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**Minxcon Consulting (Pty) Limited**

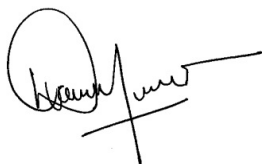
A Technical Report  
on the Blanket Mine in the  
Gwanda Area, Zimbabwe

## QUALIFIED PERSON DECLARATION

I, Daan van Heerden, in the capacity of Qualified Person do hereby certify that:-

1. To the best of my knowledge, information and belief, the Report contains all scientific and technical information required to be disclosed to make the Report not misleading.
2. The facts presented in the Report are correct to the best of my knowledge.
3. The analyses and conclusions are limited only by the reported forecasts and conditions.
4. I have no present or prospective interest in the subject property or asset.
5. My compensation, employment or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report.
6. I have no bias with respect to the assets that are the subject of the Report, or to the parties involved with the assignment.

Yours faithfully,



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## **INFORMATION RISK**

This Report was prepared by Minxcon (Pty) Ltd (“Minxcon”). In the preparation of the Report, Minxcon has utilised information relating to operational methods and expectations provided to them by various sources. Where possible, Minxcon has verified this information from independent sources after making due enquiry of all material issues that are required in order to comply with the requirements of the SAMREC and NI 43-101 Codes.

## **OPERATIONAL RISKS**

Mining and mineral and coal exploration, development and production by their nature contain significant operational risks. It therefore depends upon, amongst other things, successful prospecting programmes and competent management. Profitability and asset values can be affected by unforeseen changes in operating circumstances and technical issues.

## **POLITICAL AND ECONOMIC RISK**

Factors such as political and industrial disruption, currency fluctuation and interest rates could have an impact on future operations, and potential revenue streams can also be affected by these factors. The majority of these factors are beyond the control of any operating entity.



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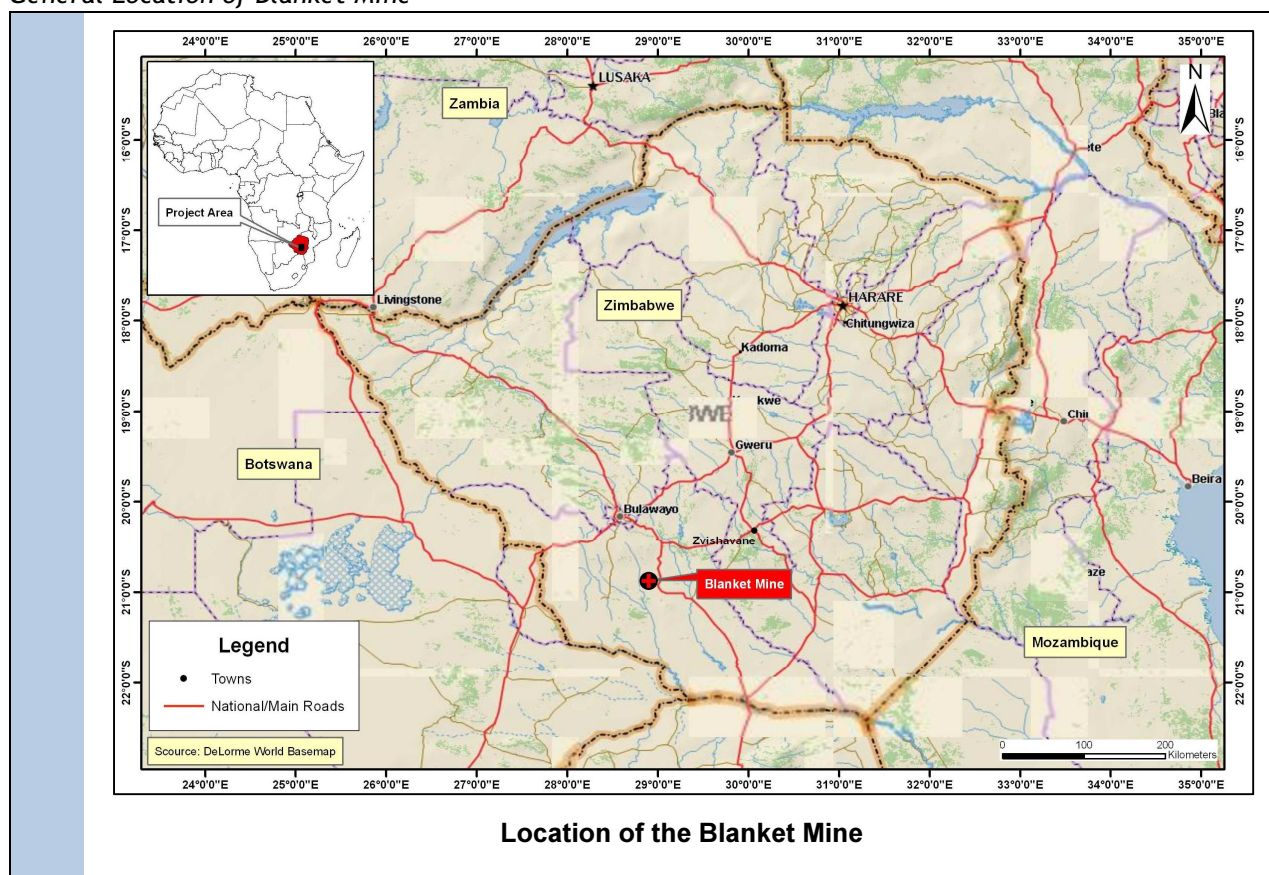
## ITEM 1 - EXECUTIVE SUMMARY

Minxcon (Pty) Ltd (“Minxcon”) was commissioned by Greenstone Management Services (Pty) Limited (“GMS” or “the client”) to compile an NI 43-101 Technical Report on behalf of Blanket Mine (1983) (Private) Limited (“Blanket”) for its parent company Caledonia Mining Corporation (“Caledonia”), a Canadian registered company which is listed on the Toronto Stock Exchange (“TSX - CAL”) and on the AIM Market of the London Stock Exchange (“LSE-CMCL”) and also traded on the NASDAQ-OTCBB. GMS is a subsidiary of Caledonia that employs the South African based management that receives a management fee from Blanket. Following the implementation of indigenisation in September 2012, Caledonia owns 49% of Blanket; the other 51% of Blanket is held by Indigenous Zimbabwean shareholders including Blanket’s employees and management and the community in which Blanket is located. Blanket is incorporated in Zimbabwe and is the owner and operator of the Blanket Mine.

### Item 1 (a) - PROPERTY DESCRIPTION

The Blanket Mine is located in the south-west of Zimbabwe, approximately 15 km northwest of Gwanda, the provincial capital of Matabeleland South. Gwanda is located 150 km southeast of Bulawayo, the country’s second largest city, 196 km northwest of the Beit Bridge Border post with South Africa, and 560 km from Harare, Zimbabwe’s capital city. Access to the mine is by an all-weather tarred road from Gwanda, which is linked to the Beit Bridge to Bulawayo, Harare by a national highway. The general geographic coordinates of Blanket Mine are Latitude 20° 52' S, Longitude 28° 54' E.

#### General Location of Blanket Mine



Blanket Mine is a well-established Zimbabwean gold mine, which operates at a depth of approximately 750 m below surface and produced approximately 45,500 ounces of gold in 2013. Blanket also holds brownfield exploration and development projects both on the existing mine area and its 18 satellite properties, which

include the GG and Mascot projects which are located 10 km and 33 km from the Blanket metallurgical recovery plant, respectively.

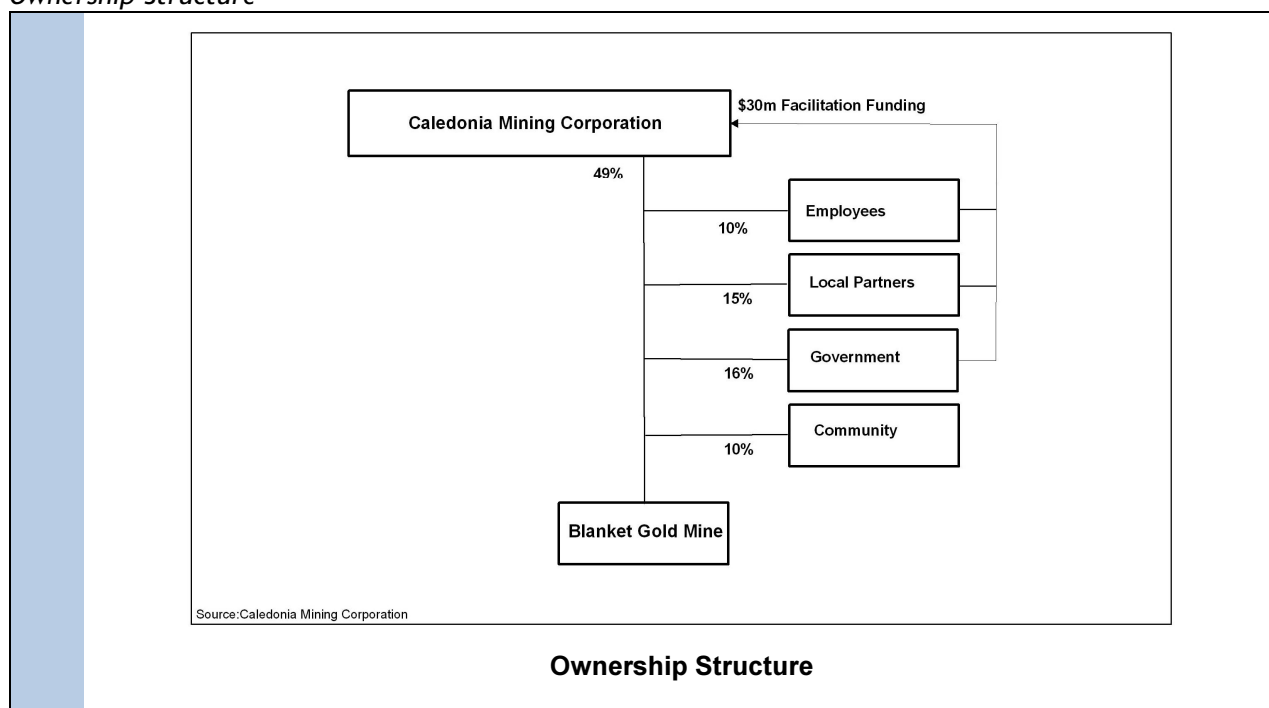
### Item 1 (b) - OWNERSHIP OF THE PROPERTY

The Indigenisation and Economic Empowerment Act ("The Act"), which was enacted in 2007, requires that 51% of all commercial enterprises in Zimbabwe be owned by indigenous Zimbabweans. On 20 February 2012 Caledonia announced it had signed a Memorandum of Understanding ("MoU") with the Minister of Youth, Development, Indigenisation and Empowerment of the Government of Zimbabwe pursuant to which 51% of Blanket would be sold for a paid transactional value of USD30.09 million. The various transactions were implemented with effect from September 5, 2012 on the following bases:-

- 16% was sold to the National Indigenisation and Economic Empowerment Fund;
- 10% was sold to a Management and Employee Trust for the benefit of the present and future managers and employees of Blanket;
- 15% was sold to identified Indigenous Zimbabweans; and
- 10% was donated to the Gwanda Community Share Ownership Trust. Blanket also made a non-refundable donation of USD1 million to the Trust as soon as it was established and paid advance dividends of USD4 million before the end of April 2013.

The Blanket Mine operates under a Special Licence (No. 5030) which was issued under the Mines and Minerals Act of 1961 (Chapter 21:05). The mine's claims are protected under this Act. The Blanket Mine covers the claims of Jethro, Blanket Section, Feudal, AR, Sheet, Eroica and Lima, comprising a total area of approximately 2,540 ha.

#### Ownership Structure



### Item 1 (c) - GEOLOGY AND MINERAL DEPOSIT

Zimbabwe's known gold mineralisation occurs in host rocks of the Zimbabwe Craton, which is made up of Archaean rocks. The geology of the Craton is characterised by deformed and metamorphosed rocks which include high-grade metamorphic rocks, gneisses, older granitoids, greenstone belts, intrusive complexes, younger granites and the Great Dyke, which makes up the geology of the Zimbabwe Craton. The Chingezi gneiss, Mashaba tonalite and Shabani gneiss form part of a variety of tonalities and gneisses of varying ages. Three major sequences of slightly younger gold-bearing greenstone belt supracrustal rocks exist:-

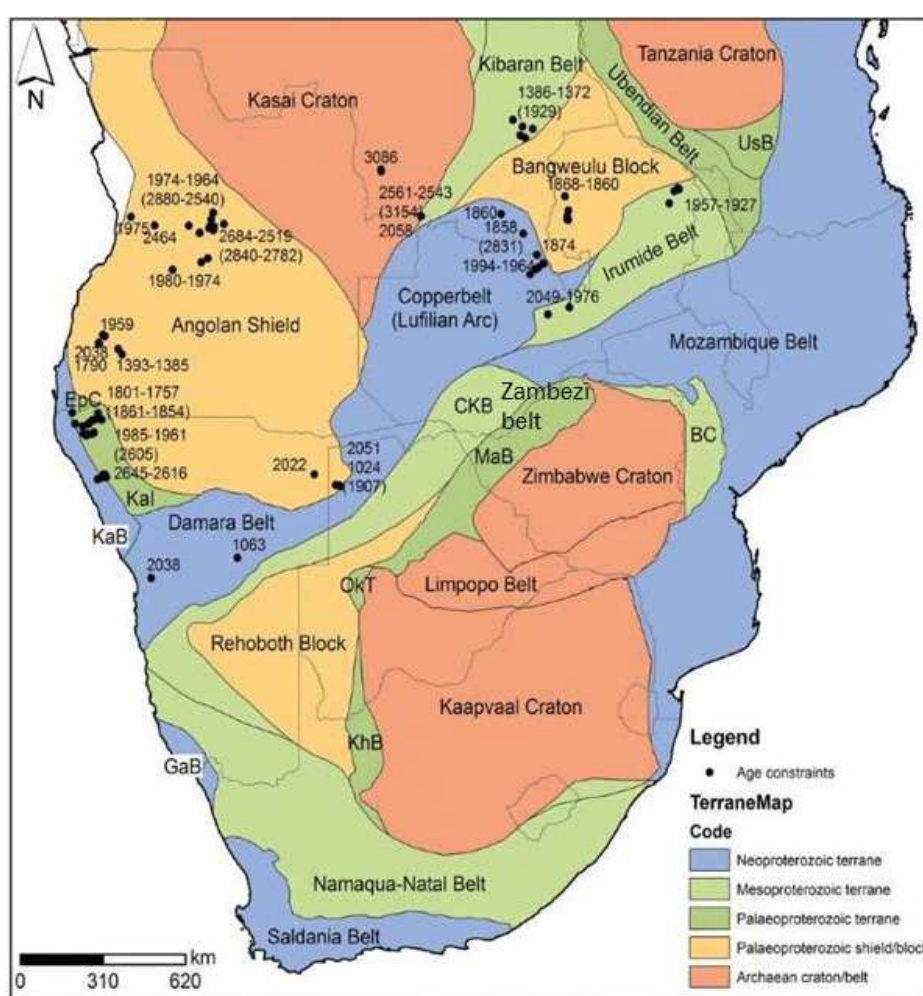


- Older greenstones called the Sebakwian Group, which are mostly metamorphosed to amphibolite facies. They comprise komatiitic and basaltic volcanic rocks, some banded iron formation (“BIF”), as well as clastic sediments.
- The Lower Bulawayan Group, which comprises basalts, high-Mg basalts, felsic volcanic rocks and mixed chemical and clastic sediments. The Lower Bulawayan Group forms the Belingwe (Mberengwa) greenstones.
- The Upper Bulawayan (upper greenstones) and Shamvaian groups, which comprise a succession of sedimentary and komatiitic to tholeiitic to calc-alkaline rocks.

Three metamorphic belts surround the Zimbabwe Craton:-

- Archaean Limpopo Mobile Belt to the south;
- Magondi Mobile Belt on the north-western margin of the Craton; and
- Zambezi Mobile Belt to the north and northeast of the Zimbabwe Craton.

#### *Zimbabwe Craton Relative to Other Cratons*



**The Zimbabwe Craton Relative to Other Cratons**

#### **Item 1 (d) - OVERVIEW OF THE PROJECT GEOLOGY**

The Blanket Mine is situated on the north-western limb of the Archaean Gwanda Greenstone Belt. Several other gold deposits are situated along the same general strike as the mine. Approximately 268 mines

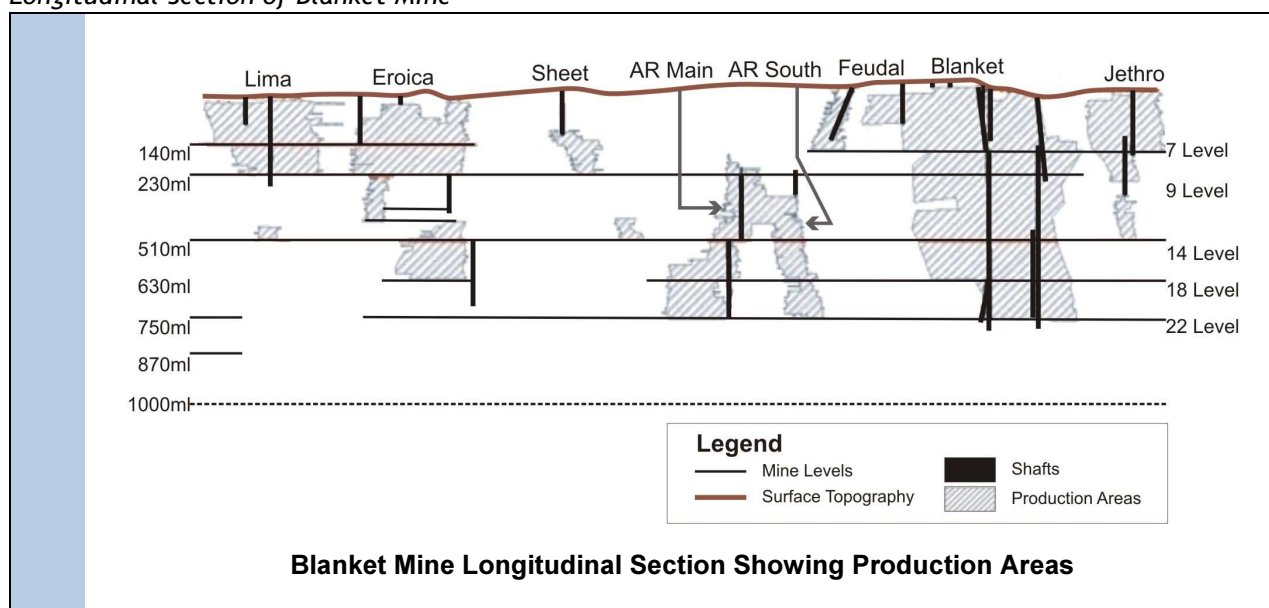
operated in this greenstone belt at one stage, however, the Blanket Mine is one of the few remaining mines. At Blanket Mine, the rock units strike north-south, plunge in a westerly direction and dips to the west (in some areas, southwest).

### Item 1 (e) - LOCAL PROPERTY GEOLOGY

The local geology consists of a basal felsic unit in the east that is not known to be mineralised. It is generally on this lithology that the tailings disposal sites are located. An ultramafic zone that includes the BIFs hosting the eastern dormant cluster and the Mineral Deposits of the nearby Vubachikwe complex lies to the west of this unit. Active Blanket Mineral Deposits occur in the immediately overlying mafic unit. A capping of andesite completes the stratigraphic sequence.

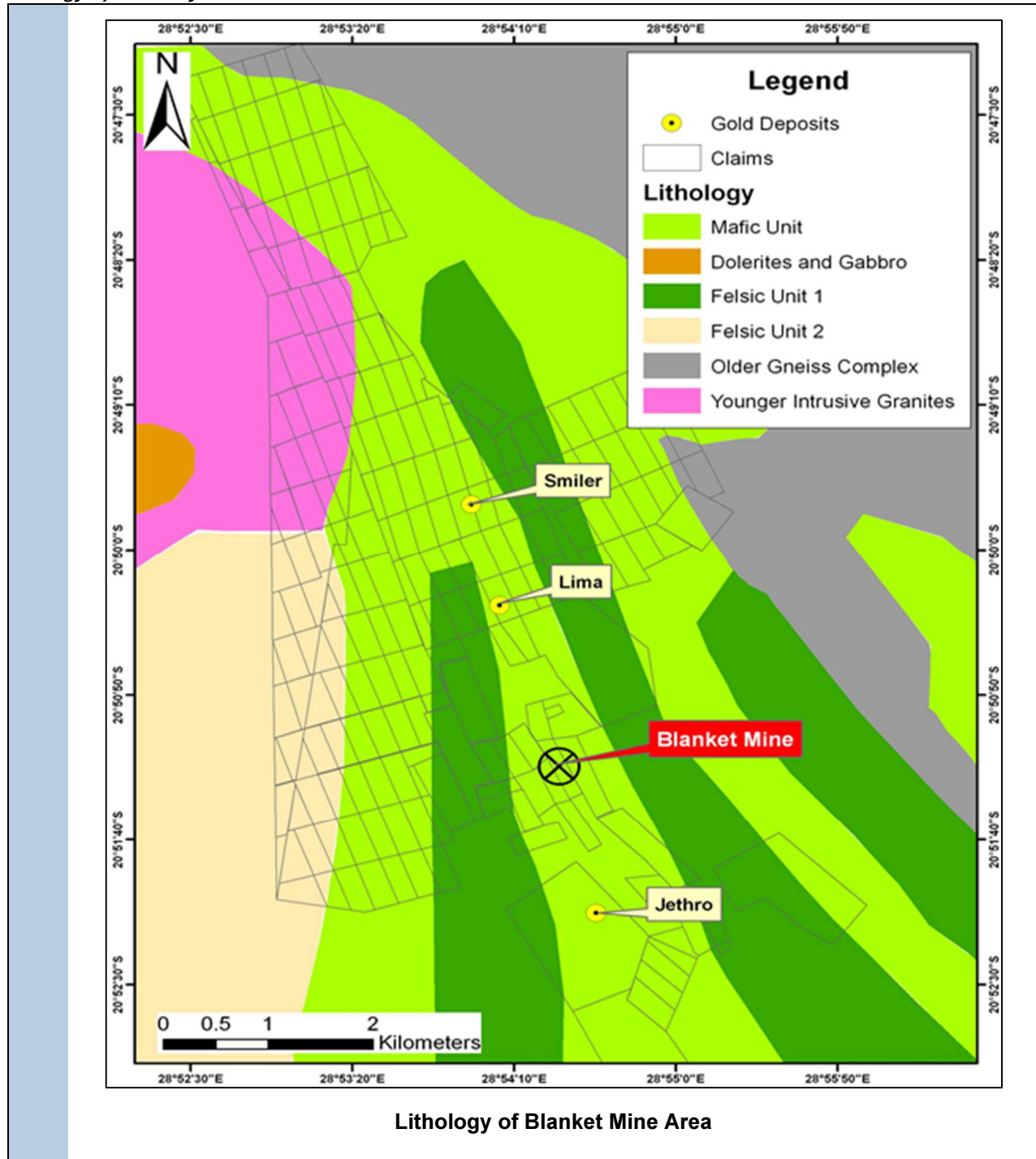
Blanket Mine is part of the group of mines that make up the North Western Mining Camp, also called the Sabiwa group of mines. Blanket Mine is a cluster of mines that extend from Jethro in the south, through Blanket, the currently defunct Feudal, AR South, AR Main, Sheet, Eroica and Lima.

#### *Longitudinal Section of Blanket Mine*



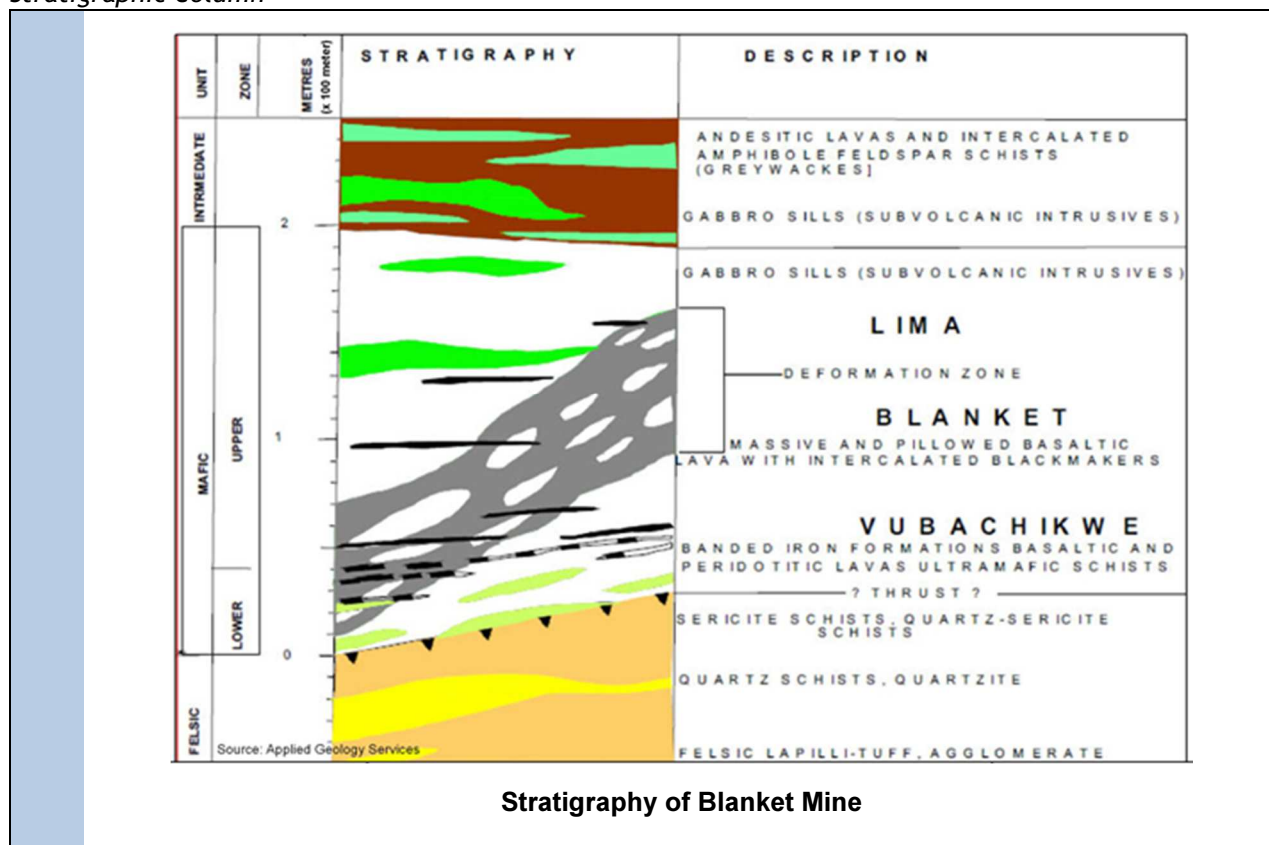
Dormant old workings include Sabiwa, Jean, Provost, Redwick, Old Lima, and Smiler. The latter group of mines form the northern continuation of the Vubachikwe zone and are hosted by BIFs. The mafic unit which hosts the gold mineralisation is, for the most part, a metabasalt with occasional remnants of pillow basalts. Regionally, the rock is a fine-grained massive amphibolite with localised shear planes. A low angle transgressive shear zone (up to 50 m wide cutting through the mafic zone) is the locus of the gold ore 25 shoots. The shear zone is characterised by a well-developed fabric and the presence of biotite. A regional dolerite sill cuts the entire sequence from Vubachikwe through Blanket to Smiler. The sill does not cause a significant displacement and although it truncates all the ore shoots, there is continuity of mineralisation below the sill (AGS, 2006). The upper zone comprises massive to pillowed lavas with intercalations of interflow sediments. According to a 2006 report by AGS, the rock is a fine-grained massive amphibolite with localised shear planes.

## Geology of the Project Area



The gold Mineral Deposits are found around a low-angle transgressive shear zone. A simplified stratigraphic column for the Blanket mine is shown in the following figure.

### Stratigraphic Column



#### Item 1 (f) - STATUS OF EXPLORATION

The Blanket Mine is a producing operation. Exploration activities are carried out both on and off the mine. Mine exploration takes place mostly underground on the producing claims and is aimed at expanding the knowledge of the ore shoot trends which are being mined, as well as searching for potential additional Mineral Deposits. Near-mine exploration takes place on non-producing assets, which have the potential to yield new sources of ore and possibly give rise to new mines.

The mine's exploration title holdings are in the form of registered mining claims (78 in total) in the Gwanda Greenstone Belt. These claims include a small number under option and cover an area of approximately 2,500 ha. The blocks of claims were pegged as follows:-

- 47 are registered as precious metal (gold) blocks covering 415 ha. Gold or precious metal claims measure 10 ha x 1 ha (10 ha) and;
- 31 claims were pegged and are registered as base metal (Cu, Ni, As) blocks, covering an area of 2,085 ha. Base-metal claims are larger than precious metal blocks.

#### Item 1 (g) - MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

The following table reflects the Mineral Resource Statement for Blanket Mine for August 2014, as verified by Minxcon. The Blanket Mine Resource classifications have been changed to Measured, Indicated and Inferred. No reserves are stated here, however, the Mineral Resources are declared inclusive of all Mineral Reserves. The reserves have been declared separately, as determined by the Reserve Life of Mine plan ("Reserve LoM Plan"). The proven and probable pillar reserves (as per the Blanket Mine mineral resource tabulation) have been declared as Measured Resources and the Probable Reserves (as per the Blanket Mine mineral resource tabulation) have been included in the Indicated Resource. The modifying factors, as applied by Blanket Mine to their Proven and Probable Reserves, have not been applied to the Minxcon Mineral Resource. The Indicated and Inferred mineral resource categories remained the same as that of the Caledonia Mineral Resource.



**August 2014 Mineral Resource as Verified by Minxcon**

Mineral Resource Category	Tonnage	Au	Au Content	Ounces
	t	g/t	kg	oz.
Measured Resource	1,572,733	3.91	6,146	197,606
Indicated Resource	2,478,902	3.77	9,340	300,288
<b>Total Measured and Indicated</b>	<b>4,051,635</b>	<b>3.82</b>	<b>15,486</b>	<b>497,895</b>
Inferred Resource	3,344,831	5.11	17,106	549,963

**Notes:**

1. Tonnes are *in situ*.
2. All figures are in metric tonnes.
3. Mineral Reserves are included in the Mineral Resource.
4. Mineral Resources are stated at a 1.96 g/t cut-off.
5. No geological losses were applied to the tonnage.
6. Tonnage and grade have been rounded and this may result in minor adding discrepancies.
7. The tonnages are stated at a relative density of 2.86 t/m<sup>3</sup>.
8. Conversion from kg to oz.: 1:32.15076.

The Measured and Indicated Mineral Resources were converted to Proven and Probable Mineral Reserves by applying applicable mining rates and other modifying factors. The Mineral Reserve Statement for Blanket mine is illustrated in the following table.

**Mineral Reserve Statement (October 2014)**

Mineral Reserve Category	Tonnage	Au	Au Content	Ounces
	t	g/t	kg	oz.
Proven	856,005	3.40	2,912	93,638
Probable	2,077,828	3.78	7,862	252,758
<b>Total Mineral Reserves</b>	<b>2,933,833</b>	<b>3.67</b>	<b>10,774</b>	<b>346,396</b>

**Notes:**

1. Tonnages refer to tonnes delivered to the metallurgical plant.
2. All figures are in metric tonnes.
3. 1kg = 32.15076 oz.
4. Pay limit Blanket Mine 2.03 g/t.
5. Pay Limit calculated: USD/oz. = 1250; Direct Cash Cost (C1) - 71 USD/t milled.
6. The reduction in ounces is mainly attributed to the exclusion of previously stated Proven and Probable Reserves below 750 m Level. (These ounces are accounted for as Measured and Indicated Resources.)

**Item 1 (h) - DEVELOPMENT AND OPERATIONS****General Infrastructure**

Blanket Mine is an operational mine with well-established infrastructure and no major modifications or upgrades are necessary to sustain mining and processing operations.

**Processing**

The Blanket Gold Plant consists of crushing, milling, Carbon-in-Leach ("CIL") and batch elution electro-winning circuits. The front-end comminution circuits (crushing and milling) have a capacity of about 40 ktpm while the CIL and downstream circuits have a capacity of approximately 100 ktpm to 120 ktpm. The plant achieved a recovery of about 93% over the past year. The plant is well-operated and maintained and housekeeping is of a high standard. The processing costs are high for a plant treating free milling material. Unit costs can be reduced by increasing tonnes treated and optimising reagent and power consumption.

**Item 1 (i) - MARKET VALUATION**

This valuation is based on a free cash flow and measures the economic viability of the Reserves to demonstrate if the extraction of the Mineral Deposit is viable and justifiable under a defined set of realistically assumed modifying factors. This is illustrated by using the Discounted Cash Flow ("DCF") method on a Free Cash Flow to the Firm ("FCFF") basis, to calculate the nett present value ("NPV") and the intrinsic value (fundamental value based on the technical inputs, and a cash flow projection that creates a NPV) of the Project in real terms. The valuation reflects the full value of the operation and no values attributable to Caledonia's participation in Blanket were calculated. The model was set up in calendar years with year 2014 only including October to December. Blanket's financial years are also based on calendar years from January to December. The DCF valuation was calculated at a gold price of USD1,250/oz., as received from the Client.

## Operating Costs

Costs reported for the Blanket Mine, which consist of plant and mining operating costs, are displayed in the following table. Other cash costs include the general and administration fees, Caledonia management fee as well as overheads. The royalty amount includes the 5% Zimbabwean revenue royalty.

### OPEX Summary

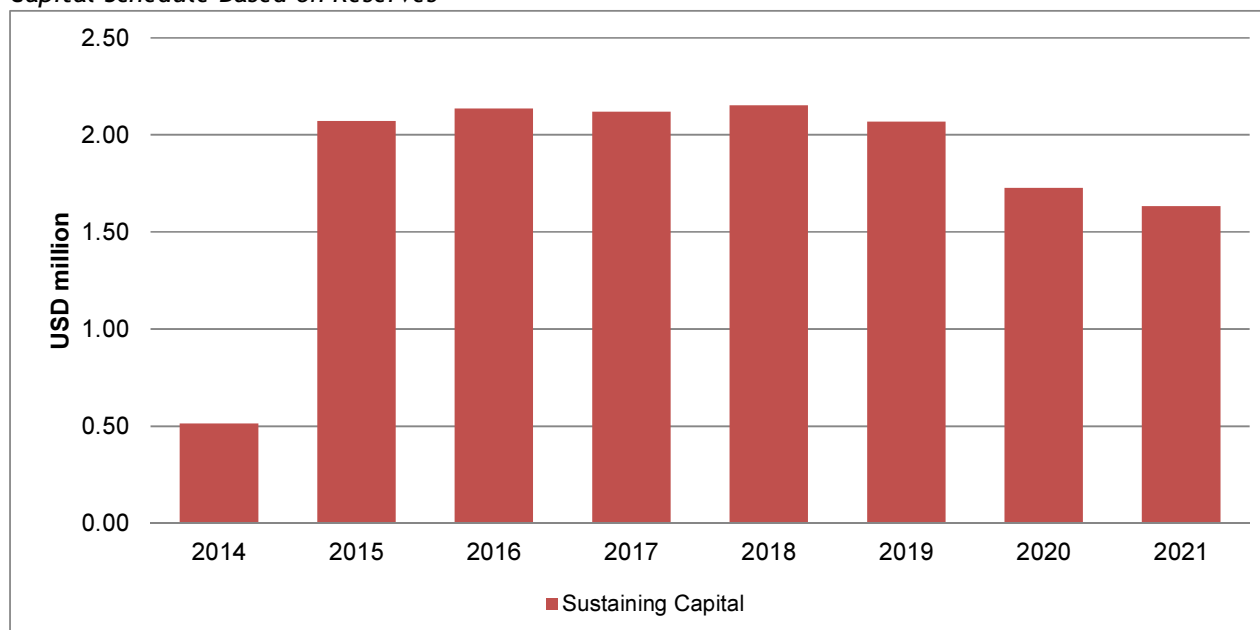
Item	Unit	Amount	Unit	Amount
<b>Net Turnover</b>	<b>USD/Milled tonne</b>	<b>138</b>	<b>USD/Gold oz.</b>	<b>1,250</b>
Mine Cost	USD/Milled tonne	49	USD/Gold oz.	446
Plant Costs	USD/Milled tonne	17	USD/Gold oz.	153
Other Costs	USD/Milled tonne	5	USD/Gold oz.	41
<b>Direct Cash Costs (C1)</b>	<b>USD/Milled tonne</b>	<b>71</b>	<b>USD/Gold oz.</b>	<b>641</b>
Capex	USD/Milled tonne	5	USD/Gold oz.	45
<b>Production Costs (C2)</b>	<b>USD/Milled tonne</b>	<b>76</b>	<b>USD/Gold oz.</b>	<b>685</b>
Royalties	USD/Milled tonne	7	USD/Gold oz.	63
Other Cash Costs	USD/Milled tonne	13	USD/Gold oz.	116
<b>Fully Allocated Costs/ Notional Costs (C3)</b>	<b>USD/Milled tonne</b>	<b>95</b>	<b>USD/Gold oz.</b>	<b>864</b>
<b>NCE Margin</b>	<b>%</b>	<b>31%</b>	<b>%</b>	<b>31%</b>
EBITDA*	USD/Milled tonne	48	USD/Gold oz.	431
EBITDA Margin	%	34%		
Gold Recovered	oz.	323,881		

#### Notes:

1. \* EBITDA excludes capital expenditure.
2. Numbers may not add up due to rounding.

Direct cash cost for Blanket is USD71/milled tonne that equates to USD641/oz., which is below the global cash cost of USD767/oz. The Blanket Mine has a fully-allocated cost of USD95/milled tonne that equates to USD864/oz. The capital schedule for the Blanket mining operations for the LoM is illustrated in the following figure. There is no initial or infrastructure capital for the Reserve LoM plan, only sustaining capital.

### Capital Schedule Based on Reserves



The following table illustrates the Project NPV at various discount rates with a best-estimated value of USD66 million at a real discount rate of 8.36%.

*Project Valuation Summary - Real Terms*

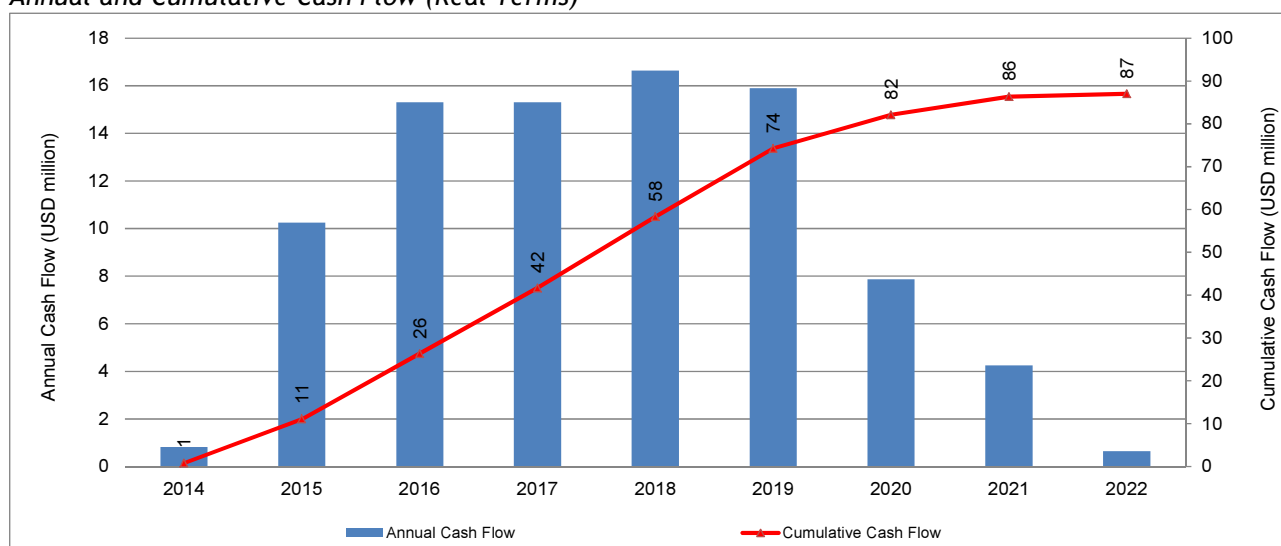
Item	Unit	Value
Real NPV @ 0.00%	USDm	87
Real NPV @ 5.00%	USDm	70
<b>Real NPV @ 8.36%</b>	<b>USDm</b>	<b>66</b>
Real NPV @ 10.00%	USDm	57
Real NPV @ 15.00%	USDm	47

The following table illustrates the Project profitability ratios.

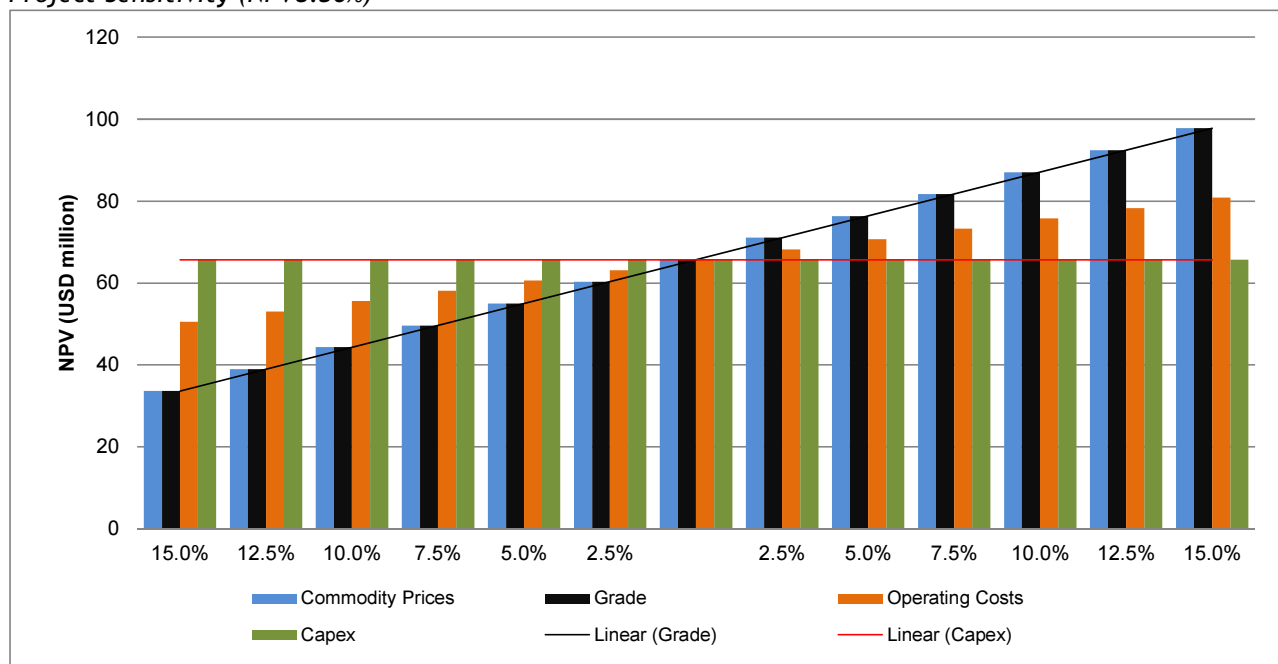
*Profitability Ratios*

Item	Unit	Profitability Ratios
Total ounces in Reserve LoM plan	oz.	346,397
<i>In Situ</i> Mining Inventory Valuation	USD/oz.	190
Production LoM	Years	8
Present Value of Income Flow	USDm	106
Break Even Milled Grade	g/t	2.54
Incentive Gold Price	USD/oz.	864

The annual and cumulative cash flow forecast for the LoM is displayed in the following figure.

*Annual and Cumulative Cash Flow (Real Terms)*

For the DCF, the gold price and grade have the biggest impact on the sensitivity of the Project, followed by the operating cost. The Project is not sensitive to the sustaining capital.

**Project Sensitivity (NPV8.36%)****Item 1 (j) - QUALIFIED PERSON'S CONCLUSIONS AND RECOMMENDATIONS****Conclusions****Mineral Resources:-**

- The Mineral Resources and Reserves tabulated on the operation are not aligned with best practises and reporting formats. These spread sheets should be revised.
- The manual mineral resource estimation methodology is deemed satisfactory, but a digital database would have advantages in terms of 3D visualisation and understanding the data.
- The QA/QC practices are not up to standard and need to be revised and implemented.
- The "deep" drilling and exploration drilling QA/QC needs to be improved.
- Drilling for the depth extensions should be increased to increase the confidence of the resource for the deepening of the project.

**Mining:-**

- The Reserve LoM plan is based on the depletion of Mineral Resource blocks following a study of mine plans.
- The developments required to access the mine's Measured and Indicated Mineral Resources have been completed.
- Historic production volumes have been on the increase since Jan 2012, moving closer to 35 ktpm. The mine plan will require production to maintain a slow but steady increase up to 40 ktpm in 2018.
- Rock conditions are fairly competent and roof support is rarely required.

**Engineering and Infrastructure:-**

- Existing infrastructure at the Blanket Mine is sufficient to sustain the current production profile.

**Processing:-**

- The plant is well-maintained and equipped to crush and mill up to 40 kt per month.
- The CIL circuit has adequate capacity to treat up to 120 kt of milled material per month.
- The plant is adequately staffed considering that most of the plant is manually controlled.
- Overall gold recoveries have been consistent on a monthly basis.
- The high free gold recovery of approximately 50% contributes to the overall high gold recovery.
- The incorporation of a central process control system can improve recoveries and reduce costs.



- Opportunities exist to reduce costs by optimising power measurement and reagent consumption.

**Market Evaluation:-**

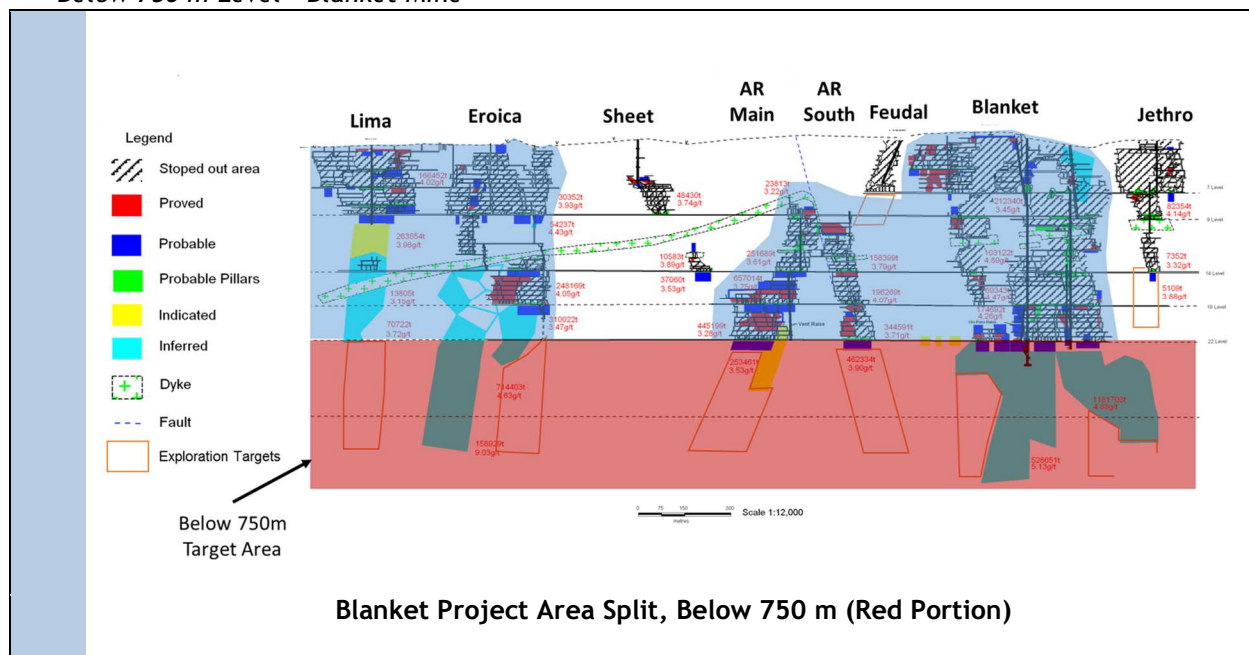
- The Project investigated is financially feasible at an 8.36% real discount rate.
- The best-estimated value of the Project was calculated at USD66 million.
- The Blanket Mine has an NCE margin of 31% that is slightly higher when benchmarked against other mines.
- The Project is most sensitive to gold price and grade.
- Direct Cash cost for the Project is USD71/milled tonne that equates to USD641/oz., which is below the reported average global gold cash cost of USD767/oz.
- Fully-allocated cost for the Project is USD95/milled tonne that equates to USD864/oz.

**Preliminary Economic Assessment Conclusions:-**

Minxcon was commissioned by GMS in October 2014 to complete a scoping level study on the Blanket Mine which comprises an initial extension from below 750 m Level to 1120 m Level, in the form of a Preliminary Economic Assessment ("PEA"). The PEA includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorised as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized. The valuation does not include the current mine plan that is based on the Mineral Reserves and Resources above 750 m but only considers the expansion project below 750 m as a stand-alone project. The PEA thus reflects the Project economics on a stand-alone basis, and the economic analysis is based on an assumed requirement to raise money for the expansion capital expenditures, despite the fact that Caledonia would be able to fund those capital expenditures from cash flow from the existing mine operations. The best-estimated value of the PEA was calculated at USD65 million with at a real discount rate of 8.36%. The IRR was calculated at 42%. Substantial upside potential exists in that the resource planned in the PEA is small in comparison to the exploration targets that could be converted to resource below 750 m Level.

**Study Level:**

- The PEA includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorised as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.
- The Mineral Resource confidence is concept level because the resources below 750 m Level are predominantly in the Inferred category. The following figure illustrates the red area included in the PEA Study:-

**Below 750 m Level - Blanket Mine**

- The PEA Study, design, schedule and OPEX estimation is better than concept level and is based on current actual performance.
- The capital estimation was estimated at a very high level of confidence based on engineering designs, drawings and firm quotes and is at least at a definitive level of confidence.

**Mining Areas:**

- The PEA includes only the Inferred Mineral Resources from the Below 750 m Level area.

**Infrastructure:**

- The existing infrastructure at the Blanket mine will be utilised in parallel with new infrastructure which is specifically aimed at targeting the Below 750 m Level mining areas.
- The extensions will entail the sinking of a new vertical shaft from surface as well as the completion of the No 6 Winze deepening project.

**Additional Capital:**

- Capital for the various key expansion project items amounts to USD43 million.

**Recoveries:**

- The historic metallurgical recoveries of 93.5% are not expected to change with the increased tonnes from the Blanket Mine.

**PEA Study:**

- The tonnage profile for the PEA is based on the replacement tonnages (Inferred Resources) to be mined through the existing shaft and the new central shaft situated in-between AR Main and AR South.
- The average grade is expected to be 4.36 g/t.
- The infrastructure extensions as defined in the PEA contain approximately 385 koz of gold *in situ*.
- The PEA Study excludes the Exploration Target areas below AR Main, AR South, Lima and Eroica. The PEA project will provide access to these Exploration target areas and to future exploration areas below 1120 level that will potentially extend the LoM.

**Valuation:**

- The best-estimated value of the PEA was calculated at USD65 million at a real discount rate of 8.36%. The IRR was calculated at 42%
- By using the Monte Carlo model for the PEA, the value range of the Blanket operation plots between USD44 million and USD84 million.
- The PEA is most sensitive to gold price and grade.
- The PEA has a break-even gold price of USD789/oz., including capital.
- Direct Cash cost for the PEA is USD67/milled t that equates to USD513/oz., which is below the average global gold cash cost of USD767/oz.
- Fully-allocated cost for the PEA is USD86/milled t that equates to USD789/oz.; noticeably lower than similar gold mining operations.

## **Recommendations**

### ***Mineral Resources:-***

- Minxcon recommends that the Mineral Resources are stated as inclusive of Mineral Reserves and that the Measured and Indicated Resources be declared separate from the Inferred Resources.
- The manual data should be captured digitally to reduce human error and assist in the 3D visualisation of the Mineral Deposit and potentially find hidden ore resource blocks.
- Geostatistical analysis of the data could possibly help to increase the mineral resources.
- Best practice QA/QC must be implemented on the operation, especially for the deep drilling and other exploration drilling as these sample points are single points and have greater influence than the day-to-day evaluation samples.
- Currently, the block evaluation does not correct for dip, which leads to under evaluation of the volume and content per resource block.
- Short deflections must be drilled when drilling the "deep" drill holes and exploration drill holes to understand variability and improve the confidence of the intersections for the Indicated and Inferred Resources.
- Long inclined boreholes ("LIB") or directional drilling should be investigated as an option to drill more and deeper intersections in the "pay shoots" without increasing the cross-cut development. This could help convert the Inferred mineral resource to an Indicated mineral resource.

### ***Mining:-***

- To assist in the LoM plan audit, a LoM design must be completed using one of the available software packages. This will be illustrated in the mining sequence and development.

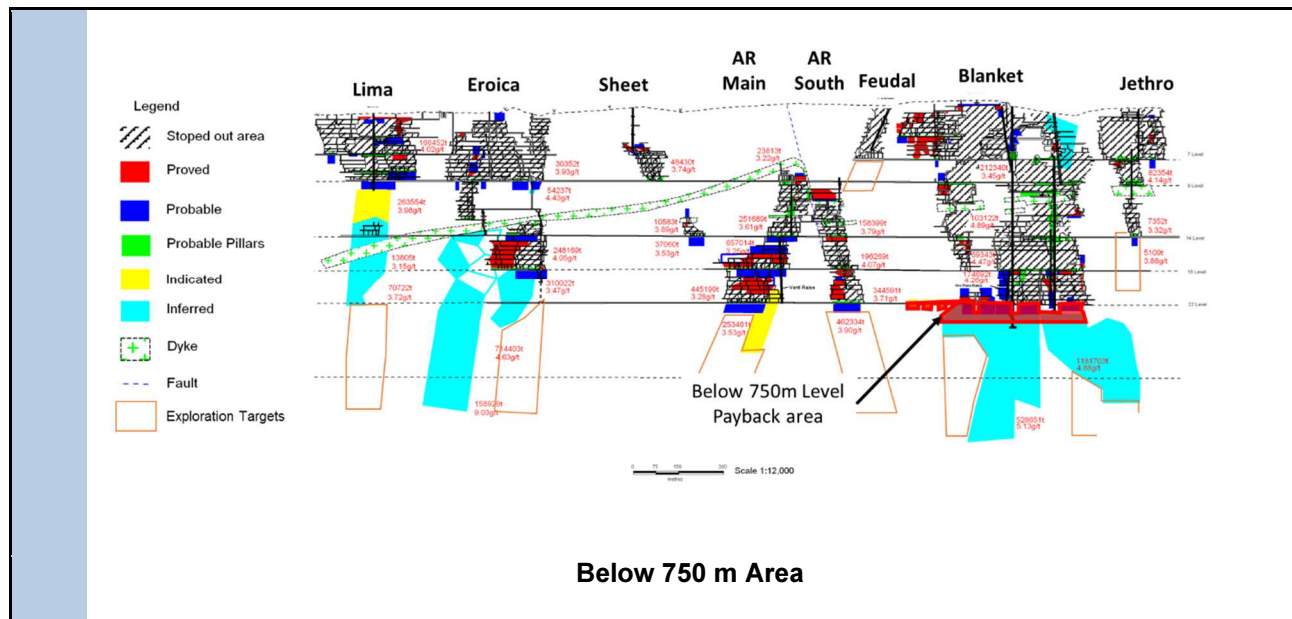
### ***Processing:-***

- The incorporation of additional process control systems should be pursued to improve gold recoveries and reduce costs.
- Metering of power consumption to the main process units should be installed so that power utilisation can be controlled; this will lower operating costs.
- The mill feed bin should be upgraded in size to increase the retention time to allow the crushers to operate during the day only.
- Reagent consumption (cyanide, and carbon) should be optimised further.
- It is recommended that laboratory costs be captured centrally and allocated to the mining, geology and metallurgical department on a cost per sample basis.

## **PEA Recommendations**

### ***Exploration***

- To fully de-risk the PEA expansion project, it is recommended to do exploration drilling as illustrated in the figure below, to increase the level of confidence of the Mineral Resources to Indicated.



### Mineral Resources:

- Best practice QA/QC must be implemented on the operation, especially for deep drilling and other exploration drilling as these sample points are single points and have greater influence than the day-to-day evaluation samples.
- Short deflections must be drilled when drilling the "deep" drill holes and exploration drill holes to understand variability and improve the confidence of the intersections for the Indicated and Inferred resources.
- Long inclined boreholes or directional drilling should be investigated as an option to drill more and deeper intersections in the "pay shoots" without increasing the cross-cut development. This could help to convert the Inferred Mineral Resources to Indicated Mineral Resources.

### Processing:

- The incorporation of additional process control systems should be pursued to improve gold recoveries and reduce costs.
- Metering of power consumptions to the main process units should be installed so that plant power utilisation can be controlled.
- Although the Gemini tables operate effectively at the moment, installation of Acacia reactors should be considered for upgrading of Knelson concentrates.

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## ITEM 2 - INTRODUCTION

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### Item 2 (a) - ISSUER RECEIVING THE REPORT

Minxcon (Pty) Ltd (“Minxcon”) was commissioned by Greenstone Management Services (Pty) Limited (“GMS” or “the client”) to compile an NI 43-101 technical report on behalf of Blanket Mine (1983) (Private) Limited (“Blanket Mine”) for its 49% shareholder, Caledonia Mining Corporation (“Caledonia”), a Canadian-registered company which is listed on the Toronto Stock Exchange (“TSX - CAL”) and on the AIM Market of the London Stock Exchange (“LSE - CMCL”) and also traded in the United States of America on the OTCQX. GMS is a subsidiary of Caledonia that employs the South African-based management that receives a management fee from Blanket. Blanket Mine is incorporated in Zimbabwe and is the owner and operator of the Blanket Mine.

### Item 2 (b) - TERMS OF REFERENCE AND PURPOSE OF THE REPORT

Minxcon was commissioned by the Client to compile an NI 43-101 technical report for the Blanket Mine. This technical report was compiled in compliance with the specifications embodied in the Standards of Disclosure for Mineral Projects as set out by the Canadian Code for reporting of Resources and Reserves - National Instrument 43-101 (Standards of Disclosure for Mineral Projects), Form 43-101F1 and the Companion Policy Document 43-101CP (“NI 43-101”). All monetary figures in this Report are expressed in USD, unless stated otherwise.

Minxcon carried out the following scope of work for the Technical Report:-

- The Caledonia offices in Johannesburg were visited to collect information pertaining to the financial, legal and environmental aspects of the Project.
- Various technical and environmental reports prepared by various independent consultants were studied.
- Geological data and Mineral Resources were reviewed.
- The Reserve LoM plan, Mineral Reserves and processing methodology were reviewed.
- A Discounted Cash Flow (“DCF”) analysis was completed.

### Item 2 (c) - SOURCES OF INFORMATION AND DATA CONTAINED IN THE REPORT

The following sources of information were used to compile this Report:-

- Technical reports and technical information from the Blanket Mine.
- Historical Technical Reports, press releases and other public documents posted on SEDAR.
- Market research information from various websites, literature and other published articles.
- Personal Communication with the COO of Caledonia, Mr. Dana Roets.
- Personal Communication with the Vice President, Exploration of Caledonia, Dr. Trevor Pearton.

For further details on references, please refer to Item 27.

### Item 2 (d) - QUALIFIED PERSONS’ PERSONAL INSPECTION OF THE PROPERTY

A site visit of Blanket Mine was conducted from 22 to 24 October 2014 by Mr Dario Clemente ((Director, Minxcon) NHD (Ext. Met.), GCC, BLDP (WBS), (FSAIMM), Mr Uwe Engelmann (Director, Minxcon): B.Sc (Zoology & Botany), B.Sc (Geol.), B.Sc Hons. (Geol.), GSSA, Pr. Sci. Nat. Reg. No. 400058/08, and Mr Daniel van Heerden ((Director) BSc (Min. Eng.), MComm (Bus. Admin.), ECSA Reg. No.20050318, FSAIMM Reg. No.37309.4), each of whom is a Qualified Person (as that term is defined in NI 43-101) for this Report. During this visit, time was spent at the mine, the treatment plant, the waste dumps, and the sample assay laboratory and data management section.

**Item 2 (e) - FORWARD-LOOKING STATEMENT**

Certain statements in this Report, other than statements of historical fact, contain forward-looking statements regarding the Blanket Mine, economic performance or financial condition, including, without limitation, those concerning the economic outlook for the mining and gold industry, expectations regarding gold prices, production, cash costs and other operating results, growth prospects and the outlook of operations, including the completion and commencement of commercial operations of specific production projects, its liquidity and capital resources and expenditure, and the outcome and consequences of any pending litigation or enforcement proceedings.

Although Minxcon believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to be correct. Accordingly, results may differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, changes in the regulatory environment and other State actions, success of business and operating initiatives, fluctuations in commodity prices and business and operational risk management.

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## ITEM 3 - RELIANCE ON OTHER EXPERTS

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Minxcon accepted the information supplied by Caledonia as valid and complete. The information applies, but is not limited to, the drill hole information, Environmental Management Plans (“EMPs”) and licenses. Minxcon scrutinised this information, together with other sources of information (such as Public Reports by the MSA Group and Caledonia, and information provided by Mr Dana Roets), and found it fit for use in the estimation of the Gold Mineral Resources and Gold Mineral Reserves (that were used in the economic evaluation of the mine). The reliance on Knight Piesold, Paramark and Black Crystal for the mine closure cost estimate and closure plan, as described in item 20(e). Minxcon did not seek an independent legal opinion on the shareholding, effective rights and obligations of Blanket Ltd. and relied on existing available information.

## ITEM 4 - PROPERTY DESCRIPTION AND LOCATION

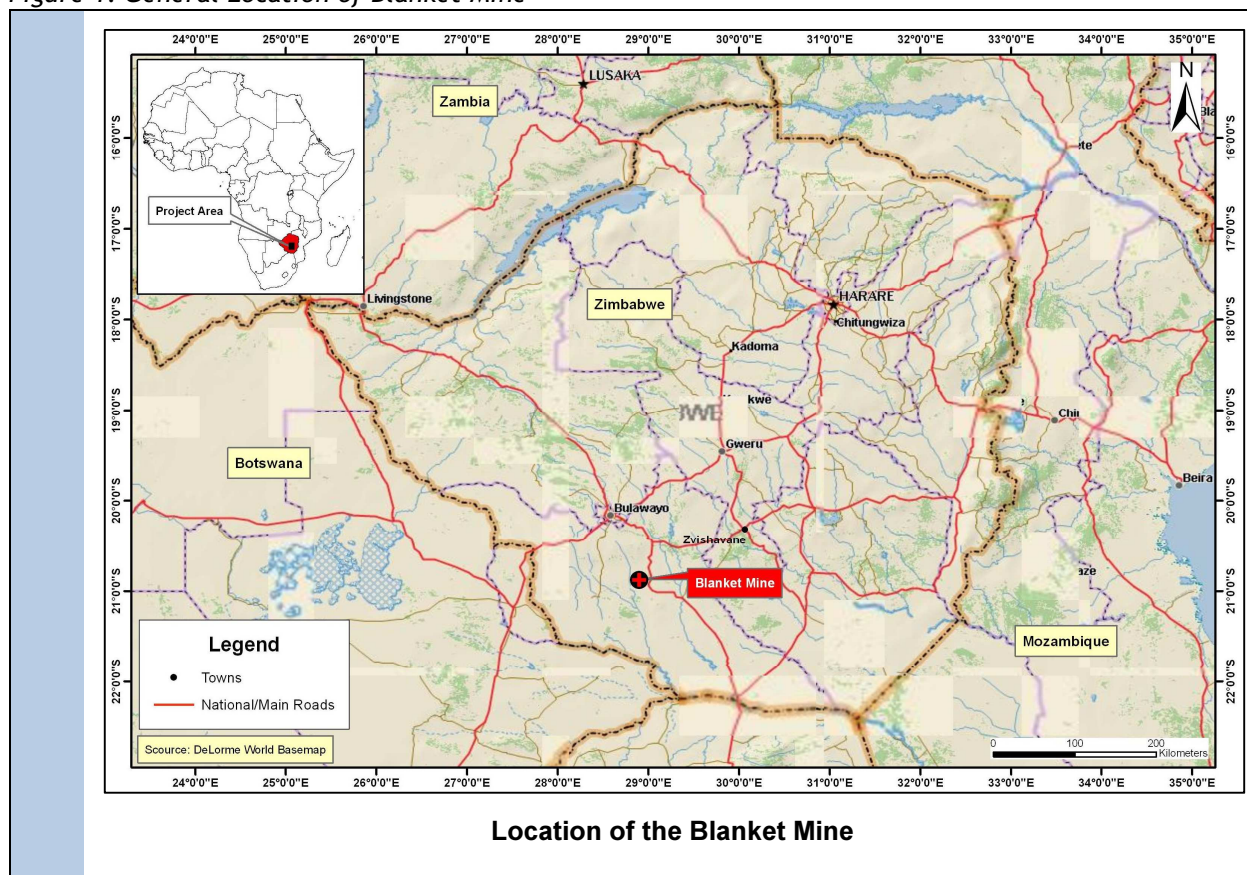
### Item 4 (a) - AREA OF THE PROPERTY

The Blanket Mine covers the operating claims of Jethro, Blanket Section, Feudal, Harvard, Mbudzane Rock, OQUEIL, Sabiwa, Sheet, Eroica and Lima, comprising a total area of approximately 2,540 ha, as documented by Applied Geology Services ("AGS") in their NI 43-101 Technical Report dated July 2006.

### Item 4 (b) - LOCATION OF THE PROPERTY

The Blanket Mine is located in the southwest of Zimbabwe, approximately 15 km northwest of Gwanda, the provincial capital of Matabeleland South. Gwanda is located 150 km southeast of Bulawayo, the country's second largest city, 196 km northwest of the Beit Bridge Border post with South Africa, and 560 km from Harare, Zimbabwe's capital city. Access to the mine is by an all-weather tarred road from Gwanda, which is linked to the Beit Bridge to Bulawayo, Harare by a national highway.

Figure 1: General Location of Blanket Mine



The general geographic coordinates of Blanket Mine are Latitude 20°52' S and Longitude 28°54' E. Coordinates for individual claims are presented in Appendix 2, Appendix 3 and Appendix 4. The area is covered by topographic sheet number 2028D4.

### Item 4 (c) - MINERAL DEPOSIT TENURE

#### Blanket Operating Claims

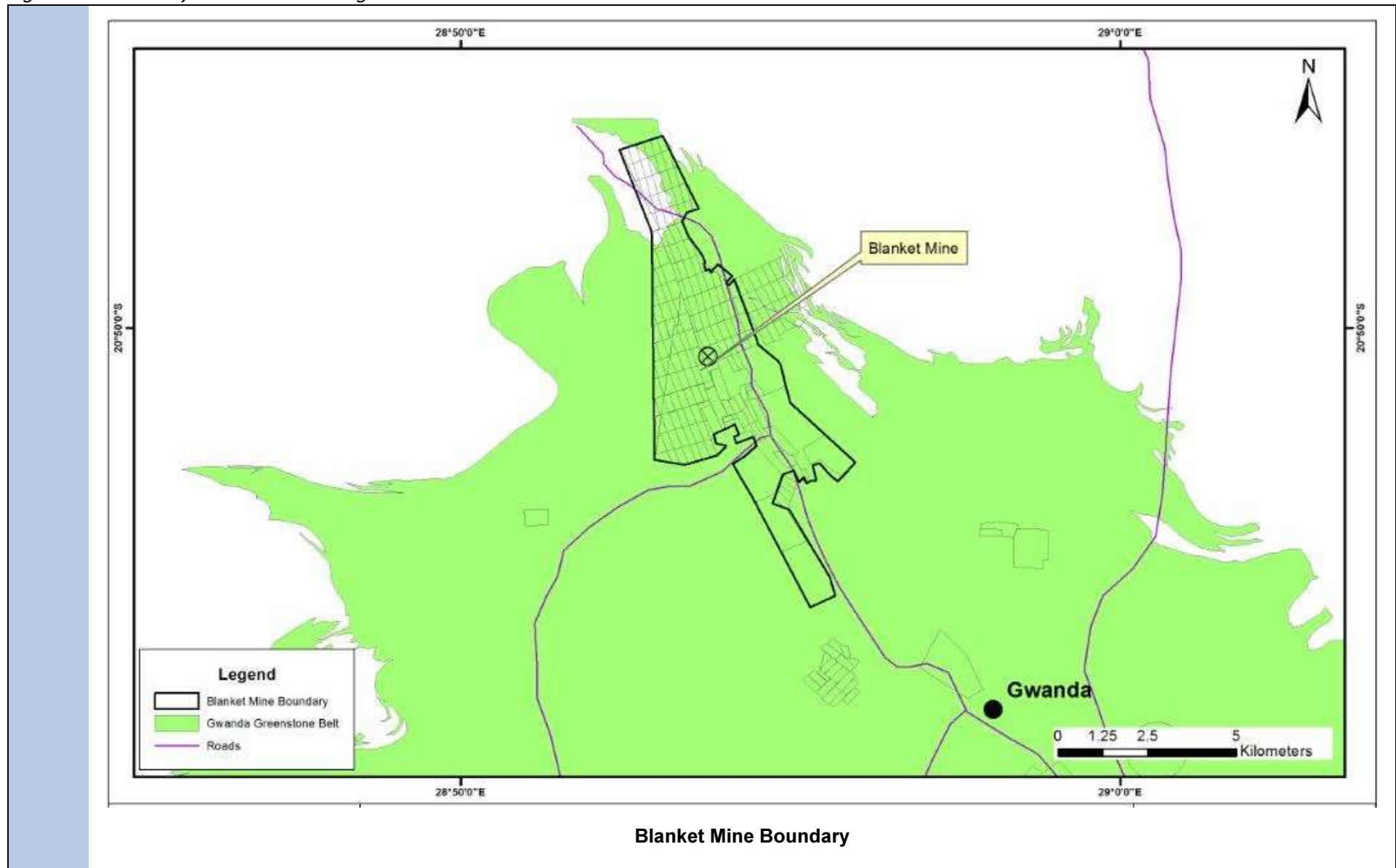
The Blanket Mine's exploration interests in Zimbabwe include operating claims (i.e. on-mine), non-operating claims and a portfolio of brownfields exploration projects ("satellite projects"). The Blanket Mine operates under a Special Licence (No. 5030) which was issued under the Mines and Minerals Act of 1961 (Chapter 21:05). The mine's claims are protected under this Act.



Blanket Mine covers the operating claims of Jethro, Blanket Section, Feudal, Harvard, Mbudzane Rock, OQUEIL, Sabiwa, Sheet, Eroica and Lima, comprising a total area of approximately 2,540 ha. Claims not covered by the Mining Lease application were reported not to form part of the production area at the time.

The registration numbers, area, number of claims and number of blocks of 2,884 operating claims (some are producing claims, others are exploration claims) belonging to the Blanket Mine were supplied to Minxcon by Caledonia and are listed in Appendix 2. The mine boundary in the figure is indicated as supplied by the Caledonia office in Johannesburg.

Figure 2: Location of Blanket Mineral Rights



### Blanket Non-Operating Claims and Exploration Claims

Blanket Mine provided two separate lists of non-operating claims at the Blanket Mine and satellite exploration claims. The names of each claim, as well as registration numbers and type of minerals were provided to Minxcon (Appendix 3 and Appendix 4).

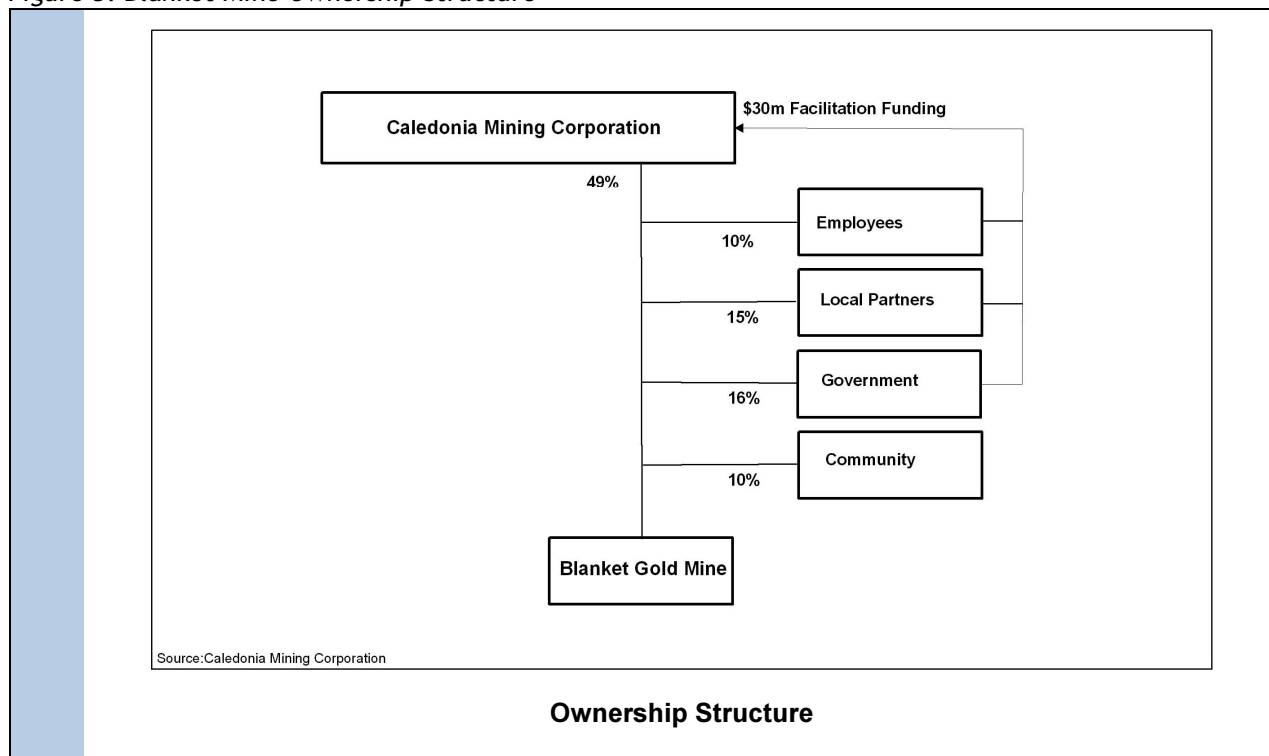
### Item 4 (d) - ISSUER'S TITLE TO/INTEREST IN THE PROPERTY

The Indigenisation and Economic Empowerment Act ("The Act"), which was enacted in 2007, requires that 51% of the equity of all commercial enterprises in Zimbabwe must be owned by indigenous Zimbabweans.

On February 20, 2012 Caledonia announced it had signed a Memorandum of Understanding ("MoU") with the Minister of Youth, Development, Indigenisation and Empowerment of the Government of Zimbabwe pursuant to which 51% of Blanket would be sold for a paid transactional value of USD30.09 million. The various transactions were implemented with effect from September 5, 2012 on the following bases:-

- 16% was sold to the National Indigenisation and Economic Empowerment Fund;
- 10% was sold to a Management and Employee Trust for the benefit of the present and future managers and employees of Blanket Mine;
- 15% was sold to identified indigenous Zimbabweans; and
- 10% was donated to the Gwanda Community Share Ownership Trust. Blanket also made a non-refundable donation of USD1 million to the Trust as soon as it was established and paid advance dividends of USD4 million before the end of April 2013.

Figure 3: Blanket Mine Ownership Structure



The Trust will receive no further dividends from Blanket until the advance dividends have been repaid by the offset of future dividends arising from the Blanket shares that are owned by the Trust. Caledonia facilitated the vendor funding of these transactions: i.e. indigenous Zimbabweans who purchased their interest in Blanket will repay their outstanding facilitation loan by sacrificing 80% of their future entitlement to Blanket dividends. Outstanding balances on the facilitation loans attract interest at London Interbank Offered Rate ("LIBOR") plus 10%. In October 2014, the Blanket board approved the suspension of dividend payments by Blanket Mine so that cash generated by Blanket Mine could be used to fund the revised investment plan. It is anticipated that Blanket Mine will resume dividend payments in early 2016. During

the period from October 2014 until the resumption of dividend distributions by Blanket Mine, the Blanket Board there will be a moratorium on the accumulation of interest on the facilitation loans. Following the implementation of Indigenisation, Caledonia received the Certificate of Compliance from the Government of Zimbabwe which confirms that Blanket is fully compliant with the Indigenisation and Economic Empowerment Act.

As an indigenised entity, Blanket can now develop and implement its long-term growth strategy. The recently re-constituted Blanket board, which includes representatives of the indigenous Zimbabwean shareholders, approved a capital investment programme for 2013 and a 4-year growth strategy for 2014 to 2017. This investment programme was endorsed by the Caledonia Board, is estimated at USD66 million, will be funded from Blanket's internally generated cash, and is expected to result in progressive increases in gold production.

#### **Item 4 (e) - ROYALTIES AND PAYMENTS**

Mining royalties are charged in terms of the Mines and Minerals Act (Chapter 21:05). The royalties are collectable from all the minerals or mineral-bearing products obtained from any mining location and disposed by a miner or on his behalf. The royalties are chargeable whether the disposal is made within or outside Zimbabwe.

Zimbabwean gold production has declined by 26% in the first-half of 2014, largely due to the effect of the lower gold price which has rendered a number of high-cost Zimbabwean gold producers unprofitable. A decision was made by the Government of Zimbabwe in its 2014 Mid-Year Fiscal Policy Review Statement to reduce the royalty on Zimbabwean gold producers from 7% to 5%, effective 1 October 2014. The royalty of 5% is, however, not tax deductible and the tax rate is applied on the earnings before royalty deductions.

The property does not appear to be subject to any royalties (other than the legislated royalty of 5% of sales value currently being paid to the Government), back-in rights, payments or other agreements and encumbrances. Ore mined from underground carries no third-party royalties. These are covered by payment of the annual claims protection fees to the Ministry of Mines.

#### **Item 4 (f) - ENVIRONMENTAL LIABILITIES**

See Item 20 (e).

#### **Item 4 (g) - PERMITS TO CONDUCT WORK**

See Item 20 (c).

#### **Item 4 (h) - OTHER SIGNIFICANT FACTORS AND RISKS**

There is no reason to believe that there are any factors or risks that may affect the title or the ability to perform work on the property.

## **ITEM 5 - ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

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### **Item 5 (a) - TOPOGRAPHY, ELEVATION AND VEGETATION**

The area around the Blanket Mine is hilly and lies at an altitude of about 1,000 m to 1,300 m above mean sea level ("amsl"). Drainage is to the northeast, into the Mchabezi River on which the Sheet dam and the Blanket dam are located (some 5 km to the east of the mine).

The indigenous vegetation is dominated by savannah with Marula (*Sclerocarya birrea*), a variety of Combretum species, Terminalia sericea, Mopane groves and patches of grassland. Around the mine and local settlements vegetation has been cut down and invaded by secondary thorny scrub dominated by *Dichrostachys cinerea*. Agriculture is limited to subsistence farming of maize and vegetables.

### **Item 5 (b) - ACCESS TO THE PROPERTY**

Access to the Blanket Mine is by an all-weather single lane tarred road from Gwanda. Gwanda is linked by national highways to Bulawayo, Harare and the Beit Bridge Border post. Earlier, Zimbabwe had good road infrastructure. However, lack of investment over the past ten to fifteen years resulted in its deterioration; substantial investment is required country-wide. The railway line connecting the Zimbabwean national network to South Africa passes through Gwanda. An airstrip for light aircraft is located 5 km to the northwest of the town.

### **Item 5 (c) - PROXIMITY TO POPULATION CENTRES AND NATURE OF TRANSPORT**

The Gwanda district hosts the provincial capital of Matabeleland, South Province, and the District Administrator's and Rural District Council offices are located 126 km south of Bulawayo and 195 km from Beit Bridge along the Bulawayo Beit Bridge highway. Gold mining, cement production, livestock production, game ranching and tourism are the major economic activities in the district. Labourers for Blanket Mine are accommodated with their families in a mine village about 1 km from the mine.

The district has 24 wards in which business centres, irrigation schemes, dams, wells, boreholes, clinics, schools, farms and mines are located. There is a fairly good road network linking the various wards internally and externally with the rest of the country. The district is serviced by telecommunication services offered by TelOne, and Telecel, NetOne and Econet whose cellular phone network covers nearly 50% of the district.

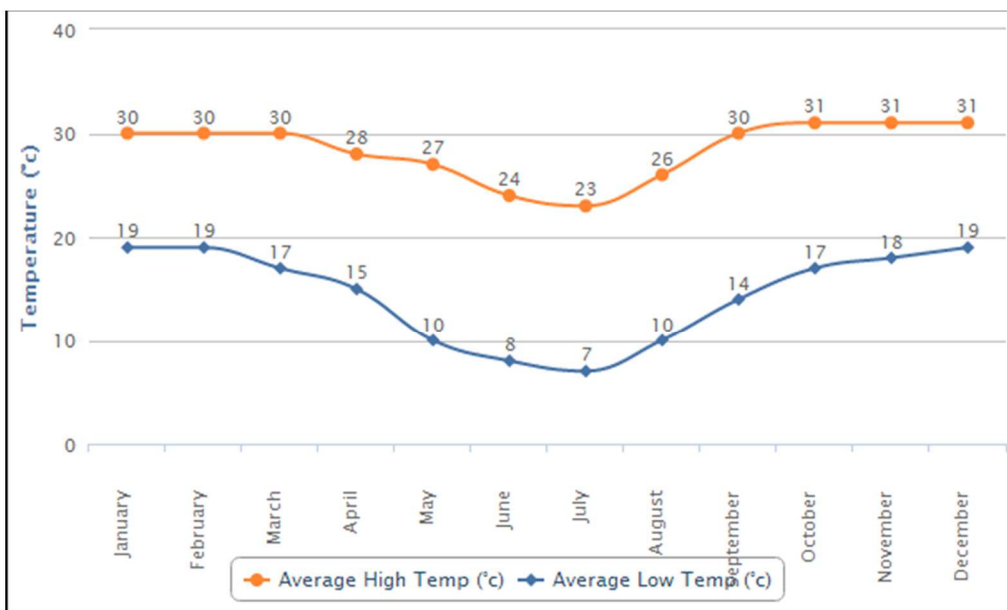
The district covers 31 km<sup>2</sup> and has an estimated population of 162,622. Of the total number of people employed, the highest proportion (64%) is engaged in agriculture and related occupations followed by services (11%). The population in the district is mostly rural.

The main natural water sources include the Tuli River, with its main tributaries (in the east bank running in a north-south direction) being the Mnyabetsi River in the Dibilashaba Communal Area, the Sengezane River in the Garanyemba Communal Area, and the Ntswangu and Pelele Rivers in the Gwanda Bolamba Communal Area.

### **Item 5 (d) - CLIMATE AND LENGTH OF OPERATING SEASON**

Temperatures are as high as 40°C during summer months and average 13°C during winter. The climatic conditions make the area vulnerable to meteorological hazards such as droughts, floods, gusty winds, as well as lightening during the wet and hot season.

Figure 4: Gwanda Average Temperatures

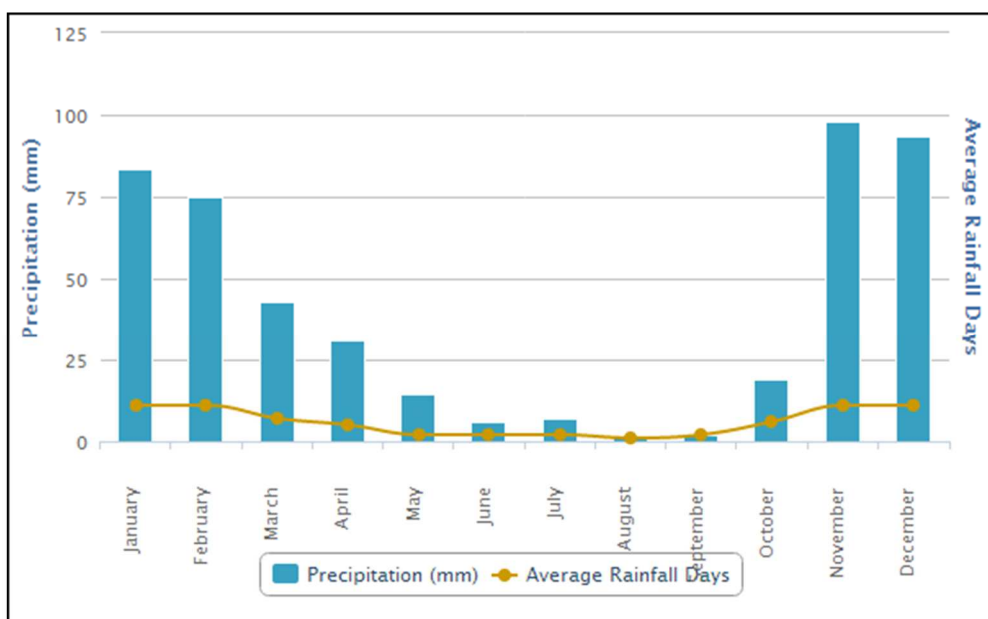


Source: www.worldweatheronline.com

**Gwanda Average Temperatures**

The entire district lies within Natural Region IV and V, which experience a short, variable rainfall seasons (averaging generally below 400 mm per year), and long, dry winter periods. Rainfall is usually associated with thunderstorms, producing rainfall of short duration and high intensity. The rainfall, in general, is less than half of the potential evaporation which has necessitated irrigation development and, more recently, infield rainwater harvesting in some wards to improve crop production which complements animal husbandry as well as reclaims open access areas such as grazing lands and induce underground water recharge as part of improving the environment. The mine is able to operate year-round.

Figure 5: Gwanda Average Monthly Precipitation



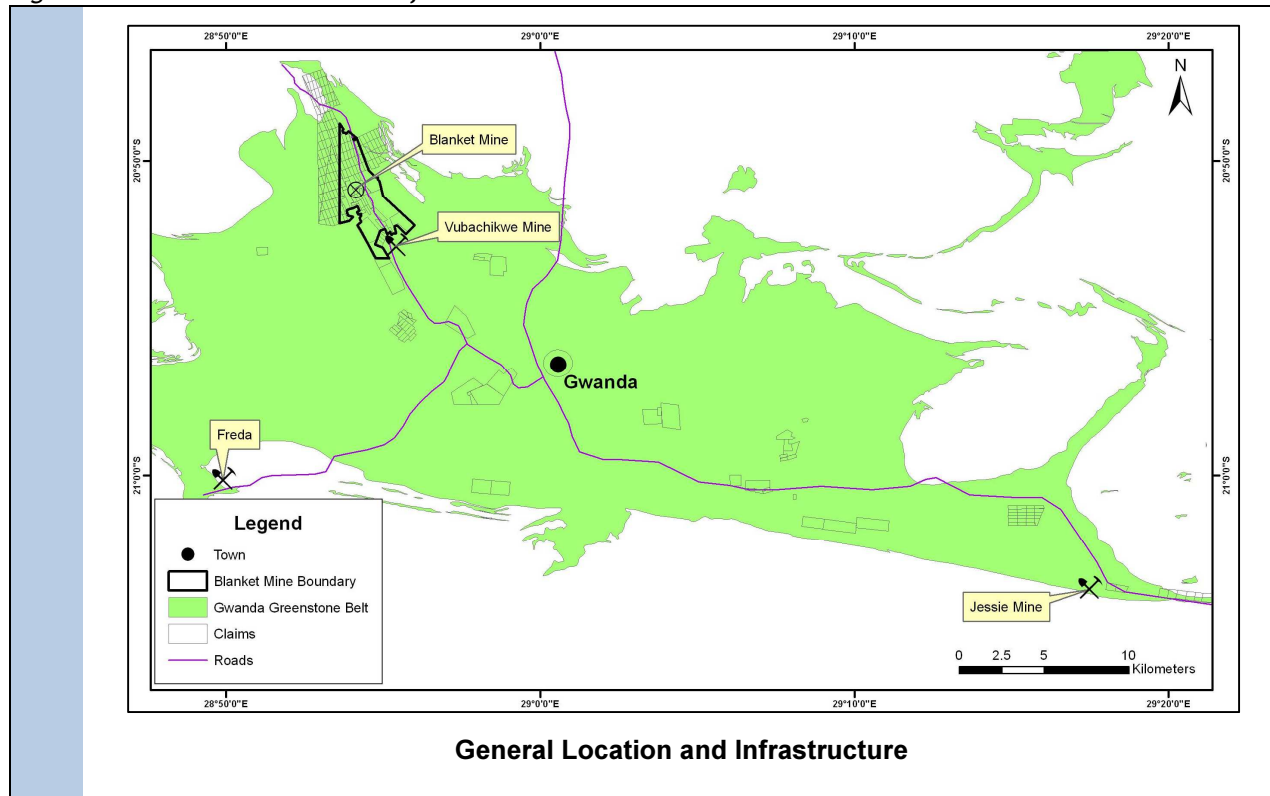
Source: www.worldweatheronline.com

**Gwanda Average Precipitation**

### Item 5 (e) - INFRASTRUCTURE

Mine infrastructure comprises underground workings with head gear and hoist facilities, a process plant, workshops and a tailings dam. Stores, workshops and offices, as well as an assay laboratory, are located adjacent to the mine shafts. There is an adequate surface area for further expansion. The general location and surrounding infrastructure is indicated in Figure 6.

Figure 6: General Location and Infrastructure



The two-compartment tailings dam, which is located to the east of the mine, is operated by Frazer Alexander Zimbabwe. Based on the throughput rate at that time (3,800 tpd), the tailings dam had a remaining capacity of 9.5 Mt. Since then the mine has slimed 6.0 Mt, leaving a capacity of 3.5 Mt as at January 2011. Since the mine no longer treats old slimes, the planned daily throughput has fallen to 1,000 tpd which equates to a life of approximately 14 years. At a production rate of 1,000 tpd, the rate of rise ("RoR") is 0.54 m per year based on the final design area of 28 ha, which is well below the legal maximum of 2 m per year.

Makeup process water and water for the mine village are derived from the Blanket dam which has a capacity of 15 Mm<sup>3</sup>. In addition, the mine has several boreholes to provide water during periods of drought (AGS, 2006). The Zimbabwe National Water Authority ("ZINWA") holds all water rights in Zimbabwe. Blanket purchases process and domestic water from ZINWA. This is supplemented with underground and borehole water. No problems have been recorded with water supply.

Two power lines (of 11 kVA and 33 kVA respectively) connect the mine to the national grid operated by the Zimbabwe Electricity Supply Authority ("ZESA"). Owing to frequent interruptions to the power supply the Blanket Mine has installed its own 10 MVA generator consisting of 4 diesel units. The mine is now self-sufficient and able to continue its mining and processing operations during disruptions to the grid supply.

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## ITEM 6 - HISTORY

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### Item 6 (a) - PRIOR OWNERSHIP AND OWNERSHIP CHANGES

The Blanket Mine is part of the Sabiwa group of mines within the Gwanda Greenstone Belt from which gold was first extracted in the 19<sup>th</sup> century. The Blanket Mine is a cluster of mines extending some 3 km from Jethro in the south through Blanket itself, Feudal, AR South, AR Main, Sheet, and Eroica, to Lima in the north. Blanket Mine has produced over a million ounces of gold during its lifetime.

Following sporadic artisanal working, the Blanket Mine was acquired in 1904 by the Matabele Reefs and Estate Company. Mining and metallurgical operations commenced in 1906 and between then and 1911, 128,000 t were mined. From 1912 to 1916 mining was conducted by the Forbes Rhodesia Syndicate who achieved 23,000 t. There are no reliable records of mining for the period between 1917 and 1941 and it is possible that operations were adversely affected by political instability during World Wars I and II. In 1941 F.D.A. Payne produced some 214,000 t before selling the property to Falconbridge in 1964 (Blanket Mine, 2009). Under Falconbridge, production increased to 45 kg per month and the property yielded some 4 Mt of ore up until September 1993. Kinross Gold Corporation ("Kinross") then took over the property and constructed a larger Carbon-in-Leach ("CIL") plant with a capacity of 3,800 tpd. This was designed to treat both run of mine ("RoM") ore and an old tailings dump.

The Blanket Mine is currently 49% owned and operated by Caledonia Mining Corporation who completed purchase of the mine from Kinross on 1 April 2006 ([www.caledoniamining.com](http://www.caledoniamining.com)). The Blanket mine re-started production in April 2009 after a temporary shut-down due to the economic difficulties in Zimbabwe. In late 2010, Blanket Mine successfully completed an expansion project which increased production capacity from 24,000 ounces of gold per annum to 40,000 ounces of gold per annum.

### Item 6 (b) - HISTORICAL EXPLORATION AND DEVELOPMENT

Exploration was conducted between 1997 and 2006 around the GG and Mascot areas with follow-up exploration drilling in 2013 around these same areas. Currently, there are two exploration shafts being developed at these two sites.

### Item 6 (c) - HISTORICAL MINERAL RESOURCE ESTIMATES

There are no historical estimates which are currently considered to be relevant.

### Item 6 (d) - HISTORICAL MINERAL RESERVE ESTIMATES

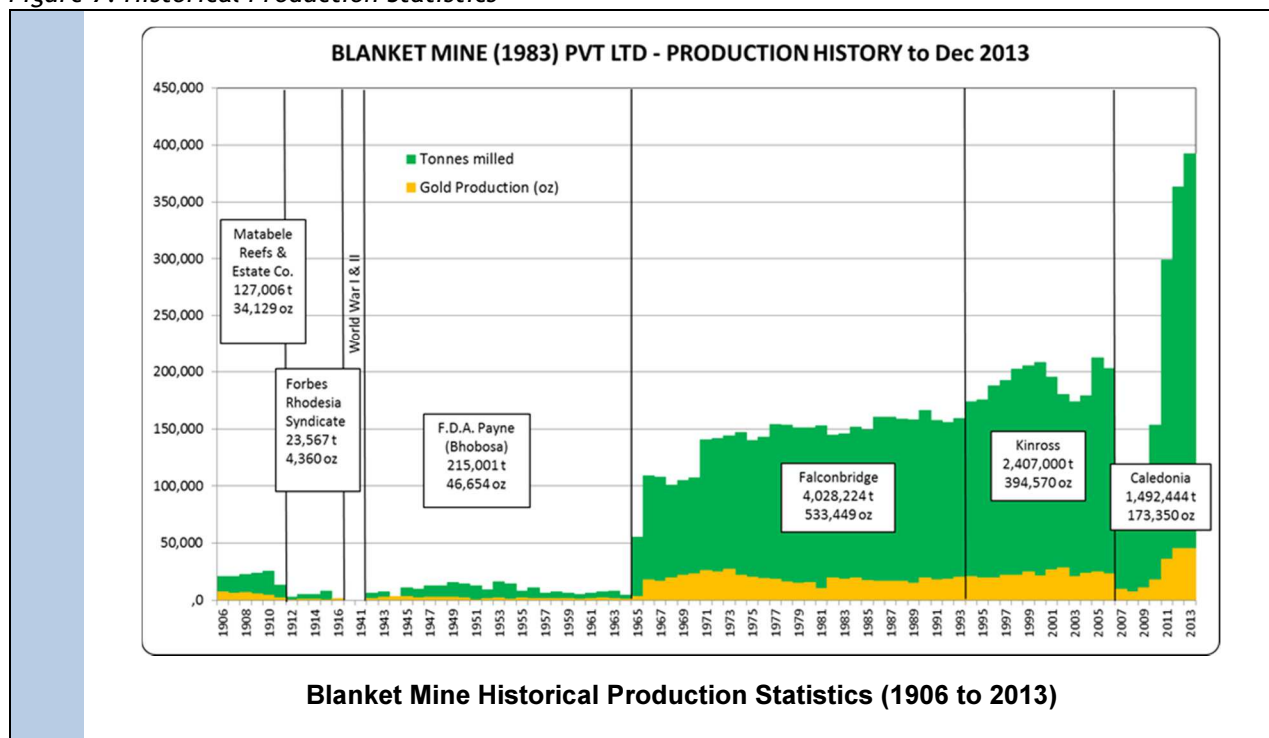
There are no historical estimates which are currently considered to be relevant.

### Item 6 (e) - HISTORICAL PRODUCTION

First recorded production started in 1906. The production history for Blanket over the past 107 years are illustrated in Figure 7.

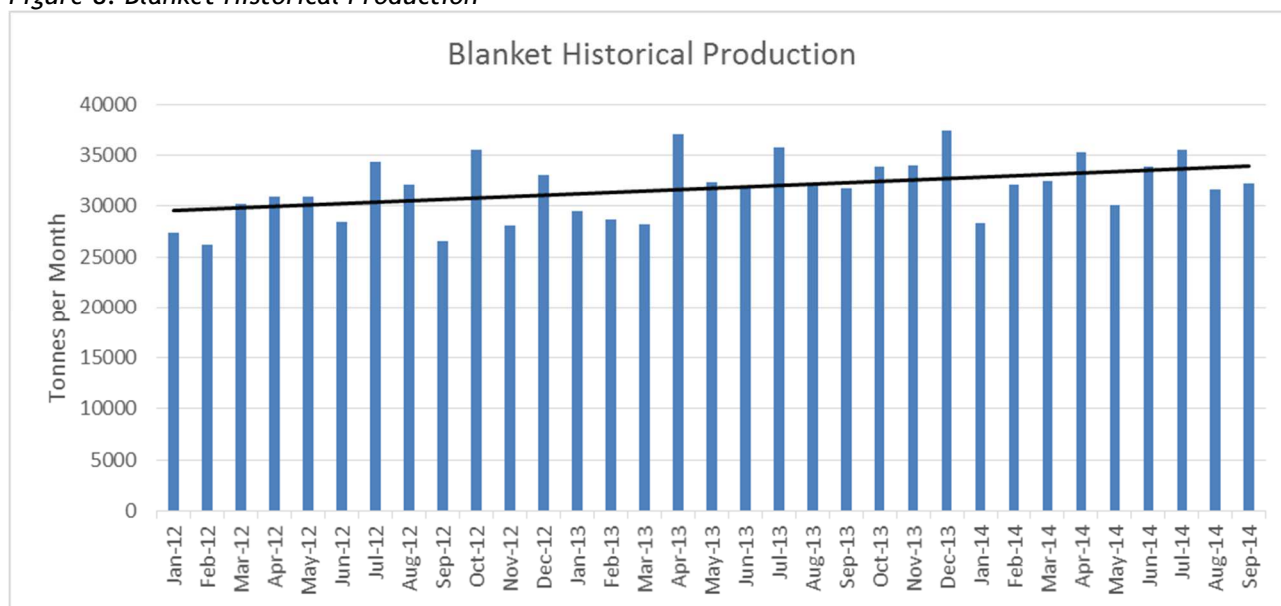


Figure 7: Historical Production Statistics



Blanket's recent actual production per month up to September 2014 is illustrated in Figure 8.

Figure 8: Blanket Historical Production

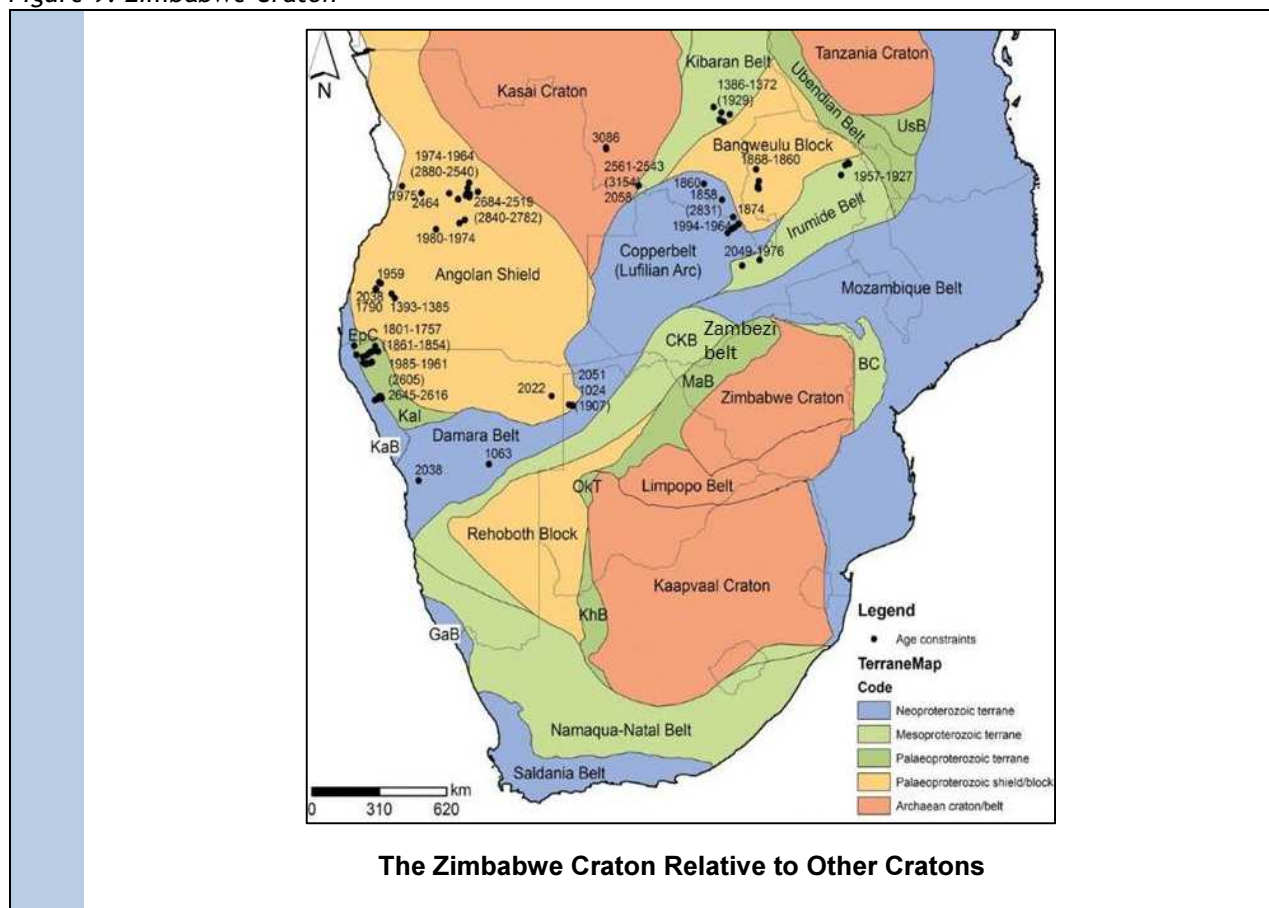


## ITEM 7 - GEOLOGICAL SETTING AND MINERALISATION

### Item 7 (a) - REGIONAL GEOLOGY

Zimbabwe's known gold mineralisation occurs in host rocks of the Zimbabwe Craton. The Zimbabwean craton is made up of Archaean rocks. The geology of the Craton is characterised by deformed and metamorphosed rocks which include high-grade metamorphic rocks, gneisses, older granitoids, greenstone belts, intrusive complexes, younger granites and the Great Dyke, which make up the geology of the Zimbabwe Craton (Figure 9).

Figure 9: Zimbabwe Craton



Source: <http://jgs.lyellcollection.org>

The Chingezi gneiss, Mashaba tonalite and Shabani gneiss form part of a variety of tonalities and gneisses of varying ages. Three major sequences of slightly younger gold-bearing greenstone belts supracrustal rocks exist. These are:-

- Older greenstones called the Sebakwian Group, which are mostly metamorphosed to amphibolite facies. They comprise komatiitic and basaltic volcanic rocks, some BIF, as well as clastic sediments.
- The Lower Bulawayan Group, which comprises basalts, high-Mg basalts, felsic volcanic rocks and mixed chemical and clastic sediments. The Lower Bulawayan Group forms the Belingwe (Mberengwa) greenstones.
- The Upper Bulawayan (upper greenstones) and Shamvaian groups, which comprise a succession of sedimentary and komatiitic to tholeiitic to calc-alkaline rocks.

The following three metamorphic belts surround the Zimbabwe Craton:-

- The Archaean Limpopo Mobile Belt, which trends east-northeast and separates the Zimbabwe Craton from the Kaapvaal Craton to the south. High-grade metamorphic and igneous rocks, which include amphibolites, gneisses and granulites, characterise the Limpopo Mobile Belt.

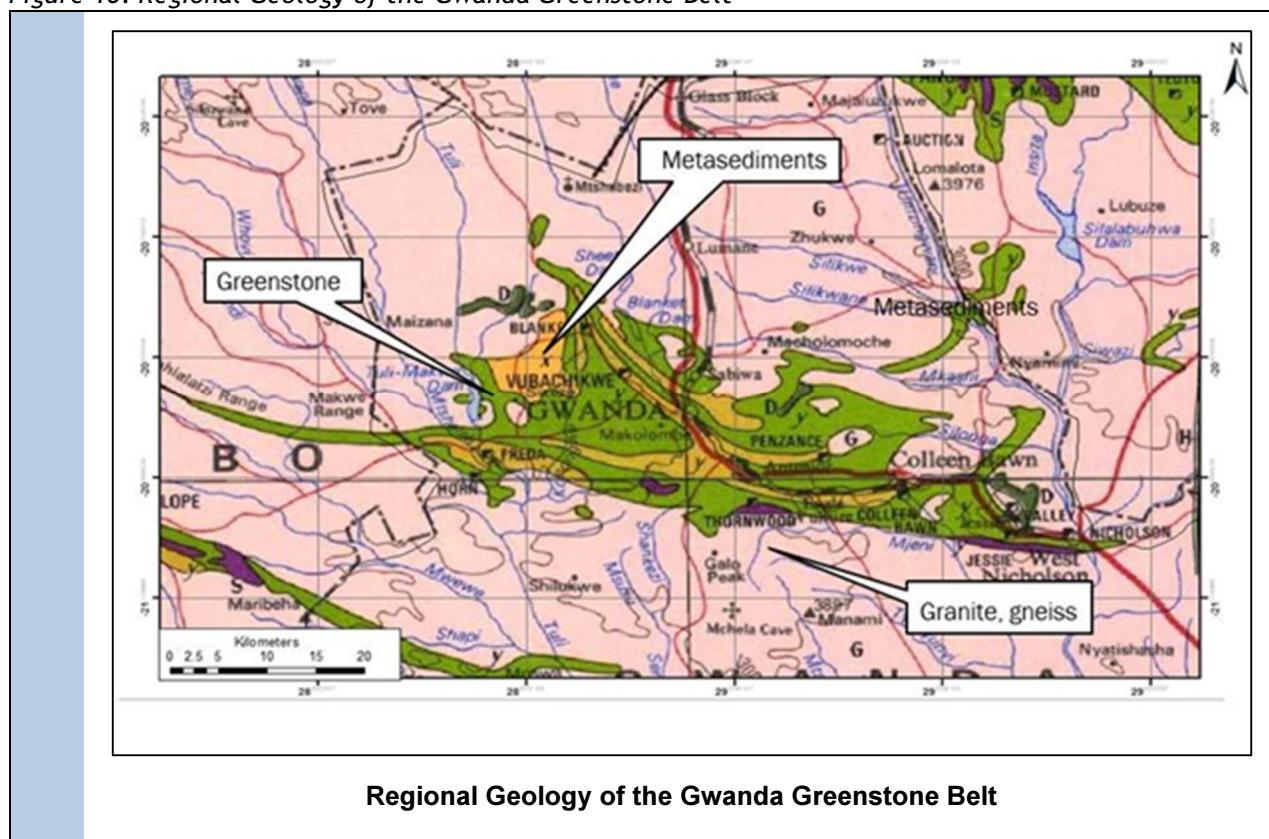
- The Magondi Mobile Belt on the north-western margin of the Craton, which formed as a result of deformation and metamorphism of the Palaeoproterozoic Magondi Supergroup. The Dewaras Group (volcano-sedimentary deposits), the Lomagundi Group (sedimentary deposits) and the Piriwiri Group (sedimentary deposits) form the Magondi Supergroup.
- The Zambezi Mobile Belt (comprising Neoproterozoic to Cambrian rocks) to the north and northeast of the Zimbabwe Craton, consisting of high grade and intensely deformed metasediments with intercalated basement gneisses.

Karoo Supergroup sediments and volcanic rocks of Permian-Triassic-Jurassic age, Cretaceous post-Karoo sediments, and Tertiary to Recent Kalahari sands overlie the Craton in the north, west, south and southeast of Zimbabwe.

### Item 7 (b) - LOCAL GEOLOGY

The Blanket Mine is situated on the north-western limb of the Archaean Gwanda Greenstone Belt, along strike from several other gold deposits. It is one of the few remaining producing gold mines out of the approximately 268 mines that were once operational in this greenstone belt. The Gwanda Greenstone Belt (Figure 10) is located in south-western Zimbabwe. It is approximately 70 km in length (west to east) and 15 km wide (north to south). The belt is typical of greenstone belts of the Zimbabwe Craton consisting of mafic to felsic volcanics with intercalated sedimentary units.

Figure 10: Regional Geology of the Gwanda Greenstone Belt



Repeated strong deformation affected all lithologies. Structurally, the Gwanda belt is dominated by a major periclinal synform, plunging approximately  $60^\circ$  to the northwest in the western half of the belt. It is flanked on both sides by two major deformation zones: the North West Gwanda Deformation Zone ("NWGDZ") on the north-western limb and the South Gwanda Deformation Zone ("SGDZ") along the southern limb. The SGDZ forms part of a regional structure bounding the southern margin of the belt. In the convergence zone of the NWGDZ and the SGDZ, the Colleen Bawn Deformation Zone ("CBDZ") splays off the SGDZ eastwards, following the north-eastern arm of the belt (Campbell and Pitfield, 1994).

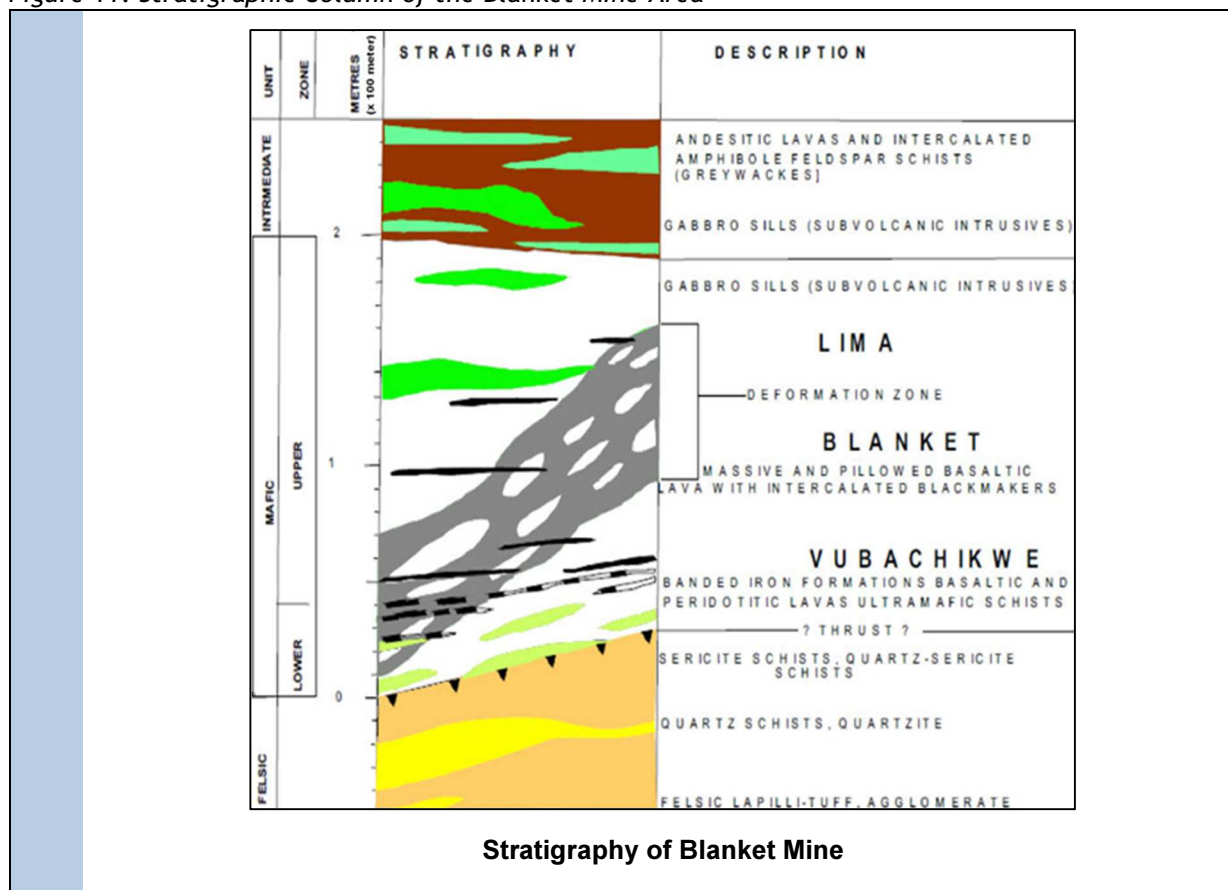
The NWGDZ is approximately 2 km wide by 18 km long with a general northwest to north-northwest trend, from the town of Gwanda to the north-western extremity of the belt (Campbell and Pitfield, 1994). Four phases of deformation have been defined by Fuchter (1990). Repetition of lithological units, particularly in the north-western arm of the greenstone belt, is interpreted as evidence of D1 thrusting. Wide zones of intense schistose deformation, considered to be associated with the gold mineralisation, are the product of the D2 event. The D1 thrust phase has a coincident trend and may be an early part of the D2 event.

The large fold structures of the D3 deformation event dominate the eastern and western ends of the greenstone belt and are easily identified on geological maps and in aerial imagery. The mineralisation at the Blanket Mine and Vubachikwe lies on the northern limb of the large western fold (the North West Mineralised Camp). The final D4 deformation event produced major lineaments which dominate the southern margin of the greenstone belt (Fuchter, 1990). According to the 2006 AGS report, “[t]he grade of metamorphism at Gwanda, which reaches upper greenschist to amphibolite facies, is higher than in the typical Zimbabwean greenstone belts, possibly due to the close proximity of the Gwanda belt to the Limpopo Mobile Belt” (AGS, 2006).

### Item 7 (c) - PROJECT GEOLOGY

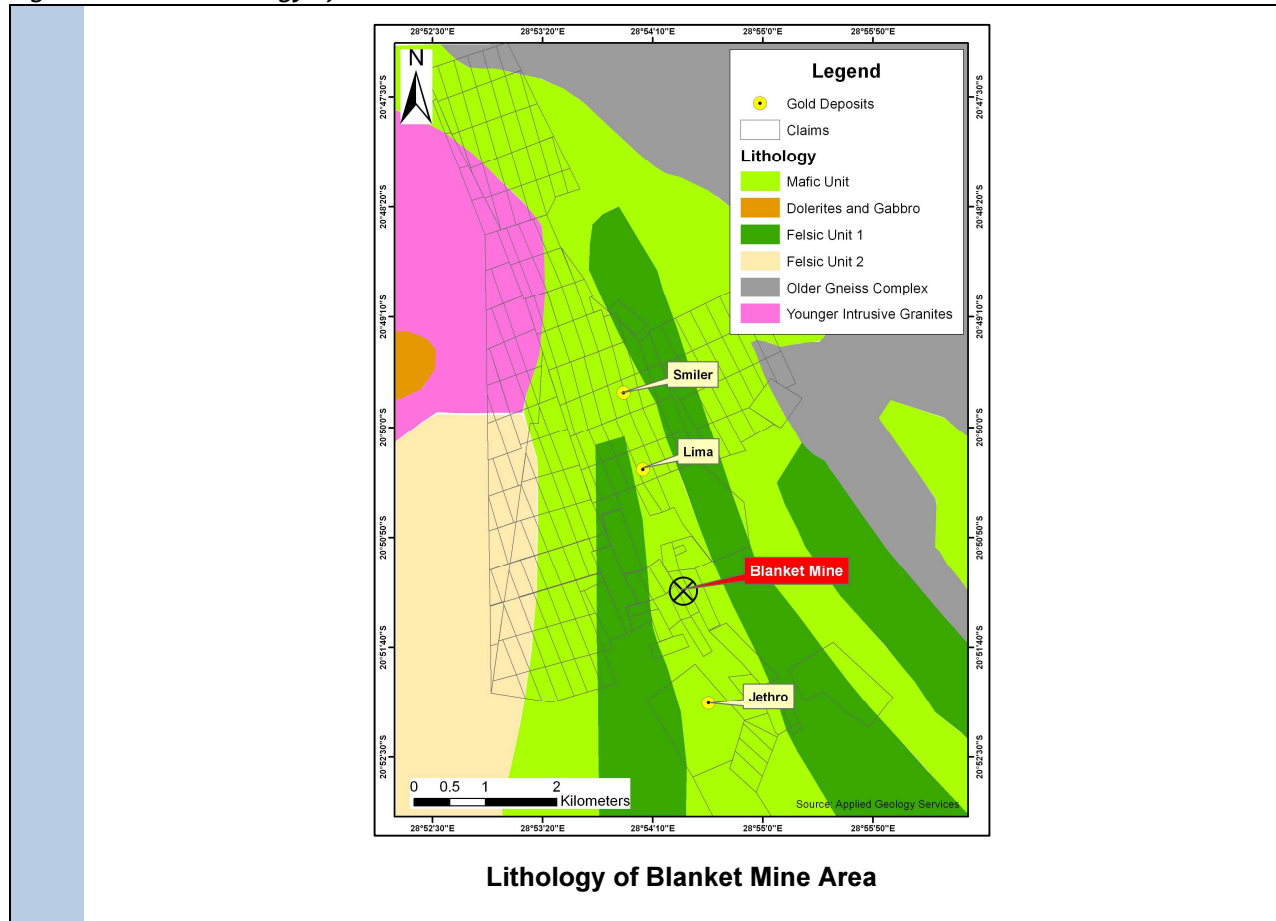
At and near the Blanket Mine, the lithologies comprise felsic schists of either sedimentary or igneous origin, overlain by mafic to ultramafic rocks containing layers of BIF, in turn overlain by a thick sequence of mafic rocks (AGS, 2006). The generalised stratigraphic column for the area is shown in Figure 11. The mafic unit which hosts the gold mineralisation is mostly a metabasalt with some remnants of pillow basalts. Regionally, the rock is a fine-grained massive amphibolite with localised shear planes. The entire sequence is cut by a regional dolerite sill from the south, through the Blanket Mine, to the Smiler deposit which lies approximately 3 km north of the Blanket Mine (Figure 12). Mineralisation at Vubachikwe is hosted in BIF interlayers. The mineralisation at the Blanket Mine is located in the overlying mafic unit.

Figure 11: Stratigraphic Column of the Blanket Mine Area



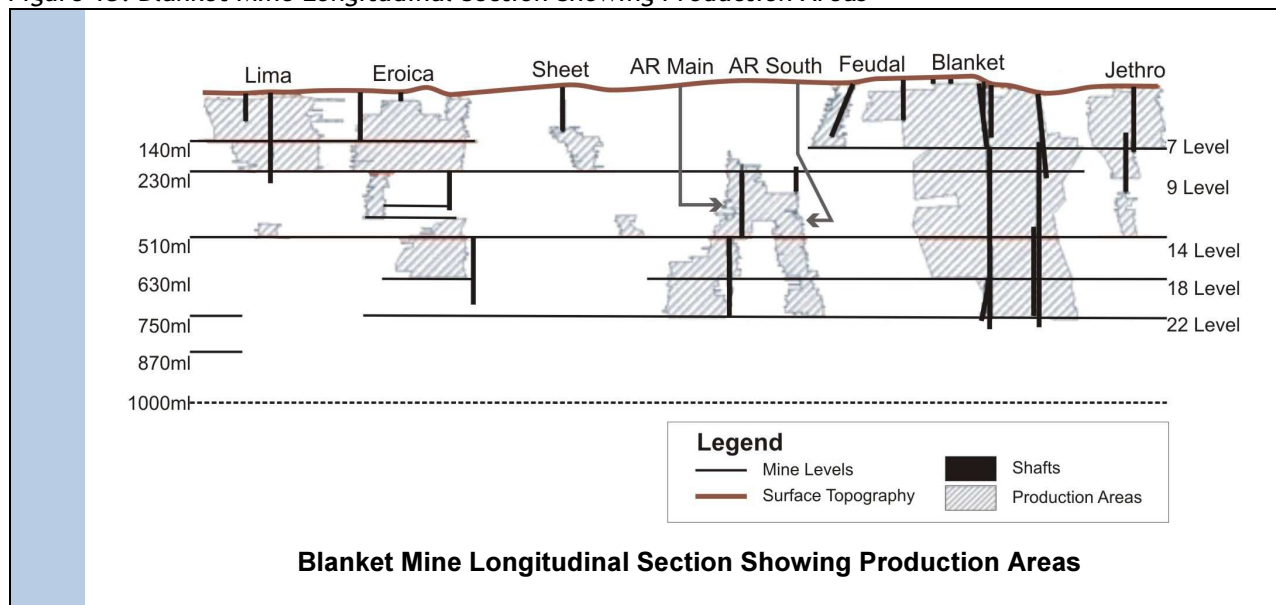


**Figure 12: Local Geology of Blanket Mine**



The longitudinal section running through the Blanket Mine from Lima in the north to Jethro in the south is illustrated in Figure 13. This section shows the steep to vertical nature of the Mineral Deposits with their depth extension. These Mineral Deposits are areas of mineralisation within the various shears and zones of alteration. The Mineral Deposits of the Blanket mine are listed and described in the following.

**Figure 13: Blanket Mine Longitudinal Section Showing Production Areas**



## **Item 7 (d) - BLANKET MINE MINERAL DEPOSITS**

### **Jethro Mineral Deposit**

The Jethro Mineral Deposit strikes north-south and dips near vertical in a westerly direction. It tends to roll over locally.

### **Blanket Section**

The Blanket Section is located approximately 400 m to the north of the Jethro Mineral Deposit. Blanket Mineral Deposits 1 and 4 are parallel. They occupy north-south trending shear segments whereas Mineral Deposits 2 and 5, which are also parallel, strike northwest-southeast. Mineral Deposit 3 is cylindrical and lies in a shear segment parallel to the 2 and 5 Mineral Deposits. On average, the Mineral Deposits dip 80° southwest. On surface, the Blanket Quartz Reef lies in the footwall of the disseminated sulphide replacement type Mineral Deposits. The reef has a shallower dip than the disseminated sulphide replacement bodies, but plunges in the same direction so that it progressively advances towards them with depth, displacing Mineral Deposits 2, 3, 1, 4 (MSA, June 2011). Mineral Deposit 2 reappears on the footwall of the Blanket Quartz reef and is established on the 630 mL through to the 730 mL.

### **AR Mineral Deposits**

AR lies approximately 500 m to the north of the Blanket Mineral Deposits. It is a “Z”-shaped mineralised zone and consists of two separate Mineral Deposits that generally reach up to 30 m wide as a result of tectonic thickening from faulting and folding. The AR Mineral Deposits were first discovered in the late 1980s by exploration drilling from the 9 Level haulage. Lateral diamond drill holes (250 m long) were drilled either side of the haulage every 50 m. The body has no known surface expression and appears to form a peak under the regional dolerite sill just above 9 Level some 500 m north of the Blanket Mineral Deposits. From this point the body splits into two ore shoots: the AR Main and the AR South, plunging west at 55° and south-west at 58 ° respectively (MSA, June 2011).

### **AR Main**

The AR Main is a DSR-type Mineral Deposit occurring within a broad shear envelope in pillowed metabasalts. The envelope is generally irregular in plan and is bounded by shears which assist in defining the limits of the mineralisation. At the lowest level of development on 750 m Level, a shear disrupts the bodies causing the plunge to flatten to the west. The Mineral Deposit strike is between 40 m and 60 m with an average width of 30 m at the centre of the envelope.

The ore is a silicified amphibolite consisting predominantly of quartz with minor carbonate and chlorite minerals. Gold mineralisation is associated with arsenopyrite and to a much lesser extent pyrrhotite and pyrite. Finely-disseminated arsenopyrite occurs within the Mineral Deposit which form the high grade areas. Sulphide minerals seldom amount to more than 5% of the rock by volume. The Mineral Deposit is massive and is exploited using the long-hole open stoping method. It currently contributes 30% of the Blanket mine production.

### **AR South**

The AR South Mineral Deposit plunges southwest, trending towards the Blanket No 2 Mineral Deposit at depth. AR South is also developed within a broad shear zone and is more pipe-like than the main body. Its maximum thickness is approximately 50 m. High grade sections of this body are defined by siliceous arsenopyrite.

### **Eroica**

The main Blanket underground workings are connected to Lima by a 2 km long haulage which follows the strike of the main fabric. It thus offered an opportunity to probe for lateral Mineral Deposits on either side which led to the discovery of the Eroica shoot. The Eroica Mineral Deposit lies approximately 1,300 m north of the main Blanket Mineral Deposits. It dips at 65° to the west and has a strike length of 300 m in a northerly

direction. The Eroica Mineral Deposit is hosted in a high-strain area where the shear is up to 15 m wide. Brown carbonate alteration characterises the shear in strong association with biotite development. The Mineral Deposit is defined by thin silicified stringers that develop into swells of up to 5 m in width. The silicification shows pinch and swell both on strike and down-dip, resulting in a series of dismembered silicified pods developed within a particular shear. The biotite and carbonate alteration, together with the silicified stringers, form marker links between the dismembered pods. Finely-disseminated arsenopyrite, pyrite and pyrrhotite are associated with the gold mineralisation. The shoot is renowned for its high native gold content.

### **Lima**

The Lima section is situated 2 km north of the Blanket Mineral Deposits. The two mines are linked by an underground haulage. Like the Blanket Mineral Deposits, the Lima Mineral Deposits developed in very high-strain areas. The main shoots are the Hanging wall and Interlimb. In the Hanging wall limb mineralisation exists in the form of pyrite with subordinate arsenopyrite in cleavage planes within the pervasive biotite/chlorite alteration. The Interlimb is characterised by a centrally silicified core with pyrite and arsenopyrite constituting the main sulphides. The mine was initially established as a stand-alone operation after an exploration programme followed up on an intensive soil sampling exercise which indicated the presence of a major gold anomaly (MSA, 2011).

## ITEM 8 - DEPOSIT TYPES

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In greenstone belts, gold mineralisation occurs mainly as vein type or shear zone hosted disseminations. Most of the larger deposits are found within the greenstone belts or their contacts with the granitoids. All mineralisation is hydrothermally emplaced and associated with the regionally developed D2 deformation characterised (at the Blanket Mine) by areas of high strain wrapping around relatively undeformed remnants of the original basaltic flows. It is within the more ductile tensional high strain areas that the wider of the Mineral Deposits are located.

These orogenic gold deposits (also referred to as mesothermal, greenstone, shear zone related or lode gold deposits) are commonly associated with late syntectonic intermediate to felsic magmatism. Vein systems occur as a system of echelon veins on all scales. Tabular veins occur within less competent lithologies while veinlets and stringers forming stock works occur in more competent lithologies. Vein systems are often spatially associated with contacts between lithologies displaying competency contrasts. Lower-grade bulk tonnage styles of mineralisation may develop in areas marginal to veins with gold associated with disseminated sulphides in the host rock. Two broad groups of deposits based on precious metal composition were recognised by Roberts (1996):-

- Silver (Ag) rich deposits, in which the concentration of silver exceeds that of gold.
- Gold (Au) rich deposits, in which the concentration of gold exceeds that of silver. The gold and silver concentrations of both types are at the ppm level.

The gold-rich group of deposits may be subdivided into two styles of mineralisation, namely quartz-carbonate vein-hosted and disseminated sulphide replacement type mineralisation. At Blanket Mine silver has been reported up to 10% of precious metals (AGS, 2006), so that the gold-rich model may be applied. Two main types of mineralisation are recognised at Blanket mine, namely disseminated sulphide replacement reefs ("DSR") and quartz-filled reefs and shears.

### Item 8 (a) - DISSEMINATED SULPHIDE REPLACEMENT REEFS

DSRs host the best grades and comprise the bulk of the ore shoots. These zones have a silicified core with finely-disseminated arsenopyrite. Relatively high grades are found in a package of silicified biotite chlorite schist with irregular quartz stringers and disseminated and stringer arsenopyrite in the fabric planes. Due to lesser silicification, abundant biotite characterise the margins of these mineralised zones and as a result they have a lower gold content. Disseminated sulphide-replacement Mineral Deposits range up to 50 m in width with a strike of between 60 m and 90 m. Free-milling gold constitutes up to 50% of the total metal content with the remainder locked in the arsenopyrite. The ore is not refractory despite its association with arsenopyrite. Generally, plant recoveries in excess of 90% are achieved.

### Item 8 (b) - QUARTZ-FILLED REEFS AND SHEARS

The second type of mineralisation is the quartz-filled reefs and shears. Two quartz shears are mined at the Blanket Mine: the Blanket Quartz Reef and the Eroica Reef. These reefs have long strikes, however, they are not uniformly mineralised. Continuous pay shoots of over 100 m on strike are not present. The Quartz Reef at the Blanket Mine has a surface strike of approximately 500 m, but economic mineralisation is restricted to three 90 m long shoots which were defined on surface by the early workers (AGS 2006). Quartz-filled reefs display a much wider grade range compared to the DSR deposits. On average, these shears are of a higher grade and are used in blending the ore to the mill. Dominant ore minerals are native gold and galena although arsenopyrite becomes more prevalent below the 470 m elevation.

Increasing levels of arsenopyrite association with depth confirm that the quartz shears represent higher level offshoots and splays with brittle deformation relative to the more ductile DSR-type core zone mineralised bodies (AGS 2006). See Item 8 (c) for the mineralisation characteristics of the Mineral Deposits forming the Blanket Mine property (MSA, J2225 Blanket Mine NI 43-101 Technical Report - June 2011).



**Item 8 (c) - MINERALISATION**

Wall rock alteration typically comprises silica–pyrite–muscovite within a broader carbonate alteration halo. Quartz-carbonate altered rock forms the most commonly recognised alteration assemblage.

Gold is deposited at crustal levels within and near the brittle-ductile transition zone at:-

- depths of between 6 km and 12 km;
- pressures between 1 and 3 kilobars; and
- temperatures between 200° C and 400° C.

The deposits may have a vertical extent of up to 2 km, demonstrate extensive down-plunge continuity, and lack pronounced zoning. The ore mineralogy is dominated by gold, pyrite and arsenopyrite. Subordinate minerals such as galena, chalcopyrite, pyrrhotite, sphalerite, tellurides, scheelite, bismuth and stibnite also occur. Sulphide mineralogy commonly reflects the litho-geochemistry of the host rock with arsenopyrite being the most common sulphide mineral in metasedimentary host rocks and pyrite or pyrrhotite being more typical in metamorphosed igneous hosts. The gangue and alteration mineralogy is dominated by quartz and carbonate (ferroan dolomite, ankerite, siderite, calcite) with subordinate albite, fuchsite, sericite, muscovite, chlorite and tourmaline.

## ITEM 9 - EXPLORATION

The majority of the exploration drilling currently conducted at the Blanket mine is referred to as "deep" drilling, as it is drilled from underground cross-cuts. This drilling is aimed at the depth extensions of the various pay shoots or shafts. Surface exploration drilling has been focused around the GG and Mascot Projects (Figure 14). Two exploration programmes were completed here; one in 1997 and the other in 2013. These two areas are now being explored with underground development at the two exploration shafts (Figure 15).

Figure 14: Location of GG and Mascot Exploration Shafts

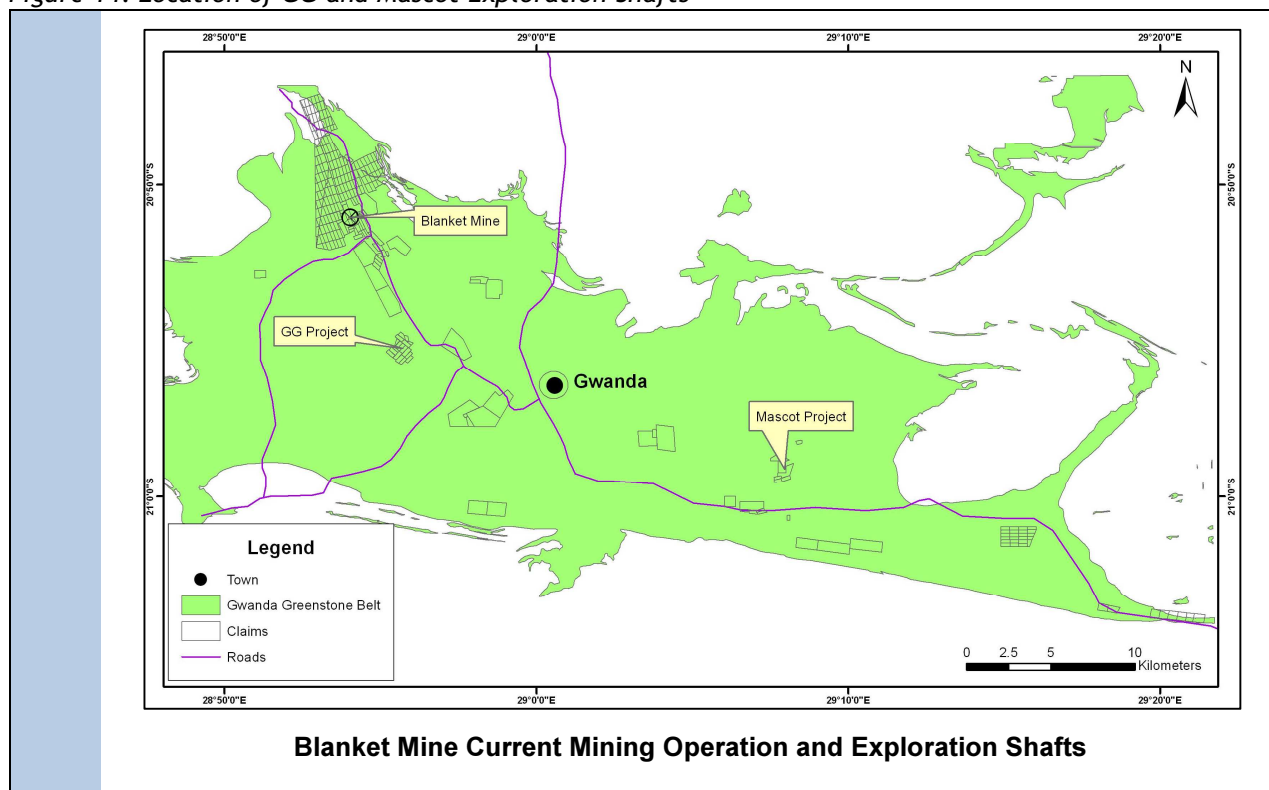
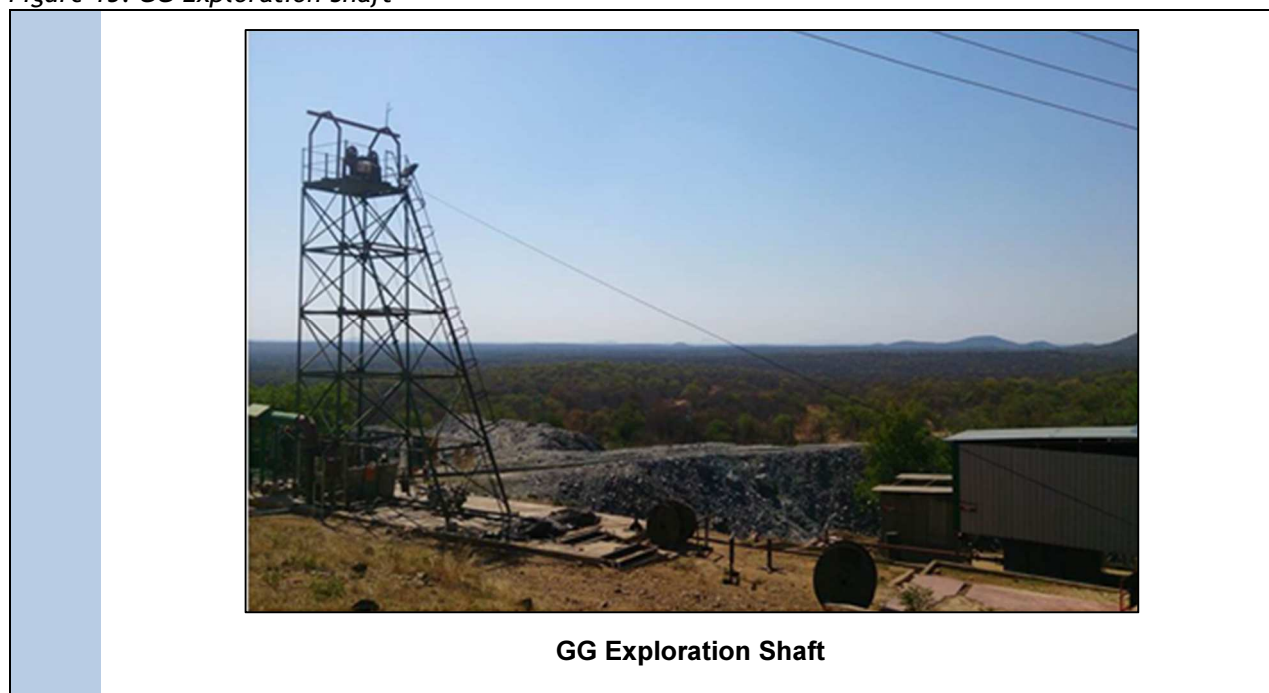


Figure 15: GG Exploration Shaft



## **Item 9 (a) - SURVEY PROCEDURES AND PARAMETERS**

This section summarises the exploration activities other than drilling undertaken during the history of the Blanket Mine. As part of the exploration/delineation of the Mineral Deposits in the underground operations the Blanket Mine conducts the following:-

- Mineralised zones are explored by means of development drives mined along the strike of the shear zones. Evaluation drill holes are drilled from these drives every 7.5 m from cubbies to assist in the delineation of the Mineral Deposits. The delineation of the mineralised zone is based on the geology and the grade above 1.96 g/t.

The above data is captured on 1:250 scale plans or multiples of the 1:250 scale. The sampling and mining data are captured on the following plans to capture the grade and volumes of the Mineral Deposits as ore resource blocks as well as the mined voids for depletion purposes:-

- The main survey plans are the main level plans and 15 m sub-level plans. Survey pegs are installed at about 30 m intervals to guide the development. All core drilling is indicated on these plans.
- There are assay plans which display the development with the chip sampling, sludge sampling and evaluation drilling sampling (Figure 16).
- Stope assay plans capture the stoping and the stope assaying.
- Geological plans to help delineate the Mineral Deposits.
- Due to the vertical nature of the Mineral Deposits there are also longitudinal projection assay plans.

The above survey procedures and plans assist in the accurate capturing of the Mineral Deposits.

## **Item 9 (b) - SAMPLING METHODS AND SAMPLE QUALITY**

Data from the following is used to generate Mineral Resource blocks at the Blanket Mine:-

- underground core;
- channel (chip) sampling;
- percussion drilling;
- sludge sampling;
- evaluation drilling; and
- some deep diamond cored holes drilled from surface or underground platforms.

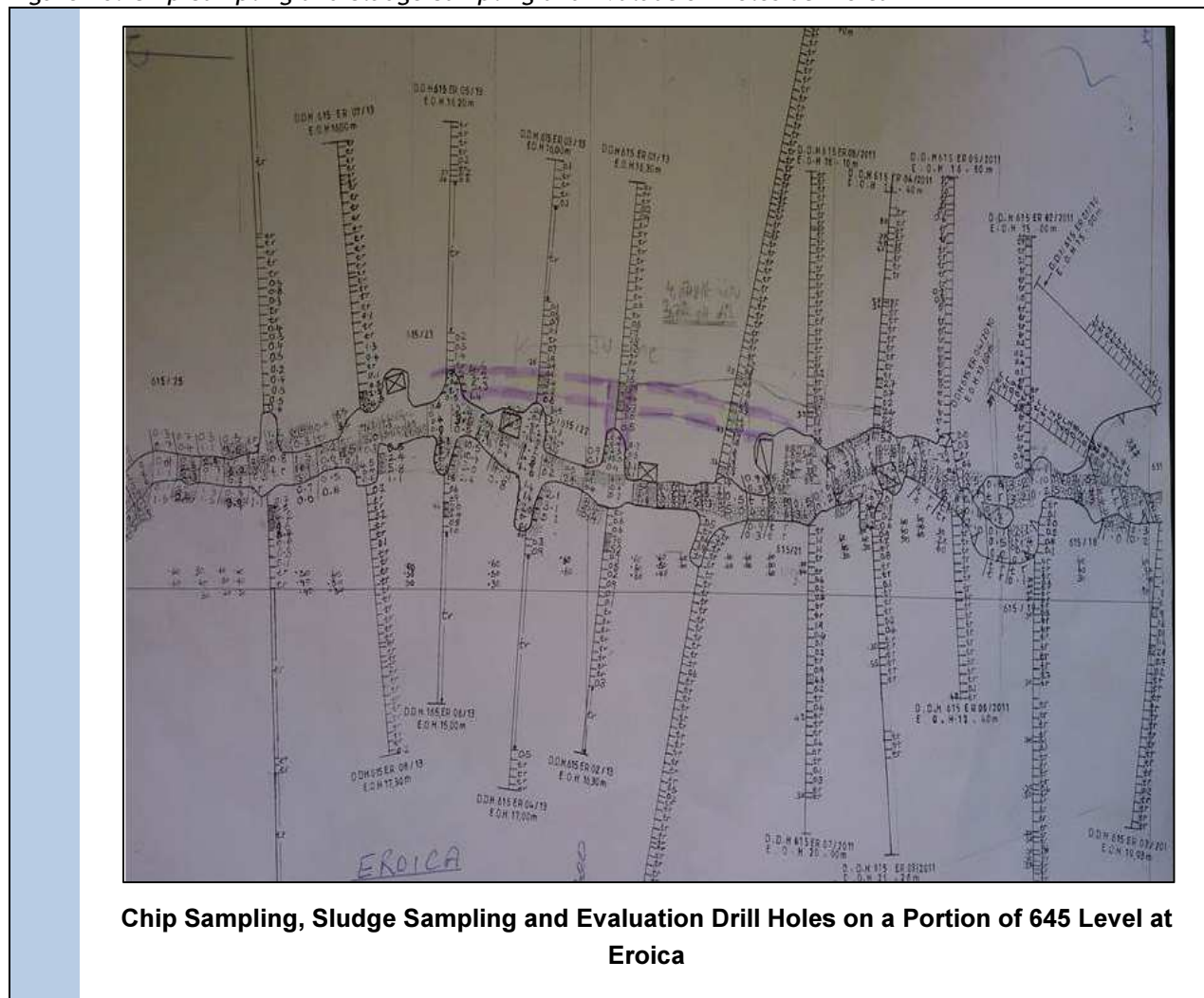
The chip sample sections are taken every 2 m in the roof of the development in the Mineral Deposits except for Jethro and Blanket (every 1.5 m). The individual samples are 0.6 m long or less, depending on their geological nature. The same applies to the evaluation drill sampling lengths. In the case of the percussion/sludge sampling, the drill discharge water is captured in cloth sample bags. The water seeps out of the bag leaving only the sludge. The accuracy of this method is debatable, but it does give an indication of the mineralisation. Closely spaced horizontal drilling in the DSR Mineral Deposits is done in order to define Measured Resources. These holes are drilled along strike of the mineralised zone from cubbies in the sidewalls of the drives located in the centre. The drill hole spacing required for the definition of Measured Resources should not be more than 7.5 m. Percussion holes are drilled every 2 m in the DSR Mineral Deposits in which the mineralised zone is not expected to be more than several metres wider than the development drift (drive). The sludge from percussion drilling is sampled as an extension of the channel sampling pattern. Channel sampling alone is done on the narrow quartz reefs.

All three sampling methods are utilised in the evaluation of the resources and the effect of the mixing of the various types of sampling data in the evaluation has not been assessed. By the nature of the sampling methodologies the chip sampling (from the roof) and sampling of the evaluation drill holes have a higher confidence than the sludge sampling.

### Item 9 (c) - SAMPLE DATA

The density and type of the sampling for the evaluation of the Measured and Indicated resources are described above and presented in Figure 16. Deep hole drilling is carried out to determine the depth extensions of the pay shoots. These are drilled predominantly from drilling platforms (cross-cuts) underground. Surface drill holes are limited due to the depth at which the mining is taking place. The intersections of these drill holes are used as sample points in the evaluation of the drilled Indicated and Inferred resource blocks. The parameters for these resource classifications are discussed in Item 14 (a).

Figure 16: Chip Sampling and Sludge Sampling and Evaluation Holes at Eroica

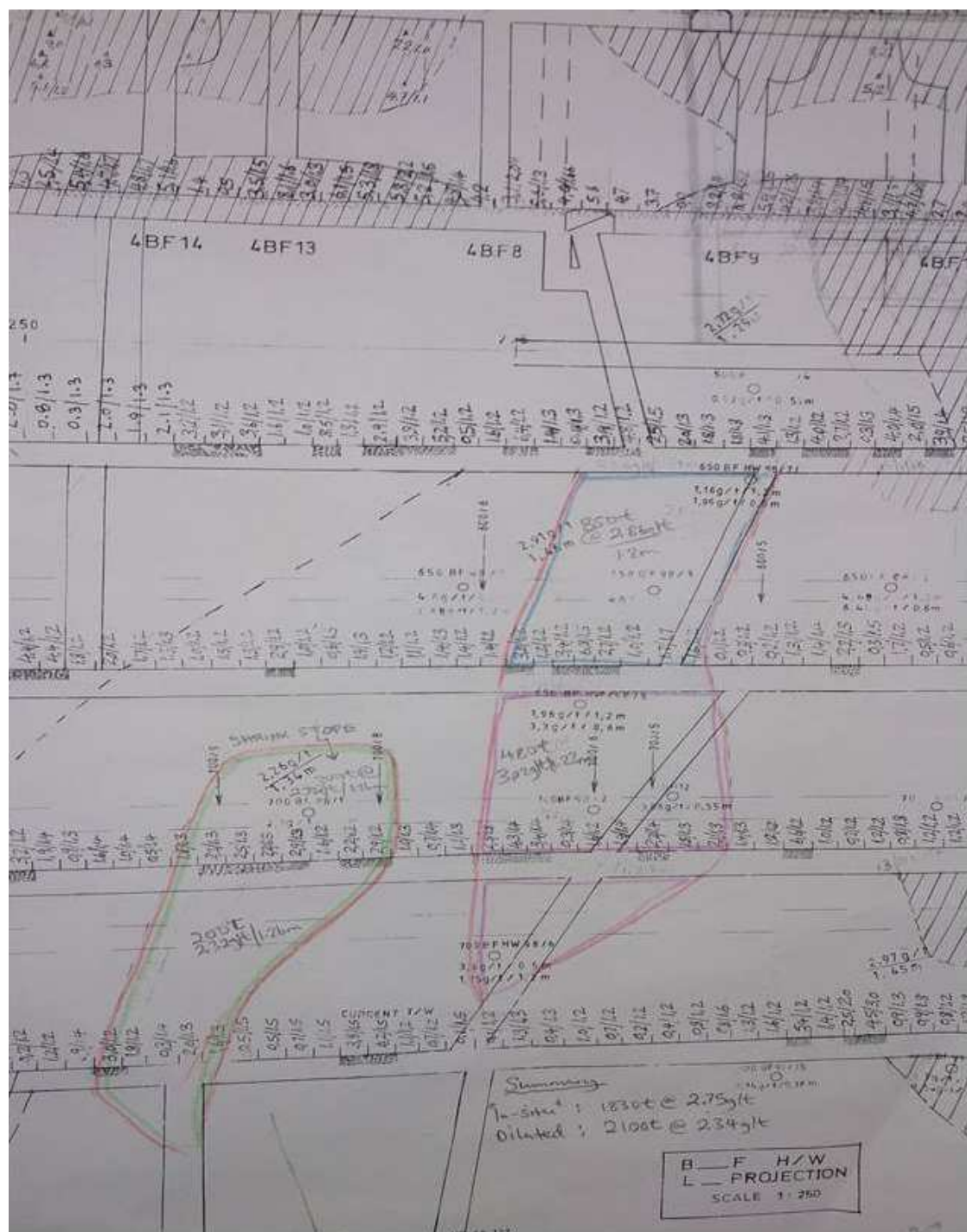


Chip Sampling, Sludge Sampling and Evaluation Drill Holes on a Portion of 645 Level at Eroica

### Item 9 (d) - RESULTS AND INTERPRETATION OF EXPLORATION INFORMATION

The delineation/interpretation of the Mineral Deposits or mineralised zones is based on geological data as well as the grade from the chip, sludge and evaluation drilling sampling. The cut-offs for these purposes are based on a gold price of USD1,300/oz. and a cost of USD70.44/t. Using these parameters, the current cut-off for the mineralisation delineation is 1.96 g/t. The cut-off utilised is the same for all the Mineral Deposits. Figure 17 illustrates the delineation of the mineralised zones using the 1.96 g/t cut-off. These portions will be blocked as resource blocks, by level, and will be part of the resource block listing after evaluation.

Figure 17: An Example of a Vertical Projection Using the Chip Sampling to Delineate the Payable Mineral Deposit



An Example of a Projection Using the Chip Sampling to Delineate the Mineralised Mineral Deposit



## ITEM 10 - DRILLING

The majority of the surface drilling was conducted by Kinross; the 1997-2006 drilling campaign was their last campaign. Caledonia Mining is continuing with the deep drilling exploration to assist with the evaluation of the depth extensions of the Mineral Deposits. Currently, there is one drill rig at the AR main Mineral Deposit and a second at the Blanket extension. No additional surface drilling is contemplated at the Blanket mine. However, in 2013 Caledonia completed additional surface drilling at the two satellite targets, GG and Mascot. Currently, no surface drilling is taking place as the exploration is being conducted by means of exploration shafts.

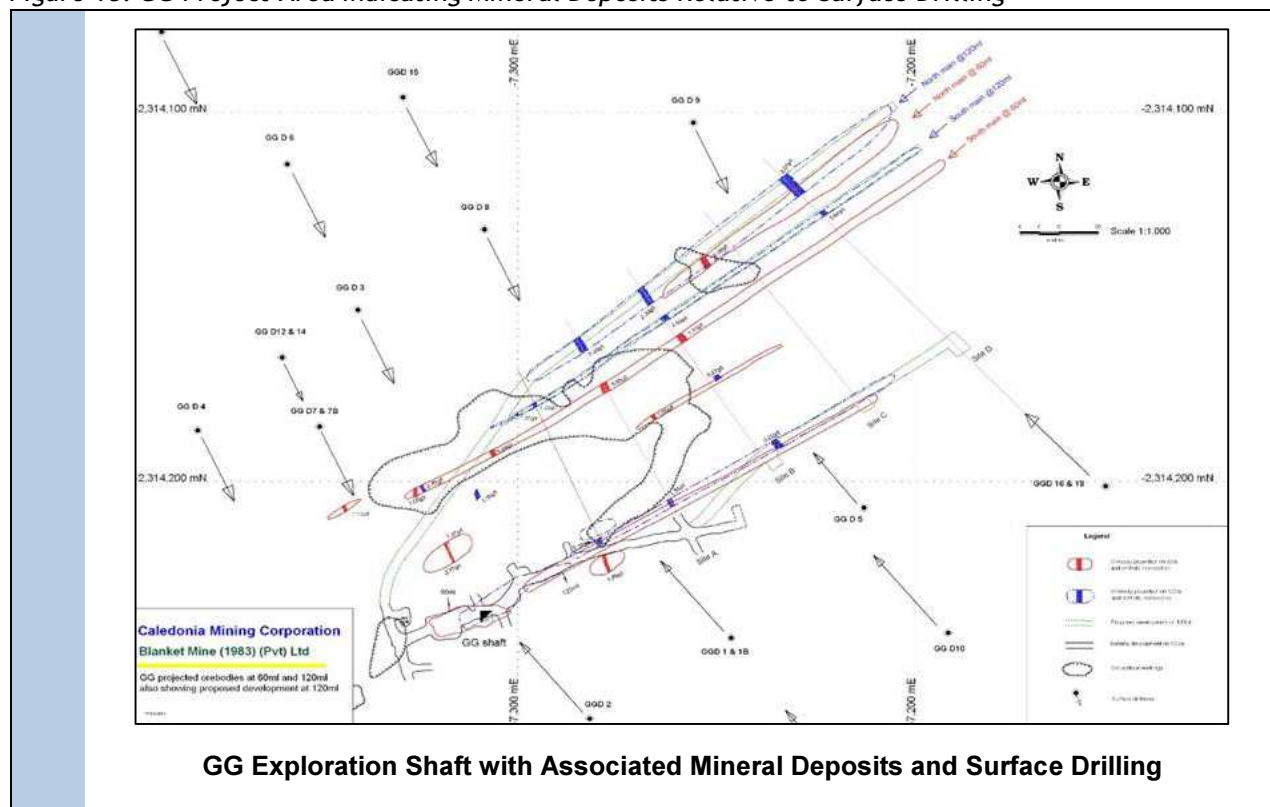
### Item 10 (a) - TYPE AND EXTENT OF DRILLING

#### Surface Drilling Procedures

There was no surface drilling in progress at the time of the site visit. The majority of the drill hole data is historical data from 1997 or earlier. Figure 18 depicts the historical surface drilling completed at GG. The most recent drilling was conducted by Caledonia at the GG and Mascot Projects in 2013. This drilling campaign was drilled using BQ diameter with no deflections. The core was transported by the geologist to the Blanket Mine where the core yard is located; all logging and sampling was completed here. The drill hole identification number and box numbers were clearly marked onto the upper side and face of each core tray. The drill core was put together to ensure that all pieces fit, no core was missing and that orientation lines were consistent. Core recoveries were reconciled by the Geologist at 3 m intervals to ensure that no core was missing. The core recoveries were recorded on geotechnical logging sheets with all core losses being noted on the log sheet. Core recoveries of less than 95% were not accepted.

Down hole surveys were carried out from the collar, every 50 m (at least 3 m) along the hole or as agreed upon with the Geologist. The entire drill core was logged by the Geologist/Geological Technician as per Blanket Mine core logging procedures.

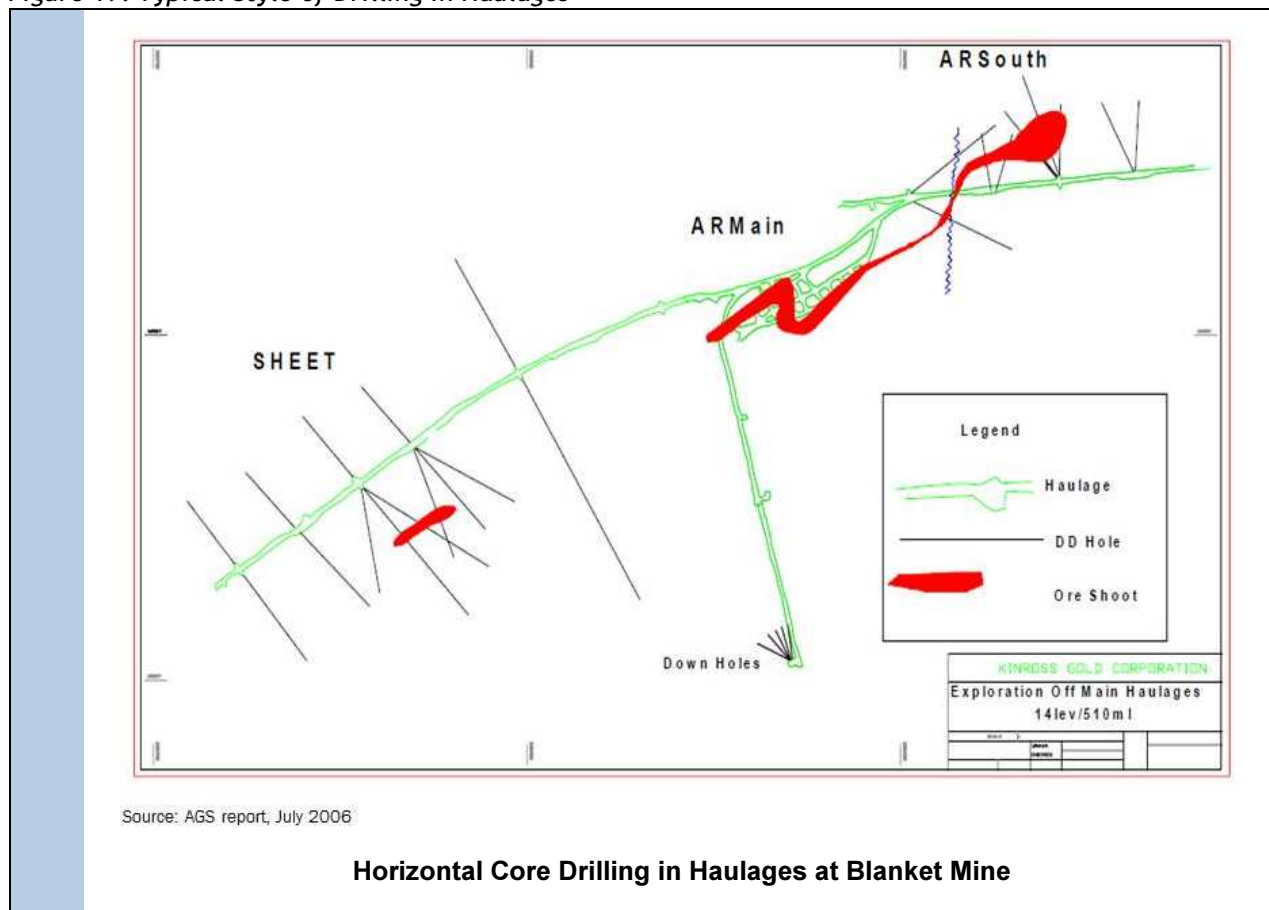
Figure 18: GG Project Area Indicating Mineral Deposits Relative to Surface Drilling



### Underground Drilling

Diamond drilling is the main method of exploration used by the mine to increase the resource base. Diamond drilling is also used for probing for extensions of existing Mineral Deposits. For horizontal core drilling (evaluation drilling) AXT diameter core (which is described in the previous section) is used. This drilling is also used to locate additional mineralised zones in the hanging wall and footwall of the main reefs. Figure 19 shows an example of the exploration core drilling conducted at the underground Blanket mine. The deep drilling, which explores for the depth extensions, are drilled from the cross-cuts (Figure 19).

*Figure 19: Typical Style of Drilling in Haulages*



The generation of Measured Mineral Resources is achieved by drilling more closely spaced horizontal drill holes (at 7.5 m intervals) through the DSR Mineral Deposits. The drilling is done from cubbies off a drive located in the centre of the mineralised zone and along the strike of the mineralised zone. A cross-section of one of the deep drilling holes is shown in Figure 20. This cross-section shows the surveyed path, geology, survey and sampling data, all of which are used as the sampling point data for further resource block valuations.

The diagram is a geological cross-section of a borehole. The vertical axis represents depth, with labels such as 0, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900, 4000, 4100, 4200, 4300, 4400, 4500, 4600, 4700, 4800, 4900, 5000, 5100, 5200, 5300, 5400, 5500, 5600, 5700, 5800, 5900, 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700, 6800, 6900, 7000, 7100, 7200, 7300, 7400, 7500, 7600, 7700, 7800, 7900, 8000, 8100, 8200, 8300, 8400, 8500, 8600, 8700, 8800, 8900, 9000, 9100, 9200, 9300, 9400, 9500, 9600, 9700, 9800, 9900, 10000. The horizontal axis represents distance from the borehole, with labels such as 0, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900, 4000, 4100, 4200, 4300, 4400, 4500, 4600, 4700, 4800, 4900, 5000, 5100, 5200, 5300, 5400, 5500, 5600, 5700, 5800, 5900, 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700, 6800, 6900, 7000, 7100, 7200, 7300, 7400, 7500, 7600, 7700, 7800, 7900, 8000, 8100, 8200, 8300, 8400, 8500, 8600, 8700, 8800, 8900, 9000, 9100, 9200, 9300, 9400, 9500, 9600, 9700, 9800, 9900, 10000. The diagram shows a borehole profile with various geological layers labeled. A legend on the right side identifies symbols for different rock types and features. A table of 'SURVEY DATA' is provided, listing depth, temperature, and other measurements. The diagram is titled 'LITHA' and 'Borehole'.

**LITHA**

**Borehole**

**SURVEY DATA**

Depth (m)	Temperature (°C)	Pressure (MPa)	Strain (%)	Stress (MPa)	Volume (%)	Mass (%)	Porosity (%)	Permeability (D)	Seismicity
0	15.0	0.1	0.0	0.0	100.0	100.0	0.0	0.0	0.0
100	16.0	0.2	0.1	0.1	99.9	99.9	0.1	0.0	0.0
200	17.0	0.4	0.2	0.2	99.8	99.8	0.2	0.0	0.0
300	18.0	0.6	0.3	0.3	99.7	99.7	0.3	0.0	0.0
400	19.0	0.8	0.4	0.4	99.6	99.6	0.4	0.0	0.0
500	20.0	1.0	0.5	0.5	99.5	99.5	0.5	0.0	0.0
600	21.0	1.2	0.6	0.6	99.4	99.4	0.6	0.0	0.0
700	22.0	1.4	0.7	0.7	99.3	99.3	0.7	0.0	0.0
800	23.0	1.6	0.8	0.8	99.2	99.2	0.8	0.0	0.0
900	24.0	1.8	0.9	0.9	99.1	99.1	0.9	0.0	0.0
1000	25.0	2.0	1.0	1.0	99.0	99.0	1.0	0.0	0.0
1100	26.0	2.2	1.1	1.1	98.9	98.9	1.1	0.0	0.0
1200	27.0	2.4	1.2	1.2	98.8	98.8	1.2	0.0	0.0
1300	28.0	2.6	1.3	1.3	98.7	98.7	1.3	0.0	0.0
1400	29.0	2.8	1.4	1.4	98.6	98.6	1.4	0.0	0.0
1500	30.0	3.0	1.5	1.5	98.5	98.5	1.5	0.0	0.0
1600	31.0	3.2	1.6	1.6	98.4	98.4	1.6	0.0	0.0
1700	32.0	3.4	1.7	1.7	98.3	98.3	1.7	0.0	0.0
1800	33.0	3.6	1.8	1.8	98.2	98.2	1.8	0.0	0.0
1900	34.0	3.8	1.9	1.9	98.1	98.1	1.9	0.0	0.0
2000	35.0	4.0	2.0	2.0	98.0	98.0	2.0	0.0	0.0
2100	36.0	4.2	2.1	2.1	97.9	97.9	2.1	0.0	0.0
2200	37.0	4.4	2.2	2.2	97.8	97.8	2.2	0.0	0.0
2300	38.0	4.6	2.3	2.3	97.7	97.7	2.3	0.0	0.0
2400	39.0	4.8	2.4	2.4	97.6	97.6	2.4	0.0	0.0
2500	40.0	5.0	2.5	2.5	97.5	97.5	2.5	0.0	0.0
2600	41.0	5.2	2.6	2.6	97.4	97.4	2.6	0.0	0.0
2700	42.0	5.4	2.7	2.7	97.3	97.3	2.7	0.0	0.0
2800	43.0	5.6	2.8	2.8	97.2	97.2	2.8	0.0	0

The exploration and deep drilling core is sampled every 0.6 m, as a standard, except when a smaller sample length is required for geological reasons. The core is split and one half is sent to the mine laboratory for sample preparation. The pulp is split in two and one sample is assayed at the mine laboratory with the second sample being sent to Duration Laboratory in Bulawayo or Harare. According to Dr Trevor Pearton, vice president of exploration, these laboratories are accredited. However, the certificates of accreditation were not available for inspection. The evaluation drill holes are not split; the entire sample is sent away for analysis.

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Prepared by Minxcon (Pty) Ltd

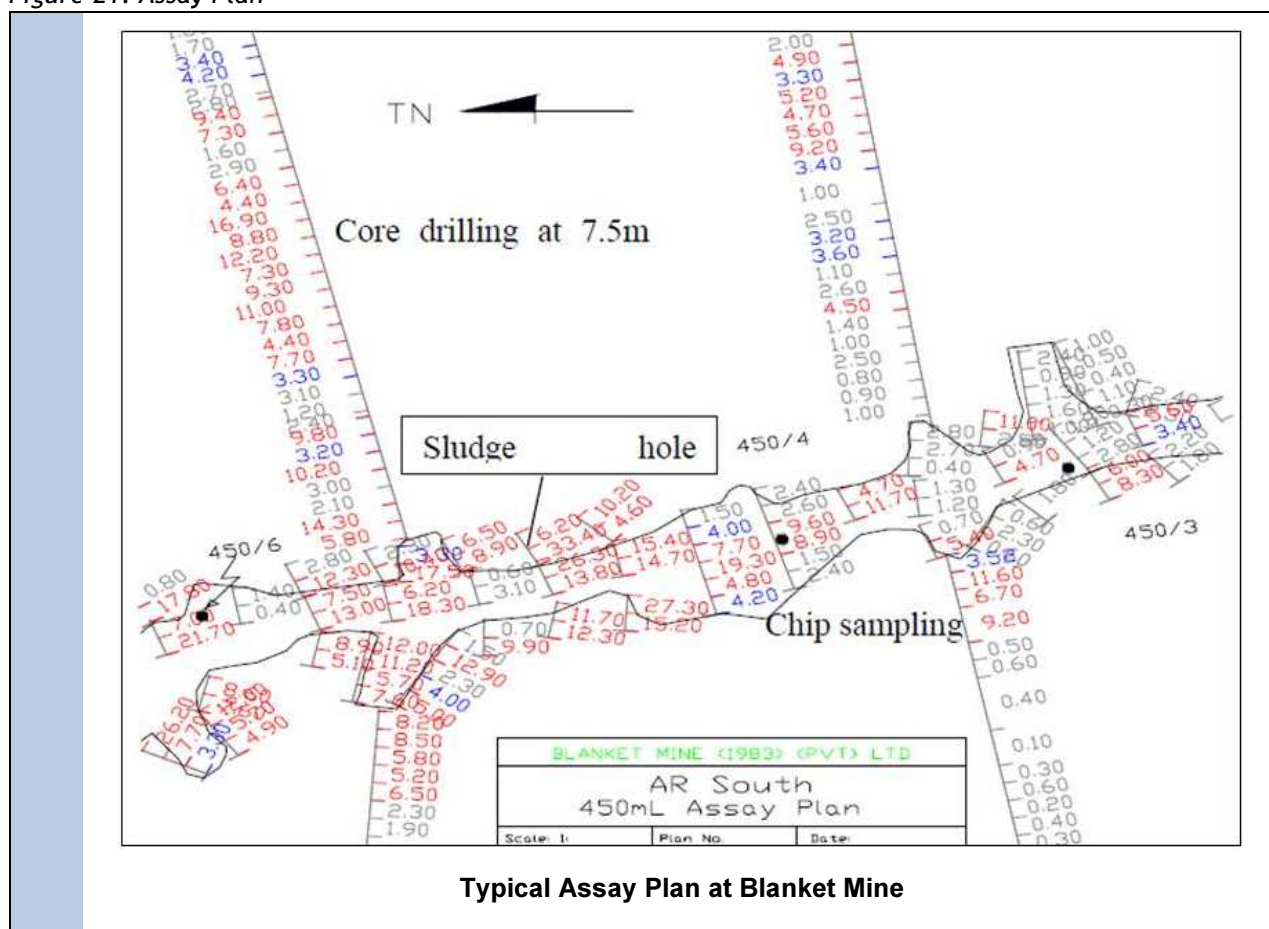


### Underground Chip Sampling Procedures

The process of chip sampling was not observed during the site visit. The underground channel/chip sampling, which is taken in the roof, has similar sampling protocols. The distance from a known survey peg to the first sample section is noted. Subsequent sample sections are marked at 2 m intervals on the back of the drives on strike. Samples are taken every 0.6 m across the drive on the section starting from the hanging wall to the footwall. Where there are discrepancies between assay results and the visual grade estimation, a channel is cut across the mineralised zone with a diamond saw in order to improve the geometry of the sample groove. In wider Mineral Deposits where not all the mineralisation is exposed by the primary development, sidewall sludge holes are drilled to a depth of 1.2 m. In pinch-and-swell Mineral Deposits, like Eroica, the width of the transverse section is determined by the lithology, e.g. a 0.2 m quartz vein is sampled separately over its width. A sample weight of about 2 kg is collected in each instance.

Both chip and sludge samples (Figure 21) are taken to give a complete section across the strike at standard 0.6 m intervals. In all of the mineralised zones, except the very wide AR Main and AR South bodies, only 4.2 m is sampled across the strike and any mineralisation beyond these limits is not included in resource. The unsampled payable sections are mined, but reported as coming from not-in-reserve (“NIR”) blocks. An exception to the standard 0.6 m channel sample interval occurs in the quartz shear deposits where lithology determines the sampled width when the vein is less than, or not a multiple of, 0.6 m. Cross-cuts through very wide Mineral Deposits are treated in the same way as evaluation core drilling and the sidewalls are sampled at 0.6 m intervals.

Figure 21: Assay Plan



### Item 10 (b) - FACTORS INFLUENCING THE ACCURACY OF RESULTS

No geotechnical core recovery logs were observed for the historical and underground deep exploration holes during the site visit, so the impact of this on the accuracy of drill hole assay is uncertain. In the case of the underground chip sampling the high volume of samples taken would reduce the impact of isolated

inaccuracies. However, in the case of the underground exploration drilling the frequency of samples is lower and therefore the recovery records are important from an accuracy point of view.

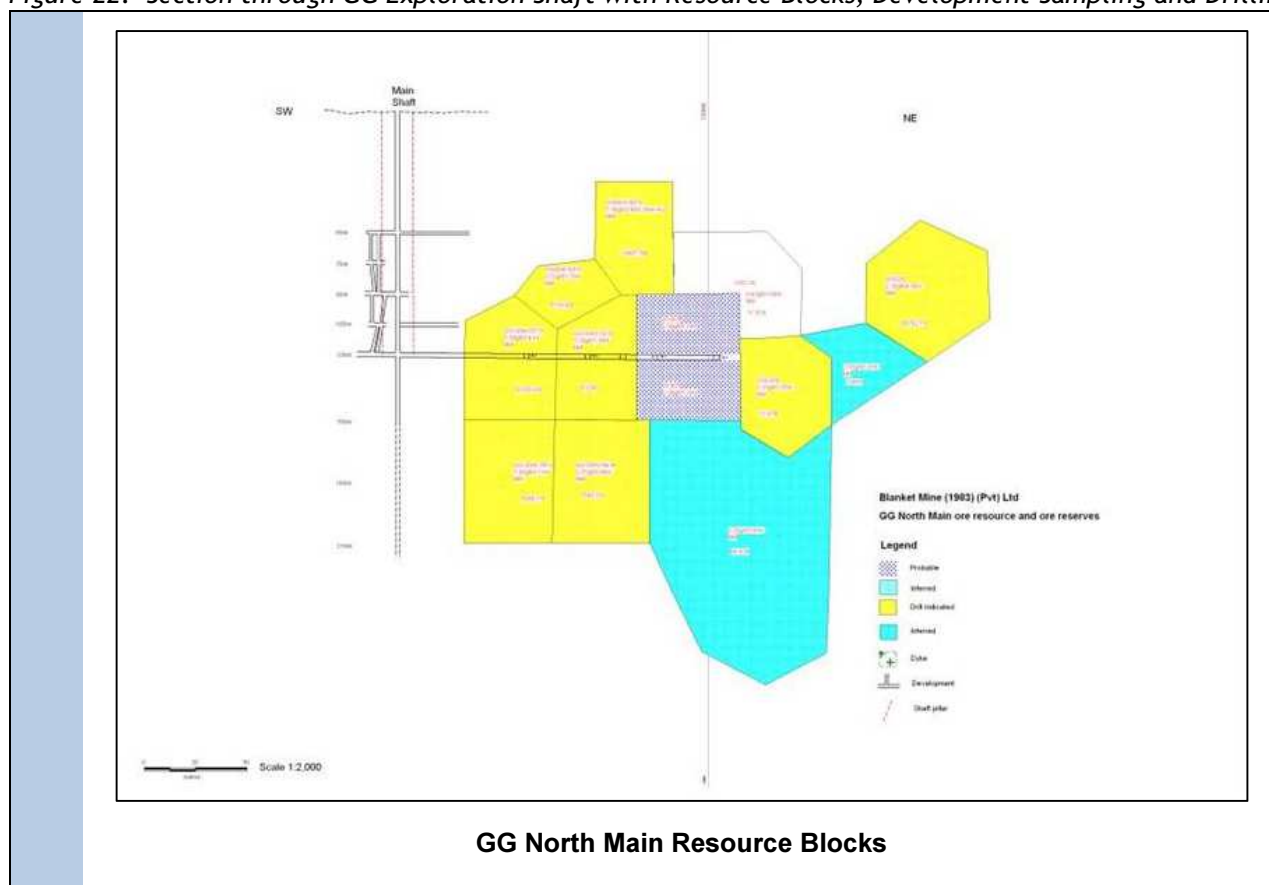
The sludge samples, by the nature of their sampling, have inherent inaccuracies. Measures are taken to reduce these by flushing the hole between samples, and using cloth sample bags and individual sample ticket numbers. The fines in these samples are washed away and therefore there could be a bias introduced to the sampling process.

The drilling sample data points are based on a single intersection with no deflections. Due to the variability in this type of Mineral Deposit, Minxcon considers it prudent to drill an additional short deflection, for the deep drilling and surface exploration holes.

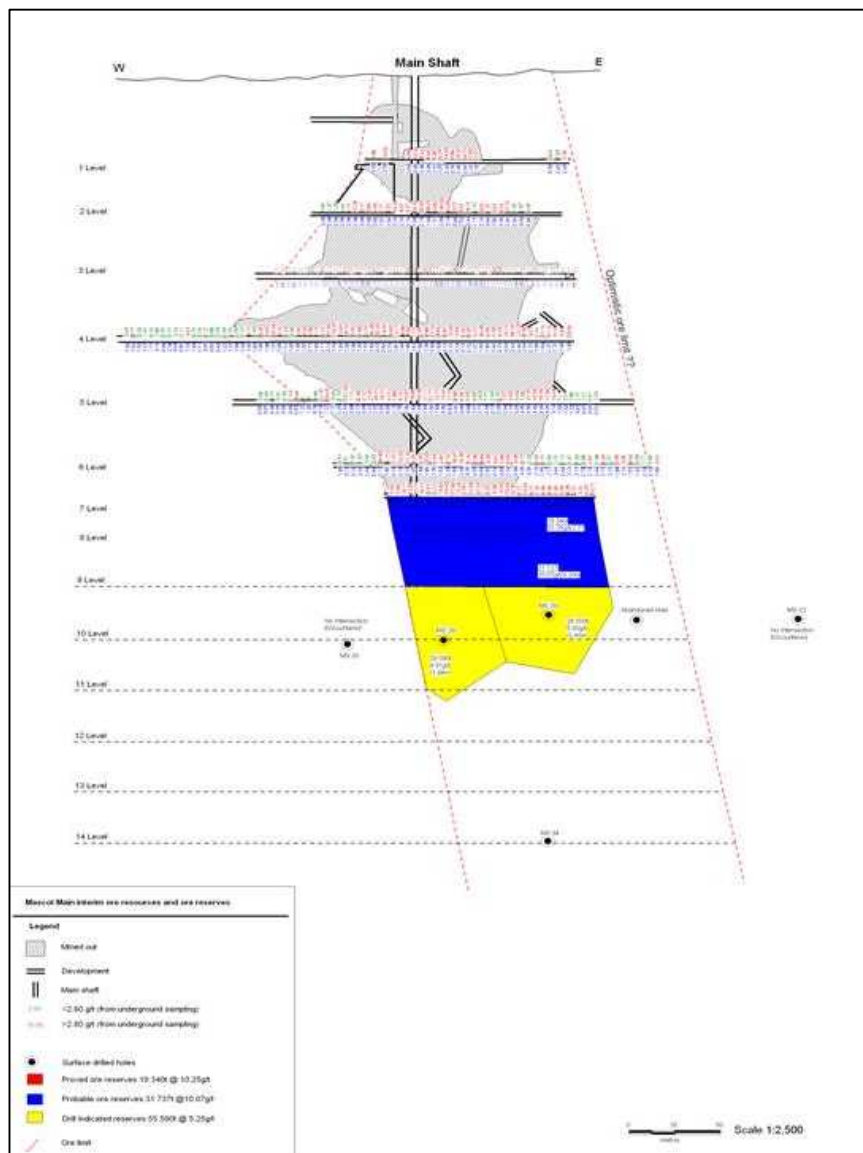
### Item 10 (c) - EXPLORATION PROPERTIES - DRILL HOLE DETAILS

There are two satellite exploration sites that are being developed by Blanket Mine. These are the GG and Mascot sites. The sites are exploration shafts that have a combination of historical surface drilling, underground lateral drilling as well as on-reef sampling. Figure 22 shows the section through the GG exploration shaft with the associated development and resource blocks. The GG shaft has two mineralised zones - the South Main and North Main reefs. The Mascot shaft is represented in Figure 23 and Figure 24 which show the working plans of the Mascot Main parallel reef and the South parallel reef respectively. Resources were first declared for these two shafts in 2014. These resources are stated in the Mineral Resources section.

*Figure 22: Section through GG Exploration Shaft with Resource Blocks, Development Sampling and Drilling*

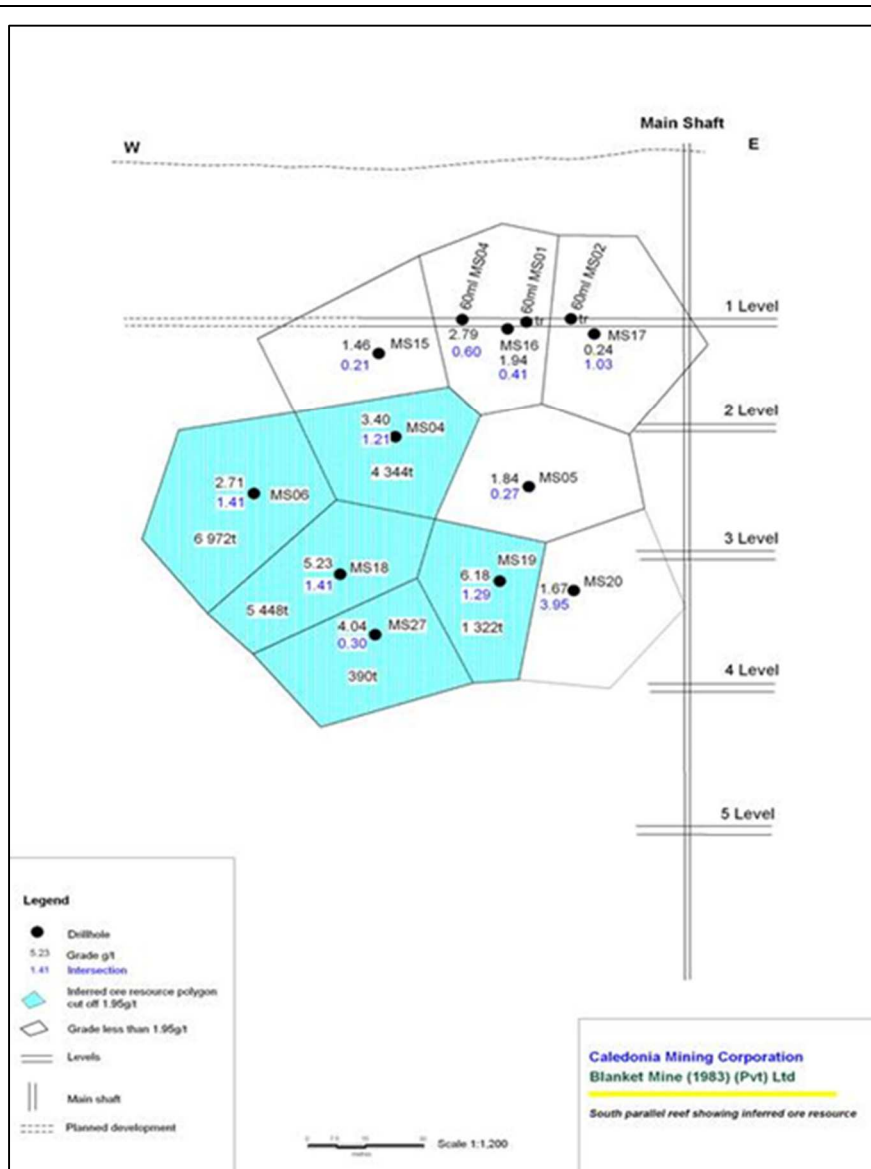


**Figure 23: Mascot Main Reef Resource Blocks as Defined by Historical Development Sampling and Current Drilling**



**Mascot Surface Drilling and Resource Blocks**

Figure 24: Mascot South Parallel Reef Projection Indicating Resource Blocks as Defined by Drill Hole Intersections



Mascot South Parallel Reef with Resource Blocks and Drill Hole Intersections

## ITEM 11 - SAMPLE PREPARATION, ANALYSES AND SECURITY

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### Item 11 (a) - SAMPLE HANDLING PRIOR TO DISPATCH

The management of drilled core at the drilling sites and its transportation (surface and underground) to the laboratory rests with the responsible Mine Geologist and or Geological Technician. At the drilling site, the Geologist/Technician:-

- Ensures that all core is sequentially laid down in core boxes which are kept secure and guarded against possible mixing.
- Checks the drillers to ensure core obtained attains a recovery of at least 95%.
- Ensures that all core boxes are collected at the end of the drilling shift. The core boxes are secured and transported to the core yard where they are entered into a log book, logged and sampled within 3 days.
- Places the boxes containing the core in the correct sequence and identifies the mineralised zones.
- Marks samples at 0.6 m intervals in nearly homogeneous mineralised zones. Selective sampling intervals are employed on mineralised units with unique features e.g. colour, concentration of mineralisation, alteration, and mineralogy.
- Splits the core into two halves (after completing marking) and then breaks at the marked intervals.
- Inserts blank samples (dolerite dyke material) at a minimum rate of 1 blank sample after every 20 samples and with duplicates inserted randomly in every batch of samples to the laboratory.

Measures taken to ensure the validity and integrity of samples taken include using the following three types of sample bags:-

- Cloth sample bags (for sludge sampling) to allow for effective decanting of water while retaining the sample. Since more than one sample is taken from the sludge hole, the hole is flushed thoroughly with water before drilling and collecting the next sample.
- Plastic sample bags are used in continuous chip and grab sampling.
- Paper bags are used for sampling on-site core. The above bags are used once and discarded to minimise contamination. A ticket tagging system is used with sketches drawn at the face showing the ticket numbers corresponding to the samples taken. On receipt from the laboratory, results are plotted on the assay plan against the corresponding ticket numbers.

### Item 11 (b) - SAMPLE PREPARATION AND ANALYSIS PROCEDURES

#### Borehole Samples

Boxes containing the core are laid out in the correct sequence and mineralised zones are identified. Samples are marked at 0.6 m intervals in nearly homogeneous mineralised zones. Selective sampling intervals are employed on mineralised units with unique features e.g. colour, concentration of mineralisation, alteration and mineralogy.

Once the samples have been marked, the core is split into two halves and broken at the marked intervals in accordance with the company's core cutting procedure. The two halves from the same interval are assigned and marked with the same ID, but with the additional labels, e.g. A1 or A2 for the half that is retained and B1 or B2 for the half that will be bagged. Also included in the assignment of sample IDs is a blank sample. At the Blanket mine the blank sample used is dolerite dyke. Certified reference materials are occasionally inserted by the Laboratory Supervisor. However, no records of this were available.

The halved core samples that are to be bagged are placed into sample bags with corresponding sample IDs. Individual sample bags from each intersection are sent to the in-house Blanket Mine laboratory for gold determinations. At the laboratory a sample submission sheet listing all sample numbers is completed. As a check control, residue pulp from duplicate samples are extracted from the samples at the Blanket Mine Laboratory and sent to another laboratory for independent assaying. All mineralised (payable) intersections from the deep drilling programme and the exploration surface drilling are sent to an external laboratory for check assay.

**Item 11 (c) - QUALITY ASSURANCE AND QUALITY CONTROL**

During the site visit no QA/QC protocols were readily available. QA/QC procedures should be documented and revised to adapt to changing conditions. Very few QA/QC samples are introduced into the sample stream, be that for the underground chip and sludge samples or the drilling samples (evaluation or exploration). This is evident in the fact that no QA/QC plots were available to check. Therefore, there is no tracking of re-assays or whether they were conducted or not. In the case of the day-to-day production and development, sludge and evaluation drilling samples might not be as crucial due to the high volume of samples being processed. However, in the case of the deep drilling and surface exploration drilling it is crucial that a high QA/QC standard is maintained as these are single sample points that are utilised for resource evaluation purposes.

Best QA/QC practices require that CRMs, blanks and duplicates are introduced into the sample stream to test for accuracy and precision. Industry standard assay QA/QC protocols require that percentages introduced generally range from 10% to 20% depending on the type of Mineral Deposit and operation. In the case of the Blanket operation only dolerite blanks are introduced into the sampling stream of the surface exploration but not for the other sampling. The exploration drilling pulp (which is prepared at the mine laboratory) is split in two and one sample is sent to an external laboratory (Duration) in Bulawayo or Harare (Performance Labs) (according to mine personnel this laboratory is accredited). The records of the QA/QC should be documented as part of best practice. Blanket Mine must review the QA/QC protocols and ensure that best practice is implemented in the future, especially for the deep drilling and exploration drilling samples.

Minxcon does, however, still deem the sampling data base to be acceptable for resource estimation.

**Item 11 (d) - ADEQUACY OF SAMPLE PREPARATION**

The mine laboratories were inspected by Mr Dario Clemente and even though the mine laboratory is not accredited, it employs good housekeeping, suggesting a fairly high standard (refer to Item 13). As part of its external verification process the mine laboratory sends samples away to Duration, Met Solution and Performance Laboratories (accredited according to the mine personnel), to test their precision and accuracy. Minxcon was supplied with figures for January, April, July and August 2014 which (apart from April) had a good correlation coefficient. In addition, the laboratory makes use of standard reference material which it sources from Geostats in Australia or AMIS from South Africa. Graphs, which show a good correlation, were supplied to Minxcon. The laboratory is manually operated and does not have an electronic tracking system. The implementation of a Laboratory Information Management system ("LIMS") will assist in reducing human error. The sample preparation methodology could be improved but is considered to be adequate for Mineral Resource estimation purposes given the good correlation between planned grades and actual recovered grades in the plant.



During the site visit, the Qualified Person reviewed the data utilised for the Mineral Resource estimation of the mine in order to independently verify the data. Due to time constraints and the manual nature of the large database, only spot checks were done. These checks focused on the data flow process to verify the data from the sampling stage to the resource block listing which makes up the resource statement; this data forms the basis for the geological model. The historical data is currently being captured digitally which will minimise human error in data flow as well as assist in visualising the complex geology in 3D.

As part of the verification process the development assay plans were checked in terms of the displayed data and how it feeds into the mineral resource evaluation process. The chip, sludge and evaluation drilling assay data is displayed on the development assay plan (Figure 25) and this data is weighted to determine the grade of a section of the resource block. It must be noted that the individual grades are top cut to the 90% percentile when calculating the block grades.

### Various Sampling Points Utilised in the Evaluation of the Block Summaries

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Prepared by Minxcon (Pty) Ltd

Figure 26: Resource Block Evaluation Sheet

Blanket Mine (1983) (Pvt) Ltd Reserve/Resource Calculation (2013/2014) As at 31/08/2013					
Ore body	A.R. South	545/560		545 Level	
Section (m)	Sample Width (cm)	Sample Value (g/t)	m*cm	(g/t*m*cm)	
7.5	967	3	7252.5	21757.5	
7.5	1820	5.42	13650	73983	
2	520	4.5	1040	4680	
2	350	7.9	700	5530	
2	300	2.8	600	1680	
2	300	2.8	600	1680	
2	320	2.02	640	1292.8	
2	300	5.05	600	3030	
2	230	3.9	460	1794	
2	300	2.8	600	1680	
2	224	2.6	480	1248	
2	120	8.5	240	2040	
<b>Total/Ave</b>	<b>35</b>	<b>7.68</b>	<b>4.48</b>	<b>26862.5</b>	<b>12395.3</b>

**Resource Block Evaluation Sheet on AR South Mineral Deposit**

The area of the block is measured off the plans using a planimeter on the two levels and an average is calculated. The height between the two levels is used to work out the volume, after which it is multiplied by the standard historical SG of 2.86. This results in the tonnage of the resource block which will form part of the resource block listing (with an associated grade) which, in turn, makes up the mine mineral resource. The cut-off for the delineation of the mineralised portion is currently 1.96 g/t.

Figure 27: Resource Block Summary (note that Sample Width has m and not cm units - affects other units)

SUMMARY					
Orebody :	A. R. SOUTH				
Block :	545/560				
Category :	SOUTHERN				
Level	Section (m)	Sample width (cm)	Sample value (g/t)	( m *cm )	(g/t *m*cm)
545	35	7.68	4.48	26862.5	120395.3
560	32	19.38	3.80	62020	235950.4
Tot / Av	67	13.27	4.01	88882.5	356345.7
Block Average grade	4.01 g/t				
Block Average width	13.27 m				
545m ' Lev Area	236.875 m <sup>2</sup>				
560m ' Lev Area	580.83 m <sup>2</sup>				
Mean Area	408.8525 m <sup>2</sup>				
Height	16.8				
S. G	2.86				
	19644.54492				
Block Tonnes	19645 t @ 4.01g/t over 13.27m				

**Block Summary for the Resource Block Listing**



The manual nature of the process is prone to human error when data is transferred from one activity to the next, e.g. from the block listing to the actual resource block plans in longitudinal sections. The total resource and the various classifications are discussed in the resources section.

#### **Item 12 (b) - LIMITATIONS ON/FAILURE TO CONDUCT DATA VERIFICATION**

The QA/QC data was not readily available or well-documented. This suggests that the QA/QC procedure is not consistently applied and the results are not statistically analysed. Discrepancies appear to be visually assessed; it is uncertain when these discrepancies are considered unacceptable or how they are dealt with.

#### **Item 12 (c) - ADEQUACY OF DATA**

The data observed during the site visit is deemed adequate due to the manual nature and high volume of data; the mine has been operating successfully for a number of years using this system. The reconciliations indicate that the mine has a fairly high mine call factor (>90%) which indicates that the evaluation is close to the actual grade or that there is a possible underestimation of gold loss during mining due to the under evaluation via the sludge samples due to the fines being lost.

Minxcon is however of the opinion that the sampling data base is acceptable for the manual resource estimation methodology being utilised at the Blanket Operation because of the sheer volume of sampling data from the mining operation as well as the historical reconciliation between the gold called for and the recovered gold which indicates a good correlation.

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## ITEM 13 - MINERAL PROCESSING AND METALLURGICAL TESTING

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### **Item 13 (a) - NATURE AND EXTENT OF TESTING AND ANALYTICAL PROCEDURES**

The plant currently treats RoM from the main Mineral Deposits (refer to Item 17 (b) for analysis on the historic production efficiencies). The ore is free milling and the mineralogy has not changed to a significant degree (the gold recoveries have been consistent for the past two years). Sufficient information from historic production is required to determine the expected production performance with reasonable confidence.

### **Item 13 (b) - BASIS OF ASSUMPTIONS REGARDING RECOVERY ESTIMATES**

The expected processing efficiencies are based on historic production.

### **Item 13 (c) - REPRESENTATIVENESS OF SAMPLES**

The samples measured from historic production are considered reliable and representative. As a result, they can be used to adequately predict future performance.

### **Item 13 (d) - DELETERIOUS ELEMENTS FOR EXTRACTION**

The arsenopyrite content of RoM material currently being treated from Blanket Mine is sufficiently low enough not to pose a risk to economic extraction and deposition of tailings.

Blanket ores are free milling in that 93% of the gold is recovered via direct cyanidation. Arsenic therefore reports to the mine residue deposit in the form of undecomposed arsenopyrite, constituting less than 1% of the ore. The ore contains approximately 35% carbonate minerals which results in the tailings having an alkaline chemistry which inhibits the decomposition of arsenopyrite which is not exposed to the atmosphere. Rain water run-off from the tailings dam is channelled within bund walls to a sump from where it is returned to the plant as makeup water.

Blanket will be undertaking a pilot plant test work programme on the other more-refractory Mineral Deposits not currently being mined which may have a higher arsenopyrite content. Continuous testing and analysing of arsenic and other potential deleterious elements will be conducted as part of this test programme. Appropriate neutralisation steps will be included in the process design as required.

## ITEM 14 - MINERAL RESOURCE ESTIMATES

The Mineral Resources were compiled and supplied by the Blanket mine personnel. During the site visit and audit process, the Qualified Person verified that the Mineral Resources comply with the definitions and guidelines for the reporting of Exploration Information, Mineral Resources and Mineral Reserves in Canada, “the CIM Standards on Mineral Resources and Reserves - Definitions and Guidelines” and the Rules and Policies of the National Instrument 43-101 - Standards of Disclosure for Mineral Projects, Form 43-101F1 and Companion Policy 43-101CP. However, the mineral resources reported on the Blanket Mine combine the reserves and resources in a single tabulation which is not strictly compliant (Table 1).

### Item 14 (a) - ASSUMPTIONS, PARAMETERS AND METHODS USED FOR RESOURCE ESTIMATES

Due to the manual nature of the sampling database no electronic modelling or estimation is conducted on the sampling database. Estimation methodologies such as Kriging is, therefore, not utilised in the mineral resource estimation. The block listing received from the mine is compiled using the method described in Item 12. A summary of the parameters used in the resource estimation is as follows:-

- Manual weighted averages of sampling data.
- No kriging or digital estimation process.
- The individual sample points are top cut to the 90<sup>th</sup> percentile.
- Mineralised widths are determined by the combination of geology and the mineral resource cut-off of 1.96 g/t (based on a gold price of \$ 1 300/oz. and a cost of \$ 70.44/t).
- A historical SG of 2,86 is standard for all reefs.
- For narrow reefs a minimum mining width of 1.2 m is used.
- Ore resource blocks are based on the geology and the geometry of mined-out areas.
- Ore resource blocks are not corrected for dip.
- The block model is the combination of the mineral resource blocks.
- Depletions are determined by the mine survey department.
- The resources are classified into Measured, Indicated and Inferred Mineral Resources (classification criteria are described in the following section as per the mine’s definition).

#### Inferred Mineral Resources

Inferred Mineral Resource block boundaries are taken to the following limits where no point within the block is greater than the specified distance from a sample point:-

- 60 m on strike; and
- 120 m on dip.

Down-dip continuity at two times strike is taken from the known limits of pay shoots on other Mineral Deposits (Jethro and Blanket No.1) which have tapered outlines with depths three to four times maximum strike. The following exceptions limit the distance of a resource block boundary from a sample point:-

- Where the 60 m limit exceeds the strike confines of the pay shoot defined by existing up-dip mining limits.
- Where peripheral intersections suggest a significant thinning of the mineralised zone.
- Where un-mineralised holes indicate termination of the mineralised zone. In this instance the boundary is taken halfway between the mineralised and non-mineralised intercepts, with the restrictions of pay shoot boundary-taking precedence.
- Where projected geological features (e.g. dykes and faults) are likely to affect the mineralised zone.

#### Indicated Mineral Resources

Indicated Mineral Resources are generated from core holes, mainly from underground drifts and in some instances from channel sampling of mine development. The latter are essentially extension blocks from Measured Mineral Resources and Proven Mineral Reserves. Indicated Mineral Resource block boundaries are

taken to the following limits where no point within the block is greater than the specified distance from a sample point, with the following exceptions:-

- 30 m on strike; and
- 60 m on dip.

The 30 m strike distance of a resource block from a borehole intersection is reduced in the following situations:-

- Where the 30 m limit exceeds the strike confines of the ore shoot defined by the up-dip mining limits.
- Where peripheral intersections suggest a significant thinning of the mineralised zone.
- Where un-mineralised holes indicate termination of the mineralised zone. In this instance the boundary is taken halfway between the mineralised and non-mineralised intercepts, with the restrictions of pay shoot boundary taking precedence.
- Where projected geological features (e.g. dykes and faults) are likely to affect the mineralised zone.

### Measured Mineral Resources

In practice, Measured Mineral Resources are not normally reported as these are converted upon completion of development and sampling to Proven Reserves. Measured resource blocks are taken to the following limits, where no point within the block is greater than the specified distance from a sample point, with the following exceptions:-

- 7.5 m on strike; and
- 7.5 m on dip.

Down-dip continuity is determined by the mining method of 15 m lifts on the DSR Mineral Deposits and quartz shear reefs.

### Mineral Resource for Blanket Underground Operations

Table 1 details the reconciliation of the August 2013 and August 2014 Mineral Resource as tabulated by the Blanket Mine.

*Table 1: August 2013 and August 2014 Blanket Mine Mineral Resource Reconciliation (as tabulated by Blanket Mine)*

Category	2013				2014			
	Estimated Tonnes	Est Mill Head Grade	%	Ounces	Estimated Tonnes	Est Mill Head Grade	%	Ounces
	t	g/t		oz.	t	g/t		oz.
Proven *	966,733	3.72	13.48	115,517	895,194	3.37	11.78	96,943
<b>Total Available</b>	<b>966,733</b>	<b>3.72</b>	<b>13.48</b>	<b>115,517</b>	<b>895,194</b>	<b>3.37</b>	<b>11.78</b>	<b>96,943</b>
Probable*	2,121,373	3.56	29.57	243,143	1,888,805	3.58	24.85	217,591
Probable Pillars*	765,337	4.13	10.67	101,740	772,143	4.05	10.16	100,522
<b>Total Reserves*</b>	<b>3,853,442</b>	<b>3.72</b>	<b>53.72</b>	<b>460,400</b>	<b>3,556,142</b>	<b>3.63</b>	<b>46.79</b>	<b>415,055</b>
Indicated Resources**	448,364	3.81	6.25	54,940	698,963	3.66	9.20	82,177
Inferred Resources**	2,871,099	5.02	40.03	462,944	3,344,831	5.11	44.01	549,963

#### Notes:

1. \* Reserve tonnages are fully diluted (factor of 7.5%).
2. \*\* Resource tonnages are *in situ* i.e. no modifying factors have been applied.
3. 2013 gold price = USD1,400/oz.
4. 2013 pay limit = 1.95 g/t.
5. 2014 gold price = USD1,300/oz.
6. 2014 pay limit = 1.96 g/t.
7. Conversion from g to troy oz. = 32.15076.

Table 2 reflects the reclassified Mineral Resource as verified by Minxcon. The Blanket mine/operation resource classifications have been changed to Measured, Indicated and Inferred. No reserves are stated here, however, the Mineral Resources are declared as inclusive of all Mineral Reserves. The reserves have been declared separately, as determined by the Reserve LoM plan.

The Proven and Probable pillar reserves of the Caledonia mineral resource have been declared Measured Resources and the Probable Reserves have been included in the Indicated Resource. The modifying factors as applied by Caledonia have not been applied to the Minxcon mineral resource. The Indicated and Inferred Mineral Resource categories remained the same as the Caledonia calculated mineral resource.

**Table 2: August 2014 Mineral Resource as Verified by Minxcon**

Mineral Resource Category	Tonnage	Au	Au Content	Ounces
	t	g/t	kg	oz.
Measured Resource	1,572,733	3.91	6,146	197,606
Indicated Resource	2,478,902	3.77	9,340	300,288
<b>Total Measured and Indicated</b>	<b>4,051,635</b>	<b>3.82</b>	<b>15,486</b>	<b>497,895</b>
Inferred Resource	3,344,831	5.11	17,106	549,963

**Notes:**

1. Tonnes are *in situ*.
2. All figures are in metric tonnes.
3. Mineral Reserves are included in the Mineral Resource.
4. Mineral Resources are stated at a 1.96 g/t cut-off.
5. No geological losses were applied to the tonnage.
6. Tonnage and grade have been rounded and this may result in minor adding discrepancies.
7. The tonnages are stated at a relative density of 2.86 t/m<sup>3</sup>.
8. Conversion from kg to oz.: 1:32.15076.

### Mineral Resource for GG and Mascot Exploration Shafts

The Mineral Resource for the two exploration shafts are a combination of drilling data as well as underground sampling of the development haulages. The evaluation process is the same as for the Blanket mine. Sections of the two exploration shafts can be seen in the mineral resource working plans illustrated in Figure 22 to Figure 24.

**Table 3: August 2014 Mineral Resource for GG as Verified by Minxcon**

Resource Category	Tonnage	Width	Au	Au Content	Ounces
	t	m	g/t	kg	oz.
Measured Resource	127,178	4.53	3.79	482	15,486
Indicated Resource	55,123	2.45	5.86	323	10,386
<b>Measured &amp; Indicated Resource</b>	<b>182,301</b>	<b>3.90</b>	<b>4.41</b>	<b>805</b>	<b>25,872</b>
Inferred Resource	110,242	2.73	2.87	316	10,173

**Notes:**

1. Tonnes are *in situ*.
2. All figures are in metric tonnes.
3. Mineral Resources are stated at a 1.96 g/t cut-off.
4. No geological losses were applied to the tonnage.
5. Tonnage and grade have been rounded and this may result in minor adding discrepancies.
6. The tonnages are stated at a relative density of 2.86 t/m<sup>3</sup>.
7. Conversion from kg to oz.: 1:32.15076.

**Table 4: August 2014 Mineral Resource for Mascot as Verified by Minxcon**

Resource Category	Tonnage	Width	Au	Au Content	Ounces
	t	m	g/t	kg	oz.
Measured Resource	66,532	1.75	2.60	173	5,571
Indicated Resource	69,006	3.18	4.83	333	10,716
<b>Measured &amp; Indicated Resource</b>	<b>135,538</b>	<b>2.48</b>	<b>3.74</b>	<b>507</b>	<b>16,288</b>
Inferred Resource	69,587	2.53	8.23	573	18,416

**Notes:**

1. Tonnes are *in situ*.
2. All figures are in metric tonnes.
3. Mineral Resources are stated at a 1.96 g/t cut-off.
4. No geological losses were applied to the tonnage.
5. Tonnage and grade have been rounded and this may result in minor adding discrepancies.
6. The tonnages are stated at a relative density of 2.86 t/m<sup>3</sup>.
7. Conversion from kg to oz.: 1:32.15076.

### Item 14 (b) - DISCLOSURE REQUIREMENTS FOR RESOURCES

All Mineral Resources have been categorised and reported in compliance with the definitions embodied in the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM Council (incorporated into NI 43-101). As per CIM Code specifications, Mineral Resources have been reported separately in the Measured, Indicated and Inferred Mineral Resource categories. Inferred Mineral Resources

have been reported separately and have not been incorporated with the Measured and Indicated Mineral Resources.

**Item 14 (c) - INDIVIDUAL GRADE OF METALS**

Mineral Resources for gold have been estimated for the Blanket Mine (Table 2). No other metals or minerals have been estimated for the Project.

**Item 14 (d) - FACTORS AFFECTING RESOURCE ESTIMATES**

No socio-economic, legal or political modifying factors have been taken into account in the estimation of Mineral Resources for the Blanket Mine.

## ITEM 15 - MINERAL RESERVE ESTIMATES

### Item 15 (a) - KEY ASSUMPTIONS, PARAMETERS AND METHODS

#### Key Assumptions

- It is assumed that the planned production will be achieved.
- The modifying factors applied over the LoM were derived from historical production figures that are assumed to be untampered and correct.

#### Parameters

- All the Mineral Resources included in the Reserve LoM plan will be extracted mainly through the existing infrastructure. Production rates applied are inclusive of required on-reef development, such as raises, ore passes, travelling ways, etc. the cost of the on reef development are included in the mining costs.
- The mining rate was applied as a rate per day, supported by achieved actual rates.
- Stopping rates were planned between 50 tpd in some areas and up to 500 tpd in others.
- The rates were based on shaft hoisting capacity constraints and further reduced to accommodate other capital development activities that is required beyond the scope of the NI 43-101 report. These are discussed in Item 24 (a).

#### Methods

The Reserve LoM plan comprises Measured and Indicated Mineral Resources in the area above 750 m (above 22 Level) at Blanket Mine. The Mineable Resources were indicated on the mine plans and subsequently logged into a block list. The position of each resource block was evaluated regarding its position relative to existing infrastructure, such as shafts, and the position in terms of stopping sequence. An extraction sequence number was given to each resource block, after which the block list was sorted to reflect the order of extraction. This sorted list was imported into Enhanced Production Scheduler ("EPS"). The blocks from different areas were tagged and the appropriate mining rates were applied according to the mine's extraction strategy (Table 5).

Table 5: Mine Design Criteria - Stopping

Description	Unit	Value
Stope Preparation	Months	2
Above 750 level Blanket Production	t/day	50
Above 750 level AR Main Production	t/day	400
Above 750 level AR South Production	t/day	500
Above 750 level Eroica Production	t/day	200
Above 750 level Lima Production	t/day	50

Mining rates were applied as a rate per day; the mine will produce 352 days a year. Modifying factors were built into the EPS schedule.

### Item 15 (b) - MINERAL RESERVE RECONCILIATION - COMPLIANCE WITH DISCLOSURE REQUIREMENTS

The Mineral Reserves for Blanket Mine is illustrated in Table 6.

Table 6: Mineral Reserve Statement (October 2014)

Mineral Reserve Category	Tonnage	Au	Au Content	Ounces
	t	g/t	kg	oz.
Proven	856,005	3.40	2,912	93,638
Probable	2,077,828	3.78	7,862	252,758
<b>Total Mineral Reserves</b>	<b>2,933,833</b>	<b>3.67</b>	<b>10,774</b>	<b>346,396</b>

#### Notes:

1. Tonnages refer to tonnes delivered to the metallurgical plant.
2. All figures are in metric tonnes.
3. 1kg = 32.15076 oz.
4. Pay limit Blanket Mine 2.03 g/t.
5. Pay Limit calculated: USD/oz. = 1,250; Direct Cash Cost (C1) - 71 USD/t milled.
6. Production profile cut end 2021.

## Mineral Reserve Reconciliation

Table 7: Mineral Reserve Reconciliation

Category	2013			2014			Difference		
	Estimated	Est. Mill	Ounces	Estimated	Est. Mill	Ounces	Estimated	Est. Mill	Ounces
	Tonnes	Head Grade		Tonnes	Head Grade		Tonnes	Head Grade	
	Mt	g/t	Moz.	Mt	g/t	Moz.	Mt	g/t	Moz.
Proven	1,349,000	3.84	166,600	856,005	3.40	93,638	-492,995	-0.44	-72,962
Probable	2,121,000	3.56	243,000	2,077,828	3.78	252,758	-43,172	0.22	9,758
<b>Total Mineral Reserves</b>	<b>3,470,000</b>	<b>3.67</b>	<b>409,400</b>	<b>2,933,833</b>	<b>3.67</b>	<b>346,396</b>	<b>-536,167</b>	<b>0.00</b>	<b>-63,004</b>

**Notes:**

1. Tonnages refer to tonnes delivered to the metallurgical plant.
2. All figures are in metric tonnes.
3. 1kg = 32.15076 oz.
4. The reduction in ounces is mainly attributed to the exclusion of previously stated Proven and Probable Reserves below 750 m Level. (These ounces are accounted for as Measured and Indicated Resources)
5. 2013 Probable Reserves include Probable and Probable Pillars.

### Item 15 (c) - MULTIPLE COMMODITY RESERVE (PRILL RATIO)

Gold is the only commodity within the mining areas that is present in significant concentrations.

### Item 15 (d) - FACTORS AFFECTING MINERAL RESERVE ESTIMATION

No factors were identified that can materially alter the Mineral Reserve statement.



## ITEM 16 - MINING METHODS

### Item 16 (a) - PARAMETERS RELEVANT TO MINE DESIGN

#### Mining Methods

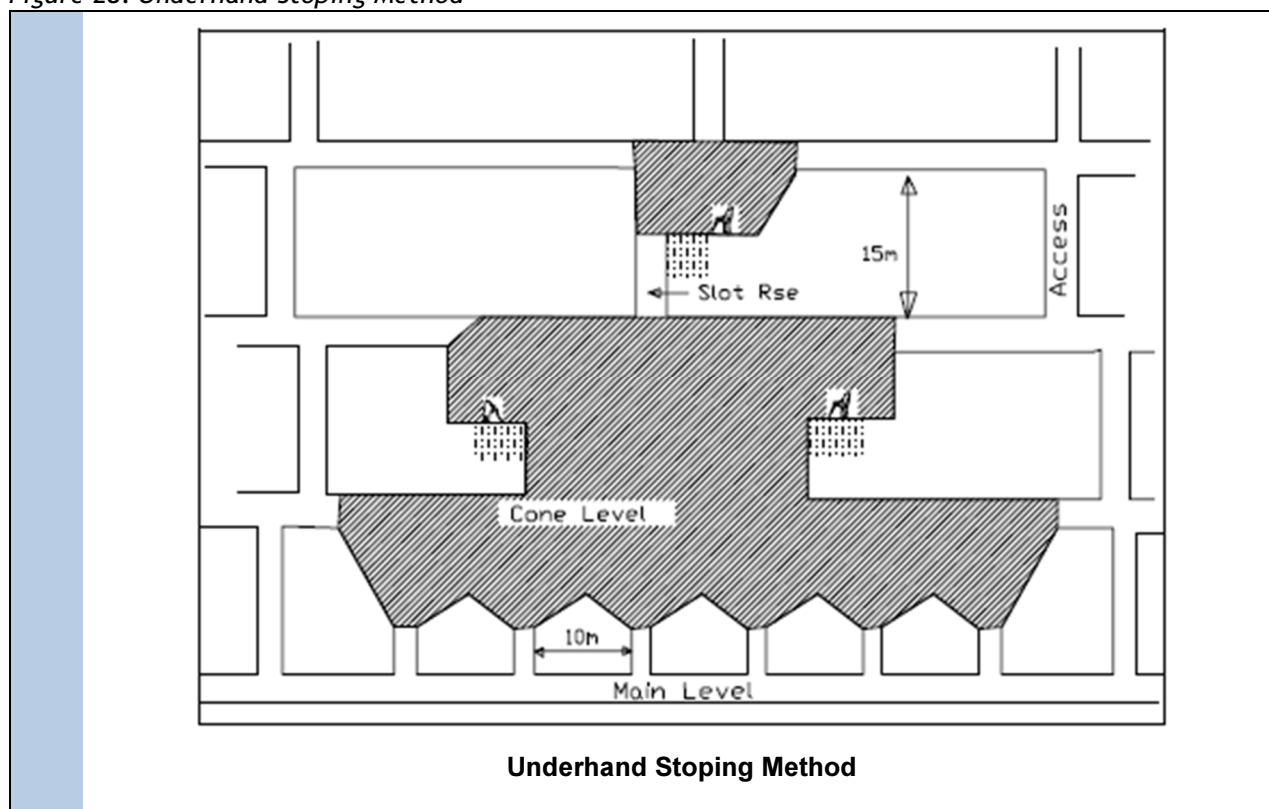
Blanket Mine uses mining methods that are commonly employed and well-understood by Greenstone Belt miners who generally have to deal with steep tabular to massive Mineral Deposits. Since the nature of the Mineral Deposits varies, the exact mining practices are tailored to suit the specific attributes of each particular Mineral Deposit. The mining methods employed represent experience gained from many years of mining. Two types of mining methods are used at the Blanket Mine:-

- Underhand stoping in the narrow Mineral Deposits.
- Long hole stoping in the wider Mineral Deposits.

The Mineral Deposits can be accessed on several main levels: 7 Level, 9 Level, 14 Level, 18 Level and 22 Level. In-between these levels cross-cuts are cut every 30 m from where diamond drilling is used to locate ore shoots for development planning. Most of the development is within mineralised zones, except when developing transfer levels between Mineral Deposits. Such development is treated as waste.

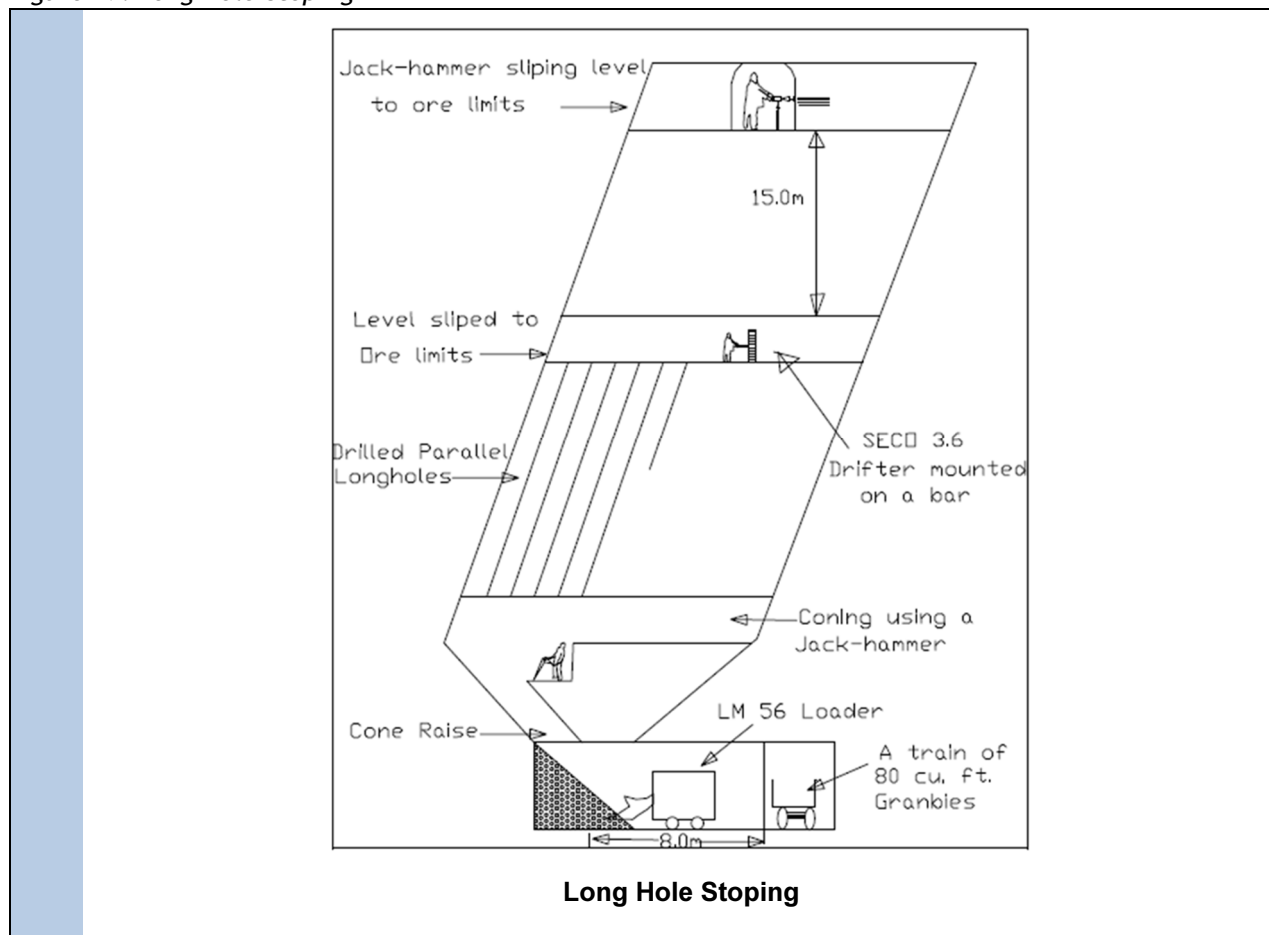
Stoping preparations in narrow Mineral Deposits (<3.0 m) begin by mining box raises sited at 10 m intervals from the footwall of the Mineral Deposit. In wider Mineral Deposits (>3.0 m), air loader operated draw points are mined instead of boxes to facilitate long hole open stoping which generates large rocks. Underhand bench stoping is usually applied in the narrow Mineral Deposits and allows for control of the stoping width (+/-2 m) and dilution. Figure 28 presents a schematic section of a typical underhand stoping method.

Figure 28: Underhand Stoping Method



Long hole stoping is the mining method used most often at the Blanket Mine. Figure 29 is a schematic section of a typical long hole stoping layout in wider Mineral Deposits.

Figure 29: Long Hole Stopping



### Modifying Factors

The Mineral Reserves were calculated based on the block list supplied by Blanket Mine. The blocks were arranged according to an extraction strategy and modifying factors were applied. Only Measured and Indicated Mineral Resources were included in the Reserve LoM plan. The applied modifying factors are:-

- **Extraction rate** - A 100% extraction rate was applied to the Measured and Indicate Mineral Resources. The indicated pillars are resources that were left behind as pillars either for shaft stability, cones or crown pillars. After the extraction of the above ore and/or the decommissioning of the shaft, these resources can be extracted with an expected 70% extraction ratio.
- **Dilution** - Waste dilution was applied based on a 10 cm over break into the hanging wall and 10 cm into the footwall.
- **Mine Call Factor ("MCF")** - By applying an MCF, the differences between shaft head grade and Reserve grades that are supported by historical measurements, will be accounted for. These differences typically occur due to gold losses in fines. The MCF only affects the gold grade; it has no impact on the plant feed tonnes. An MCF of 100% was applied for the Blanket Mine based on historical recordings. The MCF history is illustrated in Table 8.

Table 8: MCF History

Year	Milled Tonnes	Gold Recovered	Gold in Tails	Gold Accounted For	Total Mined Tonnes	Mined Grade	Gold Called For	MCF
	t	oz.	oz.	oz.	t	g/t	oz.	%
1998	215,580	24,194	3,604	27,798	216,330	4.56	31,716	88%
1999	205,330	22,838	2,839	25,677	199,787	4.27	27,428	94%
2000	193,300	23,725	2,859	26,584	187,466	4.34	26,158	102%
2001	195,400	24,748	3,204	27,952	176,625	4.71	26,746	105%
2002	179,891	26,773	3,236	30,009	178,329	5.19	29,756	101%
2003	173,700	24,525	2,234	26,759	165,887	4.80	25,600	105%
2004	178,896	24,119	2,416	26,535	185,302	4.60	27,405	97%
2005	212,319	24,783	2,867	27,650	212,176	4.05	27,628	100%
2006	99,361	11,685	1,342	13,027	94,824	4.08	12,439	105%
2007	100,082	9,885	1,098	10,983	100,082	3.70	11,906	92%
2008	81,987	7,687	760	8,447	81,987	3.75	9,885	85%
2009	103,445	11,295	1,117	12,412	103,445	3.54	11,773	105%
2010	153,501	17,707	1,540	19,247	153,501	3.75	18,507	104%
2011	299,257	35,826	2,738	38,564	299,257	3.85	37,042	104%
2012	363,725	45,464	3,057	48,521	363,725	3.83	44,788	108%
2013	392,320	45,527	3,269	48,796	392,320	3.99	50,328	97%
<b>Tot/Ave</b>	<b>3,148,094</b>	<b>380,781</b>	<b>38,181</b>	<b>418,962</b>	<b>3,111,043</b>	<b>4.19</b>	<b>419,104</b>	<b>100%</b>

### Ventilation Design Criteria

Ventilation is downcast via the Main shaft, Jethro surface, 5 Winze and N° 4 shaft. In the Lima, Sheet, Jethro Winze and other old shafts, ventilation is up cast. Various axial flow fans have been installed on the mine to enhance the ventilation volume.

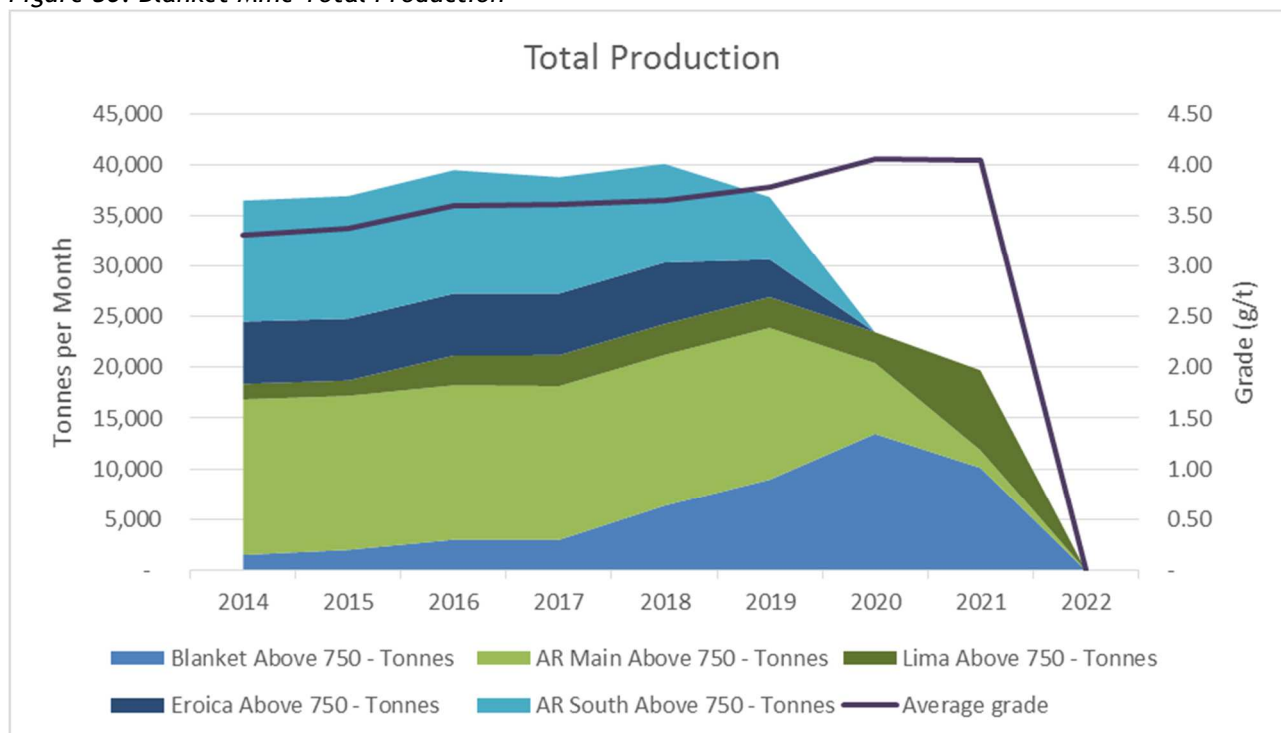
### Rock Engineering Design Criteria

The different rock types at the Blanket Mine are generally competent and support such as rock bolts are only installed on rare occasions where weaker rock conditions are encountered. There are zones with unstable sidewalls such as the Quartz Reef and Feudal at Blanket, but this is addressed by the application of a shrinkage methodology. The types of stopes do not contribute a relatively high tonnage and is insignificant to the overall dilution incurred.

### Item 16 (b) - PRODUCTION RATES, EXPECTED MINE LIFE, MINING UNIT DIMENSIONS, AND MINING DILUTION

The production for the Blanket mine is from five different areas that are all above 750 m. The production from the different levels is illustrated in Figure 30. The tonnes are illustrated as an average per month. Following a financial analysis, all production after 2021 was excluded from the Reserve LoM plan as it is uneconomical.

Figure 30: Blanket Mine Total Production



### Item 16 (c) - REQUIREMENTS FOR STRIPPING, UNDERGROUND DEVELOPMENT AND BACKFILLING

#### Underground Development

All the areas that form part of the Reserve LoM plan have development in place. The blocks only originate from the Above 750 m level and the mining rates applied are within the shaft capacity limits; no new development will be required for the Above 750 m level areas.

#### Backfilling

Backfilling is needed when mining at great depth. It is currently not a Rock Engineering requirement to backfill stoped-out panels at Blanket Mine, as mining is still shallow.

### Item 16 (d) - REQUIRED MINING FLEET AND MACHINERY

As at June 2011, underground drilling equipment comprised seventy Seco 23, Seco 25, Seco 215 jackhammers and Seco 36 (Konkola) drifters. The jackhammers are mainly used for development and the drifters for production (long hole drilling). Trimming of ore and waste is done by LM56/57 air loaders, grandby cars, cocopans and battery-operated locomotives.

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## ITEM 17 - RECOVERY METHODS

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### Item 17 (a) - FLOW SHEETS AND PROCESS RECOVERY METHODS

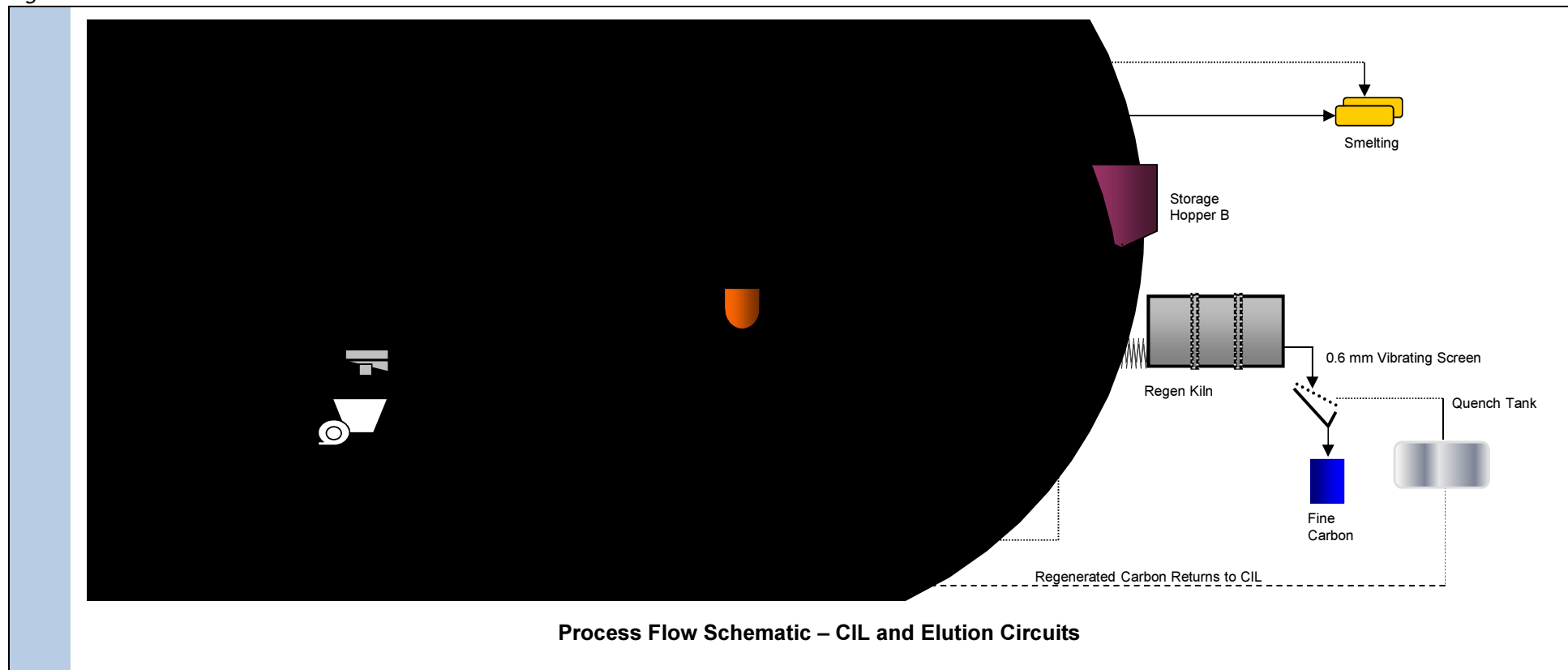
The Blanket gold Plant consists of a conventional crushing, milling and CIL, batch elution and smelting configuration with a current capacity of 40 ktpm. The crushing and milling circuits are designed to process RoM. However, the CIL and downstream circuits were designed to treat tailings dam material at a rate of about 110 ktpm (or 3,800 tonnes per day). More recently, historic tailings and RoM were treated in the CIL plant at a combined rate of approximately 100 ktpm to 120 ktpm. The tailings treatment was stopped about three years ago. The CIL is currently used exclusively for treatment of RoM at a rate of 30 ktpm to 35 ktpm. The retention time in the CIL circuit is as high as 72 hr as a result of the lower tonnage throughput. A process flow diagram can be seen in Figure 31.

The plant consists of the following circuits:-

- jaw crushing;
- cone crushing in closed circuit with a screen;
- primary rod mill in open circuit;
- ball mill in closed circuit with cyclones;
- gravity circuit;
- dewatering cyclones;
- CIL;
- combined elution and electrowinning;
- smelt house;
- carbon re-activation in a kiln;
- reagent make-up and dosing circuits; and
- water recycling and storage.

Figure 31: Process Flow Schematic - Comminution Circuits



*Figure 32: Process Flow Schematic - CIL and Elution Circuits*



## Item 17 (b) - OPERATING RESULTS RELATING TO GOLD RECOVERY

### Historic Production Efficiencies

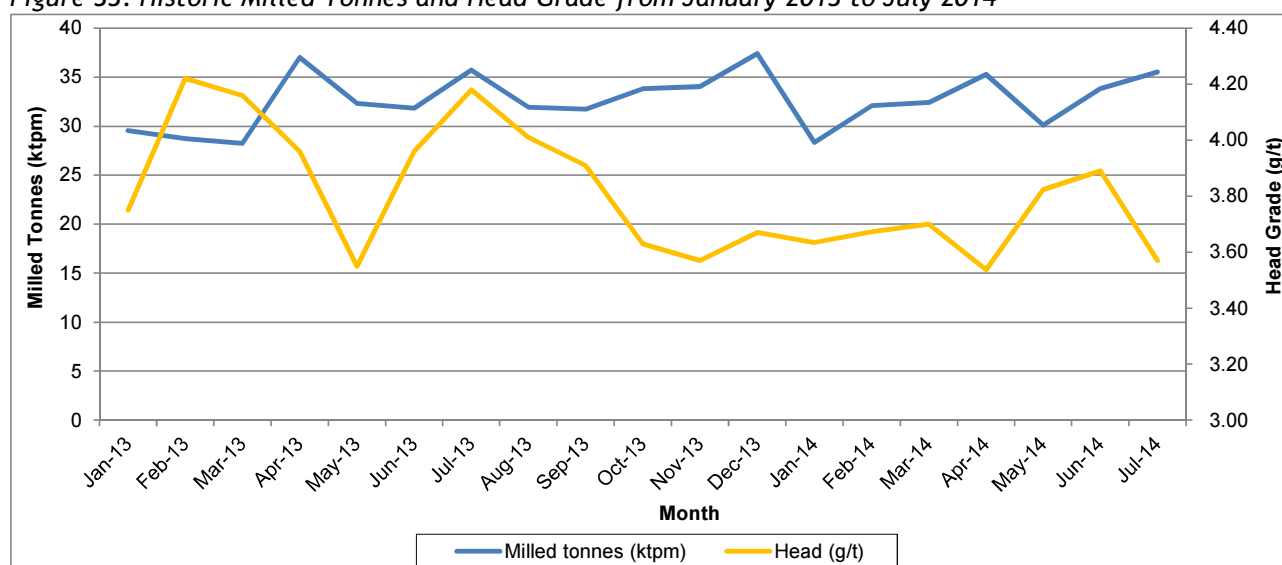
Table 9 summarises historic production data and operating costs between 2013 and July 2014.

Table 9: Historic Production from 2013 to July 2014.

Item	Source	Unit	Average per Month 2013	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
Milled tonnes	Blanket	ktpm	32.69	28.33	32.10	32.42	35.29	30.11	33.83	35.53
Head	Blanket	g/t	3.87	3.63	3.67	3.70	3.54	3.82	3.89	3.57
Head	Calculated	kg	126.65	102.97	117.88	119.98	124.85	115.12	131.59	126.83
Gravity Recovery	Blanket	%	49.28	46.68	51.85	49.53	49.46	52.51	54.50	52.14
CIL Recovery	Blanket	%	87.63	86.56	87.10	87.56	87.32	87.82	86.60	86.50
Overall Recovery	Blanket	%	93.30	93.10	93.80	93.90	94.00	94.40	93.72	93.37
Production	Calculated	kg	118.17	95.86	110.57	112.66	117.36	108.68	123.33	118.41
Residue	Calculated	g/t	0.26	0.25	0.23	0.23	0.21	0.21	0.24	0.24
Residue	Calculated	kg	8.49	7.10	7.31	7.32	7.49	6.45	8.27	8.41

Source: Blanket Mine

Figure 33: Historic Milled Tonnes and Head Grade from January 2013 to July 2014

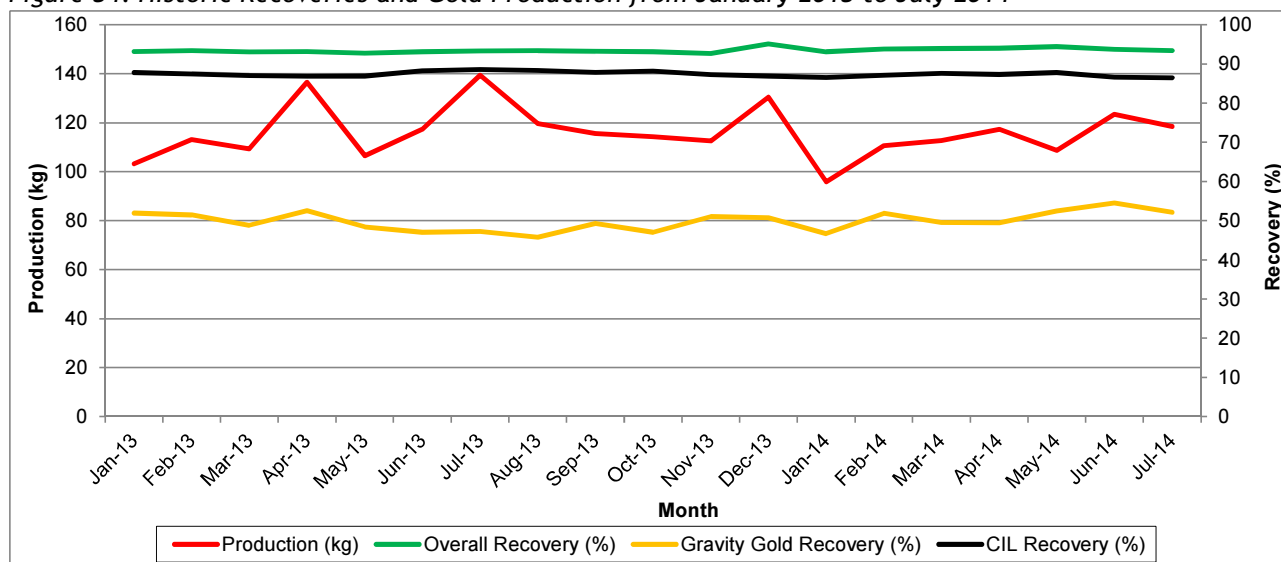


Source: Blanket Mine

The milled tonnes varied between 28.3 ktpm and 37.4 ktpm from 2013 with an average of 32.6 ktpm (Figure 33). The overall recoveries varied between 92.7% and 95.1% with an average of 93.5% (Figure 34). The gravity gold recovery varies between 46% and 52% with an average of 49%. The CIL circuit gold recovery is also very steady with an average of 87.6%. The plant is expected to achieve a similar recovery in future when treating current Blanket RoM material. RoM material from other sources may be more refractory and will have to be tested before being treated in the Blanket plant.

There is a fully equipped assay laboratory which is located at the plant offices. The mine laboratory was inspected by Mr Dario Clemente and even though the mine laboratory is not accredited, it does have the necessary equipment required to prepare and analyse mine and plant samples. The sample preparation areas are demarcated for low grade and high grade areas, especially where cross-contamination is a risk.

Good housekeeping standards are applied in the sample crushing and preparation and fire assay areas. As part of its external verification process the mine laboratory sends samples away to Duration, Met Solution and Performance Laboratories (accredited according to the mine personnel), to test their precision and accuracy. Minxcon was supplied with figures for January, April, July and August 2014 which (apart from April) had a good correlation coefficient. In addition, the laboratory makes use of standard reference material which it sources from Geostats in Australia or AMIS from South Africa. Graphs, which show a good correlation, were supplied to Minxcon. The laboratory does not have an electronic tracking system. The implementation of a Laboratory Information Management system ("LIMS") will reduce human error.

**Figure 34: Historic Recoveries and Gold Production from January 2013 to July 2014**

Source: Blanket Mine

**Item 17 (c) - PLANT DESIGN AND EQUIPMENT CHARACTERISTICS**

This section details the process flow. Refer to Figure 31 for the process flow schematic diagram.

The plant was designed and constructed by Kinross Mining Company to treat RoM ore from the Blanket mine. The ore is fed over 14" x 24" jaw crushers to reduce the top size from -300 mm to less than 80 mm. Tramp iron magnets (located ahead of the crushers) remove scrap iron before it enters the cone crushers. This is important as any iron products from underground will cause major damage to the crushers if allowed to enter the crusher bowl. The crushed ore is stored on a 900 tonne open stockpile (Figure 35) from where material is fed to the cone crushers.

**Figure 35: Cone Crusher Feed Stockpile****Cone Crusher Feed Stockpile**

The cone crushers were upgraded recently and replaced with two 38" hydraulically adjusted Nordberg crushers (Figure 36). The crushers can operate independently and feed Osborne vibrating screens. The screened product which is smaller than 10 mm is delivered to the mill feed bin. The equipment quality is good and good maintenance is applied (an observation made during the site visit).

*Figure 36: Cone Crushers***Cone Crushers**

The rod mill feed bin live capacity is small which, in turn, requires that the crushers operate on a three-shift cycle to ensure that the rod mills have adequate feed for continuous operation. There are plans to install additional storage capacity which will result in reduced operating costs in the crushing circuit. The cone crushers can then operate for fewer hours at a higher throughput thereby reducing operating unit costs and introducing more flexibility.

*Figure 37: Rod Mills***Rod Mills**

There are three 6.5 ft. x 12 ft. rod mills which operate in parallel. Each feed belt has a mill feed mass meter which is used to control and measure the mill feed rate. The foundations of the previous mills were in the process of being demolished which leaves adequate space for future expansion.

Approximately 45% to 50% of the gold production is recovered as gravity gold. Concentrate from the Knelson Concentrators is stored and re-concentrated on a Gemini table every 24 hours with the tailings recycled back into the circuit. Gemini table concentrates go for direct smelting whilst the tailings are pumped to the classifying hydro cyclone. The Knelson Concentrator tails are pumped through cyclones, the underflow of which reports to the open-circuit regrind ball mill.



The product from the Knelson tails cyclone overflow and the regrind mill discharge is pumped into the CIL plant. The CIL consists of one pre-aeration tank and eight leach tanks where alkaline-cyanide leaching and simultaneous absorption of dissolved gold onto granular activated carbon takes place (Figure 38).

*Figure 38: CIL Circuit*



**CIL Circuit**

Oxygen generated from a pressure oxygen plant is added into the first CIL tank; liquid oxygen is also available in the event of the oxygen plant being out of circuit for maintenance or breakdowns. There is a TAC 1000 cyanide online analyser which measures and controls cyanide addition. This process control system, in conjunction with oxygen injection, has reduced cyanide consumption.

Elution of the gold from the loaded carbon and subsequent electro-winning is done on site. There are two 2.5 tonne elution columns which operate in parallel. The design of the columns is unique in that the elution and the electro-winning processes take place in the same pressurised vessel. The advantage of this is that there is no circulation of solution outside the vessel which requires heat exchangers for heating and cooling. The overall effect is that the system is very energy efficient and cost effective.

During electrowinning (Figure 39) the gold is deposited on wire wool cathodes within the elution column, and the loaded cathodes are removed on a planned cycle and acid-digested. The resultant gold solids from acid digestion and the re-dressed gold concentrate from Knelson Concentrators are smelted into bars. The granular activated carbon is kiln regenerated before it is recirculated back to the CIL section. Loaded carbon is not acid treated in an attempt to reduce reagent costs. Carbon reactivation has remained acceptable although the acid treatment can be re-introduced if required. The gold bullion, in the form of doré bars, is delivered, as required by Zimbabwean gold-mining law, to the Government-operated Fidelity for sampling and onward delivery to the Zimbabwe gold refinery.

*Figure 39: Elution and Electrowinning Vessels***Elution and Electrowinning Vessels**

Power is supplied from the national grid, but a fully-automated diesel driven power plant is available when power trips occur. The diesel power generation sets have a capacity of 10 Megawatts and can service both the mine and the plant when required.

The plant tailings from CIL are reduced in cyanide content and deposited on two licensed tailing impoundment areas located close to the plant. The maximum amount of tailings water is pumped back to the metallurgical plant for re-use. Daily management and operation of the tailing deposition area is contracted out to the Zimbabwean subsidiary of Fraser Alexander.

### **Item 17 (a) - CURRENT REQUIREMENTS FOR REAGENTS AND LABOUR**

#### **Labour Requirements**

Table 10 summarises the current labour complement for the Blanket Gold Plant.

*Table 10: Labour Complement for the Plant*

Section	Position	Number
<b>Plant Senior Staff</b>	Mill Superintendent	1
	Asst. Mill Superintendent	1
<b>Plant Staff</b>	Plant Metallurgist	1
	Senior Assayer	1
	Plant Foreman	1
	Metallurgical Technician	1
	Plant Operators	3
	Mill Clerk	1
	Elution Supervisor	1
	Senior Smelting Assistant	1
	Senior Lab. Assistant	1
	Senior Crusher Attendants	2
	Crusher Attendants	13
<b>Primary Crusher</b>	Senior Crusher Attendants	1
	Crusher Attendants	5
<b>Secondary Crusher</b>	Crusher Attendants	1
	Gravity & Smelting Assistants	3
	Mill Attendants	4
<b>Milling</b>	Mill Attendants	10
	Senior Elution Assistant	1
<b>Elution</b>	Elution Assistants	2
	Elution Attendants	3
<b>Tailings</b>	Supervisor	1
	Slimes Dam Attendants	3
	Pump Attendants	3

Section	Position	Number
CIL	CIL Attendants	4
	CIL Attendants	6
	CIL Attendants	1
Water	Water Works Attendant	1
	Water Works Attendant	2
	Water Works Attendant	1
Metallurgical Lab and Sample preparation	Laboratory Assistants	2
	Laboratory Assistants	4
Fusion Furnaces	Supervisor	1
	Laboratory Assistant	1
Wet Assay	Supervisor	1
	Lab Assistants	1
<b>Sub Total</b>		<b>90</b>
Engineering	Mechanical Engineer	1
	Foreman	1
	Fitter	5
	B/Maker	4
	Plumber	1
	Rubber Liner	1
	Assistant Fitter	5
	B/maker Assistant	4
	Lubricator	1
	R/Liner Assistant	1
	Plumber's Assistant	1
	Electrician	1
	Assistant Electricians	1
<b>Sub Total</b>		<b>27</b>
<b>Total</b>		<b>117</b>

Source: Blanket Mine

The Electrical Engineer is not included in the above table as he is shared between the plant and the mine. All the plant employees are adequately trained and from observation around the plant, as well as the condition of equipment, it is clear that management is of a high standard. The higher labour complement is in part due to the manual control nature of the plant.

The laboratory personnel account for an additional ten people. The laboratory is used for plant analysis as well as management of mine and exploration samples. The plant does not have a central process control system, but there are local controls in the important areas such as mill feed control cyanide addition and level controls in relevant areas.

### Reagents and Consumables

The reagent and consumable consumptions are shown in Table 11. The forecasted consumptions are not expected to change significantly.

Table 11: Reagent and Consumable Consumptions

Item	Unit	Average 2014
<b>Grinding Media and CIL reagents</b>		
Rods	kg/t	0.7
Balls- 40mm	kg/t	0.9
Total Steel Media	kg/t	1.5
Lime	kg/t	1.7
Carbon	kg/t	0.1
Sodium Cyanide	kg/t	0.8
Liquid Oxygen	kg/t	0.2
<b>Elution Consumables</b>		
Steel wool	kg/tC	0.3
Caustic Soda	kg/tC	52.8

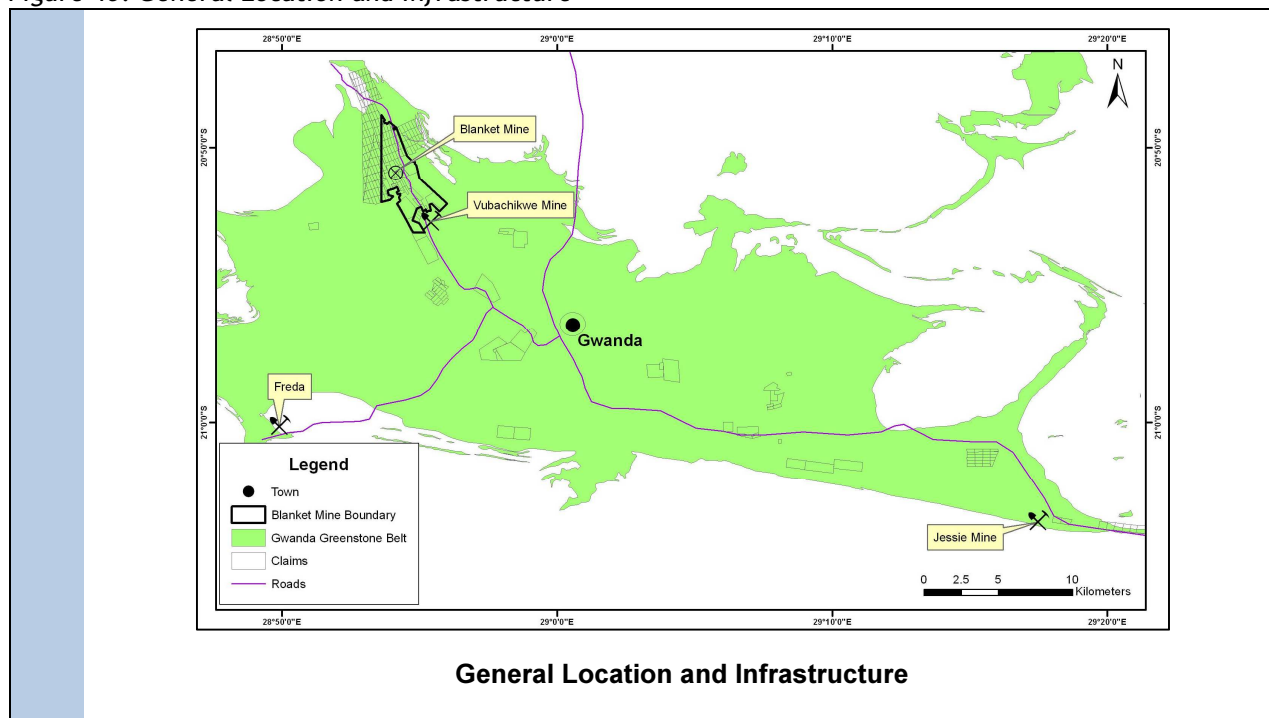
Source: Blanket Mine

Some of the higher consumptions of reagents was due to the high retention times of approximately 72 hours in the CIL circuit. This mainly affects carbon consumption due to the long exposure to agitation and abrasion in the CIL tanks, as well as cyanide consumption.

## ITEM 18 - PROJECT INFRASTRUCTURE

The Blanket Mine Project Area is accessed by an all-weather single lane tarred road and is situated roughly 16 km from Gwanda. Gwanda is linked by national highways to Bulawayo, Harare and the Beit Bridge Border post. The railway line connecting the Zimbabwean national network to South Africa passes through Gwanda. An airstrip for light aircraft is located approximately 5 km to the northwest of the town. The general location and infrastructure of the Blanket Mine is illustrated in Figure 40.

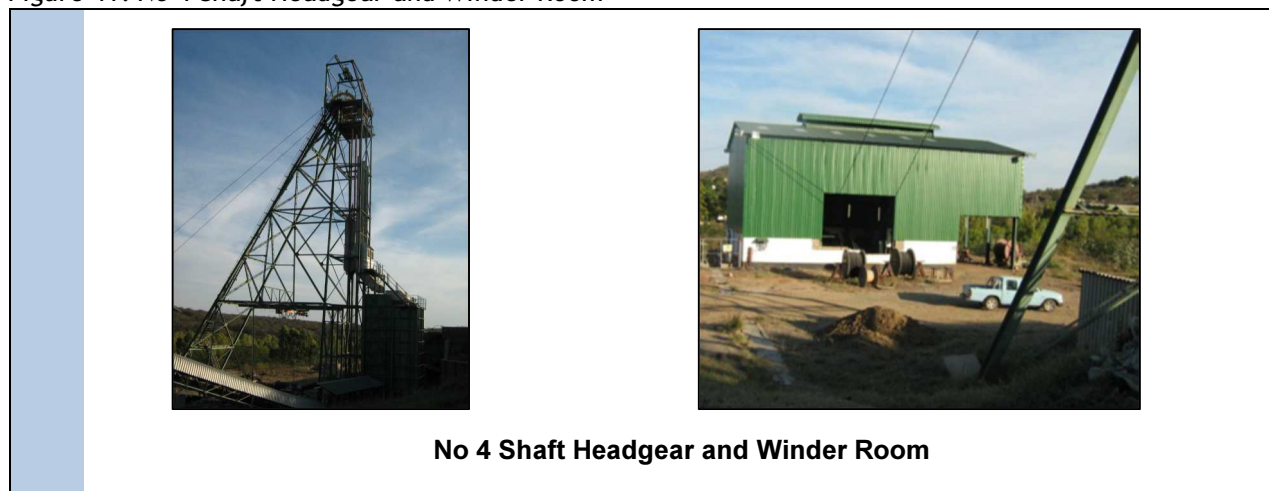
*Figure 40: General Location and Infrastructure*



### Item 18 (a) - MINE LAYOUT AND OPERATIONS

The Blanket Mine consists of a series of small shafts providing access to the underground workings. The majority of these shafts are used for ventilation while the 4 m x 2 m, two-compartment rectangular 4 shaft (Figure 41) is used to hoist the approximate 1,300 tpd of ore and development waste generated down to 750 m level. Jethro shaft and its associated sub-shaft system is used to transport men and material underground.

*Figure 41: No 4 Shaft Headgear and Winder Room*



Additional information on the mining operations is contained in the relevant sections of this Report.

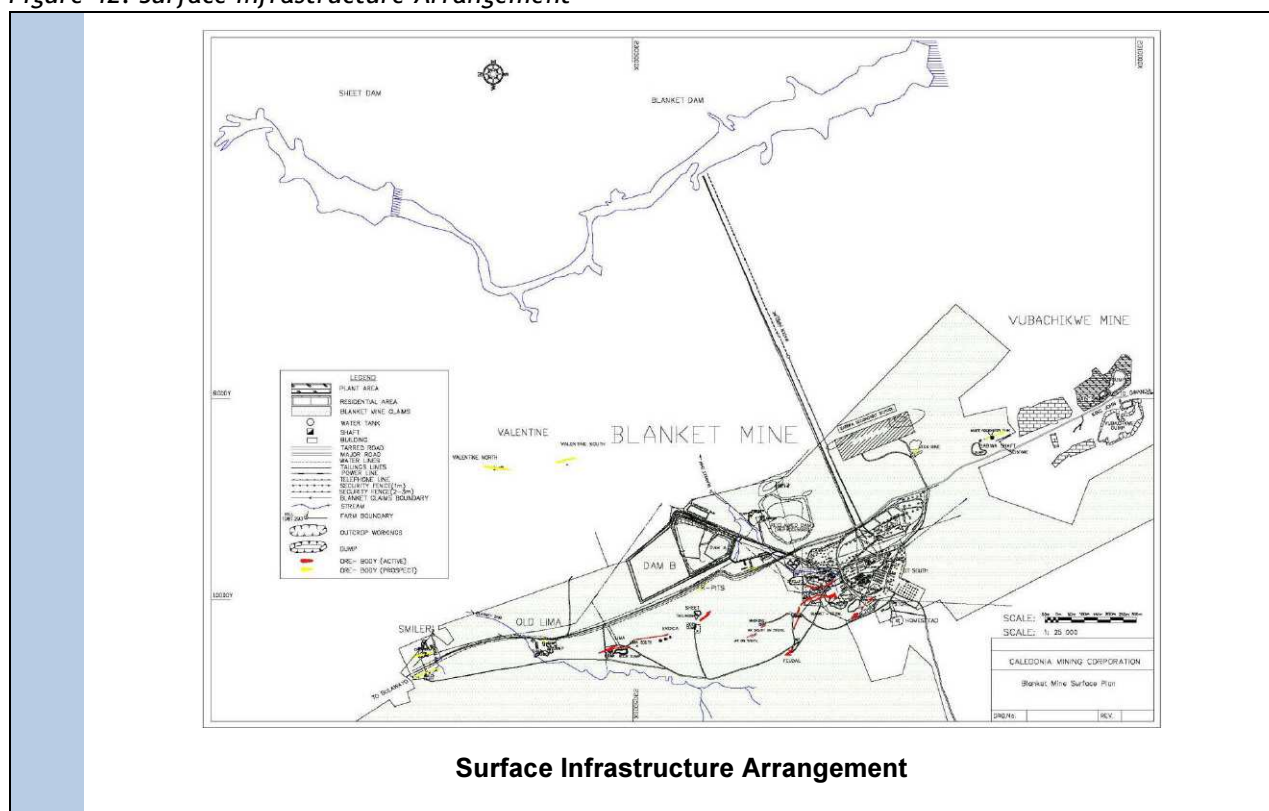


## Item 18 (b) - INFRASTRUCTURE

Surface infrastructure comprises mine offices, change houses, workshops, store rooms, a processing plant and an assay laboratory to name but a few. Surface infrastructure is located adjacent to the shafts and there is adequate room for future expansion. A Tailings Storage Facility (“TSF”) is also located in close proximity to the Project Area. The labour force and their families reside within a kilometre of the mine in accommodation supplied by the mine.

Production shafts on surface consist of the No 4 shaft and the Jethro shaft. Sub-shaft infrastructure in the form of the No 5 Winze connects Jethro to the underground workings. Other shafts and raise bore holes on surface, primarily used for ventilation purposes, include Lima, Eroica and Sheet to name but a few. A total of 11 hoists are installed at the mine, 3 of which are used for ore handling (main incline shaft, the sub-vertical shaft and 6 Winze shaft). All ore is transported to the Blanket Mine area for hoisting to surface. The surface infrastructure at the Blanket Mine is illustrated in Figure 42.

Figure 42: Surface Infrastructure Arrangement



The two-compartment TSF, which lies to the east of the mine, is operated by Frazer Alexander Zimbabwe. As at January 2011 the TSF had a remaining capacity of 3.5 Mt. Since the mine no longer treats old slimes, the planned daily throughput of 1,000 tpd equates to a remaining estimated lifespan of 14 years. The final design area of the TSF will total 28 ha.

## Item 18 (c) - SERVICES

### POWER RETICULATION

The mine is supplied with power via 33kV and 11kV overhead power lines from a main substation situated in Gwanda. The power lines are owned and maintained by ZESA. Four additional standalone diesel generators with suitable switchgear, transformers, and controls were also installed to ensure that the mine can stay operational during power interruptions. This additional installation has a total installed capacity of 10 MVA (Figure 43).

*Figure 43: Diesel Genset Unit and Genset Shed*

Power is fed down the shafts to the underground workings and is stepped down to the required 550 V service voltages.

#### **WATER RETICULATION**

ZIMWA holds all water rights in Zimbabwe and Blanket subsequently purchases process and domestic water from ZIMWA. Water for the mine, metallurgical plant and the mine village is obtained from the Blanket dam which is located 5 km east of the mine. The Blanket dam has a total capacity of 15Mm<sup>3</sup>. In addition to this water source, the mine has equipped several boreholes to alleviate water shortages during the dry season and droughts. Underground water is pumped to surface from the 7 level pump station at a rate of between 40 m<sup>3</sup> and 60 m<sup>3</sup> per hour. The pump station has a maximum pumping capacity of 150 m<sup>3</sup> per hour to handle excessive water inflow (especially during the rainy seasons). Pumping is done in stages on five different levels, 7, 9, 14, 19 and 22 Levels.

#### **VENTILATION**

Ventilation at the Blanket Mine is largely natural with the main incline shaft, Jethro shaft, 5 Winze shaft and sub-vertical shaft down-casting. Shafts such as Lima, Sheet and Jethro Winze are used for up-casting ventilation. A single booster fan as well as several other fans are installed at development ends to aid ventilation. Once mining operations expand to the below 750 m Level, a proper ventilation system with forced up and down-cast ventilation will be commissioned.

#### **COMPRESSED AIR**

Underground drilling and lashing is aided by jackhammers, drifters and loaders. This creates a significant compressed air demand and subsequently a total compressed air capacity of 10,400 cfm is installed on the mine. Compressor locations and their capacities are as follows:-

- Two 4,400 cfm ER8 Atlas Copco Compressors at Blanket;
- Two 2,000 cfm GA160 Atlas Copco Rotary Screw Compressor at Blanket;
- One 1,000 cfm GA160 Atlas Copco Rotary Screw Compressor at Lima; and
- Two 3,000 cfm GA250 Atlas Copco Rotary Screw Compressor at Lima.

Compressed air is fed underground at Blanket via an 8" pipeline with an additional 4" line feeding the plant. The air supply at Lima is fed underground via a 6" pipeline.

## ITEM 19 - MARKET STUDIES AND CONTRACTS

### Item 19 (a) - MARKET STUDIES AND COMMODITY MARKET ASSESSMENT

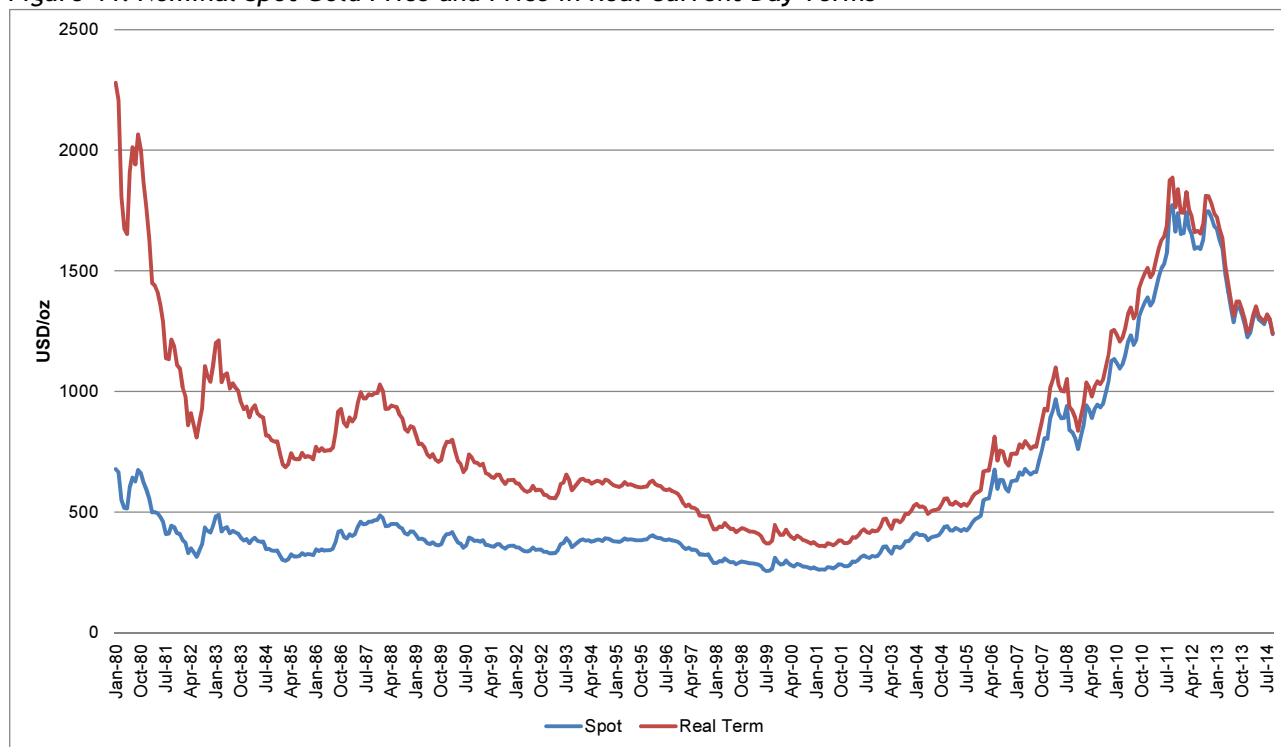
The Market Studies were compiled by the Qualified Person, in compliance with the definitions and guidelines for the reporting of Exploration Information, Mineral Resources and Mineral Reserves in Canada, “the CIM Standards on Mineral Resources and Reserves - Definitions and Guidelines” and in accordance with the Rules and Policies of the National Instrument 43-101 - Standards of Disclosure for Mineral Projects, Form 43-101F1 and Companion Policy 43-101CP.

#### GOLD MARKET

Gold has seen two major rallies over the past two centuries. From 1833 to 1933, gold prices were constant at around USD20 per ounce. From 1934 to 1967, gold prices increased to USD35 per ounce after President Roosevelt fixed the gold price in 1934; the gold price remained stable until 1967 when it was freed. Gold was traded in the market from 1967 and the price increased with rapid fluctuations from then on.

Two significant price jumps occurred in the historical trend of the gold price. The first was in early January 1980, when gold prices reached USD850/oz., but it plunged significantly in the following year. The second historical jump in price started in 2001. This increase is substantially more firmly based and less volatile than the first. Shown in real current-day terms, the price rise in the 1980s was more significant, reaching, when measured in today’s terms, over USD2,000/oz.

Figure 44: Nominal Spot Gold Price and Price in Real Current Day Terms



The global gold market has attracted a lot of attention since 2001. During the 2013 calendar year the market observed an end to the twelve-year Bull Run in gold prices and thus far 2014 is shaping up to be a year of consolidation for gold with the price drivers continuing to adjust from concerns over the health and stability of the global financial system.

Gold mining companies need to know where to next. This section of the Report reviews the world gold market. This is followed by an investigation into the relationship between the gold price and other key influencing variables, such as inflation and currency fluctuation.

There are several factors contributing to short-term and long-term gold price escalations. In the short-term there are two main reasons why gold prices dramatically increase:-

- In a period where global financial markets are unstable and the global economy is in recession, investors are less trusting of financial markets as reliable investments and look at alternative investment avenues that act as a bulwark against any downturn. The gold market, one of such alternatives, operates as a type of insurance against extreme movements in the value of traditional assets during unstable financial markets.
- The devaluation of the US dollar versus other currencies, and international inflation with high oil prices are reasons why big companies use gold as a hedge against fluctuations in the US dollar.

In the long-term, there are three major reasons for increasing gold prices:-

- Mine production, increased mining costs, decreased exploration and difficulties in finding new deposits.
- Institutional and retail investment has rational expectations when markets are uncertain. They therefore keep gold in their investment portfolios as it is more liquid or marketable in unstable financial markets.
- Investing in gold is becoming easier via gold Exchange Traded Funds (“ETFs”) compared to other finance markets. Gold ETFs have stimulated the demand side of gold because it has become as easy to trade as any stock or share.

#### GOLD RESOURCES

According to Natural Resource Holdings (“NRH”) (2013), the total gold Resources (inclusive of Proven and Probable Reserves, Measured, Indicated and Inferred Resources) that are owned by 312 entities including public, private and government-backed companies’ approximated 3.72 billion *in situ* ounces (“Boz.”) in 2013. The average grade of all the deposits was estimated at 1.01 g/t gold.

The database comprises 580 mines and deposits which consist of over one million ounces of *in situ* resources in all categories. Of these 580 used, 199 are producing mines at an average grade of 1.18 g/t while the remaining 381 are undeveloped deposits at an average grade of 0.89 g/t. The average grade differs significantly (33%) between producing and undeveloped deposits. This has important implications on future gold production, and at a gold price reaching low levels many of these projects will simply not be economically feasible. While North America displays the largest amount of contained gold, Africa continues to be home to some of the highest grade (and highest risk) projects on the planet (Table 12).

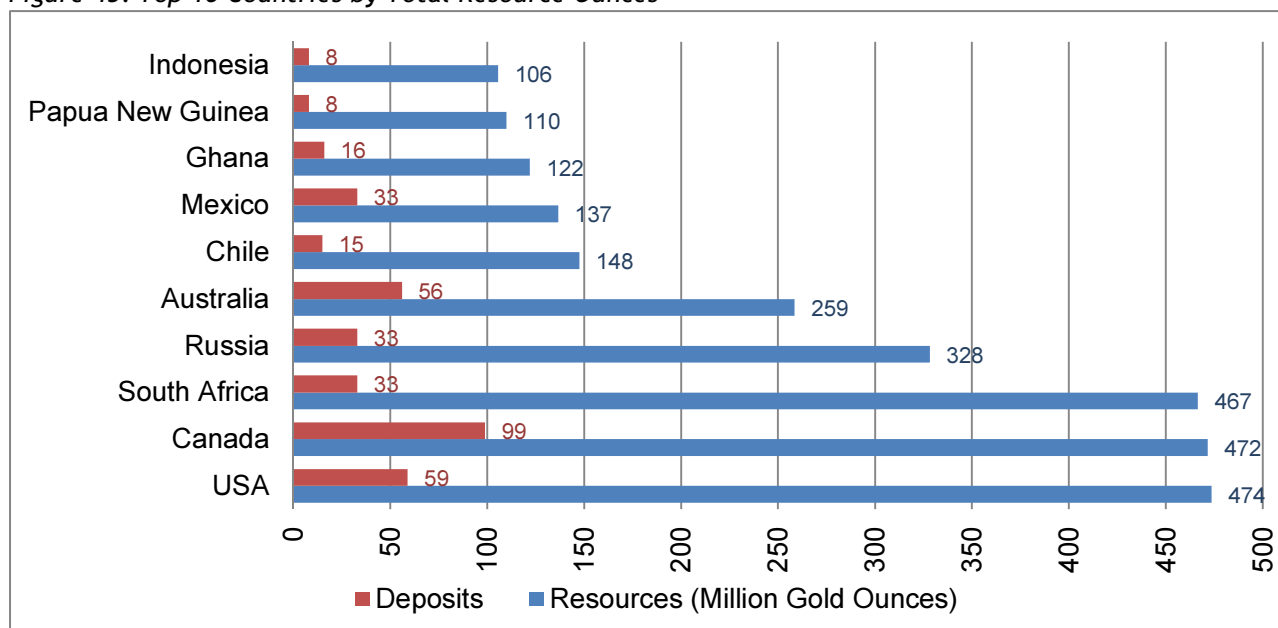
Table 12: Geographical Gold Deposits

Continent	Resources	Number of Deposits	Average Grade
	Moz.		g/t
North America	1,131	199	0.71
Africa	842	109	2.87
Asia	717	87	1.11
South America	543	90	0.83
Australasia	381	68	0.98
Europe	104	27	1.00
<b>World total</b>	<b>3,717</b>	<b>580</b>	<b>1.01</b>

Source: Natural Resource Holdings (2013).

The most resource ounces are held by the 10 countries displayed in Figure 45.

Figure 45: Top 10 Countries by Total Resource Ounces



Source: Natural Resource Holdings (2013)

### GOLD RESERVES

The global gold reserves are dominated by Australia, South Africa and Russia. Ghana moved up four places from 2013 and increased gold reserves by 400 million tonnes during 2013.

Table 13: Country Listing of Gold Reserves

	Reserves
	Mt
Australia	9,900
South Africa	6,000
Russia	5,000
Chile	3,900
United States	3,000
Indonesia	3,000
Brazil	2,400
Ghana	2,000
Peru	1,900
China	1,900
Uzbekistan	1,700
Mexico	1,400
Papua New Guinea	1,200
Canada	920
Other countries	10,000
<b>World total (rounded)</b>	<b>54,220</b>

Source: US Geological Survey, Mineral Commodity Summaries 2014, February 2014

### GOLD SUPPLY

- Global gold mine production has grown at a Compounded Annual Growth rate (“CAGR”) of only 1.12% per annum over the past 17 years, mainly due to significant declines in the South African industry. Production, however, accelerated to 2.11% per annum during the last 10 years following the rise in the gold price.
- In turn, recycling has grown by a steady 4.52% per annum over the 17 years from only 631 tonnes in 1997 to 1,280 in 2013.
- Producer de-hedging was estimated at 48 tonnes for 2013, leaving the outstanding delta-adjusted hedge book at just 73 tonnes.
- Globally, the average total cash increased by 4% in 2013, to USD767/oz. as producers made efforts to contain costs. Total production cost was USD989/oz.
- Excluding write downs (extraordinary costs), all-in costs averaged USD1,206/oz. These two figures give a sense of short-term and long-term support levels.

## MINE PRODUCTION

It was estimated that global mine supply increased by 161 tonnes during 2013; 6% higher than 2012. With difficult current economic conditions, the increase in production is a result of a combination of factors.

- A large number of operations have reported higher year-on-year production over the last couple of quarters. In some cases it reflects a return towards “normal” levels of output following periods of low production due to political issues, geotechnical problems and mine sequencing.
- Supply from new operations has made an important contribution towards the increase in global production.
- Major producers focused on reducing non-essential capital expenditure, and more generally moved away from expansions and acquisitions as seen previously.

Figure 46: Gold Supply

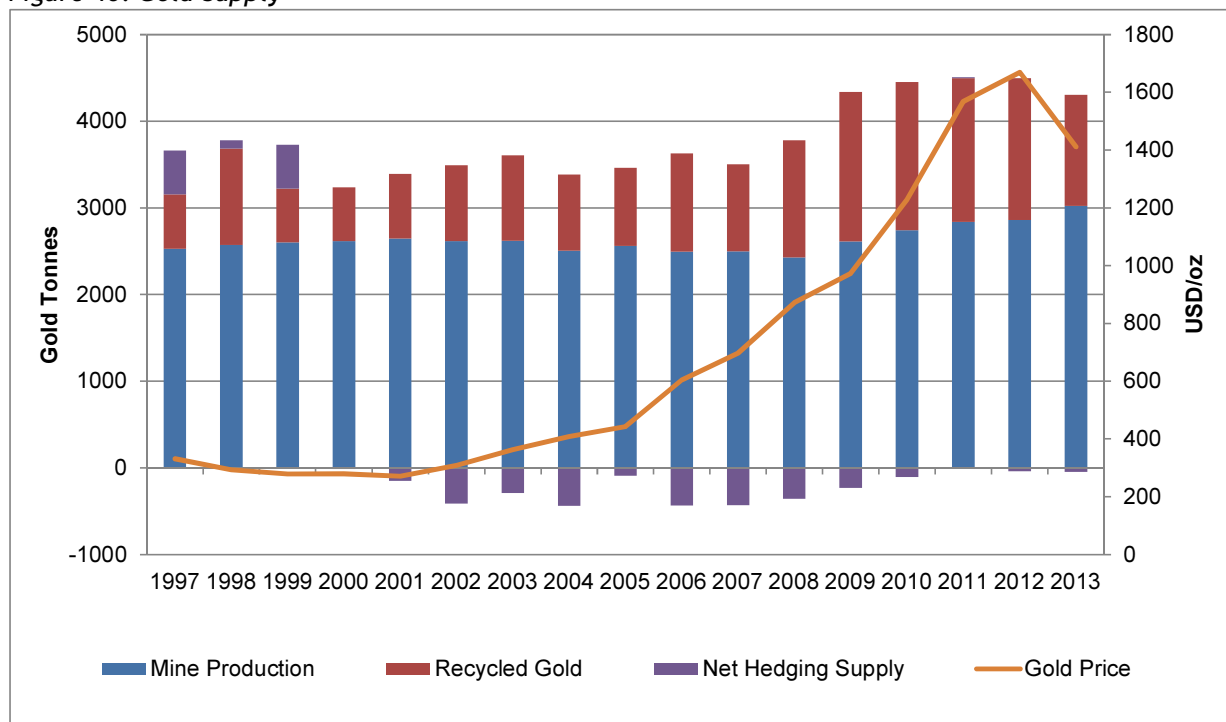


Table 14 displays the top 20 gold mining countries for 2012 and 2013. China is now by far the biggest producer followed by Australia and Russia while Mali has moved down to occupy the 16<sup>th</sup> position.

Table 14: Top 20 Gold Mining Countries

Country	Mine Production (t)		Change % y-o-y
	2012	2013	
China	413.1	438.2	6%
Australia	251.4	266.1	6%
Russia	230.1	248.8	8%
United States	231.3	228.9	-1%
Peru	180.4	181.6	1%
South Africa	177.3	174.2	-2%
Canada	108.0	133.1	19%
Ghana	95.8	107.9	11%
Mexico	102.8	103.8	1%
Indonesia	89.0	99.2	10%
Brazil	67.3	79.9	16%
Uzbekistan	73.3	77.4	5%
PNG	57.2	63.3	10%
Argentina	54.6	50.1	-9%
Chile	48.6	48.6	0%
Mali	50.3	47.1	-7%
Tanzania	49.1	46.6	-5%
Kazakhstan	40.0	42.4	6%
Philippines	41.0	40.6	-1%
Colombia	39.1	40.4	3%
Rest of World	464.3	504.0	8%
<b>World Total</b>	<b>2,864.0</b>	<b>3,022.1</b>	<b>5%</b>

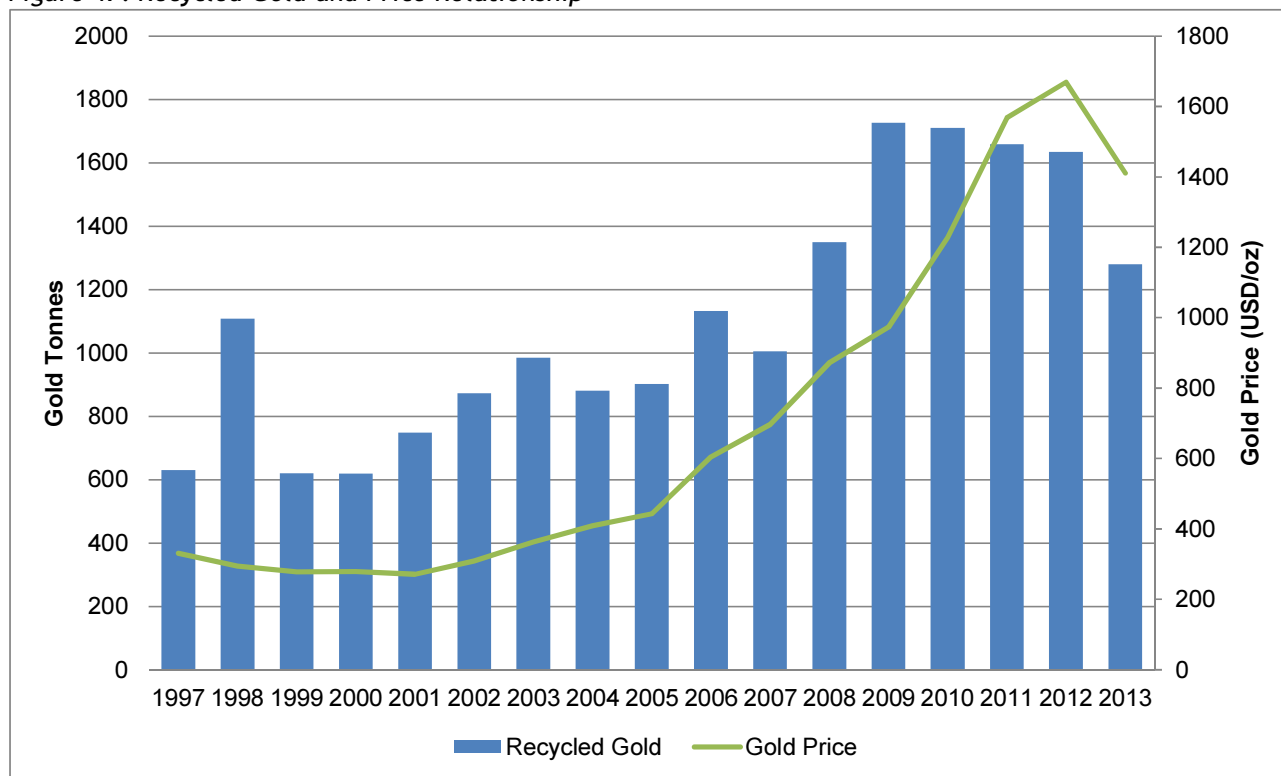
Source: Thomson Reuters GFMS (2014)

Note: y-o-y: year-on-year

### RECYCLED GOLD

The annual supply of recycled gold declined for the fifth consecutive year to the lowest level since 2009. Global supply fell 22% to an estimated 1,280 tonnes in 2013. The scale of decline was the same for industrialised markets as for developing countries, although the drivers of behaviour differed. While price is not the only factor that determines the level of recycling, it is a key driver and its influence was clearly on display during the uptick in the gold price and again in 2013. The sharp fall in the price, and subsequent weakness resulted in a considerable decline in recycling in most of these markets.

Figure 47: Recycled Gold and Price Relationship



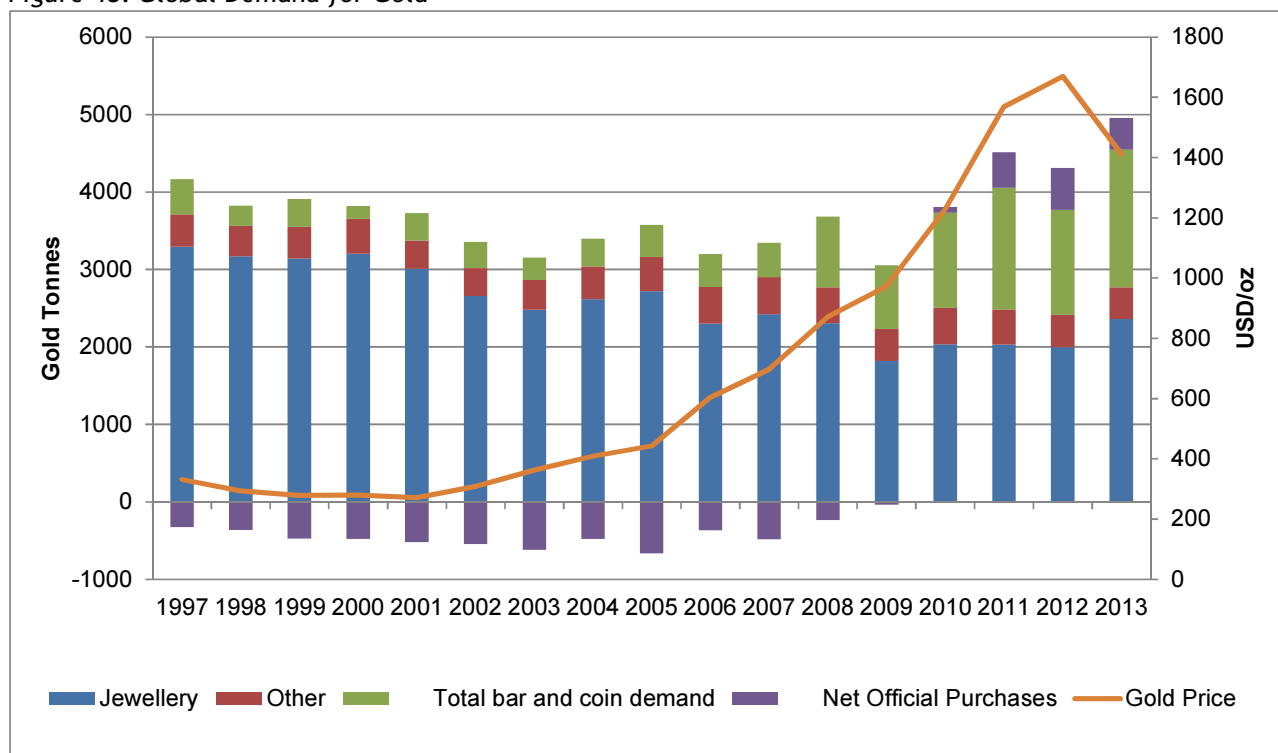
Source: World Gold Council

### GOLD DEMAND

- Jewellery fabrication contracted by a CAGR of 2.06% of the past 17 years but jumped by 13% to a five-year high of 2,198 tonnes in 2013 following the downturn in price.
- Industrial fabrication remained flat.
- Central banks turned from net sellers to net buyers but overall were net sellers of 773 tonnes over the past 10 years.
- World investment demand surged by a CAGR of almost 20% over the past 10 years.



Figure 48: Global Demand for Gold



### JEWELLERY

According to the world gold council (2014), 2013 recorded the largest volume growth in annual jewellery demand since 1997 and marked a return to pre-crisis levels. A longer-term perspective shows that an increasing share of global collective wealth has been allocated to gold jewellery since 2003 (with the exception of 2009, during the worst of the financial crisis). In 2013, gold jewellery value was almost 0.14% of global gross domestic product (“GDP”) compared with less than 0.08% ten years previously. Significantly, jewellery’s share of global GDP in 2013 was one fifth higher than 1997, which was the peak year for gold jewellery demand at 3,294 tonnes.

### INVESTMENT

Gold exchange-traded products are traded on the major stock exchanges including Zurich, Mumbai, London, Paris and New York and most funds are physically backed by vaulted gold. Throughout 2013 the main feature of gold investment was the contrast between exchange-traded funds (“ETFs”), which acted as a source of supply to the market as substantial institutional positions were sold (-881 tonnes), and demand for bars and coins, which surged to an all-time high of 1,654 tonnes.

Over-the-counter (“OTC”) investment and stock flows includes the more dense elements of the investment market as well as any stock changes that have yet to be identified and any statistical residual. By adding OTC investment and stock flows component into the picture for investment yields, the investment total is 10% below that of 2012. Also incorporated within OTC investment and stock flows is demand for gold deposit accounts, which has increased particularly in countries such as Turkey and China. An additional element contributing to the number is gold used to back financial transactions, for example in China, where a number of new instruments (e.g. inter-bank swaps and ETFs) have been introduced.

### TECHNOLOGY

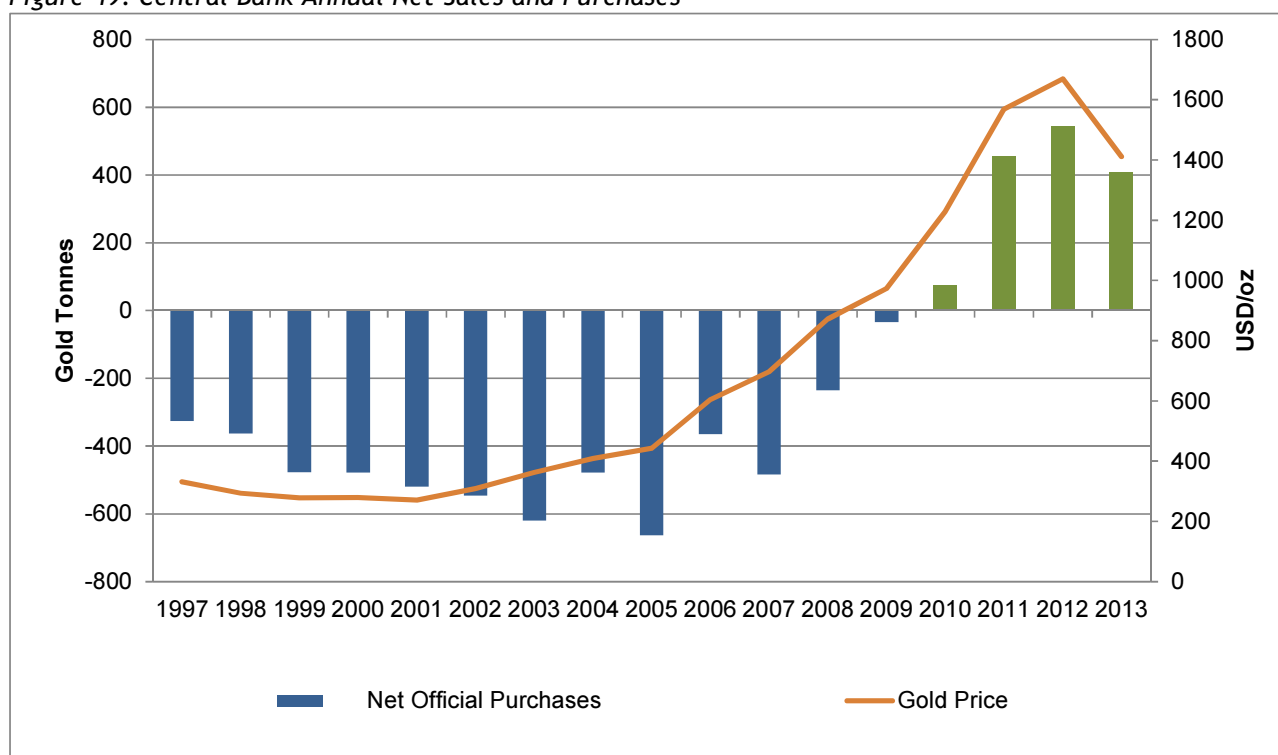
Application of gold in the technology sector remains relatively small. According to the world gold council, worldwide semiconductor reached record sales in 2013. This was driven by expanding demand for smartphones and tablets. Healthy gains were also seen in products using liquid-crystal display (“LCD”) panels. In other areas of semiconductor applications, the automobile industry continues to provide strong support, led by China and the US.

Gold used in dentistry continued its long-term downtrend, although the pace of decline slowed in response to lower gold prices. Gold is seeing a continuation of the long-term trend away from gold to cheaper alternatives (mainly cobalt, chrome, porcelain, and ceramics).

### CENTRAL BANKS

Central Banks turned net buyers in 2008 following a number of years where the banks were net sellers. Central banks made net purchases of 369 tonnes of gold in 2013. The pace of purchases slowed towards the end of the year due to the heightened volatility of gold and a slower rate of foreign reserve accumulation. Although the annual total is 32% lower than 2012, it is considered a healthy outcome - particularly in light of 2012 being the highest level of demand for almost 50 years (Figure 49). The central banks have been a source of net demand for four consecutive years; this is expected to continue into 2014.

Figure 49: Central Bank Annual Net Sales and Purchases



The following countries all saw significant increases in official reserves while a number of other central banks made smaller purchases of around eight tonnes and less during 2013:-

- Russia (77 tonnes);
- Kazakhstan (28 tonnes);
- Azerbaijan (20 tonnes); and
- Korea (20 tonnes).

Aside from the 3.5 tonne sale from Germany, which is related to its coin minting programme, there have been no further sales in what is the final year of the current Central Bank Gold Agreement ("CBGA"). In spite of the gold price action seen throughout 2013, there clearly remains little appetite from signatories to reduce their gold holdings any further. The top 40 countries' official gold holdings as at the end of March 2014 are displayed in Table 15.

**Table 15: Top 40 Reported Official Gold Holdings (As at March 2014)**

Rank	Country	Tonnes	Rank	Country	Tonnes
1	United States	8,133.5	21	Austria	280.0
2	Germany	3,386.4	22	Belgium	227.4
3	IMF	2,814.0	23	Philippines	193.2
4	Italy	2,451.8	24	Algeria	173.6
5	France	2,435.4	25	Thailand	152.4
6	China	1,054.1	26	Kazakhstan	148.7
7	Russia	1,040.7	27	Singapore	127.4
8	Switzerland	1,041.1	28	Sweden	125.7
9	Japan	765.2	29	South Africa	125.1
10	Netherlands	612.5	30	Mexico	122.8
11	India	557.7	31	Libya	116.6
12	ECB	503.2	32	BIS	115.0
13	Turkey	483.5	33	Greece	112.2
14	Taiwan	423.6	34	Korea	104.4
15	Portugal	382.5	35	Romania	103.7
16	Venezuela	367.6	36	Poland	102.9
17	Saudi Arabia	322.9	37	Australia	79.9
18	United Kingdom	310.3	38	Kuwait	79.0
19	Lebanon	286.8	39	Indonesia	78.1
20	Spain	281.6	40	Egypt	75.6

**Source:** World Gold Council - Q1 2014.

**Note:** IMF: International Monetary Fund

ECB: European Central Bank

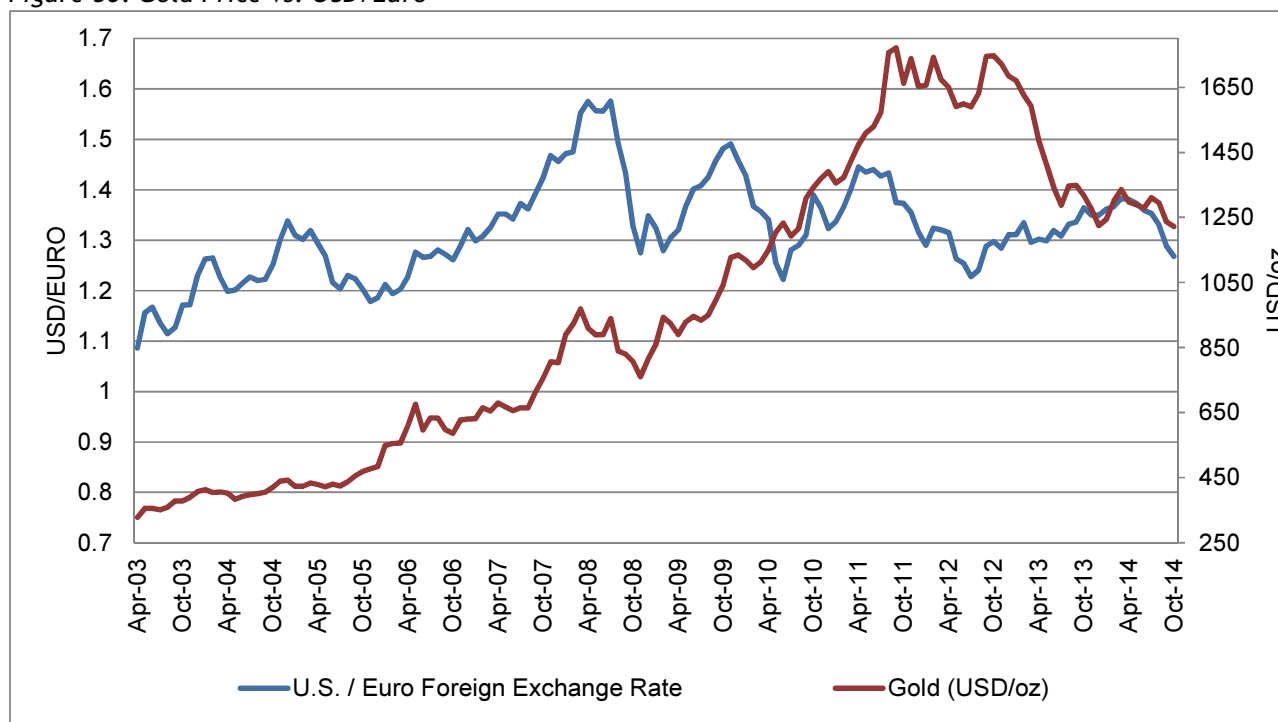
BIS: Bank for International Settlements

## CURRENCY

As gold is usually traded relative to its USD price, the value of the dollar has a meaningful impact on gold. More importantly, gold is viewed as a natural hedge to the USD as it is not directly linked to the monetary or fiscal policies of a particular government. This characteristic strengthens their inverse relationship. Because the USD is also the primary currency used in global transactions and is seen as a stable and reliable unit of exchange, countries aim to have ample reserves to be able to meet their USD denominated liabilities. As such, the dollar forms the lion's share of foreign reserve portfolios. However, governments need to manage the concentration risk in their reserves by diversifying into high quality, liquid assets that lack credit risk - like gold.

Gold is often seen as a currency that provides a natural alternative to money. Gold satisfies many criteria that define a currency including its use as convertibility, store of value and medium of exchange. Through the years it can be seen that gold has the evolving nature of the relationship with the USD, its geological scarcity and its physical/chemical qualities as a non-corrosive, durable metal make it a natural hedge to paper currencies. Because fiat money can be printed as a result of monetary policies, part of gold's value as a hard asset is derived from its lack of supply growth. Gold is a highly liquid asset, with daily trading volumes comparable to major currency pairs such as the USD-pound sterling, and is eclipsed only by USD-yen and USD-euro transactions (Figure 50).

Figure 50: Gold Price vs. USD/Euro



Note:

1. Correlation: 0.670002946.

While gold is considered a commodity by many, in practice, its role as currency stands out. It is used by central banks as part of their foreign reserves, accepted in exchange for goods in parts of the world, and traded alongside other currencies in the financial system. According to the Bank for International Settlements (“BIS”) 2013 annual report that states that “gold is to be dealt with as a foreign exchange position rather than a commodity because its volatility (which is almost consistently lower than commodities) is more in line with foreign currencies, and banks manage it in a similar manner to foreign currencies”.

An allocation to gold, denominated in USDs, represents an implicit exposure to a foreign currency, providing international investors with protection against falls in their local currency. Further, when evaluating a portfolio’s exchange risk in light of its foreign currency denominated holdings, gold can be used as a cost-effective and better-rounded complement to other hedging strategies. For example, for a US investor trying to hedge currency risk stemming from emerging market exposure, gold has been historically less costly than a basket of currencies, and including gold as part of the hedging strategy has significantly reduced drawdowns.

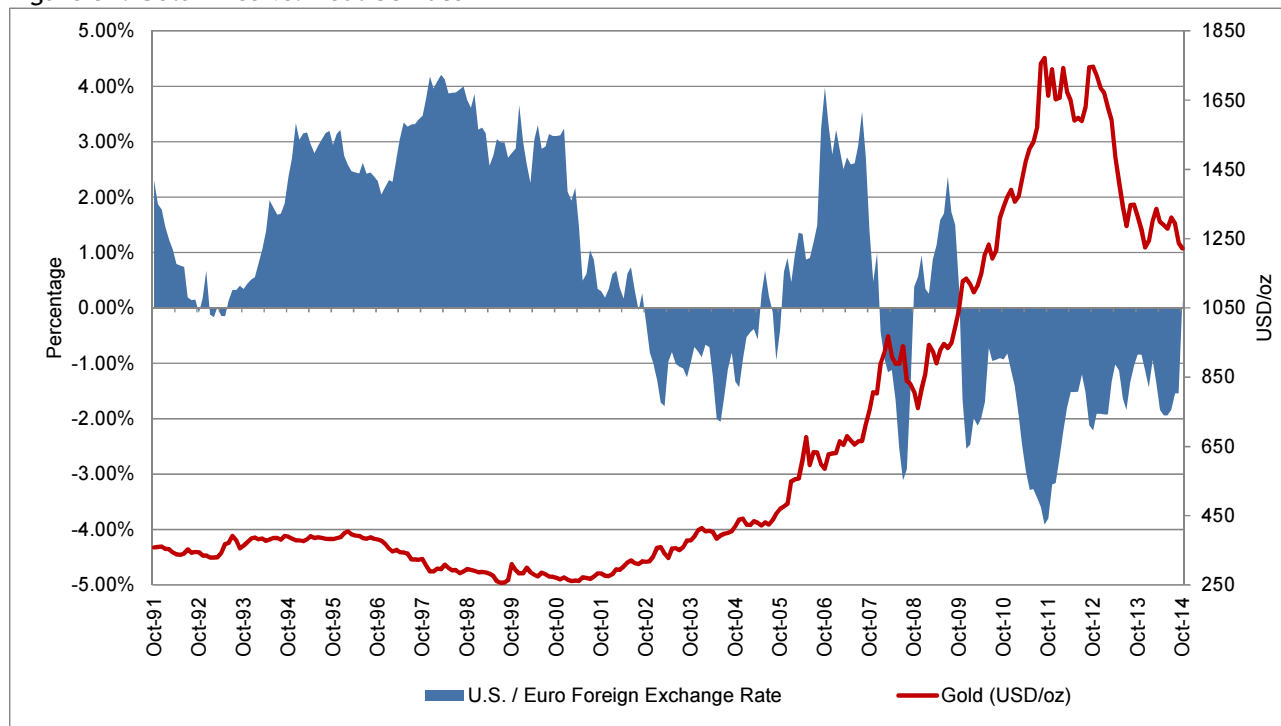
Driven by China’s desire to increase its financial influence, the Chinese renminbi is likely to emerge gradually as a genuine international currency as Beijing eases restrictions on its use in transactions and investments abroad. It is expected that during the coming period of uncertainty and transition between different reserve currencies, official central bank asset managers around the world are likely to increase their interest in gold as a result of doubts about the overall strength of global monetary arrangements. This has been prominent since the economic downturn in 2008 (Figure 49).

#### US INFLATION AND INTEREST RATES

A common argument for buying gold is that it is seen as an inflation hedge. Consumer price indices (“CPI”) measure “representative” baskets of goods that may well reflect a general price trend, but these will likely not reflect everyone’s experience of inflation. The reason why the US CPI is the measure most widely used to measure gold’s effectiveness as hedge, is because of the fact that gold is traded by the USD and that real interest rates create an opportunity cost for holding gold make US inflation a logical candidate to use as a

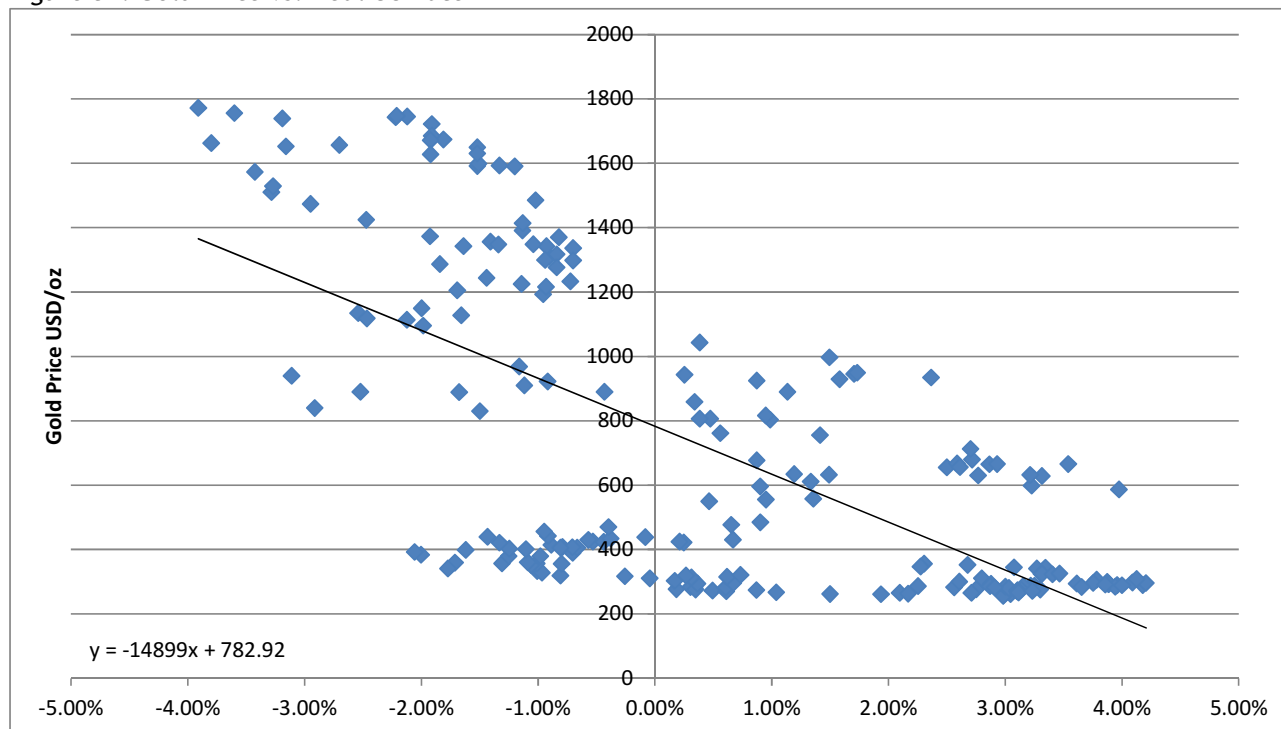
reference in long-term pricing. Real US rate is the lending interest rate adjusted for inflation as measured by the GDP deflator. From Figure 51 it can be seen that when the real US rate becomes negative, the gold price increases, that gives an indication that investors start investing in gold rather than the banks to receive better returns.

Figure 51: Gold Price vs. Real US Rate



Minxcon used the information from Figure 51 and plotted the price against the real inflation rate. This shows a strong negative Pearson correlation of -0.66%

Figure 52: Gold Price vs. Real US Rate



Note:  $r = -0.663393969$

From the preceding figures it is evident that the gold price is directly influenced by the change in the real US rate. The forecast of the real US rate is thus a good indication of what will happen to the gold price in the short-term.

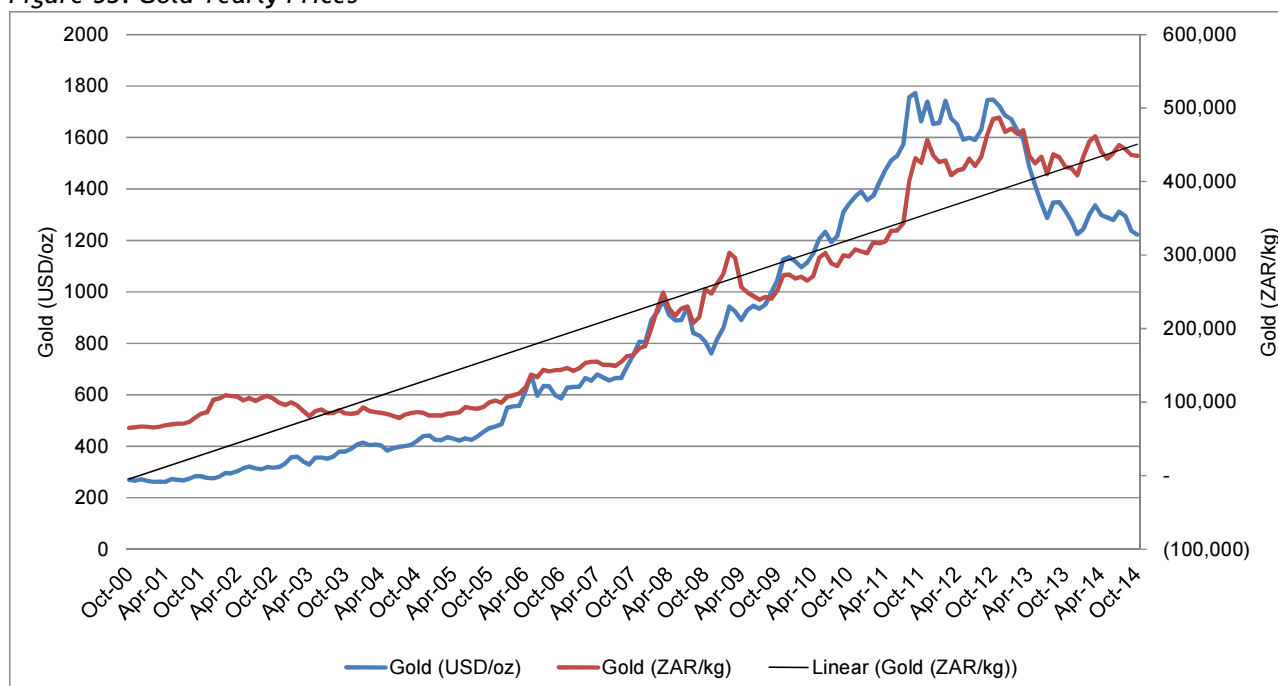
### GOLD PRICING

The second quarter of 2013 saw an absolute drop in the gold price of more than USD400/oz. - a double-digit decline in the average quarterly price compared with both Q1 2013 and Q2 2012. In the first quarter of 2014 a gold price rally was driven by some weak U.S. economic data releases coupled with a rise in safe-haven buying as emerging market risk increased and several currencies depreciated sharply.

The price action also had an impact on the supply side of the gold market resulting in a sharp contraction in recycling. In what is a normal reaction to sharply weaker prices, recycling activity shrank - primarily due to consumers in developing markets holding onto their stocks of old gold as the profit motive faded along with the gold price.

An increasing conviction is depicted among Indian and Chinese consumers that gold prices will be stable or higher in the future, with particular positivity around longer-term expectations for the gold price. What is notable is that positive price expectations appeared to have increased with subsequent drops in the price, illustrating extremely resilient sentiment around the future trajectory of gold. There was major increases in jewellery demand, coin and bar purchases around the USD1,200/oz. level.

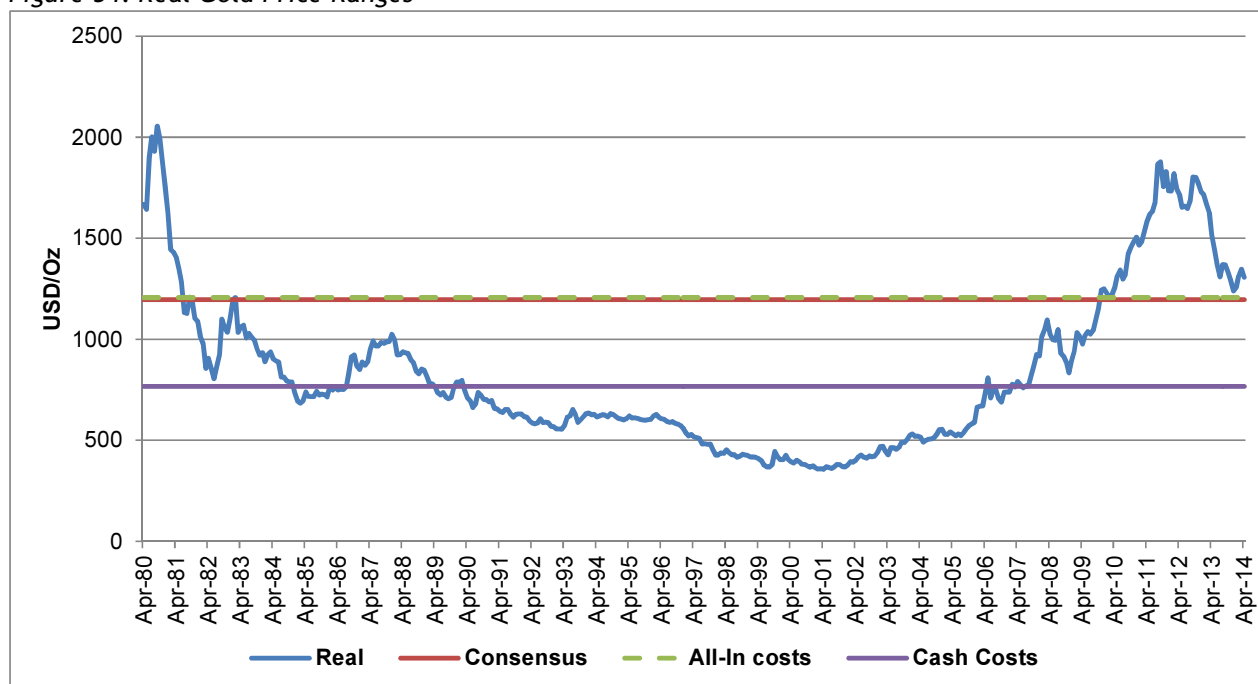
Figure 53: Gold Yearly Prices



### OUTLOOK FOR GOLD

Economic theory suggests that prices should increase in line with the cost of producing the commodity otherwise it will lead to oversupply or deficit. Measuring the CAGR of the gold price over the past 35 years supports the general practise to increase commodity prices with the USD inflation rate - the CAGR of the gold price measured for this period is 2.71% and 3.12% from the high in 1980 to the September 2011 high. Although inflation fluctuated significantly in the 2 years following the spike in 1980, US inflation stabilised between 2% and 4% for most of the time. Measuring the gold price in real times show the two historic highs in Figure 54. Plotted on the graph is also the cash cost, all-in costs and consensus figures. Operating costs were discussed in detail earlier in this Report.

Figure 54: Real Gold Price Ranges



Consensus opinion has the real gold price declining over the coming months and years. This is driven by continued economic recovery that would see tapering of the Federal Reserve's massive quantitative easing program continue, increase in U.S. treasury yields and equity markets and a stronger USD, all of which are negative for the gold price.

Table 16: Gold Price Forecast (Nominal Terms)

	Unit	2014	2015	2016	2017	2018	Long-Term (Constant)
Gold	USD/oz.	1,238	1,234	1,287	1,257	1,280	1,181

Source: Consensus Economics (Oct 2014)

It is unlikely that the price will drop back to the cash cost level, currently at USD 767/oz. This will mean that no new mine will be developed and existing operations will spend no capital. This will very quickly lead to upward pressure on the price. A strong support level seems to be the USD1200/oz. level which represents the all-in cost number but also the current long-term consensus real term price for gold.

### Item 19 (b) - CONTRACTS

On January 28, 2014 Caledonia announced that as a result of new regulations introduced by the Zimbabwe Ministry of Finance, all gold produced in Zimbabwe must now be sold to Fidelity Printers and Refiners Limited ("Fidelity"), a company which is controlled by the Zimbabwean authorities and which is now responsible for the final refining and marketing of all gold produced in Zimbabwe. Accordingly, all of Blanket's production has subsequently been sold to Fidelity. Blanket receives 98.5% of the value of the gold within a maximum of 7 days of a sale to Fidelity. Blanket has received all payments due from Fidelity under these new arrangements in-full and on-time.



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## ITEM 20 - ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

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### Item 20 (a) - RELEVANT ENVIRONMENTAL ISSUES AND RESULTS OF STUDIES DONE

Information regarding environmental consideration is taken largely from AGS (2006), Fraser Alexander Zimbabwe (Pty) Ltd (March 2010) and Blanket Mine (November 2009).

In 1995 a full Environmental Impact Assessment was completed by SRK to identify the major detrimental aspects of the mining operation and recommend remedial measures. Apart from the potential to pollute groundwater from the tailings dam, no significant detrimental environmental impacts were identified by this study.

Kinross Gold Corporation, the owners of the mine up until June, 2006, issued an Environmental Policy and Framework document in 2001 based on ISO 14001, which serves as the guideline for all environmental issues at Blanket Mine.

### Item 20 (b) - WASTE DISPOSAL, SITE MONITORING AND WATER MANAGEMENT

The Government of Zimbabwe has enacted regulations covering water and effluent disposal, through the all-encompassing Environmental and Natural Resources Act. Under the Water Act and the Waste Disposal Regulations a mine is required to obtain permits for all effluent disposal and two permits have been issued to the Blanket Mine by ZINWA, covering the sewage effluent and mill tailings disposals.

The Blanket Mine tailings operation is a gold tailings operation, comprising two dams/compartments adjacent to one another. Dam A and Dam B are operated as a paddock ("day wall") operation. Decanting of the two dams occurs through separate penstocks, with Dam A having an elevated penstock installed in 2005/2006. Dam A is the initial tailings dam with Dam B having been constructed subsequently and adjacent to Dam A. Dam A is in the order of 3 m lower in elevation to Dam B (height difference is an estimate as no current updated survey information is available). The tailings dams are operated by Fraser Alexander Zimbabwe.

The unresolved issue of the hard naturally occurring groundwater is an outstanding concern for the closure plan of Blanket. A letter has been written in December 2012 to the Environmental Management Agency ("EMA") requesting:-

1. Oxygen absorbed to be removed from the sampling parameters because it has limited relevance to ground water.
2. The TDS Limit Value increased to  $\leq 2500$  blue band to reflect the naturally occurring ground water.
3. In response to EMA suggesting the sewage pond outflows be used to irrigate the tailings dam vegetation which is being done; the sewage outflow should be removed from the sampling parameters as the "end of pipe" will reflect in the tailings dam unsaturated zone monitoring ("uzm").

Similar monitoring of the sewage disposal area shows that all holes are in the acceptable green category. In October, 2009, Epoch Resources (Pty) Ltd ("Epoch") was appointed by Fraser Alexander Tailings (Pty) Ltd to undertake an audit review of the tailings operation at the Blanket Mine. The audit review identified no significant operational or design risks associated with the dam. The following are two key findings of the audit:-

- A number of the findings and recommendations identified in the 2007 audit report have not been addressed.
- The level of reporting and documentation of the operational data pertaining to the tailings dam has declined significantly since the last audit.

An updated survey of the tailings dam facility was not available at the time of the audit as was the case during the 2007 audit. In addition, no monthly depositional tonnages were made available and the rate of rise for the tailings dam could not be determined. However, at a production rate of 1,000 tpd the rate of rise ("RoR") is 0.54 m per year based on the final design area of 28 ha, which is well below the legal maximum of 2 m per year. Epoch recommended the following:-

- An updated comprehensive survey must be carried out on the entire tailings dam facility, including the dam basins, position of drains, penstock outlets and piezometers.
- Appropriate monitoring data sheets and report templates must be implemented for the collection, documentation and report of the various monitoring aspects pertaining to the tailings dam.
- A minimum vertical freeboard of 1.5 m for Dam A and B must be maintained at all times.
- Piezometers must be checked by carrying out Upset Tests to confirm that they are fully operational.
- Drains must be rodded and flushed to confirm that they are fully operational and not blocked.
- A comprehensive slope stability assessment must be undertaken.
- The height discrepancy between Dam A and B must be gradually phased out.

#### **Item 20 (c) - PERMIT REQUIREMENTS**

No permits other than the operating claims, non-operating claims and exploration claims have been issued.

#### **Item 20 (d) - SOCIAL AND COMMUNITY-RELATED REQUIREMENTS**

Blanket Mine is fully indigenised as required by Zimbabwe law; i.e. the company is 51% owned by indigenous Zimbabweans. Of the above portion, 10% was donated to the Gwanda Community Share Ownership Trust (GCSOT) and 10% is held by the Blanket Management and Employee Trust.

Blanket's investment in community and social projects is not limited to the operation of the mine and the welfare of its employees but includes payments to the GCSOT in terms of Blanket's indigenisation as well as certain ex gratia project related payments. Blanket provides housing for all its employees, who live some distance from the mine, and has a policy of assisting local communities with their infrastructural requirements.

#### **Item 20 (e) - MINE CLOSURE COSTS AND REQUIREMENTS**

In March 2001 the Blanket Mine contracted Knight Piesold to estimate the costs of decommissioning and closure of the mine. This study included all aspects of the mining operation such as open workings, waste dumps and infrastructure. An updated decommissioning and reclamation cost estimate was undertaken by Blanket Mine and reported in November 2009.

There are a number of Government of Zimbabwe regulations and guidelines including the Mining General Regulations, the Environmental and Natural Resources Act, the Water Act and the Waste Disposal Regulations which cover a mine's closure obligations. These are all addressed and costed in the Knight Piesold report and in the updated report by Blanket Mine dated November 2009.

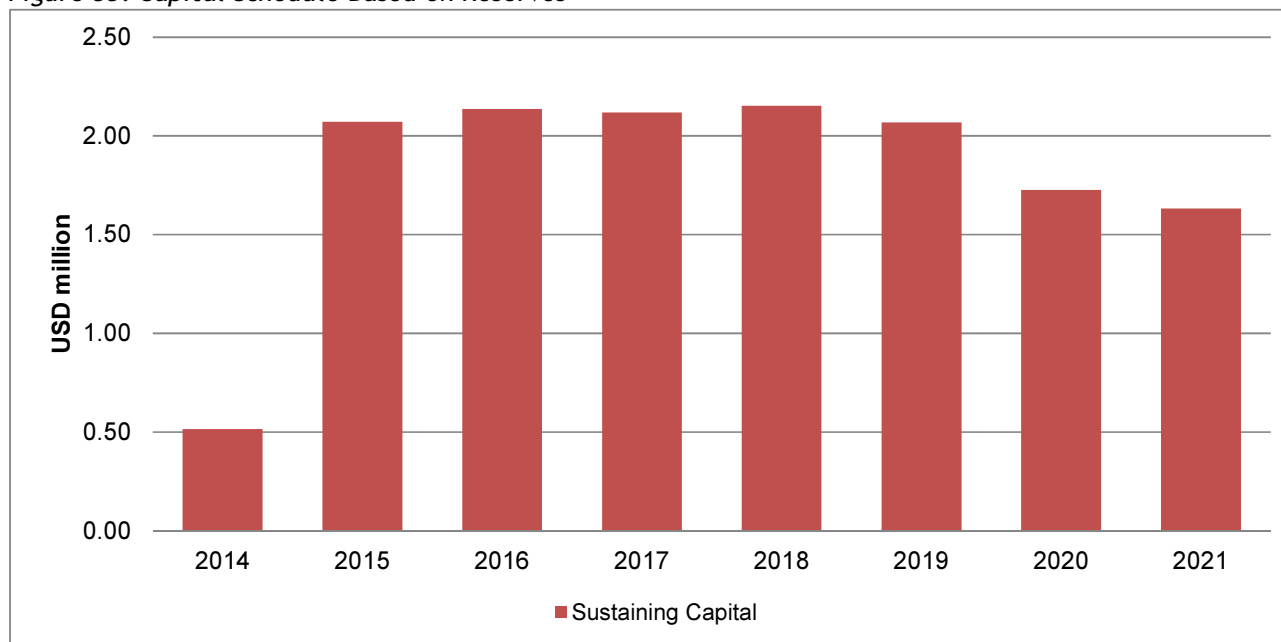
During December 2012 a review and update of the closure cost estimates and the closure plan was revised by Toltecs (Pvt) Limited t/a Paramark ("Paramark") and Black Crystal Environmental Consultants ("Black Crystal"). The closure cost was calculated at USD1.6 million. The mine is not required to post a bond for this amount, but has reached an agreement with government that the break-up value of the plant and mine infrastructure be pledged as a guarantee for the closure cost.

## ITEM 21 - CAPITAL AND OPERATING COSTS

### Item 21 (a) - CAPITAL COSTS

The capital schedule for the Blanket mining operations for the LoM is illustrated in Figure 55. There is no initial or infrastructure capital for the Reserve LoM plan, only sustaining capital. Sustaining capital expenditures are capital expenditures resulting from improvements to and major renewals of existing assets. Such expenditures serve to maintain existing operations, but do not generate additional revenue. The total sustaining capital amounts to USD14.4 million over the LoM. Sustaining capital for 2014 only includes months October to December.

Figure 55: Capital Schedule Based on Reserves

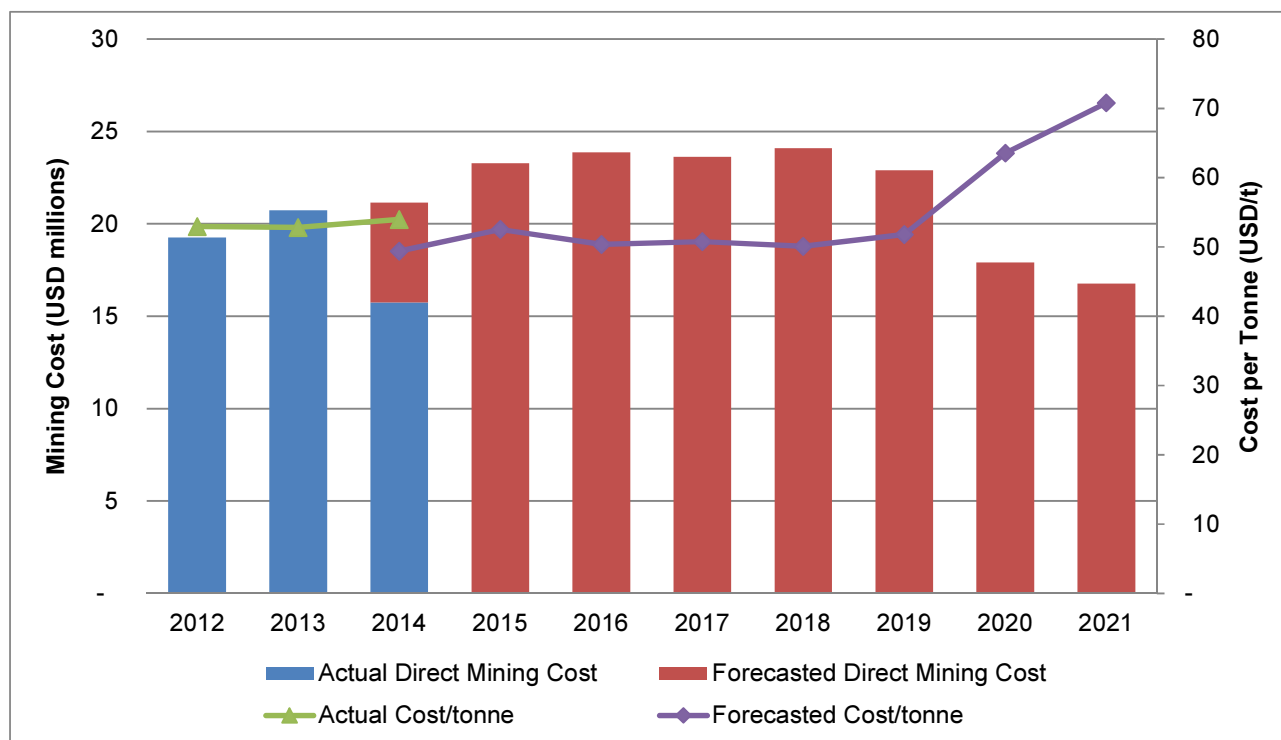


### Item 21 (b) - OPERATING COST

#### Mining Opex

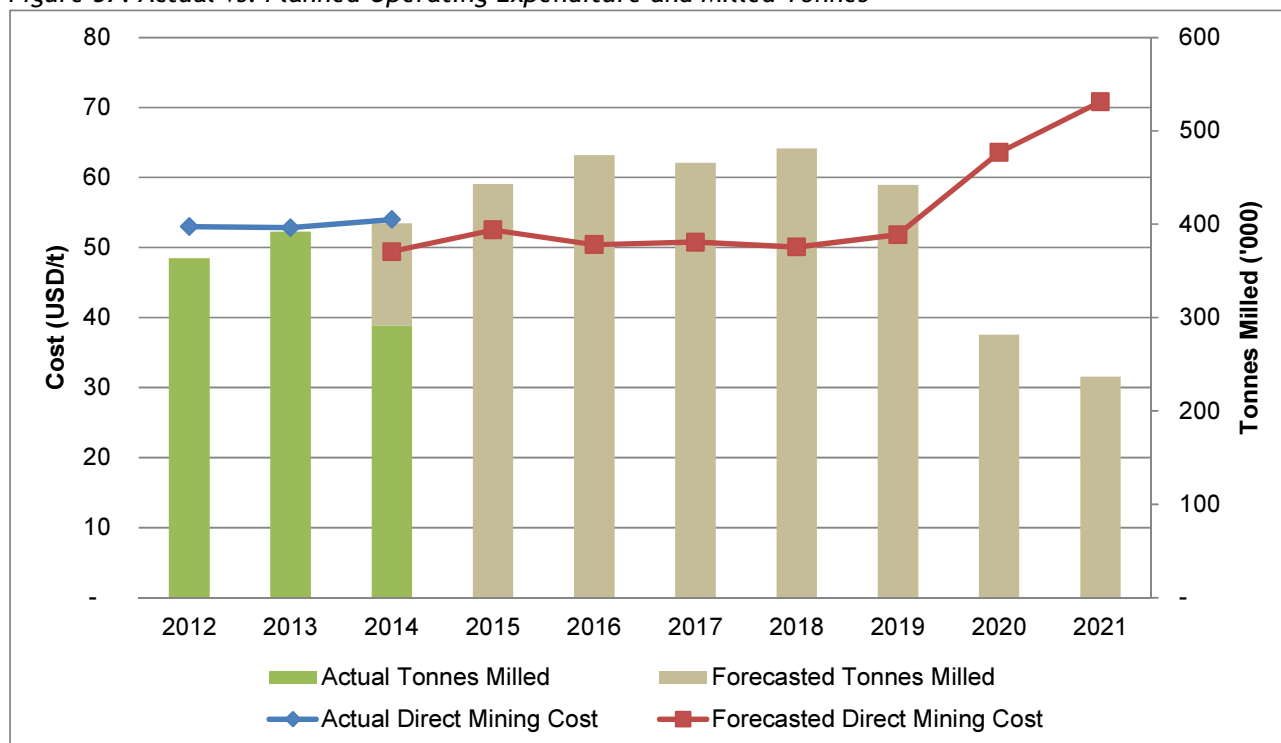
The operating costs used for Blanket Mine is based on the business plan received from the mine. The operating costs planned from October 2014 onwards were compared to the actual costs paid during 2012, 2013 and up to September 2014. The comparison was done to ensure that the planned opex, as received from the mine is achievable. The comparison is displayed in Figure 56. The increase in the cost per tonne from 2020 to 2021 is a function of the decrease in production, as displayed in Figure 57.

Figure 56: Actual vs. Planned Operating Expenditure



The increase in the total direct mining cost and the decrease in cost per tonne are a function of the increase in tonnes mined and milled from an average of 381,000 tonnes from 2012 to 2014 to a forecasted average of 461,000 tonnes from 2015 to 2019. The actual and forecasted costs per tonne are displayed against the tonnes milled to better indicate the effect it has on the cost per tonne.

Figure 57: Actual vs. Planned Operating Expenditure and Milled Tonnes

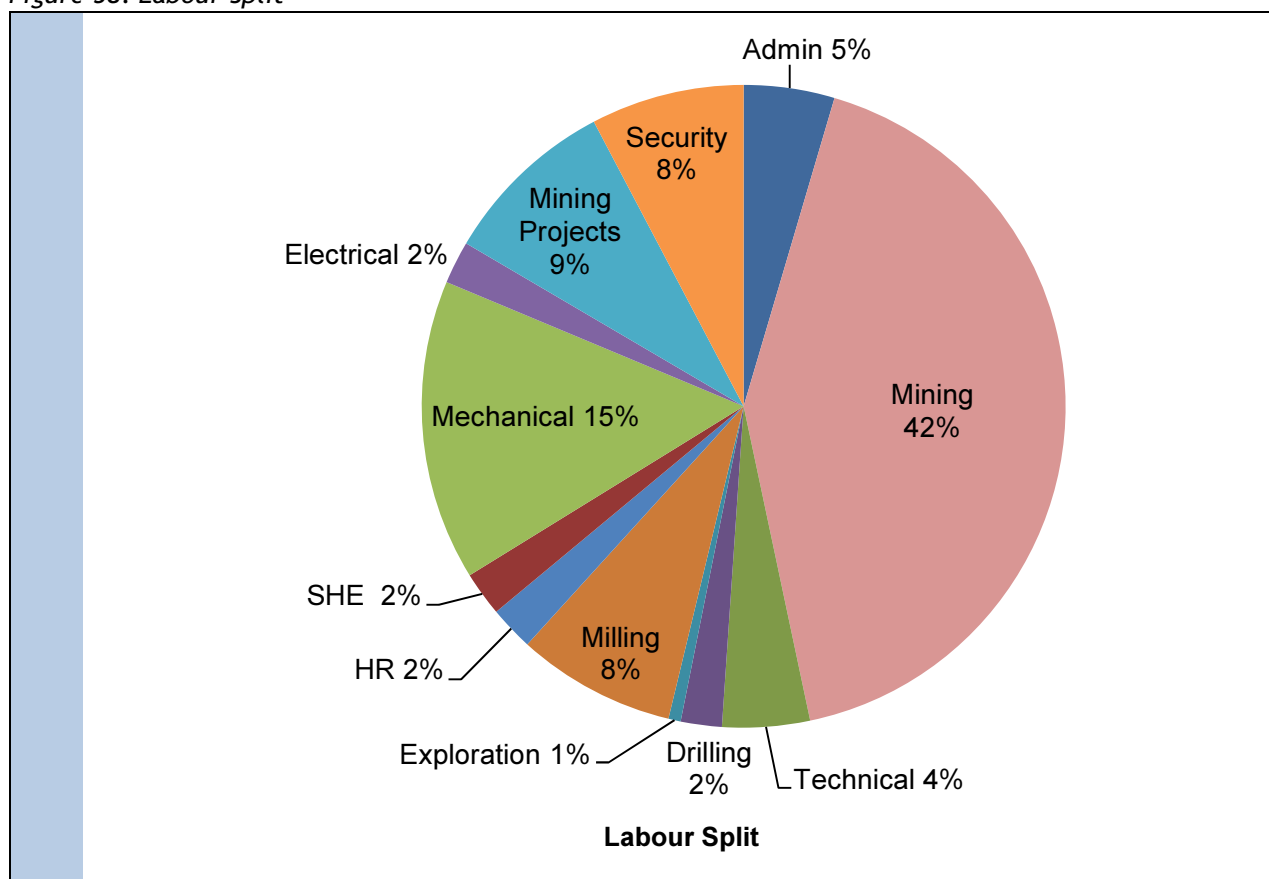


From Figure 56 and Figure 57 it appears that the planned production costs are very similar to the actual cost for 2012, 2013 and 2014, and would be an acceptable assumed rate. Labour is the highest contributor to the direct mining costs and make up 35% of the cost followed by the electricity that averages 22% of the

cost. The operating cost per milled tonne increased in year 2020 to 2021 as a result of the smaller amount of tonnes actually produced against similar operating expenditure.

Labour cost is forecasted to increase by 12% when the forecasted production increases to 454,000 tonnes per year which is a result of the increase in total mine employees from 1,118 to  $\pm 1,163$ . A breakdown of the current labour complement is displayed in Figure 58. The majority of the employees (42%) is the directly related mining employees.

Figure 58: Labour Split



The costs were split between fixed costs and variable costs. The fixed cost component in the estimate was determined by identifying the activities which would remain fixed on the operation regardless of the tonnage produced. These activities are flagged as fixed in the model. It should be noted that some of the fixed costs (direct labour, electricity, water and others) would change with tonnage, whether it is a linear or step change. All activities of which the cost would directly change with tonnage, whether it is a linear or step change, has been assumed and flagged as variable cost. The majority portion of the costs is fixed.

Table 17 illustrates the average operating cost components over the LoM. Where relevant, the operating cost was linked to the ore tonnes produced. The cash flow was modelled on a variable cost basis for plant and mining consumable costs but fixed costs such as the administration, overheads and management were fixed independent of the tonnes mined. The mechanical engineering cost includes compressors, spares, rolling stock and transport. The other direct mining expense includes administration, security, human resources ("HR") and safety, health, and administration costs. Procurement costs and other overheads are included in the operating costs as non-direct mining expenses. The non-direct mining costs make up 18% of the total mining cost. The costs displayed in Table 17 are based on the costs at a steady-state of 461,000 tonnes per annum.

Table 17: Fixed and Variable Mining Operating Cost

Direct Mining Expenses	Unit	Amount per Year
<b>Fixed Direct Mining Expenses</b>		<b>At Steady State</b>
Mechanical engineering	USD	2,355,919
Mining	USD	699,433
Electrical engineering	USD	946,566
Other	USD	2,227,064
ZESA Power	USD	4,978,240
Diesel cost	USD	245,280
Total non-management payroll Mining	USD	7,103,228
Management payroll Mining	USD	1,105,192
Other on-mine costs	USD	1,854,000
<b>Variable Direct Mining Expenses</b>		
Explosives Cost	USD/RoM t	3.2
Mining Steel Cost	USD/RoM t	1.3
<b>Total Direct Mining Expenses</b>	<b>USD</b>	<b>23,558,393</b>
<b>Total Direct Mining Expenses</b>	<b>USD/RoM t</b>	<b>51.1</b>
<b>Non-Direct Mining Expenses</b>	<b>Unit</b>	<b>Amount per Year</b>
<b>Fixed Non-Direct Mining Expenses</b>		
Other income/(expense)	USD	65,976
Exploration EPO fees	USD	422,004
Caledonia Management fee	USD	4,680,000
<b>Total Non-Direct Mining Expenses</b>	<b>USD</b>	<b>5,167,980</b>
<b>Total Non-Direct Mining Expenses</b>	<b>USD/RoM t</b>	<b>11.2</b>
<b>Total Combined Mining Expenses</b>	<b>USD/RoM t</b>	<b>62.3</b>

### Processing Opex

#### Historic Processing Costs

The historic plant costs are summarised in Table 18.

Table 18: Historic Plant Operating Costs between 2012 and July 2014

Item	Unit	Monthly Average 2012	Monthly Average 2013	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Avg
Milled Tonnes	ktpm	30.31	32.69	28.33	32.10	32.42	35.29	30.11	33.83	35.53	31.73
<b>Fixed Plant Expenses</b>	<b>USD'000</b>	<b>181.68</b>	<b>193.30</b>	<b>157.57</b>	<b>151.72</b>	<b>158.48</b>	<b>168.22</b>	<b>156.51</b>	<b>162.94</b>	<b>156.10</b>	<b>181.01</b>
Milling Fixed Consumables	USD'000	59.18	52.97	25.74	13.76	16.19	21.65	15.48	23.25	24.55	47.95
Non-Management	USD'000	100.02	112.64	104.14	110.27	114.60	118.88	113.34	112.00	110.57	107.60
Management	USD'000	22.48	27.69	27.69	27.69	27.69	27.69	27.69	27.69	20.99	25.46
<b>Variable Plant Expenses</b>	<b>USD/t</b>	<b>14.79</b>	<b>13.60</b>	<b>15.98</b>	<b>13.82</b>	<b>12.96</b>	<b>11.70</b>	<b>14.65</b>	<b>12.41</b>	<b>11.44</b>	<b>13.94</b>
ZESA Power	USD/t	5.97	5.76	7.09	6.27	5.40	4.96	6.37	6.16	5.80	5.89
Diesel Power	USD/t	0.27	0.29	0.47	0.50	0.74	0.07	1.32	0.17	0.13	0.32
Cyanide	USD/t	3.36	3.01	3.47	3.02	2.48	2.12	2.65	1.98	2.17	3.02
Steel	USD/t	3.80	3.21	3.28	2.46	2.89	2.58	2.71	2.78	2.21	3.31
Other Consumables	USD/t	1.39	1.33	1.67	1.57	1.45	1.97	1.61	1.31	1.13	1.40
<b>Total Plant Expenses</b>	<b>USD'000</b>	<b>629.91</b>	<b>638.02</b>	<b>610.22</b>	<b>595.25</b>	<b>578.79</b>	<b>580.99</b>	<b>597.63</b>	<b>582.63</b>	<b>562.37</b>	<b>623.32</b>
<b>Total Plant Expenses</b>	<b>USD/t</b>	<b>20.78</b>	<b>19.52</b>	<b>21.54</b>	<b>18.55</b>	<b>17.85</b>	<b>16.46</b>	<b>19.85</b>	<b>17.22</b>	<b>15.83</b>	<b>19.64</b>

Source: Blanket

The average plant costs for this period were USD19.64 per RoM tonne (or per mill feed tonne) at an average of 31.73 ktpm. There are opportunities to reduce operating cost by measuring and controlling power consumption to the main plant units as well as optimising the plant throughput. Some initiatives have been implemented by plant management which have contributed to lower operating costs:-

- the installation of the cyanide analyser and controller has contributed to lower cyanide consumptions; and
- the addition of oxygen has contributed to the lower cyanide consumptions.

#### Projected Processing Costs

Table 19 summarises the total plant operating costs at steady-state production (between 2015 and 2019) of about 38.43 ktpm or 461.18 ktpa.

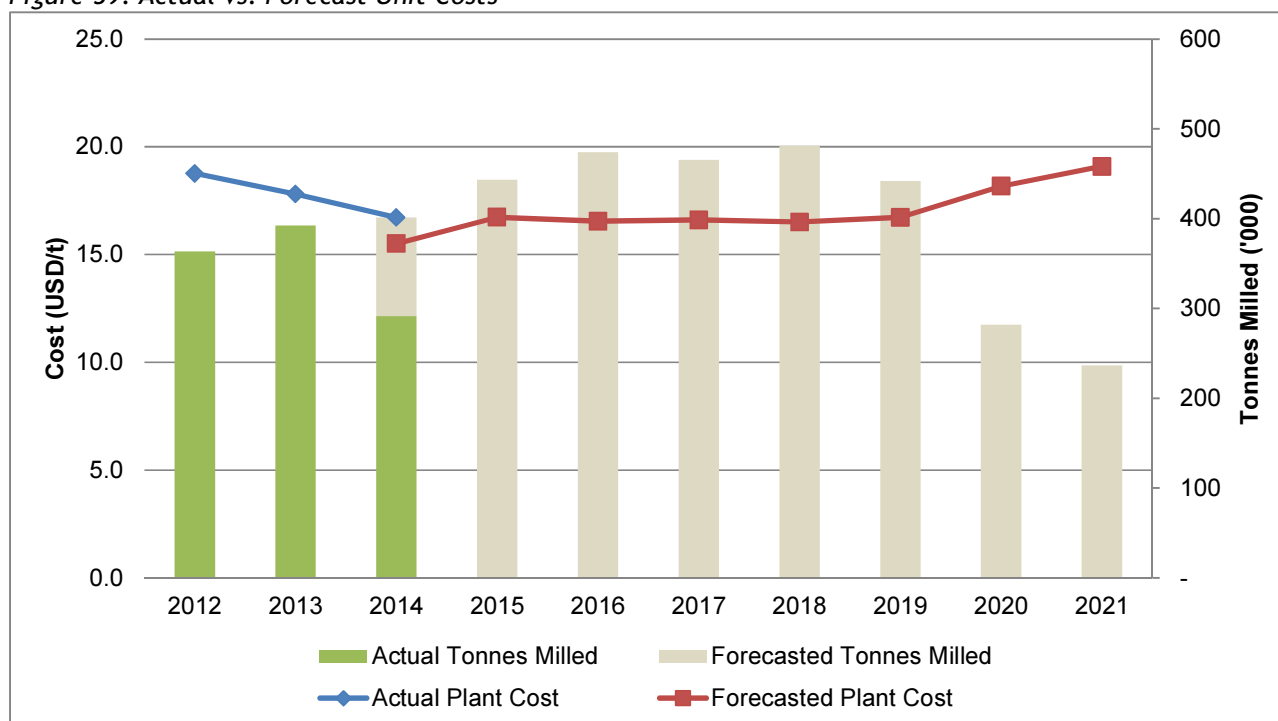
Table 19: Expected Plant Operating Cost at Steady State

Item	Unit	Monthly Averages between 2015 and 2019	Yearly Averages between 2015 and 2019
Milled Tonnes	kt	38.43	461.18
<b>Fixed Plant Expenses</b>	<b>USD'000</b>	<b>176.11</b>	<b>2,113.36</b>
Milling Fixed Consumables	USD'000	21.49	257.83
Non-Management	USD'000	133.81	1,605.70
Management	USD'000	20.82	249.83
<b>Variable Plant Expenses</b>	<b>USD/t</b>	<b>12.04</b>	<b>12.04</b>
ZESA Power	USD/t	6.34	6.34
Diesel Power	USD/t	0.20	0.20
Cyanide	USD/t	2.38	2.38
Steel	USD/t	1.53	1.53
Other Consumables	USD/t	1.60	1.60
<b>Total Plant Expenses</b>	<b>USD'000</b>	<b>638.81</b>	<b>7,665.72</b>
<b>Total Plant Expenses</b>	<b>USD/t</b>	<b>16.62</b>	<b>16.62</b>

Source: Blanket

Referring to Figure 59, the forecasted unit costs compare well with the historic unit costs.

Figure 59: Actual vs. Forecast Unit Costs



### Operating Costs Summary

To produce an ounce of gold, mining companies incur not only operating costs, but also spend sustaining capital at the sites and capital to explore and to sustain their long-term future. Some confusion still exists in the mining industry on reporting mining costs and there is no specific set of standards. Minxcon used the current Australian method of reporting that was suggested by the Gold Institute. This method is perceived as being uniform in the industry but basic differences still exist between countries. The operating costs in the financial model were broken down into different categories:-

- (C1) Direct Cash Cost;
- (C2) Production Cost; and
- (C3) Fully Allocated Cost.

The definitions of these costs are as follows:-

**(C1) Direct Cash Cost**

C1 represents the cash cost incurred at each processing stage, from mining through to recoverable metal delivered to market, less net by-product credits (if any). The M1 margin is defined as metal price received minus C1. Direct Cash Costs cover:-

- Mining, ore freight and milling costs;
- Ore purchase and freight costs from third parties in the case of custom smelters or mills;
- Mine-site administration and general expenses;
- Concentrate freight, smelting and smelter general and administrative costs;
- Matte freight, refining and refinery general and administrative costs; and
- Marketing costs (freight and selling).

**(C2) Production Cost**

Production Cost (C2) is the sum of net direct cash costs (C1) and Capex. The M2 margin is defined as metal price received minus C2.

**(C3) Fully Allocated Cost**

Fully Allocated Cost (C3) is the sum of the production cost (C2), indirect costs and net interest charges. The M3 margin is defined as metal price received minus C3. Indirect costs are the cash costs for:-

- The portion of corporate and divisional overhead costs attributable to the operation;
- Research and exploration attributable to the operation;
- Royalties and "front-end" taxes (excluding income and profit-related taxes);
- Extraordinary costs i.e. those incurred as a result of strikes, unexpected shutdowns etc.; and
- Interest charges including all interest paid, both directly attributable to the operation and any corporate allocation (net of any interest received) on short-term loans, long-term loans, corporate bonds, bank overdrafts etc.

Costs reported for the Blanket Mine, which consists of plant and mining operating costs, are displayed in Table 20. Other cash costs include the general and administration fees, Caledonia management fee as well as overheads. Detail about the operating cost and the breakdown of the mining and plant costs are described in the mining and plant cost sections. The royalty amount includes the Zimbabwean revenue royalty.

*Table 20: OPEX Summary*

Item	Unit	Amount	Unit	Amount
<b>Net Turnover</b>	<b>USD/Milled tonne</b>	<b>138</b>	<b>USD/Gold oz.</b>	<b>1,250</b>
Mine Cost	USD/Milled tonne	49	USD/Gold oz.	446
Plant Costs	USD/Milled tonne	17	USD/Gold oz.	153
Other Costs	USD/Milled tonne	5	USD/Gold oz.	41
<b>Direct Cash Costs (C1)</b>	<b>USD/Milled tonne</b>	<b>71</b>	<b>USD/Gold oz.</b>	<b>641</b>
Capex	USD/Milled tonne	5	USD/Gold oz.	45
<b>Production Costs (C2)</b>	<b>USD/Milled tonne</b>	<b>76</b>	<b>USD/Gold oz.</b>	<b>685</b>
Royalties	USD/Milled tonne	7	USD/Gold oz.	63
Other Cash Costs	USD/Milled tonne	13	USD/Gold oz.	116
<b>Fully Allocated Costs/ Notional Costs (C3)</b>	<b>USD/Milled tonne</b>	<b>95</b>	<b>USD/Gold oz.</b>	<b>864</b>
<b>NCE Margin</b>	<b>%</b>	<b>31%</b>	<b>%</b>	<b>31%</b>
EBITDA*	USD/Milled tonne	48	USD/Gold oz.	431
EBITDA Margin	%	34%		
Gold Recovered	oz.	323,881		

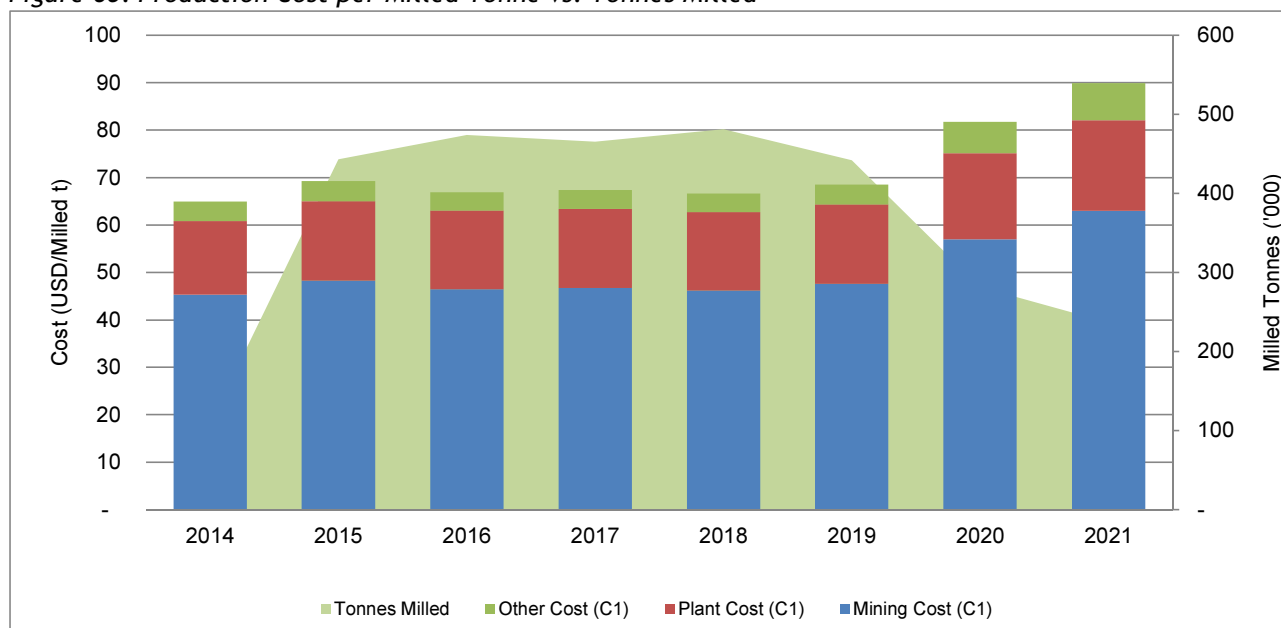
**Notes:**

1. \* EBITDA excludes capital expenditure.
2. Numbers may not add up due to rounding.

Direct Cash cost for Blanket is USD71/milled t that equates to USD641/oz., which is below the global cash cost of USD767/oz.

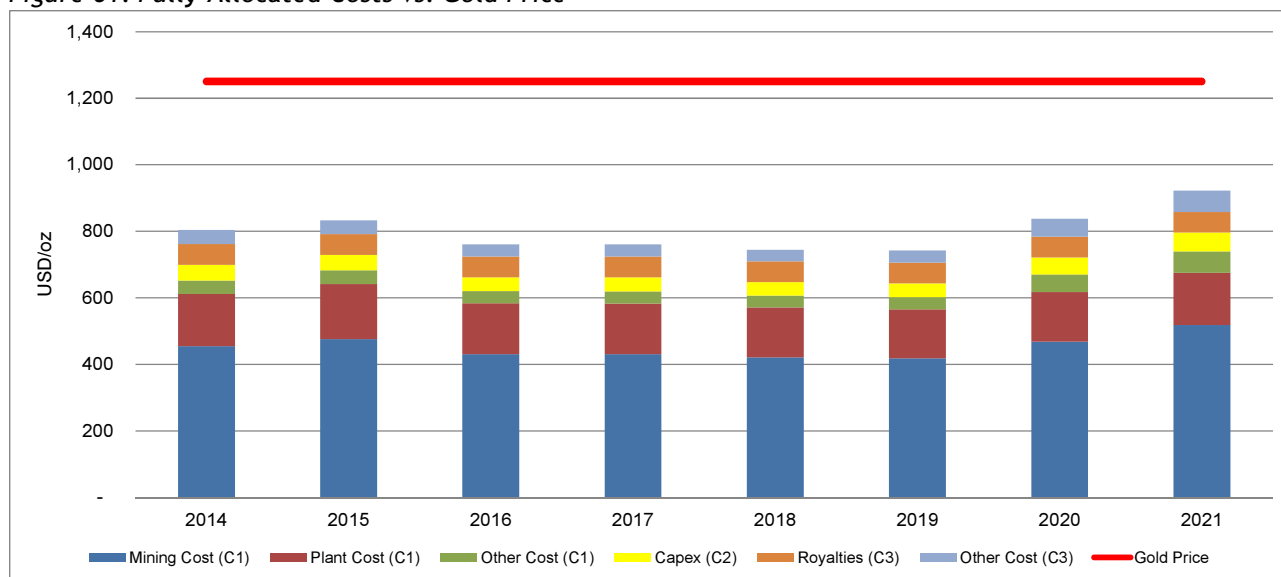


Figure 60: Production Cost per Milled Tonne vs. Tonnes Milled



Blanket Mine has a fully-allocated cost of USD95/milled tonne that equates to USD864/oz. The fully allocated cost is displayed in Figure 61 on a per ounce basis together with the gold price of USD1,250/oz. that was used in the LoM.

Figure 61: Fully-Allocated Costs vs. Gold Price



## ITEM 22 - ECONOMIC ANALYSIS

### Item 22 (a) - PRINCIPAL ASSUMPTIONS

The purpose of this valuation exercise was to demonstrate the financial viability of the Project. This is illustrated by using the Discounted Cash Flow (“DCF”) method on a Free cash flow to the firm (“FCFF”) basis, to calculate the nett present value (“NPV”) and the intrinsic value of the Project in real terms. The intrinsic value is the amount considered, on the basis of an evaluation of available facts, to be the “true”, “real” or “underlying” worth of an item. Thus it is a long-term, Non-Market Value concept that smooths short term price fluctuations. In mining, the intrinsic value refers to the fundamental value based on the technical inputs, and a cash flow projection that creates a NPV. Few of these inputs are market related, except possibly for metal price, benchmarked costs and the discount rate applied.

A company has different sources of finance, namely common stock, retained earnings, preferred stock and debt. Free cash flow is based on either FCFF or Free cash flow to equity (“FCFE”). FCFF is the cash flow available to all the firm’s suppliers of capital once the firm pays all operating expenses (including taxes) and expenditures needed to sustain the firm’s productive capacity. The expenditures include what is needed to purchase fixed assets and working capital, such as inventory. FCFE is the cash flow available to the firm’s common stockholders once operating expenses (including taxes), expenditures needed to sustain the firm’s productive capacity, and payments to (and receipts from) debt holders are accounted for. It must be noted that FCFF minus Nett Debt = FCFE.

The NPV is derived post-royalties and tax, pre-debt real cash flows, after taking into account operating costs, capital expenditures for the mining operations and the processing plant and using forecast macro-economic parameters. The valuation date for the Discounted Cash Flow is 1 October 2014.

### Basis of Valuation of the Mining Assets

In generating the financial model and deriving the valuations, the following was considered:-

- This Report details the optimised cash flow model with economic input parameters.
- The cash flow model is in constant money terms and done in USD.
- A hurdle rate of 8.36% (in real terms) was calculated for the discount factor.
- The impact of the Mineral Royalties Act as per the Zimbabwean Mining Regulation.
- Sensitivity analyses were performed to ascertain the impact of discount factors, commodity prices, grade, working costs and capital expenditure.
- The full value of the operation was reported for Blanket Mine - no attributable values were calculated.
- The model was set up in calendar years with year 2014 only including October to December.
- Blanket’s financial years are based on calendar years from January to December.

### Macro-Economic Forecasts

The following section includes the macro-economic and commodity price forecasts for the operation over the LoM. The USD gold price is in real monetary terms and constant throughout the LoM. The model is set up in calendar years from January to December starting October 2014. Table 21 displays the forecast for gold product in real terms as received from the client. The historic gold price over the past 3 years averaged USD1,531/oz. and the 2014 average up to September 2014 averaged USD1,298/oz. By comparing the forecast to the Energy and Metals Consensus Forecast with an average gold price of USD1,237/oz. over the next four years, a gold price of USD1,250/oz. is considered to be an acceptable and appropriate forecast.

Table 21: Gold Forecast

Item	Unit	2014
Gold	USD/oz.	1,250
Gold	USD/kg	40,188

Source: Caledonia

## Working Capital

The creditors and debtors days were calculated as the actual averages over the past 3 years. The creditors' days were calculated at 94 days and debtors days at 13 days. On September 2014 Blanket's working capital consisted of debtors receivables of USD1.7 million to be received and creditor payment outstanding of USD3.5 million. This balance was also included in the working capital calculation of the financial model.

## Recoveries and Working Capital

The ore from the Blanket Mine operation is treated at the existing Blanket plant; the expected recovery percentage can be seen in Table 22. The recovery is detailed in the processing Section of this Report.

Table 22: Recovery Percentage

Item	Percentage
Plant Recovery % Blanket Mine	93.5%

## DISCOUNT RATE

### Capital Asset Pricing Model

To test the appropriateness of the discount rate for the specific Project, Minxcon used the Capital Asset Pricing Model ("CAPM") to calculate the discount rate. The following were considered:-

- The US Risk Free Rate (30 years) at 3.33% was considered an acceptable risk-free rate at the time of the valuation.
- The market risk premium of 5.0%, a rate generally considered as being the investor's expectation for investing in equity rather than a risk-free government bond.
- The beta of a stock is used to reflect the stock price's volatility over and above other general equity investments in the country of listing - the Beta was calculated at 1.50 as described below.

Table 23: Nominal Discount Rate Calculation

Cost of Equity	Discount Rate
US Risk free rate	3.33%
Risk premium of market	5.0%
Operational Risk (Base Beta)	1.50
Nominal Cost of equity (CAPM)	10.83%
Real Cost of equity (CAPM)	8.36%

## Beta

Beta is a measure of the volatility or systematic risk of a security or a portfolio in comparison to the market as a whole. The analyst must make two estimation decisions when setting up the Beta calculations:-

1. The first decision concerns the length of the estimation period. Most estimates of betas, including those by Value Line and Standard and Poor's 500 ("S&P 500"), use five years of data, while Bloomberg uses two years of data.
2. The second decision concerns the use of daily or intra-day returns, which will increase the number of observations in the regression, but it exposes the estimation process to a significant bias in beta estimates related to non-trading, in particular small stocks.

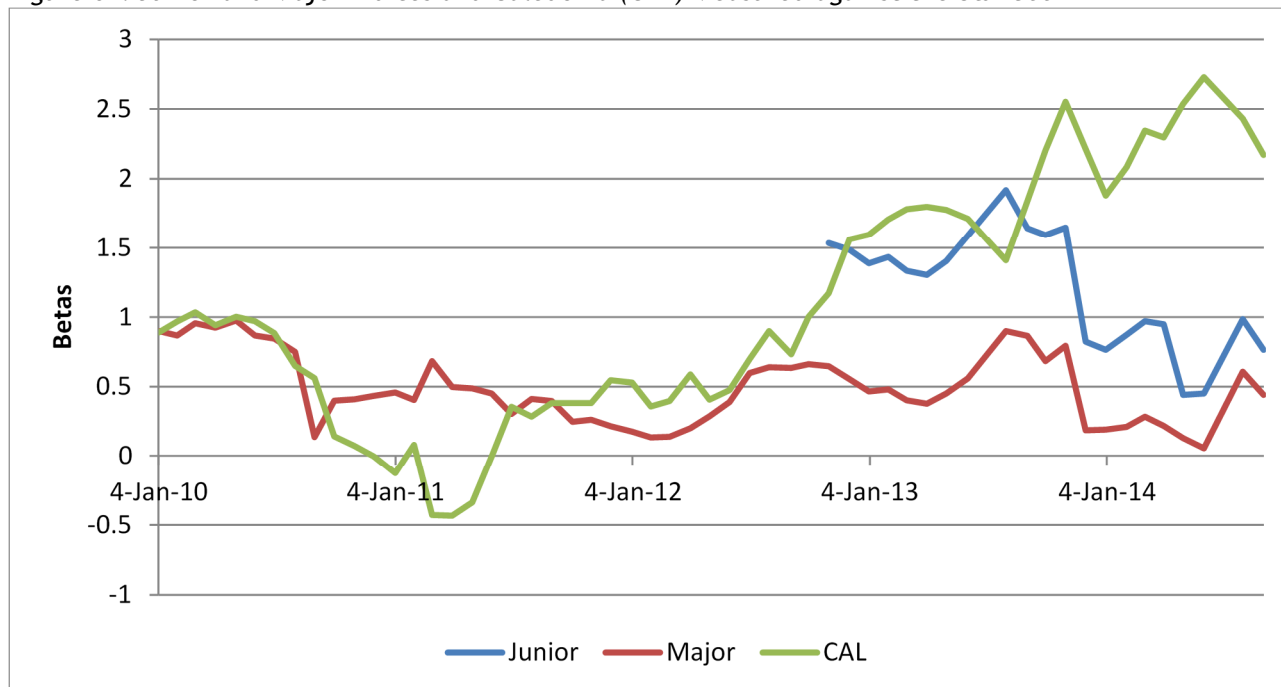
Finding a measurable database for Zimbabwe is not possible. Minxcon considered two Exchange Traded Funds which includes a basket of equities, Junior Gold Miners ETF (NYSEARCA: "GDXJ") and Gold Miners ETF (NYSEARCA: "GDX"). This was measured against the S&P 500 typically used for Beta calculations. The S&P 500 is designed to be a leading indicator of U.S. equities and is meant to reflect the risk/return characteristics of the large cap universe. The S&P 500 is one of the most commonly used benchmarks for the overall U.S. stock market. The composite split of junior miners for the GDXJ is based on companies in the following countries which unfortunately are biased towards US and Australian companies but nevertheless gives an indication of a basket Beta: The United States (21.8%), Australia (11.2%), South Africa (2.4%), China (1.3%) and the United Kingdom (0.7%). The GDX consist of the global majors. Using a start date for the indices from 4 January 2010, the following betas were calculated over 56 months:-

- GDX (Juniors) - 0.93741627;

- GDX (Majors) 0.258442589 - this is very much aligned with current Betas of individual mines; and
- Caledonia (Toronto price) - 0.81.

Measured monthly over a historic 2-year period, it is evident that Betas of the two gold indices and in particular that of Juniors, have declined. In contrast, those of Blanket Mine have increased.

Figure 62: Junior and Major Indices and Caledonia (CAL) Measured against the S&P 500

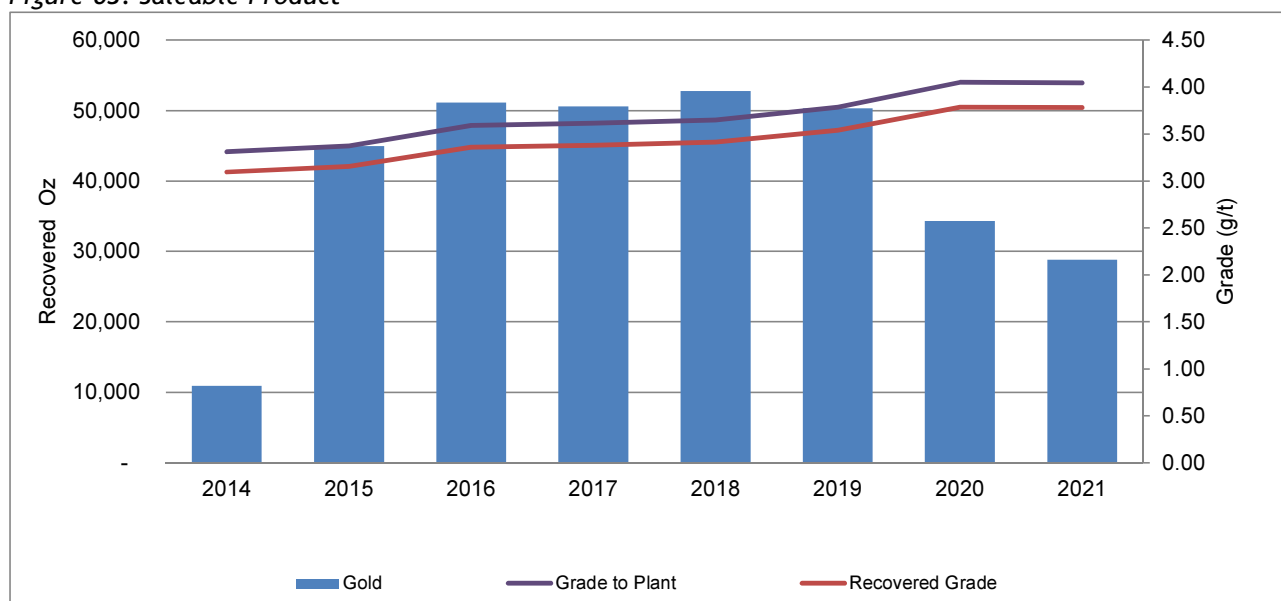


Considering that less volatility recently occurred in the Betas of Gold operations, Minxcon proposes a Beta for Blanket Mine averaging between the longer term 0.81 and current number of 2.17 - i.e. - 1.50.

## Item 22 (b) - CASH FLOW FORECAST

The saleable product per annum is illustrated in Figure 63. The average recovery over the LoM is 93.5% for an average grade of 3.67 g/t.

Figure 63: Saleable Product



A breakdown of the tonnes and ounces used in the LoM are displayed in Table 24. The Reserve LoM plan included only Mineral Reserves that has been diluted by using the modifying factors described in the mining section. The cash flow became negative in year 2022 and all Reserves beyond this point were not included in the Reserve statement.

Table 24: Production Breakdown in LoM

Item	Project	Blanket Mine LoM
Ore Tonnes Mined	Tonnes ('000)	2,934
Average Mined Grade	g/t	3.67
Total Oz in Reserve LoM Plan	oz.	346,397
Grade Delivered to Plant	g/t	3.67
<b>Metal Recovered</b>		
Recovered grade	g/t	3.43
Yield/Recovery	%	93.5%
Total Oz Recovered	oz.	323,881

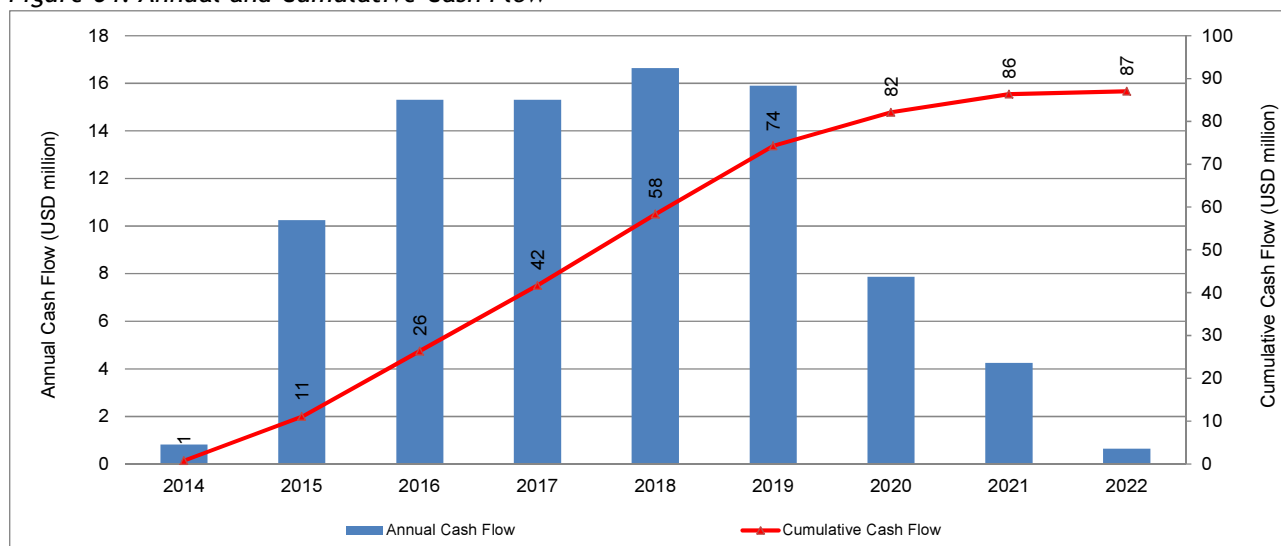
### Discounted Cash Flow

Minxcon's in-house DCF model (Table 25) was employed to illustrate the NPV for the Project in real terms. The NPV was derived post-royalties and tax, pre-debt real cash flows, using the techno-economic parameters, commodity price and macro-economic projections.

This valuation is based on a free cash flow and measures the economic viability of the Reserves to demonstrate if the extraction of the Mineral Deposit is viable and justifiable under a defined set of realistically assumed modifying factors. The model is based on financial years running from January to December and commences in October 2014. The annual and cumulative cash flow forecast for the LoM are displayed in Figure 64.

During 2018 the tonnes mined and the grade mined is higher than the average of the preceding and succeeding years which results in peak cash flow of USD16.6 million during this year.

Figure 64: Annual and Cumulative Cash Flow



The actual profit after tax and the forecasted profit after tax are displayed against the ounces recovered (Figure 65). During 2012 and 2013 the ounces produced were higher than the forecasted and actual produced ounces from 2014 onwards (except during 2016) and thus had higher revenues during these two years. The operating profits were also higher because of the actual average annual gold prices of USD1,657/oz. and USD1,393/oz. during 2012 and 2013 respectively. The revenue generated during 2012 was more than 2013 although the profit during 2012 is less than 2013 as there was an Investing Zone ("IZ") transaction cost of USD15.3 million that was paid. The average gold price in 2014 was slightly higher than the forecasted USD1,250/oz. used in 2015. The increase in profit during 2016 to 2019 is a function of the increase in ounces

recovered as the production increases. The decrease in profit from 2020 to 2021 is a function of the Reserve LoM plan, with a decrease in tonnages scheduled. This decline would be reversed if the Inferred Resources were converted into Reserves generating further upside potential for the mine.

Figure 65: Actual Profit vs. Forecasted Profit

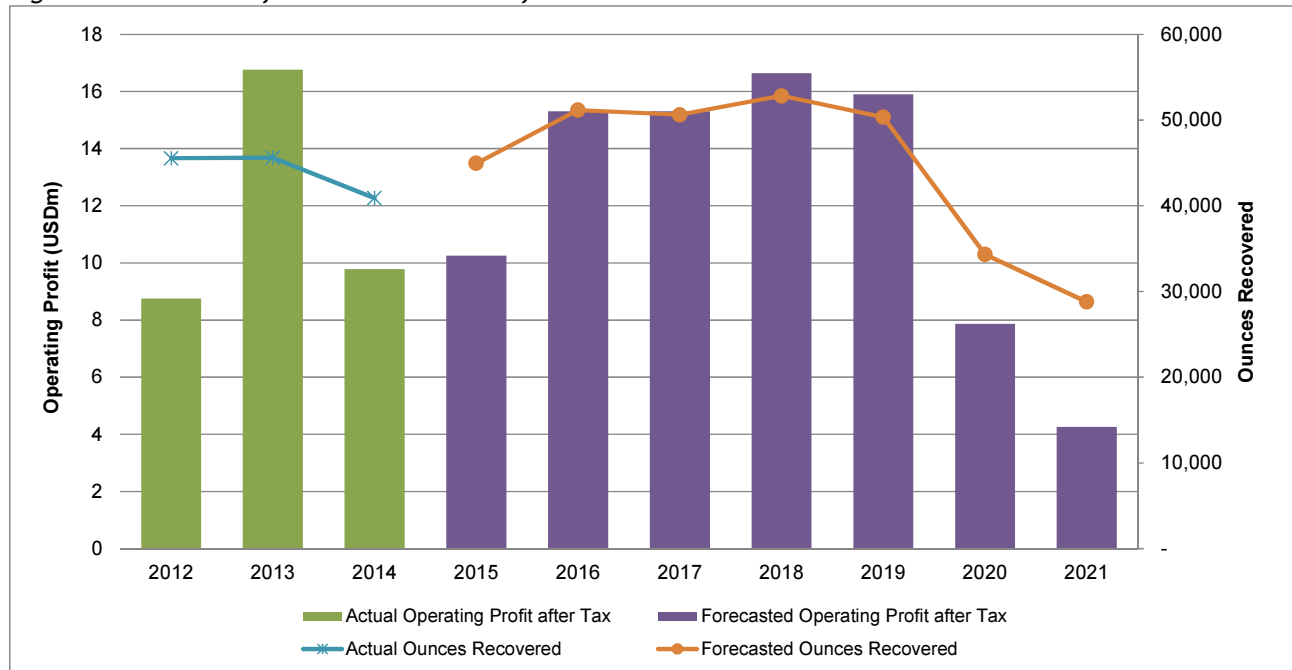


Table 25: Real Cash Flow



**Project Title:** Blanket Gold Mine  
**Client:** Caledonia Mining Corporation  
**Project Code:** M14-056a

Project Valuation Schedule			
Project Valuation Date (Base Date)	01-Oct-14	Commodity Price	100% Fixed Costs 100%
Financial Year End (month and year)	31-Dec-14	Exchange Rate	100% Variable Cost 100%
First Year	1	Grade	100% Mining Capex 100%
Days remaining	91		Plant Capex 100%

Project Duration	Unit	Totals	2014	2015	2016	2017	2018	2019	2020	2021	2022
Calendar Years			1	2	3	4	5	6	7	8	0
Financial Years	years	8									
Macro-Economic Factors (Real Terms)											
Inflation	USD Inflation Rate	%	2.20%	1.77%	1.99%	2.20%	2.30%	2.40%	2.30%	2.30%	2.30%
Commodity prices	Gold	USD/oz	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
Operating Statistics											
ROM		tonnes	2,933,833	109,489	443,315	473,784	465,526	481,157	442,096	281,714	236,753
ROM	(Max)	tonnes/mnth	40,096	36,095	36,943	39,482	38,794	40,096	36,841	23,476	19,729
Mill Head grade	Gold	g/t	3.67	3.3106	3.37	3.59	3.62	3.65	3.79	4.05	4.05
Tonnes to mill		tonnes	2,933,833	109,489	443,315	473,784	465,526	481,157	442,096	281,714	236,753
Recovered grade	Precious Metals	g/t	3.43	3.10	3.15	3.36	3.38	3.41	3.54	3.79	3.78
Metal recovered	Gold	kg	10,074	339	1,398	1,591	1,574	1,643	1,565	1,067	896
Metal recovered	Gold	oz	323,881	10,896	44,956	51,157	50,614	52,820	50,329	34,315	28,794
Financial											
Revenue		USD	404,851,492	13,620,154	56,195,410	63,946,575	63,266,967	66,024,548	62,911,561	42,893,889	35,992,389
Revenue	Gold	USD	404,851,492	13,620,154	56,195,410	63,946,575	63,266,967	66,024,548	62,911,561	42,893,889	35,992,389
Mining cost			(144,448,430)	(4,959,118)	(21,429,662)	(22,021,908)	(21,778,978)	(22,240,792)	(21,050,624)	(16,055,795)	(14,911,553)
Direct Cash Costs	Fixed Cost	USD	(131,448,609)	(4,473,974)	(19,465,333)	(19,922,572)	(19,716,231)	(20,108,784)	(19,091,694)	(14,807,521)	(13,862,500)
Direct Cash Costs	Variable Cost	USD	(12,999,821)	(485,144)	(1,964,329)	(2,099,336)	(2,062,746)	(2,132,008)	(1,958,930)	(1,248,273)	(1,049,053)
Plant cost			(49,667,103)	(1,898,404)	(7,418,797)	(7,842,388)	(7,728,132)	(7,944,685)	(7,394,595)	(5,120,056)	(4,520,045)
Direct Cash Costs	Fixed Cost	USD	(33,521,835)	(1,095,874)	(4,979,178)	(5,235,095)	(5,166,282)	(5,296,815)	(4,961,680)	(3,569,750)	(3,217,161)
Direct Cash Costs	Variable Cost	USD	(16,145,268)	(602,530)	(2,439,620)	(2,607,293)	(2,561,850)	(2,647,870)	(2,432,915)	(1,550,307)	(1,302,883)
Other Costs			(13,428,000)	(450,000)	(1,854,000)	(1,854,000)	(1,854,000)	(1,854,000)	(1,854,000)	(1,854,000)	(1,854,000)
Direct Cash Costs	Other Cost Fixed	USD	(13,428,000)	(450,000)	(1,854,000)	(1,854,000)	(1,854,000)	(1,854,000)	(1,854,000)	(1,854,000)	(1,854,000)
Direct Cash Costs	Total C1		(207,543,533)	(7,107,522)	(30,702,459)	(31,718,296)	(31,361,110)	(32,039,477)	(30,299,219)	(23,029,851)	(21,285,598)
Production Costs	SIB	USD	(14,422,315)	(515,033)	(2,071,543)	(2,136,392)	(2,118,817)	(2,152,086)	(2,068,950)	(1,727,594)	(1,631,901)
Production Costs	Total C2 (Includes C1)	USD	(221,965,848)	(7,622,556)	(32,774,002)	(33,854,688)	(33,479,927)	(34,191,563)	(32,368,169)	(24,757,445)	(22,917,499)
Fully Allocated Costs	Royalty Act No 28 of 2008	USD	0	0	0	0	0	0	0	0	0
Fully Allocated Costs	Zimbabwe Royalty	USD	(20,242,575)	(681,008)	(2,809,771)	(3,197,329)	(3,163,348)	(3,301,227)	(3,145,578)	(2,144,694)	(1,799,619)
Fully Allocated Costs	Other Fixed Costs		(37,467,855)	(1,291,995)	(5,167,980)	(5,167,980)	(5,167,980)	(5,167,980)	(5,167,980)	(5,167,980)	(5,167,980)
Fully Allocated Costs	Total C3 (Includes C1+C2)	USD	(279,676,277)	(9,595,558)	(40,751,753)	(42,219,997)	(41,811,255)	(42,660,770)	(40,681,727)	(32,070,119)	(29,885,098)
EBITDA		USD	139,597,529	4,539,629	17,515,200	23,862,970	23,574,528	25,515,864	24,298,784	12,551,363	7,739,192
EBIT		USD	125,175,215	4,024,595	15,443,657	21,726,578	21,455,711	23,363,778	22,229,834	10,823,769	6,107,291
Taxation		USD	(36,354,447)	(1,176,401)	(4,563,357)	(6,230,977)	(6,154,765)	(6,666,251)	(6,343,853)	(3,242,116)	(1,976,728)
STC		USD	0	0	0	0	0	0	0	0	0
Income after tax		USD	88,820,767	2,848,195	10,880,300	15,495,601	15,300,946	16,697,527	15,885,981	7,581,653	4,130,564
Working capital changes		USD	(1,823,649)	(2,017,920)	(628,810)	(191,981)	2,547	(56,047)	8,508	286,885	125,337
Cash Flow											
Net Cash Flow	Annual cash flow	USD	86,997,117	830,275	10,251,490	15,303,620	15,303,494	16,641,480	15,894,489	7,868,538	4,255,901
Cumulative Net Cash Flow	Cumulative cash flow	USD		830,275	11,081,765	26,385,386	41,688,879	58,330,359	74,224,848	82,093,386	86,349,287
Net present value				0	1	2	3	4	5	6	7
Discount Rate	Real	%	8.36%	1.0000	1.0836	1.1742	1.2724	1.3788	1.4940	1.6190	1.7543
Net Present Value		USD	65,686,690	830,275	9,460,504	13,033,130	12,027,418	12,069,826	10,638,562	4,860,239	2,425,953

## Item 22 (c) - NET PRESENT VALUE

The highlights of the valuation conducted by Minxcon are discussed in the following sections. Table 26 illustrates the Project NPV at various discount rates with a best-estimated value of USD66 million at a real discount rate of 8.36%. Blanket is an existing operation and the IRR is not applicable.

Table 26: Project Valuation Summary - Real Terms

Item	Unit	Value
Real NPV @ 0.00%	USDm	87
Real NPV @ 5.00%	USDm	70
<b>Real NPV @ 8.36%</b>	<b>USDm</b>	<b>66</b>
Real NPV @ 10.00%	USDm	57
Real NPV @ 15.00%	USDm	47

Table 27 illustrates the Project profitability ratios.

Table 27: Profitability Ratios

Item	Unit	Profitability Ratios
Total ounces in Reserve LoM plan	oz.	346,397
<i>In Situ</i> Mining Inventory Valuation	USD/oz.	190
Production LoM	Years	8
Present Value of Income flow	USDm	106
Break Even Milled Grade	g/t	2.54
Incentive Gold Price	USD/oz.	864

A range of values was calculated for the DCF valuation by determining an upper and lower range. The upper and lower ranges were determined by applying a maximum and minimum standard deviation on the following input parameters with the lower confidence categories having a wider variance:-

- Commodity Price (USD/Au oz.);
- Grade (g/t);
- Fixed Cost;
- Variable Cost; and
- Sustaining Capex.

In order to evaluate risk, a simulation was developed using a population of 5,000 simulations. This allows the simulation of random scenarios to determine the effect thereof. Minxcon simulated various input parameters using a range in which a parameter is expected to vary (see Table 28).

Table 28: Input Ranges

	Min	Max	Current	Min	Max
Gold Price (USD/oz.)	80%	120%	1,250	1,100	1,500
Grade (g/t)	90%	110%	3.7	3.3	4.0
Fixed Costs (USD/t)	95%	110%	61	58	67
Variable Cost (USD/t)	95%	110%	10	9	11
Sustaining Capex (USDm)	95%	110%	14	14	16

By applying these ranges, a lower and upper value was determined for the DCF (see Table 29).

Table 29: Range of Values

Valuation Method	Lower Value USDm	Best Estimated Value USDm	Higher Value USDm
Discounted Cash Flow	43	66	96

## Item 22 (d) - REGULATORY ITEMS

### Corporate Taxes

The prevailing taxation regime for mining companies in Zimbabwe includes the following provisions:-

- Corporate Income tax at 25%.



- Exploration, development and capital costs can be expensed against profit in the year incurred or carried forward to be expensed against the first year of production.
- Exemptions on customs duty and import taxes on capital items during exploration and development phases.
- Withholding tax on dividend payments to non-Zimbabweans and on services provided by foreign suppliers at a rate of 5% to 15% depending on the location of the payee.

### Royalties

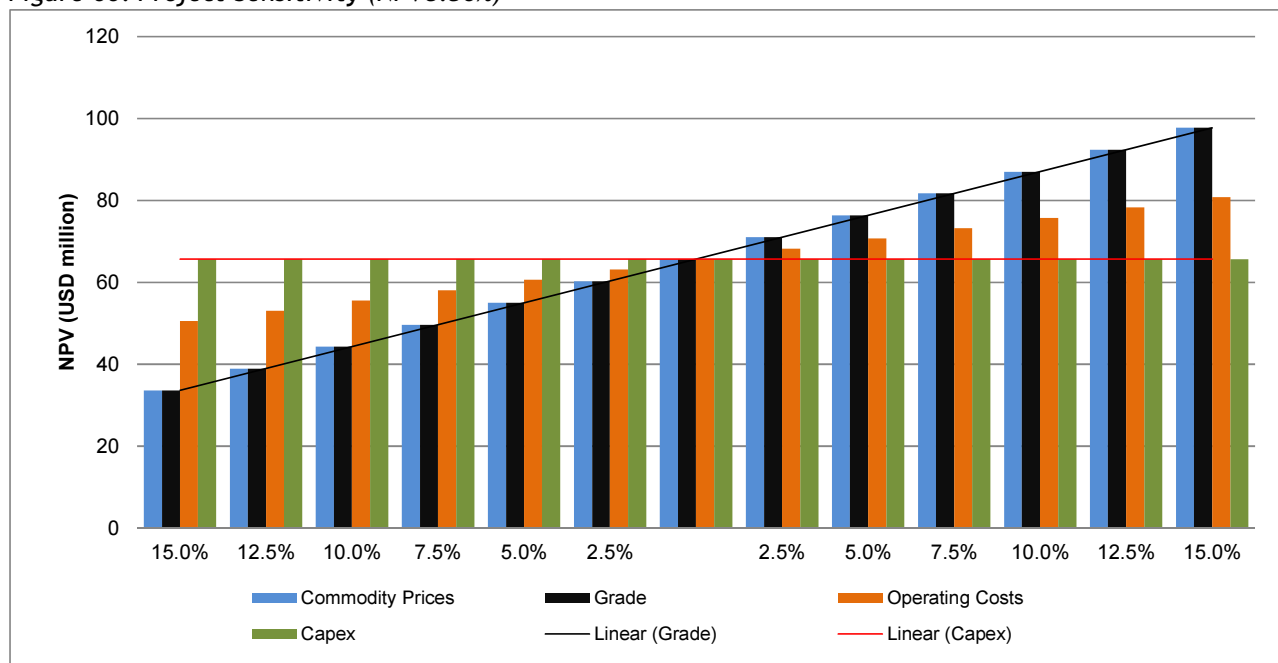
Mining royalties are charged in terms of the Mines and Minerals Act (Chapter 21:05). The royalties are collectable from all the minerals or mineral-bearing products obtained from any mining location and disposed by a miner or on his behalf. The royalties are chargeable whether the disposal is made within or outside Zimbabwe.

Zimbabwean tax laws and international pricing have pushed deliveries in the gold sector to decline by 26% within the first-half of 2014. A decision was made by the Government of Zimbabwe in its 2014 Mid-Year Fiscal Policy Review Statement to reduce the royalty on Zimbabwean gold producers from 7% to 5%, effective 1 October 2014. The royalty of 5% is, however, not tax deductible and the tax rate is applied on the earnings before royalty deductions.

### Item 22 (e) - SENSITIVITY ANALYSIS

Based on the real cash flow calculated in the financial model, Minxcon performed single-parameter sensitivity analyses to ascertain the impact on the NPV. The bars represent various inputs into the model each being increased or decreased by 2.5% i.e., left side of graph shows lower NPVs because of lower prices and lower grades, higher Opex and Capex and the opposite on the right hand. The red line and black line representing the least sensitive and most sensitive impacts to the NPV. For the DCF, the gold price and grade have the biggest impact on the sensitivity of the Project followed by the operating cost. The Project is not sensitive to the sustaining capital.

Figure 66: Project Sensitivity (NPV8.36%)



A sensitivity analysis was conducted on the grade and the gold price to better indicate the effect these two factors have on the NPV, as well as the production costs (C1) and the sustaining capital. This is displayed in Table 30 and Table 31.

Table 30: Sensitivity Analysis of Gold Price and Grade to NPV8.36% (USDm)

	Grade	3.12	3.21	3.31	3.40	3.49	3.58	3.67	3.76	3.86	3.95	4.00	4.13	4.22
Au Price	Change %	70.0%	75.0%	80.0%	85.0%	90.0%	95.0%	100.0%	105.0%	110.0%	115.0%	120.0%	112.5%	115.0%
1,063	85.0%	6	11	15	20	25	29	34	38	43	47	50	56	61
1,094	87.5%	11	15	20	25	30	34	39	44	48	53	56	62	67
1,125	90.0%	15	20	25	30	35	39	44	49	54	59	62	68	73
1,156	92.5%	20	25	30	35	40	45	50	55	60	64	67	74	79
1,188	95.0%	25	30	35	40	45	50	55	60	65	70	73	80	85
1,219	97.5%	29	34	39	45	50	55	60	66	71	76	79	86	92
<b>1,250</b>	<b>100.0%</b>	34	39	44	50	55	60	<b>66</b>	71	76	82	85	92	98
1,313	105.0%	38	44	49	55	60	66	71	77	82	87	91	98	104
1,375	110.0%	43	48	54	60	65	71	76	82	88	93	97	104	110
1,438	115.0%	47	53	59	64	70	76	82	87	93	99	102	110	116
1,500	120.0%	50	56	62	67	73	79	85	91	97	102	106	114	120
1,563	125.0%	56	62	68	74	80	86	92	98	104	110	114	122	129
1,625	130.0%	61	67	73	79	85	92	98	104	110	116	120	129	135
1,688	135.0%	70	76	83	89	96	102	108	115	121	128	132	141	147

Table 31: Sensitivity Analysis of Production Costs and Sustaining Capital to NPV8.36% (USDm)

	Capex	12.3	12.6	13.0	13.3	13.7	14.1	14.4	14.8	15.1	15.5	15.7	16.2	16.6
Production Cost (USD/t)	Change %	85.0%	87.5%	90.0%	92.5%	95.0%	97.5%	100.0%	102.5%	105.0%	107.5%	109.0%	112.5%	115.0%
92	130.0%	30	30	30	30	30	30	30	30	30	30	30	30	30
88	125.0%	36	36	36	36	36	36	36	36	36	36	36	36	36
85	120.0%	42	42	42	42	42	42	42	42	42	42	42	42	42
81	115.0%	48	48	48	48	48	48	48	48	48	48	48	48	48
78	110.0%	54	54	54	54	54	54	54	54	54	54	54	54	54
74	105.0%	60	60	60	60	60	60	60	60	60	60	60	60	60
<b>71</b>	<b>100.0%</b>	66	66	66	66	66	66	<b>66</b>	66	66	66	66	66	66
67	95.0%	72	72	72	72	72	72	72	72	72	72	72	72	72
64	90.0%	77	77	77	77	77	77	77	77	77	77	77	77	77
60	85.0%	83	83	83	83	83	83	83	83	83	83	83	83	83
57	80.0%	89	89	89	89	89	89	89	89	89	89	89	89	89
53	75.0%	95	95	95	95	95	95	95	95	95	95	95	95	95
50	70.0%	101	101	101	101	101	101	101	101	101	101	101	101	101

## ITEM 23 - ADJACENT PROPERTIES

### Item 23 (a) - PUBLIC DOMAIN INFORMATION

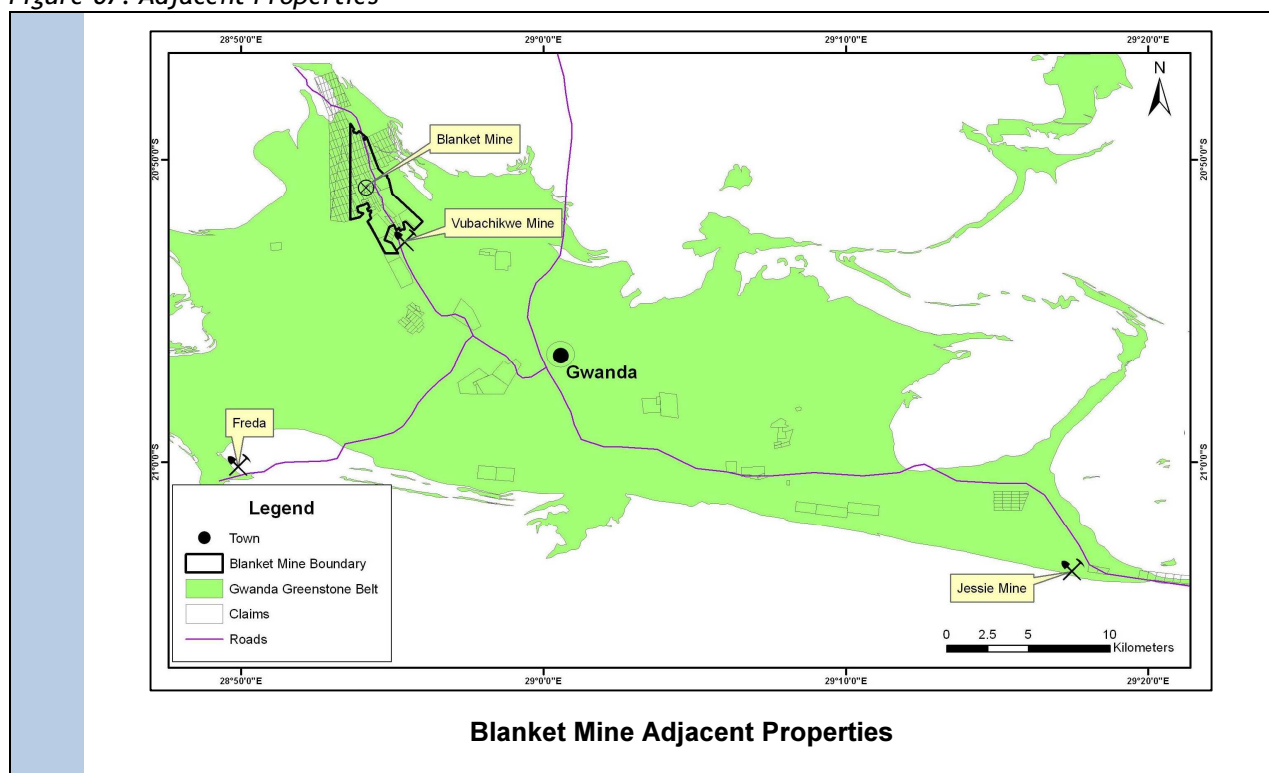
The Zimbabwean craton hosts more than 6,000 gold occurrences and over 790 recorded gold mines, most of which have some current or historic gold production. The Blanket Mine is one of only three surviving major gold producers from about 268 mines once worked in the Gwanda greenstone belt. The other two are the nearby Vubachikwe, and Jessie at the south-eastern end of the belt near West Nicholson. Freda at the belt's western end is mined out.

Vubachikwe Mine is situated 9 km northwest of Gwanda, and has reached a depth of 1,155 m. Ores are hosted in beds of BIF striking northwest and dipping 75° to the southwest. The gold is present as free gold and inclusions in arsenopyrite. Generally, the ore occurs in lenses 5 m-40 m in thickness and up to 200 m down-dip. The mine is located on the northern limb of a plunging syncline, and Mineral Deposits are folded. Gold also occurs as disseminated replacements in adjacent basaltic rocks.

Jessie mine mineralisation consists of hornblende schist hosts auriferous quartz veins dipping steeply to the southwest. Pyrite, pyrrhotite, chalcopyrite and galena are erratically distributed.

Mining at Freda started in 1919. The deposit is located 22 km west of Gwanda. Oxidised ore containing pyrrhotite, pyrite and arsenopyrite, with minor amounts of tetradymite was mined by opencast methods and 7,550 kg Au were recovered, grading at 3.3 g/t Au. The vein-type ores are hosted in epidiorite surrounded by grits and quartz-mica schist. The Mineral Deposits were up to 30 m thick, striking 115° and inclined steeply to the southwest.

Figure 67: Adjacent Properties



### Item 23 (b) - SOURCES OF INFORMATION

- Spilpunt. Mineral Commodities and Africa. Available from: <http://spilpunt.blogspot.com/2007/04/zimbabwe.html>. Viewed: 29 October 2014.
- A Technical Report dated 28 June 2011, by the MSA Group (Pty) titled "Technical Report on the Blanket Gold Mine Zimbabwe".

**Item 23 (c) - VERIFICATION OF INFORMATION**

The information was sourced from the Spilpunt Blogspot and is publicly available. The information has not been independently verified by Minxcon.

**Item 23 (d) - APPLICABILITY OF ADJACENT PROPERTY'S MINERAL DEPOSIT TO PROJECT**

Vubachikwe Mine is the only adjacent property of significance. While the remainder of the Gwanda Greenstone Belt is tied up by numerous claim and EPO holders, they are for the most part passive holders whose holding is largely as a result of their political alignment. Although the mines work separate Mineral Deposits, the style of mineralisation is essentially the same; a structural and genetic link between the two mines is very likely. Vubachikwe mine workings extend to depths of over 1,155 m below surface, compared with about 750 m at Blanket. The proximity of the Blanket Mine to Vubachikwe enabled it to buy and treat the Vubachikwe sand dumps through the Blanket metallurgical plant from 2000 to 2005.

**Item 23 (e) - HISTORICAL ESTIMATES OF MINERAL RESOURCES OR MINERAL RESERVES**

Up until the end of 1991 the Vubachikwe Mine produced almost 21,744 kg of gold at an average of 7 g/t. Between 2000 and 2005 the Blanket Mine bought and treated the dumps at Vubachikwe in its metallurgical plant. The total resource of this deposit is estimated at 40 t Au.

The Jessie Mine reported ores grading at 10,5 g/t, and previously reported production was approximately 12 tonnes of Au, as well as a minor amount of copper.

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## ITEM 24 - OTHER RELEVANT DATA AND INFORMATION

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### Item 24 (a) - UPSIDE POTENTIAL

Minxcon was commissioned by GMS in October 2014 to complete a scoping level study on the deeper extensions of Blanket mine below 750 m Level. The LoM extension strategy for Blanket Mine includes the areas below 750 m Level and associated Inferred Mineral Resources. Access to this area will require the following:-

- Development of a new Trimming loop on 750 mL;
- Complete the sink to deepen No 6 Winze; and
- Sinking of a new central shaft positioned in-between AR Main and AR South mineral deposits.

The Report details a scoping-level study in the form of a Preliminary Economic Assessment (“PEA”). The PEA includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorised as Mineral Reserves (the “PEA Study”), and there is no certainty that the preliminary economic assessment will be realized. The PEA Study includes the deepening of the mine from 750 m to 1120 m on a stand-alone basis.

A DCF valuation was carried out on the PEA Study area on a stand-alone basis and includes mainly Inferred Resources. The value derived from the PEA is considered to represent the upside potential to the current Blanket Mine operation.

The scope of work was to complete the PEA Study as a stand-alone underground mine and using the existing processing plant to treat gold ore from the Below 750 m level mining areas. The following tasks were completed during the PEA study:-

1. a mining strategy was discussed;
2. mining areas were targeted;
3. capital and operating cost was calculated;
4. metallurgical test work was evaluated;
5. processing design criteria were identified and costs were calculated; and
6. a financial evaluation was conducted in the form of a DCF based predominantly on Inferred Resources.

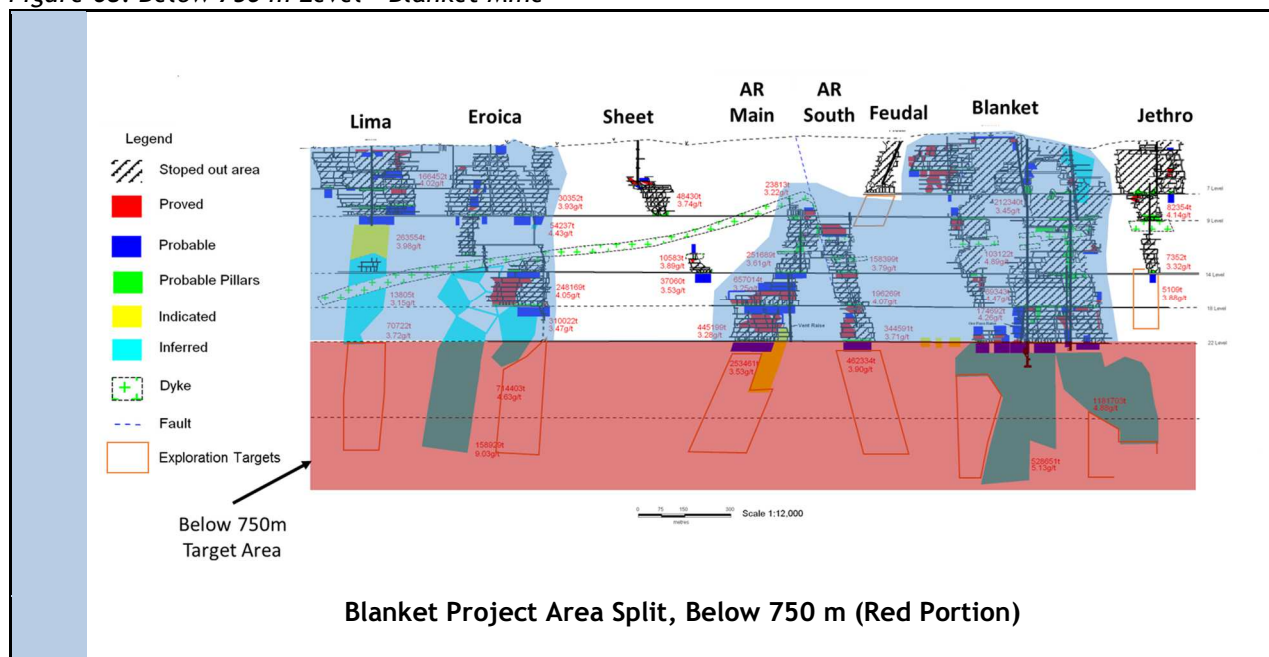
### STUDY STATUS

The PEA includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorised as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized. The remainder of the PEA Study was based on information obtained through past experiences and records, hence the mining schedule, mining rates, capital schedule and operating costs are estimated on a very high level of confidence. The capital cost estimation is based on quotations and is also regarded as accurate.

### TARGET AREA

The PEA Study includes Indicated and Inferred Resources from Below 750 m level. These areas are illustrated in Figure 68.

Figure 68: Below 750 m Level - Blanket Mine

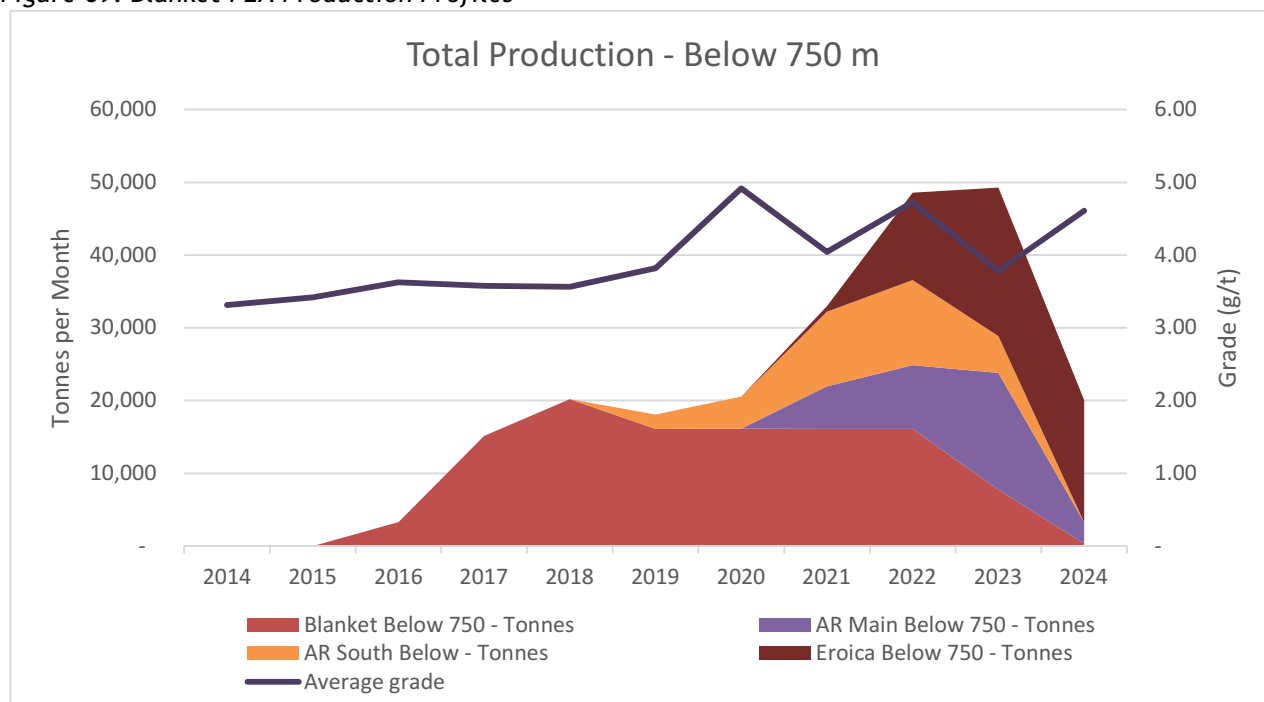


All exploration targets (red borders) are excluded from the PEA Study due to the paucity of information in these areas Figure 69 illustrates the areas included in the PEA.

#### PEA PRODUCTION

The PEA Study Production from Below 750 m level is illustrated in Figure 69.

Figure 69: Blanket PEA Production Profiles



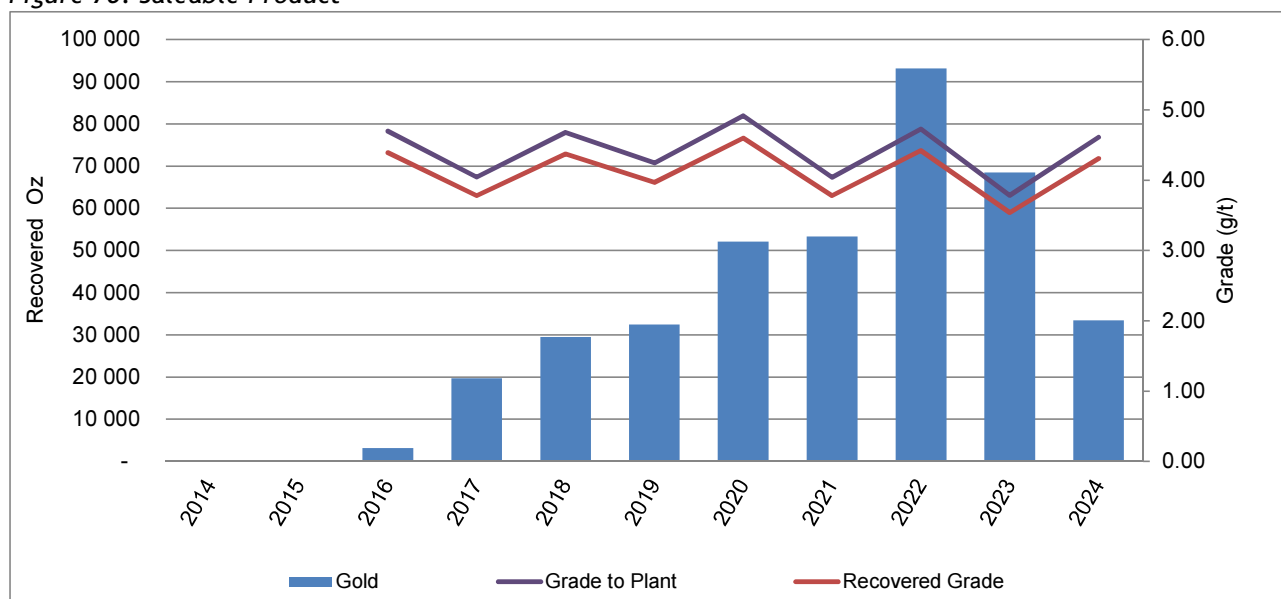
#### PROCESSING

The Blanket Gold Plant consists of crushing, milling, CIL and batch elution electro-winning circuits. The crushing, milling and gravity gold recovery circuit are going to be upgraded to treat between 75 tph and 85 tph (50 ktpm to 55 ktpm). With the proposed upgrades and modifications, the front-end comminution circuits (crushing and milling) will have a capacity of about 160 to 180 tph. The CIL and downstream circuits have a capacity of approximately 185 tph. The plant will treat RoM ore from the Blanket Mine at a recovery of about 93.5%.

### SALEABLE PRODUCT

The saleable product per year is illustrated in Figure 70. The average recovery over the LoM is forecast at 93.5% at an average grade of 4.36 g/t.

Figure 70: Saleable Product



A breakdown of the tonnes and ounces used in the LoM are displayed in Table 32. The PEA Study included Mineral Resources that were diluted by using the modifying factors described in the mining section.

Table 32: PEA Production Breakdown in LoM

Item	Project	Blanket Mine LoM
Ore Tonnes Mined	Tonnes ('000)	2,938
Average Mined Grade	g/t	4.36
Total Oz. in PEA Study	oz.	411,862
Grade Delivered to Plant	g/t	4.36
<b>Metal Recovered</b>		
Recovered grade	g/t	4.08
Yield/Recovery	%	93.5%
Total Oz. Recovered	oz.	385,091

### PEA INFRASTRUCTURE

The existing infrastructure at the Blanket mine will be utilised in parallel with new infrastructure and is specifically aimed at targeting the Below 750 m Level mining areas. The extensions will entail the sinking of a new vertical shaft (Central Shaft) from surface as well as the deepening of an old sub-shaft, named 6 Winze, to access the Blanket Below 750 m Level mining area and to provide secondary access to the development of the Central Shaft. The Central Shaft will be a 6 m diameter shaft with four compartments, designed to hoist all men, material and rock.

### PEA CAPITAL ESTIMATION SUMMARY

Capital contained in this section was supplied by the client and reviewed by Minxcon. The capital is deemed sufficient and all major infrastructure costs have been accounted for. Processing Capital Cost details the capital required to upgrade the comminution (crushing and milling) circuits at the Blanket Plant over the next four years. The upgrades will allow the circuits to process the targeted mine throughput of 55 ktpm. The leaching as well as the elution and smelting circuits have sufficient capacity. The capital expenditure schedule is in line with the tonnes ramp-up according to the PEA Study.

The following major upgrades are planned between 2015 and 2018:-

- Extension of the jaw crusher product stockpile.
- Additional primary and regrind mills with auxiliary equipment such as feed weightometers and slurry pumping.
- Addition of a Knelson Concentrator.
- Although the installation will only be considered at a later date, provision has been made for the installation of Acacia reactors for upgrading of Knelson concentrates. The Gemini tables will be used initially with some modifications as these units operate effectively at present.

The capital summary for the PEA Study is illustrated in Table 33.

*Table 33: Expansion Project Capital Estimation*

Item Description	Total Cost
	USD
New Central Shaft *	22,303,316
Haulage Development	7,040,000
Metallurgical Plant	5,589,644
No 6 Winze	1,000,000
Blanket Deep Drilling Project	6,800,000
<b>Total</b>	<b>42,732,690</b>

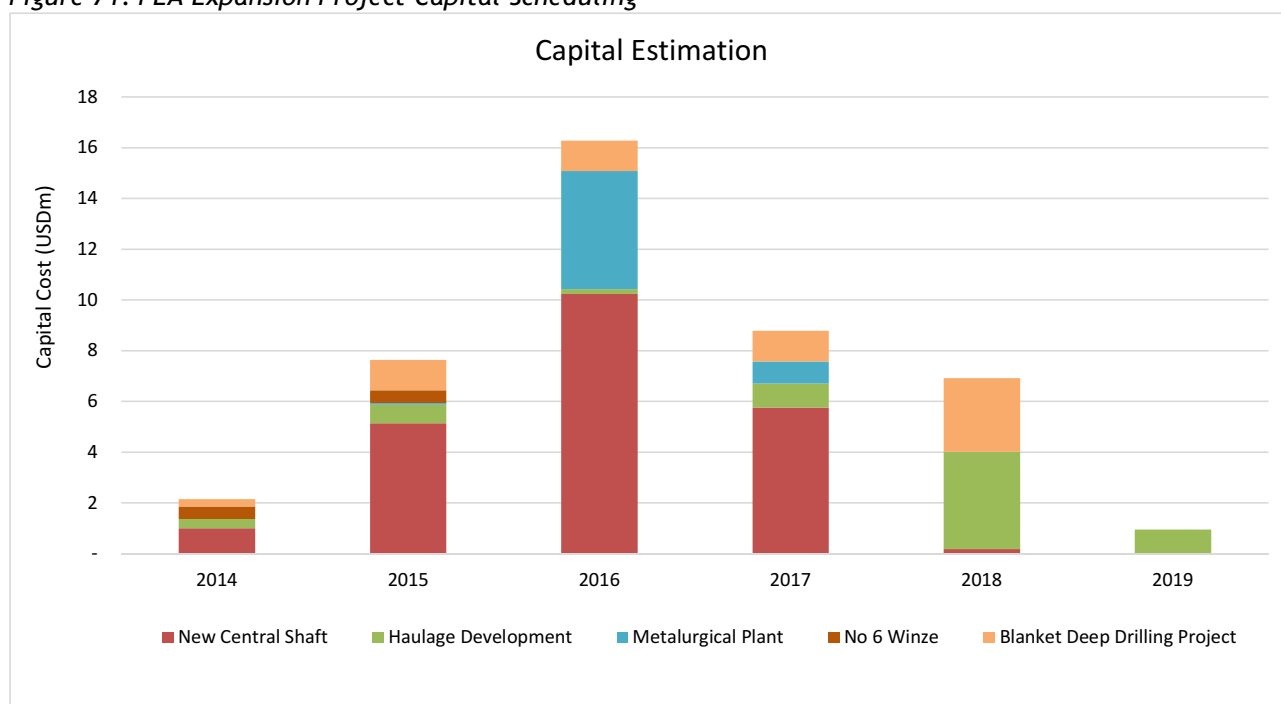
The total capital estimation including sustaining capital over the LoM is illustrated in Table 34.

*Table 34: Total Capital Estimation*

Item Description	Total
Sustaining Capital	12,085,547
Project Capital	42,732,690
<b>Total</b>	<b>54,818,507</b>

The PEA Study capital expenditure schedule is expected to span a period of approximately 5 years with minor capital being spent in the 6<sup>th</sup> year. The Project capital schedule is illustrated in Figure 71.

*Figure 71: PEA Expansion Project Capital Scheduling*

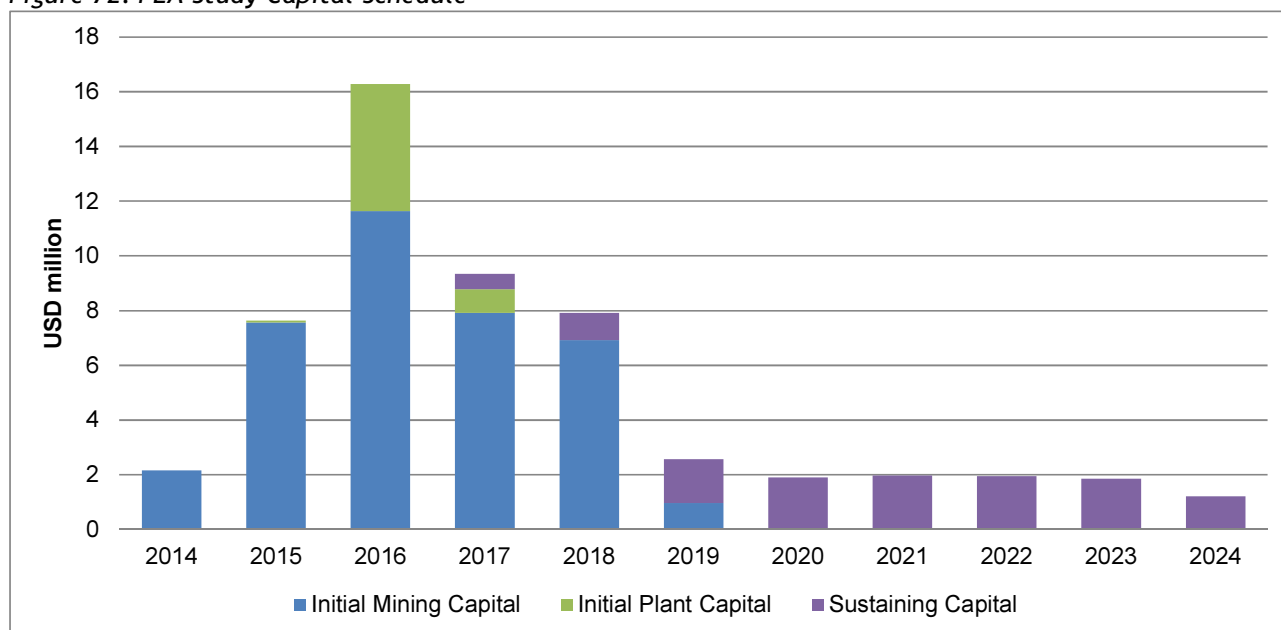


The capital schedule for the Blanket mining operations over the Reserve LoM is illustrated in Figure 55 and consists of sustaining capital. Sustaining capital expenditures are capital expenditure resulting from improvements to and major renewals of existing assets. Such expenditures serve to maintain existing



operations but do not generate additional revenues. Total Project capital expenditure over the PEA Study period is USD43 million with the peak capital expenditure of USD16 million during 2016.

Figure 72: PEA Study Capital Schedule



#### PEA OPERATING COSTS

The operating costs used for Blanket Mine is based on the business plan received from the mine. The operating costs planned from October 2014 onwards were compared to the actual costs paid during 2012, 2013 and up to September 2014. The comparison was done to ensure that the planned opex, as received from the mine, is, in fact, achievable. Costs reported for the Blanket Mine PEA, which consist of plant and mining operating costs are displayed in Table 35. Other costs (C3) include the general and administration fees, Caledonia management fee as well as overheads. The royalty amount includes the Zimbabwean revenue royalty of 5%.

Table 35: PEA OPEX Summary

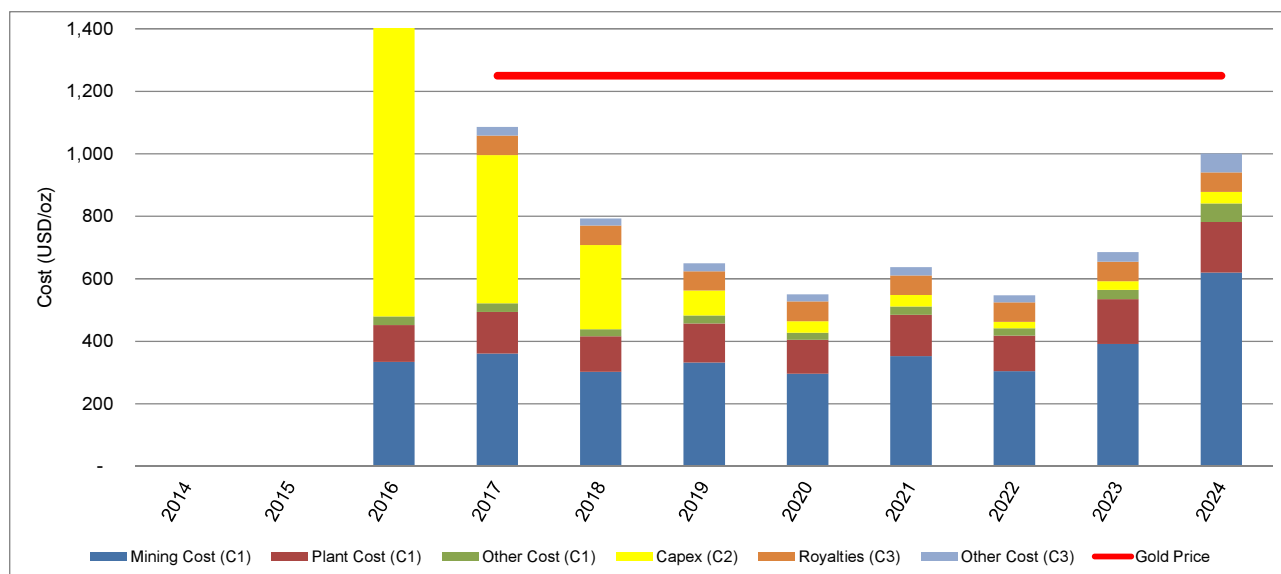
Item	Unit	Amount	Unit	Amount
<b>Net Turnover</b>	<b>USD/Milled tonne</b>	<b>164</b>	<b>USD/Gold oz.</b>	<b>1,250</b>
Mine Cost	USD/Milled tonne	47	USD/Gold oz.	358
Plant Costs	USD/Milled tonne	17	USD/Gold oz.	127
Other Costs	USD/Milled tonne	4	USD/Gold oz.	28
<b>Direct Cash Costs (C1)</b>	<b>USD/Milled tonne</b>	<b>67</b>	<b>USD/Gold oz.</b>	<b>513</b>
Capex	USD/Milled tonne	19	USD/Gold oz.	142
<b>Production Costs (C2)</b>	<b>USD/Milled tonne</b>	<b>86</b>	<b>USD/Gold oz.</b>	<b>656</b>
Royalties	USD/Milled tonne	8	USD/Gold oz.	63
Other Cash Costs	USD/Milled tonne	9	USD/Gold oz.	71
<b>Fully Allocated Costs/ Notional Costs (C3)</b>	<b>USD/Milled tonne</b>	<b>103</b>	<b>USD/Gold oz.</b>	<b>789</b>
<b>NCE Margin</b>	<b>%</b>	<b>37%</b>	<b>%</b>	<b>37%</b>
EBITDA*	USD/Milled tonne	79	USD/Gold oz.	603
EBITDA Margin	%	48%		
Gold Recovered	oz.	385,091		

**Notes:**

- \* EBITDA excludes capital expenditure.
- Numbers may not add up due to rounding.

Direct Cash cost for Blanket is USD67/milled tonne that equates to USD513/oz., which is below the global cash cost of USD767/oz. Blanket Mine has a fully-allocated cost of USD103/milled tonne that equates to USD789/oz. The fully allocated cost is displayed per ounce together with the gold price of USD1,250/oz. that was used in the LoM (Table 36). During year 2024 the tonnes mined decreases but the grade mined increases resulting in lower cost per ounce produced.

Table 36: PEA Fully-Allocated Costs vs. Gold Price



### VALUATION

The macro economic forecasts used in the PEA are based on the assumptions used in the Reserve LoM plan valuation.

Table 37: PEA Valuation Summary - Real Terms

Item	Unit	Value
Real NPV @ 0.00%	USDm	127
Real NPV @ 5.00%	USDm	81
<b>Real NPV @ 8.36%</b>	<b>USDm</b>	<b>65</b>
Real NPV @ 10.00%	USDm	52
Real NPV @ 15.00%	USDm	33
Internal Rate of Return (IRR)	%	42%

Table 38 illustrates the Project profitability ratios.

Table 38: PEA Profitability Ratios

Item	Unit	Profitability Ratios
Total ounces in PEA Study	oz.	411,862
<i>In situ</i> Mining Inventory Valuation	USD/oz.	157
Production LoM	Years	8.5
Project LoM	Years	10.3
Present Value of Income flow	USDm	136
Present Value of Investment	USDm	36
Benefit-Cost Ratio	Ratio	3.8
Return on Investment	%	281%
Average Payback Period (From start of production)	Years	3.7
Peak Funding Requirement	USDm	-25
Peak Funding Year	Year	2016
Break Even Milled Grade (Including Capex)	g/t	2.75
Incentive Gold Price (Including Capex)	USD/oz.	789

### MONTE CARLO

In order to evaluate risk, a Monte Carlo simulation was developed using a population of 5,000 simulations. This is a tool which allows the simulation of random scenarios to determine the effect thereof. Minxcon simulated various input parameters using a range in which a parameter is expected to vary (see Table 39).

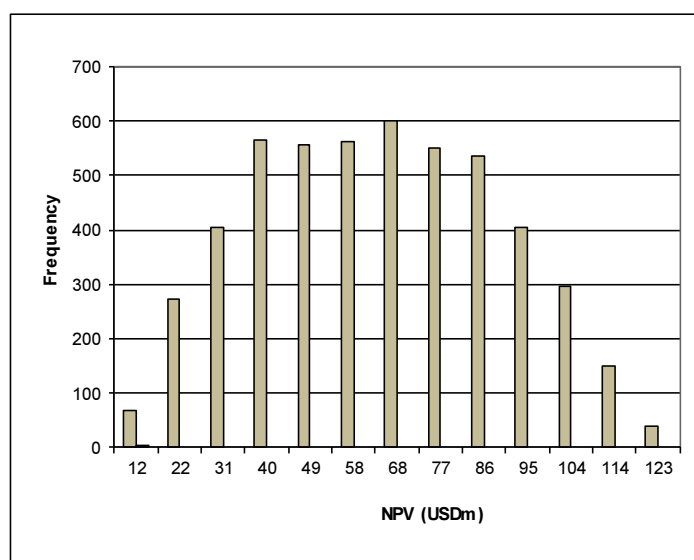
Table 39: Monte Carlo Input Ranges

Input	Min	Max	Current	Min	Max
Gold Price (USD/oz.)	80%	120%	1,250	1,000	1,500
Grade (g/t)	90%	110%	4.3	3.9	4.8
Fixed Costs (USD/t)	95%	105%	57	54	60
Variable Cost (USD/t)	95%	105%	10	9	10
Mining Capex (USD)	95%	110%	49	47	54
Plant Capex (USD)	95%	105%	6	5	6

The simulation was done on the LoM model. The results of the simulation are depicted in Figure 73. Using these figures in the Monte Carlo model, the value range of the Blanket expansion operation plots between USD44 million (Q25%) and USD84 million (Q75%). The analysis shows a positive distribution with a relatively small deviation from the mean. The operation is therefore a robust operation and not very sensitive to change in the input parameters - an indication of low risk. The best-estimated value of USD65 million is also similar to the mean value of USD64 million derived from the Monte Carlo.

Figure 73: Monte Carlo LoM Summary Report

## Monte Carlo Simulation (Summary Report)

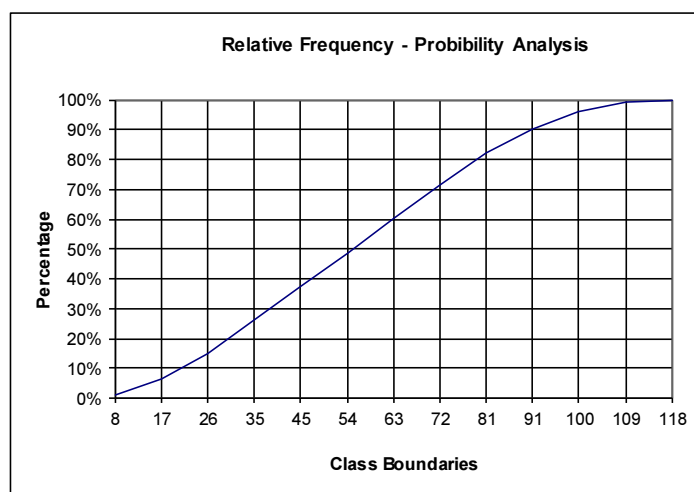


## Summary Statistics

Sample Size (n):	5000
MEAN:	USD 64
STDEV:	USD 26
Mean Standard Error:	USD 0

## Quartiles

Min:	USD 8
Q(0.25):	USD 44
Median:	USD 64
Q(0.75):	USD 84
Max:	USD 127



## 90% Central Interval

Q(0.05):	USD 24
Q(0.95):	USD 107

## 95% Central Interval

Q(0.025):	USD 20
Q(0.975):	USD 112

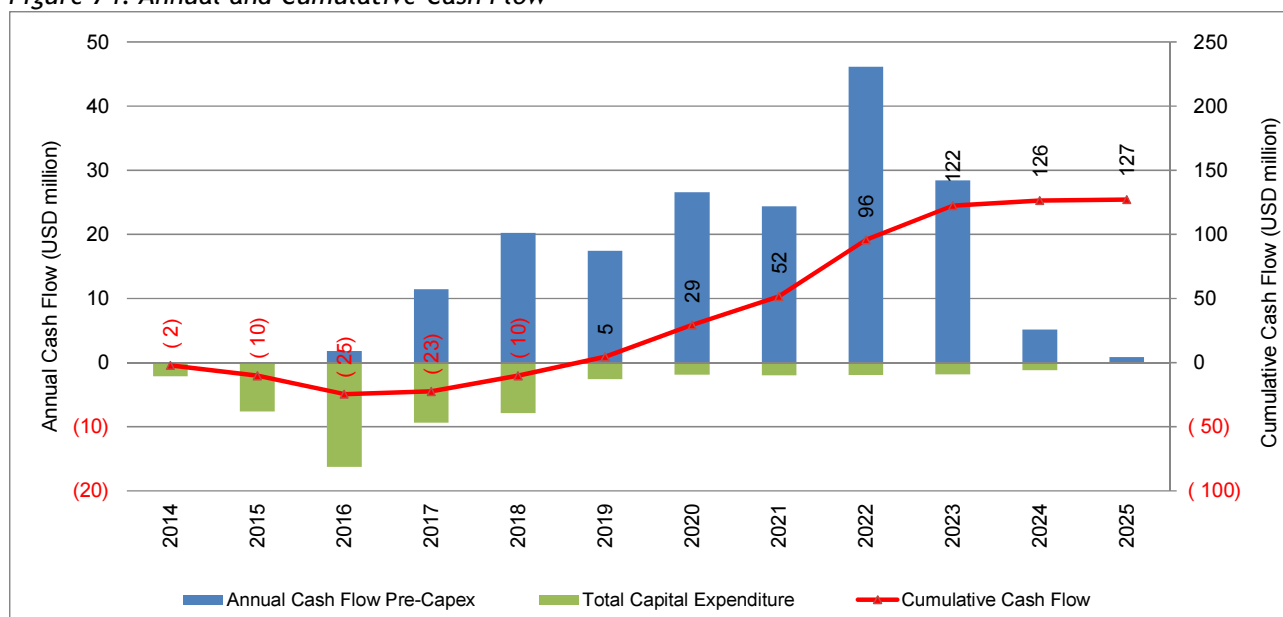
## Prob(NPV &gt; 0)

Pr(y > 0):	#N/A
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## PEA CASH FLOWS

The annual cash flow before capital expenditure, total capital expenditure and cumulative cash flow forecast for the LoM is displayed in Figure 64. During 2022 the tonnes mined are higher than the average of the preceding and succeeding years which results in peak cash flow of USD44 million during this year.

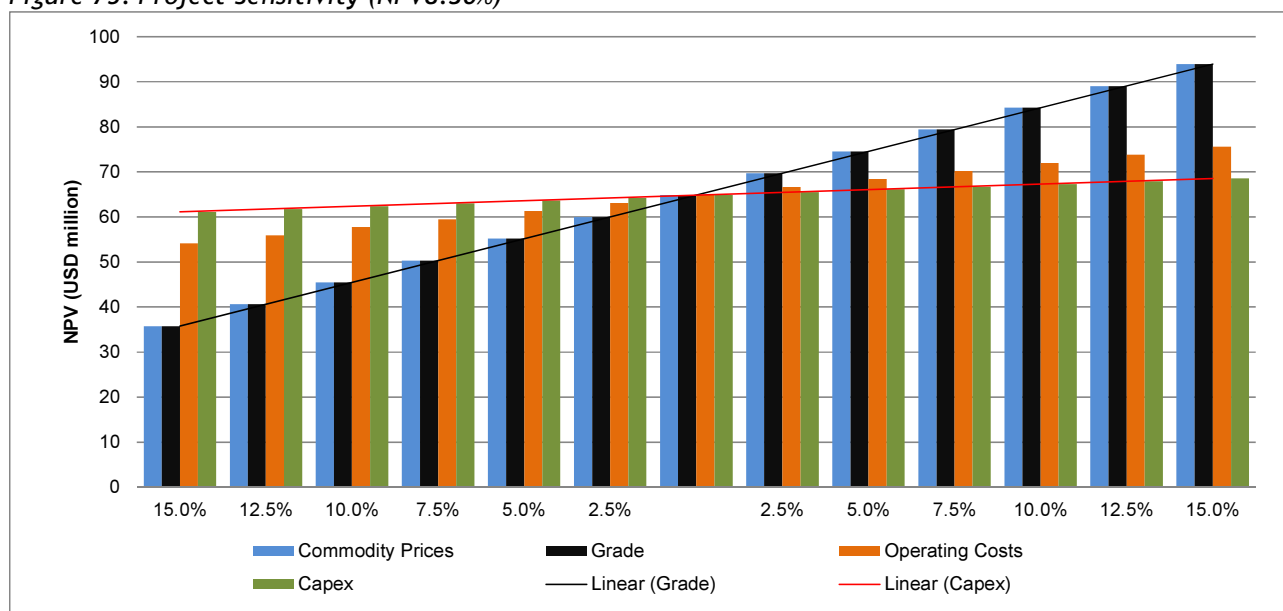
Figure 74: Annual and Cumulative Cash Flow



### PEA SENSITIVITY ANALYSIS

Based on the real cash flow calculated in the financial model, Minxcon performed single-parameter sensitivity analyses to ascertain the impact on the NPV. The bars represent various inputs into the model, each being increased or decreased by 2.5% i.e., the left side of the graph shows lower NPVs because of lower prices and lower grades, higher Opex and Capex and the opposite on the right hand. The red line and black line representing the least sensitive and most sensitive impacts to the NPV. For the DCF, the gold price and grade have the biggest impact on the sensitivity of the Project followed by the operating cost. The Project is not sensitive to the capital.

Figure 75: Project Sensitivity (NPV8.36%)



A sensitivity analysis was conducted on the grade and the gold price to better indicate the effect these two factors have on the NPV, as well as the total costs and the capital including renewals and replacement capital (Table 40 and Table 41).

Table 40: Sensitivity Analysis of Gold Price and Grade to NPV8.36% (USDm)

	Grade delivered to plant	3.71	3.82	3.92	4.03	4.14	4.25	4.36	4.47	4.58	4.69	4.75	4.91	5.02
AU Price	Change %	85.0%	87.5%	90.0%	92.5%	95.0%	97.5%	100.0%	102.5%	105.0%	107.5%	109.0%	112.5%	115.0%
1,063	85.0%	10	15	19	23	27	32	36	40	44	48	51	56	60
1,094	87.5%	15	19	23	28	32	36	41	45	49	53	56	62	66
1,125	90.0%	19	23	28	32	37	41	45	50	54	59	61	67	72
1,156	92.5%	23	28	32	37	41	46	50	55	59	64	66	73	77
1,188	95.0%	27	32	37	41	46	51	55	60	64	69	72	78	83
1,219	97.5%	32	36	41	46	51	55	60	65	69	74	77	84	88
<b>1,250</b>	<b>100.0%</b>	36	41	45	50	55	60	<b>65</b>	70	75	79	82	89	94
1,281	102.5%	40	45	50	55	60	65	70	75	80	85	88	95	99
1,313	105.0%	44	49	54	59	64	69	75	80	85	90	93	100	105
1,344	107.5%	48	53	59	64	69	74	79	85	90	95	98	105	111
1,363	109.0%	51	56	61	66	72	77	82	88	93	98	101	109	114
1,406	112.5%	56	62	67	73	78	84	89	95	100	105	109	116	122
1,438	115.0%	60	66	72	77	83	88	94	99	105	111	114	122	127
1,500	120.0%	69	75	80	86	92	98	104	109	115	121	124	133	138

Table 41: Sensitivity Analysis of Production Costs and Capital to NPV8.36% (USDm)

	Total Capex	46.6	48.0	49.3	50.7	52.1	53.4	54.8	56.2	57.6	58.9	59.8	61.7	63.0
Production Cost (USD/t)	Change %	85.0%	87.5%	90.0%	92.5%	95.0%	97.5%	100.0%	102.5%	105.0%	107.5%	109.0%	112.5%	115.0%
87	130.0%	44	43	42	42	41	40	40	39	38	37	37	36	35
84	125.0%	48	47	47	46	45	45	44	43	42	42	41	40	40
81	120.0%	52	52	51	50	50	49	48	47	47	46	46	45	44
77	115.0%	57	56	55	54	54	53	52	52	51	50	50	49	48
74	110.0%	61	60	59	59	58	57	56	56	55	54	54	53	52
71	105.0%	65	64	64	63	62	61	61	60	59	59	58	57	56
<b>67</b>	<b>100.0%</b>	69	68	68	67	66	66	<b>65</b>	64	63	63	62	61	61
64	95.0%	73	73	72	71	70	70	69	68	68	67	66	65	65
61	90.0%	77	77	76	75	75	74	73	73	72	71	71	70	69
57	85.0%	82	81	80	80	79	78	77	77	76	75	75	74	73
54	80.0%	86	85	84	84	83	82	82	81	80	79	79	78	77
50	75.0%	90	89	89	88	87	87	86	85	84	84	83	82	82
47	70.0%	94	93	93	92	91	91	90	89	89	88	87	86	86

## ITEM 25 - INTERPRETATION AND CONCLUSIONS

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Minxcon reviewed all the information and has made the following observations regarding the Blanket Mine:-

### **Mineral Resources:-**

- The Mineral Resources and Reserves tabulated on the operation are not aligned with best practises and reporting formats. These spread sheets should be revised.
- The manual mineral resource estimation methodology is deemed satisfactory, but a digital database would have advantages in terms of 3D visualisation and understanding the data.
- The QA/QC practices are not up to standard and need to be revised and implemented.
- The "deep" drilling and exploration drilling QA/QC needs to be improved.
- Drilling for the depth extensions should be increased to increase the confidence of the resource for the deepening of the Project.

### **Mining:-**

- The Reserve LoM plan is based on the depletion of Mineral Resource blocks following a study of mine plans.
- The developments required to access and mine the Measured and Indicated Mineral Resources have been completed.
- Historic production volumes are on the increase since Jan 2012 moving closer to 35 ktpm line. The Reserve LoM plan will require production to keep increasing to just below 40 ktpm.
- Rock conditions are fairly competent and roof support is seldom required.

### **Engineering and Infrastructure:-**

- Existing infrastructure at the Blanket Mine is sufficient to sustain the current production profile.

### **Processing:-**

- The plant is well-maintained and equipped to crush and mill up to 40 kt per month.
- The CIL circuit has adequate capacity to treat up to 120 kt of milled material per month.
- The plant is adequately staffed considering that most of the plant is manually controlled.
- Overall gold recoveries have been consistent on a monthly basis.
- The high free gold recovery of approximately 50% contributes to the overall high gold recovery.
- The incorporation of a central process control system can improve recoveries and reduce costs.
- Opportunities exist to reduce costs by optimising power measurement and reagent consumption.

### **Reserve Market Evaluation:-**

- The Project investigated is financially feasible at an 8.36% real discount rate.
- The best-estimated value of the Project was calculated at USD66 million with at a real discount rate of 8.36%.
- The Blanket Mine has an NCE margin of 31% that is slightly higher than that of other mines.
- The Project is most sensitive to gold price and grade.
- Direct Cash cost for the Project is USD71/milled tonne that equates to USD641/oz., which is below the average global gold cash cost of USD767/oz.
- Fully-allocated cost for the Project is USD95/milled tonne that equates to USD864/oz.

### **PEA Conclusions:-**

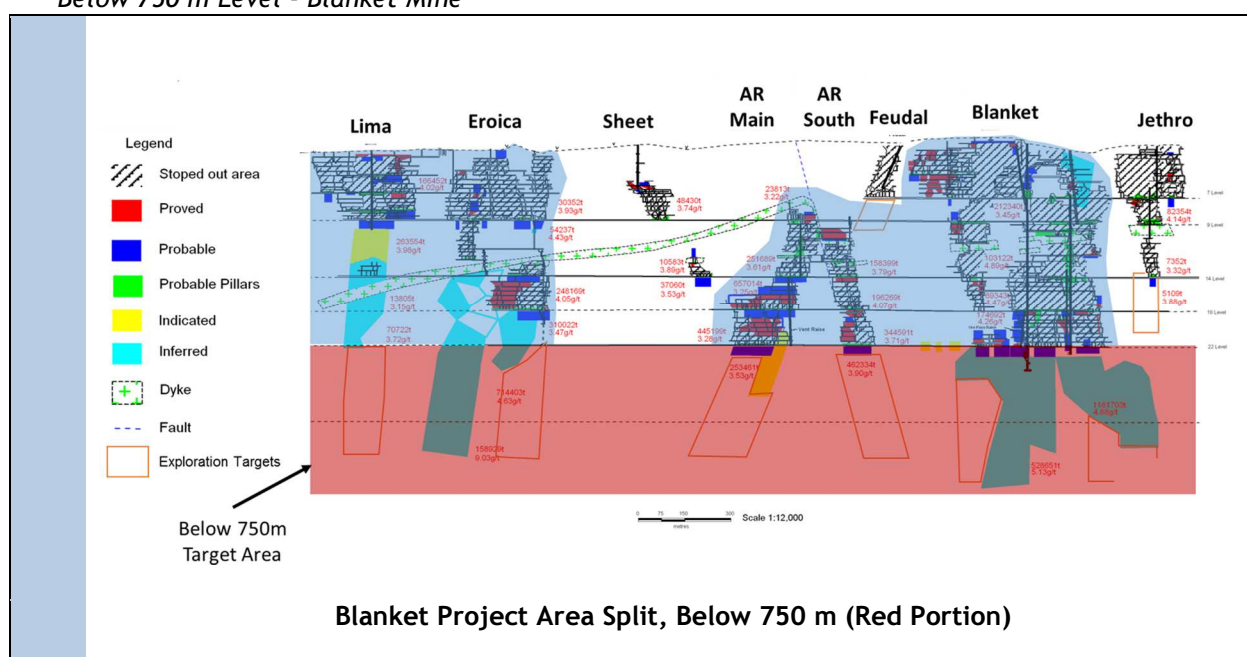
Minxcon was commissioned by GMS in October 2014 to complete a scoping level study on an initial extension to the Blanket Mine from below 750 m Level to 1120 m Level, in the form of a Preliminary Economic Assessment ("PEA"). The PEA includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorised

as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized. The valuation does not include the current mine plan that is based on the Mineral Reserves and Resources above 750 m but only considered the expansion project below 750 m as a stand-alone project. The PEA thus reflects Project economics on a stand-alone basis, and the economic analysis is based on an assumed requirement to raise money for the expansion capital expenditures, despite the fact that Caledonia would be able to fund those capital expenditures from cash flow from the existing mine operations. The best-estimated value of the PEA was calculated at USD65 million at a real discount rate of 8.36%. The IRR was calculated at 42%. Substantial upside potential exists in that the resource planned in the PEA is small in comparison to the exploration targets that could still be converted to resource below 750 m Level.

#### Study Level:

- The Mineral Resource confidence is concept level because the resources below 750 m Level are predominantly in the Inferred Resource category. The following figure illustrates the red area included in the PEA Study:-

*Below 750 m Level - Blanket Mine*



- The PEA Study, design, schedule and OPEX estimation is better than concept level and is based on current actual performance.
- The capital estimation was estimated at a very high level of confidence based on engineering designs, drawings and firm quotations and is at least at a definitive level of confidence.

#### Mining Areas:

- The PEA includes the Inferred Mineral Resources from the Below 750 m Level area.

#### Infrastructure:

- The existing infrastructure at the Blanket mine will be utilised in parallel with new infrastructure which is specifically aimed at targeting the Below 750 m Level mining areas.
- The extensions will entail the sinking of a new vertical shaft from surface as well as the completion of the No 6 Winze deepening project.

#### Additional Capital:

- Capital for the various key expansion project items amounts to USD43 million.



**Recoveries:**

- The historic metallurgical recoveries of 93.5% are not expected to change with the increased tonnes from the Blanket Mine.

**PEA Study:**

- The tonnage profile for the PEA Study is based on the replacement tonnages (Inferred Resources) to be mined through the existing shaft and the new central shaft situated in-between AR Main and AR South.
- The average grade is expected to be 4.36 g/t.
- The infrastructure extensions as defined in the PEA adds approximately 385 koz.
- The PEA Study excludes the Exploration Target areas below AR Main, AR South, Lima and Eroica. The PEA project will provide access to these Exploration target areas and to future exploration areas below 1120 level that will potentially extend the LoM.

**Valuation:**

- The best-estimated value of the PEA was calculated at USD65 million at a real discount rate of 8.36%. The IRR was calculated at 42%
- By using the Monte Carlo model for the PEA, the value range of the Blanket operation plots between USD44 million and USD84 million.
- The PEA is most sensitive to gold price and grade.
- The PEA has a break-even gold price of USD789/oz., including capital.
- Direct Cash cost for the PEA is USD67/milled t that equates to USD513/oz., which is below the average global gold cash cost of USD767/oz.
- Fully-allocated cost for the PEA is USD86/milled t that equates to USD789/oz.; noticeably lower than similar gold mining operations.

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## ITEM 26 - RECOMMENDATIONS

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Minxcon recommends the following for the Blanket Mine:-

### ***Mineral Resources:-***

- Minxcon recommends that the Mineral Resources are stated as inclusive of Mineral Reserves and that the Measured and Indicated Resources be declared separate from the Inferred Resources.
- The manual data should be captured digitally to reduce human error and assist in the 3D visualisation of the Mineral Deposit and potentially find hidden ore resource blocks.
- Geostatistical analysis of the data could possibly help to increase the mineral resources.
- Best practice QA/QC must be implemented on the operation, especially for the deep drilling and other exploration drilling as these sample points are single points and have greater influence than the day-to-day evaluation samples.
- Currently, the block evaluation does not correct for dip, which leads to under evaluation of the volume and content per resource block.
- Short deflections must be drilled when drilling the "deep" drill holes and exploration drill holes to understand variability and improve the confidence of the intersections for the Indicated and Inferred Resources.
- Long inclined boreholes or directional drilling should be investigated as an option to drill more and deeper intersections in the "pay shoots" without increasing the cross-cut development. This could help convert the Inferred mineral resource category to the Indicated mineral resource category.

### ***Mining:-***

- To assist in the LoM plan audit, a LoM design must be completed using one of the available software packages. This will be illustrated graphically in the mining sequence and development.

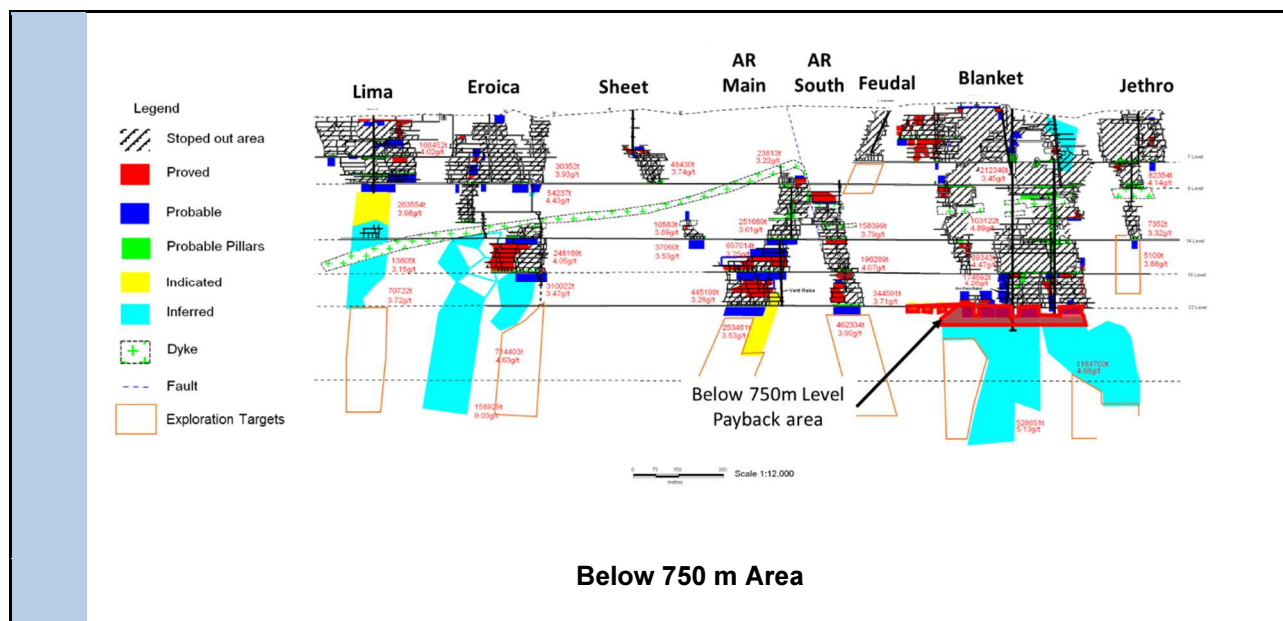
### ***Processing:-***

- The incorporation of additional process control systems should be pursued to improve gold recoveries and reduce costs.
- Metering of power consumption to the main process units should be installed so that power utilisation can be controlled; this will contribute to lower operating costs.
- The mill feed bin should be upgraded in size to increase the retention time to allow the crushers to operate during the day only.
- Reagent consumption (cyanide, and carbon) should be optimised further.
- It is recommended that laboratory costs be captured centrally and allocated to the mining, geology and metallurgical department on a cost per sample basis.

### ***PEA Recommendations***

#### ***Exploration***

- To fully de-risk the PEA expansion project, it is recommended to do exploration drilling as illustrated in the figure below, to increase the level of confidence of the Mineral Resources to Indicated.



### Mineral Resources:

- Best practice QA/QC must be implemented on the operation, especially for deep drilling and other exploration drilling as these sample points are single points and have greater influence than the day-to-day evaluation samples.
- Short deflections must be drilled when drilling the "deep" drill holes and exploration drill holes to understand variability and improve the confidence of the intersections for the Indicated and Inferred resources.
- Long inclined boreholes or directional drilling should be investigated as an option to drill more and deeper intersections in the "pay shoots" without increasing the cross-cut development. This could help to convert the Inferred Mineral Resources to Indicated Mineral Resources.

### Processing:

- The incorporation of additional process control systems should be pursued to improve gold recoveries and reduce costs.
- Metering of power consumptions to the main process units should be installed so that plant power utilisation can be controlled.
- Although the Gemini tables operate effectively at the moment, installation of Acacia reactors should be considered for upgrading of Knelson concentrates.

## ITEM 27 - REFERENCES

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## GLOSSARY OF TERMS

Table 42: Glossary of Terms

Term	Definition
<b>Alluvial</b>	The product of sedimentary processes in rivers, resulting in the deposition of alluvium (soil deposited by a river).
<b>Arenite</b>	A sedimentary rock composed mainly of quartz minerals.
<b>Argillite</b>	A sedimentary rock composed mainly of clay minerals.
<b>Assay laboratory</b>	A facility in which the proportions of metal in ores or concentrates are determined using analytical techniques.
<b>Auriferous</b>	A synonym for gold-bearing.
<b>Beneficial Interest</b>	The ultimate interest accruing or due to a party in a project. Depending on the circumstances, the beneficial interest may differ from participation, contributory or share subscription interests.
<b>Capital Asset Pricing Model (CAPM)</b>	A model that describes the relationship between risk and expected return.
<b>Carbon-In-Leach (CIL)</b>	A process similar to CIP (described below) except that the ore slurries are not leached with cyanide prior to carbon loading. Instead, the leaching and carbon loading occur simultaneously.
<b>Carbon-In-Pulp (CIP)</b>	A common process used to extract gold from cyanide leach slurries. The process consists of carbon granules suspended in the slurry and flowing counter-current to the process slurry in multiple-staged agitated tanks. The process slurry, which has been leached with cyanide prior to the CIP process, contains solubilised gold. The solubilised gold is absorbed onto the carbon granules, which are subsequently separated from the slurry by screening. The gold is then recovered from the carbon by electrowinning onto steel wool cathodes or by a similar process.
<b>Comminution</b>	Action of reducing material, normally ore, to minute particles or fragments.
<b>Conglomerate</b>	A sedimentary rock containing rounded fragments (clasts) derived from the erosion and abrasion of older rocks. Conglomerates are usually formed through the action of water in rivers and beaches. The interstitial spaces between the clasts are filled with finer grained sediment.
<b>Contributory interest</b>	In general, a contributory interest is the amount required to be contributed towards the exploration and development costs of a project by a party in order for that party to earn its participation interest in the project. If that party does not contribute its share of the funding then its participating interest will be diluted. The precise definition of this term can differ between agreements.
<b>Cut-off grade</b>	Cut-off grade is any grade that, for any specific reason, is used to separate two courses of action, e.g. to mine or to leave, to mill or to dump.
<b>Development</b>	Activities related to preparation for mining activities to take place and reach the required level of production.
<b>Diamond drilling</b>	An exploration drilling method, where the rock is cut with a diamond drilling bit, usually to extract core samples.
<b>Dilution</b>	Waste which is mixed with ore in the mining process.
<b>Dip</b>	The angle that a structural surface, i.e. a bedding or fault plane, makes with the horizontal. It is measured perpendicular to the strike of the structure.
<b>Discount rate</b>	The interest rate used in discounted cash flow analysis to determine the present value of future cash flows. The discount rate takes into account the time value of money (the idea that money available now is worth more than the same amount of money available in the future because it could be earning interest) and the risk or uncertainty of the anticipated future cash flows (which might be less than expected).
<b>Discounted Cash Flow (DCF)</b>	In finance, discounted cash flow analysis is a method of valuing a project, company, or asset using the concepts of the time value of money. All future cash flows are estimated and discounted to give their present values (PVs) – the sum of all future cash flows, both incoming and outgoing, is the net present value (NPV), which is taken as the value or price of the cash flows in question.
<b>Electro-winning</b>	The process of removing gold from solution by the action of electric currents.
<b>EMPR</b>	Environmental Management Programme Report.
<b>Exploration</b>	Prospecting, sampling, mapping, diamond drilling and other work involved in the search for mineralisation.
<b>Facies</b>	The features that characterise rock as having been emplaced, metamorphosed or deposited in a sedimentary fashion, under specific condition. In the case of sediment host deposits, this infers deposition within a particular depositional environment.

Term	Definition
<b>Faulting</b>	The process of fracturing that produces a displacement within, of across lithologies.
<b>Fair Value</b>	The estimated price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between knowledgeable and willing parties at the measurement date (an exit price) [IFRS], other than in a liquidation sale [US GAAP, FAS 157].
<b>Feasibility study</b>	A definitive engineering estimate of all costs, revenues, equipment requirements and production levels likely to be achieved if a mine is developed. The study is used to define the economic viability of a project and to support the search for project financing.
<b>Fluvial</b>	River environments.
<b>Footwall</b>	The underlying side of a fault, Mineral Deposit or stope.
<b>Forward sales</b>	The sale of a commodity for delivery at a specified future date and price.
<b>Grade</b>	The quantity of metal per unit mass of ore expressed as a percentage or, for gold, as grams per tonne of ore.
<b>Hanging wall</b>	The overlying side of a fault, Mineral Deposit or stope.
<b>Heap leaching</b>	A low-cost technique for extracting metals from ore by percolating leaching solutions through heaps of ore placed on impervious pads. Generally used on low-grade ores.
<b>In situ</b>	In place, i.e. within unbroken rock.
<b>Indicated Mineral Resource</b>	An "Indicated Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed (NI43-101 definition).
<b>Inferred Mineral Resource</b>	An "Inferred Mineral Resource" is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
<b>Internal Rate of return (IRR)</b>	The internal rate of return on an investment or project is the "annualised effective compounded return rate" or "rate of return" that makes the net present value of all cash flows (both positive and negative) from a particular investment equal to zero. It can also be defined as the discount rate at which the present value of all future cash flow is equal to the initial investment or in other words the rate at which an investment breaks even.
<b>Intrinsic Value</b>	The amount considered, on the basis of an evaluation of available facts, to be the "true", "real" or "underlying" worth of an item. Thus it is a long-term, Non-Market Value concept that smooths short term price fluctuations. In the case of real estate, this would be the value of the property taking into account the structure, size, location etc., as opposed to taking into account the current state of the market. In mining, the intrinsic value refers to the fundamental value based on the technical inputs, and a cash flow projection that creates a Net Present Value. Few of these inputs are market related, except possibly for metal price, benchmarked costs and the discount rate applied.
<b>Kriging</b>	An estimation method that minimises the estimation error between data points in determining mineral resources. Kriging is the best linear unbiased estimator of a mineral resource.
<b>Level</b>	The workings or tunnels of an underground mine which are on the same horizontal plane.
<b>Lithology</b>	The general compositional characteristics of rocks.
<b>Marginal mine</b>	A mine which has a relatively small cash operating margin (cash operating costs including capital expenditures in relation to gross gold sales) at the current gold price.
<b>Market Value</b>	The estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion [IVSC, IFRS].
<b>Measured mineral resource</b>	"Measured Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.
<b>Metallurgical plant</b>	Process plant erected to treat ore and extract the contained gold.



Term	Definition
<b>Metallurgical recovery</b>	Proportion of metal in mill feed which is recovered by a metallurgical process or processes.
<b>Metallurgy</b>	The science of extracting metals from ores and preparing them for sale.
<b>Milling/Crush</b>	The comminution of the ore, although the term has come to cover the broad range of machinery inside the treatment plant where the gold is separated from the ore prior to leaching or flotation processes.
<b>Mine call factor (MCF)</b>	The ratio of the grade of material recovered at the mill (plus residue) to the grade of ore calculated by sampling in stopes.
<b>Mine recovery factor (MRF)</b>	The MRF is equal to the mine call factor multiplied by the plant recovery factor.
<b>Mineable</b>	That portion of a mineral resource for which extraction is technically and economically feasible.
<b>Mineral Reserve</b>	<p>A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. Adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined. (NI43-101 definition). Mineral reserves are reported as general indicators of the life of mineral deposits. Changes in reserves generally reflect:</p> <ul style="list-style-type: none"> <li>i. development of additional reserves;</li> <li>ii. depletion of existing reserves through production;</li> <li>iii. actual mining experience; and</li> <li>iv. price forecasts.</li> </ul> <p>Grades of mineral reserve actually processed from time to time may be different from stated reserve grades because of geologic variation in different areas mined, mining dilution, losses in processing and other factors. Neither reserves nor projections of future operations should be interpreted as assurances of the economic life of mineral deposits or of the profitability of future operations.</p>
<b>Mineral Resource</b>	A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilised organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.
<b>Mineralisation</b>	The presence of a target mineral in a mass of host rock.
<b>Mineralised area</b>	Any mass of host rock in which minerals of potential commercial value occur.
<b>Net Present Value (NPV)</b>	The difference between the present value of cash inflows and the present value of cash outflows. NPV is used in capital budgeting to analyse the profitability of an investment or project.
<b>Notional Cost</b>	All in cost which includes total cash costs (net of by-product credits), capital spending, general and administrative expenses, and exploration expenses.
<b>Ore</b>	A mixture of valuable and worthless minerals from which at least one of the minerals can be mined and processed at an economic profit.
<b>Mineral Deposit</b>	A continuous well defined mass of material of sufficient ore content to make extraction economically feasible.
<b>Outcrop</b>	The exposure of rock on surface.
<b>Participation interest</b>	The interest that a party holds in any benefits arising from the development or sale of a project. In order to earn this interest the party may, or may not, be required to contribute towards the exploration and development costs. The definition of this term may differ between agreements.
<b>Pay limit</b>	The breakeven grade at which the Mineral Deposit can be mined without profit or loss and is calculated using the gold price, the working cost and recovery factors.
<b>PEA Study</b>	The Life of Mine plan that was done as part of the Preliminary Economic Assessment of the area that includes "Above 750 m Level" areas and "Below 750 m Level" areas. The PEA Study are inclusive of the Reserve LoM plan and Inferred Mineral Resources.
<b>Placer</b>	A sedimentary deposit containing economic quantities of valuable minerals mainly formed in alluvial and eluvial environments.
<b>Plant recovery factor</b>	The gold recovered after treatment processes in a metallurgical plant. It is expressed as a percentage of gold produced (in mass) over the mass of gold fed into the front of the plant (i.e. into the milling circuit).
<b>Probable Mineral Reserve</b>	"Probable Mineral Reserve" is the economically mineable part of an Indicated and, in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and

Term	Definition
	other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. (NI43-101 definition).
<b>Proven Mineral Reserve</b>	A "Proven Mineral Reserve" is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified. (NI43-101 definition).
<b>Recovered grade</b>	The actual grade of ore realised or produced after the mining and treatment processes.
<b>Reef</b>	A narrow gold-bearing lithology, normally a conglomerate in the Witwatersrand Basin that may contain economic concentrates of gold and uranium.
<b>Refining</b>	The final stage of metal production in which final impurities are removed from the molten metal by introducing air and fluxes. The impurities are removed as gases or slag.
<b>Reserve LoM Plan</b>	The Life of Mine that are based only on Measured and Indicated Mineral Resources and only for the area "Above 750 m Level". The Reserve LoM plan will be used to state Mineral Reserves.
<b>Rehabilitation</b>	The process of restoring mined land to a condition approximating to a greater or lesser degree its original state. Reclamation standards are determined by the South African Department of Mineral and Energy Affairs and address ground and surface water, topsoil, final slope gradients, waste handling and re-vegetation issues.
<b>Sampling</b>	Taking small pieces of rock at intervals along exposed mineralisation for assay (to determine the mineral content).
<b>Sedimentary</b>	Formed by the deposition of solid fragmental material that originates from weathering of rocks and is transported from a source to a site of deposition.
<b>Semi-Autogenous Grinding (SAG) mill</b>	A piece of machinery used to crush and grind ore, which uses a mixture of steel balls, and the ore itself to achieve comminution.
<b>Semi-variogram</b>	A graph that describes the expected difference in value between pairs of samples as a function of sample spacing.
<b>Share Subscription Right</b>	The right which a party has to subscribe for shares in any company set up to develop the mineral rights. The precise definition can differ between agreements.
<b>Slimes</b>	The finer fraction of tailings discharged from a processing plant after the valuable minerals have been recovered.
<b>Slurry</b>	A fluid comprising fine solids suspended in a solution (generally water containing additives).
<b>Smelting</b>	Thermal processing whereby molten metal is liberated from beneficiated ore or concentrate with impurities separating as lighter slag.
<b>Spot price</b>	The current price of a metal for immediate delivery.
<b>Stockpile</b>	A store of unprocessed ore or marginal grade material.
<b>Stope</b>	Excavation within the Mineral Deposit where the main production takes place.
<b>Stratigraphic</b>	A term describing the chronological sequence in which bedded rocks occur that can usually be correlated between different localities.
<b>Strike length</b>	Horizontal distance along the direction that a structural surface takes as it intersects the horizontal.
<b>Stripping</b>	The process of removing overburden to expose ore.
<b>Sulphide</b>	A mineral characterised by the linkages of sulphur with a metal or semi-metal, such as pyrite (iron sulphide). Also a zone in which sulphide minerals occur.
<b>Sweepings</b>	The clean-up of residual broken ore in stopes.
<b>Syncline</b>	A basin shaped fold.
<b>Syn depositional</b>	A process that took place at the same time as sedimentary deposition.
<b>Tailings</b>	Finely ground rock from which valuable minerals have been extracted by milling.
<b>Tailings dam</b>	Dams or dumps created to store waste material (tailings) from processed ore after the economically recoverable gold has been extracted.
<b>Tonnage</b>	Quantities where the tonne is an appropriate unit of measure. Typically used to measure reserves of gold-bearing material in situ or quantities of ore and waste material mined, transported or milled.
<b>Total cost per ounce</b>	A measure of the average cost of producing an ounce of gold, calculated by dividing the total operating costs in a period by the total gold production over the same period.
<b>Transgress</b>	Systematic inundation of an erosional surface by sedimentary deposition.
<b>Unconformity</b>	A surface within a package of sedimentary rocks which may be parallel to or at an angle with overlying or underlying rocks, and which represents a period of erosion or non-deposition, or both.
<b>Vamping</b>	The final clean-up of gold bearing rock and mud from track ballast and/or accumulations in gullies and along transportation routes.

Term	Definition
<b>Waste rock</b>	Rock with an insufficient gold content to justify processing.
<b>Weighted average Cost of Capital</b>	A company's assets are financed by either debt or equity. WACC is the average of the costs of these sources of financing, each of which is weighted by its respective use in the given situation.
<b>Working costs</b>	Working costs represent production costs directly associated with the processing of gold and selling, administration and general charges related to the operation.
<b>Zinc precipitation</b>	A chemical reaction using zinc dust that converts gold solution to a solid form for smelting into unrefined gold bars.

## APPENDIX

### Appendix 1: Qualified Persons' Certificates

#### CERTIFICATE of QUALIFIED PERSON - D v Heerden

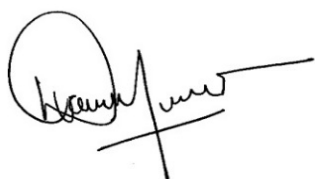
I, Daniel van Heerden, do hereby certify that:-

1. I am a Director of **Minxcon (Pty) Ltd**  
Suite 5, Coldstream Office Park,  
2 Coldstream Street,  
Little Falls, Roodepoort, South Africa
2. I graduated with a B.Eng. (Mining) degree from the University of Pretoria in 1985 and an M.Comm. (Business Administration) degree from the Rand Afrikaans University in 1993. In addition, I obtained diplomas in Data Metrics from the University of South Africa and Advanced Development Programme from London Business School in 1989 and 1995, respectively. In 1989 I was awarded with a Mine Managers Certificate from the Department of Mineral and Energy Affairs.
3. I have worked as a Mining Engineer for more than 28 years with my specialisation lying within Mineral Reserve and mine management. I have completed a number of Mineral Reserve estimations and mine plans pertaining to various commodities, including gold, using approaches described by the Canadian Code for reporting of Resources and Reserves - National Instrument 43-101 (Standards of Disclosure for Mineral Projects), Form 43-101F1 and the Companion Policy Document 43-101CP ("NI43-101").
4. I am affiliated with the following professional associations, which meet all the attributes of a Professional Association or a Self-Regulatory Professional Association, as applicable (as those terms are defined in NI43-101):-

Class	Professional Society	Year of Registration
Member	Association of Mine Managers of SA	1989
Fellow	South African Institute of Mining and Metallurgy (FSAIMM Reg. No. 37309)	1985
Professional Engineer	Engineering Council of South Africa (Pr.Eng. Reg. No. 20050318)	2005

5. I am responsible for Items 1-3, 15-16, 18, 21, 23-27 of the technical report titled "A Technical Report on the Blanket Mine, Gwanda Area, Zimbabwe" prepared for Caledonia Mining Corporation with an effective date of 9 July 2015 (the "Report").
6. I have read the definition of "Qualified Person" set out in NI43-101 and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfil the requirements to be a Qualified Person for the purposes of the Report.
7. I have read NI43-101 and the Report has been prepared in compliance with it.
8. As of the effective date, to the best of my knowledge, information and belief, the Report contains all scientific and technical information required to be disclosed to make the Report not misleading.
9. The facts presented in the Report are, to the best of my knowledge, correct.
10. The analyses and conclusions presented in the Report are limited only by the reported forecasts and conditions.
11. I have neither prior involvement, nor present or prospective interest in the subject property or asset and have no bias with respect to the assets that are the subject of the Report, or to the parties involved with the assignment.
12. I am independent of the issuer. My compensation, employment or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report.
13. I undertook a personal inspection of the property from 22 to 24 October 2014, and spent time at the mine, the treatment plant, the waste dumps, and the sample assay laboratory and data management section.

Yours faithfully,



**D v HEERDEN**

B Eng (Min.), MCom (Bus. Admin.)

Pr.Eng., FSAIMM, AMMSA

**DIRECTOR, MINXCON**

**Date of Sign-off: 9 July 2015**

**CERTIFICATE of QUALIFIED PERSON - U Engelmann**

I, Uwe Engelmann, do hereby certify that:-

1. I am a Director of **Minxcon (Pty) Ltd**  
Suite 5, Coldstream Office Park,  
2 Coldstream Street,  
Little Falls, Roodepoort, South Africa
2. I graduated with a BSc Honours (Geology) degree from the University of the Witwatersrand in 1991.
3. I have more than 18 years' experience in the mining and exploration industry. This includes eight years as an Ore Resource Manager at the Randfontein Estates Projects on the West Rand. I have completed a number of assessments and technical reports pertaining to various commodities, including gold, using approaches described by the Canadian Code for reporting of Resources and Reserves - National Instrument 43-101 (Standards of Disclosure for Mineral Projects), Form 43-101F1 and the Companion Policy Document 43-101CP ("NI43-101").
4. I am affiliated with the following professional associations which meet all the attributes of a Professional Association or a Self-Regulatory Professional Association, as applicable (as those terms are defined in NI43-101):-

Class	Professional Society	Year of Registration
Member	Geological Society of South Africa (MGSSA No. 966310)	2010
Professional Natural Scientist	South African Council for Natural Scientific Professions (Pr.Sci.Nat. Reg. No. 400058/08)	2008

5. I am responsible for Items 1-3, 6-14, 23-27 of the technical report titled "A Technical Report on the Blanket Mine, Gwanda Area, Zimbabwe" prepared for Caledonia Mining Corporation with an effective date of 9 July 2015 (the "Report").
6. I have read the definition of "Qualified Person" set out in NI43-101 and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfil the requirements to be a Qualified Person for the purposes of the Report.
7. I have read NI43-101 and the Report has been prepared in compliance with it.
8. As of the effective date, to the best of my knowledge, information and belief, the Report contains all scientific and technical information required to be disclosed to make the Report not misleading.
9. The facts presented in the Report are, to the best of my knowledge, correct.
10. The analyses and conclusions presented in the Report are limited only by the reported forecasts and conditions.
11. I have neither prior involvement, nor present or prospective interest in the subject property or asset and have no bias with respect to the assets that are the subject of the Report, or to the parties involved with the assignment.
12. I am independent of the issuer. My compensation, employment or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report.
13. I undertook a personal inspection of the property from 22 to 24 October 2014, and spent time at the mine, the treatment plant, the waste dumps, and the sample assay laboratory and data management section.

Yours faithfully,



**U ENGELMANN**

BSc (Zoo. & Bot.), BSc Hons (Geol.)

Pr.Sci.Nat., MGSSA

**DIRECTOR, MINXCON**

**Date of Sign-off: 9 July 2015**

**CERTIFICATE of QUALIFIED PERSON - D Clemente**

I, Dario Clemente, do hereby certify that:-

1. I am a Director of **Minxcon Projects SA (Pty) Ltd**  
Suite 5, Coldstream Office Park,  
2 Coldstream Street,  
Little Falls, Roodepoort, South Africa
2. I graduated with an NHD (Ext. Met.) from the University of the Witwatersrand in 1976. In addition, I have completed the Business Leadership Development Programme at Wits Business School.
3. I have more than 40 years' experience in the mining and metallurgical industry. This includes 15 years as a metallurgical manager and consultant as well as four years in mine management. I have completed various technical reports on metallurgical operations and have been co-author of a technical paper presented overseas. I have completed a number of assessments and technical reports pertaining to various commodities, including gold, using approaches described by the Canadian Code for reporting of Resources and Reserves - National Instrument 43-101 (Standards of Disclosure for Mineral Projects), Form 43-101F1 and the Companion Policy Document 43-101CP ("NI43-101").
4. I am affiliated with the following professional associations, which meet all the attributes of a Professional Association or a Self-Regulatory Professional Association, as applicable (as those terms are defined in NI43-101):-

Class	Professional Society	Year of Registration
Fellow	South African Institute of Mining and Metallurgy (FSAIMM Reg. No. 701139)	1995
Member	Mine Metallurgical Managers Association of South Africa (MMMA Reg. No. M000948)	1988

5. I am responsible for Items 1-3, 17-18, 23-27 of the technical report titled "A Technical Report on the Blanket Mine, Gwanda Area, Zimbabwe" prepared for Caledonia Mining Corporation with an effective date of 9 July 2015 (the "Report").
6. I have read the definition of "Qualified Person" set out in NI43-101 and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfil the requirements to be a Qualified Person for the purposes of the Report.
7. I have read the NI43-101 and the Report has been prepared in compliance with it.
8. As of the effective date, to the best of my knowledge, information and belief, the Report contains all scientific and technical information required to be disclosed to make the Report not misleading.
9. The facts presented in the Report are, to the best of my knowledge, correct.
10. The analyses and conclusions presented in the Report are limited only by the reported forecasts and conditions.
11. I have neither prior involvement, nor present or prospective interest in the subject property or asset and have no bias with respect to the assets that are the subject of the Report, or to the parties involved with the assignment.
12. I am independent of the issuer. My compensation, employment or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report.
13. I undertook a personal inspection of the property from 22 to 24 October 2014, and spent time at the mine, the treatment plant, the waste dumps, and the sample assay laboratory and data management section.

Yours faithfully,



**D CLEMENTE**

NHD (Ext. Met.), GCC, BLDP (WBS)

MMMA, FSAIMM

**DIRECTOR, MINXCON PROJECTS SA**

**Date of Sign-off: 9 July 2015**

**CERTIFICATE of QUALIFIED PERSON - NJ Odendaal**

I, Johan Odendaal, do hereby certify that:

1. I am a Director of **Minxcon (Pty) Ltd**  
Suite 5, Coldstream Office Park,  
2 Coldstream Street,  
Little Falls, Roodepoort, South Africa
2. I graduated with a BSc (Geology) degree from the Rand Afrikaans University in 1985. In addition, I obtained a BSc Honours (Mineral Economics) from the Rand Afrikaans University in 1986 and an MSc (Mining Engineering) from the University of the Witwatersrand in 1992.
3. I have worked as a Geoscientist for more than 26 years. As a former employee of Merrill Lynch, I was actively involved in advising mining companies and investment bankers on corporate-related issues, analysing platinum and gold companies. I have completed a number of valuations on various commodities, including gold, using approaches described by the Canadian Code for reporting of Resources and Reserves - National Instrument 43-101 (Standards of Disclosure for Mineral Projects), Form 43-101F1 and the Companion Policy Document 43-101CP ("NI43-101") and using valuation approaches described by the Standards and Guidelines for Valuation of Mineral Properties recommended by the Special Committee of the Canadian Institute of Mining, Metallurgy and Petroleum or Valuation of Mineral Properties ("CIMVal").
4. I am affiliated with the following professional associations, which meet all the attributes of a Professional Association or a Self-Regulatory Professional Association, as applicable (as those terms are defined in NI43-101):-

Class	Professional Society	Year of Registration
Member	Geological Society of South Africa (MGSSA Reg. No. 965119)	2003
Fellow	South African Institute of Mining and Metallurgy (FSAIMM Reg. No. 702615)	2003
Professional Natural Scientist	South African Council for Natural Scientific Professions (Pr.Sci.Nat. Reg. No. 400024/04)	2003

5. I am responsible for Items 1-6, 19-27 of the technical report titled "A Technical Report on the Blanket Mine, Gwanda Area, Zimbabwe" prepared for Caledonia Mining Corporation with an effective date of 9 July 2015 (the "Report").
6. I have read the definition of "Qualified Person" set out in NI43-101 and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfil the requirements to be a Qualified Person for the purposes of the Report.
7. I have read NI43-101 and CIMVal, and the Report has been prepared in compliance with these.
8. As of the effective date, to the best of my knowledge, information and belief, the Report contains all scientific and technical information required to be disclosed to make the Report not misleading.
9. The facts presented in the Report are, to the best of my knowledge, correct.
10. The analyses and conclusions presented in the Report are limited only by the reported forecasts and conditions.
11. I have neither prior involvement, nor present or prospective interest in the subject property or asset and have no bias with respect to the assets that are the subject of the Report, or to the parties involved with the assignment.
12. I am independent of the issuer. My compensation, employment or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report.
13. I did not undertake a personal inspection of the property.

Yours faithfully,



**NJ ODENDAAL**

BSc (Geol.), BSc (Min. Econ.), MSc (Min. Eng.)

Pr.Sci.Nat., FSAIMM, MGSSA

**DIRECTOR, MINXCON**

**Date of Sign-off: 9 July 2015**



**CERTIFICATE of QUALIFIED PERSON - J Burger**

I, Jaco Burger, do hereby certify that:-

1. I am an employee of **Minxcon (Pty) Ltd**  
Suite 5, Coldstream Office Park,  
2 Coldstream Street,  
Little Falls, Roodepoort, South Africa
2. I graduated with a B Eng (Mining) degree from the University of Pretoria in 2009. In addition, I have obtained a Mine Managers' Certificate in 2012. I completed a post graduate diploma in Financial Management through UNISA in 2011 and am currently a 2014 CFA Level 1 Candidate.
3. I have worked as a Mining Engineer for more than six years. As a former employee of Anglo Platinum I was involved in the mining production activities and was in charge of supervising various underground operations. I have been employed by Minxcon for the past two years as a valuator and completed a number of valuations on various commodities, including gold, using approaches described by the Canadian Code for reporting of Resources and Reserves - National Instrument 43-101 (Standards of Disclosure for Mineral Projects), Form 43-101F1 and the Companion Policy Document 43-101CP ("NI43-101") and using valuation approaches described by the Standards and Guidelines for Valuation of Mineral Properties recommended by the Special Committee of the Canadian Institute of Mining, Metallurgy and Petroleum or Valuation of Mineral Properties ("CIMVal").
4. I am affiliated with the following professional associations, which meet all the attributes of a Professional Association or a Self-Regulatory Professional Association, as applicable (as those terms are defined in NI43-101):-

Class	Professional Society	Year of Registration
Professional Engineer	Engineering Council of South Africa (Pr.Eng. Reg. No. 20130533)	2013
Member	South African Institute of Mining and Metallurgy (MSAIMM Reg. No. 705773)	2012

5. I am responsible for Items 1-6, 19-27 of the technical report titled "A Technical Report on the Blanket Mine, Gwanda Area, Zimbabwe" prepared for Caledonia Mining Corporation with an effective date of 9 July 2015 (the "Report").
6. I have read the definition of "Qualified Person" set out in NI43-101 and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfil the requirements to be a Qualified Person for the purposes of the Report.
7. I have read NI43-101 and CIMVal, and the Report has been prepared in compliance with these.
8. As of the effective date, to the best of my knowledge, information and belief, the Report contains all scientific and technical information required to be disclosed to make the Report not misleading.
9. The facts presented in the Report are, to the best of my knowledge, correct.
10. The analyses and conclusions presented in the Report are limited only by the reported forecasts and conditions.
11. I have neither prior involvement, nor present or prospective interest in the subject property or asset and have no bias with respect to the assets that are the subject of the Report, or to the parties involved with the assignment.
12. I am independent of the issuer. My compensation, employment or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report.
13. I did not undertake a personal inspection of the subject property.

Yours faithfully,



**J BURGER**

B Eng (Min.), Dip. Fin. Management, MMC  
Pr.Eng., MSAIMM

**VALUATOR, MINXCON**

**Date of Sign-off: 9 July 2015**



*Appendix 2: Blanket Operating Claims*

Name	Reg No.	Area	No. of Claims	No. of Blocks	Type
Blanket	1817	Gda	13	1	Au
Blanket 2	3958	Gda	8	1	Au
Blanket	5030	Gda	7	1	Au
Blanket 9	31202	Gda	7	1	Au
Blanket A	GA247	Gda	9	1	Au
Blanket B	GA248	Gda	10	1	Au
Blanket D	GA349	Gda	4	1	Au
Blanket F	GA512	Gda	6	1	Au
Blanket J	GA547	Gda	2	1	Au
Blanket K	6874BM	Gda	25	1	Tu
Blanket L	9627BM	Gda	23	1	Cu
D T	21775	Gda	10	1	Au
Feudal 2	10051BM	Gda	25	1	Tu
Feudal 3	31190	Gda	6	1	Au
Feudal 3	19918	Gda	9	1	Au
Feudal D B E	21065	Gda	8	1	Au
Feudal South	GA446	Gda	4	1	Au
Feudal West	10358BM	Gda	25	1	As
Harvard	5576BM	Gda	25	1	Tu
Jethro	19923	Gda	9	1	Au
Lima 17	36066	Gda	2.7	1	Au
Lima 18	36067	Gda	9.8	1	Au
Lima 19	36068	Gda	9.7	1	Au
Lima 20	36069	Gda	9.6	1	Au
Lima 21	36070	Gda	9.5	1	Au
Lima 22	36071	Gda	9.1	1	Au
Lima 23	36072	Gda	8.3	1	Au
Lima 24	36073	Gda	10	1	Au
Lima 25	36074	Gda	10	1	Au
Lima 26	36075	Gda	10	1	Au
Lima 27	36076	Gda	10	1	Au
Lima 28	36077	Gda	10	1	Au
Lima 29	36078	Gda	10	1	Au
Lima 30	36079	Gda	10	1	Au
Lima 31	36080	Gda	10	1	Au
Lima 32	36081	Gda	4	1	Au
Lima 33	36082	Gda	7	1	Au
Lima 34	36083	Gda	10	1	Au
Lima 35	36084	Gda	10	1	Au
Lima 36	36085	Gda	10	1	Au
Lima 37	36086	Gda	10	1	Au
Lima 38	36087	Gda	10	1	Au
Lima 39	36088	Gda	2.04	1	Au
Lima 40	36089	Gda	3.25	1	Au
Lima 41	36090	Gda	3.25	1	Au
Lima 42	36091	Gda	9	1	Au
Lima 43	36092	Gda	10	1	Au
Lima 44	36093	Gda	10	1	Au
Lima 45	39094	Gda	10	1	Au
Lima 46	36095	Gda	10	1	Au
Lima 47	36096	Gda	8.1	1	Au
Lima 48	36097	Gda	3	1	Au
Lima 49	36098	Gda	7.95	1	Au
Lima 50	36099	Gda	5.8	1	Au
Lima 51	36100	Gda	3.04	1	Au
Lima 52	36101	Gda	9.25	1	Au
Lima 53	36102	Gda	8.3	1	Au
Lima 54	36103	Gda	2.18	1	Au
Lima 55	36104	Gda	7.36	1	Au
Lima 56	36105	Gda	6.3	1	Au
Lima 57	36106	Gda	10	1	Au
Lima 58	36107	Gda	10	1	Au
Lima 59	36108	Gda	10	1	Au
Lima 60	36109	Gda	10	1	Au

Name	Reg No.	Area	No. of Claims	No. of Blocks	Type
Lima 61	36110	Gda	10	1	Au
Lima 62	36111	Gda	10	1	Au
Lima 63	36112	Gda	10	1	Au
Lima 64	36113	Gda	10	1	Au
Lima 65	36114	Gda	10	1	Au
Lima 66	36115	Gda	10	1	Au
Lima 67	36116	Gda	10	1	Au
Lima 68	36117	Gda	10	1	Au
Lima H	10925BM	Gda	93	1	As
Lima I	34052	Gda	10	1	Au
Lima J	34053	Gda	10	1	Au
Lima K	34054	Gda	10	1	Au
Lima L	34055	Gda	10	1	Au
Lima M	30456	Gda	10	1	Au
Lima N	34057	Gda	10	1	Au
Lima O	34058	Gda	10	1	Au
Lima P	34059	Gda	5	1	Au
Lima Q	34060	Gda	5	1	Au
Lima R	34061	Gda	10	1	Au
Lima S	34062	Gda	10	1	Au
Lima T	34063	Gda	10	1	Au
Lima U	34064	Gda	10	1	Au
Lima V	34065	Gda	10	1	Au
Lima W	34066	Gda	10	1	Au
Lima X	34067	Gda	10	1	Au
Lima1	35753	Gda	8	1	Au
Lima10	35762	Gda	10	1	Au
Lima11	35763	Gda	10	1	Au
Lima12	35764	Gda	10	1	Au
Lima13	35765	Gda	10	1	Au
Lima14	35766	Gda	10	1	Au
Lima15	35767	Gda	10	1	Au
Lima16	35768	Gda	5	1	Au
Lima2	35754	Gda	8	1	Au
Lima3	35755	Gda	10	1	Au
Lima4	35756	Gda	10	1	Au
Lima5	35757	Gda	10	1	Au
Lima6	35758	Gda	10	1	Au
Lima7	35759	Gda	10	1	Au
Lima8	35760	Gda	6	1	Au
Lima9	35761	Gda	10	1	Au
Mbudzane Rock A	36160	Gda	10	1	Au
Mbudzane Rock A1	36176	Gda	9.7	1	Au
Mbudzane Rock A2	36177	Gda	10	1	Au
Mbudzane Rock A3	36178	Gda	10	1	Au
Mbudzane Rock A4	36179	Gda	10	1	Au
Mbudzane Rock A5	36180	Gda	10	1	Au
Mbudzane Rock A6	36181	Gda	3.5	1	Au
Mbudzane Rock B	36161	Gda	10	1	Au
Mbudzane Rock B1	36182	Gda	2.25	1	Au
Mbudzane Rock B2	36183	Gda	6.5	1	Au
Mbudzane Rock B3	36184	Gda	10	1	Au
Mbudzane Rock B4	36185	Gda	10	1	Au
Mbudzane Rock B5	36186	Gda	10	1	Au
Mbudzane Rock B6	36187	Gda	10	1	Au
Mbudzane Rock B7	36188	Gda	10	1	Au
Mbudzane Rock B8	36189	Gda	3.2	1	Au
Mbudzane Rock B9	36190	Gda	6.5	1	Au
Mbudzane Rock C	36162	Gda	10	1	Au
Mbudzane Rock C1	36191	Gda	10	1	Au
Mbudzane Rock C2	36192	Gda	10	1	Au
Mbudzane Rock C3	36193	Gda	10	1	Au
Mbudzane Rock C4	36194	Gda	10	1	Au
Mbudzane Rock C5	36195	Gda	10	1	Au
Mbudzane Rock C6	36196	Gda	2.25	1	Au

Name	Reg No.	Area	No. of Claims	No. of Blocks	Type
Mbudzane Rock C7	36197	Gda	6	1	Au
Mbudzane Rock C8	36198	Gda	9.4	1	Au
Mbudzane Rock C9	36199	Gda	9.4	1	Au
Mbudzane Rock D	36163	Gda	6.13	1	Au
Mbudzane Rock D1	36200	Gda	9.4	1	Au
Mbudzane Rock D2	36201	Gda	9.4	1	Au
Mbudzane Rock D3	36202	Gda	9.17	1	Au
Mbudzane Rock E	36164	Gda	10	1	Au
Mbudzane Rock F	36165	Gda	10	1	Au
Mbudzane Rock G	36166	Gda	10	1	Au
Mbudzane Rock H	36167	Gda	5.83	1	Au
Mbudzane Rock I	36168	Gda	2.5	1	Au
Mbudzane Rock J	36169	Gda	3.45	1	Au
Mbudzane Rock K	36170	Gda	5.1	1	Au
Mbudzane Rock L	36171	Gda	8	1	Au
Mbudzane Rock M	36172	Gda	10	1	Au
Mbudzane Rock N	36173	Gda	10	1	Au
Mbudzane Rock O	36174	Gda	10	1	Au
Mbudzane Rock P	36175	Gda	6.23	1	Au
OQUEIL	35928	Gda	1	1	Au
OQUEIL 1	35929	Gda	2.5	1	Au
OQUEIL 10	35938	Gda	10	1	Au
OQUEIL 11	35939	Gda	6	1	Au
OQUEIL 12	35940	Gda	10	1	Au
OQUEIL 13	35941	Gda	10	1	Au
OQUEIL 14	35942	Gda	9	1	Au
OQUEIL 15	35943	Gda	3	1	Au
OQUEIL 16	35944	Gda	9	1	Au
OQUEIL 17	35945	Gda	10	1	Au
OQUEIL 18	35946	Gda	10	1	Au
OQUEIL 19	35947	Gda	2.5	1	Au
OQUEIL 2	35930	Gda	5	1	Au
OQUEIL 20	35948	Gda	10	1	Au
OQUEIL 21	35949	Gda	10	1	Au
OQUEIL 22	35950	Gda	8	1	Au
OQUEIL 23	35951	Gda	3	1	Au
OQUEIL 24	35952	Gda	8	1	Au
OQUEIL 25	35953	Gda	10	1	Au
OQUEIL 26	35954	Gda	7	1	Au
OQUEIL 27	35955	Gda	4	1	Au
OQUEIL 28	35956	Gda	10	1	Au
OQUEIL 29	35957	Gda	8	1	Au
OQUEIL 3	35931	Gda	3	1	Au
OQUEIL 30	35958	Gda	7	1	Au
OQUEIL 31	35959	Gda	10	1	Au
OQUEIL 32	35960	Gda	7	1	Au
OQUEIL 33	35961	Gda	6	1	Au
OQUEIL 34	35962	Gda	8	1	Au
OQUEIL 35	35963	Gda	4	1	Au
OQUEIL 4	35932	Gda	9	1	Au
OQUEIL 5	35933	Gda	10	1	Au
OQUEIL 6	35934	Gda	10	1	Au
OQUEIL 7	35935	Gda	10	1	Au
OQUEIL 8	35936	Gda	10	1	Au
OQUEIL 9	35937	Gda	10	1	Au
Sabiwa 10	10894BM	Gda	136	1	As
Sabiwa 11	10895BM	Gda	99	1	As
Sabiwa 12	10896BM	Gda	115	1	As
Sabiwa 13	10922BM	Gda	68	1	As
Sabiwa 14	10923BM	Gda	93	1	As
Sabiwa 2	GA513	Gda	5	1	Au
Sabiwa 3	9628BM	Gda	15	1	Cu
Sabiwa 4	10049BM	Gda	20	1	Cu
Sabiwa D B	GA281	Gda	10	1	Au
Sabiwa East	10050BM	Gda	20	1	Cu

Name	Reg No.	Area	No. of Claims	No. of Blocks	Type
Sabiwa North 1/2	25610	Gda	7	1	Au
Sabiwa South 1/2	1978	Gda	6	1	Au
Sheet	35628	Gda	10	1	Au
Sheet	34747	Gda	9.2	1	Au
Sheet 1	35629	Gda	10	1	Au
Sheet 10	35638	Gda	10	1	Au
Sheet 11	35639	Gda	5	1	Au
Sheet 2	35630	Gda	10	1	Au
Sheet 2	GA341	Gda	9	1	Au
Sheet 3	35631	Gda	10	1	Au
Sheet 3	9629BM	Gda	14	1	Cu
Sheet 4	35632	Gda	10	1	Au
Sheet 5	35633	Gda	10	1	Au
Sheet 6	35634	Gda	10	1	Au
Sheet 7	35635	Gda	10	1	Au
Sheet 8	35636	Gda	10	1	Au
Sheet 9	35637	Gda	10	1	Au
Sheet A	34744	Gda	7.5	1	Au
Sheet B	34751	Gda	1	1	Au
Sheet North A	34748	Gda	9.2	1	Au
Sheet North B	34749	Gda	9.2	1	Au
Sheet North C	34750	Gda	2.99	1	Au
Sheet North D	34856	Gda	2.45	1	Au
Valentine 37	GA2767B	Gda	7.6	1	Au
Valentine 38	GA2768	Gda	8	1	Au
Valentine 39	GA2769	Gda	10	1	Au
Valentine 40	GA2770	Gda	10	1	Au
Valentine 41	GA2771	Gda	10	1	Au
Valentine 42	GA2772	Gda	7	1	Au
Valentine 43	GA2773	Gda	4	1	Au
Valentine 44	GA2774	Gda	10	1	Au
Valentine 45	GA2775	Gda	10	1	Au
Valentine 46	GA2776	Gda	10	1	Au
Valentine 47	GA2777	Gda	10	1	Au
Valentine 48	GA2778	Gda	10	1	Au
Valentine 49	GA2779	Gda	10	1	Au
Valentine 50	GA2780	Gda	10	1	Au
Valentine 51	GA2781	Gda	10	1	Au
Valentine 52	GA2782	Gda	10	1	Au
Valentine 53	GA2783	Gda	10	1	Au
Valentine 54	GA2784	Gda	10	1	Au
Valentine 55	GA2785	Gda	10	1	Au
Valentine 56	GA2786	Gda	10	1	Au
Valentine 57	GA2787	Gda	10	1	Au
Valentine 58	GA2788	Gda	10	1	Au
Valentine 59	GA2789	Gda	10	1	Au
Valentine 60	GA2790	Gda	10	1	Au
Valentine 61	GA2791	Gda	10	1	Au
Valentine 62	GA2792	Gda	4	1	Au
Valentine 63	GA2994	Gda	10	1	Au
Valentine 64	GA2995	Gda	10	1	Au
Valentine 65	GA2996	Gda	10	1	Au
Smiler Gold Dump	32939	Gda	10	1	Au
Site Cemetery	577	Gda	2	1	Site
Site Compound	701	Gda	10	1	Site
Site Compound	575	Gda	17	1	Site
Site Compound	574	Gda	7	1	Site
Site Dump	646	Gda	18	1	Site
Site Housing	573	Gda	23	1	Site
Site Housing	645	Gda	8	1	Site
Site Magazine	578	Gda	29	1	Site
Site Slimes	613	Gda	28	1	Site
<b>Total</b>			<b>2,883.57</b>	<b>256</b>	

**Appendix 3: Blanket Non-Operating Claims**

<b>Name</b>	<b>Reg No.</b>	<b>Area</b>	<b>No. of Claims</b>	<b>No. of Blocks</b>	<b>Type</b>
Abercorn 11	11269BM	Gda	66	1	Arsenic
Abercorn	33251	Gda	10	1	Gold Dump
Great Abercorn	10602BM	Gda	150	1	Tungsten
Annette 10	GA3259	Gda	8	1	Gold Reef
Annette 11	GA3260	Gda	8	1	Gold Reef
Annette 9	GA3258	Gda	8	1	Gold Reef
Banshee J	11093BM	Gda	135	1	Arsenic
Bunny's Luck	10443BM	Gda	25	1	Copper
Bunny's Luck E1	10445BM	Gda	25	1	Copper
Bunny's Luck E2	10446BM	Gda	25	1	Copper
Bunny's Luck E3	10447BM	Gda	25	1	Copper
Bunny's Luck E4	10448BM	Gda	25	1	Copper
Bunny's Luck East	10444BM	Gda	25	1	Copper
Cinderella	11122BM	Gda	4	1	Arsenic
Cinderella B	10824BM	Gda	128	1	Arsenic
Cinderella C	10825BM	Gda	137	1	Arsenic
Cinderella D	10826BM	Gda	146	1	Arsenic
Cinderella E	11123BM	Gda	13	1	Arsenic
Dan's Luck East	GA537BM	Gda	88	1	Arsenic
Dan's Luck N2	GA3769B	Gda	8	1	Gold Reef
Dan's Luck North	11268BM	Gda	27	1	Arsenic
Dan's Luck South	GA538BM	Gda	20	1	Arsenic
Gum 1	GA3060	Gda	6	1	Gold reef
Gum 2	GA3061	Gda	6	1	Gold reef
Lincoln	30548	Gda	10	1	Gold Reef
Rubicon	34519	Gda	10	1	Gold Reef
Rubicon 7	34520	Gda	10	1	Gold Reef
Rubicon C	34795	Gda	10	1	Gold Reef
Rubicon D	34796	Gda	10	1	Gold Reef
Rubicon E	34797	Gda	10	1	Gold Reef
Rubicon F	34798	Gda	10	1	Gold Reef
Rubicon G	34799	Gda	10	1	Gold Reef
Rubicon H	34800	Gda	10	1	Gold Reef
Rubicon I	34801	Gda	10	1	Gold Reef
Rubicon J	34802	Gda	10	1	Gold Reef
Rubicon K	34803	Gda	10	1	Gold Reef
Rubicon L	34804	Gda	10	1	Gold Reef
Rubicon M	34805	Gda	10	1	Gold Reef
Rubicon N	34806	Gda	10	1	Gold Reef
Rubicon O	34913	Gda	10	1	Gold Reef
Rubicon P	34914	Gda	9	1	Gold Reef
Rubicon Q	34915	Gda	8	1	Gold Reef
Rubicon R	34916	Gda	10	1	Gold Reef
Rubicon S	34917	Gda	10	1	Gold Reef
Rubicon T	34918	Gda	7	1	Gold Reef
Rubicon U	34919	Gda	10	1	Gold Reef
Rubicon V	34920	Gda	10	1	Gold Reef
Rubicon W	34921	Gda	6	1	Gold Reef
Shakeshake	10625BM	Gda	108	1	Nickel
Shakeshake 2	10626BM	Gda	108	1	Nickel
Shakeshake 3	10627BM	Gda	72	1	Nickel
Spruit	10623BM	Gda	81	1	Nickel
Spruit 2	10624BM	Gda	81	1	Nickel
Spruit 4	GA532BM	Gda	50	1	Nickel
Spruit 5	GA533BM	Gda	110	1	Nickel
Spruit 6	GA534BM	Gda	66	1	Nickel
Surprise	10628BM	Gda	95	1	Nickel
Surprise 2	10629BM	Gda	101	1	Nickel
Mazeppa	32769	Gda	3	1	Gold Dump
Dan's Luck	32776	Gda	10	1	Gold Dump
Will South	33143	Gda	5	1	Gold Dump
<b>Total</b>			<b>2,238.00</b>	<b>61</b>	

*Appendix 4: Blanket Exploration Claims*

Name	Reg No.	Area	No. of Claims	No. of Blocks	Type
GG	GA651	Gda	10	1	Gold Reef
GG 10	GA3772	Gda	4.9	1	Gold Reef
GG 11	GA3773	Gda	10	1	Gold Reef
GG 12	GA3774	Gda	8	1	Gold Reef
GG 13	GA3775	Gda	4	1	Gold Reef
GG 7	GA3769	Gda	10	1	Gold Reef
GG 8	GA3770	Gda	7	1	Gold Reef
GG 9	GA3771	Gda	9	1	Gold Reef
GG2	GA942	Gda	10	1	Gold Reef
GG3	GA943	Gda	10	1	Gold Reef
GG4	GA944	Gda	10	1	Gold Reef
GG5	GA945	Gda	10	1	Gold Reef
GG6	GA946	Gda	10	1	Gold Reef
GGA	GA947	Gda	10	1	Gold Reef
GGB	GA948	Gda	10	1	Gold Reef
GGC	GA949	Gda	10	1	Gold Reef
GGD	GA950	Gda	10	1	Gold Reef
GGE	GA951	Gda	10	1	Gold Reef
Mascot	GA 583	Gda	10	1	Gold Reef
Mascot 2	29657	Gda	10	1	Gold Reef
Mascot 5	32756	Gda	10	1	Gold Reef
Penzance North	11264BM	Gda	40	1	Arsenic
Penzance S2	11265BM	Gda	35	1	Arsenic
Penzance South	8838BM	Gda	24	1	Copper
Eagle 16	11266BM	Gda	51	1	Arsenic
Eagle Hawk	30544	Gda	10	1	Gold reef
Vulture	5031	Gda	10	1	Gold Reef
Vulture Dble Bank	8106	Gda	10	1	Gold Reef
Site	649	Gda	4	1	W/shop, water
Site	512	Gda	1	1	Water
Site	607	Gda	1	1	Water
Site	608	Gda	1	1	Water
Site	609	Gda	1	1	Water
Site	610	Gda	1	1	Water
<b>Total</b>			<b>381.90</b>	<b>34</b>	