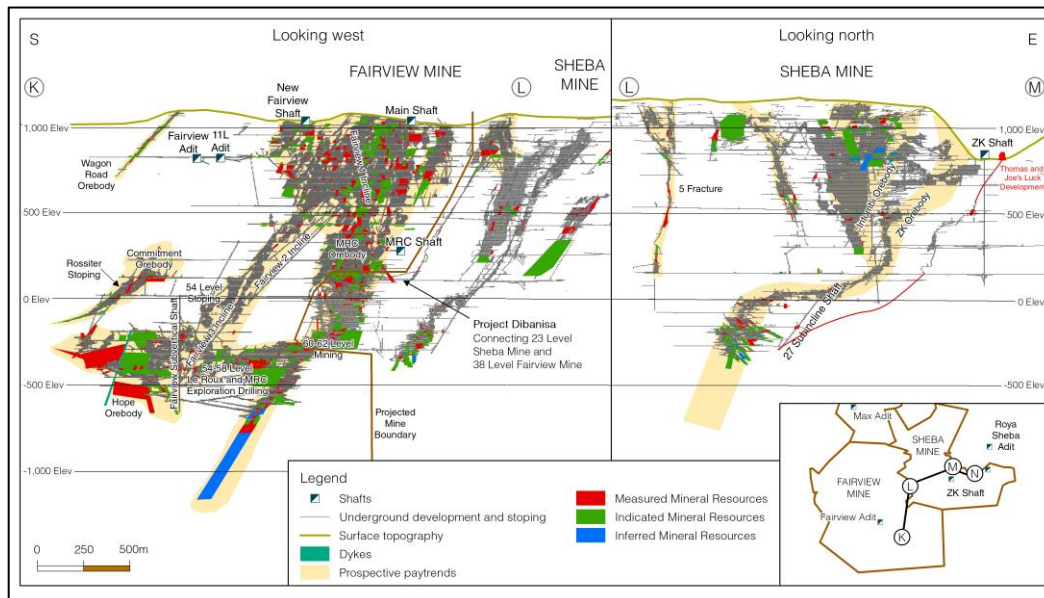


Figure 7: Longitudinal projection through Fairview and Sheba mines illustrating areas of potential mineralisation.

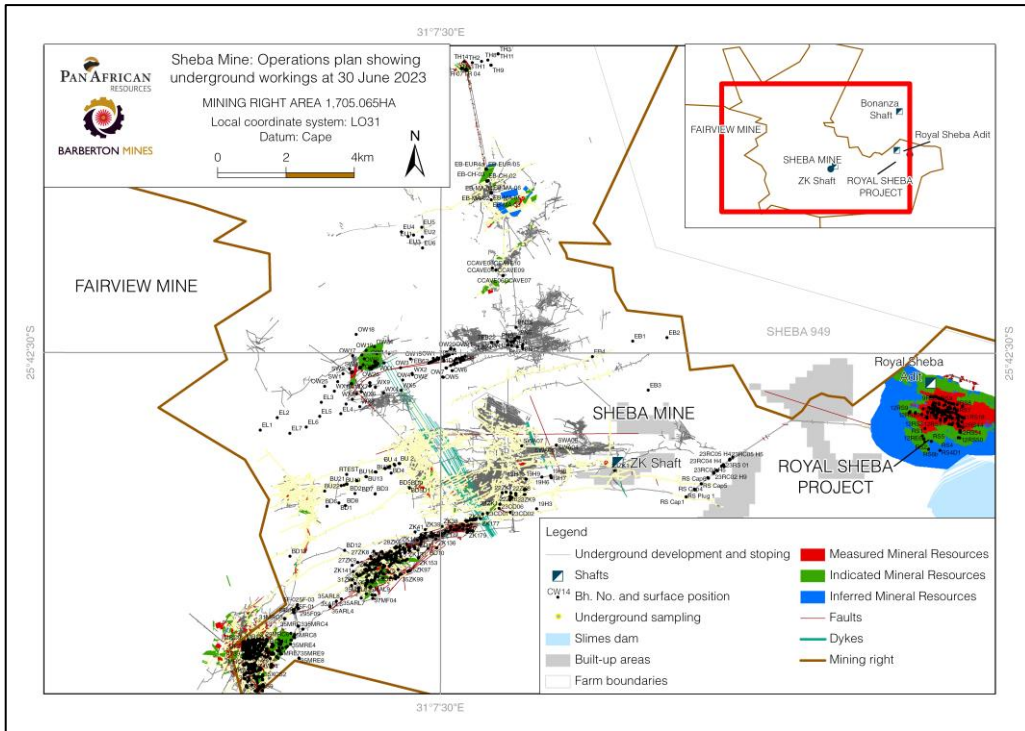


Figure 8: Sheba Mine's underground development, stopping, infrastructure and Mineral Resources.

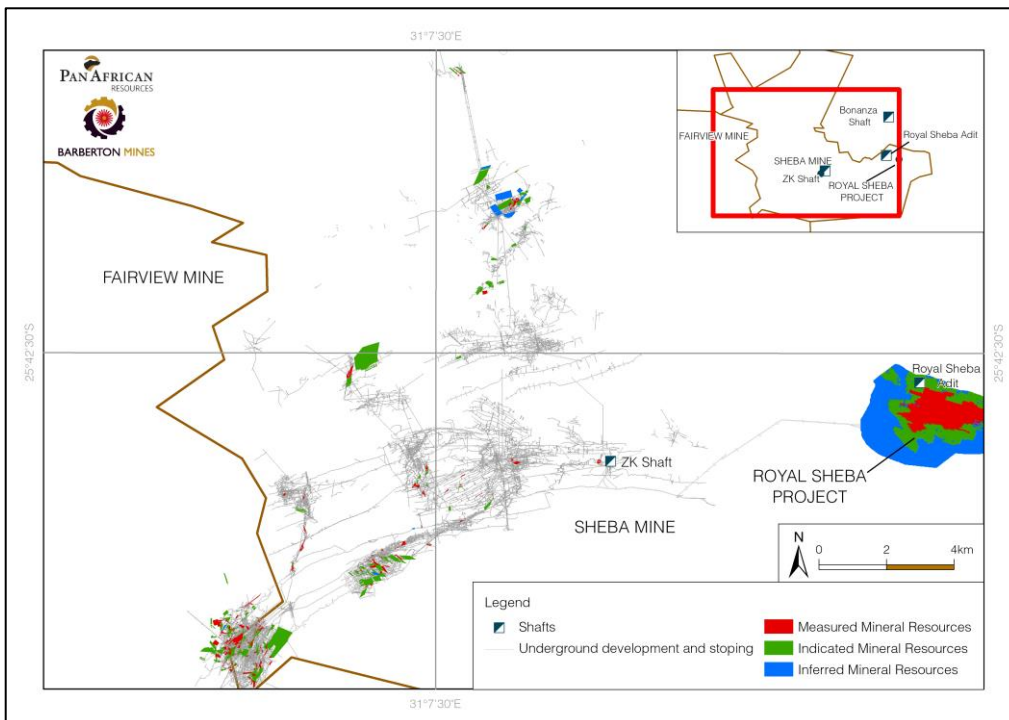


Figure 9: Mineral Resource classification map for Fairview Mine blocks that will be accessed during the Life of Mine.

4.7. Resource Statement

The Mineral Resources are generated by Pan African Resources PLC (PAR) based on the definitions and guidelines as set out by the SAMREC Code (2016). The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce Mineral Reserves.

The BML Mineral Resources comprise the operating mines, Fairview, Sheba and New Consort, the Barberton Tailings Retreatment Plant (BTRP) and sweeping and vamping exercise undertaken by VTN, a company contracting to BML. The same method of estimating the Mineral Resources is used at each of the BML mines. Due to the highly erratic nature of both the structure of the 'ore shoots' and of the grade within them, most of the data for evaluating resource blocks is derived from development adjacent to the mining blocks and from the position of the present mining. The continuity of grade values within the ore shoots is based primarily on experience that has been gained from mining the orebody in the past and experience that has been gained from the study of its tectonic structure. The consolidated resource statement for BML is presented in Table 1. Sheba Mine considers a total combined Measured and Indicated resource of 0.83Mt at 7.43g/t to produce 0.20Moz of gold. The Mineral Reserves declared over the Sheba Mine are detailed in Table 2.

Table 1: Sheba Mine and BML Mineral Resource statement effective 30th June 2023 (Pan African Resources, 2023).

Operation	Category	Quantity (Mt)	Grade (g/t)	Contained gold (Moz)
Sheba	Measured	0.56	8.72	0.16
	Indicated	0.26	4.69	0.04
	Total Measured & Indicated	0.83	7.43	0.20
	Inferred	0.33	10.42	0.11
Total BML	Measured	13.46	3.39	1.47
	Indicated	11.97	2.75	1.06
	Total Measured & Indicated	25.42	3.09	2.52
	Inferred	21.35	2.32	1.60

Table 2: Sheba Mine and BML Mineral Reserve statement effective 30th June 2023 (Pan African Resources, 2023).

Operation	Category	Quantity (Mt)	Grade (g/t)	Contained gold (Moz)
Sheba	Proved	0.58	4.62	0.09
	Probable	0.22	5.17	0.04
	Total	0.80	4.77	0.12
Total BML	Proved	2.76	5.25	0.47
	Probable	6.65	4.95	1.06
	Total	9.42	5.04	1.53

A gold price of ZAR 850 00 / kg, a 5% dilution and a 91.18% MCF have been applied for reserve calculations.

5. REGULATION 11.1.(e): THE DETAILS OF THE MARKET, THE MARKET'S REQUIREMENTS AND PRICING IN RESPECT OF THE MINERALS CONCERNED

5.1. A list of Products and their Proportionate Quantities

The gold pulp produced by Sheba Mine is transported to BML's BIOX[®] plant for further concentration after which it is transported to Rand Refinery (Pty) Limited (RRL) for refining and sale. The ore is supplied with between 50% and 99% Au and is refined to 99.99% Au. Barberton Mines has a long standing off-take agreement with the Rand Refinery according to which gold is sold on the spot R/kg Au price.

The gold concentrate is transported to Rand Refinery (Pty) Limited (RRL) for final refining and sale. BML has an off-take agreement with Rand Refinery according to which gold is sold on the spot R/kg Au price.

5.2. Market for each Specific Product in Terms of Local, Regional or International

The market for gold is a global market. The gold is supplied from the mine to BML, who then provide it to Rand Refinery, where it is processed and purified for sale to the international market. Once refined, the gold is sold to registered jewellers and the London Bullion Market Association.

The graph below shows the price of Gold in USD per Kilogram. The gold price has rallied from the lows in the early 2000's and appears to have stabilised from 2020 to 2023 (Figure 10).



Figure 10: Gold price variations since 2014 (Goldprice, 2024).

5.3. Summary of Product Consumers

Figure 11 and Table 3 outline gold consumption and supply for the Year 2021 and 2022 from the World Gold Council website (World Gold Council, 2023). Details of the 2021/2022 gold usage are described below.

Worldwide gold demand amounted to 4 754.50 metric tons in 2022, an increase from 4 682.40 metric tons in the previous year. Also, 2020 was the first time demand for gold was lower than 4 000 metric tons throughout the period considered, which was influenced by the COVID-19 pandemic (COVID-19).

Gold jewellery demand softened slightly in 2022, almost managing a return to pre-COVID-19 levels of demand, which in 2019 stood at 2 127t. This was achieved during a year that saw periods of strong rises in the gold price (reaching record levels in some local markets, like India and Turkey) and at a time when China was hobbled by lockdowns and a COVID-19 outbreak.

The consumption of gold in the United States reached 250 metric tons in 2022, which was at the second-highest volume over the past decade. Meanwhile, China's gold consumption amounted to 1 001.7 metric tons in 2022. Following typical global patterns, Chinese gold consumption was primarily for jewelry, consuming 654 32 metric tons of the country's total gold consumption in 2022.

Table 3: Global gold consumption and supply (tonnes) for 2022 and 2023 (data from World Gold Council, 2023).

	2021	2022	Change (%)
Jewellery	2 147.70	2 086.20	-3
Investment	1 001.90	1 106.80	10
Central Bank	450.1	1 135.70	152
Technology	330.2	308.5	-7
OVERALL	4 362.30	4 071.60	-21
Total Supply	4 682.40	4 754.50	2

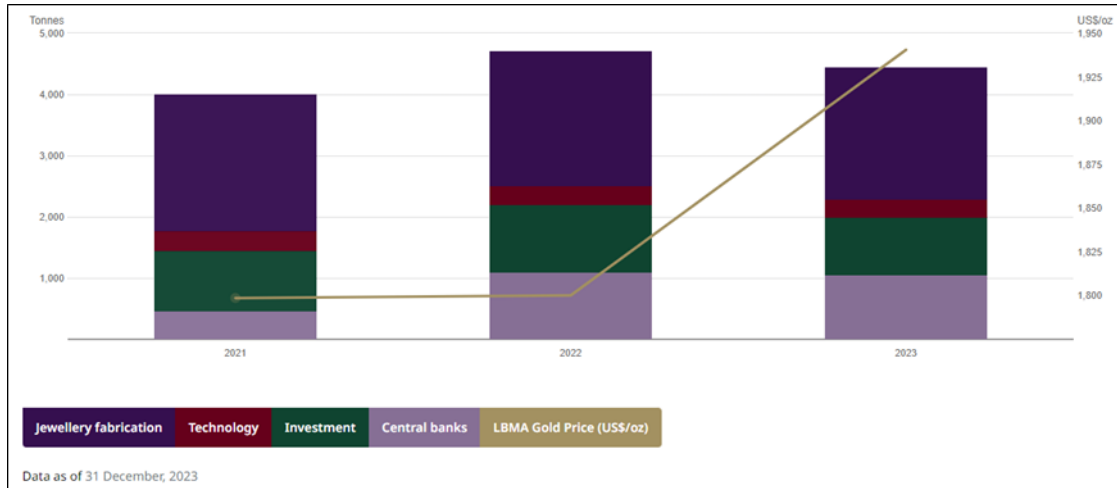


Figure 11: Global gold consumption from 2021 to 2023 (World Gold Council, 2023)

1. **Jewellery:** The high demand for gold jewellery in India and China, as well as the Middle East represents the strongest portion of global gold consumption (Figure 11 and Table 3).

Jewellery consumption in the third quarter of 2023 was slightly weaker as compared to the same quarter in the previous year (-2%), although it held 4% above its five-year average. The environment of high gold prices and economic uncertainty was a key driver of the Year over Year (y/y) decline, particularly in some of the more price-sensitive markets in Asia and the Middle East. Global gold jewellery consumption saw the usual seasonal Quarter over Quarter (q/q) uptick in the third quarter gaining 8% over the previous quarter. Global jewellery fabrication was marginally stronger than consumption, down just 1% year over year at 578.2t and global inventories grew by 62t during the quarter as a result.

Jewellery demand has continued to hold up relatively well in spite of the very high price environment this year (2023). However, risks to this sector remain, given the precarious economic scenario in many markets and continued pressure on consumers from the cost of living crisis.

2. **Investment:** The 2022 World Gold Council analysis for 2021 indicates an annual inflow into gold-backed Exchange Traded Funds (ETFs) which fell by 110t in 2022 and it was significantly lower than the 189t of net selling seen in 2021. The total annual investment increased 10% to 1 107t. Holdings of physically-backed gold ETFs declined by 110t (-3%) in 2022, equivalent to

outflows of US\$3bn. Demand for these products surged as geopolitical risk took centre-stage during the first four months of the year, but then steadily gave back gains as aggressive rate hikes began to dominate the narrative.

At the end of 2022, global holdings of gold ETFs were 110t lower at 3 473t (AUM of US\$203bn). Low-cost gold ETFs seemed to buck the trend, however: collectively, they saw net demand of 48t during 2022.

Bar and coin investment is broadly in line first – third quarter of last year, thanks to H1 strength in the Middle East, Turkey and China. Gold ETFs, in contrast, have seen outflows of 189t so far this year, and have now registered six successive quarters of negative demand.

3. **Central bank:** Central bank demand totalled 1 136t in 2022, the highest level of buying. Geopolitical uncertainty and high inflation were highlighted as key reasons for holding gold; buying was primarily from emerging market banks including Turkey and China.

Global official gold reserves rose by 337t, 120% higher Quarter over Quarter (q/q) and the second highest third quarter total following third quarter 2022. On a year to date basis, central banks have bought an astonishing net 800t, 14% higher than the same period last year.

4. **Technology:** Gold has long been central to innovations in electronics. Currently the unique properties of gold and the advent of 'nanotechnology' are driving new uses in medicine, engineering and environmental management.

The start of 2022 followed a similar pattern to 2021 as businesses, supply chains and consumers continued to recover from the COVID pandemic. Gold demand followed suit, remaining steady during the first two quarters. However, quarter 3 and quarter 4 saw a sharp reversal driven by rapid changes in the global economy; interest rates were quickly raised by central banks worldwide in an attempt to temper soaring inflation, impacting the finances of consumers and businesses globally.

A substantial drop in quarter 4 compounded quarter 3 weakness to generate a 7% decline in annual demand for gold in technology. Electronics demand mirrored the 7% annual decline in the broader sector, dropping sharply in

quarter 4 in response to the deteriorating global economic picture and supply chain challenges, particularly in China (World Gold Council, 2023).

Over the past several decades, the price of gold has been influenced by many different factors. Gold's price history has seen some significant ups and downs, and dramatic changes in price may be fuelled by such issues as central bank buying, inflation, geopolitics, monetary policy equity markets and more (Figure 12).

One of the biggest drivers of gold is currency values. Because gold is denominated in dollars, the greenback can have a significant impact on the price of gold. A weaker dollar makes gold relatively less expensive for foreign buyers, and thus may lift prices. On the other hand, a stronger dollar makes gold relatively more expensive for foreign buyers, thus possibly depressing prices. Fiats, or paper currencies, have a tendency to lose value over time. If this continues to be the case, gold could potentially continue in an uptrend as investors look to it for its perceived safety and its potential as a hedge against declining currency values. Gold has long been considered a reliable store of wealth and value, and that reputation is not likely to change any time soon.

Although past performance is not necessarily indicative of future results, gold's price history can potentially provide clues as to where it could be headed. Looking at past price data, for example, may help with spotting uptrends or downtrends. Investors may also potentially spot tradable patterns within the price data that can potentially lead to solid buying or selling opportunities.



Figure 12: London gold price for the last 10 years

Summary of Customer Specification and Details of any Proposed Beneficiation of the Products

Rand Refinery (Pty) Limited (RRL)

RRL undertakes the refining of gold bars from BML containing between 50% and 99% Au to 99.99% (“four nines”) purity. The mass of a gold bar cannot be <2 kg or >25 kg per bar. RRL reserves the right to refuse acceptance of any material delivered to RRL where the maximum permissible level for deleterious elements is exceeded. The listed deleterious elements are Fe, Cu, Zn, Pb, Ni, As and Cd, which can be accepted by RRL subject to an additional refining fee being charged per kilogram for the different elements exceeding the permitted levels. RRL does not accept any delivered material that contains Hg.

RRL is responsible to insure the material from when it is received at its premises until it is sold or credited. If RRL sells the gold on behalf of BML, a location swap fee is charged according to prevailing market practices.

5.4. Summary of Infrastructure Requirements such as Roads, Rail, Electricity and Water

The Barberton operations have fully established infrastructure. The operations are situated approximately 10 km from the town of Barberton, and the mine is

accessed via a network of existing tarred roads. The current availability of basic mine services, such as electricity, water, compressed air and surface access is more than adequate to support the life-of-mine plan. Emergency generator plants are present at the shaft to provide power supply for critical equipment during power failures.

5.5. Summary of other Information Applied that may Influence Price e.g. Exchange Rates, Duties, Tariff Barriers, etc.

The South African Rand to United States Dollar exchange rates as well as the demand for gold, influence the price of gold received for BML. As a globally traded commodity, gold prices are subject to constant fluctuations. According to Bullion Exchange, a myriad of factors impacts these prices, resulting in a ripple effect across international markets. Between December 2021 and March 2022, the spot price of gold in South Africa oscillated between 29 177 ZAR and 27 500 ZAR, briefly peaking at 31 376 ZAR in March 2022 before gradually descending.

Today, tensions between Russia, Ukraine, and their allies have boosted demand for gold, resulting in a 4.2% value increase in February 2022. In South Africa, the price of gold is further impacted by the exchange rate between the South African Rand and US Dollar (USD), load shedding impact on the South African economy and greylisting of SA to a certain extent (Figure 13).

The rand experienced a continued depreciation, with a further 15.7% decline relative to the US\$, following a 14.0% depreciation in the previous financial year. The closing US\$/ZAR exchange rate was US\$/ZAR 18.83 (2022: US\$/ZAR 16.28). During the 2023 financial year, the average US\$/ZAR exchange rate was US\$/ZAR 17.77 (2022: US\$/ZAR 15.22). As a result of this devaluation and a marginally higher US\$ gold price, the average rand gold price received increased by 17.5% from ZAR892 431/kg to ZAR1 048 823/kg. (Pan African Resources, 2023)

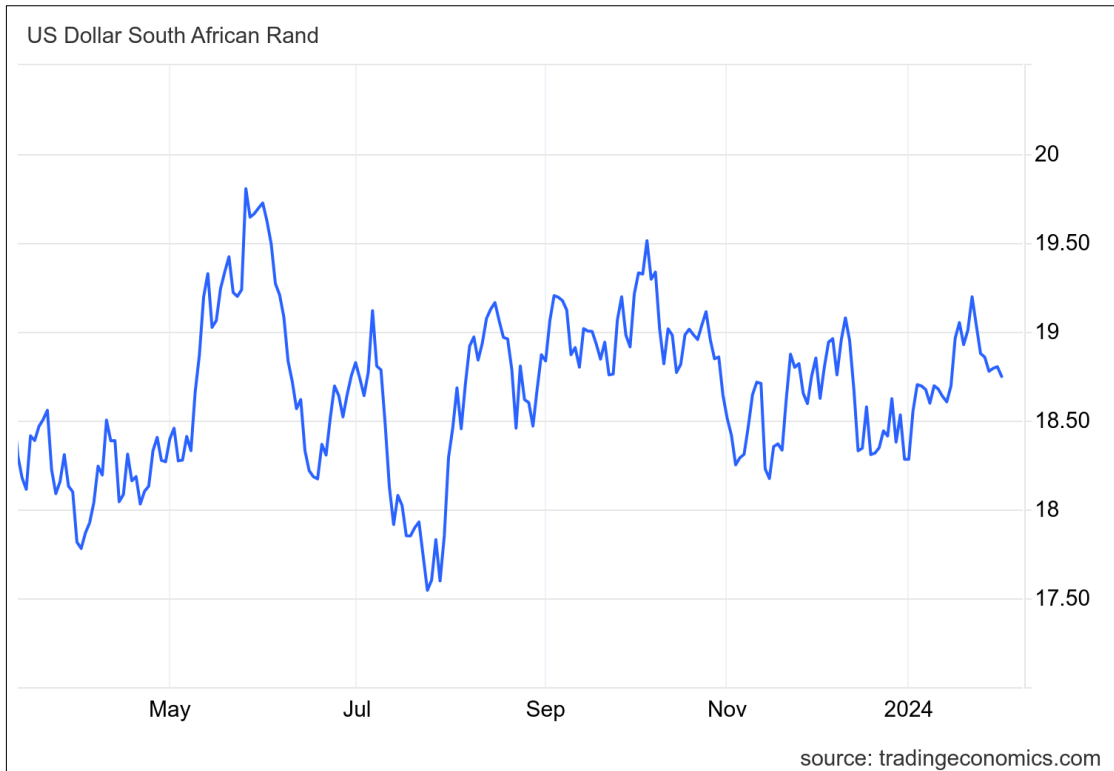


Figure 13: Exchange rate history USD/ZAR

5.6. The Price to be Used in the Cash Flow Forecast

A gold price of ZAR 850 000/kg has been used for evaluation purposes based on an average gold price of USD 1 448/oz and an average exchange rate of USD/ZAR 17.77 (Pan African Resources, 2023).

5.7. Confirmation that a Specialist Market Analysis is attached as an Appendix which Explains the Assumptions Made and how the Price was Determined

Mr J Loots, CEO of Pan African Resources, stated in the Company's 2023 Integrated Annual Report that "Pan African delivered a resilient financial performance for the current financial year, with a much-improved rand gold price compensating for lower production from our underground operations. We are confident that the measures we are implementing, specifically at Barberton Mines' underground operations, will result in higher production in the future, with production guidance increased for the 2024 financial year. If the current rand gold price tailwinds persist, we can look forward to another robust financial performance from Pan African in the year ahead" (Pan African Resources, 2023).

6. REGULATION 11(1)(f): THE DETAILS WITH REGARD TO THE APPLICABLE TIMEFRAMES AND SCHEDULING OF THE VARIOUS IMPLEMENTATION PHASES AND A TECHNICALLY JUSTIFIED ESTIMATE OF THE PERIOD REQUIRED

6.1. Timeframes and Scheduling of Implementation Phases

6.1.1. Explanation of Time Taken to Develop the Mine and Commence Production

The Sheba Mine was established in the 1880's and has been continuously mined since (SRK, 2017). Considering that the mine is already established and in production, no significant mine development is required.

6.1.2. Explanation of Production Build up Period Once Production Commences

The Sheba Mine is in steady state production and therefore no build up period is required.

6.1.3. Explanation of Production Decline Period (as Grades Deteriorate)

The current declared Mineral Reserves will be extracted (at the current production rate of 96 000 tonnes per annum) by the end of 2030. However, exploration activities across the Sheba Mine have successfully increased the Mineral Reserve base over the last twenty years. This is a clear indication that exploration activities are effective and that existing Inferred Resources are likely to be upgraded to Indicated Resources and then converted to Mineral Reserves.

The last resources to be extracted from Sheba mine will most likely be the low-grade ore of the near surface pillars of the Royal Sheba section after 2048. Hence, there is no foreseeable decline period associated with this Mining Right renewal phase. It is also noted that in these types of lode-gold deposits, new, previously unknown ore pockets can often be encountered near favourable geological structures. It is for this reason that the mine has continued to operate for more than 130 years on limited knowledge of future resources potential.

6.1.4 Production Forecast for Each Year over Full Period of 30 Years (Not Life of Mine calculation).

The production forecast for the current Sheba Mining Right (MP 30/5/1/2/2/10219 MR (189 MR)) is determined based on the Mineral Reserve and Mineral Resource estimates. The targets and Inferred Mineral Resources, which have the potential to be upgraded to Indicated Mineral Resources and hence are eligible for conversion to Mineral Reserves, are considered to extend the LOM and are forecasted in a conceptual manner. The Mineral Reserves are scheduled to be mined until 2030, by which time further Indicated or Measured Mineral Resources will have been explored and converted to additional Mineral Reserves. Figure 14, Figure 15 and Table 4 illustrate the production profile, the Run Of Mine (ROM) ounces and the production schedule for the current Mineral Reserves, respectively. The Mineral Resources defined on the Sheba Mine subsequent to 2030 will be conceptually extracted at a rate of approximately 96 000 tonnes per annum at an average grade of 6.68 g/t (Figure 16 and Table 5).

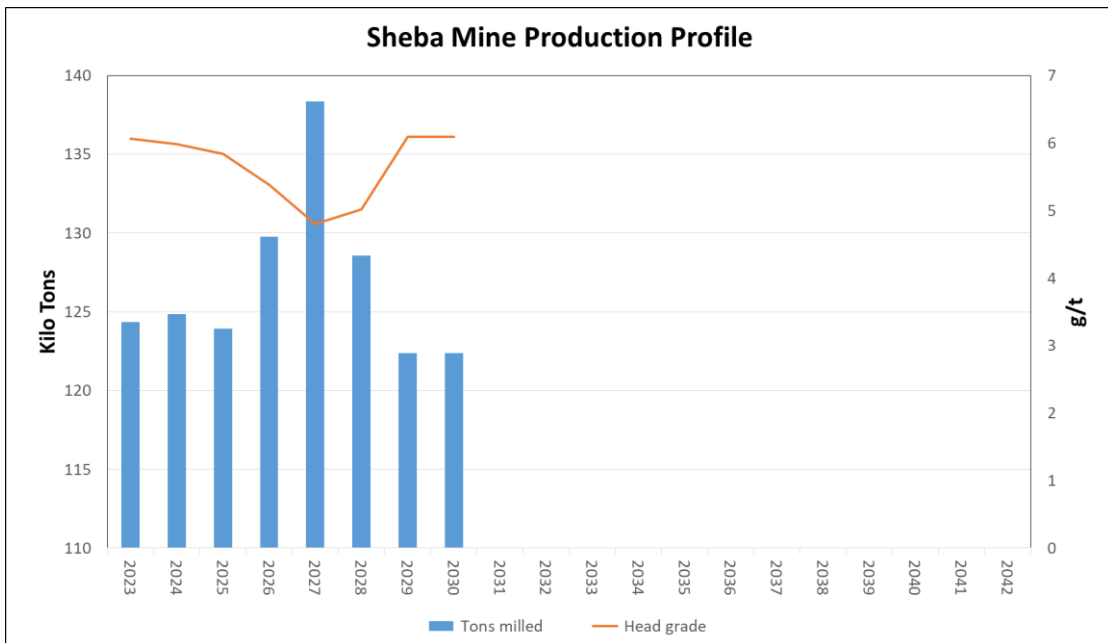


Figure 14: Production profile for the Sheba Mine (provided by BML, 2023).

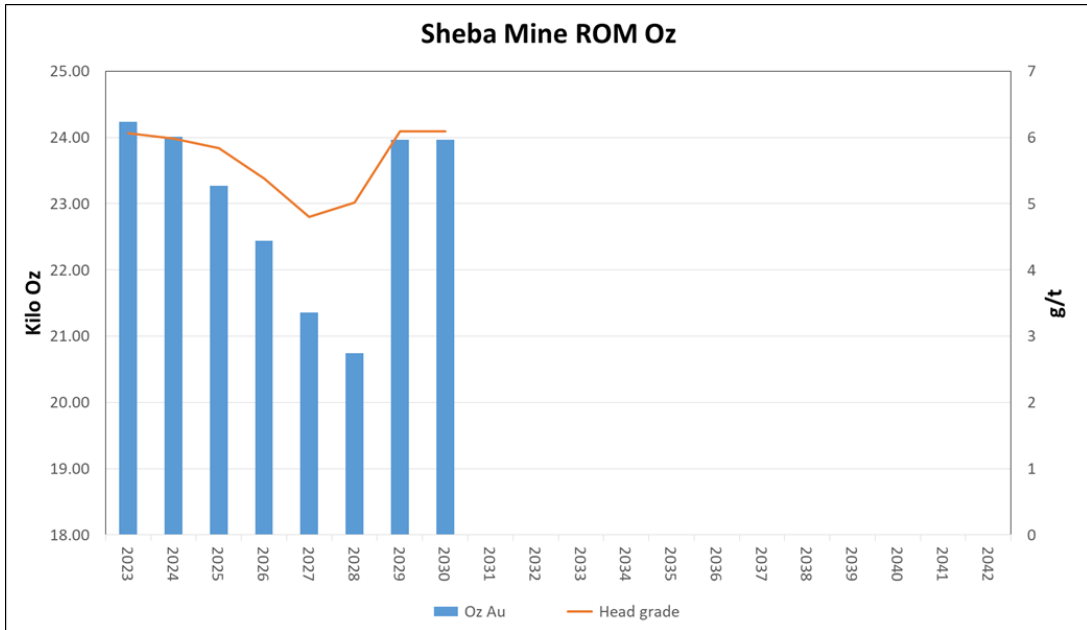


Figure 15: Run of Mine gold ounces (provided by BML, 2023).

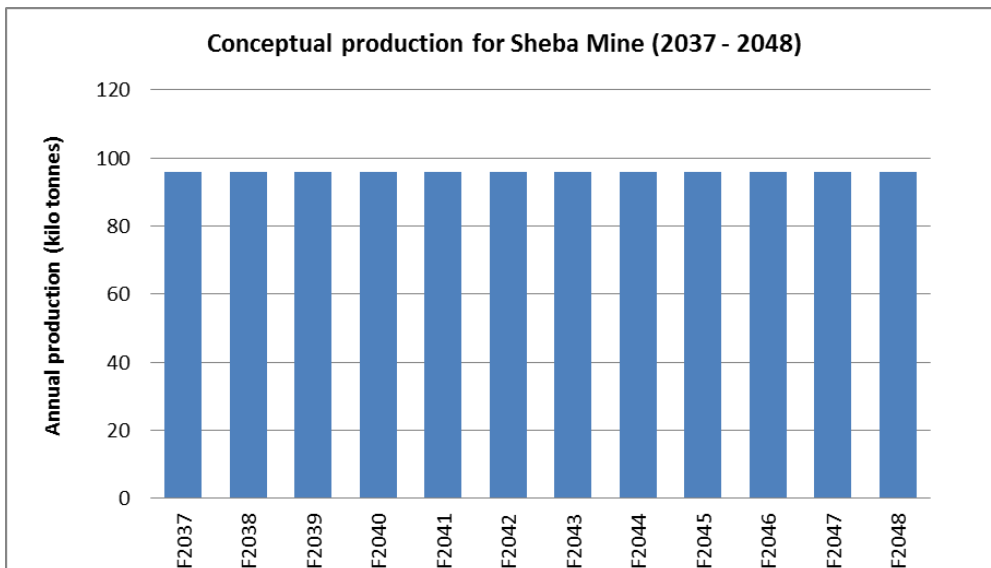


Figure 16: Conceptual production for the Mineral Resources at Sheba Mine from 2037-2048.

Table 4: Production forecasts based on the current Mineral Reserves in the Sheba Mine until the year 2037

BML	Units	Totals/ Average	F2018	F2019	F2020	F2021	F2022	F2023	F2024	F2025	F2026	F2027	F2028
Production													
Total underground production	(kt)	5161.9	271.8	270.5	272.3	278.6	275.0	303.7	303.4	250.4	245.5	244.4	245.8
Tonnes Milled - Fairview	(kt)	2034.6	105.0	103.7	100.8	100.8	100.8	104.0	104.0	105.1	101.2	101.2	101.2
Tonnes Milled - Fairview Vamping	(kt)	305.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3
Tonnes Milled - New Consort	(kt)	415.6	56.0	56.0	60.7	67.0	64.1	56.2	55.6	0.0	0.0	0.0	0.0
Tonnes Milled - New Consort Vamping	(kt)	55.9	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Tonnes Milled - Sheba	(kt)	912.5	86.6	86.6	86.6	86.6	86.0	85.3	85.7	73.1	66.1	36.1	24.9
Tonnes Milled - Sheba Vamping	(kt)	112.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Tonnes Milled - Royal Sheba	(kt)	1325.5	0.0	0.0	0.0	0.0	0.0	34.0	34.0	48.0	54.0	83.0	95.5
Headgrade - Fairview	(g/t)	12.19	12.75	12.26	12.34	12.41	13.41	12.02	11.55	11.46	11.76	11.21	11.58
Headgrade - Fairview Vamping	(g/t)	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23
Headgrade - New Consort	(g/t)	5.46	4.63	4.60	6.49	5.73	5.09	6.14	5.41	0.00	0.00	0.00	0.00
Headgrade - New Consort Vamping	(g/t)	31.64	31.64	31.64	31.64	31.64	31.64	31.64	31.64	31.64	31.64	31.64	31.64
Headgrade - Sheba	(g/t)	6.68	7.64	6.79	6.81	6.67	6.48	7.69	6.60	6.44	5.97	6.08	7.11
Headgrade - Sheba Vamping	(g/t)	33.18	33.18	33.18	33.18	33.18	33.18	33.18	33.18	33.18	33.18	33.18	33.18
Headgrade - Royal Sheba	(g/t)	4.35	0.00	0.00	0.00	0.00	0.00	4.35	4.35	4.35	4.35	4.35	4.35
Gold Produced - Fairview	(koz)	701.7	37.9	36.0	35.2	35.4	38.2	35.3	34.0	34.1	33.7	32.1	33.1
Gold Produced - Fairview Vamping	(koz)	131.5	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
Gold Produced - New Consort	(koz)	64.1	7.3	7.3	11.2	10.9	9.2	9.8	8.5	0.0	0.0	0.0	0.0
Gold Produced - New Consort Vamping	(koz)	50.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Gold Produced - Sheba	(koz)	177.4	19.2	17.1	17.2	16.8	16.2	19.1	16.5	13.7	11.5	6.4	5.2
Gold Produced - Sheba Vamping	(koz)	108.7	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Gold Produced - Royal Sheba	(koz)	160.3	0.0	0.0	0.0	0.0	0.0	4.1	4.1	5.8	6.5	10.0	11.6
Total Gold Produced - mining	(koz)	1393.8	79.4	75.3	78.5	78.0	78.6	83.3	78.0	68.5	66.6	63.5	64.8
BTRP Production													
Tonnes processed	(kt)	13844.7	1080.0	1053.4	1053.4	1053.4	1053.4	1053.4	1053.4	1053.4	1053.4	1053.4	1053.4
BTRP average grade	(g/t)	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
BTRP recovery	(%)	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%
BTRP Au produced	(koz)	301.1	23.5	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9
Total Gold Produced - mining	(koz)	1694.9	102.9	98.2	101.4	100.9	101.5	106.2	100.9	91.4	89.5	86.4	87.7

Cont. Table 4

BML	Units	Totals/ Average	F2029	F2030	F2031	F2032	F2033	F2034	F2035	F2036	F2037
Production											
Total underground production	(kt)	5 161.9	246.3	246.3	245.3	246.3	247.6	245.9	242.6	242.1	238.4
Tonnes Milled - Fairview	(kt)	2 034.6	101.2	101.2	101.2	101.2	101.2	101.2	101.2	101.2	97.5
Tonnes Milled - Fairview Vamping	(kt)	305.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3
Tonnes Milled - New Consort	(kt)	415.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tonnes Milled - New Consort Vamping	(kt)	55.9	3.3	3.3	3.3	3.3	3.3	3.3	0.0	0.0	0.0
Tonnes Milled - Sheba	(kt)	912.5	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
Tonnes Milled - Sheba Vamping	(kt)	112.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Tonnes Milled - Royal Sheba	(kt)	1 325.5	96.0	96.0	95.0	96.0	114.0	120.0	120.0	120.0	120.0
Headgrade - Fairview	(g/t)	12.19	11.60	11.52	11.29	12.02	12.11	12.93	12.93	12.97	13.85
Headgrade - Fairview Vamping	(g/t)	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23
Headgrade - New Consort	(g/t)	5.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Headgrade - New Consort Vamping	(g/t)	31.64	31.64	31.64	31.64	31.64	31.64	31.64	0.00	0.00	0.00
Headgrade - Sheba	(g/t)	6.68	7.11	6.68	5.23	5.23	4.12	2.00	2.00	0.00	0.00
Headgrade - Sheba Vamping	(g/t)	33.18	33.18	33.18	33.18	33.18	33.18	33.18	33.18	33.18	33.18
Headgrade - Royal Sheba	(g/t)	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
Gold Produced - Fairview	(koz)	701.7	33.2	33.0	32.3	34.4	34.6	37.0	37.0	37.1	38.2
Gold Produced - Fairview Vamping	(koz)	131.5	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
Gold Produced - New Consort	(koz)	64.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gold Produced - New Consort Vamping	(koz)	50.0	2.9	2.9	2.9	2.9	2.9	2.9	0.0	0.0	0.0
Gold Produced - Sheba	(koz)	177.4	5.2	4.8	3.8	3.8	1.0	0.0	0.0	0.0	0.0
Gold Produced - Sheba Vamping	(koz)	108.7	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Gold Produced - Royal Sheba	(koz)	160.3	11.6	11.6	11.5	11.6	13.8	14.5	14.5	14.5	14.5
Total Gold Produced - mining	(koz)	1 393.8	64.9	64.4	62.5	64.8	64.4	66.5	63.5	63.6	64.7
BTRP Production											
Tonnes processed	(kt)	13 844.7	1 053.4	1 053.4	124.0	0.0	0.0	0.0	0.0	0.0	0.0
BTRP average grade	(g/t)	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
BTRP recovery	(%)	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%
BTRP Au produced	(koz)	301.1	22.9	22.9	2.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Gold Produced - mining	(koz)	1 694.9	87.8	87.3	65.2	64.8	64.4	66.5	63.5	63.6	64.7

Table 5: Conceptual production for the Sheba Mine after 2036 Mineral Resources (Inferred).

Conceptual production for the Mineral Resources - Inferred													
Mine	F2036	F2037	F2038	F2039	F2040	F2041	F2042	F2043	F2044	F2045	F2046	F2047	F2048
Sheba (kt per annum)	96	96	96	96	96	96	96	96	96	96	96	96	96

6.2 Technically Justified Estimate of Period Required

Based on the planned exploitation of the Mineral Reserves in the existing Sheba Mine, there is at least 8 years' worth of mining, ending in 2030. Ongoing exploration on the current mining areas will continue to discover new Mineral Resources and upgrade certain of these to Mineral Reserves, thereby extending the years of mining.

It is foreseen that as mining progresses, additional resource blocks will be converted to Mineral Reserves and hence extend the LOM significantly.

A long term development programme at the adjacent Fairview Mine aims to establish access to the main Sheba orebody some 400 m below the current deepest level of Sheba Mine. This access will enable exploration and fast-track infrastructure development for a new sub-shaft at Sheba mine to facilitate sustainability beyond the next 30 years. In addition, geological exploration linked to this underground development is likely to "prove up" even more resources.

7. REGULATION 11(1)(g) (i) THE DETAILS WITH REGARD TO THE COSTING OF THE MINING TECHNIQUE, MINING TECHNOLOGY AND PRODUCTION RATES (excluding labour and capital)

7.1. Mine Design Maps

The cross section maps for the Sheba and Royal Sheba Mines are detailed in Figure 17 and Figure 18. Figure 17 shows the 23L development from the Sheba ZK shaft to the Royal Sheba resource. Production from Royal Sheba is scheduled to start in 2023 and last for the rest of the Sheba LOM. Figure 18 illustrates the access at depth from the new shaft at Fairview to the ZK orebody. This will enable exploration and infrastructure development for the depth extensions of the ZK orebody at Sheba Mine.

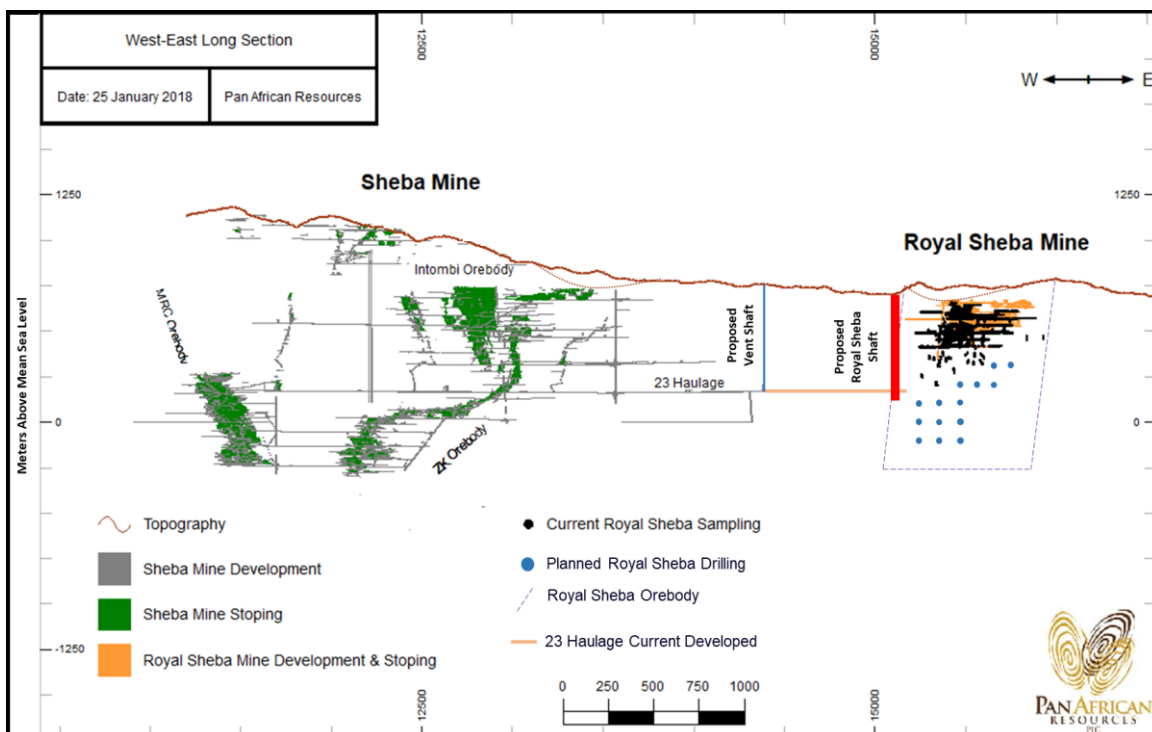


Figure 17: Cross section through Sheba Mine and Royal Sheba.

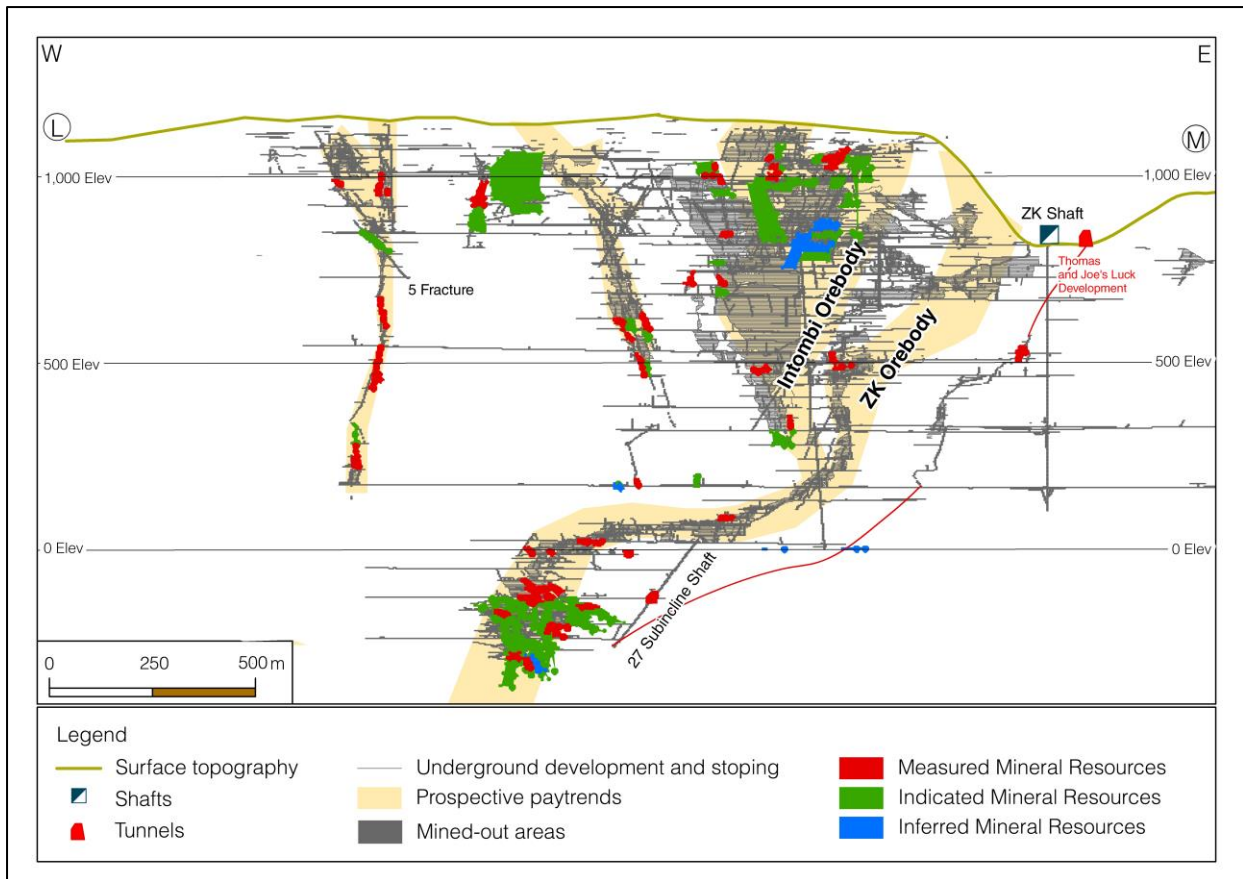


Figure 18: Sheba Mine ZK orebody deep shaft.

7.2 Description of the Mining Methods' Impact on Operating Cost

7.2.1 Basic Overview of the Mining Method

The underground mining at Sheba Mine is via mechanised cut and fill (both breast and up-dip) and conventional open stopeing methods. Table 6 illustrates the proportion of each mining method utilised on the respective mines. The ore at Sheba Mine is extracted mainly via conventional open stopeing methods (Figure 19).

Table 6: Mining methods implemented on the three Barberton Mines.

Mining method	Fairview	New Consort	Sheba
Mechanised mining – cut & fill	81%	15%	35%
Breast & up-dip mining			
Open stopeing – conventional mining	19%	85%	65%
Shrinkage mining	0%	0%	0%
Total Barberton	100%	100%	100%

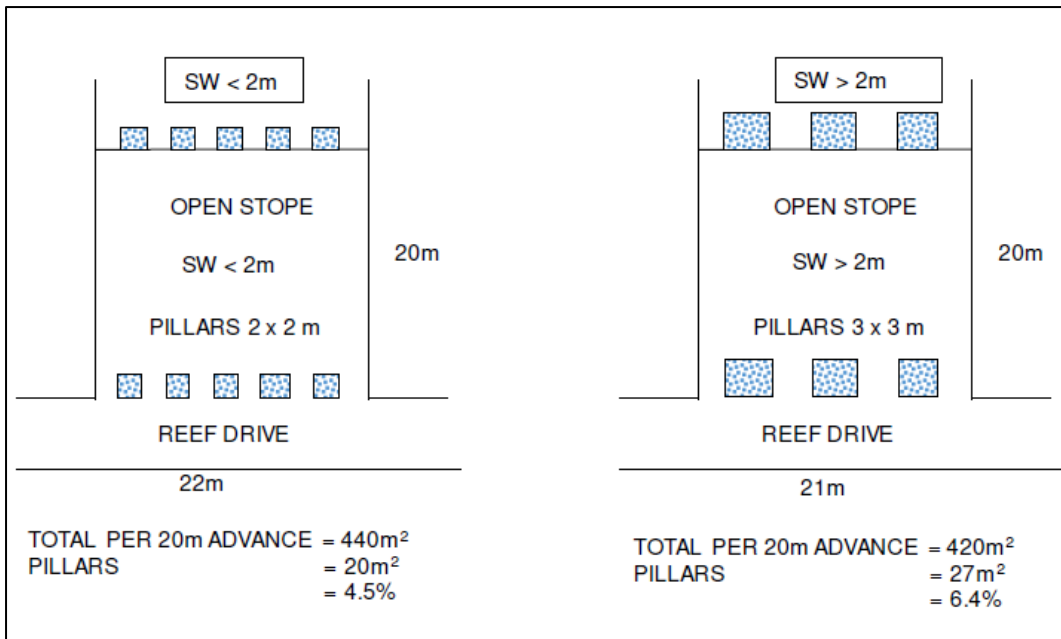


Figure 19: Conventional open stoping layout (SRK, 2017).

During mechanised cut and fill mining (Figure 20), the orebody is accessed from a deeper level and mined upwards and outwards as shown. The waste rock from infrastructure development is hauled back into the stope as fill to allow access to the updip portions of the orebodies.

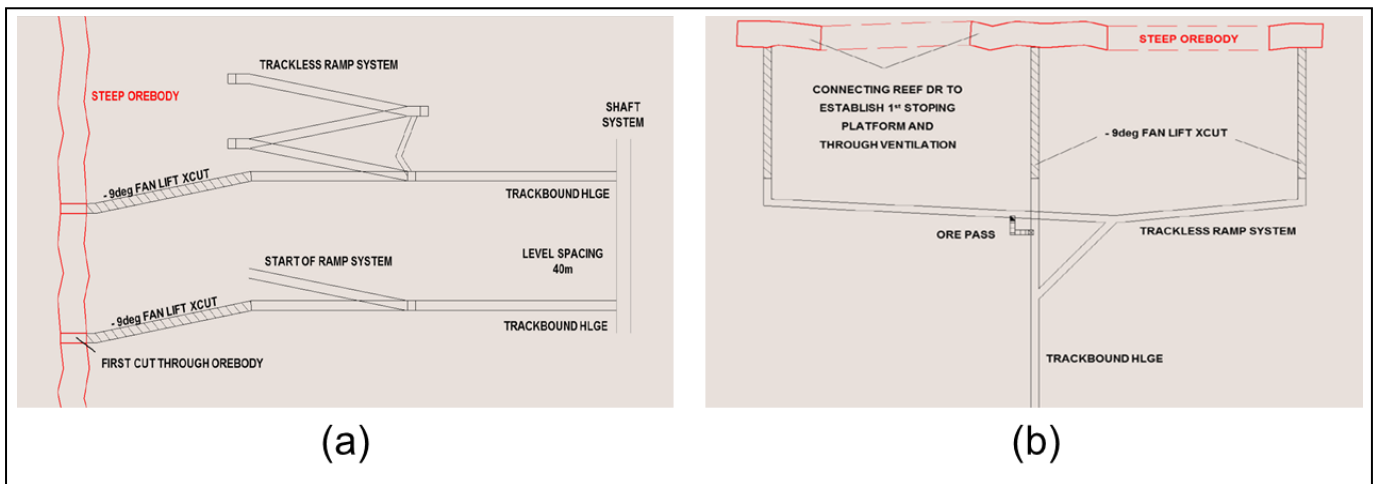


Figure 20: (a) Cross-section and (b) plan view of mechanised cut and fill mining.

The mining sequence (Figure 21) consists of:

- 1) Drilling of blast and face support holes;
- 2) Blasting stope and loading reef;
- 3) Waste blasting and filling; and
- 4) Compacting and cement capping.

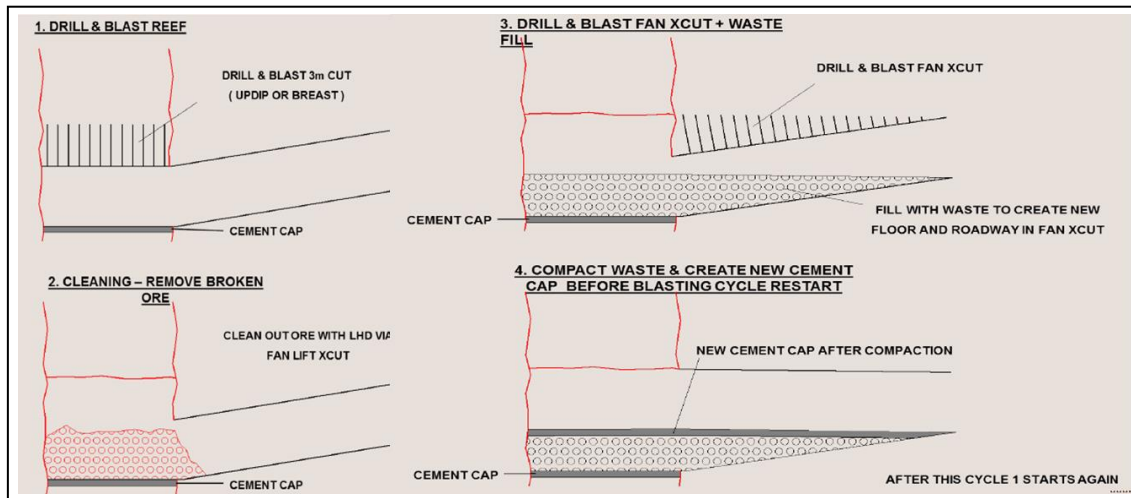


Figure 21: Mechanised cut and fill mining sequence.

7.2.2 Description of Equipment and Activities Impacting Electricity Cost

The cost of electricity is impacted by items detailed in Table 7.

Table 7: Equipment impacting on the cost of electricity.

SHEBA MINE UNDERGROUND ELECTRICITY LOAD			
LOCATION	SIZE (KW) / (Voltage)	RUNNING CONDITION	Quantity
WINDERS			
MRC Winder	150 KW (525v)	150	1
ZK Winder	500 KW (525v)	500	1
19 Sub Incline	112 KW (525v)	112	1
West 1 Winder	112 KW (525v)	112	1
Edwin Bray Winch	75 KW (525v)	75	1
South Well Adit Winch	37 KW (525v)	37	1
ZK 23 Level Winch	37 KW (525v)	37	1
MRC 35 Level Winch	37 KW (525v)	37	1
MRC 36 Level Winch	37 KW (525v)	37	1
Total:		1097	9
FAN'S			
23 Level Verster	22KW	66	3
	45KW	90	2
29 Level MRC	22KW	44	2
35 Level ZK	22KW	88	4
35 Level MRC	22KW	88	4
Total:		376	15

DE-WATERING PUMPS			
Surface Clear Water Dam	45 KW (525v)	45	1
7 Level Pump Station	55 KW (525v)	165	3
	110 KW (525v)	110	1
19 Level Pump Station	110 KW (525v)	330	3
	300 KW (2200v)	300	2
	18,5 KW (525v)	18.5	1
23 Level De-Watering Pump Station	110 KW (525v)	220	2
	45 KW (525v)	45	1
Delcor Settler Pump Station	110 KW (525v)	220	2
23 Level ZK Pump Station	18,5 KW (525v)	37	2
23 Level Shaft Bottom	10 KW (525v)	20	2
	110 KW (525v)	110	1
	7,5 KW (525v)	22.5	3
23 Level ¼ MRC Pump Station	45 KW (525v)	45	1
	7,5 KW (525v)	7.5	1
23 Level ½ MRC Pump Station	55 KW (525v)	55	2
	7,5 KW (525v)	7.5	1
25 Level MRC Pump Station	30 KW (525v)	60	2
29 Level MRC Pump Station	45 KW (525v)	135	6
31 Level MRC Pump Station	45 KW (525v)	90	4
35 Level MRC Pump Station	30 KW (525v)	90	6
	10 KW (525v)	10	1
36 Level MRC Pump Station	55 KW (525v)	55	2
Royal Sheba Clear Water Pumps	150 KW (525v)	150	2
	Total:	2348	52
COMPRESSORS			
Sheba Compressors 1000CFM	160 KW (525v)	1120	7
Edwin Bray Compressor 1000 CFM	160 KW (525v)	160	1
	Total:	1280	8

SHEBA MINE PLANT ELECTRICITY LOAD			
LOCATION	SIZE (KW) / (Voltage)	RUNNING CONDITION	Quantity
Crushing Section			
Silo Vibratory feeders	0.8	2.4	3
Tellsmith Jaw Crushers 14" x 24"	30	60	2
Astec 2 Ft Crusher	30	30	1
Astec Crusher feeder	0.8	0.8	1
Symons 3 Ft Crusher	75	75	1
Symons Crusher feeder	0.8	0.8	1
Dust Extraction & Scrubber	5.5	5.5	1
Crusher Section-ZK Take-up Spillage pump	15	15	1
Crusher Section - spillage pump Silo	7.5	7.5	1
Crusher Section - spillage pump No 2	7.5	7.5	1
Crusher Section - spillage pump Crusher Floor	7.5	7.5	1
Crusher Section - spillage pump - Classifier	7.5	7.5	1
Crusher Section Conveyor 2	7.5	7.5	1
Crusher Section Conveyor 3	7.5	7.5	1
Crusher Section Conveyor 4	7.5	7.5	1
Crusher Section Conveyor 5	3	3	1
Grizzly Screen vibrator motors	2.3	4.6	2
Belt magnet drivers	2.2	2.2	1
Belt Electromagnet	3	6	2
Classifier	7.5	7.5	1
Double Deck Exiter motors	11	22	2
Water pumps	18.5	37	2
Lighting - 16 x Floodlights 400W	0.4	6.4	16
Lighting - 17 x Bulkheads 150W	0.15	2.55	17
Fluorescents	0.07	1.47	21
Symons - Lubrication System	3	3	1
Symons - Lubrication System - Cooling fan	3	3	1
Hoists	1.5	6	4
Dust Suppression system	3	3	1
	Total:	349.72	90
Milling Section			
Mill bins - vibratory motors	0.5	1	2
Milling Conveyor 7	7.5	7.5	1
Milling Conveyor 8	7.5	7.5	1
Spillage pump	7.5	7.5	1
Wash water pump	22	22	1
Milling Conveyor 9	7.5	7.5	1
Ball Mill motor	400	400	1
Mill Effluent Screen - vibro motors	2.3	4.6	2
Mill Effluent pump - Warman 6/4	37	74	2
Conveyor No 11	7.5	7.5	1
Mill Spillage pump	7.5	7.5	1
Lighting - 31 x Floodlights 400W	0.4	12.4	31
Lighting - Fluorecents	0.07	3.71	53
Demag Crane	15	15	1
Barring gear	7.5	7.5	1
	Total:	585.21	100

Float Section			
Cyclone Feed pump 6/4	45	90	2
Jameson Cells transfer pumps	18.5	74	4
Jameson cells circulation pumps	18.5	37	2
Jameson Spillage pump	7.5	7.5	1
Dewatering pump 1	37	37	1
Dewatering pump 2	18.5	18.5	1
Flash Float	37	37	1
Float Section - Gland Service	22	44	2
Dewatering Screen - Vibratory	1.5	3	2
Sala 3"- Float Tail transfer pump	15	15	1
80x80 Float Tail transfer pump	18.5	18.5	1
Knelson Water pump	15	15	1
Knelson - motor	15	15	1
Roughers	30	60	2
Scavenger	18.5	18.5	1
Chemical Dosing pumps	0.37	1.48	4
SPX 50	3	6	2
Thickener - Hydraulic power pack	7.5	7.5	1
Spillage pump	7.5	7.5	1
Electrical hoist	0.37	0.37	1
	Total:	512.85	32
Chemical Mixing			
Agitators	0.37	0.74	2
Conc Auto sampler	0.37	0.37	1
SPX 25	3	3	1
SPX 40	3	6	2
ZK Spillage pump	7.5	7.5	1
	Total:	17.61	7
Gravity Section			
Regrind Mill - Effluent pump	18.5	18.5	1
Regrind Mill motor	15	15	1
Regrind spillage pump	7.5	7.5	1
Concentrate SPX 65	5.5	5.5	1
Conc tank agitators	3	3	2
Stock Tank agitators	7.5	7.5	2
Passage spillage pump	7.5	7.5	1
Blowers	37	37	2
TX bay spillage pump	1.5	1.5	1
Redress - Gemini table	3	3	1
Redress, 1" Sala pump	3	3	1
Drying oven	3	3	1
	Total:	112	15

Residue Section			
Spillage pump	7.5	37.5	5
Crusher Thickener - Mill dilution pumps	15	30	2
Mill returns 1	18.5	18.5	1
Mill returns 2	37	37	1
Crusher Thickener - power pack	7.5	7.5	1
LG Thickener	2.2	2.2	1
Flocculant pumps	5.5	11	2
Flocc Mixing tank	1.5	1.5	1
Auto sampler - Float tail	0.37	0.37	1
Residue pumps	18.5	74	4
Gland Service - Res area	22	22	1
Dirty water pumps	18.5	37	2
SPX 65	7.5	7.5	1
Mountain water pump	45	45	1
Cipal agitators	7.5	15	2
Sewerage pump - plant	3	3	1
Sewerage pump - plant	1.5	1.5	1
	Total:	350.57	28
Offices			
Air Conditioners	1.2	9.6	8
Air conditioners - Substation	3	6	2
Geysers - changehouse	4	12	3
Drying oven	3	3	1
Carbolite -	3	3	1
Workshop- All workshop equipment	10	10	1
	Total:	43.6	16
	Total:	7028.96	

7.2.3 Description of Equipment and Activities Impacting on Fuel Cost

The equipment impacting on fuel cost, relating to transportation and loading, is listed in Table 8.

Table 8: List of equipment impacting on fuel costs.

DESCRIPTION OF EQUIPMENT AND ACTIVITIES IMPACTING FUEL COST		
NUMBER OF VEHICLES PER OPERATION	QUANTITY	COST R'000
RBE	14	
SME	16	
TMM	24	
UV	3	
Total	57	
HYDROCARBONS ISSUED PER MINE		
AVERAGE NUMBER OF LITERS PER OPERATION PER MONTH		
Diesel	33881	
Petrol	50	
Total Liters	33931	
Prices per Dynamics - 31 January 2024		
191001037 - DIESEL DYNAMIC 50PPM (p/l)		716 583
193001016 - PETROL 95 ULP UNLEADED		1 104
Total fuel cost (petrol + diesel) per month		717 687
Average fuel cost per year, per mine		8 612 246

7.2.4 Description of Equipment and Activities Impacting on Cost of Stores and Materials

The equipment and activities listed in Table 7 and Table 8 impact on cost of stores and materials.

7.2.5 Description of Equipment and Activities Impacting on Cost of Water

The water balance at Sheba Mine remains positive throughout the year. The main underground pumping at Sheba is concentrated at the ZK Shaft (to surface) and the MRC subvertical shaft. The water from the MRC Shaft is pumped with dirty water pumps to the 23 Level settlers on the ZK Shaft and then to surface. Sludge is pumped to the process plant. Service water is obtained from a recirculating dam on 19 Level. Ground water is captured separately on 19 Level and pumped to a domestic water dam on surface (SRK, 2017). The cost of water distribution is attributed to potable water utilised underground. Potable water for domestic and process use is abstracted from nearby natural watercourses as required and filtered.

7.2.6 Description of Activities Impacting on Other Costs not Included Above

Other costs that have not yet been accounted for are: geological services, laboratory fees, legal fees, management and administration fees, rock engineering services, Health and Safety compliance services, insurance, social and labour plan costs, community costs, general repairs and maintenance of equipment (excluding mining equipment).

7.2.7 Operating Cost Forecast (Excluding the Processing Plant and Labour) for First 10 Years (provided by BML, 2024).

COST CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
LHD Costs	28 857	30 300	31 815	33 406	35 076	36 830	38 671	40 605	-	-
Electricity	34 996	36 745	38 583	40 512	42 537	44 664	46 897	49 242	-	-
Stores and materials	40 031	42 032	44 134	46 341	48 658	51 090	53 645	56 327	-	-
Mining contractor and pillar mining contractor	78 241	82 153	86 260	90 574	95 102	99 857	104 850	110 093	-	-
Other (Specify)	4 945	5 192	5 451	5 724	6 010	6 311	6 626	6 958	-	-
	79 083	92 032	102 616	108 069	111 719	131 258	148 374	160 909		
Total (ZAR)	107 986	104 390	103 627	108 487	115 664	107 495	102 316	102 316	0	0

NB! The costs determined here must explain the costs used in line item 4 of the cash flow forecast required herein under Regulation 11 (1) (g) (vi)

8. REGULATION 11 (1) (g) (ii): DETAILS AND COSTING OF THE TECHNOLOGICAL PROCESS APPLICABLE TO THE EXTRACTION AND PREPARATION OF THE MINERAL OR MINERALS TO COMPLY WITH MARKET REQUIREMENTS

8.1. High Level Description of the Processing Plant

There are five processing plants operated by Barberton Mines:

1. New Consort Concentrator and Leach Plant;
2. Sheba Concentrator;
3. Fairview Concentrator;
4. Fairview BIOX®, leach and CIP plant plus smelter; and
5. BTRP at Fairview.

The ore contains sulphide minerals and the associated gold is refractory in terms of conventional Cyanide (CN) leaching. Pyrite and arsenopyrite are the principal sulphide minerals at the Sheba Mine. Other sulphide minerals such as chalcopyrite and pentlandite are also present in minor quantities. The concentrator produces a high-grade flotation concentrate, with an average sulphur grade of approximately 12%. The Sheba circuit includes gravity concentration for the recovery of coarsely liberated gold.

The Sheba Concentrator processes underground ore in a facility including the following unit processes:

- Primary jaw crushing;
- Secondary cone crushing closed by screening and spiral classification;
- Primary ball milling closed by hydrocycloning;
- Centrifugal gravity concentration, with redressing on a shaking table;
- Flash flotation;
- Pre-rougher flotation;
- Conventional rougher, scavenger and cleaner flotation;
- Cleaner concentrate regrinding;
- Centrifugal gravity concentration on reground cleaner concentrate, with redressing on a shaking table;
- Gravity concentrate transportation to Fairview gold room;
- Flotation concentrate thickening ahead of road transportation to Fairview BIOX® plant; and
- Flotation tails thickening ahead of pumping to TSF.

8.1.1. Basic Plant Design

The basic plant design for the Sheba plant is detailed in Figure 22. The process flow chart of the shared BIOX[®] at Fairview is illustrated in Figure 23.

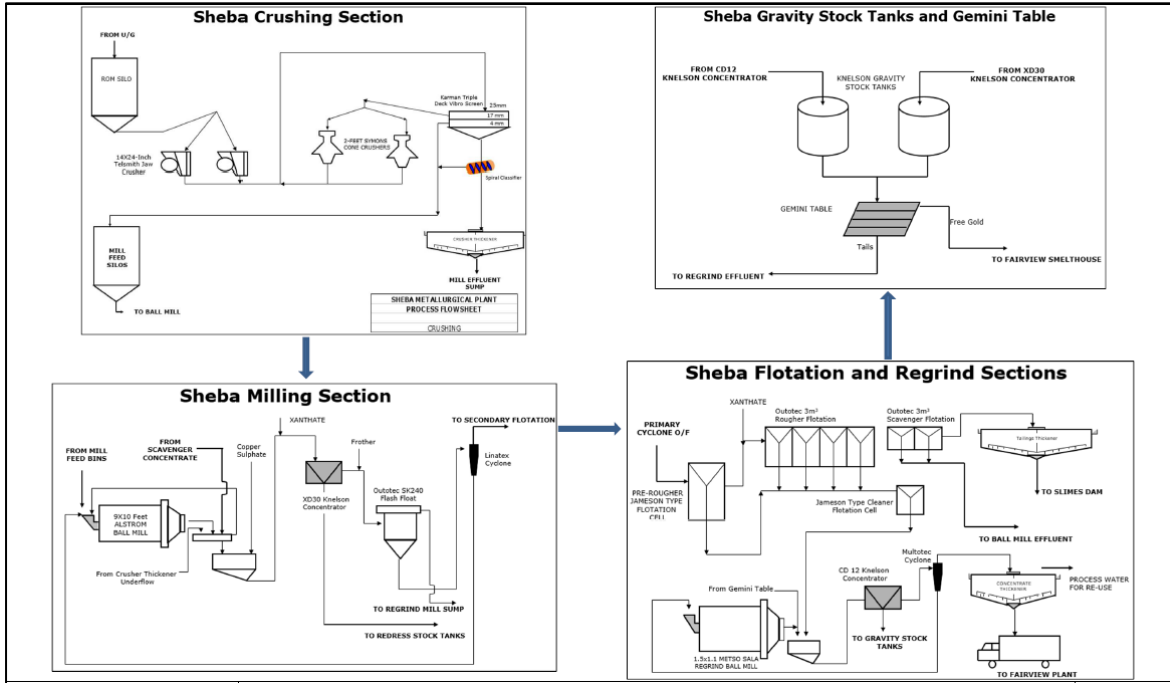


Figure 22: Schematic flow diagram of the Sheba Processing Plant (SRK, 2017).

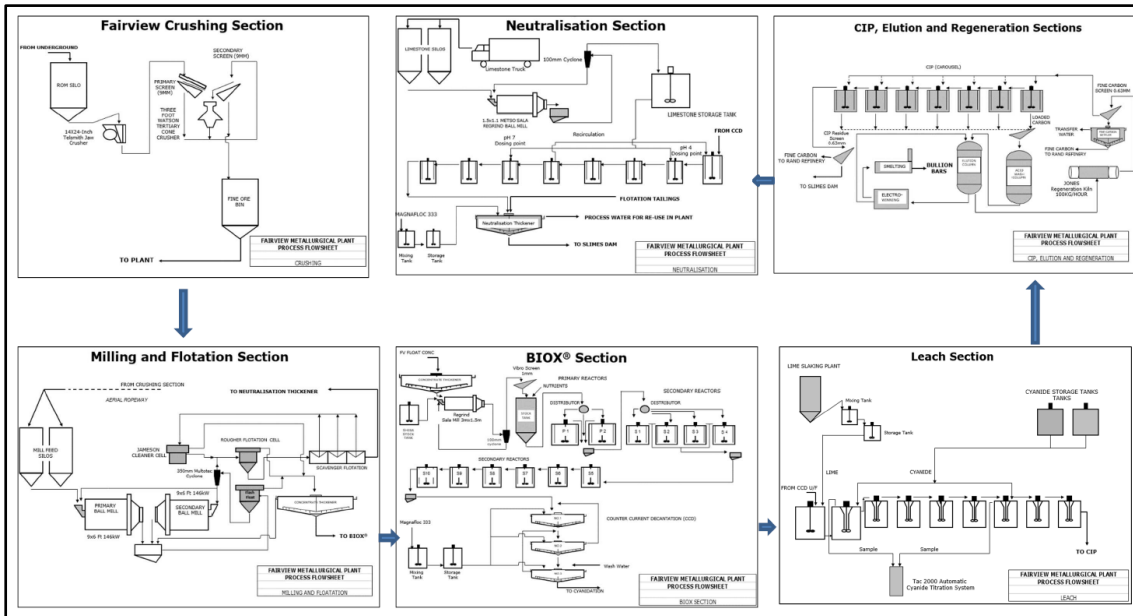


Figure 23: BML's BIOX[®] Plant process flow diagram.

8.1.2. Efficiency of the Process

Process production statistics from 2018 to 2024 are summarised in Table 9. Plant throughput has dropped slightly in recent years to around 90 ktpa, which is considerably below the plant capacity of approximately 128 ktpa. The head grade varied from 8.5 g/t to 9.4 g/t on an annual basis, averaging around 9.0 g/t. The total annual recovery averaged 93.3% over this period.

Table 9: Sheba concentrator process production statistics (SRK, 2017).

Item	Unit	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
		Jul 17-Jun 18	Jul 18-Jun 19	Jul 19-Jun 20	Jul 20-Jun 21	Jul 21-Jun 22	Jul 21-Jun 23	Jul 21-Jun 24
Feed								
Tonnage	(t)	100865	112742	108044	110987	109982	110793	61044
Grade	(g/t)	13.23	11.87	11.76	13.72	13.62	11.70	12.15
Flotation Tail								
Tonnage	(t)	91686	103905	99811	101709	99688	101246	55807
Grade	(g/t)	0.75	0.68	0.85	0.76	0.81	0.85	0.96
Flotation Concentrate								
Tonnage	(t)	9179	8838	8233	9278	10294	9547	5237
Grade	(g/t)	137.88	143.47	137.99	146.23	122.18	113.49	118.83
Gold Recovery (% of Feed)								
BIOX® Gold	(%)	93.48	94.11	92.30	94.46	92.37	91.86	90.21
Feed								
Flotation	(%)	94.83	94.80	93.33	94.95	94.59	93.34	92.80

BIOX ® throughput has ranged from 15 to 20 ktpa, which compares well with the 20 ktpa plant capacity. The concentrate grade varies from 100 g/t to 140 g/t, averaging 125 g/t with an average recovery of 97% (Table 10).

Table 10: BML's BIOX ® concentrator process production statistics.

Item	Unit	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
		Jul 17-Jun 18	Jul 18-Jun 19	Jul 19-Jun 20	Jul 20-Jun 21	Jul 21-Jun 22	Jul 21-Jun 23	Jul 21-Jun 24
BIOX® Feed								
Tonnage	(t)	16531	16706	16362	17594	18948	17939	9652
Grade	(g/t)	117.78	120.24	114.45	129.37	100.45	95.03	98.81
Oxide CIP Feed								
Tonnage	(t)	11292	11705	11468	12772	12996	11911	7382
Grade	(g/t)	172.67	184.50	166.59	179.12	129.82	122.91	128.83
Oxide CIP Tail								
Tonnage	(t)	11292	11705	11468	12772	12996	11911	7382
Grade	(g/t)	3.70	3.53	3.72	3.13	2.90	2.75	3.01
Unit Process Recovery								
BIOX®/CIP	(%)	97.87	98.05	97.79	98.28	98.18	98.18	97.86

8.2. Description of Equipment and Activities Impacting Electricity Cost

The equipment and activities impacting on electricity at the Sheba processing plant are significant. Table 11 details the equipment.

Table 11: List of equipment from the processing plant impacting on electricity.

SHEBA MINE PLANT ELECTRICITY LOAD			
LOCATION	SIZE (KW) / (Voltage)	RUNNING CONDITION	Quantity
Crushing Section			
Silo Vibratory feeders	0.8	2.4	3
Tellsmith Jaw Crushers 14" x 24"	30	60	2
Astec 2 Ft Crusher	30	30	1
Astec Crusher feeder	0.8	0.8	1
Symons 3 Ft Crusher	75	75	1
Symons Crusher feeder	0.8	0.8	1
Dust Extraction & Scrubber	5.5	5.5	1
Crusher Section-ZK Take-up Spillage pump	15	15	1
Crusher Section - spillage pump Silo	7.5	7.5	1
Crusher Section - spillage pump No 2	7.5	7.5	1
Crusher Section - spillage pump Crusher Floor	7.5	7.5	1
Crusher Section - spillage pump - Classifier	7.5	7.5	1
Crusher Section Conveyor 2	7.5	7.5	1
Crusher Section Conveyor 3	7.5	7.5	1
Crusher Section Conveyor 4	7.5	7.5	1
Crusher Section Conveyor 5	3	3	1
Grizzly Screen vibrator motors	2.3	4.6	2
Belt magnet drivers	2.2	2.2	1
Belt Electromagnet	3	6	2
Classifier	7.5	7.5	1
Double Deck Exiter motors	11	22	2
Water pumps	18.5	37	2
Lighting - 16 x Floodlights 400W	0.4	6.4	16
Lighting - 17 x Bulkheads 150W	0.15	2.55	17
Fluorescents	0.07	1.47	21
Symons - Lubrication System	3	3	1
Symons - Lubrication System - Cooling fan	3	3	1
Hoists	1.5	6	4
Dust Suppression system	3	3	1
Total:		349.72	90

Milling Section			
Mill bins - vibratory motors	0.5	1	2
Milling Conveyor 7	7.5	7.5	1
Milling Conveyor 8	7.5	7.5	1
Spillage pump	7.5	7.5	1
Wash water pump	22	22	1
Milling Conveyor 9	7.5	7.5	1
Ball Mill motor	400	400	1
Mill Effluent Screen - vibro motors	2.3	4.6	2
Mill Effluent pump - Warman 6/4	37	74	2
Conveyor No 11	7.5	7.5	1
Mill Spillage pump	7.5	7.5	1
Lighting - 31 x Floodlights 400W	0.4	12.4	31
Lighting - Fluorecents	0.07	3.71	53
Demag Crane	15	15	1
Barring gear	7.5	7.5	1
	Total:	585.21	100
Float Section			
Cyclone Feed pump 6/4	45	90	2
Jameson Cells transfer pumps	18.5	74	4
Jameson cells circulation pumps	18.5	37	2
Jameson Spillage pump	7.5	7.5	1
Dewatering pump 1	37	37	1
Dewatering pump 2	18.5	18.5	1
Flash Float	37	37	1
Float Section - Gland Service	22	44	2
Dewatering Screen - Vibratory	1.5	3	2
Sala 3"- Float Tail transfer pump	15	15	1
80x80 Float Tail transfer pump	18.5	18.5	1
Knelson Water pump	15	15	1
Knelson - motor	15	15	1
Roughers	30	60	2
Scavenger	18.5	18.5	1
Chemical Dosing pumps	0.37	1.48	4
SPX 50	3	6	2
Thickener - Hydraulic power pack	7.5	7.5	1
Spillage pump	7.5	7.5	1
Electrical hoist	0.37	0.37	1
	Total:	512.85	32

Chemical Mixing			
Agitators	0.37	0.74	2
Conc Auto sampler	0.37	0.37	1
SPX 25	3	3	1
SPX 40	3	6	2
ZK Spillage pump	7.5	7.5	1
	Total:	17.61	7
Gravity Section			
Regrind Mill - Effluent pump	18.5	18.5	1
Regrind Mill motor	15	15	1
Regrind spillage pump	7.5	7.5	1
Concentrate SPX 65	5.5	5.5	1
Conc tank agitators	3	3	2
Stock Tank agitators	7.5	7.5	2
Passage spillage pump	7.5	7.5	1
Blowers	37	37	2
TX bay spillage pump	1.5	1.5	1
Redress - Gemini table	3	3	1
Redress, 1" Sala pump	3	3	1
Drying oven	3	3	1
	Total:	112	15
Residue Section			
Spillage pump	7.5	37.5	5
Crusher Thickener - Mill dilution pumps	15	30	2
Mill returns 1	18.5	18.5	1
Mill returns 2	37	37	1
Crusher Thickener - power pack	7.5	7.5	1
LG Thickener	2.2	2.2	1
Flocculant pumps	5.5	11	2
Flocc Mixing tank	1.5	1.5	1
Auto sampler - Float tail	0.37	0.37	1
Residue pumps	18.5	74	4
Gland Service - Res area	22	22	1
Dirty water pumps	18.5	37	2
SPX 65	7.5	7.5	1
Mountain water pump	45	45	1
Cipal agitators	7.5	15	2
Sewerage pump - plant	3	3	1
Sewerage pump - plant	1.5	1.5	1
	Total:	350.57	28
Offices			
Air Conditioners	1.2	9.6	8
Air conditioners - Substation	3	6	2
Geysers - changehouse	4	12	3
Drying oven	3	3	1
Carbolite -	3	3	1
Workshop- All workshop equipment	10	10	1
	Total:	43.6	16

8.3. Description of Equipment and Activities Impacting Fuel Cost

The Sheba plant utilises a back-up diesel generator. This equipment consumes about 33 931 litres of diesel per month. Description of equipment and activities impacting fuel are detailed in Table 12.

Table 12: Description of equipment and activities impacting fuel cost

DESCRIPTION OF EQUIPMENT AND ACTIVITIES IMPACTING FUEL COST		
NUMBER OF VEHICLES PER OPERATION	QUANTITY	COST R'000
RBE	14	
SME	16	
TMM	24	
UV	3	
Total	57	
HYDROCARBONS ISSUED PER MINE		
AVERAGE NUMBER OF LITERS PER OPERATION PER MONTH		
Diesel	33 881	
Petrol	50	
Total Liters	33 931	
Prices per Dynamics - 31 January 2024		
191001037 - DIESEL DYNAMIC 50PPM (p/l)		716 583
193001016 - PETROL 95 ULP UNLEADED		1 104
Total fuel cost (petrol + diesel) per month		717 687
Average fuel cost per year, per mine		8 612 246

8.4. Description of Equipment and Activities Impacting on Cost of Stores

Consumables and equipment impacting on the cost of stores include grease, oil, replacement of liners and worn components, corrosion maintenance, as well as cyanide, lime and chemicals utilised to liberate gold.

8.5. Description of Equipment and Activities Impacting on Cost of Water

The processing plant makes use of the water pumped from underground at Sheba Mine. The costs associated with the water are related to potable water requirements.

8.6. Description of Equipment and Activities Impacting on Cost not Included Above

Other cost included in the processing plant forecast consider buy in for toll treatment as well as the cleaning of surface materials. Laboratory fees, general repairs and maintenance of equipment and security is also included as other costs.

8.7. Processing Plant Operating Cost Forecast (Excluding Labour) for First 10 Years (provided by Barberton Mines)

COST CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	-	-
Electricity	23 330	24 497	25 722	27 008	28 358	29 776	31 265	32 828	-	-
Plant	46 301	48 616	51 046	53 599	56 279	59 093	62 047	65 150	-	-
	0	5 801	9 948	10 653	10 055	19 555	27 337	32 003	-	
Total (ZAR)	69 631	67 312	66 820	69 954	74 582	69 314	65 975	65 975	0	0

NB! The costs determined here must explain the costs used in line item 5 of the cash flow forecast required herein under Regulation 11 (1) (g) (vi).

9. REGULATION 11 (1) (g) (iii): DETAILS AND COSTING OF THE TECHNICAL SKILLS AND EXPERTISE AND EXPERTISE ASSOCIATED LABOUR IMPLICATIONS REQUIRED TO CONDUCT THE PROPOSED MINING OPERATION

9.1. Organisational Structure of the Mine

The organisational structure of the BML (Fairview, New Consort and Sheba) is presented in Figure 24. The detailed organograms for certain aspects are attached in Appendix 3.

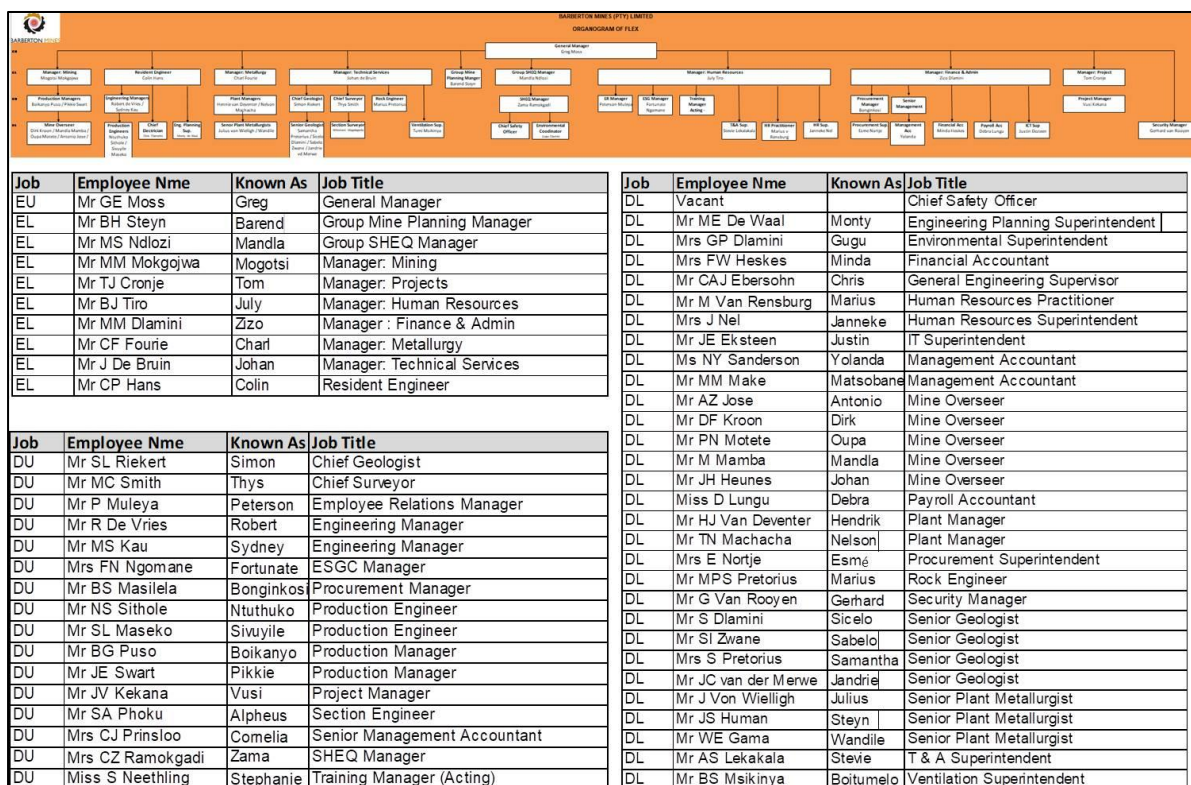


Figure 24: Organogram of BML (Fairview, New Consort and Sheba mines).

9.1.1. Description of Positions Requiring Certificates of Competency and Under which Skill Category they have Budgeted for.

Table 13 details the positions requiring certificates of competency on the Sheba Mine.

Table 13: Positions requiring certification.

No.	Occupation/position	Name and surname	Appointment (mhsa)	Area of responsibility	Skill category	Location
1.	PRODUCTION MANAGER	BOIKANYO PUSO	SECT 2.6.1	SHEBA MINE	Professionally qualified and experienced specialists and mid-management	SHEBA
2	MINE OVERSEER	MANDLA MAMBA	Sect 7(4), and Reg. 2.13.12	SHEBA MINE	Professionally qualified and experienced specialists and mid-management	SHEBA
3	MINE OVERSEER	JOHAN HEUNES	Sect 7(4), and Reg. 2.13.12	SHEBA MINE (OUTSIDE ADITS)	Professionally qualified and experienced specialists and mid-management	SHEBA
4	ENGINEERING MANAGER	ROBERT DE VRIES	MHSA Reg. 2.13.3	SHEBA MINE	Professionally qualified and experienced specialists and mid-management	SHEBA
5	PRODUCTION ENGINEERING	SIVUYILE MASEKO	MHSA Reg. 2.13.3	SHEBA MINE	Professionally qualified and experienced specialists and mid-management	SHEBA
6	PLANT MANAGER	NELSON MACHACHA	Reg. 2.6.1, 2.9.2 + Sect. 7(4)	SHEBA PLANT	Professionally qualified and experienced specialists and mid-management	SHEBA
7	GENERAL ENGINEERING FOREMAN	MASHUDU MUKOMA	Regulation 2.9.2	SHEBA MINE TRACKLESS AREA	Skilled technical and academically qualified workers. Junior management, supervisors, foreman and superintendents	Sheba Mine
8	GENERAL ENGINEERING FOREMAN	OBERHOLZER MATHEUS	Regulation 2.9.2	SHEBA PLANT	Skilled technical and academically qualified workers. Junior management, supervisors, foreman and superintendents	Sheba Mine
9	LAMPSMAN	E.B MUBI	Reg. 2.9.2, MHSA Regs. 16.2(3), 16.3(1), 16.4(1), 16.4(2),	LAMPROOM SHEBA	Skilled technical and academically qualified workers. Junior management, supervisors, foreman and superintendents	Sheba Mine
10	FTHSRP	C. T SHONGWE	MHSA, Reg 6.9	Sheba Mine	Skilled technical and academically qualified workers. Junior management, supervisors, foreman and superintendents	Sheba Mine

9.1.2. Description of which Part or Parts of the Mining Operation will be Outsourced (if any)

Aspects of the mining operation that are outsources across the Barberton Mines (Sheba, New Consort and Fairview) are listed in Table 14.

Table 14: List of activities that are outsourced.

	Item Outsourced
1	Vamping Contractor (VTN)
2	Explosives
3	Secondary Support
4	Shaft Refurbishment
5	Tyres
6	Security
7	Rock Engineering

9.2 Costing of Skill Categories in the Mining Operation to Determine if Technical Competence has been Budgeted for: Complete the Following Tables:

The technical skills budgeted for consider both mine personnel and contractors. The budget for the mine personnel is detailed in Table 15 and the contractors in Table 16. Table 17 represents the total costing of skills.

Table 15: Personnel on Sheba Mine's payroll (Years 1 – 10)- provided by BML (2023).

CATEGORY	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		YEAR 6		YEAR 7		YEAR 8		YEAR 9		YEAR 10		TOTAL
	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	
Top management	0		0		0		0		0		0		0		0		0		0		
Senior Management	0		0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-
Professionally qualified and experienced specialists and mid-management	9	121 388 868	9	127 458 311	9	133 831 227	9	140 522 788	9	147 548 928	9	154 926 374	9	162 672 693	9	170 806 327	9	179 346 644	9	188 313 976	1 526 816 137
Skilled technical and academically qualified workers. Junior management, supervisors, foreman and superintendents	103	335 097 468	103	351 852 341	103	369 444 958	103	387 917 206	103	407 313 067	103	427 678 720	103	449 062 656	103	471 515 789	103	495 091 578	103	519 846 157	4 214 819 941
Semi-skilled and discretionary decision making	724	115 418 754	724	121 189 692	724	127 249 176	724	133 611 635	724	140 292 217	724	147 306 828	724	154 672 169	724	162 405 778	724	170 526 066	724	179 052 370	1 451 724 684
Non- permanent Employees					0		0														-
TOTAL PERSONNEL EXPENDITURE	836	571 905 090	836	600 500 345	836	630 525 362	836	662 051 630	836	695 154 211	836	729 911 922	836	766 407 518	836	804 727 894	836	844 964 289	836	887 212 503	7 193 360 763

Table 16: Contractors on Sheba Mine's payroll (in ZAR).

CATEGORY	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		YEAR 6		YEAR 7		YEAR 8		YEAR 9		YEAR 10		TOTAL
	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	NO. OF POSITIONS	BUDGET	
Top management	0		0		0		0		0		0		0		0		0		0		
Senior Management	0		0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-
Professionally qualified and experienced specialists and mid-management	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-
Skilled technical and academically qualified workers. Junior management, supervisors, foreman and superintendents	150	52 895 106	150	55 539 861	150	58 316 854	150	61 232 697	150	64 294 332	150	67 509 049	150	70 884 501	150	74 428 726	150	78 150 162	150	82 057 671	665 308 960
Semi-skilled and discretionary decision making	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-
Non- permanent Employees					0		0														-
TOTAL PERSONNEL EXPENDITURE	150	52 895 106	150	55 539 861	150	58 316 854	150	61 232 697	150	64 294 332	150	67 509 049	150	70 884 501	150	74 428 726	150	78 150 162	150	82 057 671	665 308 960

Table 17: Total costing for skills (provided by BML,2023)

CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET
In House skills and services	571905090	600500345	630525362	662051630	695154211	729911922	766407518	804727894	844964289	887212503
Skills and services provided by subcontractors	52 895 106	55 539 861	58 316 854	61 232 697	64 294 332	67 509 049	70 884 501	74 428 726	78 150 162	82 057 671
Skills and services provided by service providers	-	-	-	-	-	-	-	-	-	-
Total budget for Technical Skills and Competence (ZAR)	624 800 196	656 040 206	688 842 216	723 284 327	759 448 543	797 420 971	837 292 019	879 156 620	923 114 451	969 270 174

10. REGULATION 11(1) (g) (iv): DETAILS AND COSTING OF REGULATORY REQUIREMENTS IN TERMS OF THE ACT AND OTHER APPLICABLE LAW, RELEVANT TO THE PROPOSED MINING OPERATION

10.1. Environmental Cost Forecast

10.1.1. Rehabilitation Cost Estimate

(Refer to the guideline for Financial provision (described in Regulation 54 (1) (2) published on the Departments website. Complete 10 forecasts and paste them into this section, i.e. one for the progressive impact in each of the first 10 years of operation. The progressive total (10th year must be stated under this heading and also included into the first year of the cash flow under Regulation 11 (1) (g) (vi) below in the environmental cost category).

The 10 year rehabilitation forecast summary is presented in Table 18 for the Sheba Mine.

Table 18: 10-year rehabilitation forecast summary. From BML (2023).

CATEGORY	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR	YEAR
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Sheba	9 805 719	10 325 422	10 872 669	11 448 921	12 055 713	12 694 666	13 367 484	14 075 960	14 821 986	15 607 551

10.1.2. Socio-economic Impact Cost Estimate

Refer to the guidelines on community consultation, and the scoping report template. Estimate the risk of compensation to persons whose socio-economic conditions may be directly affected by the mining operation. Provide the estimated total under this heading and also include it into the first year of the cash flow under regulation 11 (1) (g) (vi) below in the environmental cost category).

The commitment for the socio-economic impacts is budgeted at ZAR 10 633 449.

10.1.3. Summary of Estimated Environmental Cost

CATEGORY	COST ESTIMATE (ZAR)
a) Progressive total for rehabilitation	15 607 551
b) Cost to mitigate socio-economic conditions of directly affected persons	10 633 449
TOTAL COSTS (Transfer amount to cash flow forecast - Line 7 year 1 only)	26 241 000

10.2. Other Regulatory Costs

COST	AMOUNT PER ANNUM R'000	EXPLANATION ON HOW AMOUNT WAS CALCULATED
Royalty costs	15 360	
Mine Health and Safety Regulations	384	Split per gold
Occupational Health	7 522	Split per gold
Rates and Taxes	48 562	Split per gold
National Skills Fund	3 857	Split per employee
Total regulatory cost	75 684	

The costs thus derived must be clearly explained and used to justify the numbers that are reflected in line item 7 of the cash flow forecast required in terms of regulation 11 (1) (g) (vi).

11. REGULATION 11 (1) (g) (viii): PROVISIONS FOR THE EXECUTION OF THE SOCIAL AND LABOUR PLAN

The following table must be duplicated here from the table in Section 5: Financial Provision of the Social and Labour Plan.

CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	TOTAL
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	
Human Resource Development	4 240	4 452	4 675	4 908	5 154	5 411	5 682	5 966		0	40 488
Local Economic Development	7 811	8 202	8 612	9 042	9 494	9 969	10 467	10 991		0	74 588
Additional	3 289	3 453	3 626	3 807	3 998	4 198	4 408	4 628		0	31 407
ESTIMATED TOTAL PER YEAR	15 340	16 107	16 912	17 758	18 646	19 578	20 557	21 585	0	0	146 483

The costs quantified in the aforesaid categories must justify the numbers that are reflected in line item 8 of the cash flow forecast required in terms of Regulation 11(1)(g)(vi).

12. REGULATION 11 (1) (g) (iv): DETAILS REGARDING OTHER RELEVANT COSTING, CAPITAL EXPENDITURE REQUIREMENTS AND EXPECTED REVENUE APPLICABLE TO THE PROPOSED MINING OPERATIONS

12.1. Expected Revenue

12.1.1. Explanation of Revenue Determination

The revenue is determined by multiplying the kilogrammes of gold produced by the gold price. A gold price of ZAR 850 000/kg has been utilised for evaluation purposes based on an average gold price of USD1 488/oz and an average exchange rate of USD/ZAR17.17 (Pan African Resources, 2023).

12.1.1. Revenue Forecast

The revenue forecast for Sheba Mine is presented in Table 19.

12.2 Estimated Capital Expenditure

12.2.1 Initial Capital Expenditure

The Sheba Mine is currently in production and all initial capital has been spent.

Table 20 simply illustrates that no initial capital will be spent.

12.2.2 Ongoing Capital Expenditure

The ongoing capital expenditure (Table 21) is presented for Sheba Mine and the associated plant for annual refurbishment.

Table 19: Revenue forecast for the Sheba Mine (provided by BML, 2024).

CASH FLOW FORECAST AND VALUATION (REGULATION 11 (g)(vi) - SHEBA													
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	Total	
		R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	
1	REGULATIONS 11(1) (d) and (f) PRODUCTION	Kg	716.57	669.00	648.16	641.39	611.09	593.91	684.32	684.32	-	-	5 249
2	REGULATION 11(1) (e) PRICE	R p/kg	1 198 425	1 258 346	1 321 263	1 387 327	1 456 693	1 529 528	1 606 004	1 686 304	1 770 619	1 859 150	1 859 150
3	REVENUE	R	858 751	841 829	856 394	889 823	890 173	908 394	1 099 013	1 153 964	-	-	7 498 341

Table 20: Initial capital expenditure of the Sheba Mine (provided by BML, 2024)

CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
	FY FORECAST 2024	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Initial capital expenditure	0	-	-	-	-	-	-	-	-	-

Table 21: Ongoing capital expenditure for the Sheba Mine (provided by BML, 2024).

CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
	FY FORECAST 2024	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Ongoing capital expenditure	147 831	155 223	162 984	171 133	179 690	188 674	198 108	208 013	218 414	229 335

12.2.3 Summary, in a 10 year Tabular Format. (stating the initial, ongoing, and total amount of capital expenditure in each of the first ten years in which it will be incurred.)

The ten year summary of the initial and ongoing capital costs is detailed in

Table 22: Summary of initial and ongoing capital expenditure (provided by BML, 2024)

CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
	FY FORECAST 2024	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Initial capital expenditure	0	-	-	-	-	-	-	-	-	-
Ongoing capital expenditure	147 831	155 223	162 984	171 133	179 690	188 674	198 108	208 013	218 414	229 335

12.3 Explanation and Summary of Other Costs

Other costs consider mine infrastructure development to extend the LOM. These development expenditures consider Royal Sheba construction including contingency and are detailed in Table 21. It is noted that the costs are inflated by 5% per annum.

Table 21: Summary of other capital costs (provided by BML, 2024).

CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
	FY FORECAST 2024	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Other costs specified in 12.3		-	-	-	-	-	-	-	-	-

12.4 Summary of capital and other costs, in a 10 Year Tabular Format.

The summary of capital and other costs is detailed in Table 22.

Table 22: Total capital and other costs (provided by BML, 2024).

CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
	FY FORECAST 2024	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Initial capital expenditure	0	-	-	-	-	-	-	-	-	-
Ongoing capital expenditure	288 574	303 002	318 153	334 060	350 763	368 301	386 716	406 052	426 355	447 673
Other costs specified in 12.3		-	-	-	-	-	-	-	-	-
Total Capital and Other	288 574	303 002	318 153	334 060	350 763	368 301	386 716	406 052	426 355	447 673

13. REGULATION 11 (1) (g) (vi): A DETAILED CASH FLOW FORECAST AND VALUATION, EXCLUDING FINANCING OF THE PROPOSED MINING OPERATION

The cash flow forecast is presented in Table 23. The information has been provided by the Finance Department of BML (2024).

Table 23: Cash flow forecast for Sheba Mine (provided by BML, 2024).

		CASH FLOW FORECAST AND VALUATION (REGULATION 11 (g)(vi) - SHEBA										
		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	Total
		R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
1	REGULATIONS 11(1) (d) and (f) PRODUCTION	717	669	648	641	611	594	684	684	-	-	5 249
2	REGULATION 11(1) (e) PRICE	1 198 425	1 258 346	1 321 263	1 387 327	1 456 693	1 529 528	1 606 004	1 686 304	-	-	11 443 890
3	REVENUE	858 751	841 829	856 394	889 823	890 173	908 394	1 099 013	1 153 964	-	-	7 498 341
4	REGULATIONS 11(1) (g) (i) MINING COST	107 986	104 390	103 627	108 487	115 664	107 495	102 316	102 316	-	-	852 283
5	REGULATIONS 11(1) (g) (ii) TECHNOLOGY COST	69 631	67 312	66 820	69 954	74 582	69 314	65 975	65 975	-	-	549 563
6	REGULATIONS 11(1) (g) (iii) TECHNICAL SKILLS COST	361 832	349 782	347 225	363 511	387 558	360 187	342 834	352 834	-	-	2 865 765
7	REGULATIONS 11(1) (g) (iv) REGULARORY REQUIREMENTS	75 684	73 163	72 628	76 035	81 065	75 340	71 710	71 710	-	-	597 335
	OTHER COSTS	26 241	25 367	25 182	26 363	28 107	26 122	24 863	24 863	-	-	207 107
8	REGULATIONS 11(1) (G) (viii) SOCIAL AND LABOUR PLAN COST	15 340	16 107	16 913	17 758	18 646	19 579	20 557	21 585	-	-	146 486
9	REGULATIONS 11(1) (g) (v) CAPITAL AND OTHER	147 831	155 223	162 984	171 133	179 690	188 674	198 108	208 013	-	-	1 411 657
10	WORKING PROFIT/LOSS	54 204	50 485	61 015	56 581	4 862	61 683	272 649	306 666	-	-	868 144
11	TAX	14 635	13 631	16 474	15 277	1 313	16 654	73 615	82 800	-	-	234 399
12	NET CASH FLOW	39 569	36 854	44 541	41 304	3 549	45 029	199 034	223 866	-	-	633 745
13	DISCOUNTED CASH FLOW	35 777	33 322	40 272	37 345	3 209	40 713	179 958	202 411	-	-	573 007

14. REGULATION 11 (1) (g) (vii): DETAILS REGARDING THE APPLICANTS RESOURCES OR PROPOSED MECHANISMS TO FINANCE THE PROPOSED MINING OPERATION, AND DETAILS REGARDING THE IMPACT OF SUCH FINANCING ARRANGEMENTS ON THE CASH FLOW FORECAST

14.1 Financing the Cash Flow

Barberton Mines (Pty) Ltd is 100% owned by Pan African Resources PLC, a mid-tier Africa-focused precious metals producer with a production capacity in excess of 80,000oz gold per annum (Pan African Resources, 2023). The company's strategy, as detailed in the integrated annual report for the year 1 July 2022 to 30 June 2023, is underpinned by four pillars, namely profitable, sustainable, stakeholders and growth with the key enablers being people, action and results. The group is in a strong financial position, with well-established cash-generative operations, decentralised hands-on management structure and a cost-conscious culture. Pan African Resources has an exceptional mineral asset base with attractive organic growth opportunities, in both established projects and brownfield exploration prospects. The group is profitable and cash generative at the current gold price, with the ability to fund all on-mine sustaining capital expenditure internally and meet its other funding and growth commitments.

14.2 Detail Regarding the Financing Arrangements

Funding of the projects will be from capital raised and cash generated from operations.

14.3 Confirmation of Supporting Evidence Appended

The Pan African Resources integrated annual report for the year 1 July 2022 to 30 June 2023 confirms the availability of funds to fulfill the required cashflow (Appendix 1)

15. REGULATION 11 (1) (h): UNDERTAKING, SIGNED BY THE APPLICANT, TO ADHERE TO THE PROPOSALS AS SET OUT IN THE MINING WORK PROGRAMME

Herewith I, the person whose name and identity number is stated below, confirm that I am the Applicant or the person authorized to act as representative of the Applicant in terms of the resolution submitted with the application, and undertaking to implement this mining works programme and adhere to the proposals set out herein.

Full Names and Surname	Gregory Edwin Moss
Identity Number	6808315090084

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Appendices

Appendix 1: Pan African Resources (2023) Integrated Annual Report, 137 pp.

Appendix 2: Pan African Resources (2023) Mineral Resources and Mineral Reserves Report, 87 pp.

Appendix 3: Barberton Mines Organograms.