27 July 2022

ASX ANNOUNCEMENT
(ASX: TGM)

THETA'S TGME PROJECT DEFINITIVE FS CONFIRMS NPV$_{(10\%)}$ OF A$432 MILLION AT US$1,642/OZ GOLD PRICE

The Feasibility Study ('FS') presents a clear pathway to production via the re-development of TGME's gold assets within South Africa's renowned gold mining regions, with a forecast total Life of Mine (LOM) production of 1.24 Moz's of contained gold. Early site development works, finalisation of permitting and approvals are in progress.

FS KEY BASE CASE RESULTS:

- **Transvaal Gold Mining Estate (TGME) Underground Gold Mine Project, which initially includes 4 mines (Phase 1) - Beta, Frankfort, Clewer-Dukes Hill-Morgenzon (CDM) and Rietfontein - located near the towns of Pilgrim's Rest and Sabie in Mpumalanga Province, 370km northeast of Johannesburg;**
- **The TGME Gold Project contains more than 43 historical mines with a longer-term plan to bring these large shallow goldfields back to production with minimum capital expenditure. Additionally, there is 3.6 Moz of Inferred Mineral Resources available for future development – not included[1] in the Base Case LOM plan;**
- **Execution ready with Front-End Engineering Design (FEED) of the TGME gold plant complete. Plant designs support long-term growth initiatives;**
- **Phase 1 of the Initial 12.9 year LOM plan at the processing rate of 540 ktpa with key physical parameters including;**
    - **Gold ore production build up over the first 41 months is 45 ktpm from the initial four mines;**
    - **Free-milling stand-alone processing plant, with doré produced on site to produce 80 – 100Koz p.a. @ 5.18 g/t recovered gold – at 87.1% gold recovery rate;**
    - **First gold production is scheduled for Q2, 2024[2];**
    - **Gold plant expected to produce over 100koz/pa by the third year of production;**
    - **Recommission of existing on-site Tailings Storage Facility (TSF);**
    - **LOM plan outlines a recovery of 1.08 Moz gold from 1.24 Moz mined;**

[1] These resources were not considered for this FS due to different environmental approval application process required/planned.
[2] First gold produced timing will be subject to securing funding and obtaining all necessary regulatory permitting approvals.

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- **LOM plan includes 558koz Proven/Probable Reserve covering over 7 years of mining and 662Koz of Inferred Mineral Resource;**
- **The focus of the mining strategy remains on extracting all the mineable Mineral Resources, including 53% of Inferred Mineral Resources; and**
- **Over 3 Moz of Inferred Mineral Resources available for future development are not included in the Base Case LOM plan.**

- **Under average gold prices of US$1,642 / oz (A$2,189[3] / oz), the FS demonstrates strong financial returns[4] (based on LOM plan), including:**
  - **Undiscounted free cash flows of US$508m (A$678m), pre-tax US$717m (A$956m);**
  - **NPV (at a 10% discount rate) of US$219m (A$292m), pre-tax US$324m (A$432m);**
  - **Capital payback period of 31 months;**
  - **Pre-tax IRR of 65%;**
  - **Combined Underground Projects have an AISC of US$834/oz (A$1,112/oz); and**
  - **Peak Capital requirement is US$77m (A$103m)[5], total capital US$174m (A$232m)[6].**
- **Potential upside beyond the FS includes:**
  - **Phase 2 - Increase production to include 7 mines, with an expanded processing plant to 80 ktpm producing up to 160 koz p.a. within five years;**
  - **Enlarging mineral resources via exploration targets, alongside the incorporation of additional mines from 40 neighbouring historical mines – located within a short distance to the planned plant;**
  - **Adoption of ESG fundamentals during the planning, design and development stages of the project, which aims to deliver a reduction in energy consumption, diversify the talent pool, and attract suppliers / contractors who utilise sustainable products;**
  - **Tendering of mine services contracts in South Africa to achieve the most competitively priced outcome; and**
  - **All current reserves and LOM material are hosted in shallow orebodies.**
- **Two scheduling strategies have been investigated, namely:**
  - **Base Case: LOM Plan targeting the total Mineral Resources (Measured, Indicated and Inferred); and**
  - **Ore Reserve Plan: LOM Plan targets only Measured and Indicated Mineral Resources.**

Both schedules are presented in Table 1 to 3, Appendix A, and both demonstrate strong project economics.

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[3] USD to AUD converted at an exchange rate of 1.333.
[4] Financial returns applying the 'Base Case' scenario statistics.
[5] TGM is currently in discussion with debt financiers and has engaged an experienced debt advisor to assist in the negotiation of term-sheets for funding of the Project. Further equity raises are also planned to fund working capital and part of the project capital if required, which may lead to dilution to existing shareholders.
[6] Th FS demonstrates that post to Peak Funding, the balance of Total Capital requirement will be self-funded from project cashflow. The board may however, consider external funding solutions such as via equity, debt, gold pre-sales, gold-streaming or a mixture of these methods.

Figure 1 Panoramic view of TGME Processing Plant, Workshops and Tailings Dam

Table 1: Key Project Metrics

Description	Units	Base Case	Reserve Plan
Project Start Date	Qtr/Year	Q1 2023	Q1 2023
Commercial Production Start Date	Qtr/Year	Q2 2024	Q2 2024
Production build up period	Months	14	14
Life of mine	years	12.9	7.3
Underground ore mined (LOM)	Mt	6.46	2.85
Mined Grade	g/t	5.95	6.09
Gold Mined (LOM)	Moz	1.24	0.56
Production Rate	Kt/a	540	540
Production Rate	Kt/m	45	45
Grind size	µ	106	106
Gold recovered (average LOM)	%	87	87
Gold recovered (LOM)	Moz	1.08	0.49

Table 2: Project Economics at Various Gold Prices – Base Case (AUD)

Project Economics at gold price	Unit	Forecast (USD1,642/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	AUDm	432	339	405	536	669	802
NPV @ 10% (real) Post-tax	AUDm	292	232	274	359	447	533
IRR (%) Pre-tax	%	65%	57%	64%	77%	90%	102%
IRR (%) Post-tax	%	57%	50%	56%	67%	78%	87%
AISC	AUD/oz	1,112	1,096	1,107	1,129	1,149	1,167
EBITDA annual average	AUDm	92	77	87	107	128	148
EBIT annual average	AUDm	80	66	76	96	116	136
Free Cash Flow (Pre-tax)	AUDm	956	768	897	1,158	1,421	1,686
Free Cash Flow (Post-tax)	AUDm	678	550	638	814	996	1,175
Development Capital – Peak Funding	AUDm	102	102	102	102	102	102
Capital Sustaining	AUDm	49	49	49	49	49	49
Payback post-tax	Months	31	33	31	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	422%	332%	395%	524%	653%	783%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	285%	226%	268%	351%	437%	521%

NOTES: 1. Converted to AUD from USD using AUD:USD exchange rate of 1.333.
2. Due to rounding, numbers presented throughout this document may not add up precisely to the totals, provided and percentages may not precisely reflect the absolute figures.

Table 3: Project Economics at Various Gold Prices – Reserve Plan (AUD)

Project Economics at gold price	Unit	Forecast (USD1,635/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	AUDm	192	140	178	255	333	411
NPV @ 10% (real) Post-tax	AUDm	130	95	121	173	226	276
IRR (%) Pre-tax	%	58%	48%	57%	72%	85%	98%
IRR (%) Post-tax	%	50%	41%	48%	61%	74%	84%
AISC	AUD/oz	1,127	1,113	1,124	1,145	1,165	1,184
EBITDA annual average	AUDm	76	65	73	90	107	124
EBIT annual average	AUDm	59	48	56	73	90	107
Free Cash Flow (Pre-tax)	AUDm	330	248	307	425	543	662
Free Cash Flow (Post-tax)	AUDm	239	181	223	305	389	470
Development Capital – Peak Funding	AUDm	104	104	104	104	104	104
Capital Sustaining	AUDm	24	24	24	24	24	24
Payback post-tax	Months	31	34	32	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	185%	134%	171%	246%	320%	395%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	125%	92%	117%	166%	217%	266%

NOTE: *1.* Converted to AUD from USD using AUD:USD exchange rate of 1.333.

Theta Gold Mines Limited ("Theta Gold" or "Company") (ASX: TGM| OTC: TGMGF) is pleased to deliver a FS for the TGME Underground Gold Mine Project, delivering a 6.46 Mt resource @ 5.95 g/t Au for 1.24M oz of contained gold.

Theta Gold Chairman, Mr. Bill Guy stated: "*The completion of the definitive FS marks a significant milestone achievement for Theta Gold shareholders, and brings with it the rebirth of one of South Africa's historical mine projects offering significant opportunities for our employees and their families as well as the local communities within the region.*

The definitive FS has confirmed the mining method, technical aspects, and the economic viability of the 540 ktpa mining and processing operation. The stand-alone CIL plant is to be constructed in modules using technology that enhances the design efficiency and construction of the metallurgical plant, with the optionality to expand production capacity in the future as additional mines are brought into production.

The definitive FS uses a base gold price of US$1,642 / oz (A$2,189 / oz) with an AISC of US$834 /oz (A$1,112/oz), thus displaying the financial robustness of the project which delivers a capital payback of US$99m, (A$132m) in 31 months.

Once up to 7 mines are brought into production, including Vaalhoek, Desire and Glynn's Mines, an annual production of 160 koz/pa will make Theta one of South Africa's most significant, mid-tier listed gold doré producing companies."

[ENDS]

This announcement was approved for release by Theta Gold Mines Limited's Board and ceases the Trading Halt of the Company's securities on the ASX.

For more information, please visit www.thetagoldmines.com or contact:
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ABOUT THETA GOLD MINES LIMITED

Theta Gold Mines Limited (ASX: TGM | OTCQB: TGMGF) is a gold development company that holds a range of prospective gold assets in a world-renowned South African gold mining region. These assets include several surface and near-surface high-grade gold projects which provide cost advantages relative to other gold producers in the region.

Theta Gold's core project is located next to the historical gold mining town of Pilgrim's Rest, in Mpumalanga Province, some 370km northeast of Johannesburg by road or 95km north of Nelspruit (Capital City of Mpumalanga Province). Following small scale production from 2011 – 2015, the Company is currently focussing on the construction of a new gold processing plant within its approved footprint at the TGME plant, and for the processing of the Theta oxide gold ore. Nearby surface and underground mines and prospects are expected to be further evaluated in the future.

The Company aims to build a solid production platform to over 160kozpa based primarily around shallow, open-pit or adit-entry shallow underground hard rock mining sources. Theta Gold has access to over 43 historical mines and prospect areas that can be accessed and explored, with over 6.7Moz of historical production recorded.

Theta Gold holds 100% issued capital of its South African subsidiary, Theta Gold SA (Pty) Ltd ("TGSA"). TGSA holds a 74% shareholding in both Transvaal Gold Mining Estates Limited ("TGME") and Sabie Mines (Pty) Ltd ("Sabie Mines"). The balance of shareholding is held by Black Economic Empowerment ("BEE") entities. The South African Mining Charter requires a minimum of 26% meaningful economic participation by the historically disadvantaged South Africans ("HDSAs"). The BEE shareholding in TGME and Sabie Mines is comprised of a combination of local community trusts, an employee trust and a strategic entrepreneurial partner.

COMPETENT PERSON'S STATEMENTS

MINERAL RESOURCES

Mr. Uwe Engelmann confirms that he is the Competent Person for the TGM Mineral Resources as reported on TGM's Mineral Resources which is extracted from TGM's ASX announcement dated 8 April 2021 (Initial Maiden Underground Mining Reserve) and 25 October 2021 (TGME Project Permitting Update) available to view at www.asx.com.au and was prepared in accordance with the guidelines of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012). Mr. Engelmann has read and understood the requirements of the JORC Code (2012).

Mr. Engelmann is a Competent Person as defined by the JORC Code, 2012, having more than five years' experience that is relevant to the style of mineralisation and type of deposit described in this report and to the activity for which he is accepting responsibility. Mr. Engelmann (BSc (Zoo. & Bot.), BSc Hons (Geol.), Pr.Sci.Nat. No. 400058/08, MGSSA), is a director of Minxcon (Pty) Ltd and a member of the South African

Council for Natural Scientific Professions. Mr. Engelmann is a full-time employee of Minxcon (Pty) Ltd and has reviewed this report and consents to the inclusion of the matters based on his supporting information in the form and context in which it appears.

The information in this announcement that relates to TGM's Mineral Resources is extracted from TGM's ASX announcement dated 8 April 2021 (Initial Maiden Underground Mining Reserve) and 25 October 2021 (TGME Project Permitting Update) available to view at www.asx.com.au, and was prepared in accordance with the guidelines of the JORC Code (2012). TGM confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resources estimates in the relevant market announcement continue to apply and have not materially changed. TGM confirms that the form and content in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

ORE RESERVES

The information in this report relating to Ore Reserves is based on, and fairly reflects, the information and supporting documentation compiled by Mr. Daniel van Heerden (B.Eng (Mining M.Com (Business Management), member of Engineering Council of South Africa (Pr.Eng. Reg. No. 20050318)), a director of Minxcon Pty Ltd and a fellow of the South African Institute of Mining and Metallurgy (FSAIMM Reg. No. 37309).

Mr van Heerden has sufficient experience that is relevant to the style of mineralisation under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code (2012). Mr van Heerden consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to TGM's Ore Reserves is extracted from TGM's ASX announcement dated 8 April 2021 (Initial Maiden Underground Mining Reserve) and 25 October 2021 (TGME Project Permitting Update) available to view at www.asx.com.au, and was prepared in accordance with the guidelines of the JORC Code (2012). TGM confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Ore Reserve estimates in the relevant market announcement continue to apply and have not materially changed. TGM confirms that the form and content in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

DISCLAIMERS

This announcement has been prepared by and issued by Theta Gold Mines Limited to assist in informing interested parties about the Company and should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this announcement.

This announcement may contain forward looking statements. Whilst Theta Gold has no reason to believe that any such statements and projections are either false, misleading or incorrect, it does not warrant or guarantee such statements. Nothing contained in this announcement constitutes investment, legal, tax or other advice. This overview of Theta Gold does not purport to be all inclusive or to contain all information which its recipients may require in order to make an informed assessment of the Company's prospects. Before making an investment decision, you should consult your professional adviser, and perform your own analysis prior to making any investment decision. To the maximum extent permitted by law, the Company makes no representation and gives no assurance, guarantee or warranty, express or implied, as to, and take no responsibility and assume no liability for, the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omissions, from any information, statement or opinion contained in this announcement. This announcement contains information, ideas and analysis which are proprietary to Theta Gold.

FORWARD-LOOKING AND CAUSIONARY STATEMENTS

This announcement may refer to the intention of Theta Gold Mines regarding estimates or future events which could be considered forward looking statements. Forward looking statements are typically preceded by words such as "Forecast", "Planned", "Expected", "Intends", "Potential", "Conceptual", "Believes", "Anticipates", "Predicted", "Estimated" or similar expressions. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, and may be influenced by such factors including but not limited to funding availability, market-related forces (commodity prices, exchange rates, stock market indices and the like) and political, environmental or economic events (including government or community issues, land owners, global or systemic events). Forward looking statements are provided as a general reflection of the intention of the Company as at the date of release of the document, however are subject to change without notice, and at any time. Future events are subject to risks and uncertainties, and as such results, performance and achievements may in fact differ from those referred to in this announcement. Mining, by its nature, and related activities including mineral exploration, are subject to a large number of variables and risks, many of which cannot be adequately addressed, or be expected to be assessed, in this document. Work contained within or referenced in this report may contain incorrect statements, errors, miscalculations, omissions and other mistakes. For this reason, any conclusions, inferences, judgments, opinions, recommendations or other interpretations either contained in this announcement, or referencing this announcement, cannot be relied upon. There can be no assurance that future results or events will be consistent with any such opinions, forecasts or estimates. The Company believes it has a reasonable basis for making the forward looking statements contained in this document, with respect to any production targets, resource statements or financial estimates, however further work to define Mineral Resources or Reserves, technical studies including feasibilities, and related investigations are required prior to commencement of mining. No liability is accepted for any loss, cost or damage suffered or incurred by the reliance on the sufficiency or completeness of the information, opinions or beliefs contained in this announcement.

Theta Gold undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly, you should not place undue reliance on any forward-looking statement.

The Feasibility Study referred to in this announcement is based on technical and economic assessments to support the estimation of Ore Reserves. There is no assurance that the intended development referred to will proceed as described, and will rely on access to future funding to implement. Theta Gold Mines believes it has reasonable grounds the results of the Feasibility Study. At this stage there is no guarantee that funding will be available, and investors are to be aware of any potential dilution of existing issued capital. The production targets and forward looking statements referred to are based on information available to the Company at the time of release, and should not be solely relied upon by investors when making investment decisions. Theta Gold cautions that mining and exploration are high risk, and subject to change based on new information or interpretation, commodity prices or foreign exchange rates. Actual results may differ materially from the results or production targets contained in this release. Further evaluation is required prior to a decision to conduct mining being made. The estimated Mineral Resources quoted in this release have been prepared by Competent Persons as required under the JORC Code (2012). Material assumptions and other important information are contained in this release.

Cautionary Statement for the LOM Base Case – The Base Case is presented as potential upside to the Project. However, the Base Case is supported by a significant portion of Inferred Mineral Resources. Inferred Mineral Resources inherently have a lower level of confidence and although it would be reasonable to expect that the majority of Inferred Mineral Resources would upgrade to Indicated Mineral Resources with continued exploration, it should not be assumed that such upgrading will occur. The realisation of the full potential of the Base Case as presented thus cannot be guaranteed.

APPENDIX A – DETAIL SUMMARY OF TGME UNDERGROUND GOLD MINE FEASIBILITY STUDY

FS HIGHLIGHTS

Minxcon (Pty) Ltd completed a Feasibility Study for Theta Gold Mines Limited with the report finalised in July 2022 to restart the following historical underground projects situated in Mpumalanga Province, South Africa:

- Beta (including the Beta North, Beta Central and Beta South sections);
- Frankfort;
- Clewer-Dukes Hill-Morgenzon (or CDM); and
- Rietfontein.

Two scheduling strategies have been investigated, namely:

- Base Case: life of mine plan targeting the total Mineral Resources (Measured, Indicated and Inferred); and
- Ore Reserve Plan: LOM plan targeting only Measured and Indicated Mineral Resources.

Beta is scheduled as the first operation to commence production, followed by Rietfontein, and finally CDM and Frankfort simultaneously. Beta and Rietfontein are higher-grade mines compared to CDM and Frankfort.

The Base Case LOM plan will comprise a 12.9-year mining operation starting in 2023 and delivering production of 1.24 million ounces of contained gold. The estimated development capital or peak funding requirement is USD77 million (AUD102 million)[7], with the Project forecast to generate a pre-tax NPV10% of USD324 million (AUD432 million) and pre-tax Internal Rate of Return (IRR) of 65% at the forecast gold price of averaging USD1,642/oz over the LOM. Based on these metrics, the Project has a projected payback period of 31 months. First gold production is planned for Q2 2024.

FS KEY METRICS

Table 4: Key Project Parameters

Description	Units	Base Case	Reserve Plan
Project Start Date[1]	Qtr/Year	Q1 2023	Q1 2023
Commercial Production Date	Qtr/Year	Q2 2024	Q2 2024
Production build up period	Months	14	14
Life of mine	years	12.9	7.3
Underground ore mined (LOM)	Mt	6.46	2.85
Mined Grade	g/t	5.95	6.09
Gold Mined (LOM)	Moz	1.24	0.56
Production Rate	Kt/a	540	540
Production Rate	Kt/m	45	45
Grind size	µ	106	106
Gold recovered (average LOM)	%	87	87
Gold recovered (LOM)	Moz	1.08	0.49

Note: 1. Start date subject to project Finance and permitting approvals.

[7] TGM is currently in discussion with debt financiers and has engaged an experienced debt advisor to assist in the negotiation of term-sheets for funding of the Project. Further equity raises are also planned to fund working capital and part of the project capital if required, which may lead to dilution to existing shareholders.

Base Case

Table 5 and ***Table 6*** detail the Project economics of the Base Case at various price scenarios in USD terms and AUD terms, respectively.

Table 5: Project Economics at Various Gold Prices – Base Case (USD)

Project Economics at gold price	Unit	Forecast (USD1,642/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	USDm	324	255	304	402	501	601
NPV @ 10% (real) Post-tax	USDm	219	174	206	269	335	400
IRR (%) Pre-tax	%	65%	57%	64%	77%	90%	102%
IRR (%) Post-tax	%	57%	50%	56%	67%	78%	87%
AISC	USD/oz	834	822	831	847	862	876
EBITDA annual average	USDm	69	58	66	81	96	111
EBIT annual average	USDm	60	49	57	72	87	102
Free Cash Flow (Pre-tax)	USDm	717	576	673	869	1066	1264
Free Cash Flow (Post-tax)	USDm	508	412	478	611	747	881
Development Capital – Peak Funding	USDm	77	77	77	77	77	77
Capital Sustaining	USDm	37	37	37	37	37	37
Payback post-tax	Months	31	33	31	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	422%	332%	395%	524%	653%	783%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	285%	226%	268%	351%	437%	521%

Table 6: Project Economics at Various Gold Prices – Base Case (AUD)

Project Economics at gold price	Unit	Forecast (USD1,642/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	AUDm	432	339	405	536	669	802
NPV @ 10% (real) Post-tax	AUDm	292	232	274	359	447	533
IRR (%) Pre-tax	%	65%	57%	64%	77%	90%	102%
IRR (%) Post-tax	%	57%	50%	56%	67%	78%	87%
AISC	AUD/oz	1,112	1,096	1,107	1,129	1,149	1,167
EBITDA annual average	AUDm	92	77	87	107	128	148
EBIT annual average	AUDm	80	66	76	96	116	136
Free Cash Flow (Pre-tax)	AUDm	956	768	897	1,158	1,421	1,686
Free Cash Flow (Post-tax)	AUDm	678	550	638	814	996	1,175
Development Capital – Peak Funding	AUDm	102	102	102	102	102	102
Capital Sustaining	AUDm	49	49	49	49	49	49
Payback post-tax	Months	31	33	31	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	422%	332%	395%	524%	653%	783%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	285%	226%	268%	351%	437%	521%

NOTE:- *1.* Converted to AUD from USD using AUD:USD exchange rate of 1.333.

Figure 2: Annual Gold Production – Base Case

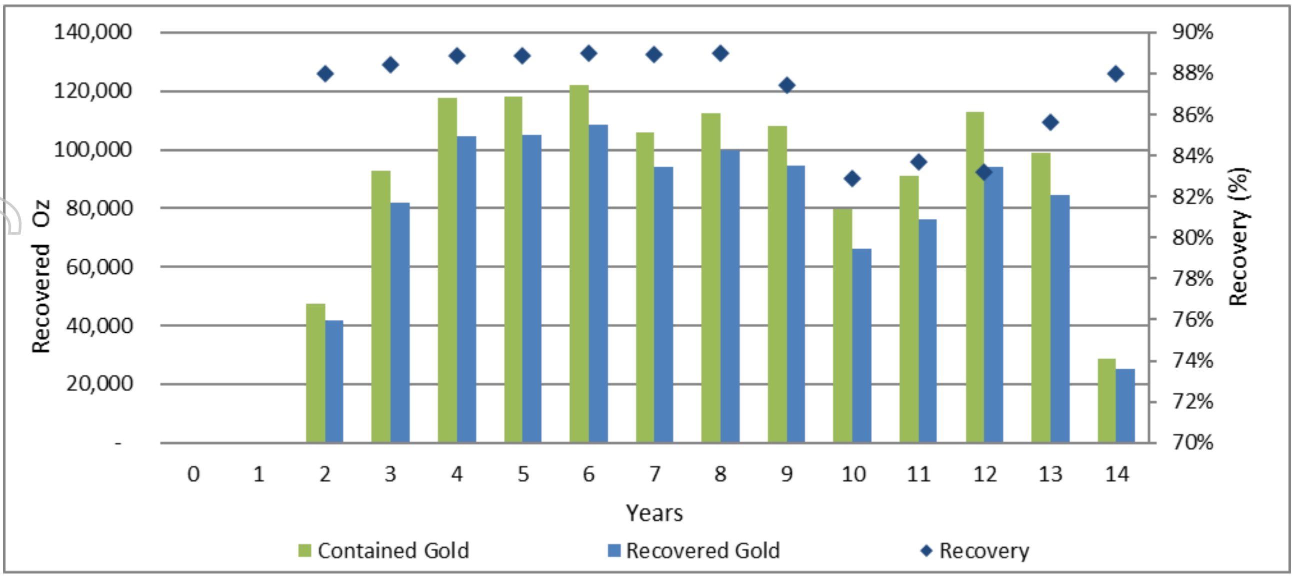
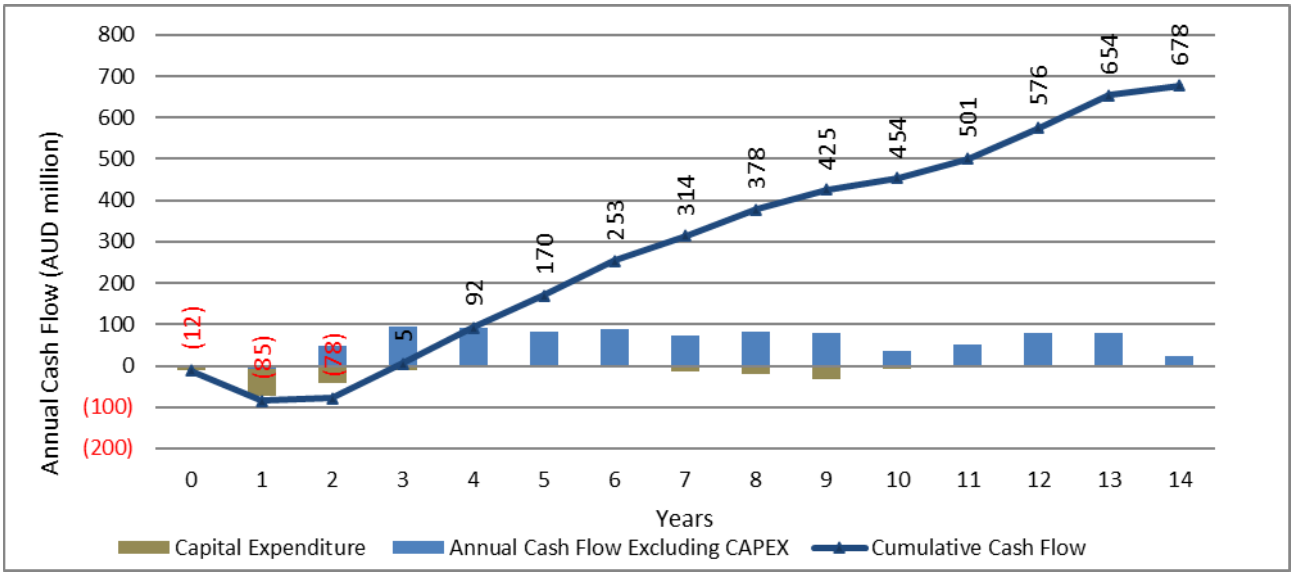


Figure 3: Annual and Cumulative Cash Flow (Post-Tax) – Base Case (AUD)



NOTES:

1. Forecast Prices averaging USD1,642/oz over LOM.
2. Converted to AUD from USD at exchange rate of 1.333 AUD:USD.

Reserve Plan

Table 7 and ***Table 8*** detail the Project economics of the Reserve Plan at various price scenarios in USD terms and AUD terms, respectively.

Table 7: Project Economics at Various Gold Prices – Reserve Plan (USD)

Project Economics at gold price	Unit	Forecast (USD1,635/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	USDm	144	105	134	191	250	308
NPV @ 10% (real) Post-tax	USDm	98	71	91	130	169	207
IRR (%) Pre-tax	%	58%	48%	57%	72%	85%	98%
IRR (%) Post-tax	%	50%	41%	48%	61%	74%	84%
AISC	USD/oz	846	835	843	859	874	888
EBITDA annual average	USDm	57	48	55	67	80	93
EBIT annual average	USDm	45	36	42	55	67	80
Free Cash Flow (Pre-tax)	USDm	247	186	230	318	407	497
Free Cash Flow (Post-tax)	USDm	179	136	167	229	292	353
Development Capital – Peak Funding	USDm	78	78	78	78	78	78
Capital Sustaining	USDm	18	18	18	18	18	18
Payback post-tax	Months	31	34	32	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	185%	134%	171%	246%	320%	395%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	125%	92%	117%	166%	217%	266%

Table 8: Project Economics at Various Gold Prices – Reserve Plan (AUD)

Project Economics at gold price	Unit	Forecast (USD1,635/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	AUDm	192	140	178	255	333	411
NPV @ 10% (real) Post-tax	AUDm	130	95	121	173	226	276
IRR (%) Pre-tax	%	58%	48%	57%	72%	85%	98%
IRR (%) Post-tax	%	50%	41%	48%	61%	74%	84%
AISC	AUD/oz	1,127	1,113	1,124	1,145	1,165	1,184
EBITDA annual average	AUDm	76	65	73	90	107	124
EBIT annual average	AUDm	59	48	56	73	90	107
Free Cash Flow (Pre-tax)	AUDm	330	248	307	425	543	662
Free Cash Flow (Post-tax)	AUDm	239	181	223	305	389	470
Development Capital – Peak Funding	AUDm	104	104	104	104	104	104
Capital Sustaining	AUDm	24	24	24	24	24	24
Payback post-tax	Months	31	34	32	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	185%	134%	171%	246%	320%	395%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	125%	92%	117%	166%	217%	266%

NOTE: *1.* Converted to AUD from USD using AUD:USD exchange rate of 1.333.

Figure 4: Annual Gold Production – Reserve Plan

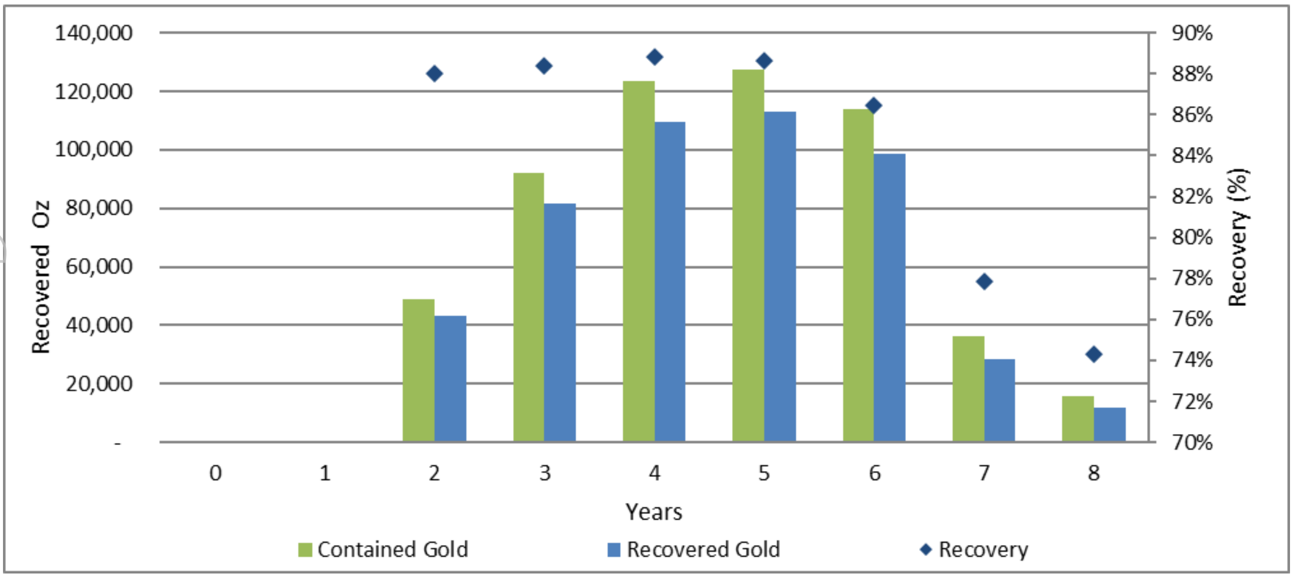
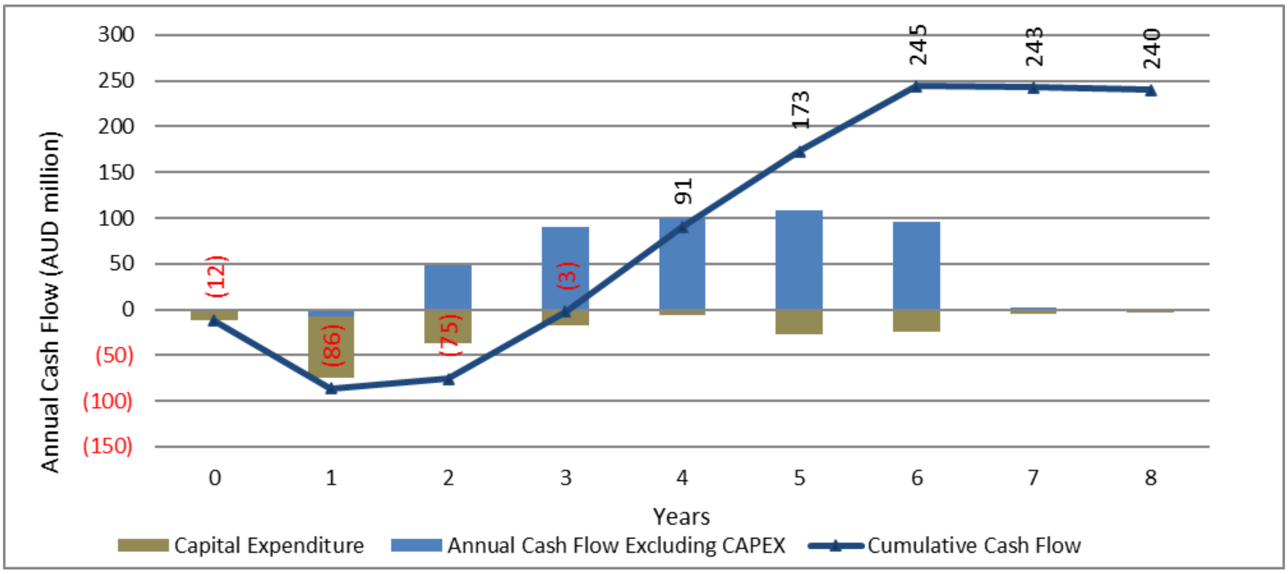


Figure 5: Annual and Cumulative Cash Flow (Post-Tax) – Reserve Plan (AUD)



NOTES:-

1. Forecast Prices averaging USD1,635/oz over LOM.
2. Converted to AUD from USD at exchange rate of 1.333.

PROJECT DESIGN

The TGM Underground Project aims to restart historical underground gold mines located in a historically prolific gold mining region in the Mpumalanga Province of South Africa. The Project Areas are centred on the town of Pilgrims Rest, some 370 km due northeast of Johannesburg, and ownership has always been vested in TGM or its partners.

The Project targets the Beta (including the Beta North, Beta Central and Beta South sections), Rietfontein, Frankfort and Clewer-Dukes Hill-Morgenzon ("CDM") Mines. A significant amount of gold resources remain underground which were not mined historically due to technological limitations, or limiting ore characteristics.

Beta is scheduled as the first operation to commence production, followed by Rietfontein, and finally CDM and Frankfort simultaneously. In comparison to CDM and Frankfort, Beta and Rietfontein are higher-grade mines.

A metallurgical plant, which acts as the central processing plant for all the historical operations, is situated in close proximity with a maximum distance to operations of ~40km. A new facility was be established on this footprint and will treat all the ore from the underground operations.

Two scheduling strategies have been investigated in the FS. The *Base Case* considers a life of mine ("LOM") plan targeting the total Mineral Resources (Measured, Indicated and Inferred). The *Ore Reserve Plan* considers a LOM plan targeting only Measured and Indicated Mineral Resources.

This FS demonstrates the ability to achieve optimised cash flows by scheduling production from the operations. The mine designs and associated costs per operational element feed into a combined operations financial model. The Ore Reserve Plan supports the declaration of compliant JORC Code 2012 Ore Reserves.

MINERAL RESOURCES

Based on stope grade and tonnes, the JORC Code (2012) Mineral Resources utilised for the FS totals 0.09 Mt of Measured (77%) material at 5.37 g/t Au, 4.54 Mt of Indicated material at 6.24 g/t Au, and 7.74 Mt Inferred material 5.56 g/t Au. This equates 15.7 koz Measured, 911.5 koz Indicated and 1,383.2 koz of contained gold (see *Table 9* below).

Table 9: TGM Underground Projects Mineral Resources as at 1 February 2021

Mineral Resource Classification	Mine	Reef	Reef Grade	Stope Grade	Reef Width	Stope width	Content	Reef Tonnes	Stope Tonnes	Au Content	
			g/t	g/t	cm	cm	cm.g/t	Mt	Mt	kg	koz
Measured	Frankfort	Bevetts	7.13	5.37	73	103	520	0.069	0.091	489	15.7
Total Measured			**7.13**	**5.37**	**73**	**103**	**520**	**0.069**	**0.091**	**489**	**15.7**
Indicated	Frankfort	Bevetts	7.86	5.13	58	96	452	0.243	0.373	1912	61.5
	CDM	Rho	13.19	3.80	23	90	307	0.258	0.895	3401	109.4
	Beta	Beta	21.66	6.58	23	90	499	0.716	2.357	15506	498.5
	Rietfontein	Rietfontein	14.57	8.20	52	92	755	0.517	0.919	7534	242.2
Total Indicated			**16.35**	**6.24**	**37**	**91**	**597**	**1.734**	**4.543**	**28,352**	**911.5**
Total Measured & Indicated			**16.00**	**6.22**	**38**	**91**	**606**	**1.803**	**4.634**	**28,841**	**927.3**
Mineral Resource Classification	**Mine**	**Reef**	**Reef Grade**	**Stope Grade**	**Reef Width**	**Stope width**	**Content**	**Reef Tonnes**	**Stope Tonnes**	**Au Content**	
			g/t	**g/t**	**cm**	**cm**	**cm.g/t**	**Mt**	**Mt**	**kg**	**koz**
Inferred	Frankfort	Bevetts	7.41	4.27	48	93	356	0.343	0.596	2543	81.8
	CDM	Rho	10.06	3.02	24	90	244	0.544	1.811	5472	175.9
	Beta	Beta	16.51	5.43	25	90	414	1.107	3.367	18285	587.9
	Rietfontein	Rietfontein	14.06	8.52	57	94	803	1.190	1.962	16721	537.6
Total Inferred			**13.51**	**5.56**	**39**	**91**	**532**	**3.184**	**7.736**	**43,022**	**1383.2**

Notes:-

1. Mineral Resource cut-off of 160 cm.g/t applied.
2. Fault losses of 5% for Measured and Indicated, 10% for Inferred Mineral Resources.
3. Gold price used for the cut-off calculations is USD1,500/oz.
4. cm.g/t and g/t figures will not back calculate due to variable densities in reef and waste rock.
5. Mineral Resources are stated as inclusive of Ore Reserves.
6. Mineral Resources are reported as total Mineral Resources and are not attributed.
7. Discrepancy in summation may occur due to rounding.

The Mineral Resources were independently estimated by Minxcon (Pty) Ltd as at 1 February 2021. No further ground work or Mineral Resource revisions have taken place since then, thus the estimate is still valid. The Mineral Resources for the underground in situ operations are declared a 160 cm.g/t cut-off (1.76 g/t) over a diluted stoping width of 90 cm. Mineral Resources where applicable have been depleted with the historical workings of the respective Project Areas.

The Projects represent either historical and/or mature operations. Drilling and channel chip sampling have been completed over Beta, Frankfort and CDM, with the majority of datasets being historical data.

All historical sample types were agglomerated, and data type biases were not investigated due to the small number of drillhole intersections. Only full reef composite data was available for the chip sample data while full reef composites were calculated for each drillhole intersection. Data aggregation methods utilised in generating the full reef composites of the sampling are not available for review due to the historical nature of the data. The reef widths are however generally narrow so the reef samples would probably have been one sample. The drillhole data is expressed as a single weighted composited point for the mother hole and deflections where applicable. In addition, drillholes with wedges, or multiple reef intersections, weighted mean reef widths and grades were calculated for each drillhole for use in the Mineral Resource estimation.

Where stretch values were used in the estimation these were composited to a 3 m composite based on a minimum stretch length. These values were treated separately and not included in the chip sample database. Areas utilising stretch values were immediately relegated to Inferred Mineral Resource classification.

The Mineral Resource estimation utilised block models consisting of varying block sizes. For the concordant reef types, a single cell in the Z direction was utilised. The reef thickness was estimated in order to generate a 3D model which was projected to the structural model. Depletions of historical stope workings and development (when on-reef) were applied. Where the reefs outcropped on surface and cut against topography, the model was sub-celled to this outcrop in order to accurately assess the reef volume occurring in these areas. A 90 cm stope width based on historical mining was applied to those estimated reef widths below 70 cm to create a mining or stoping grade, thus allowing for 20 cm dilution to the grade and tonnage.

The Inferred Mineral Resources have a low level of confidence and while it would be reasonable to expect that the majority of Inferred Mineral Resources would upgrade to Indicated Mineral Resources with continued exploration, due to the uncertainty of Inferred Mineral Resources, it should not be assumed that such upgrading will occur.

ORE RESERVES

The total Ore Reserve estimate for the combined LOM plan, only targeting Measured and Indicated Resources in the LOM schedule, is detailed in *Table 10*.

Table 10: Ore Reserve Estimate for TGM Mines (Ore Reserve Plan)

Ore Reserve Category	Tonnes	Grade	Au Content	
	kt	g/t	kg	koz
Beta				
Proved	-	-	-	-
Probable	1,634	6.86	11,206	360
Rietfontein				
Proved	-	-	-	-
Probable	509	7.76	3,954	127
Frankfort				
Proved	58	4.26	245	8
Probable	258	4.08	1,053	34
CDM				
Proved	-	-	-	-
Probable	395	2.30	908	29
Combined				
Proved	58	4.26	245	8
Probable	2,796	6.12	17,121	550
Total	**2,853**	**6.09**	**17,366**	**558**

Notes:

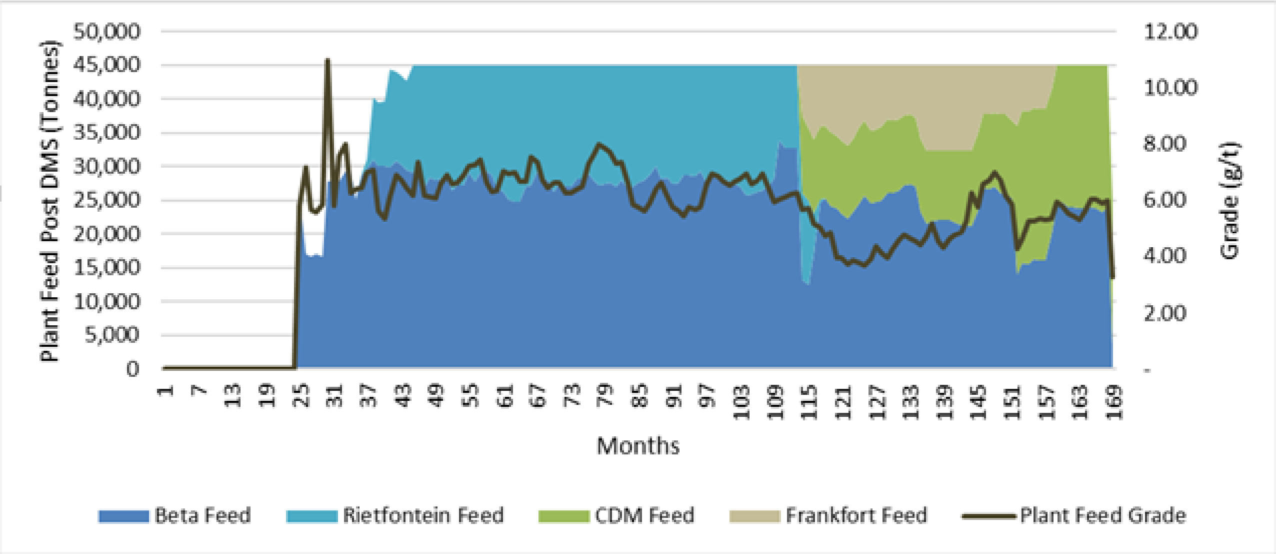
1. An Ore Reserve cut-off of 170 cm.g/t has been applied for the Beta Mine.
2. An Ore Reserve cut-off of 150 cm.g/t has been applied for the Frankfort Mine.
3. An Ore Reserve cut-off of 121 cm.g/t has been applied for the CDM Mine.
4. An Ore Reserve cut-off of 160 cm.g/t has been applied for the Rietfontein Mine.
5. A gold price of USD1,465/oz and exchange rate of ZAR/USD 16.00 was used for the cut-off calculation.
6. Discrepancy in summation may occur due to rounding.

LIFE OF MINE PLAN

Combined Plant Feed (Base Case)

The combined plant feed tonnes for the Base Case are illustrated in *Figure 6*. The feed is based on the LOM plan targeted Mineral Resources, inclusive of Inferred Mineral Resources. The total LOM for the plant feed is 11.33 years, shorter than the mining LOM plan due to stockpiling the initial on-reef development at Beta.

Figure 6: Combined Plant Feed Tonnes from Underground Operations –Base Case



The diluted Mineral Resources included in the combined LOM plan as a total of the Base Case, only targeting Mineral Resources for the LOM schedule, are detailed in *Table 11*.

Table 11: Diluted Mineral Resources included in the Life of Mine Plan (Base Case)

Mineral Resource Classification	Tonnes	Grade	Au Content	
	kt	g/t	kg	koz
Beta				
Measured	-	-	-	-
Indicated	1,688	6.81	11,498.82	369.70
Inferred	2,025	5.78	11,712.98	376.58
Rietfontein				
Measured	-	-	-	-
Indicated	507	7.79	3,949.94	126.99
Inferred	783	8.35	6,533.87	210.07
Frankfort				
Measured	57	4.30	244.92	7.87
Indicated	277	4.39	1,212.97	39.00
Inferred	325	4.22	1,374.31	44.19
CDM				
Measured	-	-	-	-
Indicated	403	2.32	934.44	30.06
Inferred	399	2.40	957.26	30.78
Combined				
Measured	57	4.30	244.92	7.87
Indicated	2,874	6.12	17,596.17	565.75
Inferred	3,531	5.83	20,578.41	661.61
Total	**6,462**	**5.95**	**38,419.50**	**1,235.23**

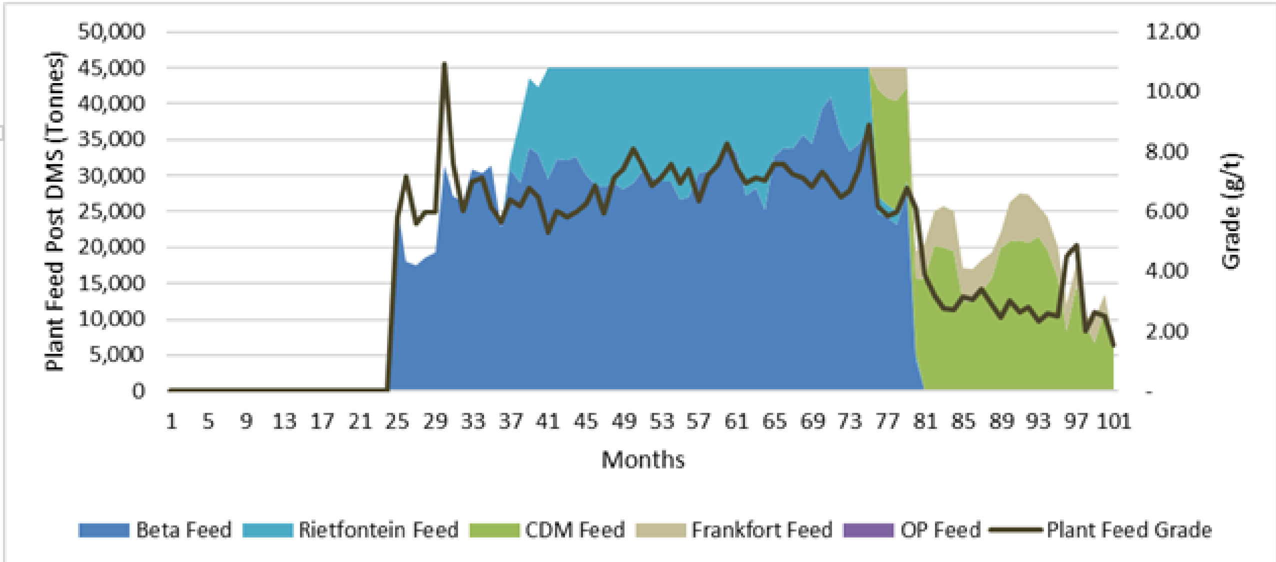
Notes:

1. A Mineral Resources inventory cut-off of 170 cm.g/t has been applied for the Beta Mine.
2. A Mineral Resources inventory cut-off of 150 cm.g/t has been applied for the Frankfort Mine.
3. A Mineral Resources inventory cut-off of 121 cm.g/t has been applied for the CDM Mine.
4. A Mineral Resources inventory cut-off of 160 cm.g/t has been applied for the Rietfontein Mine.
5. A gold price of USD1,465/oz and exchange rate of ZAR/USD 16.00 was used for the cut-off calculation.
6. Discrepancy due to summation may occur due to rounding.

Combined Plant Feed (Ore Reserve Plan)

The combined plant feed tonnes for the Ore Reserve Plan are illustrated in *Figure 7*. The feed is based on the LOM plan targeting only Ore Reserves for scheduling.

Figure 7: Combined Plant Feed Tonnes from Underground Operations – Ore Reserve Plan



The total Ore Reserve estimate for the combined LOM plan, only targeting Measured and Indicated Resources in the LOM schedule, is detailed in Table 12.

Table 12: Ore Reserve Estimate for TGM Mines (Ore Reserve Plan)

Ore Reserve Category	Tonnes	Grade	Au Content	
	kt	g/t	kg	koz
Beta				
Proved	-	-	-	-
Probable	1,634	6.86	11,206	360
Rietfontein				
Proved	-	-	-	-
Probable	509	7.76	3,954	127
Frankfort				
Proved	58	4.26	245	8
Probable	258	4.08	1,053	34
CDM				
Proved	-	-	-	-
Probable	395	2.30	908	29
Combined				
Proved	58	4.26	245	8
Probable	2,796	6.12	17,121	550
Total	**2,853**	**6.09**	**17,366**	**558**

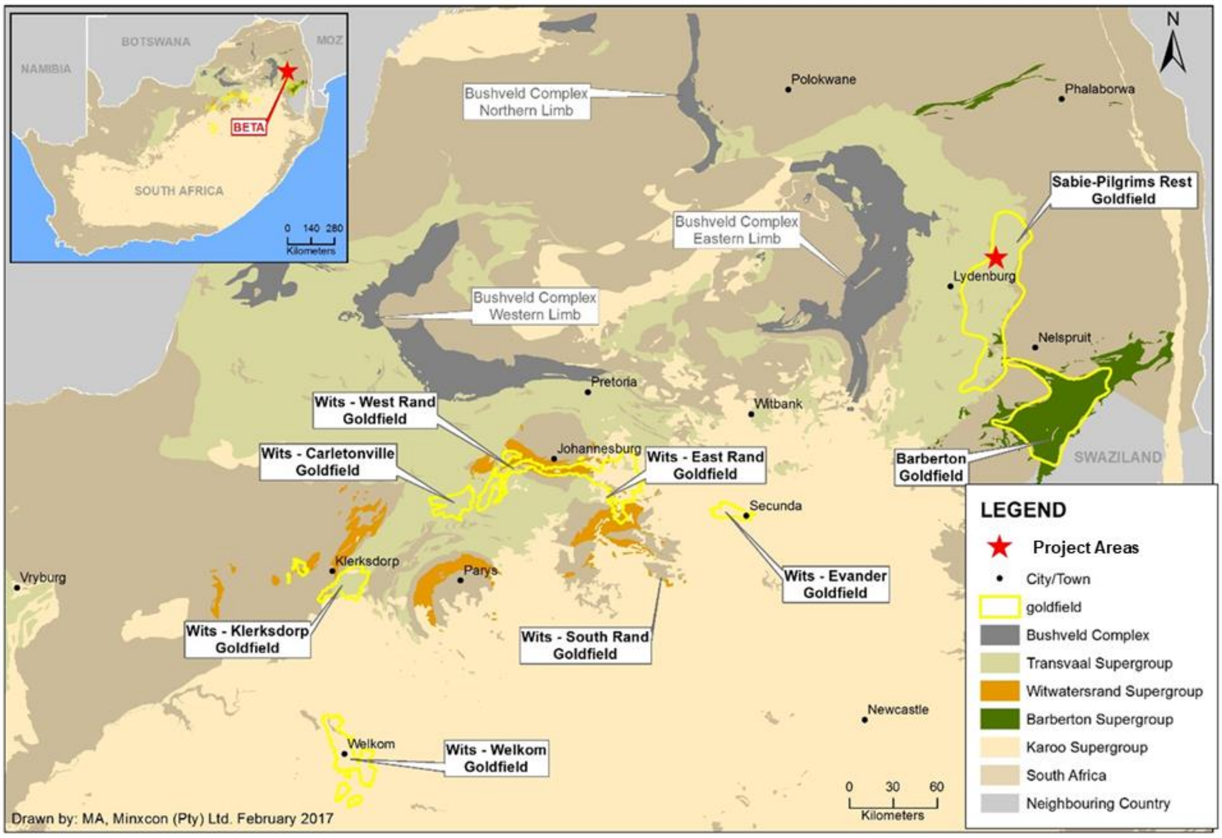
Notes:

1. An Ore Reserve cut-off of 170 cm.g/t has been applied for the Beta Mine.
2. An Ore Reserve cut-off of 150 cm.g/t has been applied for the Frankfort Mine.
3. An Ore Reserve cut-off of 121 cm.g/t has been applied for the CDM Mine.
4. An Ore Reserve cut-off of 160 cm.g/t has been applied for the Rietfontein Mine.
5. A gold price of USD1,465/oz and exchange rate of ZAR/USD 16.00 was used for the cut-off calculation.
6. Discrepancy due to summation may occur due to rounding.

GEOLOGY

The Project Areas are situated within the Sabie-Pilgrims Rest Goldfield, approximately 370 km northeast of Johannesburg (*Figure 8*). This metallogenic province extends for approximately 140 km in a north-north-easterly direction, over a maximum width of 30 km along the Great Escarpment of southern Africa. Gold mineralisation occurs within shear zones located within sedimentary host rocks of the Transvaal Supergroup.

Figure 8: Regional Geological Setting



The orebodies considered in the FS are described as thin, sheet-like near horizontal deposits. The reefs considered for extraction through the underground operations at Beta, Frankfort and CDM, namely the Beta Reef (Beta Mine), Bevetts Reef (Frankfort Mine) and Rho Reef (CDM) are all concordant reefs that dip shallowly westwards between 3°and 12°. At the Rietfontein Mine, the Rietfontein Reef occurs as a sub-vertical hydrothermal vein striking north-northeast and fills a narrow 1-3 m wide fracture in basement granite.

Beta

The Beta Reef occurs as a sub-horizontal or hydrothermal typical “flat reef” quartz-carbonate vein which strikes north-northeast, dips at about 3° to 7° to the west and pinches and swells down dip as well as along strike. The reef varies in width from waste-on-contact to nearly 3 m with a mean reef width of between 20 cm to 30 cm and is stratigraphically located within the dolomite of the Eccles Formation within the Malmani Subgroup of the Transvaal Supergroup. The gold-bearing material is mainly associated with pyrite with trace chalcopyrite with a minor presence of graphitic and carbonaceous material.

The Beta Reef vein has been prospected to depths of about 550 m below surface by historical as well as more recent drill holes. The only available information is that which is available in the form of annotations on plans and various MS Excel™ spreadsheets. The deepest underground development reaches a depth of 360 m below surface. Exploration activity indicates the presence of a pay shoot towards the east-southeast of the current westernmost workings.

The Beta Reef quartz vein follows the regional trend of bedding on a north-northeast to south-southwest strike orientation. It has been traced for nearly 2 km on strike and 2.5 km on dip and mined for at least 1.5 km down dip in the area of Beta Mine.

The Beta Mine is split into an eastern and western section by the 30 m thick north-northeast to south-southwest trending Beta Dyke which is thought to be diabasic in nature (of the late Vaalian age belonging principally to the Bushveld Complex) and intruded into the Transvaal Group. The dyke exhibits a scissor displacement on the Beta reef where in the north displacement is approximately 2 m down to the west. In the south this displacement increases to approximately 25 m to the west.

Minor dykes and faulting occur within the Mine trending along the regional north-northeast to south-southwest trending lineaments and generally have negligible displacements.

Frankfort

At the Frankfort Mine, the Bevetts Reef occurs as a concordant to sub-concordant reef. The Bevett's Reef is developed at the interface between the Bevetts quartzite and the overlying Pretoria shales. The reef consists of a quartz-carbonate vein, which can vary in thickness from a contact to in excess of 200 cm. Evidence of duplex thrusting is present, which may have served to eliminate the reef horizon in some areas and duplicate it into a thick package in other areas. Reef mineralogy is comprised of coarse euhedral sulphide crystals. These coarse sulphides are predominately pyrite, arsenopyrite and lesser tetrahedrite. Massive chalcopyrite is common. The mineralisation is commonly banded with barren milky quartz and lesser calcite between the sulphide bands.

Below the Bevetts Reef, a 100 cm thick quartzite unit is developed. Below this quartzite, the Bevetts Conglomerate, comprising rounded to sub–angular chert clasts, is sporadically developed. Below this, the thin dolomitic Rooihoogte Formation is present before passing into a 60 m thick lava unit, which contains amygdales at the top of the unit.

CDM

At CDM, the Rho Reef hosts gold mineralisation and has a general dip direction of 5° to 7° to the west and strikes in a north–south direction. The reef occurs approximately 24 m below the base of the Bevett's unconformity, which marks the end of the dolomite succession and the beginning of the Pretoria Group. The Rho Reef itself consists of an Upper Rho Reef and a Lower Rho Reef separated on average by 2 m of argillaceous dolomite. Below the Lower Rho Reef there is a sill developed approximately 5 m in the footwall ranging from 5 m to 18 m thick. A shale band varying from 5cm in the north to 60cm in the south is developed 3 m below the Lower Rho Reef. Above the Upper Rho Reef, a unit termed the silver shale is developed 3 m in the hanging wall and is between 50 cm and 100 cm thick. Above the silver shale, a hanging wall sill is developed that ranges from 18 m to 22 m thick. The Bevett's conglomerate unconformably overlies this hanging wall sill.

Faulting generally trends NNE to SSW is normal and sub–vertical. Displacements are in most cases less than 3 m. Dykes occupy pre-existing fault planes and either one or both contacts are strongly faulted. Dykes follow the trend of the faulting and in most cases faults and dykes are water-bearing, though the inflow is not excessive.

The resource model is however based on one reef only, referred to as the Rho Reef. It is uncertain if the historical sampling captured is the upper or lower reef.

Rietfontein

Another style of mineralisation occurs at the Rietfontein Mine, where the Rietfontein Reef occurs as a cross-reef in the basement granites. It penetrates the overlying Black Reef Quartzite for a short distance before petering out. The granite surrounding the quartz vein is heavily decomposed as a result of the hydrothermal fluids and influx of surface water along the outcrop trace of the quartz vein. The sub-vertical hydrothermal quartz vein strikes north-northeast and fills a narrow 1-3 m wide fracture in basement granite. The quartz vein has been traced over 16 km on strike and mined for 3 km along its strike length. The gold-bearing material and the gold are associated with pyrite and trace arsenopyrite, chalcopyrite and bismuth. The vertical vein has been prospected to depths of 400 m by historical drillholes, the only information is annotations on plan. The deepest underground development is 320 m below surface. There is no indication of the vein closing out at depth giving room for exploration of the depth extensions.

MINING

Mining Strategy

The mining strategy for the underground operations is to apply mechanised long-hole drilling to narrow reef mining to selectively mine out only the reef channel with minimal dilution at Beta, Frankfort and CDM. Rietfontein will be mined conventionally utilising shrinkage stoping with a hybrid loading methods between trackless LHDs and rail-bound locomotives.

The mining objective is to allow for an 8-month period from April 2022 for environmental approvals and finalisation of EPCM contracts before mining construction starts in December 2022, with an additional 6-month construction period before development can start in June 2023. Once UG development commences, all on-reef development is stockpiled for a period of ten months before the plant is commissioned, due to very low ore volumes being mined. First gold production is therefore in Q2, 2024[8].

The existing mining infrastructure will be utilised, with the addition of new accesses, underground development and pre-development of the mining grids to access the planned mining areas at Beta, Frankfort and CDM. When mining grid development has advanced sufficiently, early stoping can commence. The aim is to open-up sufficient ground to produce the planned stoping tonnes.

At Rietfontein, the existing adits and underground development will be utilised with the addition of new development ends, a new decline and the extension of an existing decline.

The Base Case for the planned LOM is based on scheduling the Measured, Indicated and Inferred Mineral Resources at each of the four mines. Provisional LOM schedules based only on Ore Reserves are also included in this report and will be referred to as the Ore Reserve Plan. However, the focus of the mining strategy

[8] First gold production is subject to securing financing and permitting approvals.

remains on extracting all the mineable Mineral Resources, as determined in this Section. The two scenarios are summarised in *Table 13*.

Table 13: Mining Strategy Scenarios

Mining Strategy Scenario	Description
Base Case	LOM plan inclusive of Measured, Indicated and Inferred Mineral Resources
Ore Reserve Plan	LOM plan including only Measured and Indicated Mineral Resources

Modifying Factors

The JORC Code defines modifying factors as mining, metallurgical, economic, marketing, legal, environmental, social and governmental considerations that are used to convert Mineral Resources to Ore Reserves.

Mining Ore Reserve Conversion Factors – Beta, Frankfort and CDM

The Ore Reserve conversion factors applied to the underground operations are detailed in *Table 14*.

Table 14: Ore Reserve Conversion Factors – Beta, Frankfort, CDM

Area	Factors		Unit	Value
Underground	Minor Geological Loss	Measured	%	0
		Indicated	%	5
		Inferred	%	10
	Pillar Loss Beta and CDM		%	7.05
	Pillar Loss Frankfort		%	11.46
	Ore loss		%	0.5
	Dilution		%	1
	MCF		%	85

The pillar loss applied to the Frankfort Mine is higher than the pillar loss applied to the Beta and CDM operations. The pillar loss applied to the Frankfort Mine was derived from the geotechnical study conducted.

Mining Ore Reserve Conversion Factors – Rietfontein

The Ore Reserve conversion factors applied to the underground operations are detailed in *Table 15*.

Table 15: Ore Reserve Conversion Factors - Rietfontein

Factors		Unit	Value
Geological Losses	Measured	%	0
	Indicated	%	5
	Inferred	%	10
Pillar Loss		%	8.0
Ore Loss		%	3
Stoping and Raise Dilution		cm	20
MCF		%	85

The stoping and raise dilution to consider an overbreak into the waste of 10 cm on either side of the reef contact.

Processing and Metallurgical Factors

There are no processing or metallurgical factors that are deemed to be classified as modifying factors applied to the Ore Reserves estimation or the Base Case mining inventory estimation.

Infrastructure Factors

There are no infrastructure factors that are deemed to be classified as modifying factors applied to the Ore Reserves estimation or the Base Case mining inventory estimation.

Economic and Marketing Factors

The Base Case and Ore Reserve plan are based on a market price of USD1,642/oz. This is included in the pay-limit calculations to determine a minimum cut-off grade for each mine. For the Base Case, the marginal tail consisting of CDM tonnes, was excluded from the financial analysis and the LOM plan at month 169. No other economic or marketing factor was considered in converting Mineral Resources to Ore Reserve, nor for determining the Base Case mining inventory.

Legal, Environmental, Social and Governmental Factors

There are no legal, environmental, social, or governmental factors that are deemed to be classified as modifying factors applied to the Ore Reserves estimation or the Base Case mining inventory estimation.

Production Scheduling Strategy

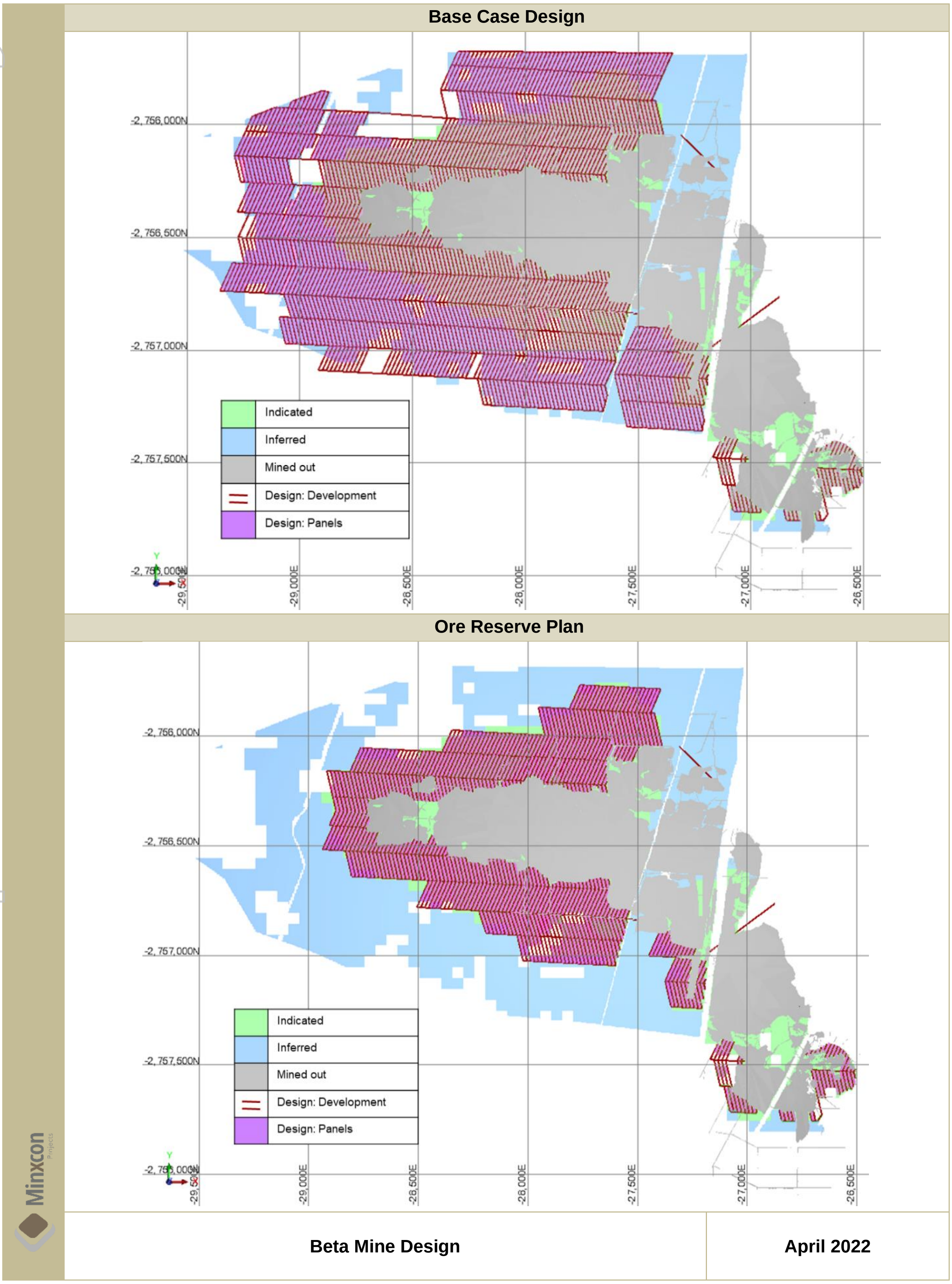
The steady state production schedule strategy is to produce:-

- 30 ktpm from the Beta Mine;
- 15 ktpm from the Rietfontein Mine;
- 15 ktpm from the Frankfort Mine; and
- 10 ktpm to a 20 ktpm ramp-up near the end of CDM Mine LOM.

Beta Mine Design

The Beta Mine design is illustrated in Figure 9, showing the stope designs of both the Base Case and the Ore Reserve Plan.

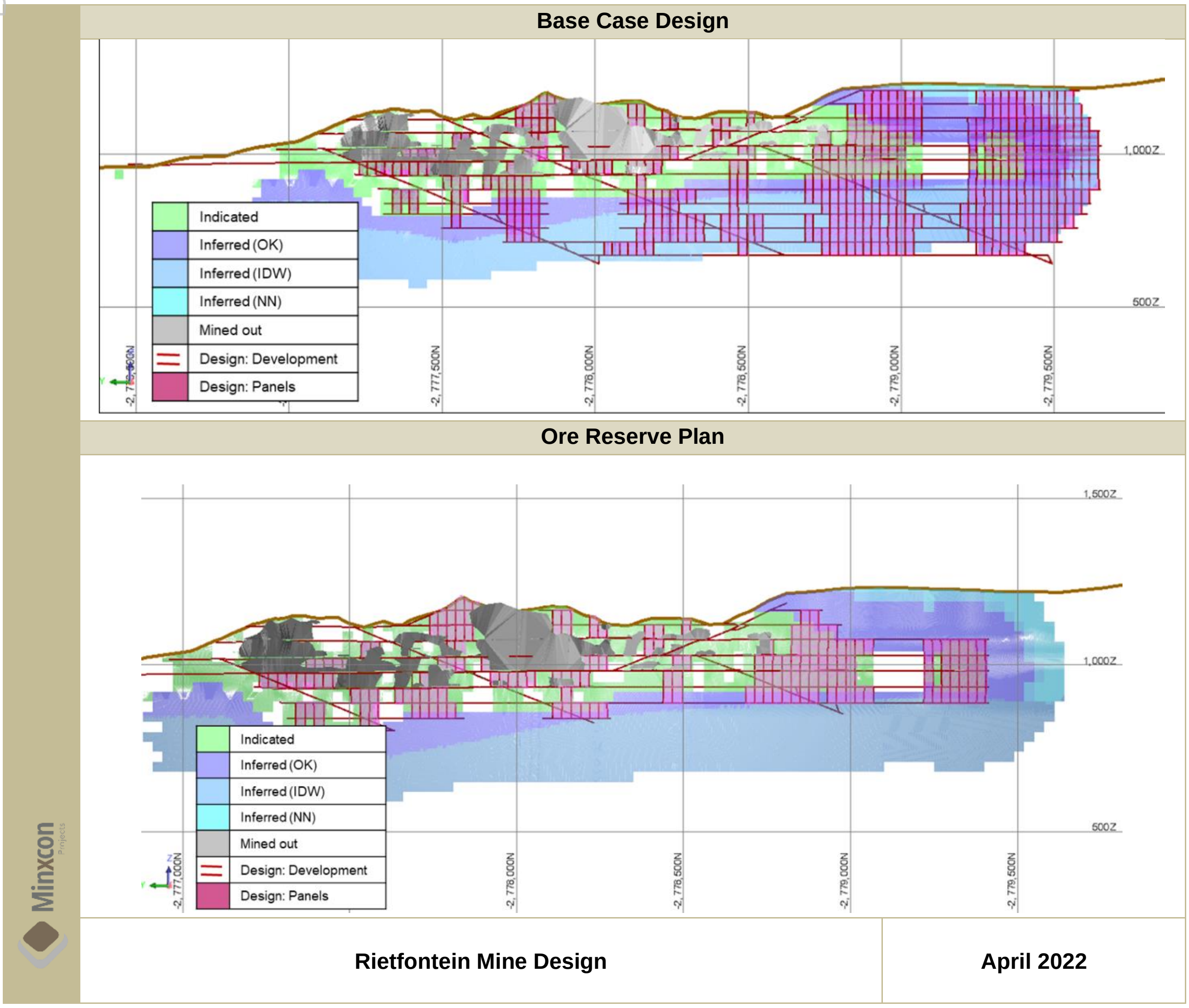
Figure 9: Beta Mine Design



Rietfontein Mine Design

The Rietfontein Mine design is illustrated in *Figure 10*, showing the stope designs of both the Base Case and the Ore Reserve Plan.

Figure 10: Rietfontein Mine Design

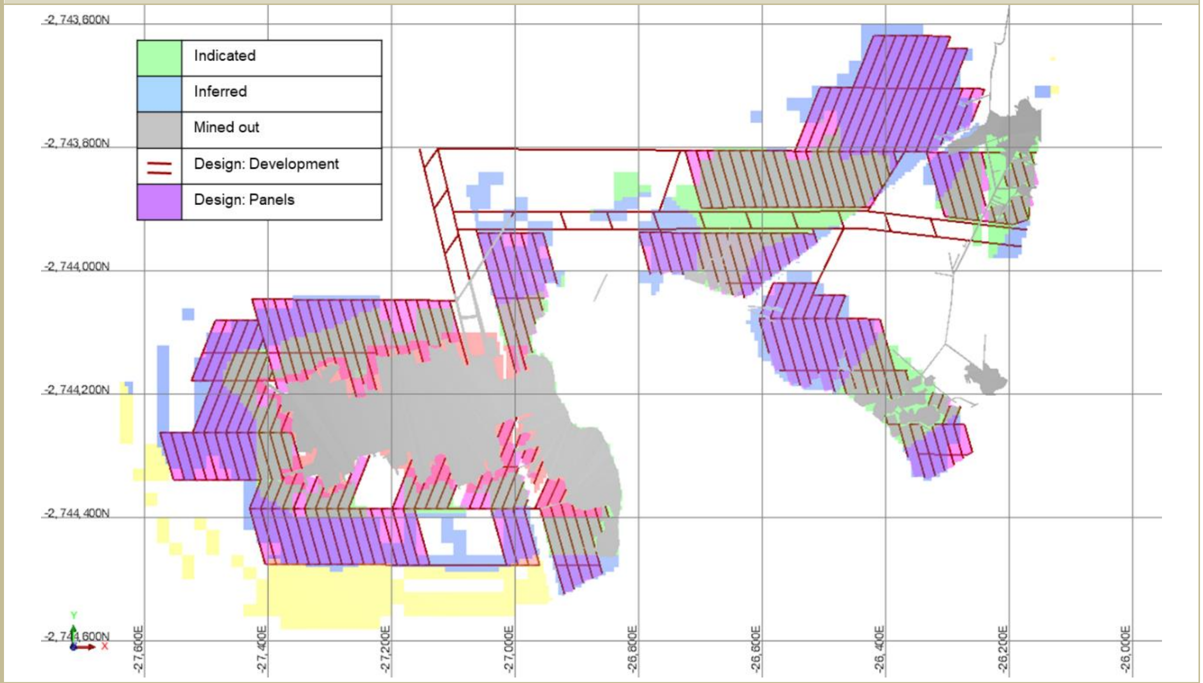


Frankfort Mine Design

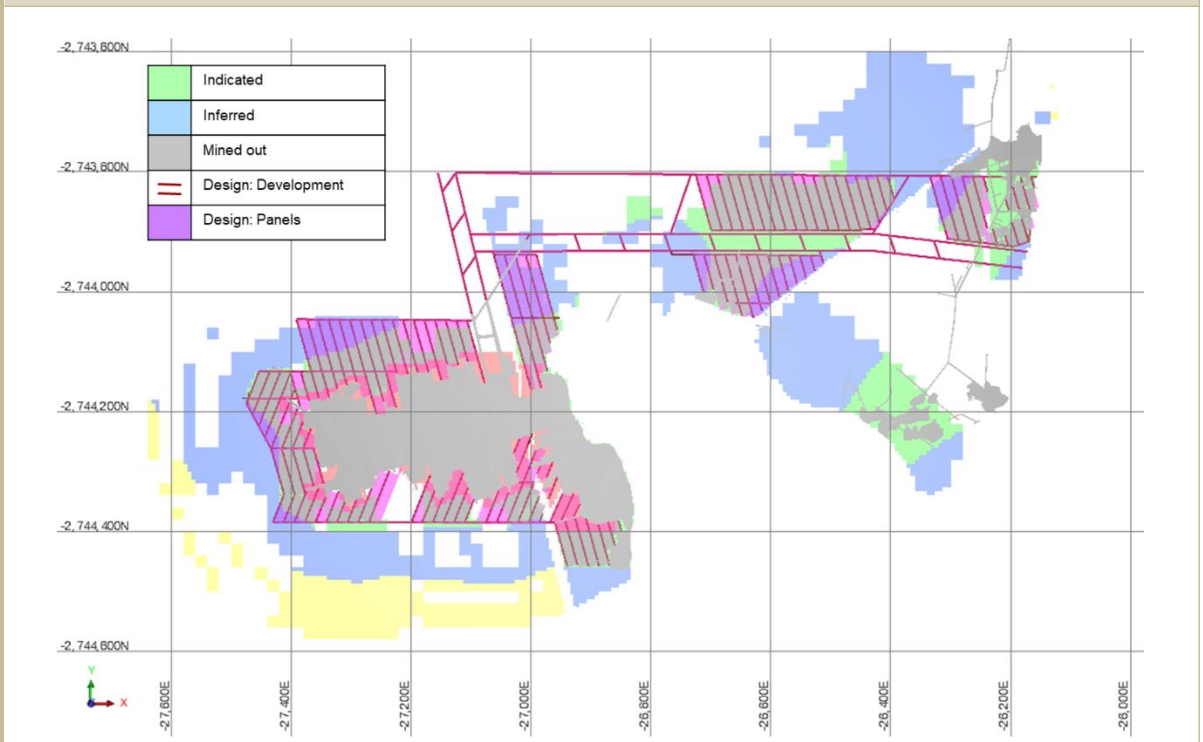
The Frankfort Mine design is illustrated in *Figure 11*, showing the stope designs of both the Base Case and the Ore Reserve Plan.

Figure 11: Frankfort Mine Design

Base Case Design



Ore Reserve Plan



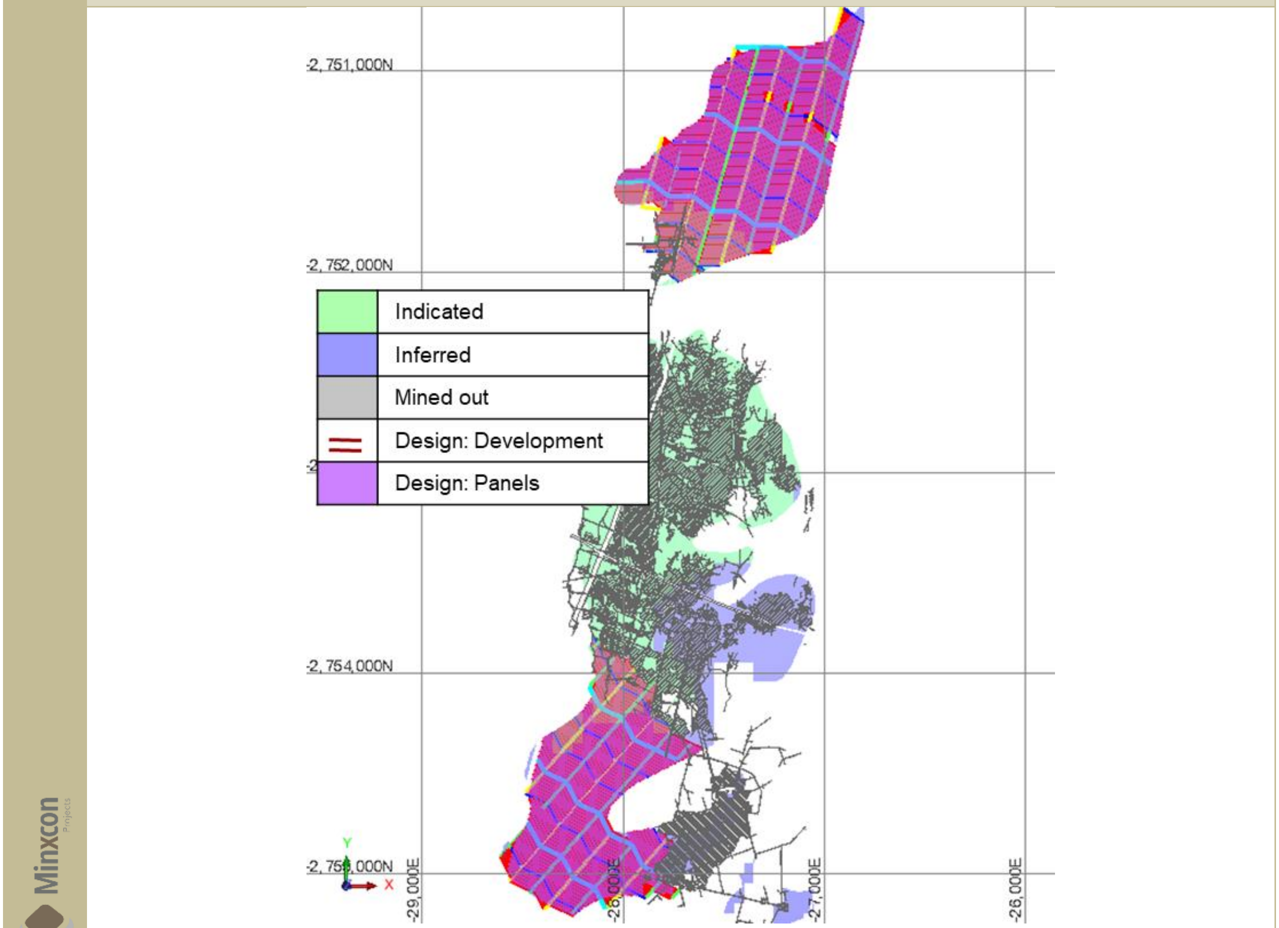
Frankfort Mine Design	April 2022

CDM Mine Design

The CDM Mine will be accessed via the existing CDM North and South portals. The portals will serve the two planned mining areas independently. The CDM Mine Base Case design is illustrated in *Figure 12*.

Figure 12: CDM Base Case Plan Mine Design

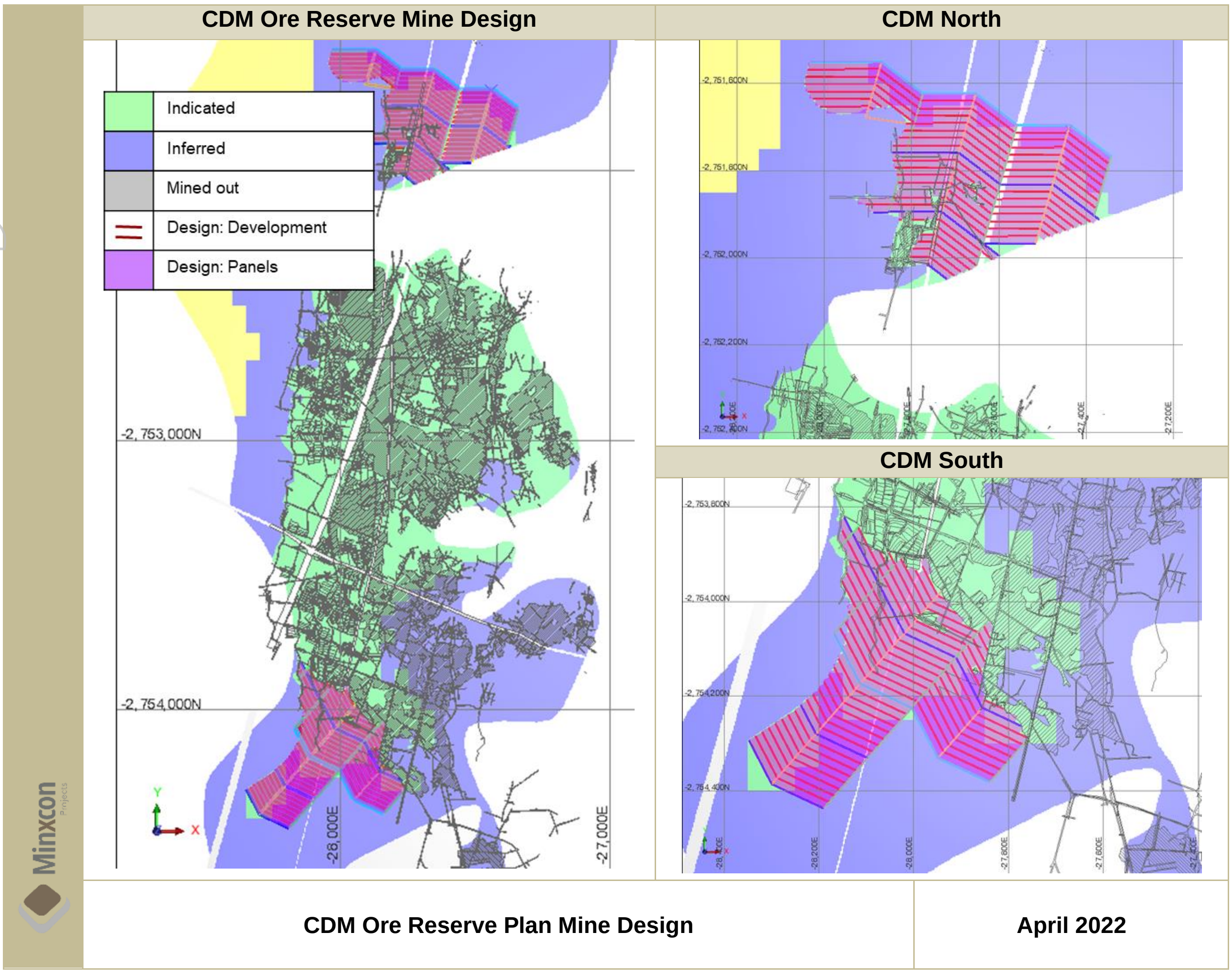
Base Case Design



CDM Base Case Plan Mine Design	**April 2022**

The CDM Mine Ore Reserve design is illustrated in *Figure 13*.

Figure 13: CDM Ore Reserve Plan Mine Design



GEOTECH

Beta Mine

A project review and initial geotechnical recommendations for the Beta Mine were completed by an independent rock engineer, Mr. Mark Grave. Numerical modelling and empirical analysis were completed to determine rock characteristics, and potential failure zones and provide geotechnical recommendations.

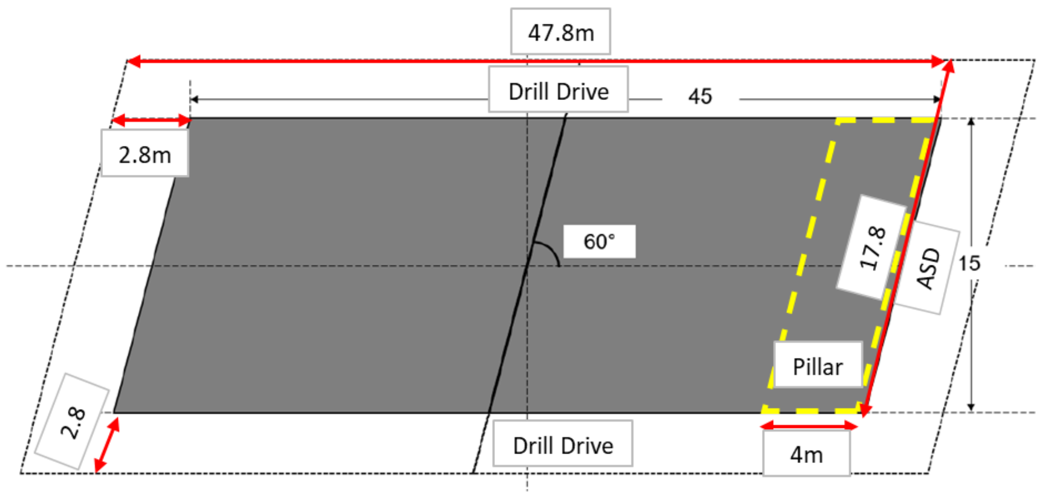
The following recommendations have been made by the rock engineer:-

- Careful consideration must be given to prevent back area caving from propagating to the advancing face;
- Consideration of grouted backfill bags on the ledges as a means of protecting adits;
- Adit hanging walls and sidewalls should be reinforced with 1.8 m resin grouted tendons;
- At least two adits must be protected with dip rib pillars or backfill bags (W:H >=5) to comply with escape way legislation; and
- The protected adits must be connected with similarly protected strike drives not more than 200 m apart.

- A cemented backfill strategy using tailings for deposition at Beta Mine should be investigated further by means of the required geotechnical studies and reconnaissance of the mined-out areas

The detail of the study is described in the "*Project Review and Initial Recommendations for the Beta Mine of Transvaal Gold Mining Estates (TGME)*" Report. A pillar loss of 7.05% has been calculated from rock engineering recommendations and applied to the design to account for *in situ* material that will not be mined and left as pillars. The recommended pillar requirements for the Frankfort Mine are detailed in *Figure 14*.

Figure 14: Recommended Beta Mine Pillar Design



Source: Pillar Requirements for Beta Shaft, 2020

Recommended Beta Mine Pillar Design	**April 2022**

The pillar loss calculation is detailed in *Table 16*.

Table 16: Beta Mine Pillar Loss Calculation

Pillar Loss		
Parameter	**Unit**	**Value**
Mining Block Length	m	45
Mining Block Width	m	15
ASD Width	m	2.8
Drill Drive Width	m	2.8
Pillar Width	m	4
Pillar Length	m	15
Mining Area	m²	851
Pillar Area	m²	60
Pillar Loss	**%**	**7.05**

It has been planned that development ends will typically be supported with shepherd crook grouted bolts, following a typical 3 x 2 pattern, spaced at 1.5 m intervals.

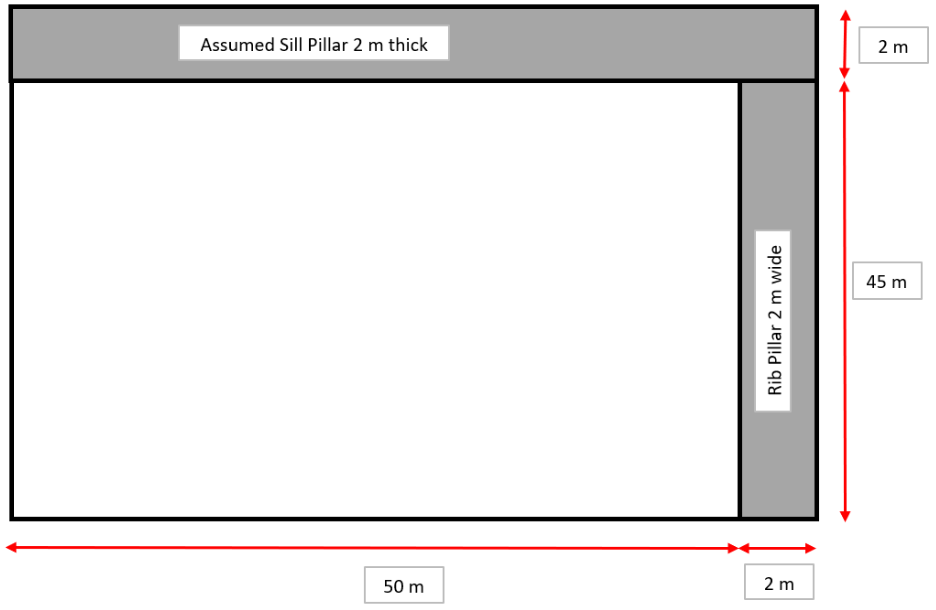
Stope support is planned to consist of mine poles which will be installed on the shoulder of the stopes, adjacent to the drill drives. The mine poles will be pre-stressed by installing jackpots. Typical strike spacings of 1.5 m are expected for the installation of stope support.

In areas where geological features, such as faults and dykes will be intersected it is recommended that 20 t mine poles are installed at spacings of 50 cm on either side of the contact. It has also been recommended that faults should be stitched with rebar, spaced 1 m apart in the development ends, within 50 cm of the contact on either side. No drilling of support holes into dykes will be allowed.

Rietfontein Mine

A pillar requirements study for the Rietfontein Mine has been completed by an independent rock engineer, Mr. Mark Grave. A pillar loss of 8% has been calculated from rock engineering recommendations and applied to the design to account for *in situ* material that will not be mined and left as pillars. The recommended pillar requirements for the Rietfontein Mine are detailed in *Figure 15.*

Figure 15: Recommended Pillar Design for Rietfontein Mine



Source: Pillar Requirements for Rietfontein Shaft, 2020

Recommended Rietfontein Mine Pillar Design	April 2022

The pillar loss calculation for Rietfontein Mine is detailed in *Table 17*.

Table 17: Pillar Loss Calculation

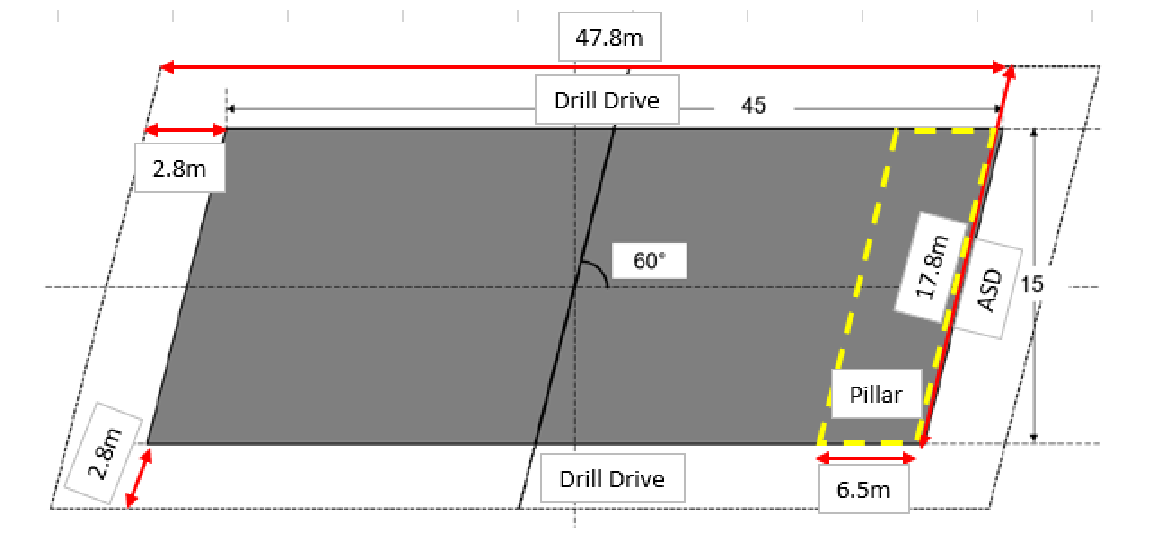
Description	Unit	Value
Stope Height	M	45
Panel Length	M	50
Rib Pillar Width	M	2
Sill Pillar Width	M	2
Mining Block Area	m²	2,444
Pillar Area	m²	194
Pillar Loss	**%**	**8.0**

Frankfort Mine

A pillar requirements study for the Frankfort Mine has been completed by an independent rock engineer, Mr. Mark Grave. A pillar loss of 11.46% has been calculated from rock engineering recommendations and applied to the design to account for *in situ* material that will not be mined and left as pillars. The recommended pillar requirements for the Frankfort Mine are detailed in *Figure 16*.

The pillar requirements study is detailed in the "*Pillar Requirements for Frankfort Shaft*" Report.

Figure 16: Recommended Pillar Design for Frankfort Mine



Source: Pillar Requirements for Frankfort Shaft, 2020

Recommended Frankfort Mine Pillar Design	**April 2022**

The pillar loss calculation is detailed in *Table 18*.

Table 18: Frankfort Mine Pillar Loss Calculation

Pillar Loss		
Parameter	**Unit**	**Value**
Mining Block Length	m	45
Mining Block Width	m	15
ASD Width	m	2.8
Drill Drive Width	m	2.8
Pillar Width	m	6.5
Pillar Length	m	15
Mining Area	m²	851
Pillar Area	m²	98
Pillar Loss	**%**	**11.46**

It has been recommended that development ends should be supported with shepherd crook grouted bolts, following a typical 3 x 2 pattern, spaced at 1.5 m intervals.

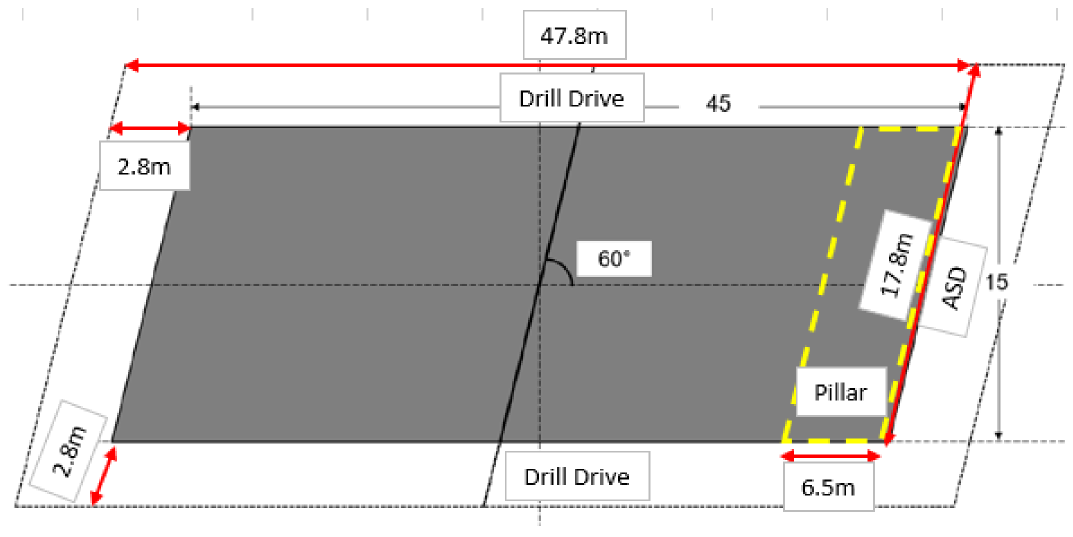
Stope support should consist of mine poles which will be installed on the shoulder of the stopes, adjacent to the drill drives. The mine poles will be pre-stressed by installing 10 t jackpots. Strike spacings of 1.5 m between the mine poles should not be exceeded.

In areas where geological features, such as faults and dykes will be intersected it is recommended that 20 t mine poles are installed at spacings of 50 cm on either side of the contact. It has also been recommended that faults should be stitched with rebar, spaced 1 m apart in the development ends, within 50 cm of the contact on either side. No drilling of support holes into dykes will be allowed.

CDM Mine

A pillar requirements study for the CDM Mine has been completed by an independent rock engineer, Mr. Mark Grave. A pillar loss of 7.05% has been calculated from rock engineering recommendations and applied to the design to account for *in situ* material that will not be mined and left as pillars. The recommended pillar requirements for the CDM Mine are detailed in *Figure 17*.

Figure 17: Recommended Pillar Design for CDM Mine



Source: Pillar Requirements for CDM Shaft, 2020

Recommended CDM Mine Pillar Design	**April 2022**

The pillar loss calculation is detailed in *Table 19*.

Table 19: CDM Mine Pillar Loss Calculation

Pillar Loss		
Parameter	**Unit**	**Value**
Mining Block Length	m	45
Mining Block Width	m	15
ASD Width	m	2.8
Drill Drive Width	m	2.8
Pillar Width	m	4
Pillar Length	m	15
Mining Area	m²	851
Pillar Area	m²	60
Pillar Loss	**%**	**7.05**

It has been planned that development ends will typically be supported with shepherd crook grouted bolts, following a typical 3 x 2 pattern, spaced at 1.5 m intervals.

Stope support is planned to consist of mine poles which will be installed on the shoulder of the stopes, adjacent to the drill drives. The mine poles will be pre-stressed by installing jackpots. Typical strike spacings of 1.5 m are expected for the installation of stope support.

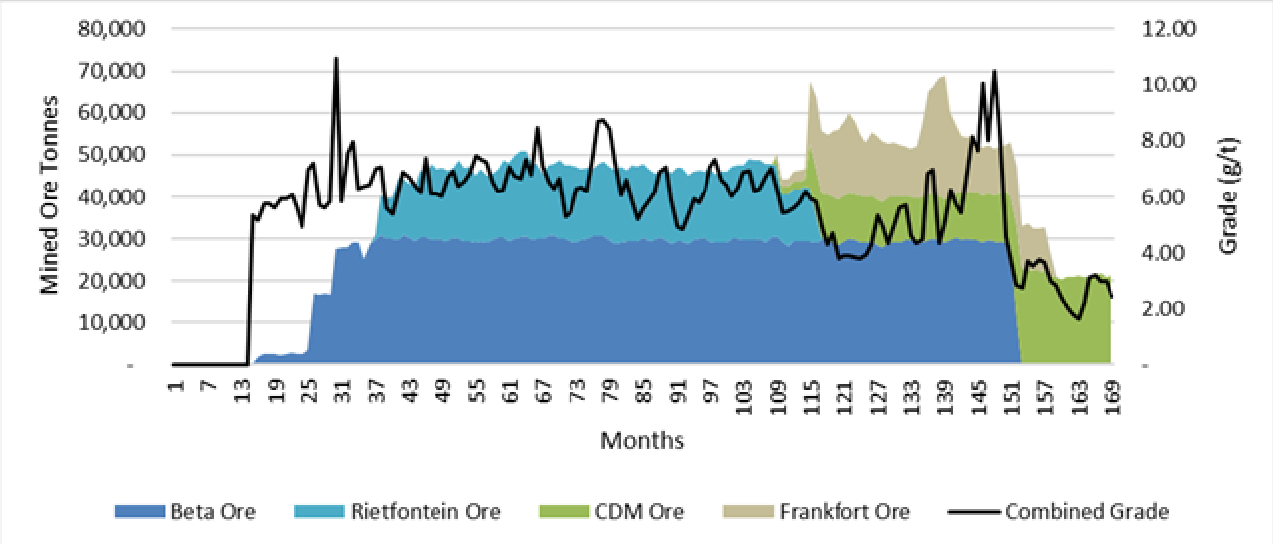
In areas where geological features, such as faults and dykes will be intersected it is recommended that 20 t mine poles are installed at spacings of 50 cm on either side of the contact. It has also been recommended that faults should be stitched with rebar, spaced 1 m apart in the development ends, within 50 cm of the contact on either side. No drilling of support holes into dykes will be allowed.

MINING AND PROCESSING SCHEDULE

Base Case

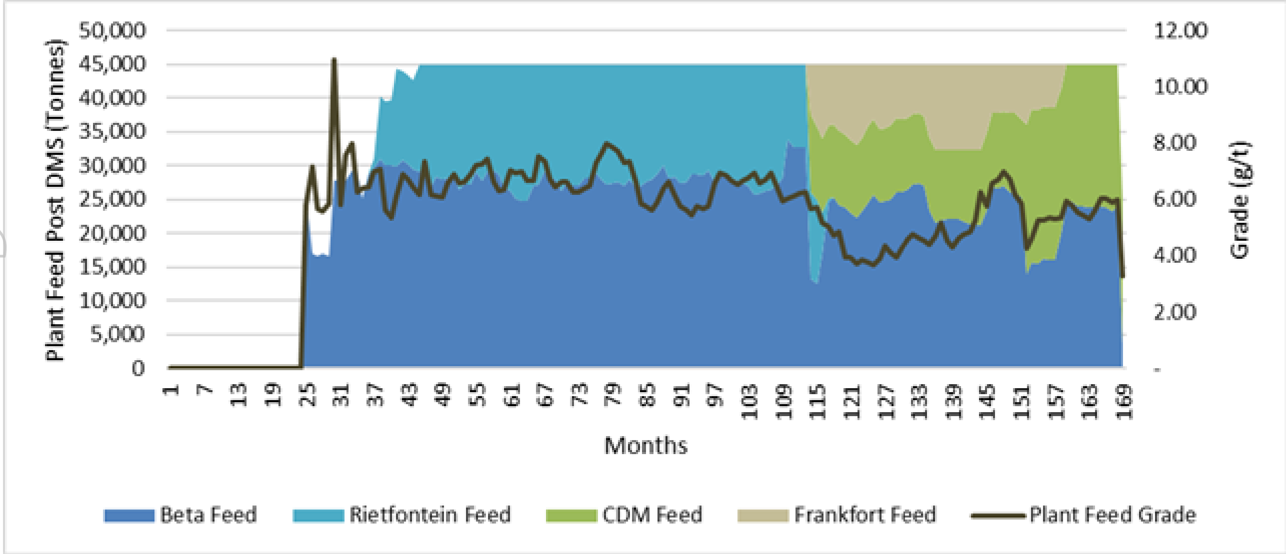
The combined mined tonnes for the Base Case are illustrated in *Figure 18*. The mined tonnes are based on the LOM plan targeted Mineral Resources, inclusive of Inferred Mineral Resources. The total LOM for the Base Case is 12.9 years.

Figure 18: Combined Mined Tonnes from Underground Operations – Base Case



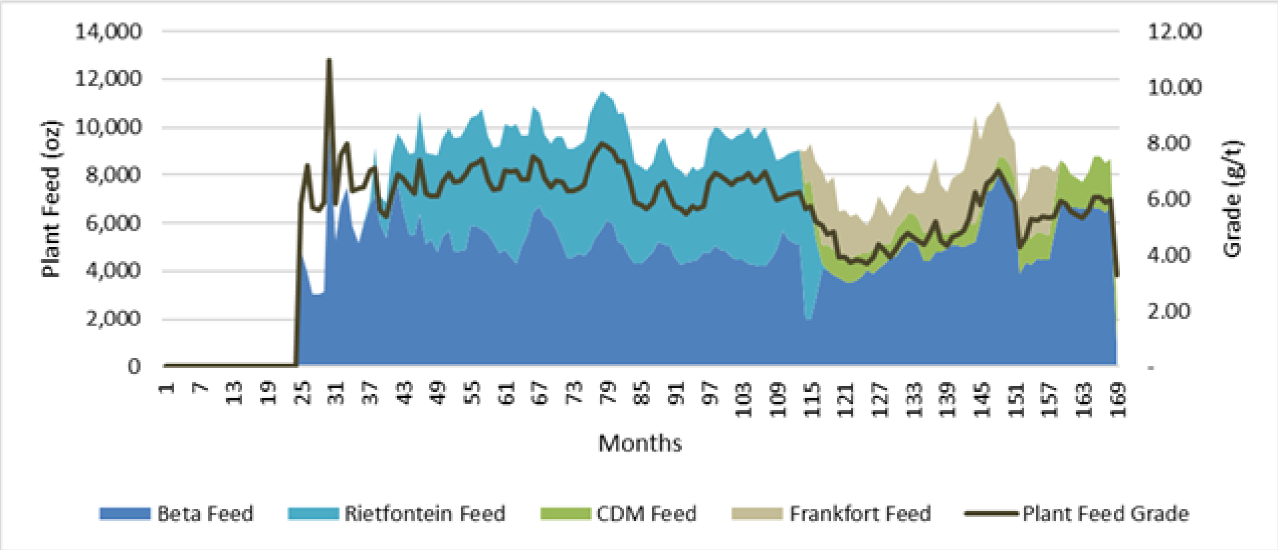
The combined plant feed tonnes for the Base Case are illustrated in *Figure 19*. The feed is based on the LOM plan targeted Mineral Resources, inclusive of Inferred Mineral Resources. The total LOM for the plant feed is 11.33 years, shorter than the mining LOM plan due to stockpiling the initial on-reef development at Beta.

Figure 19: Combined Plant Feed Tonnes from Underground Operations –Base Case



The combined plant feed content (ounces) for the Base Case is illustrated in *Figure 20*.

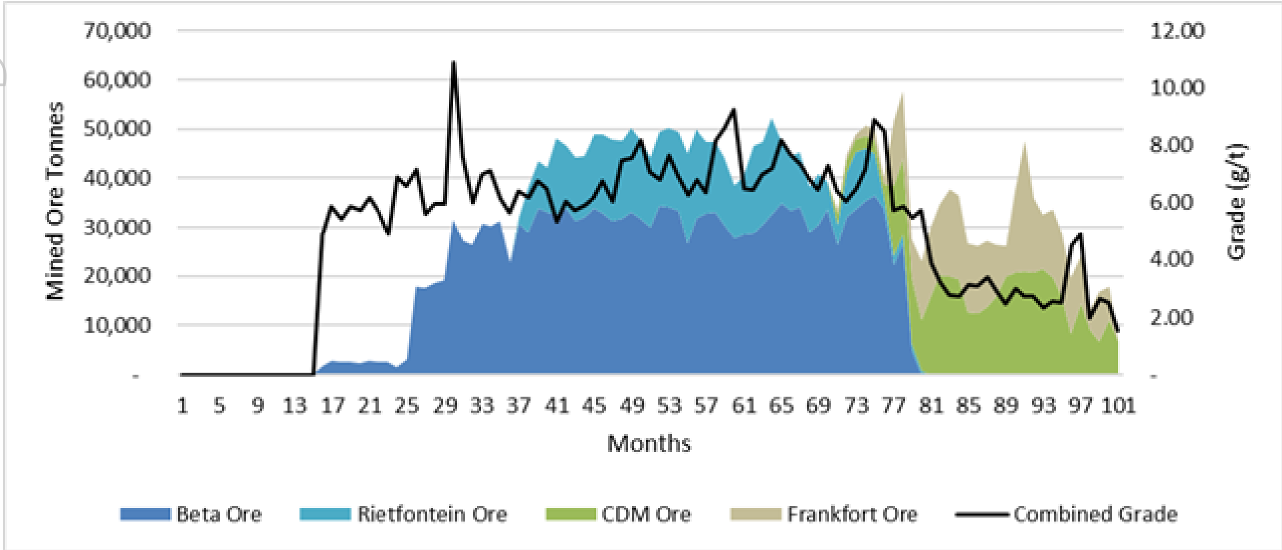
Figure 20: Combined Plant Feed Content from Underground Operations – Base Case



Reserve Plan

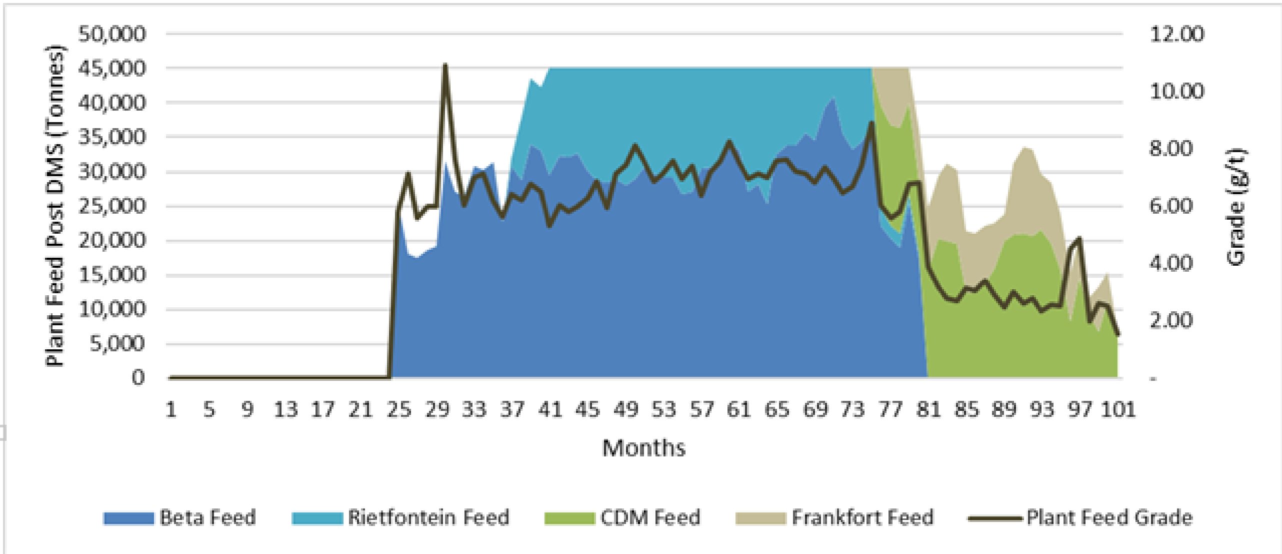
The combined mined tonnes for the Ore Reserve Plan are illustrated in *Figure 21*. The mined tonnes are based on the LOM plan targeting only Ore Reserves for scheduling.

Figure 21: Combined Mined Tonnes from Underground Operations – Reserve Plan



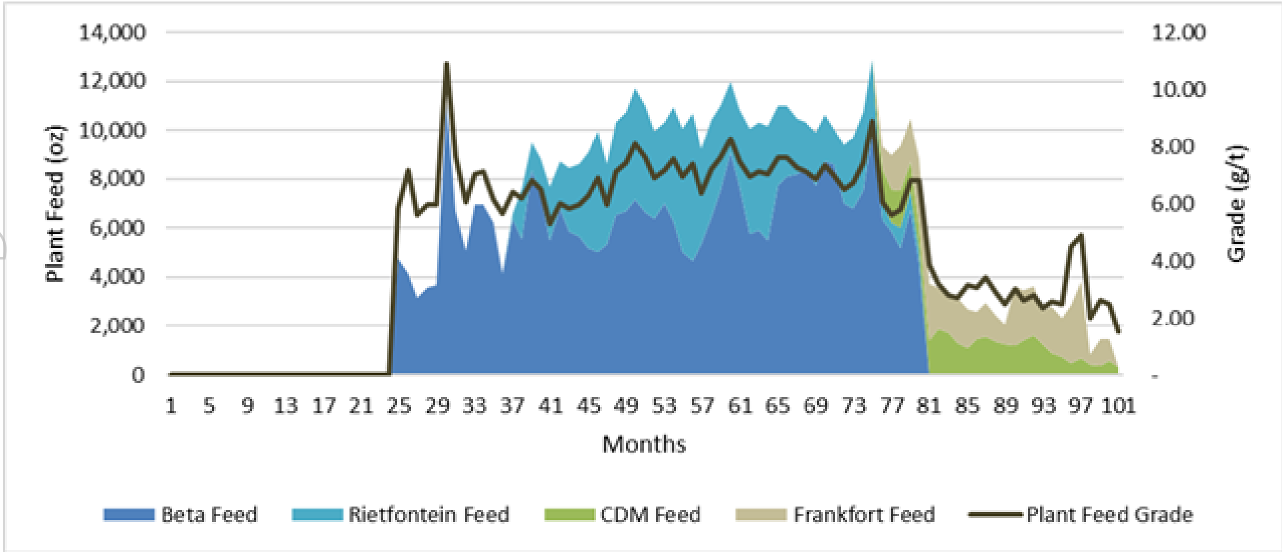
The combined plant feed tonnes for the Ore Reserve Plan are illustrated in *Figure 22*. The feed is based on the LOM plan targeting only Ore Reserves for scheduling.

Figure 22: Combined Plant Feed Tonnes from Underground Operations – Reserve Plan



The combined plant feed content (ounces) for the Ore Reserve plan is illustrated in *Figure 23*.

Figure 23: Combined Plant Feed Content from Underground Operations – Reserve Plan



METALLURGY

There are four major ore sources that metallurgical test work was concluded on:

- Rietfontein;
- Frankfort;
- CDM; and
- Beta

Metallurgical tests included historical TGME plant data, work completed by previous owners, and supplemented by over 100 years of mining history. Recent metallurgical test work is summaries below.

Beta

Testwork concluded by Maelgwyn and SGS Laboratories on composite samples from Beta for diagnostic leaching analysis indicated recoveries between 86% and 90%, gravity testwork also excluded the possibility of a gravity step as only 12% of the gold was available for gravity recovery.

CDM

Met63 supervised and conducted testwork on four 20kg Dukes samples received from TGME, the laboratory used for the testwork is MAK Analytical in Modderfontein, South Africa. The testwork included sulphide flotation and leach testwork on the sulphide tailings.

Frankfort

Frankfort is not process until year 8/9 and represents only 91.06 Koz of 1.383 Moz in Base LOM

Met63 in conjunction with various laboratories conducted a comprehensive metallurgical testwork program for Frankfort ore, which has been identified as a double refractory ore. The following was key conclusions resulted from the testwork on the Frankfort ore:

- A DMS step is required to remove benign material;
- A sulphide and carbon flotation stage;
- Fine grinding of flotation tailings;
- Separate leaching circuits for oxide and sulphide material, oxidative leaching for the sulphatic ore and conventional CIL for oxide material.
- Oxidative leaching of the carbon concentrate before conventional CIL.

The achieved gold recoveries for the testwork program were between 61% and 82%. A recovery of 69% was assumed.

Rietfontein

Rietfontein ore, a generally free-milling orebody was investigated to determine the amenability to conventional CIL processing. The testwork was done by Ready Lead Assay Laboratory located in Boksburg in January 2022 and indicated recoveries between 88% and 93%, a recovery of 90% was assumed.

PROCESSING

Met63 was contracted to do a detailed design and costing of a processing plant designed for a feed capacity of 45 ktpm which is equivalent to 67 tph at 92% availability. A flow schematic is shown in Figure 24.

The feasibility study has been split into three phases, allowing for various processing scenarios aligned with the mining development program. The design of each phase is based on a stand-alone processing facility aligned with the mining plan of the ore body.

- *Phase 1 – Carbon-in-Leach Plant (*Free milling ore is process for the first 7 Years figure 23).
  The design and costing of a 45 ktpm oxide ore processing plant including crushing, milling, CIL and elution with doré produced on site. Testwork undertaken on various "free-milling" ores has indicated high undissolved gold losses, indicating the presence of small amounts of sulphidic constituents.

  This was particularly evident when completing standard cyanidation bottle roll trials on Dukes and Morgenzon samples. Subsequent additional testwork supports this. As a result, the Phase 1 circuit will include a flash flotation stage, post milling to remove sulphide associated material before conventional cyanidation. This flotation mass pull will join the concentrator product from Phase 2.

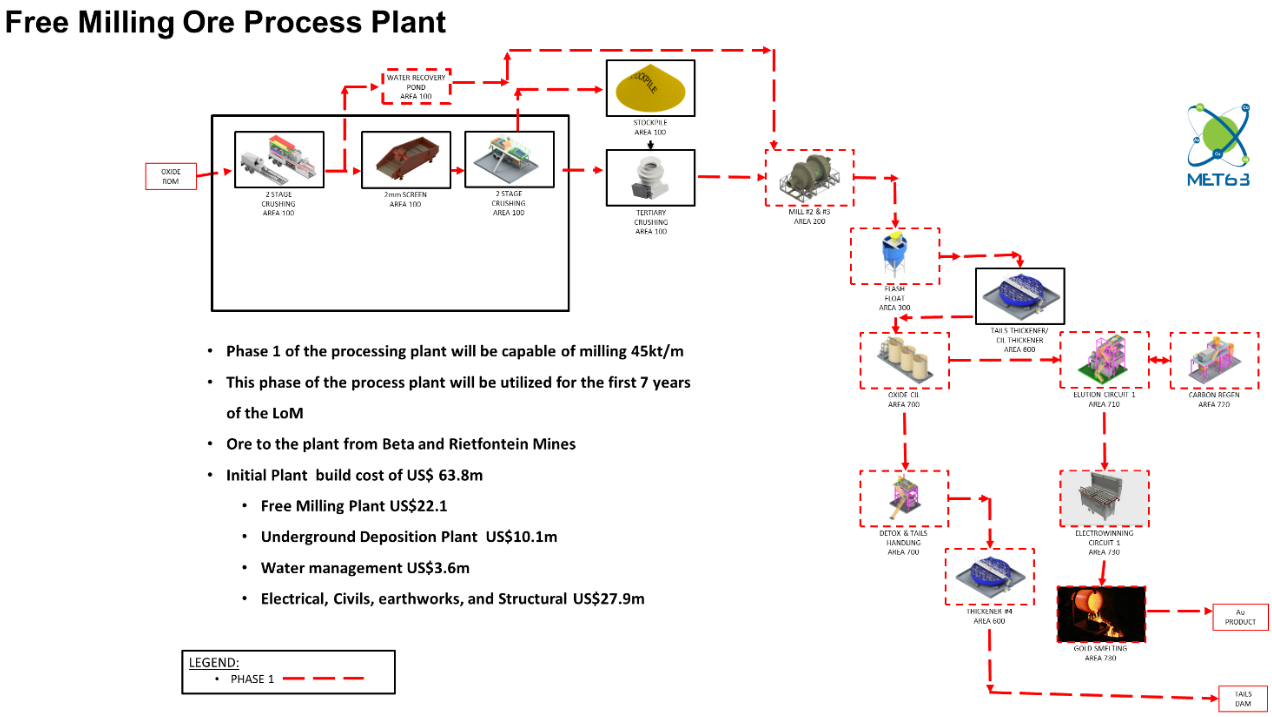
- *Phase 2 – Gold Concentrator Plant*
  The design and cost of a 20 ktpm concentrating plant including crushing, milling, DMS and flotation. The final products consist of a combined carbon and sulphide flotation concentrate. The carbon flotation concentrate being processed through the CIL 3 plant and the sulphide flotation concentrate is processed through the CIL 1 plant.

- *Phase 3 – Oxidative Leaching of Sulphide Concentrate*
  The Phase 3 plant includes a 45 ktpm Leach-ox process plant that was designed and costed, including crushing, milling and carbon/sulphide flotation. The phase 3 plant consists of both the gold concentrator plant as well as the CIL plant as described in Phase 1 and Phase 2. The carbon flotation concentrate processed in a dedicated CIL circuit (CIL 3), sulphide flotation concentrate oxidised under

atmospheric conditions with liquid oxygen injection and high shear reactors. Oxidised product to be treated in a separate batch CIL process (CIL 1) with the tails treated in a large CIL (CIL 2), that also processes the flotation tails as well as "free-milling" ore feed. This option allows for all recovered gold to be produced as doré on-site with no concentrate produced.

Although there are some shared infrastructure and processing equipment between the phases, for the purposes of this FS the phase One plant will be constructed first to treat CDM, Rietfontein and Beta ore with phase three being constructed at a later stage before mining of Frankfort ore commences.

Figure 24: Process Flow Schematic Phase 1



Referring to the process flow schematic shown in Figure 24, the final processing plant will consist of:

For Free-Milling ore and sulphide ore (Beta, Rietfontein and CDM):

- 3-stage crushing and screening of free-milling RoM ore to produce -6mm material;
- Milling of the -6mm product from the crushing and screening circuit down to 75 µm;
- Flash flotation of the milled product to remove any sulphatic material;
- Flash flotation concentrate will be processed via oxidative leaching (CIL 1);
- Flash flotation tailings will be processed using conventional cyanidation (CIL 2);
- Elution, electrowinning and smelting of the eluate from CIL; and
- Detoxification of the CIL tailings and deposition on the TSF as well as underground deposition.

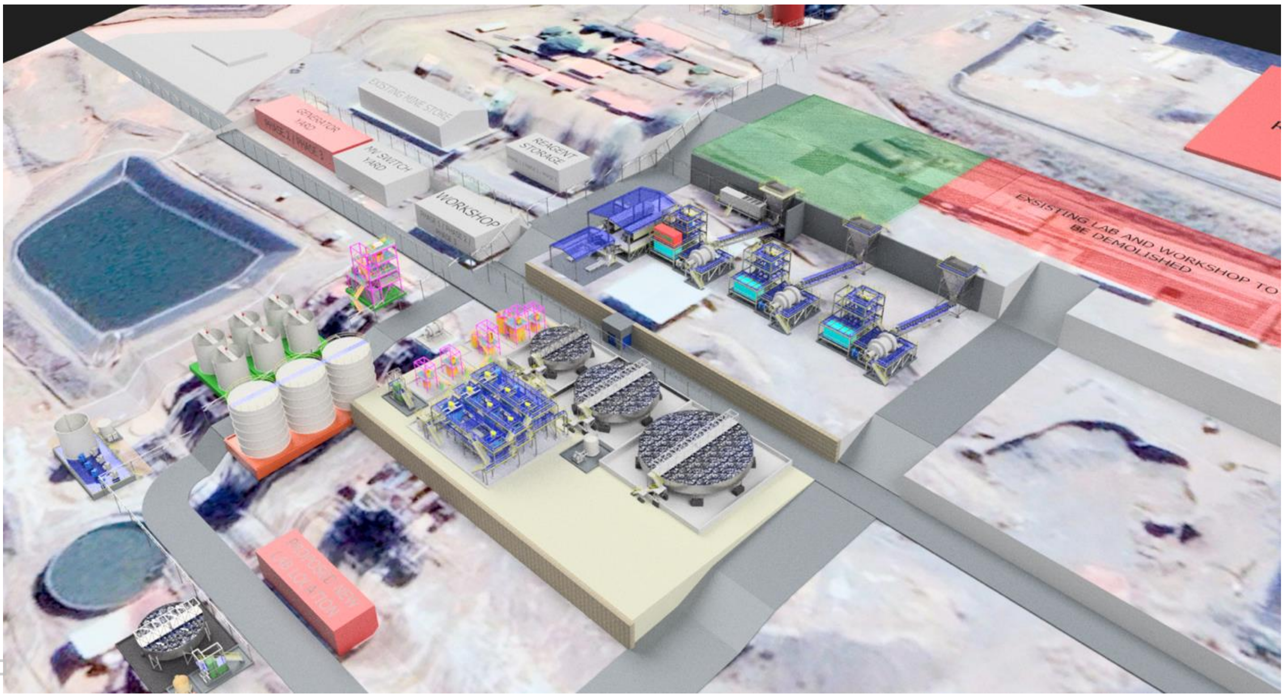
For Refractory ore (Frankfort)

- Crushing and Screening of RoM ore to -2mm and +2mm;
- Milling of the -2mm material

- Oversize (+2mm) will be processed using a DMS plant in order to remove benign material (floats);
- Milling of the sinks from the DMS and the -2 mm ore from the crushing circuit down to 212 µm;
- Flash flotation of the milled material to remove any sulphatic material;
- Flash flotation tailings are sent to a carbon flotation circuit to remove carbonaceous material;
- The carbon float tailings are sent to a sulphide flotation to remove the remaining sulphatic material;
- The carbon float concentrate is treated in a dedicated Carbon CIL circuit (CIL 3);
- The sulphide float concentrate is milled down to 75 µm and further treated using a leach-ox process (CIL 1);
- The sulphide flotation tailings are processed using conventional leaching (CIL 2);
- A dedicated elution and electrowinning circuit for treating the eluate from the Carbon CIL;
- CIL 1 and CIL 2 have a combined elution and electrowinning circuit; and
- Detoxification of the CIL tailings and underground deposition of the detoxified tailings.

A 3D rendering of the processing plant is illustrated in *Figure 25*.

Figure 25: 3D Plant Rendering Final design Phase 1-3.



HYDROGEOLOGY AND HYDROLOGY

A groundwater and hydrological study have been conducted by MvB consulting. The study and groundwater modelling conducted concluded that sufficient water will be available from the underground operations to support the TGME underground mining operations and process plant at the planned production rates.

The purpose of the study was to:

- Assess the potential geohydrological impacts related to the proposed mining in the region. These included the risk of aquifer depletion and groundwater quality deterioration.
- Recommend possible precautionary measures and suitable monitoring.

There are essentially three potential primary risks associated with the proposed mining. These are:

- Lowering of the regional groundwater level due to inflow of groundwater into the mine workings.
- Impact on the regional groundwater quality because of seepage of contaminants from the mining operations.
- Impact on the regional groundwater quality because of seepage of contaminants from the TSF.

The following mitigation measures are recommended for the above impacts:

- Groundwater intersected in the mine workings is detrimental towards the operations and will therefore be sealed as far as possible. The aim is to minimise the groundwater inflow into the mine.
- The aim is to keep the mine as dry as possible through grouting and sealing of fissures. Any ingress water into the mine should be abstracted as quickly as possible to minimise the contact with potential contaminants. Mine service water will be circulated in a closed loop. Implementation of passive water treatment for post-closure may be considered if necessary.
- The aim is to minimise the seepage into the tailings material and to collect and return as much as possible of the water on the TSF. The return water dams will be lined, As will the new TSF. Groundwater quality monitoring will be conducted as an early warning of potential impacts and to verify the findings of the numerical model. Post-closure rehabilitation and passive treatment (if required).

TAILINGS STORAGE

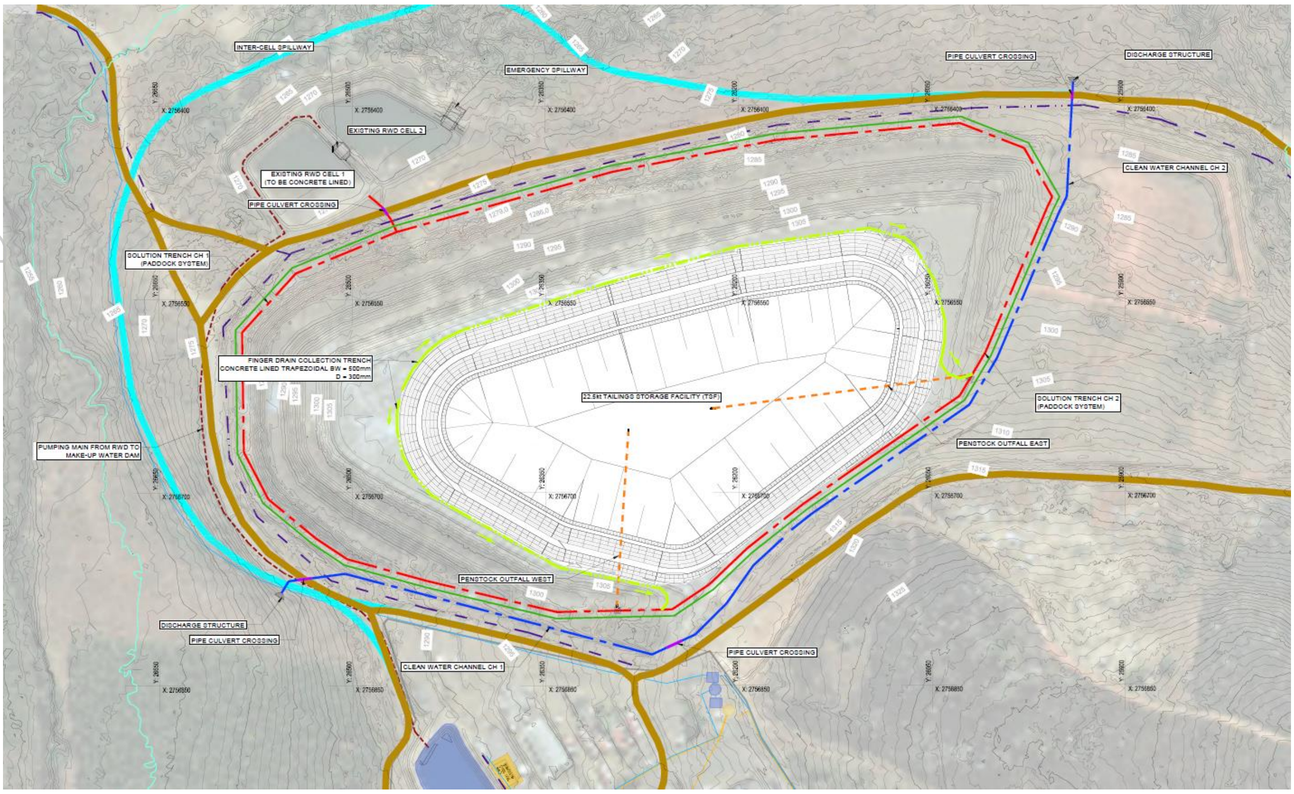
Beta TSF

In order to meet the deposition requirements of the Phase-I mining development, the extension of the TSF will have to be undertaken in two stages. The first stage (Stage 1) will consist of the vertical extension of the existing TSF up to the final design height, with a capacity of 22.5 ktpm. The second stage (Stage 2) will entail extending the footprint to the open area, to the east of the existing TSF, with a capacity of 30 ktpm. The layout of the proposed expansion of the TSF is illustrated in *Figure 26*.

The total capacity of the planned extension will be approximately 2.09M Mt:-

- Stage 1 capacity: 0.79 Mt.
- Stage 2 capacity: 1.3 Mt.

Figure 26: Planned Layout of TSF Expansion



Underground Deposition

Paterson & Cooke Consulting Engineers (Pty) Ltd (”Paterson & Cooke”) were contracted to do a pre-feasibility study (“PFS”) report on the underground deposition of tailings material, as the current TSF does not have the required capacity to accommodate all tailings over the LOM. The design was based on backfilling the entire processing stream. The backfill will be placed in the old workings in the Beta mine namely Beta North, Beta Central and Beta South. TGME has estimated the volume of the existing voids in the Beta Mine as 1,738,012 m^3 and the volume of future voids in the Beta Mine will be 723,950 m^3. The estimated duration to fill the voids with tailings is approximately 5.3 years at 30 ktpm and approximately 2 years at 80 ktpm at a void fill efficiency of 65%.

MINE SERVICES AND INFRASTRUCTURE

The TGME underground projects are historic operating mines. The project areas are therefore established to a large degree.

Available/existing infrastructure at the Beta Underground Project area includes:

- tarred R533 regional main access road leading to the Project;
- single lane partially paved site access road;
- administration offices;
- old processing plant and associated stores, ore handling and ore feed infrastructure;
- TSF with return water dams;

- workshops;
- two water reservoirs;
- old water supply pumping system (drawing from Blyde River)
- changing facility at the process plant;
- stores and laydown yard;
- 6.6 kV line supplying power to the operation from the existing Eskom consumer substation;
- site distribution substation;
- power distribution transformers;
- processing plant motor control centres;
- processing plant pollution control dam;
- historic heap leach ponds;
- fuel storage tanks;
- salvage and reclamation yard;
- access control fencing (mainly at the administration offices and old processing plant)
- low level river crossings (Towards Beta North and Beta South); and
- various portals and developments providing access to the Beta complex underground workings.

Available/existing infrastructure at the Rietfontein Underground Project area includes:

- tarred R536 regional main access road leading from the town of Sabie past the project;
- gravel site access road;
- Old DMS process plant site – all equipment and infrastructure removed/demolished;
- Portals providing access to underground operation;
- Underground development – haulages, orepasses, incline shaft, etc.

Available/existing infrastructure at the Frankfort Underground Project area includes:

- tarred R533 regional main access road leading to Pilgrims rest;
- gravel site access road;
- Old DMS process plant site – all equipment and infrastructure removed/demolished;
- portal to underground operation.

Available/existing infrastructure at the CDM Underground Project area includes:

- tarred R533 regional main access road leading to Pilgrims rest;
- gravel site access road;
- Old DMS process plant site – all equipment and infrastructure removed/demolished;
- portal to underground operation.

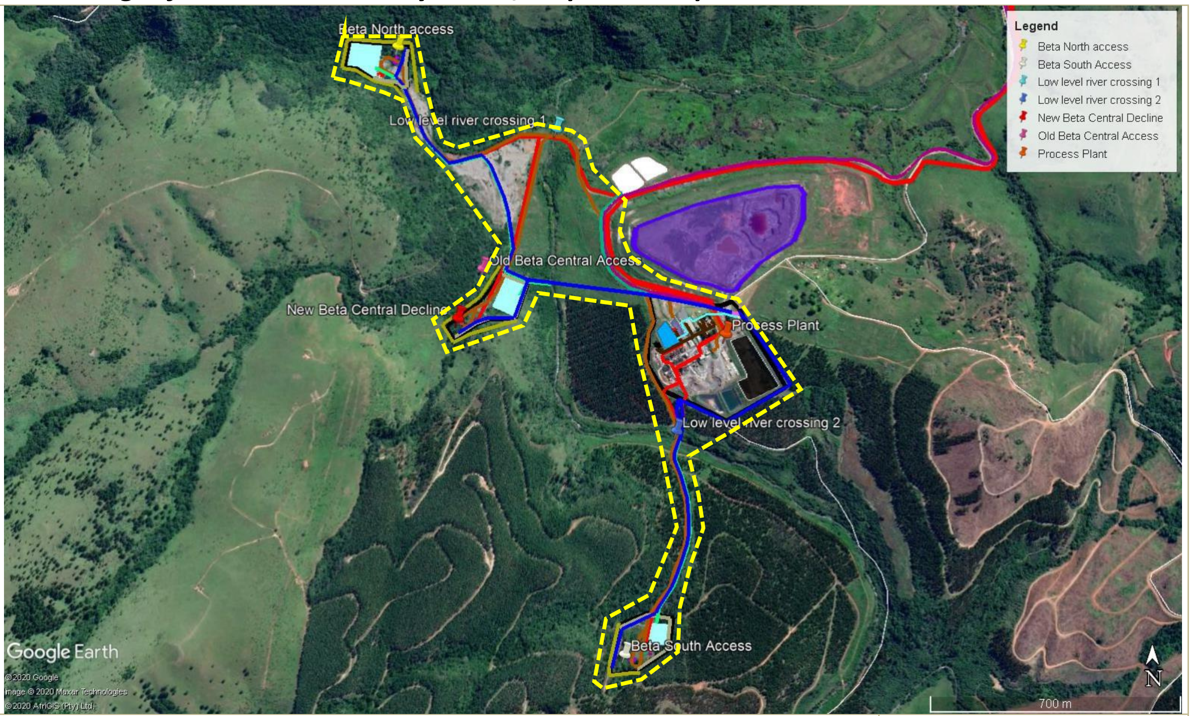
In order to effectively establish the underground mining operations and processing plant, a number of infrastructure items will be required. The required infrastructure will include, but is not limited to:-

- new process and beneficiation plant;

- offices – mobile/prefabricated offices;
- fuel storage facilities;
- earth moving vehicle workshop;
- mining and engineering stores;
- first aid station;
- control room;
- mining waste sorting /management and salvage yard;
- sewage handling facilities;
- diesel generator sets;
- additional power distribution transformers – specifically for the underground mining operations;
- additional 8 MVA supply infrastructure;
- new 6.6 kV overhead line from the existing Eskom consumer substation;
- power supply overhead lines feeding underground workings;
- ROM ore haul roads;
- site security and access control;
- mining settling and collection dam (stormwater and pollution control);
- surface water management infrastructure
- waste rock dumps and ROM pads;
- potable water treatment plant;
- underground infrastructure;
  - power supply;
  - water supply;
  - Ore handling infrastructure (Orepasses, conveyors, incline winder with required shaft equipment);and
  - dewatering system.
- Surface ore handling and load out facilities.

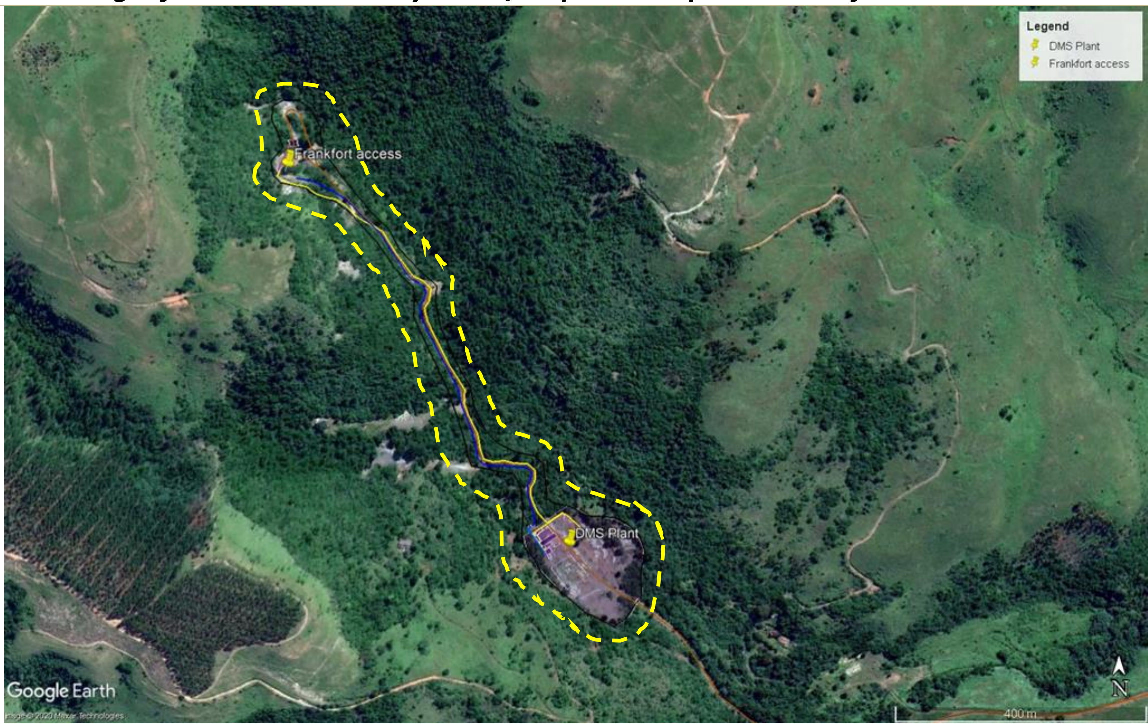
The extent of the mining and shared infrastructure battery limit is illustrated with the bright yellow dotted line in *Figures 27, Figure 28, Figure 29* and *Figure 30*.

Figure 27: Mining Infrastructure Battery Limit / Capital Footprint - Beta



Mining Infrastructure Battery Limit / Capital Footprint – Beta	April 2022

Figure 28: Mining Infrastructure Battery Limit / Capital Footprint - Frankfort

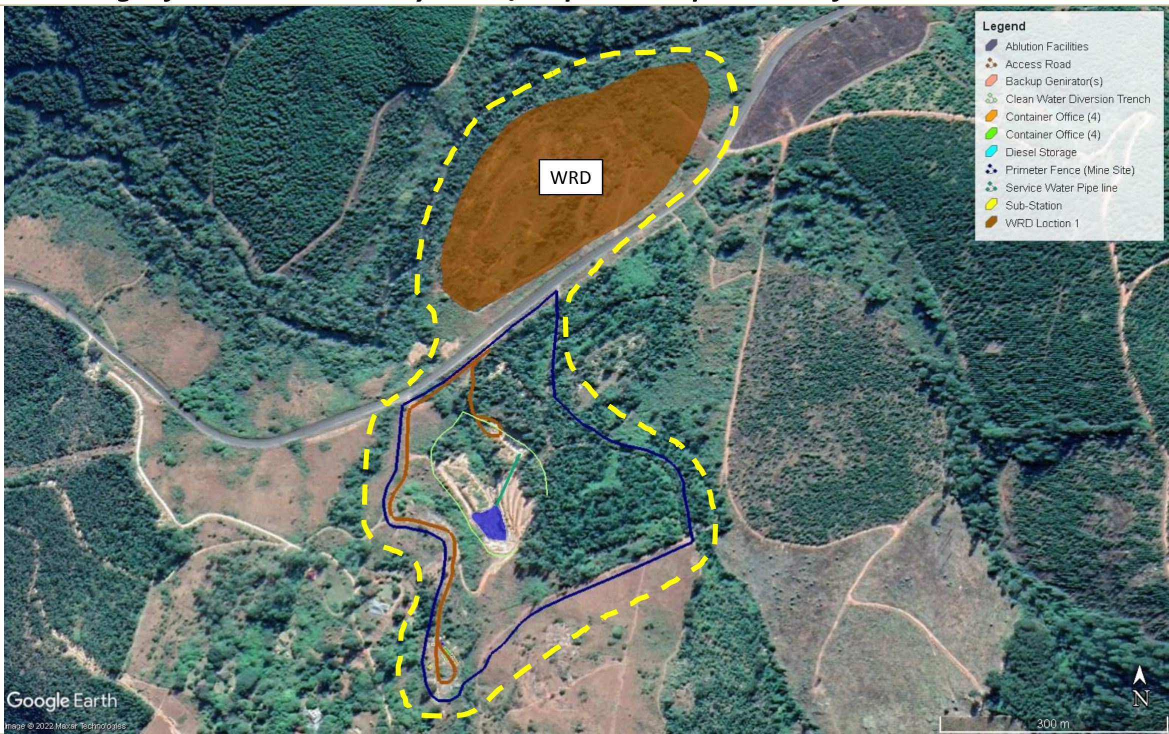


Mining Infrastructure Battery Limit / Capital Footprint - Frankfort	April 2022

Figure 29: Mining Infrastructure Battery Limit / Capital Footprint - CDM

Mining Infrastructure Battery Limit / Capital Footprint - CDM	April 2022

Figure 30: Mining Infrastructure Battery Limit / Capital Footprint - Rietfontein



Mining Infrastructure Battery Limit / Capital Footprint - Rietfontein	April 2022

Engineering and infrastructure design criteria were drafted based on the requirements for infrastructure and equipment in the main Work Breakdown Structure areas for each operation. These areas were determined and set out based on the battery limits. The summary Work Breakdown Structure is listed in the table below.

Table 20: Project Work Breakdown Structure

WBS Code	Description
WBS 0100	Access, Roads and Routes
WBS 0200	Security and Access Control
WBS 0300	Power Supply
WBS 0400	Water Supply
WBS 0500	Water Management
WBS 0600	Ventilation & Compressed Air
WBS 0700	Underground Infrastructure
WBS 0800	Mining Site
WBS 0900	Ore Storage, Load Out and Transport
WBS 1000	Vehicles
WBS 1100	Information Technology & Communication
WBS 1200	Processing Plant
WBS 1300	Indirect Capital

Engineering designs have been conducted based on and as set out in engineering and infrastructure design criteria. The designs provide Bills of Quantities which are utilised for capital cost estimations.

Access roads to the underground Project Areas are in place and in good and serviceable condition. Haul roads will have to be constructed to allow for the transport of run of mine ore and waste rock to the run of mine stockpile located at the process plant and waste rock dumps located at the CDM operations, respectively. The haul roads, which were not forming part of the project access or regional paved roads, will cater for single-way traffic. Haul roads were designed at a maximum gradient of 10° and consider the types of vehicles to travel on these roads.

Power supply is currently available to the TGM plant area. Power is supplied from the Ponieskrans Eskom consumer substation located in close proximity to the TGM Plant at 22 kV via a single overhead line feeding from the Eskom Groothout Distribution substation. Power is stepped down at the Ponieskrans substation to 6.6 kV and feeds the TGM Plant intake and distribution substation. The current supply allocation to the operation is 2.5 MVA (1 x 2.5 MVA 22kV / 6.6 kV transformers and 1 x 2.5 MVA 22 kV / 6.6 kV transformers providing spare capacity).

TGM is in the process of securing an additional 12 MVA allocation. This will require upgrades to the Lydenburg Eskom Transmission substation, Groothout Eskom distribution substation, overhead line from the Groothout substation to the Ponieskrans substation and the Ponieskrans substation. This will take 24 months to complete from the date of approval (accepted as August 2022).

During the initial 17 months of mining only the Beta underground mine will be operational. Power requirements will thus consist of the first portion of the process plant as well as the requirements for the Beta operation. The requirement amounts to 7.2 MVA. The existing allocation of 2.5 MVA and the applications in process for a further 8 MVA will thus be sufficient to supply this phase of the project. Production at the process plant is however planned to start 4 months prior to the full grid power allocation being available and the process plant will thus be supplied from diesel generators.

In month 34 of production the Rietfontein operation starts up and will require an additional 2 MVA. This will bring the total power requirement to 9.2 MVA. The available allocation of 10.5 MVA will thus be sufficient to support the addition of the Rietfontein operation.

In month 70 of mining the CDM and Frankfort operations will start production. This will require an additional 4.5 MVA allocation. TGM will well in advance do the application for this additional allocation to ensure the power is available in time.

Back-up diesel generators will also be supplied at each of the mining operations to supply power to critical services at the mining operations.

The Frankfort, CDM and Rietfontein underground mining operations currently do not have the allocation for grid power supply. An application process is in progress to secure additional supply to ensure grid power is available to these operations when required.

Water supply will mainly consist of water sourced from dewatering the existing underground workings of each operation, collected run-off water and abstraction from the Blyde River if required. Water requirements have been estimated for the individual water usage areas including the underground mining operations, process plant, offices, and admin areas as well as the tailings storage facilities. A static water balance has been completed for each of the project operational areas (Plant, Beta, Rietfontein, Frankfort and CDM). Estimations indicate that the operation will be water-positive at peak inflow of water into the underground operations. Water from the underground operations will also be utilised for the supply of potable water to the Project, and this will pass through a potable water treatment plant. The treated water will subsequently be distributed to storage facilities located across the operation for use.

The additional service water will be sourced from boreholes and potable water will be trucked from the town of Sabie and Pilgrims Rest if required.

Pumping systems, catchment and diversion trenches and dams were designed based on the expected water that needs to be dewatered from the underground operations and run-off water that will be generated from the dirty mining areas of the underground projects.

Other facilities that have been allowed for include, but are not limited to, workshops, stores, fuel storage and refuelling facilities, wash bay, underground ventilation infrastructure, underground ore transport infrastructure and surface and underground water management infrastructure.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG)[9]

Theta Gold operates its mines in South Africa which as a country has embraced ESG changes and been on the front foot in development and implementation of ESG across the country.

Design and Construction with EGS Considerations

During the design phase of the Underground gold mine operations and metallurgical plant the Company has looked at initiatives that will reduce the carbon emissions and fewer GHG, which are less polluting, and contribute less to climate change.

Theta Gold will have in place an Ecological Compensation Programme which includes:

- Theta has offered an Ecological Compensation program for continued mining to the Department of Forestry Fishery Environment (DFFE).
- Contribution to the long-term security and biodiversity and ecosystem services through rehabilitating the ecological and hydrological functioning contributing to the long-term security of biodiversity and ecosystem services through rehabilitating the ecological and hydrological functioning of the upper portions of the Blyde River Catchment and replenishing the water licenced abstraction volume.
- Invasive Alien tree control and revegetation.
- Fire belt implementation as set out in the Ecological Compensation Programme.
- Control, through regular and repeated reconnaissance and control measures, all invasive alien trees within the riparian zone of the Blyde River.
- Implement erosion and sediment control operations on all cleared of IAPs and other susceptible areas, by revegetating all areas cleared of IAPs with indigenous plant species to the level of a cover of 15% within 10 years, with the objective of removing unnatural levels of sediment input into the Blyde River system.
- A water and waste management system have been designed for the operations that will ensure that all affected water is contained, recycled and reused in the system.
- Infrastructure layouts have been designed to be located on already disturbed footprints. Therefore, no new clearance of vegetation will take place.
- Environmental Monitoring Programme.
- Gold Process plant design, including
  - Emissions Solution and Reporting
    - Identify, track and benchmark operational greenhouse gas emissions
  - Energy efficient equipment and reduced carbon footprint by reducing wastage
    - Training and awareness programmes
  - International Cyanide Management Institute Code
    - Cyanide destruction and detoxification
  - Comply with ISO 14001 standards
- Mine design
  - Optimising processes and system
  - Optimising compressed air systems and new ventilation controls
  - Using high precision drill rigs to minimize rework
  - Using fuel additives and other business improvement initiatives to optimize equipment energy consumption.

[9] Note: The ESG section included in this FS Report has been prepared solely by Theta Gold and does not form part of the FS work prepared and signed-off by Minxcon.

Social Aspects:

- Occupational Health and Safety
    - Proactive safety culture leading to Zero Harm focused on visible, felt leadership and discouraging undesirable behavior and acts (Behavior based safety)
    - HIV and Aids programme
    - TB programme
    - Other STI's programme
    - Employee wellness programme
    - Substance abuse programme
    - Communicable diseases protocols (Covid-19 protocols)
    - Vaccinations (Covid-19)

- Community forums
    - Promoting communication between affected stakeholder to forge a transparent and inclusive relationship
    - Promote active participation of host communities and other affected parties in matters of common interest
    - Identify and manage conflicts timeously

- Promote local economic growth
    - Procurement and enterprise development
    - Exploiting synergies between the SLP and the LED (Local Municipality)
    - Infrastructure development
    - Enterprise incubation
    - 4IR initiatives and innovation

- Utilize and expand the existing skills base for the empowerment of historically disadvantage people
    - Human resource development programme
    - Skills development plan
    - Career development plans
    - Mentorship and couching plans
    - Internships
    - Skills transfer programme (on-the-job training)
    - Career guidance programme (primary and high school kids)

Figure 31 Management interacting with local school kids on Madiba day by making a difference in the community

PROJECT IMPLEMENTATION

The project execution plan will consist of a multi-phased production build-up strategy to reach ROM production outputs of 45 ktpm from the various underground operations.

The establishment of the underground mining operations will necessitate the following major work.

- Completion of required governmental and regulatory approvals;
- Construction of the surface footprint at Beta, Rietfontein, Frankfort and CDM mines;
- Supporting infrastructure and equipment installations to support mining;
- Water treatment plants and surface water management infrastructure;
- Making safe and re-supporting historic mining areas;
- Procurement of mining equipment;
- Orebody development;
- Commissioning of tailings infrastructure; and
- Commissioning of the process plant.

The overriding requirement is to take maximum advantage of the integrated project plan between surface footprint, tailings, and processing plant. This approach will ensure synergies throughout the project, reducing risks and project slippage.

- Other key aspects of the execution strategy are:
    - Establish and maintain a dedicated, project-specific resource base;
    - An integrated project team as described in Sections 5 and 8;
    - A contract delivery approach that capitalises on existing commercial arrangements and relationships;
    - An overriding commitment to the health, safety, environment, and community objectives for the project;
    - Existing site knowledge and past learning are to be incorporated into relevant areas of project methodology and implementation; and
    - Timeous procurement of long-lead item.

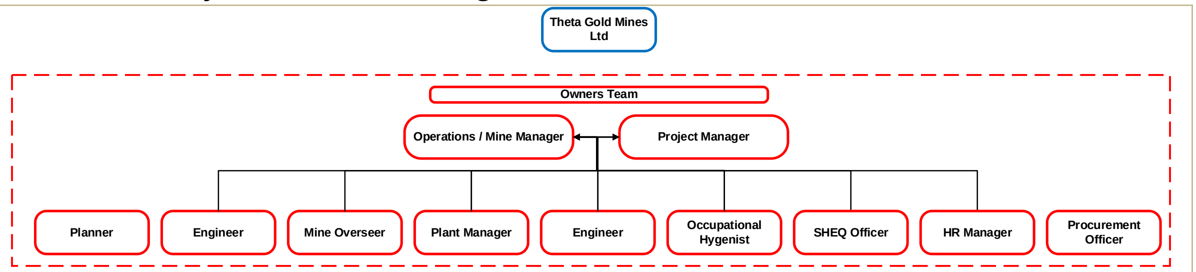
Management of the project will be implemented through an integrated project team comprising personnel from different organisations which includes:

- Owners Team – TGM;
- Contractors and Consultants – Various service providers and contractors; and
- Project Manager – TGM.

The project management team will be full-time TGM employees with various contractor companies coming on board as required. In order to achieve successful project completion, other specialist personnel or organisations may supplement the project team on an as-required basis. The project team will be located in a dedicated project office at the mine site.

In order to successfully execute the Project, an owner's project management team will have to be appointed. A proposed team structure is illustrated in *Figure 32*.

Figure 32: Owner's Project Execution Management Structure



Note: This structure is supported conditional to final business decisions arrived at during the completion of detailed studies and the Financial Close process. If and when a final business decision is reached that materially changes the manner in which the business will be managed, this will be amended accordingly.

Owner's Project Execution Management Structure	**April 2022**

Once the owner's project management team structure has been established and key role players have been appointed, tender processes will follow, after which the required EPC contractors will be selected and appointed.

The envisioned EPC contractors will be:

- Mining EPC;
- Process Plant EPC;
- Bulk Electrical Supply EPC; and
- General Supporting Infrastructure EPC.

PROJECT APPROVALS

The Beta, Frankfort and CDM Projects are located within the boundaries of an existing and executed mining tenement. Amendments to the existing mining right are required and are currently in an advanced stage. No additional tenement applications are required.

Portions of the Beta and CDM Project Areas fall within a land parcel recently demarcated as a proposed Nature Reserve. TGM has submitted conditions for continued mining for consideration to the authorities as the mining tenement predates the proposed Nature Reserve.

The Rietfontein Project occurs within the boundary of a mining tenement that has been granted and is in the process of execution for final registration.

The primary agencies involved in permits and environmental approvals for the Project are:

- Department of Mineral Resources and Energy (DMRE);
- Department of Environment, Forestry and Fisheries (DFFE);
- Department of Water and Sanitation (DWS).

A number of key environmental approvals and water use license applications are in progress with all permits anticipated to be received by Q2 2023[10].

[10] Ref to ASX Release dated 18 July 2022 "Permitting Update – TGME Underground Gold Mine Project"

PROJECT TIMELINE

The project schedules for the mining operation, process plant, and Tailings Storage Facility (TSF) should be aligned in order to ensure timely completion of the various project entities and delivery of sustainable production.

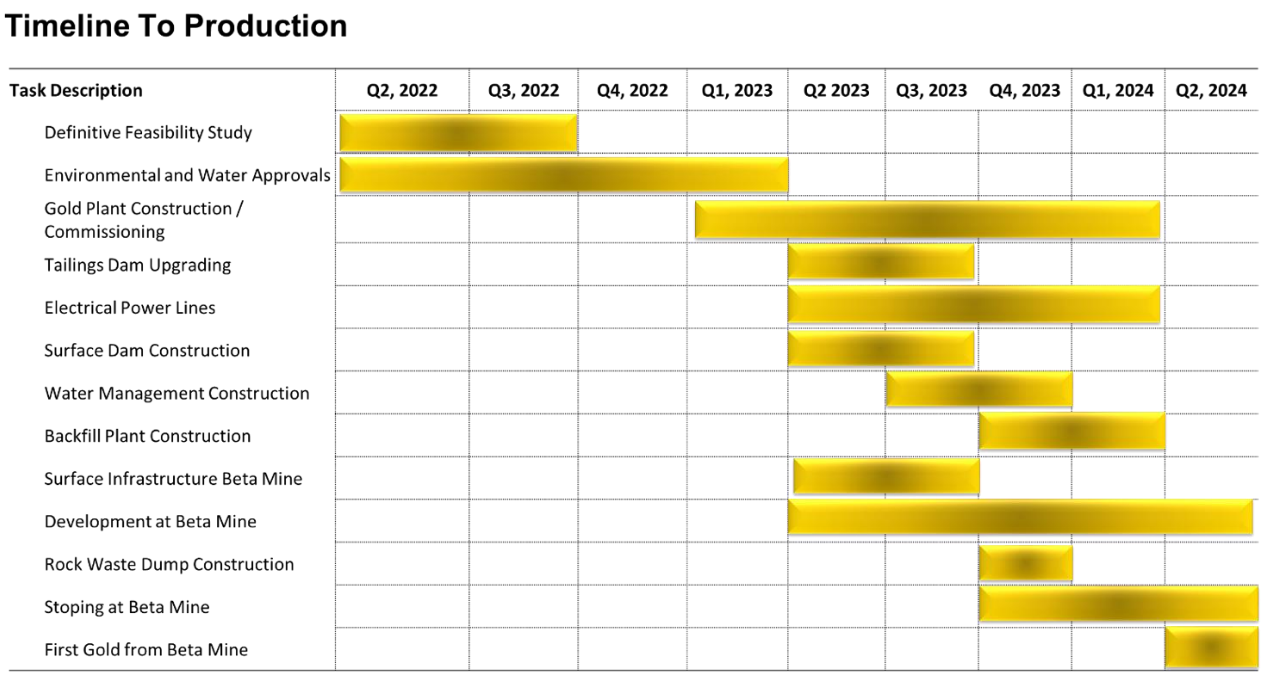
The construction work will be planned to achieve the following goals:-

- commission Beta surface infrastructure;
- commission water management systems and infrastructure ;
- commission ore flow and ore storage facilities;
- commence capital development and first stoping panels;
- commission process plant;
- commission tailings facilities; and
- re-establish and commission Rietfontein's underground operation.

The project schedule has been developed in conjunction with numerous contractors and is based on the approved scope of work, the staging requirements, and known constraints and site conditions at the time of preparation.

All required appointments of management, staff, contractors and service providers will be concluded prior to the commencement of the construction phase. A summary of the construction schedule and the key construction areas is illustrated in *Figure 33*.

Figure 33: Project Timeline



Note: Plant construction and commissioning subject to securing funding for project and permitting approvals.

CAPITAL AND OPERATING COSTS

Capital Cost

Mining Capital Cost

Capital costs for Beta, Frankfort, CDM and Rietfontein have been estimated for the mining operations and certain shared infrastructure. The costs are based on the infrastructure, facilities and equipment required for an underground mining operation with a production rate of 30 ktpm for Beta, 15 ktpm for Rietfontein, 15 ktpm for Frankfort and 10 ktpm – 20 ktpm for CDM. The mining and shared infrastructure CAPEX for the four underground operations are summarised in *Table 21* and *Table 22* in USD and AUD, respectively.

Table 21: Mining and Infrastructure Capital (USD)

WBS Code	WBS Area	Unit	Beta	Frankfort	CDM	Rietfontein
WBS 0100	Access, Roads and Routes	USDm	0.2	0.1	0.1	0.1
WBS 0200	Security and Access Control	USDm	0.2	0.0	0.1	0.1
WBS 0300	Power Supply	USDm	0.8	0.7	0.4	1.1
WBS 0400	Water Supply	USDm	0.8	0.3	0.2	0.2
WBS 0500	Water Management	USDm	3.6	2.4	3.2	2.5
WBS 0600	Ventilation & Compressed Air	USDm	0.9	0.4	0.7	0.4
WBS 0700	Underground Infrastructure	USDm	0.2	3.5	0.1	7.0
WBS 0800	Mining Site	USDm	1.2	0.7	1.1	0.4
WBS 0900	Ore Storage, Stockpiles and WRD	USDm	0.0	0.0	0.0	0.0
WBS 1000	Project Waste Management	USDm	0.0	0.0	0.0	0.2
WBS 1100	Vehicles	USDm	0.5	0.4	0.2	0.2
WBS 1200	Instrumentation and Communication	USDm	0.4	0.1	0.3	0.1
WBS 1300	Indirect Capital	USDm	0.2	0.1	0.2	0.2
Total		**USDm**	**9.0**	**8.7**	**6.5**	**12.3**

Table 22: Mining and Infrastructure Capital (AUD)

WBS Code	WBS Area	Unit	Beta	Frankfort	CDM	Rietfontein
WBS 0100	Access, Roads and Routes	AUDm	0.3	0.1	0.1	0.1
WBS 0200	Security and Access Control	AUDm	0.3	0.0	0.1	0.1
WBS 0300	Power Supply	AUDm	1.1	0.9	0.5	1.5
WBS 0400	Water Supply	AUDm	1.1	0.4	0.3	0.2
WBS 0500	Water Management	AUDm	4.8	3.2	4.3	3.3
WBS 0600	Ventilation & Compressed Air	AUDm	1.2	0.5	0.9	0.5
WBS 0700	Underground Infrastructure	AUDm	0.3	4.7	0.1	9.4
WBS 0800	Mining Site	AUDm	1.6	0.9	1.5	0.5
WBS 0900	Ore Storage, Stockpiles and WRD	AUDm	0.0	0.0	0.0	0.1
WBS 1000	Project Waste Management	AUDm	0.0	0.0	0.0	0.3
WBS 1100	Vehicles	AUDm	0.7	0.5	0.3	0.2
WBS 1200	Instrumentation and Communication	AUDm	0.5	0.1	0.4	0.1
WBS 1300	Indirect Capital	AUDm	0.3	0.1	0.3	0.2
Total		**AUDm**	**12.0**	**11.6**	**8.7**	**16.4**

***NOTES**: 1.* Converted from USD at exchange rate of 1.333 AUD:USD.

Processing Capital Cost

The total plant capital estimation for the processing plant is summarised in *Table 23*. The capital estimate includes the construction of the plant, tailings deposition and water management. The estimated total plant capital is USD75.5 million or AUD100.7 million.

Table 23: Plant Capital

Subcategory	Total Cost	
	USDm	AUDm
Earthworks	0.8	1.1
Civil Construction	2.2	3.0
Structural Supply	2.2	2.9
Platework Supply	2.8	3.7
Mechanicals Supply	20.3	27.0
Piping & Valves Supply	2.4	3.1
Electrical Supply	4.8	6.4
Instrumentation Supply	1.0	1.3
Transport	0.7	0.9
Buildings	0.0	0.1
TSF – 30 ktpm	17.8	23.7
Underground Deposition	16.8	22.4
Water Management	3.8	5.0
Grand Total Plant Capital	**75.5**	**100.7**

NOTES: *1.* Converted from USD at exchange rate of 1.333 AUD:USD.

Total Capital Cost

Table 24 summarised the overall capital over the LOM of the TGME underground operations.

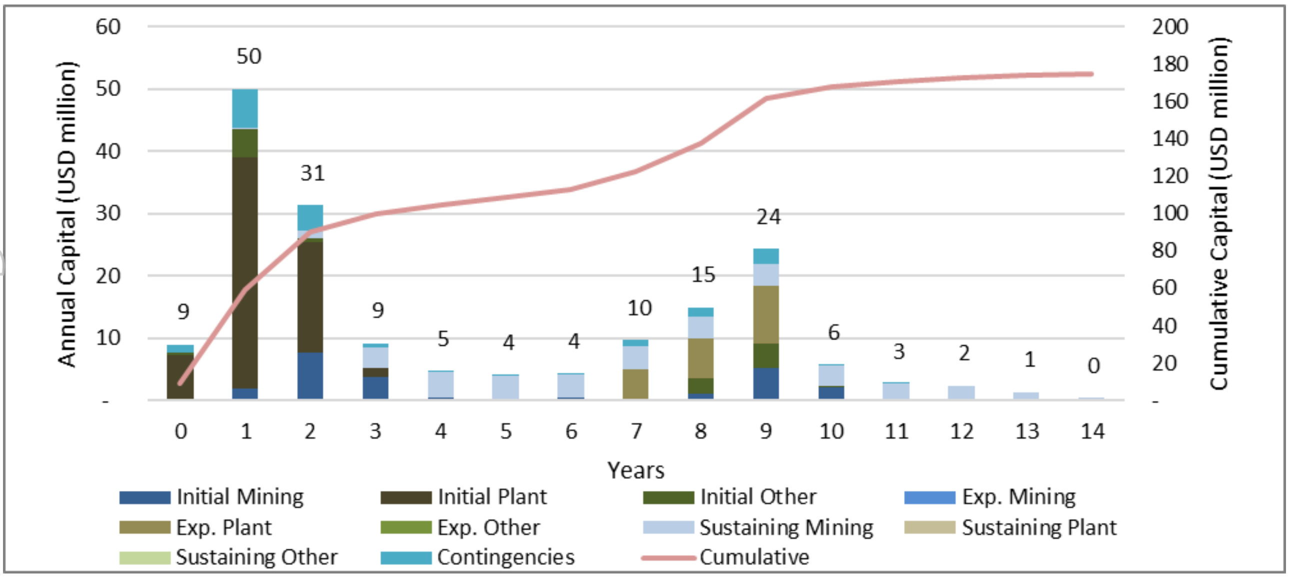
Table 24: Total Capital – Base Case

Total Capital	USDm	AUDm
Total Initial Capital	99.2	132.3
Total Expansion Capital	20.6	27.5
Total Sustaining Capital	37.0	49.3
Total Capital Contingencies	17.5	23.3
Total	**174.3**	**232.4**

NOTES: *1.* Converted from USD at exchange rate of 1.333 AUD:USD.

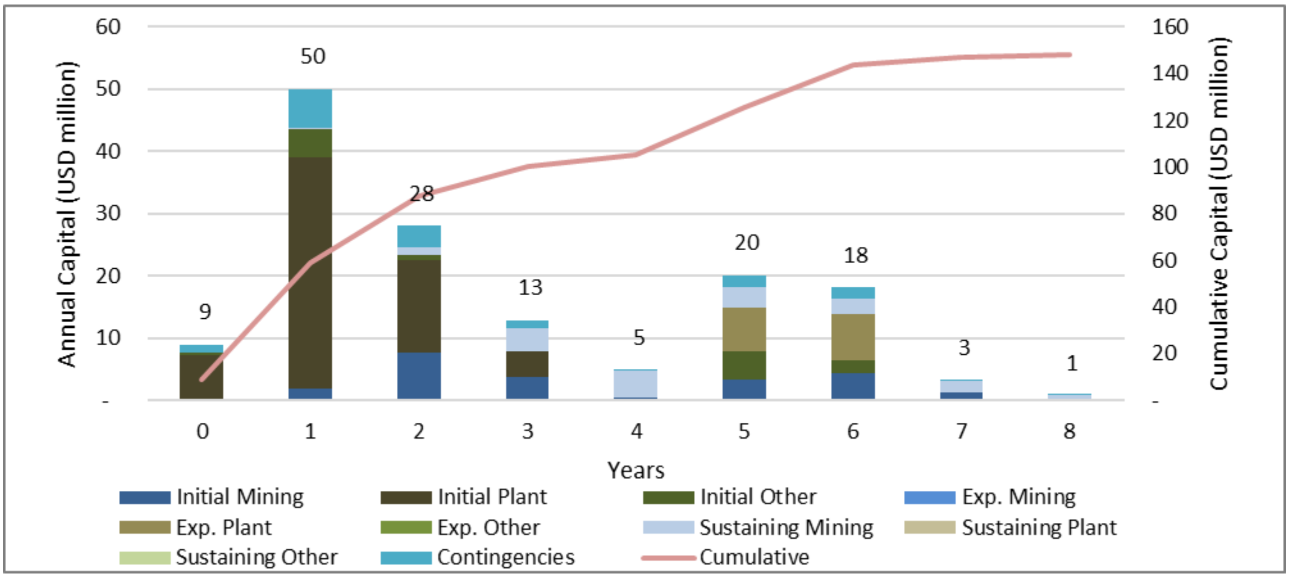
The capital schedule over the life of the project for the Base Case is illustrated in Figure 34. Capital in year 0 and year 1 consists of Beta mine's infrastructure, plant Infrastructure, oxide plant circuit 45 ktpm and the TSF. The capital in year 2 consists of the tailings backfill plant and Rietfontein mine infrastructure. Capital in year 8 and year 9 includes the DMS circuit, as well as Frankfort and CDM mines infrastructure. The engineering, procurement, and construction management ("EPCM") costs are included in the capital costs.

Figure 34: Annual Capital Schedule (USD) – Base Case



The capital schedule over the life of the project for the Ore Reserve Plan is illustrated in *Figure 35*. Capital in year 5 and year 6 includes the DMS circuit, as well as Frankfort and CDM mines infrastructure.

Figure 35: Annual Capital Schedule (USD) – Ore Reserve Plan



OPERATING COST

Mining

Beta

Operating Cost – Summary Combined

The operating costs are summarised in *Table 25*, reflecting the cost per category at steady state.

Table 25: Beta Operating Cost Summary (Category Based)

Category	Total Cost	
	AUD/t Hoisted	USD/t Hoisted
Mining	53.57	40.19
Engineering	5.31	3.98
Finance	0.47	0.35
HR	0.21	0.16
Maintenance	0.11	0.08
ORM	1.12	0.84
SHE	0.95	0.71
Total	**61.73**	**46.31**

Rietfontein

Operating Cost – Summary Combined

The operating costs are summarised in *Table 26*, reflecting the cost per category at steady state.

Table 26: Rietfontein Operating Cost Summary (Category Based)

Category	Total Cost	
	AUD/t Hoisted	USD/t Hoisted
Mining	150.48	112.89
Engineering	21.07	15.81
Finance	1.16	0.87
HR	0.59	0.44
Maintenance	0.08	0.06
ORM	3.01	2.26
SHE	2.60	1.95
Total	**179.00**	**134.28**

Frankfort Mine

Operating Cost – Summary Combined

The operating costs are summarised in *Table 27*, reflecting the cost per category at steady state.

Table 27: Frankfort Operating Cost Summary (Category Based)

Category	Total Cost	
	AUD/t Hoisted	USD/t Hoisted
Mining	28.91	21.69
Engineering	9.68	7.26
Finance	0.79	0.59
HR	0.37	0.28
Maintenance	0.08	0.06
ORM	2.01	1.51
SHE	1.61	1.21
Total	**43.47**	**32.61**

CDM Mine

Operating Cost – Summary Combined

The operating costs are summarised in *Table 28* , reflecting the cost per category at steady state.

Table 28: CDM Operating Cost Summary (Category Based)

Category	Total Cost	
	AUD/t Hoisted	USD/t Hoisted
Mining	47.57	35.69
Engineering	5.84	4.38
Finance	0.56	0.42
HR	0.27	0.20
Maintenance	0.11	0.08
ORM	1.41	1.06
SHE	1.16	0.87
Total	**56.92**	**42.70**

Processing

The operating cost for the processing plant is detailed in *Table 29* for both USD and AUD terms for the two phases of the plant. The plant will operate on generator power for a total of 4 months between the time when the plant is constructed, and the electrical infrastructure is in place. For this period, generator rental is estimated to be USD75,611/month or AUD100,790/month and the cost of power increases to USD16.4/t or AUD21.9/t.

Table 29: Processing Operating Cost Summary

Type	Item	Unit	Phase 2 – CDM, Rietfontein and Beta	Phase 3 – All Ore
AUD Terms				
Fixed	Labour - Plant	AUD/month	122,700	122,700
	Labour - Underground Deposition	AUD/month	53,951	53,951
Fixed Total		**AUD/month**	**176,651**	**176,651**
Variable	Reagents & Grinding Media	AUD/t	9.1	12.4
	Power	AUD/t	8.8	15.3
	Water	AUD/t	0.2	0.2
	Consumables	AUD/t	0.2	0.2
	Laboratory	AUD/t	0.5	0.5
	Crushing	AUD/t	1.1	1.1
	Maintenance	AUD/t	1.7	2.9
	TSF Deposition	AUD/t	2.1	2.1
	Underground Deposition	AUD/t	15.8	15.8
	DMS Reject Transport & Deposition	AUD/t Reject Material	0.9	0.9
Variable Total		**AUD/t**	**40.5**	**51.4**
USD Terms				
Fixed	Labour - Plant	USD/month	92,048	92,048
	Labour - Underground Deposition	USD/month	40,473	40,473
Fixed Total		**USD/month**	**132,522**	**132,522**
Variable	Reagents & Grinding Media	USD/t	6.8	9.3
	Power	USD/t	6.6	11.5
	Water	USD/t	0.2	0.2
	Consumables	USD/t	0.2	0.2
	Laboratory	USD/t	0.4	0.4
	Crushing	USD/t	0.9	0.9
	Maintenance	USD/t	1.3	2.2
	TSF Deposition	USD/t	1.5	1.5
	Underground Deposition	USD/t	11.8	11.8
	DMS Reject Transport & Deposition	USD/t Reject Material	0.7	0.7
Variable Total		**USD/t**	**30.4**	**38.5**

Project Operating Cost

The total Operating Cost summary over the Base Case LOM in AUD and USD terms is provided in *Table 30* respectively, as a cost per plant feed tonne.

Table 30: Total Operating Cost Summary (Average over Life of Mine) – Base Case

Description	USD/t	AUD/t
Total Mining OPEX	66.9	89.2
Total Plant OPEX	20.2	26.9
Total TSF OPEX	8.5	11.3
Total Central Services OPEX	6.2	8.3
Total Refining Charges and Penalties	0.4	0.5
Total Environmental and Social Cost	8.7	11.6
Total Other Cost	0.9	1.2
Total Corporate Overheads	3.5	4.7
Contingencies	10.9	14.5
Total Project OPEX	**126.2**	**168.3**

The total Operating Cost summary over the Ore Reserve Plan LOM in AUD and USD terms is provided in *Table 31* respectively, as a cost per plant feed tonne.

Table 31: Total Operating Cost Summary (Average over Life of Mine) – Ore Reserve Plan

Description	USD/t	AUD/t
Total Mining OPEX	72.7	96.9
Total Plant OPEX	19.9	26.5
Total TSF OPEX	6.4	8.5
Total Central Services OPEX	7.2	9.6
Total Refining Charges and Penalties	0.4	0.5
Total Environmental and Social Cost	9.7	12.9
Total Other Cost	1.1	1.5
Total Corporate Overheads	4.5	6.0
Contingencies	11.2	14.9
Total Project OPEX	**133.1**	**177.5**

FINANCIAL COST INDICATORS

The operating costs in the financial model were reported into different categories as defined by the World Gold Council. Table 32 illustrates a breakdown of all the costs included in each costing category:

a. (Operating) Adjusted Operating Cost;
b. All-in Sustaining Cost ("AISC"); and
c. All-in Cost ("AIC").

Table 32: Financial Cost Indicators

<table>
<tr><td rowspan="3">All-in Costs (AIC)</td><td rowspan="2">All-in Sustaining Costs (AISC)</td><td>Adjusted Operating Costs</td><td>On-Site Mining Costs (on a sales basis)
On-Site General & Administration costs
Royalties & Production Taxes
Realised Gains/Losses on Hedges due to operating costs Community Costs related to current operations
Permitting Costs related to current operations 3rd party smelting, refining and transport costs
Non-Cash Remuneration (Site-Based)
Stockpiles / production inventory write down
Operational Stripping Costs
By-Product Credits</td></tr>
<tr><td colspan="2">Corporate General &/Administrative costs (including share-based remuneration)
Reclamation & remediation - accretion & amortisation (operating sites)
Exploration and study costs (sustaining)
Capital exploration (sustaining)
Capitalised stripping & underground mine development (sustaining)
Capital expenditure (sustaining)</td></tr>
<tr><td colspan="3">Community Costs not related to current operations
Permitting Costs not related to current operations
Reclamation and remediation costs not related to current operations
Exploration and study costs (non-sustaining)
Capital exploration (non-sustaining)
Capitalised stripping & underground mine development (non-sustaining)
Capitalised stripping & underground mine development (non-sustaining)
Capital expenditure (non-sustaining)</td></tr>
</table>

Costs reported for the underground operations on this basis are displayed per milled tonne as well as per recovered gold ounce in USD terms and AUD terms in *Table 33* and *Table 34*, respectively.

Table 33: Project Cost Indicators – USD Terms (Weighted Average over LOM)

Item	Base Case	Reserve Plan
	USD/Feed tonne	USD/Feed tonne
Net Turnover	**271**	**276**
Mine Cost	72	78
Plant Costs	31	28
Other Costs	15	15
Royalties	11	9
Operating Costs	**128**	**130**
Renewals and Replacements	6	6
Reclamation	2	4
Off-mine Overheads	3	4
All-in Sustaining Costs (AISC)	**139**	**144**
Non-Sustaining Capital	21	45
All-in Costs (AIC)	**160**	**189**
All-in Cost Margin	**41%**	**31%**
EBITDA*	138	138
EBITDA Margin	51%	50%
Gold Recovered	1,076,431	485,950
Item	**USD/Gold oz**	**USD/Gold oz**
Net Turnover	**1,628**	**1,619**
Mine Cost	429	456
Plant Costs	184	164
Other Costs	93	90
Royalties	64	51
Operating Costs	**770**	**762**
Renewals and Replacements	34	36
Reclamation	10	22
Off-mine Overheads	20	25
All-in Sustaining Costs (AISC)	**834**	**846**
Non-Sustaining Capital	128	267
All-in Costs (AIC)	**962**	**1,113**
EBITDA*	827	810

Notes: 1. C1 Cash Costs US$706/oz include site-based mining, processing, and admin operating costs plus transport & refining costs.
2. AISC of US$834/oz includes C1 Cash Costs plus royalties, renewals and replacements, reclamation, and off-mine overheads.

Table 34: Project Cost Indicators – AUD Terms (Weighted Average over LOM)

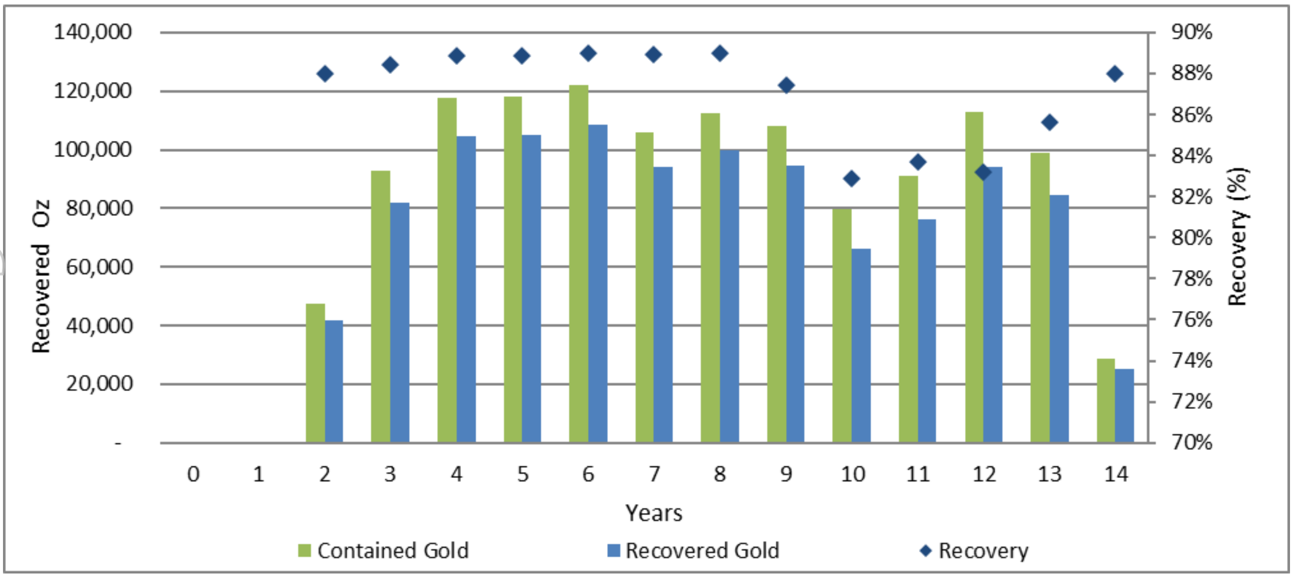
Item	Base Case	Reserve Plan
	AUD/Feed tonne	AUD/Feed tonne
Net Turnover	**361**	**368**
Mine Cost	95	103
Plant Costs	41	37
Other Costs	21	21
Royalties	14	12
Operating Costs	**171**	**173**
Renewals and Replacements	8	8
Reclamation	2	5
Off-mine Overheads	5	6
All-in Sustaining Costs (AISC)	**185**	**192**
Non-Sustaining Capital	28	61
All-in Costs (AIC)	**214**	**253**
All-in Cost Margin	**41%**	**31%**
EBITDA*	184	184
EBITDA Margin	51%	50%
Gold Recovered	1,076,431	485,950
Item	**AUD/Gold oz**	**AUD/Gold oz**
Net Turnover	**2,170**	**2,159**
Mine Cost	572	608
Plant Costs	245	219
Other Costs	124	121
Royalties	85	68
Operating Costs	**1,026**	**1,016**
Renewals and Replacements	46	49
Reclamation	13	29
Off-mine Overheads	27	34
All-in Sustaining Costs (AISC)	**1,112**	**1,127**
Non-Sustaining Capital	170	356
All-in Costs (AIC)	**1,283**	**1,483**
EBITDA*	1,103	1,080

PROJECT FINANCIALS

Saleable Product

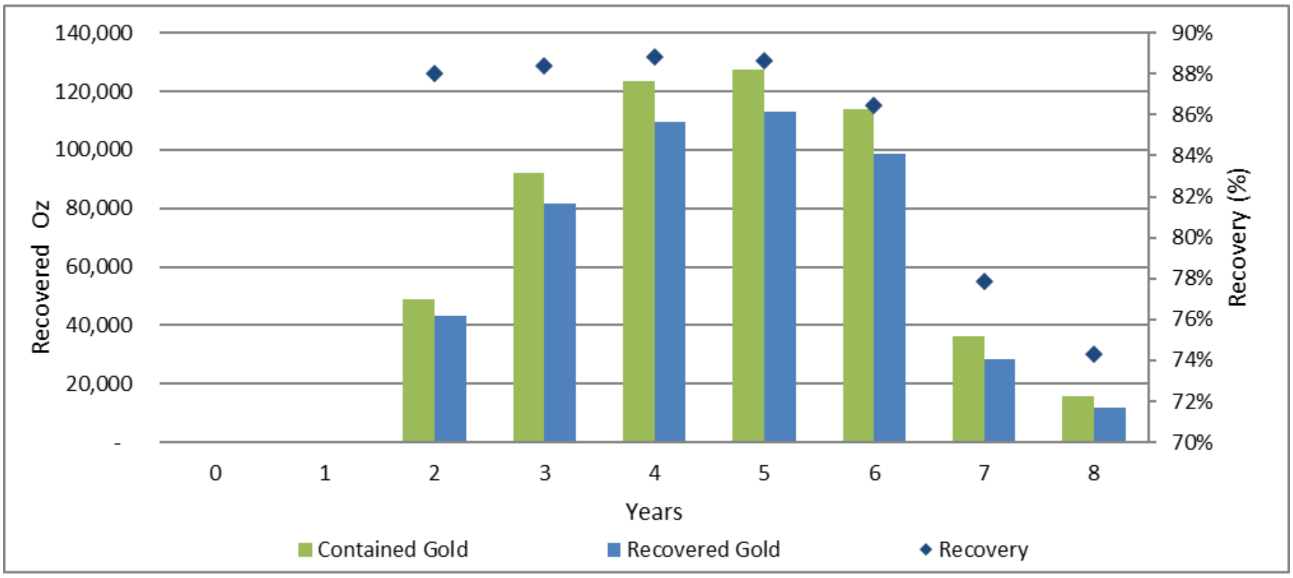
The saleable product ounces per year, for the Base Case scenario, are illustrated Figure 36. The average recovery over the LOM is 87% for an average recovered gold grade of 5.18 g/t. The first eleven months of on-reef development from Beta are stockpiled and are then used to commission the plant. The reason for the delay is due to the on-reef development ore tonnes for those eleven months only averaging approximately 2,300 tonnes per month. The plant capital was therefore delayed allowing for sufficient build-up of the ore for commissioning.

Figure 36: Annual Gold Production – Base Case



The saleable product ounces per year, for the Reserve Plan, are illustrated in *Figure 37*. The average recovery over the LOM is 87% for an average recovered gold grade of 5.30 g/t.

Figure 37: Annual Gold Production – Reserve Plan



A breakdown of the tonnes and ounces used in the LOM are displayed in *Table 35*.

Table 35: Production Breakdown in Life of Mine

Item	Project	Base Case	Reserve Plan
Waste Tonnes Mined	Kt	4,168	2,181
Ore Tonnes Mined	Kt	6,462	2,853
Total Tonnes Mined	Kt	10,631	5,034
Content in Mine Plan	Oz	1,235,216	558,339
Grade Delivered to Plant	g/t	5.95	6.09
Recovered grade	g/t	5.18	5.30
Average Recovery	%	87.1%	87.0%
Total oz. Recovered	Oz	1,076,431	485,950

ECONOMIC INPUT PARAMETERS

Forecast data is based on projections for the different commodity prices and the country-specific macro-economic parameters and is presented in calendar years from January to December.

Both the ZAR/USD exchange rate and USD commodity prices are in real terms. *Table 36* illustrates the forecasts for the first three years as well as the long-term forecast used in the financial model. The price forecasts and exchange rate forecasts are based on the median of various banks, brokers and analyst forecasts and converted to real terms. From 2025 onwards a constant long-term forecast is applied for the remaining LOM. The inflation rate was sourced from International Monetary Fund ("IMF").

Table 36: Macro-economic Forecasts and Commodity Prices over the Life of Project (Real Terms)

Item	Unit	2022	2023	2024	2025	Long-Term
		0	1	2	3	
SA Inflation Rate	%	3.50%	2.70%	2.60%	2.50%	2.30%
Exchange rate	ZAR/USD	15.65	15.60	15.53	15.49	15.49
Gold	USD/oz	1,725	1,564	1,522	1,650	1,650

Source: Median of various Banks and Broker forecasts (Minxcon), IMF.

Minxcon also considered several constant gold price scenarios to test the sensitivity to financial results. The constant prices considered are:-

- USD1,500/oz;
- USD1,600/oz;
- USD1,800/oz;
- USD2,000/oz; and
- USD2,200/oz

The results of these price scenarios are presented in the sensitivity analysis section of the report along with the forecast prices. All results are presented utilising the forecast prices unless stated otherwise.

CASH FLOWS

Minxcon's in-house DCF model was populated with the data to illustrate the NPV for the operation in real ZAR terms, which was subsequently converted to real USD terms using the exchange rate forecast. At TGME's request, the USD cash flow was also converted to AUD at exchange rate as of the effective date, 1 April 2022. The NPV is derived from post-tax, pre-debt real cash flows, using the techno-economic parameters, commodity price and macro-economic projections.

This economic analysis is based on a free cash flow and measures the economic viability of the overall project as well as the economic viability of the orebody including only Measured and Indicated Resources to demonstrate if the extraction of the Ore Reserve is viable and justifiable under a defined set of realistically assumed modifying factors.

Basis of Evaluation

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

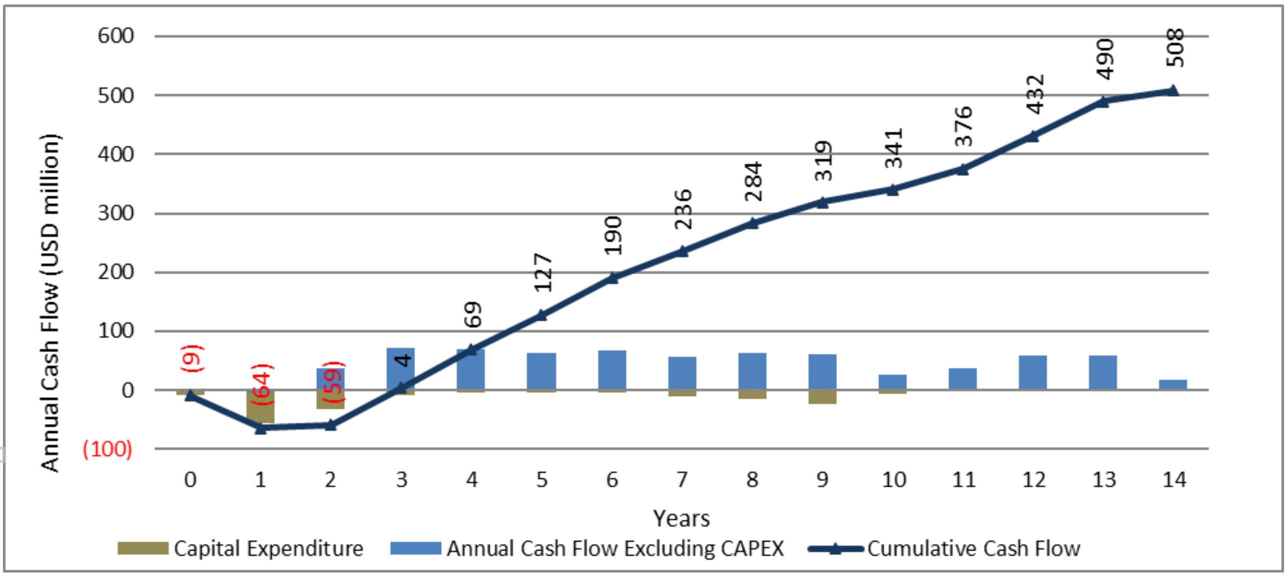
- This report details the optimised cash flow model with economic input parameters.
- The cash flow model is in real money terms and completed in ZAR.
- The DCF valuation was set up in months and starts in April 2022, but also subsequently converted to calendar years.

- The annual ZAR cash flow was converted to USD using real term forecast exchange rates for the LOM period.
- The USD cash flow was converted to AUD from USD at exchange rate of 1.333 AUD:USD as at 1 April 2022.
- A company hurdle rate of 10.0% (in real terms) was utilised for the discount factor.
- The impact of the Mineral Royalties Act using the formula for refined metals was included.
- Sensitivity analyses were performed to ascertain the impact of discount factors, commodity prices, exchange rate, grade, operating costs and capital expenditures.
- Valuation of the tax entity was performed on a stand-alone basis.
- The full NPV of the operation was reported for the operations.
- The Base Case includes Measured, Indicated and Inferred Mineral Resources in the LOM plan.
- The Ore Reserve Plan includes only Measured and Indicated Mineral Resources in the LOM, to determine the viability of the Ore Reserves.

Base Case

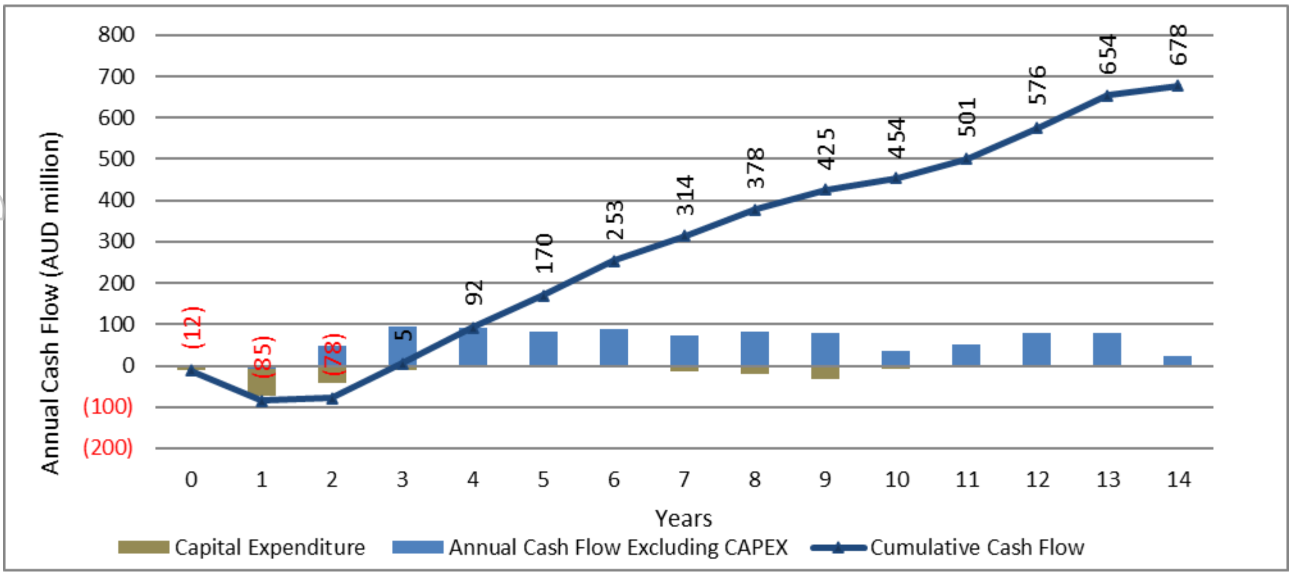
The capital expenditure, cash flow excluding capital expenditure and cumulative cash flow for the Base Case over the LOM are displayed in *Figure 38* and *Figure 39* on an annual basis in USD and AUD terms, respectively. The peak funding requirement is USD7 7 million (or AUD102 million) (inclusive of contingencies) in month 24, with a pay-back period of 31 months from start of mining and 21 months from start of processing.

Figure 38: Annual and Cumulative Cash Flow USD (Real Terms) – Base Case



NOTE: 1. Forecast Prices averaging USD1,642/oz over LOM.

Figure 39: Annual and Cumulative Cash Flow (Post-Tax) – Base Case (AUD)



NOTES:

1. Forecast Prices averaging USD1,642/oz over LOM.
2. Converted to AUD from USD at exchange rate of 1.333 AUD:USD.

The detailed real-term annual cash flow for the Base Case is illustrated in *Table 37* to follow.

Table 37: Annualised Real Cash Flow Model (USD Terms) – Base Case

Minxcon

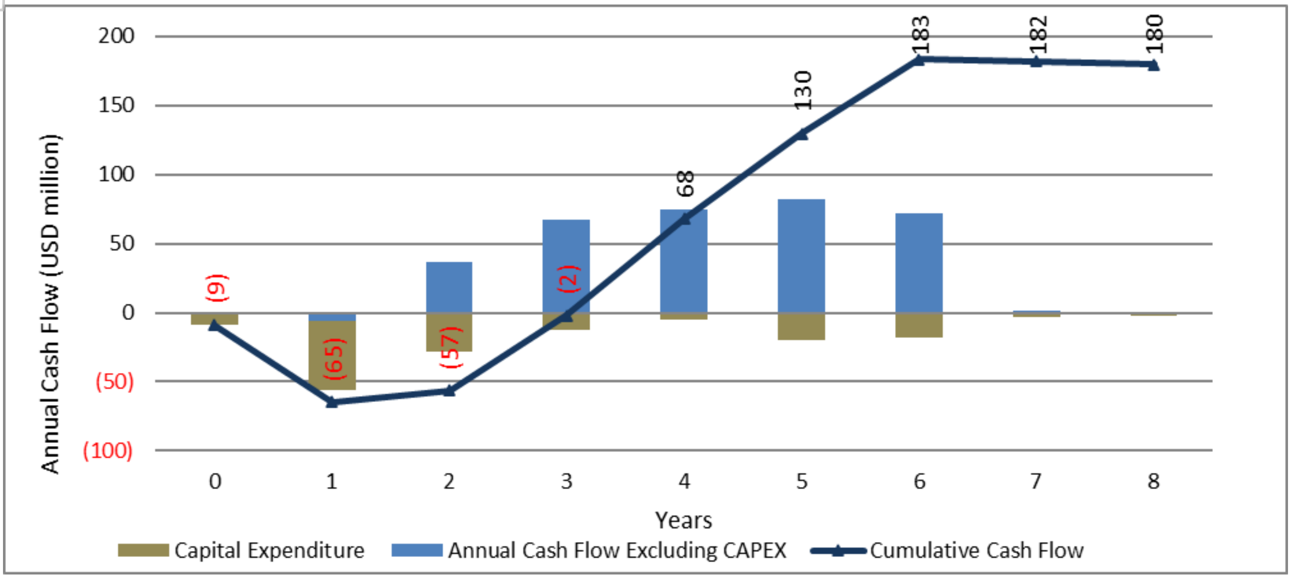
Project Title: **TGME UG Ops**
Client: TGME
Project Code: P21-013a

Project Duration		Unit	Totals															
Calendar Years				2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Financial Years		years	14	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Macro-Economic Factors (Real Terms)																		
Currency		ZAR /USD	15.50	15.65	15.60	15.53	15.49	15.49	15.49	15.49	15.49	15.49	15.49	15.49	15.49	15.49	15.49	15.49
Inflation	ZAR Inflation Rate	%	4.49%	4.30%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Inflation	US Inflation Rate	%	2.44%	3.50%	2.70%	2.60%	2.50%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%
Commodities																		
Commodity prices	Gold	USD/oz.	1,640	1,725	1,564	1,522	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650.00	1,650.00	1,650.00	1,650.00
Operating Statistics																		
Tonnes Produced																		
Waste		tonnes	4,168,212	0	58,270	173,079	406,060	456,756	462,306	428,042	404,750	354,994	380,704	426,996	219,325	180,148	165,537	51,246
Stripping ratio		Ratio	0.64	0.00	3.93	0.91	0.89	0.82	0.80	0.75	0.73	0.63	0.63	0.64	0.31	0.30	0.54	0.60
ROM		tonnes	6,462,465	0	14,818	191,154	454,438	559,578	576,901	567,858	558,262	562,396	608,629	665,926	703,506	608,990	304,710	85,299
ROM	(Max)	tonnes/mnth	58,625	-	1,235	15,929	37,870	46,632	48,075	47,322	46,522	46,866	50,719	55,494	58,625	50,749	25,393	7,108
Mill Head grade	Gold Grade	g/t	5.95	0.00	5.70	7.25	6.36	6.75	6.82	6.91	5.85	6.48	5.95	4.25	5.43	6.72	2.95	2.90
Tonnes to mill		tonnes	6,462,465	0	0	205,972	453,227	540,000	540,000	540,000	540,000	540,000	561,560	608,716	613,181	602,889	557,436	159,485
Recovered Grade																		
Recovered grade	Precious Metals	g/t	5.18	-	0.00	6.28	5.63	6.02	6.05	6.26	5.42	5.76	5.24	3.37	3.86	4.85	4.72	4.89
Metal recovered																		
Metal recovered	Gold	kg	33,481	0	0	1,294	2,551	3,250	3,266	3,381	2,925	3,110	2,945	2,053	2,366	2,926	2,633	780
Metal recovered	Gold	oz	1,076,431	-	-	41,612	82,003	104,494	104,991	108,698	94,057	100,000	94,677	66,004	76,072	94,088	84,660	25,076
Financial																		
Revenue		**USD**	**1,753,067,125**	**-**	**-**	**62,690,963**	**133,952,400**	**170,690,162**	**171,502,843**	**177,558,982**	**153,641,701**	**163,350,130**	**154,654,199**	**107,817,587**	**124,263,162**	**153,692,107**	**138,291,869**	**40,961,020**
Revenue	Gold	USD	1,753,067,125	0	0	62,690,963	133,952,400	170,690,162	171,502,843	177,558,982	153,641,701	163,350,130	154,654,199	107,817,587	124,263,162	153,692,107	138,291,869	40,961,020
Mining cost			**(462,359,719)**	**0**	**(2,496,034)**	**(14,686,542)**	**(41,923,428)**	**(49,811,952)**	**(49,201,471)**	**(47,092,738)**	**(45,907,990)**	**(44,290,005)**	**(43,507,921)**	**(38,949,521)**	**(33,818,367)**	**(29,426,526)**	**(16,495,515)**	**(4,751,708)**
Direct Cash Costs	Fixed Cost	USD	(3,553,990)	0	(53,958)	(116,326)	(375,083)	(375,083)	(375,083)	(375,083)	(375,083)	(375,083)	(446,852)	(188,843)	(188,843)	(181,081)	(95,692)	(31,897)
Direct Cash Costs	Variable Cost	USD	(416,773,028)	0	(2,215,164)	(13,235,076)	(37,737,124)	(44,908,510)	(44,353,527)	(42,436,497)	(41,359,453)	(39,888,558)	(39,105,804)	(35,219,812)	(30,555,127)	(26,570,307)	(14,900,230)	(4,287,837)
Direct Cash Costs	Contingeny	USD	(42,032,702)	0	(226,912)	(1,335,140)	(3,811,221)	(4,528,359)	(4,472,861)	(4,281,158)	(4,173,454)	(4,026,364)	(3,955,266)	(3,540,866)	(3,074,397)	(2,675,139)	(1,499,592)	(431,973)
Plant cost			**(198,132,195)**	**0**	**0**	**(5,899,499)**	**(11,311,634)**	**(14,185,397)**	**(14,305,456)**	**(14,251,919)**	**(14,185,369)**	**(15,928,994)**	**(19,269,346)**	**(21,443,443)**	**(21,473,610)**	**(21,377,573)**	**(19,155,484)**	**(5,344,472)**
Direct Cash Costs	Fixed Cost	USD	(19,812,444)	0	0	(1,091,934)	(1,461,341)	(1,539,715)	(1,539,715)	(1,539,715)	(1,539,715)	(1,756,483)	(1,828,739)	(1,828,739)	(1,828,739)	(1,804,654)	(1,539,715)	(513,238)
Direct Cash Costs	Variable Cost	USD	(160,307,733)	0	0	(4,271,247)	(8,821,963)	(11,356,100)	(11,465,245)	(11,416,575)	(11,356,075)	(12,724,420)	(15,688,848)	(17,665,299)	(17,692,725)	(17,629,504)	(15,874,361)	(4,345,372)
Direct Cash Costs	Contingeny	USD	(18,012,018)	0	0	(536,318)	(1,028,330)	(1,289,582)	(1,300,496)	(1,295,629)	(1,289,579)	(1,448,090)	(1,751,759)	(1,949,404)	(1,952,146)	(1,943,416)	(1,741,408)	(485,861)
Other Costs			**(110,342,277)**	**0**	**(1,635,544)**	**(4,008,844)**	**(7,628,891)**	**(9,858,057)**	**(10,445,509)**	**(10,751,261)**	**(10,745,314)**	**(11,253,826)**	**(11,334,092)**	**(7,893,647)**	**(8,287,363)**	**(8,458,604)**	**(6,161,916)**	**(1,879,408)**
Direct Cash Costs	Other Cost Fixed	USD	(28,235,730)	0	(885,682)	(1,573,046)	(2,109,352)	(2,109,352)	(2,109,352)	(2,109,352)	(2,109,352)	(2,109,352)	(2,966,725)	(2,668,749)	(2,668,749)	(2,616,731)	(1,709,735)	(490,199)
Direct Cash Costs	Other Costs Variable	USD	(63,537,859)	0	(108,358)	(1,238,061)	(4,047,397)	(6,118,222)	(6,681,504)	(6,986,109)	(7,004,489)	(7,495,283)	(6,735,456)	(3,898,002)	(4,283,382)	(4,516,487)	(3,338,336)	(1,086,773)
Direct Cash Costs	Contingeny	USD	(8,167,849)	0	(88,470)	(250,188)	(547,951)	(732,254)	(782,386)	(809,496)	(811,132)	(854,812)	(863,494)	(584,441)	(618,740)	(634,856)	(449,278)	(140,351)
Direct Cash Costs	Rehabilitation	USD	(10,400,838)	0	(553,034)	(947,549)	(924,191)	(898,229)	(872,266)	(846,304)	(820,342)	(794,379)	(768,417)	(742,454)	(716,492)	(690,529)	(664,567)	(162,085)
Direct Cash Costs			**(770,834,191)**	**0**	**(4,131,578)**	**(24,594,886)**	**(60,863,954)**	**(73,855,405)**	**(73,952,436)**	**(72,095,918)**	**(70,838,673)**	**(71,472,825)**	**(74,111,360)**	**(68,286,611)**	**(63,579,340)**	**(59,262,704)**	**(41,812,915)**	**(11,975,588)**
Production Costs	Initial Capital expenditu	USD	**(98,840,686)**	(7,778,558)	(43,541,466)	(26,094,621)	(5,137,420)	(559,106)	(111,535)	(380,155)	(304,124)	(3,457,805)	(9,062,061)	(2,402,919)	(10,915)	0	0	0
Production Costs	Contingency	USD	**(17,447,867)**	(1,150,907)	(6,235,734)	(4,071,199)	(721,437)	(67,093)	(13,384)	(45,619)	(991,636)	(1,429,382)	(2,431,818)	(288,350)	(1,310)	0	0	0
Production Costs	SIB	USD	**(36,988,778)**	0	(199,683)	(1,174,923)	(3,353,874)	(3,984,956)	(3,936,118)	(3,767,419)	(3,672,639)	(3,543,200)	(3,480,634)	(3,115,962)	(2,705,469)	(2,354,122)	(1,319,641)	(380,137)
Production Costs		**USD**	**(944,743,198)**	**(8,929,465)**	**(54,108,460)**	**(55,935,629)**	**(70,076,685)**	**(78,466,561)**	**(78,013,473)**	**(76,289,111)**	**(80,582,778)**	**(86,403,787)**	**(98,441,268)**	**(74,093,842)**	**(66,297,034)**	**(61,616,826)**	**(43,132,556)**	**(12,355,724)**
Fully Allocated Costs	Royalty	USD	(68,704,885)	0	0	(313,455)	(669,762)	(7,997,108)	(8,145,399)	(8,568,469)	(6,441,248)	(6,803,974)	(5,133,981)	(3,100,663)	(5,122,281)	(7,531,959)	(6,914,593)	(1,961,994)
Fully Allocated Costs	Other Fixed Costs	USD	(21,999,157)	0	(987,081)	(1,699,389)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(568,020)
Fully Allocated Costs		**USD**	**(1,035,447,240)**	**(8,929,465)**	**(55,095,541)**	**(57,948,473)**	**(72,450,507)**	**(88,167,729)**	**(87,862,933)**	**(86,561,640)**	**(88,728,087)**	**(94,911,822)**	**(105,279,309)**	**(78,898,565)**	**(73,237,122)**	**(71,004,506)**	**(51,902,871)**	**(14,936,292)**
EBITDA		**USD**	**891,061,270**	**0**	**(5,118,659)**	**36,083,234**	**70,714,624**	**87,133,589**	**87,700,948**	**95,190,534**	**74,657,720**	**83,369,270**	**73,704,798**	**34,726,253**	**53,743,734**	**85,041,723**	**87,708,639**	**26,404,865**
EBIT		**USD**	**717,619,885**	**(8,929,465)**	**(55,095,541)**	**4,742,490**	**61,501,893**	**82,522,433**	**83,639,910**	**90,997,341**	**64,913,614**	**68,438,308**	**49,374,890**	**28,919,022**	**51,026,040**	**82,687,601**	**86,388,998**	**26,024,728**
Taxation		USD	(209,203,886)	0	0	0	0	(17,741,804)	(25,522,021)	(27,920,593)	(19,458,720)	(20,492,073)	(14,158,341)	(7,999,568)	(15,236,380)	(25,501,018)	(27,021,297)	(8,152,070)
Income after tax		USD	507,948,376	(8,929,465)	(55,095,541)	4,742,490	61,501,893	64,780,629	58,117,889	63,076,748	45,454,894	47,946,236	35,216,549	20,919,453	35,789,660	57,186,582	59,367,700	17,872,658
Working capital changes		USD	190,975	0	190,974	338,342	1,252,145	263,359	(5,933)	(252,673)	366,701	(154,279)	283,635	508,072	(664,864)	(877,947)	(904,930)	(138,281)
Cash Flow				2,022	2,023	2,024	2,025	2,026	2,027	2,028	2,029	2,030	2,031	2,032	2,033	2,034	2,035	2,036
Net Cash Flow	Annual cash flow	USD	**508,139,350**	(8,929,465)	(54,904,567)	5,080,832	62,754,038	65,043,988	58,111,957	62,824,075	45,821,595	47,791,957	35,500,184	21,427,526	35,124,796	56,308,635	58,462,770	17,734,377

Reserve Plan

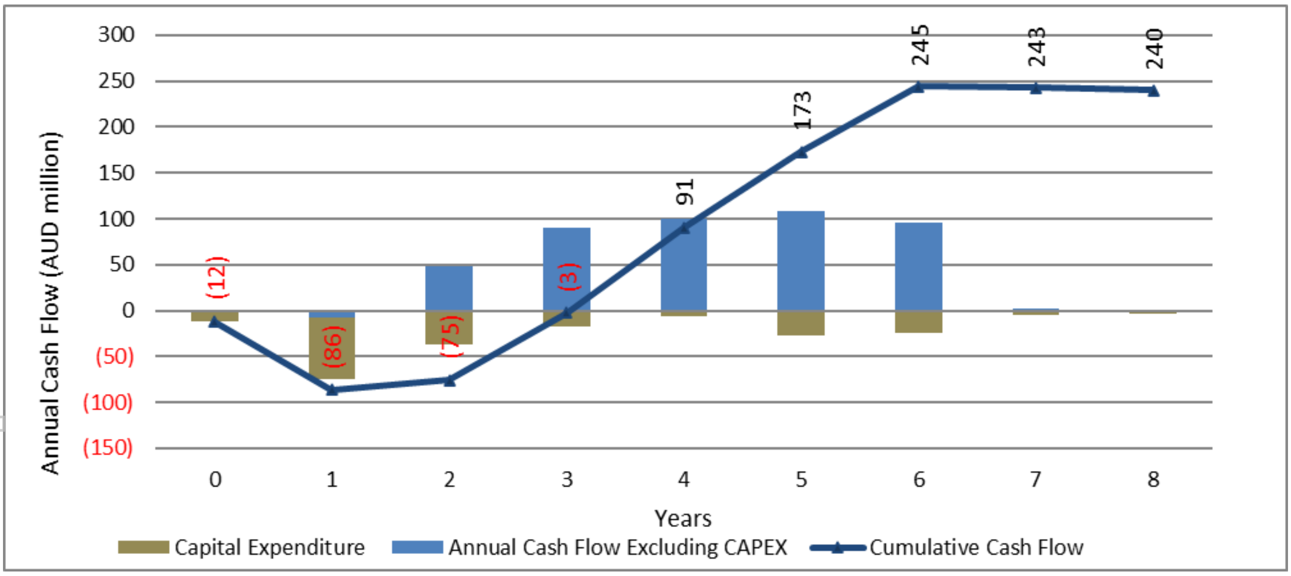
The capital expenditure, cash flow excluding capital expenditure and cumulative cash flow for the Reserve Plan over the LOM are displayed in *Figure 40* and *Figure 41* on an annual basis in USD and AUD terms, respectively. The cash flow levels out when CDM and Frankfort operate on their own, illustrating the two mines are marginal.

Figure 40: Annual and Cumulative Cash Flow USD (Real Terms) – Ore Reserve Plan



NOTE: Forecast Prices averaging USD1,642/oz over LOM

Figure 41: Annual and Cumulative Cash Flow (Post-Tax) – Ore Reserve Plan (AUD)



NOTES:

1. Forecast Prices averaging USD1,642/oz over LOM.
2. Converted to AUD from USD at exchange rate of 1.333 AUD:USD.

The detailed real-term annual cash flow for the Reserve Plan is illustrated in *Table 38* to follow.

Table 38: Annualised Real Cash Flow Model (USD Terms) – Reserve Plan

Minxcon

Project Title: **TGME UG Ops**
Client: TGME
Project Code: P21-013a

Project Duration		Unit	Totals									
Calendar Years				2022	2023	2024	2025	2026	2027	2028	2029	2030
Financial Years		years	8	0	1	2	3	4	5	6	7	8
Macro-Economic Factors (Real Terms)												
Currency		ZAR /USD	15.53	15.65	15.60	15.53	15.49	15.49	15.49	15.49	15.49	15.49
Inflation	ZAR Inflation Rate	%	4.48%	4.30%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Inflation	US Inflation Rate	%	2.53%	3.50%	2.70%	2.60%	2.50%	2.30%	2.30%	2.30%	2.30%	2.30%
Commodities												
Commodity prices	Gold	USD/oz.	1,632	1,725	1,564	1,522	1,650	1,650	1,650	1,650	1,650	1,650
Operating Statistics												
Tonnes Produced												
Waste		tonnes	2,180,624	0	66,626	208,130	466,075	522,549	293,318	258,414	281,021	84,491
Stripping ratio		Ratio	0.76	0.00	4.29	1.04	0.99	0.90	0.55	0.52	0.71	0.52
ROM		tonnes	2,853,240	0	15,519	199,203	472,897	577,999	533,510	497,434	395,244	161,435
ROM	(Max)	tonnes/mnth	48,167	-	1,293	16,600	39,408	48,167	44,459	41,453	32,937	13,453
Mill Head grade	Gold Grade	g/t	6.09	0.00	5.72	7.22	6.15	7.01	7.47	6.58	2.85	3.05
Tonnes to mill		tonnes	2,853,240	0	0	214,722	465,488	540,000	540,000	536,352	395,244	161,435
Recovered Grade												
Recovered grade	Precious Metals	g/t	5.30	-	0.00	6.26	5.45	6.32	6.50	5.72	2.22	2.27
Metal recovered												
Metal recovered	Gold	kg	15,115	0	0	1,343	2,537	3,413	3,509	3,067	879	366
Metal recovered	Gold	oz	485,950	-	-	43,193	81,566	109,730	112,826	98,620	28,254	11,761
Financial												
Revenue		**USD**	**788,316,834**	**-**	**-**	**65,073,180**	**133,237,900**	**179,243,668**	**184,301,641**	**161,095,641**	**46,152,716**	**19,212,088**
Revenue	Gold	USD	788,316,834	0	0	65,073,180	133,237,900	179,243,668	184,301,641	161,095,641	46,152,716	19,212,088
Mining cost			**(221,858,595)**	**0**	**(3,008,625)**	**(16,309,450)**	**(45,132,965)**	**(53,235,318)**	**(39,906,575)**	**(32,254,914)**	**(23,786,176)**	**(8,224,571)**
Direct Cash Costs	Fixed Cost	USD	(1,940,675)	0	(53,958)	(116,326)	(375,083)	(375,083)	(375,083)	(447,120)	(121,153)	(76,870)
Direct Cash Costs	Variable Cost	USD	(199,748,956)	0	(2,681,155)	(14,710,447)	(40,654,885)	(48,020,661)	(35,903,622)	(28,875,529)	(21,502,644)	(7,400,013)
Direct Cash Costs	Contingeny	USD	(20,168,963)	0	(273,511)	(1,482,677)	(4,102,997)	(4,839,574)	(3,627,870)	(2,932,265)	(2,162,380)	(747,688)
Plant cost			**(80,014,122)**	**0**	**0**	**(6,097,749)**	**(11,523,437)**	**(14,078,653)**	**(13,702,759)**	**(14,854,410)**	**(13,719,001)**	**(6,038,113)**
Direct Cash Costs	Fixed Cost	USD	(9,738,613)	0	0	(1,091,934)	(1,461,341)	(1,539,715)	(1,539,715)	(1,539,715)	(1,539,715)	(1,026,477)
Direct Cash Costs	Variable Cost	USD	(63,001,499)	0	0	(4,451,474)	(9,014,510)	(11,259,061)	(10,917,338)	(11,964,294)	(10,932,104)	(4,462,717)
Direct Cash Costs	Contingeny	USD	(7,274,011)	0	0	(554,341)	(1,047,585)	(1,279,878)	(1,245,705)	(1,350,401)	(1,247,182)	(548,919)
Other Costs			**(54,751,360)**	**0**	**(2,034,758)**	**(4,771,601)**	**(8,199,833)**	**(10,561,078)**	**(9,959,828)**	**(9,357,378)**	**(6,188,408)**	**(3,678,476)**
Direct Cash Costs	Other Cost Fixed	USD	(15,259,944)	0	(885,682)	(1,573,046)	(2,109,352)	(2,109,352)	(2,109,352)	(3,043,139)	(2,086,709)	(1,343,312)
Direct Cash Costs	Other Costs Variable	USD	(25,181,275)	0	(113,438)	(1,330,905)	(3,981,283)	(6,192,243)	(5,682,823)	(4,238,513)	(2,327,653)	(1,314,415)
Direct Cash Costs	Contingeny	USD	(3,599,268)	0	(88,922)	(258,452)	(542,067)	(738,842)	(693,504)	(648,067)	(392,878)	(236,538)
Direct Cash Costs	Rehabilitation	USD	(10,710,873)	0	(946,717)	(1,609,198)	(1,567,131)	(1,520,640)	(1,474,149)	(1,427,658)	(1,381,167)	(784,211)
Direct Cash Costs			**(356,624,078)**	**0**	**(5,043,383)**	**(27,178,801)**	**(64,856,234)**	**(77,875,050)**	**(63,569,162)**	**(56,466,702)**	**(43,693,586)**	**(17,941,161)**
Production Costs	Initial Capital expenditu	USD	**(98,848,431)**	(7,778,558)	(43,541,466)	(23,276,885)	(7,962,902)	(559,106)	(7,785,587)	(6,506,167)	(1,282,059)	(155,701)
Production Costs	Contingency	USD	**(16,208,973)**	(1,150,907)	(6,235,734)	(3,507,652)	(1,286,533)	(67,093)	(1,963,762)	(1,824,762)	(153,847)	(18,684)
Production Costs	SIB	USD	**(17,748,688)**	0	(240,690)	(1,304,756)	(3,610,637)	(4,258,825)	(3,192,526)	(2,580,393)	(1,902,894)	(657,966)
Production Costs		**USD**	**(503,859,631)**	**(8,929,465)**	**(55,061,272)**	**(55,268,093)**	**(77,716,307)**	**(82,760,074)**	**(83,675,213)**	**(74,643,309)**	**(47,032,386)**	**(18,773,511)**
Fully Allocated Costs	Royalty	USD	(24,972,845)	0	0	(325,366)	(666,189)	(7,920,151)	(8,429,840)	(7,295,808)	(239,430)	(96,060)
Fully Allocated Costs	Other Fixed Costs	USD	(12,342,813)	0	(987,081)	(1,699,389)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(1,704,061)	(1,136,040)
Fully Allocated Costs		**USD**	**(541,175,289)**	**(8,929,465)**	**(56,048,353)**	**(57,292,848)**	**(80,086,557)**	**(92,384,286)**	**(93,809,113)**	**(83,643,178)**	**(48,975,877)**	**(20,005,612)**
EBITDA		**USD**	**394,377,098**	**0**	**(6,030,464)**	**35,869,625**	**66,011,415**	**91,744,407**	**110,598,579**	**95,629,070**	**515,639**	**38,827**
EBIT		**USD**	**247,141,545**	**(8,929,465)**	**(56,048,353)**	**7,780,332**	**53,151,343**	**86,859,382**	**90,492,528**	**77,452,463**	**(2,823,161)**	**(793,524)**
Taxation		USD	(68,170,780)	0	0	0	0	(16,941,237)	(27,634,332)	(23,595,212)	0	0
Income after tax		USD	178,970,765	(8,929,465)	(56,048,353)	7,780,332	53,151,343	69,918,145	62,858,196	53,857,252	(2,823,161)	(793,524)
Working capital changes		USD	229,694	0	229,693	436,363	1,418,034	89,310	(1,162,880)	(165,264)	1,356,500	(1,257,461)
Cash Flow				2,022	2,023	2,024	2,025	2,026	2,027	2,028	2,029	2,030
Net Cash Flow	Annual cash flow	USD	**179,200,458**	(8,929,465)	(55,818,661)	8,216,695	54,569,377	70,007,455	61,695,316	53,691,987	(1,466,661)	(2,050,985)

PROJECT ECONOMICS

The Project NPVs for the two scenarios are shown in *Table 39* in USD and AUD, respectively. The real term best-estimated value of the Base Case is USD219 million (AUD292 million) at a real discount rate of 10.0%. The real term best-estimated value decreases to USD98 million (AUD130 million) when only the Ore Reserve Plan is considered at a real discount rate of 10.0%. The IRR of the Base Case and Ore Reserve Plan are 57% and 50%, respectively, indicating a robust project. The Project is financially viable when considering only the potential Reserves, hence an updated Ore Reserve can be declared.

Table 39: Project NPVs at Various Discount Rates (Project) (Real Terms)

Project Value (Post-tax)	Base Case	Reserve Plan
USD Terms	**USDm**	**USDm**
NPV @ 0%	508.1	179.2
NPV @ 2.5%	406.6	154.0
NPV @ 5%	328.2	132.3
NPV @ 7.5%	267.1	113.8
NPV @ 10%	**218.8**	**97.8**
NPV @ 12.5%	180.2	83.9
NPV @ 15%	149.2	71.9
IRR	57.2%	50.2%
AUD Terms	**AUDm**	**AUDm**
NPV @ 0%	677.5	238.9
NPV @ 2.5%	542.1	205.3
NPV @ 5%	437.6	176.5
NPV @ 7.5%	356.1	151.7
NPV @ 10%	**291.7**	**130.3**
NPV @ 12.5%	240.3	111.9
NPV @ 15%	198.9	95.9
IRR	57.2%	50.2%

NOTE: 1. Converted to AUD from USD at exchange rate of 1.333 AUD:USD.

The profitability ratios for the Project are displayed in *Table 40* for the two scenarios.

Table 40: Project Profitability Ratios

Profitability Ratios	Unit	Base Case	Reserve Plan
Internal Rate of Return (IRR)	%	57%	50%
Total ounces in Mine plan	oz	1,235,216	558,339
Total ounces Recovered	oz	1,076,431	485,950
LOM	Months	155	87
LOM	Years	12.9	7.3
Benefit-Cost Ratio/Money on Investment 10%	Ratio	6.6	3.8
Capital Gain 10%	%	564%	284%
Average Payback Period (from Start of Mining)	Months	31	31
Average Payback Period (from First Gold)	Months	21	21
Peak Funding Requirement	USDm	77	78
Peak Funding Requirement	AUDm	102	104
Peak Funding Month	Months	24	24
Revenue over LOM (Undiscounted)	USDm	1,753	788
EBITDA over LOM (Undiscounted)	USDm	891	394
Net Cash Flow over LOM (Undiscounted)	USDm	508	179
Break-even Feed Grade (Excluding CAPEX)	g/t	2.9	3.0
Break-even Feed Grade (Including CAPEX)	g/t	3.5	4.2
Break-even Gold Price (Excluding CAPEX)	USD/oz	800	809
Break-even Gold Price (Including CAPEX)	USD/oz	962	1,113
Average Gold Price	USD/oz	1,642	1,635
Average Exchange Rate	ZAR/USD	15.50	15.52

SENSITIVITY ANALYNISIS

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 15%. The left-hand side of the graph indicates a negative 15% change in the input while the right-hand side of the graph indicates a positive 15% change in the input. A negative effect on the NPVs represented by red bars and a positive effect represented by blue bars. For the DCF, the gold price, exchange rate and grade have the biggest impact on the sensitivity of the Project followed by the mining operating costs. The Project is least sensitive to capital, plant and other operating costs.

Figure 41: Project Sensitivity USD (NPV$_{10.0\%}$) – Base Case

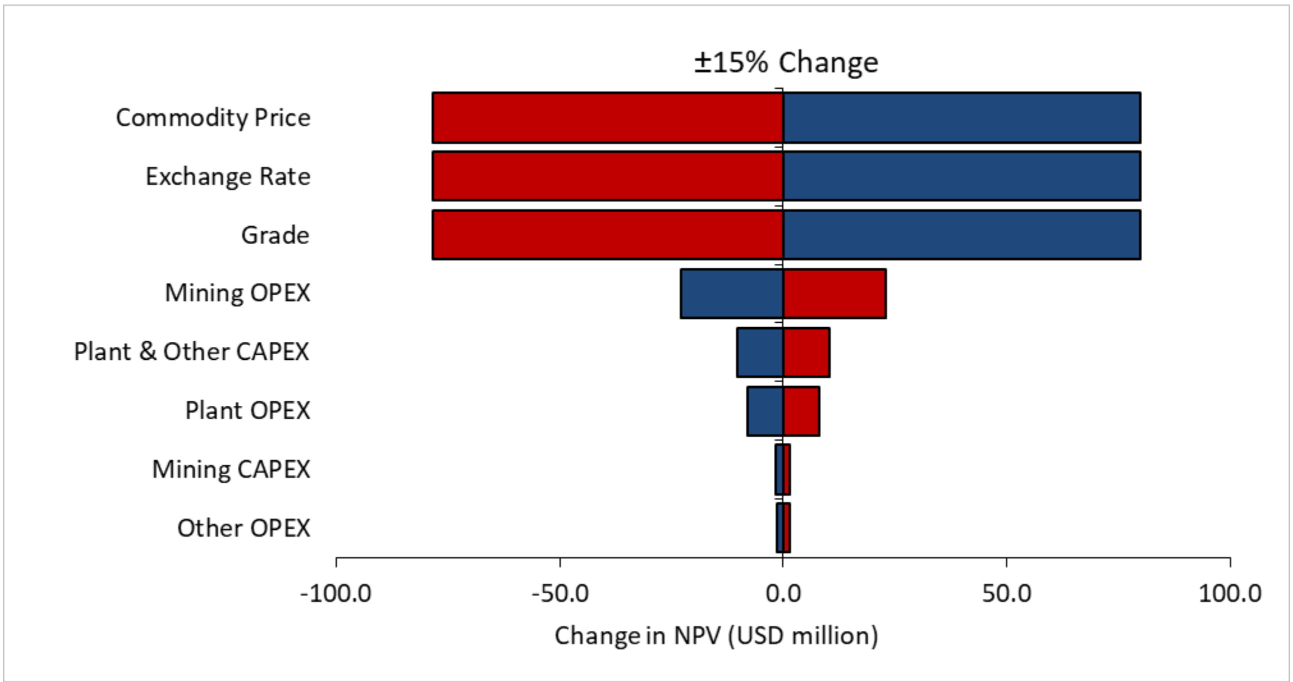
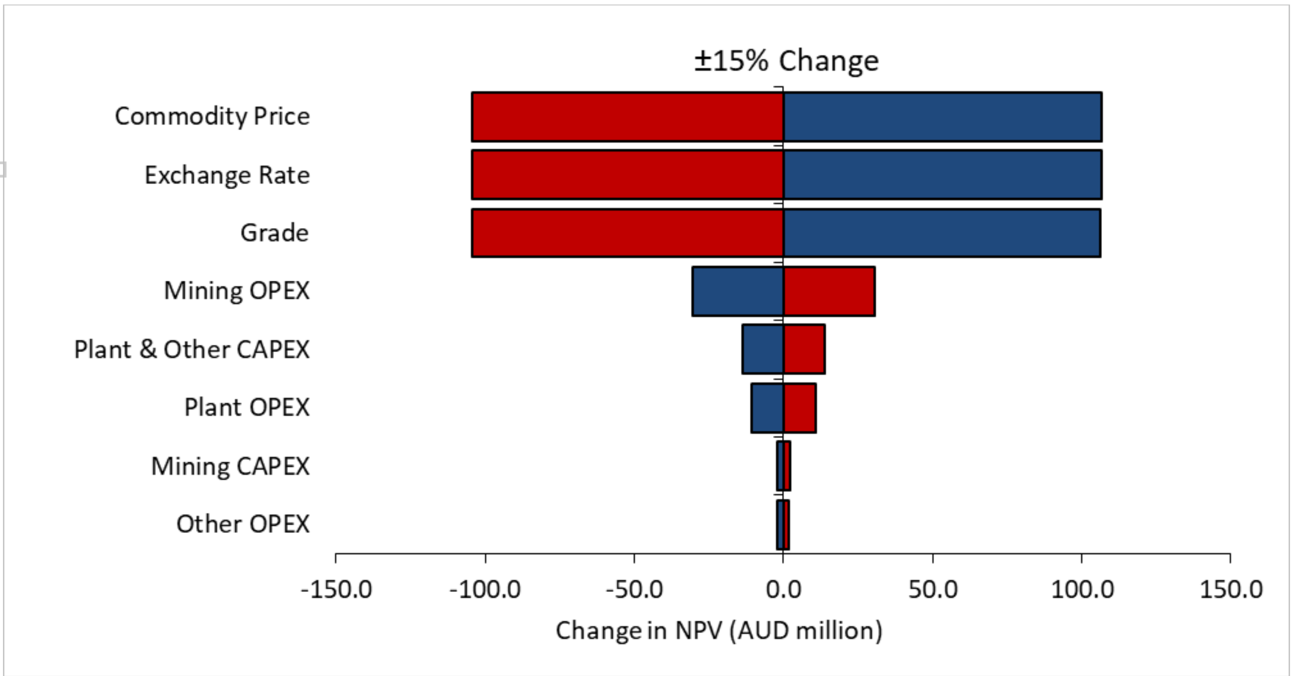


Figure 42: Project Sensitivity AUD (NPV$_{10.0\%}$) – Base Case



Base Case

The project is most sensitive to a movement in the gold price, ZAR:USD exchange rate and grade, all of which directly affect the revenue. *Table 43* and *Table 44* detail the Project economics of the Base Case at various price scenarios in USD terms and AUD terms, respectively.

Table 43: Project Economics at Various Gold Prices – Base Case (USD)

Project Economics at gold price	Unit	Forecast (USD1,642/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	USDm	324	255	304	402	501	601
NPV @ 10% (real) Post-tax	USDm	219	174	206	269	335	400
IRR (%) Pre-tax	%	65%	57%	64%	77%	90%	102%
IRR (%) Post-tax	%	57%	50%	56%	67%	78%	87%
AISC	USD/oz	834	822	831	847	862	876
EBITDA annual average	USDm	69	58	66	81	96	111
EBIT annual average	USDm	60	49	57	72	87	102
Free Cash Flow (Pre-tax)	USDm	717	576	673	869	1066	1264
Free Cash Flow (Post-tax)	USDm	508	412	478	611	747	881
Development Capital – Peak Funding	USDm	77	77	77	77	77	77
Capital Sustaining	USDm	37	37	37	37	37	37
Payback post-tax	Months	31	33	31	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	422%	332%	395%	524%	653%	783%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	285%	226%	268%	351%	437%	521%

Table 44: Project Economics at Various Gold Prices – Base Case (AUD)

Project Economics at gold price	Unit	Forecast (USD1,642/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	AUDm	432	339	405	536	669	802
NPV @ 10% (real) Post-tax	AUDm	292	232	274	359	447	533
IRR (%) Pre-tax	%	65%	57%	64%	77%	90%	102%
IRR (%) Post-tax	%	57%	50%	56%	67%	78%	87%
AISC	AUD/oz	1,112	1,096	1,107	1,129	1,149	1,167
EBITDA annual average	AUDm	92	77	87	107	128	148
EBIT annual average	AUDm	80	66	76	96	116	136
Free Cash Flow (Pre-tax)	AUDm	956	768	897	1,158	1,421	1,686
Free Cash Flow (Post-tax)	AUDm	678	550	638	814	996	1,175
Development Capital – Peak Funding	AUDm	102	102	102	102	102	102
Capital Sustaining	AUDm	49	49	49	49	49	49
Payback post-tax	Months	31	33	31	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	422%	332%	395%	524%	653%	783%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	285%	226%	268%	351%	437%	521%

NOTE: *1.* Converted to AUD from USD using AUD:USD exchange rate of 1.333.

Reserve Plan

Table 45 and ***Table 46*** detail the Project economics of the Reserve Plan at various price scenarios in USD terms and AUD terms, respectively.

Table 45: Project Economics at Various Gold Prices – Reserve Plan (USD)

Project Economics at gold price	Unit	Forecast (USD1,635/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	USDm	144	105	134	191	250	308
NPV @ 10% (real) Post-tax	USDm	98	71	91	130	169	207
IRR (%) Pre-tax	%	58%	48%	57%	72%	85%	98%
IRR (%) Post-tax	%	50%	41%	48%	61%	74%	84%
AISC	USD/oz	846	835	843	859	874	888
EBITDA annual average	USDm	57	48	55	67	80	93
EBIT annual average	USDm	45	36	42	55	67	80
Free Cash Flow (Pre-tax)	USDm	247	186	230	318	407	497
Free Cash Flow (Post-tax)	USDm	179	136	167	229	292	353
Development Capital – Peak Funding	USDm	78	78	78	78	78	78
Capital Sustaining	USDm	18	18	18	18	18	18
Payback post-tax	Months	31	34	32	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	185%	134%	171%	246%	320%	395%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	125%	92%	117%	166%	217%	266%

Table 46: Project Economics at Various Gold Prices – Reserve Plan (AUD)

Project Economics at gold price	Unit	Forecast (USD1,635/ oz Avg)	USD1,500/oz	USD1,600/oz	USD1,800/oz	USD2,000/oz	USD2,200/oz
NPV @ 10% (real) Pre-tax	AUDm	192	140	178	255	333	411
NPV @ 10% (real) Post-tax	AUDm	130	95	121	173	226	276
IRR (%) Pre-tax	%	58%	48%	57%	72%	85%	98%
IRR (%) Post-tax	%	50%	41%	48%	61%	74%	84%
AISC	AUD/oz	1,127	1,113	1,124	1,145	1,165	1,184
EBITDA annual average	AUDm	76	65	73	90	107	124
EBIT annual average	AUDm	59	48	56	73	90	107
Free Cash Flow (Pre-tax)	AUDm	330	248	307	425	543	662
Free Cash Flow (Post-tax)	AUDm	239	181	223	305	389	470
Development Capital – Peak Funding	AUDm	104	104	104	104	104	104
Capital Sustaining	AUDm	24	24	24	24	24	24
Payback post-tax	Months	31	34	32	28	25	24
Capital Efficiency (Pre-Tax NPV/Dev Capital	%	185%	134%	171%	246%	320%	395%
Capital Efficiency (Post-Tax NPV/Dev Capital	%	125%	92%	117%	166%	217%	266%

NOTE: *1.* Converted to AUD from USD using AUD:USD exchange rate of 1.333.

UPSIDE OPPORTUNITIES

While TGM has sought to maximise the value of the TGME Underground Gold Mine Project during the completion of the Feasibility Study, a number of potential opportunities exist to further enhance the valuation of the project, including:

- Expanding the resource and mine life beyond 12.9 years through further underground exploration drilling and bringing on further mines from up to 40 historic mines within the region;
- Potential to increase the overall reserve tonnage and/or grade through additional drilling and reserve definition works;
- Due to the modular design and construction of the processing plant the ability to expand the number of streams and increasing the capacity throughput for the circuit by increased milling, leaching and elution with minimal additional capital expenditure;
- Potential improvement in recovery grade through continual metallurgical test work and general orebody mineralogy optimisation;
- Potential improvements and optimisation in productivity by the utilisation of modern mine planning and controls;
- Potential to reduce the future required electrical grid power supply with green energy supply and renewable sources; and
- Potential to re-mine the current tailings dams and deposit these mine tails into underground deposition reducing the current disturbed environmental footprint.

KEY RISKS

A risk assessment was conducted to identify the risks associated with the Project. In the workshop, various techniques were used to identify and assess risks and their consequences. During the initial risk analysis, the process was performed without taking into consideration any controls or mitigations to contain the risks and their consequences. Using the rating system, the worst-case scenario (inherent risk rating) is determined.

Following the identification and rating of the inherent risks, controls or mitigations were identified that are already in place or are well-understood in terms of the specific risk identified. Based on the effectiveness of the controls, the likelihood and consequences of the risk were re-evaluated, which resulted in the residual risk profile of the Project.

The risk profile contains several indicators that will be useful in guiding the stakeholders in identifying appropriate actions that need to be taken in a subsequent action plan. These indicators include high levels of likelihood, consequence, and exposure, as well as borderline or defective controls.

The top-ranking risks associated with the Project sorted on risk rating are detailed in Table 47.

Table 47: Risk Assessment

ID	Project	Risk Category	Risk	Description / Cause	Risk Likelihood	Impact	Risk Rating	Mitigation/Control	Risk Likelihood	Impact	Residual Risk Rating
1	Beta	Permitting	Delay in dewatering of Beta underground workings	Approvals not in place to use and/or discharge water that is pumped out of mine	3	3	13	Prepare and submit application for licences and adhere to all requirements and instructions in order to obtain authorisations.	2	3	9
2	Beta, Frankfort, CDM	Permitting	Delay in commencement of processing operations	Appropriate approvals and permits not in place to allow for underground storage of tailings at the Beta mine	3	3	13	Prepare and submit application for licences and adhere to all requirements and instructions in order to obtain authorisations.	2	3	9
3	Beta, Frankfort, CDM, Rietfontein	Infrastructure	Insufficient Capital Provisions	Unknowns with regards to underground conditions due to lack of access to some areas may require additional capital expenditure not accounted for in this study	3	3	13	Detailed reconnaissance work to be conducted as soon as access can be gained to the unaccused workings to verify condition and verify requirements for re-establishing the underground workings at the four TGME underground operations	1	3	6
4	Beta, Frankfort, CDM, Rietfontein	Metallurgy / Processing	Insufficient Capital Provisions	Underestimation of underground repositioning operating and capital cost. Design conducted is oversized and needed to be scaled to fit production profiles.	2	3	9	Design and costing estimate to be upgraded from PFS level to FS level for correct production profile.	1	3	6
5	Beta, Frankfort, CDM	Permitting	Delay in commencement of mining operations	Appropriate mining rights (mine works programmes), permits and authorisations, including Water Use Licence and Environmental Authorisation, are not in place for the proposed operations.	2	4	14	Prepare and submit application for licences and adhere to all requirements and instructions in order to obtain authorisations.	1	3	6
6	Beta, Frankfort, CDM, Rietfontein	Infrastructure	Insufficient power available to the support the operations	Current available allocations do not meet requirements to support the operations on grid power for LOM	3	3	13	Applications for additional grid power allocation is in progress. This process should be expedited by any means to ensure timeous availability of grid power to the operations.	2	2	5
7	Beta, Frankfort, CDM, Rietfontein	Metallurgy / Processing	Reduced production	TSF design conducted for allowable deposition rate of 22.5 ktpm with a future extension that will increase the allowable deposition rate to 30 ktpm. To provide for the planned production of the Beta mine at 30 ktpm the extension phase had to be pulled forward in terms of capital expenditure. Impact of this is unknown	3	2	8	Review of the two phases of the TSF to understand and mitigate the higher upfront deposition.	2	2	5

APPENDIX B

JORC Checklist – Table 1 Assessment and Reporting Criteria

NB - JORC Table 1 Sections 1 to 3 include all mineralised targets that are encompassed and quantified within the TGM portfolio as they occur in the Mpumalanga Province. The section 4 as presented below includes only the FS results of the Beta, Rietfontein, Frankfort and CDM underground operations.

JORC Checklist – Table 1 Assessment and Reporting Criteria

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Sampling types discussed in this section mainly pertain to historical data with the exception of the Theta Project subsequent to the 2017-2019 drilling campaign. Drilling data sampling types include diamond, reverse circulation ("RC"), percussion and auger drilling. Other sampling data types include underground channel chip sampling (as individual sample section composite data points on plans or as development or stope face composite stretch values), grab sampling as well as trench and sample pit sampling for bulk sampling for the purposes of size fraction analysis. The table below outlines the types of sampling data collected or utilised in the Mineral Resource or Exploration Target estimates for each of the Project Areas.

Project Area	Reef	Sampling Data Types
Rietfontein	Rietfontein	Drillhole Data Channel Chip Sample Data
Beta	Beta	Drillhole Data Channel Chip Sample Data
Frankfort	Bevetts and Theta	Drillhole Data Channel Chip Sample Data
Clewer, Dukes Hill & Morgenzon	Rho	Drillhole Data Channel Chip Sample Data
Olifantsgeraamte	Olifantsgeraamte	Drillhole Data Channel Chip Sample Data
Vaalhoek	Vaalhoek and Thelma Leaders	Drillhole Data Channel Chip Sample Data Stretch Values
Glynn's Lydenburg	Glynn's	Drillhole Data Channel Chip Sample Data Stretch Values
Theta Project (Theta Hill, Browns Hills and Iota section of Columbia Hill)	Beta, Shale, Lower Theta, Upper Theta, Lower Rho, Upper Rho and Bevetts	Drillhole Data Trench Sampling Data Channel Chip Sample Data
Columbia Hill (remaining)	Rho, Shale and Shale Leaders	Drillhole Data Channel Chip Sample Data
Hermansburg	Eluvial	RC Drillhole Data
DG1	Eluvial	RC Drillhole Data
DG2	Eluvial	RC Drillhole Data
DG5	Eluvial	Grab Samples RC Drillhole Data
Glynn's Lydenburg TSF	Tailings	Auger Drillhole Data
Blyde TSFs (1, 2, 3, 3a, 4, 5)	Tailings	Auger Drillhole Data

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
		<table><tr><td>TGM Plant</td><td>Tailings</td><td>Auger Drillhole Data</td></tr><tr><td rowspan="3">Vaalhoek, South East (DGs), Peach Tree, Ponieskrantz, Dukes Clewer</td><td rowspan="3">Rock Dump</td><td>Bulk Sampling Data</td></tr><tr><td>Trench Sampling Data</td></tr><tr><td>Sampling Pit Data</td></tr></table>
		a) Channel Chip Sampling Data:- Historical (Pre-1946) chip sample values were captured in ‘pennyweight’ (dwt) units for gold content and in inches for channel width. The quality of the chip samples could not be ascertained due to the historical nature there-of; however, it should be noted chip sampling is a well-established sampling method in the underground South African mining industry. The sampling activity on the mines was usually managed by each mine’s survey department and were usually conducted to specific company-wide standards. More recent chip sample values were captured as cm.g/t content values and channel widths were recorded in centimetres as is the case at Frankfort while under ownership of Simmer & Jack Mines Limited. During 2008, Minxcon audited the chip sampling procedure as employed by Simmer & Jack and found the procedures employed to be of industry standard. b) Stretch Values:- In some instances (such as at Vaalhoek and Glynn’s Lydenburg) in areas where original sample plans were not available, stretch value plans recording a composite content and channel width value for a stope length or development end were available and included in the database. The integrity of these plans as a source of grade information has been proven in other areas on the same mines where both chip sample plans and stretch value plans were available and were compared. It was found that the correlation to old sampling has been representative of the stretch values in these areas. c) Drillhole Data:- Historical (pre-2007/8) drillhole data (inclusive of diamond, RC, and auger) exists on many of the operations. However very little backing data is available for many of these older holes and it must be assumed that QAQC was not included in the process. Minxcon has however reviewed the general quality of the survey data for these drillholes. For the most part, collar data has been found to agree well with local topography and is considered to be acceptable for modelling purposes. Downhole survey data with respect to diamond and RC drilling is also often absent from the older holes; however, it should be noted that over 98% of these holes were seldom drilled to depths in excess of 150 m and were vertically collared. Only 1.40% of all the drillholes on all the properties were drilled as inclined drillholes, thus it is Minxcon’s view that the holes and their relative reef intercept points would be spatially acceptable for modelling purposes. The historical drillhole data has no accompanying assay QAQC, however this fact is considered in allocation of Mineral Resource classification during modelling. More recent drillhole data (inclusive of diamond, RC and auger) from 2008 onward is considered to be of high quality as it was conducted to updated industry standards with the incorporation of drillhole collar survey as well as assay QAQC where blanks and certified reference material were inserted for monitoring purposes, with the inclusion of coarse duplicate samples. These later drilling programmes were also either monitored, audited or managed by Minxcon personnel under Minxcon previous sister company Agere Project Management (“Agere”). d) Trench, Sample Pit and Bulk Sampling (Vaalhoek Rock Dump):- In order to evaluate the Vaalhoek Rock Dump, trenches and sample pits were dug. The trenches and pits were surveyed by a Mine Surveyor and were sampled in sections down to a depth 1.2 m, each sample representing a composite of 40 cm down the wall of the trench or pit. These samples were then assayed. The discard material from the trenches and pits was then composited to form a bulk sample of 50 tonnes for conducting size fraction analysis. The nature and quality of the sampling in question has been considered in the Mineral Resource classification for the Vaalhoek Dump, which is Inferred.

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
		e) Bulk Sampling (South East (DGs), Peach Tree, Ponieskrantz, Dukes Clewer):- Bulk sampling was done through a triple deck screening plant (bulk samples were between 20t and maximum 520t per waste rock dump). f) Trench Sampling (Theta Project Browns Hill):- Trenching was conducted on Browns Hill during the 2017-2019 drilling campaign to assist in locating the Lower Theta Reef outcrop. Trenches were dug in roughly an east-west orientation to a depth of between 1.0 m to 2.1 m. A total of 10 trenches were dug with an approximate spacing of approximately 30 to 35 m. The trenches were sampled near to vertical at 2 m intervals, due to the very shallow dip of the reef, where full side-wall composite samples were taken. Samples were dispatched to SGS Laboratory in Barberton for analysis. The trench sampling was not used in any evaluation as its only purpose was to locate reef outcrops.
	Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.	a) Chip Sampling:- In concordant reef underground projects chip samples were taken normal to the reef dip and calculated to give a composited value for a true reef thickness. In the case of cross-reefs such as that at Rietfontein, chip sample positions were plotted on the development centre lines indicating face sampling normal to the reef dip. Scatter plots were also generated to examine the data set for errors introduced while capturing the data. All values were converted using factors of 2.54 cm for 1 inch and 1.714285 g/t for 1 dwt. The older underground sampling took place at approximately 6 m spacing along on-reef development, whilst in newer mining areas this spacing was reduced to approximately 2 to 3 m along on-reef development. In the stoping areas a grid was targeted on an approximate 5 m by 5 m grid where applicable, which is a historical grid (Pre-1946). This grid was put in place due to the nugget effect of the reef. The minimum size of the samples was 20 cm to obtain a minimum weight of 500 g. b) Trench, Sample pit and Bulk Sampling (Vaalhoek Rock Dump):- The trenches at Vaalhoek Rock Dump were located and spread as evenly as possible on the top of the dump, while pits were located on the sides of the dump and these were sampled in sections down to a depth 1.2 m, each sample representing a composite of 40 cm down the wall of the trench or pit. The discard material from the trenches and pits was then composited to form a bulk sample of 50 tonnes for conducting size fraction analysis and screened at -10 mm, +40 mm and -75 mm. The nature and quality of the sampling in question has been considered in the Mineral Resource classification for the Vaalhoek Dump, which is Inferred. c) Trench, Sample pit and Bulk Sampling (Theta Project):- The trenches were dug in roughly an east-west orientation to a depth of between 1.0 m to 2.1 m. A total of 10 trenches were dug with an approximate spacing of approximately 30 m to 35 m. The trenches were sampled near to vertical at 2 m intervals, due to the very shallow dip of the reef, where full side-wall composite samples were taken. The trench sampling was not used in any evaluation as its only purpose was to locate reef outcrops.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as	Samples presented in the historical database represent full reef composites for both diamond drilling as well as chip sampling. The historical nature of the data and the high grades encountered implies the use of fire assay as an assay technique. Sample preparation and aspects regarding sample submission for assay are not known due to the historical nature of the sampling data. Underground sampling, for metallurgical purposes, was undertaken at the northern Neck section of Vaalhoek during February 2018. Two samples weighing approximately 4kg were taken from exposed faces of the Vaalhoek Reef, in two separate underground localities of previous mining. Two samples were also taken of Thelma Leader mineralisation located in underground exposures adjacent to the Vaalhoek Dyke. These samples also weighed approximately 4 kg each. All samples were composites of rock chipped over the reef width. The four samples were submitted for Bottle Roll testwork at SGS Barberton, which is discussed under the Metallurgical section. The smallest split drillcore sample taken was 15 cm in length. After crushing and pulverising the core sample, a 30 g cupel was utilised for analysis. Low core recoveries resulted in reverting to RC drilling for evaluation purposes. For the RC drilling conducted at the Theta Project, the mass of recovered sample obtained was recorded on a per metre drilled basis, with approximately 3 kg of sample per metre run, being split off by means of a 3-tier riffle splitter for submission to SGS

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
	where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Laboratories in Barberton. Assays pertaining to the Theta Project were conducted by means of gold by fire assay with a gravimetric and/or flame atomic absorption spectrometry ("AAS") utilising a 30 g cupel.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	a) Underground/Hard Rock Projects:- All historic (pre 2007/2008) Mineral Resource evaluation drilling for the underground projects was conducted in the form of diamond drilling. Information regarding drilling diameter, drill tube type and core orientation is not available or discernible for the earlier 1995/1996 drilling as the core is no longer available. Only core loss, intersection length and grade (g/t) are recorded with various levels of geological lithological information. Due to the age of the data in question and the non-availability of the historical drill core, information regarding drilling diameter, drill tube type, core orientation is not available. More recent drillhole data (inclusive of diamond, RC and auger) from 2008 onward is considered to be high quality as it was conducted to updated industry standards with the incorporation of assay QAQC where blanks and certified reference material ("CRM") were inserted for monitoring purposes. Core drilling utilised an NQ (47.6 mm) drill bit. Details pertaining to earlier drilling programs' core orientation are not available. Due to poor diamond drillcore recoveries during the 2017-2019 drilling campaign, core orientation was not conducted. b) Open Pit or Eluvial Projects:- Drilling on the eluvial deposits took place under the auspices of Horizon Blue Resources and is regarded as being of high quality due to good survey control and inclusion of QAQC practices. The main drilling method (95% of drillholes) utilised to evaluate these projects was reverse circulation (4.5 inch (115 mm) and 6 inch (150 mm) diameter) drilling, vertical reverse circulation drillholes, with or without temporary casing depending on ground condition in the vicinity of the various drill sites. Rotary core drilling (NQ size with 75.7 mm outside diameter and 47.6 mm inside diameter) was utilised in 5% of the drillholes on these projects. More recent drillhole data (inclusive of diamond, RC and auger) from 2008 onward is considered to be of high quality as it was conducted to updated industry standards with the incorporation of assay QAQC where blanks and certified reference material ("CRM") were inserted for monitoring purposes. Core drilling utilised an NQ (47.6 mm) drill bit. Details pertaining to earlier drilling programs' core orientation are not available. Due to poor diamond drillcore recoveries during the 2017-2019 drilling campaign, core orientation was not conducted. c) Tailings Projects:- Drilling on the tailings projects was conducted by means of small diameter (45 mm and 50 mm) auger drilling. Drillhole positions have been surveyed by TGM utilising a GPS based Total station. All holes were drilled vertically.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	a) Diamond Drilling:- Information regarding the 1995/1996 recoveries is not available. However, during the 2008 and 2012/2013 drilling campaigns the recoveries were recorded. Diamond drill core recoveries were recorded during the 2013 drilling programmes, which was managed by Minxcon Exploration (Pty) Ltd. Core recovery percentage was calculated for each drill run. Sample recoveries were maximised through drilling techniques (diamond drilling), however drilling recoveries versus grade relationships were not assessed. During the 2017-2019 drilling campaign consistent and accurate records relating to core and RC drill sample recovery were maintained on a per sample basis. Diamond drill samples were measured on a per sample basis and related back to the recorded drill run length versus the length of drill core recovered, which was then presented as a percentage. The average drill recovery achieved during the diamond drilling campaign was approximately 65%, with at least 33.3% of samples achieving recoveries of 50% or less. This low recovery resulted in reverting to RC drilling as a means of obtaining representative drill data for evaluation purposes.

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
		b) RC Drilling:- Details regarding the chip sample recovery of the historical RC drilling for the eluvial project are not available or existent in Minxcon's data records. For the RC drilling conducted at the Theta Project, the mass of recovered sample obtained was recorded on a per metre drilled basis, with approximately 3 kg of sample per metre run, being split off by means of a 3-tier riffle splitter for submission to SGS Laboratories in Barberton.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Owing to the historical nature of the data in question (prior to 2005), measures taken to maximise sample recovery and ensure the representative nature of the samples are not known. During the 2008, 2012/2013 and 2017-2019 drilling campaign, sample recoveries were maximised through utilising appropriate drilling techniques depending on the deposit in question. In order to ensure the representative nature of the drilled intersections and due to the dip of the reefs being very shallow at between 3° to 12°, drillholes were drilled vertically in order to obtain an intersection as close to normal as possible. Owing to low core recoveries achieved in the 2017-2019 drilling campaign, RC drilling was utilised to maximise sample recovery.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Sample recovery versus grade was not assessed due to the lack of historical drill core and sample rejects, as well as due to the low diamond drilling sample recovery experience during the 2017-2019 drilling campaign. Sample recovery and grade relations with regard to the RC drilling was not possible due to not having a historical RC dataset to compare with. It is Minxcon's view that samples recording a core loss would result in a net negative bias, resulting in a potentially lower reported gold value. Twinning of these holes might serve to support this theory.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Historical drillholes (pre-2007/2008) in most cases have no original drillhole logs available for review. Summary lithological strip logs or MS Excel™ logs are available in most cases however and present lithological changes and reef positions. It is Minxcon's view that the level of detail available is still supportive and appropriate for Mineral Resource estimation. This level of detail has been considered in allocation of Mineral Resource classification. All 2008 drillholes were geologically logged including the deflections (or wedges) and the 2012/2013, as well as the 2017-2019 drilling campaign drillholes were both geologically and geotechnically logged. It is Minxcon's view that logging was done to a level of detail appropriate to support Mineral Resource estimation.
	Whether logging is qualitative or quantitative in nature. Core (or costing, channel, etc.) photography.	No detailed drillhole logs are available for the historical (pre-2007/2008) surface drilling. No core or core photography is available for review. The 2008 and 2012/2013 logging was qualitative in nature and core photos of all intersections were also taken. Logging conducted during the 2017-2019 drilling campaign was also qualitative in nature. All drill core and reference RC Chip sample trays were photographed and archived for record purposes.
	The total length and percentage of the relevant intersections logged.	Historical drillholes (pre-2007/2008) in most cases have no original drillhole logs available for review. Summary lithological strip logs or MS Excel™ logs are available in most cases however and present lithological changes and reef positions. Based on the information available it is assumed that all historical intersections represented in the Mine Resource estimation dataset were logged. All drilling and relevant intersections relating to 2007 through to and including the 2017-2019 drilling programme were logged. The logging information per Project is presented in the full CPR document and described in detail.
Sub-sampling techniques and sample preparatio n	If core, whether cut or sawn and whether quarter, half or all core taken.	It is not known how core was split in historical drilling (pre-2007/2008) campaigns. It is assumed that core was split as has been routine exploration practice. However, sampling/core records/libraries or protocols for this period are not available for review. In later drilling programmes (including the 2017-2019 drilling campaign) core was sawn in half lengthwise down the core axis. Once the core had been split the core was sampled along lithological boundaries. The smallest sample that was taken was 15 cm which was governed by the low core recovery, as well as the minimum weight required for a laboratory sample. Individual samples for NQ cores were 20 cm long. Reef samples were >10 cm and <40 cm.
	If non-core, whether riffled, tube sampled, rotary split, etc.	Historical Protocols pertaining to the RC and auger drilling sample splitting are not available for scrutiny and thus unknown. During the 2017-2019 RC drilling programme, samples were dry sampled and riffle split through a 3-tier riffle splitter

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
	and whether sampled wet or dry.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	For historical diamond drilling (pre-2007/2008) no protocols pertaining to sample preparation techniques are available for scrutiny. Recent (inclusive of the 2017-2019 drilling campaign) drilling sampling preparation and its appropriateness is in line with industry practice.
	Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.	Historical (pre-2007/2008) historical sub-sampling techniques were not available for review. All later drilling programmes utilised blanks and certified reference materials in order to maximise representativity of samples. In the 2017-2019 drilling campaign, coarse duplicates were added to the QAQC programme to test repeatability and thus representativity of samples.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Pertaining to historical (pre-2007/2008) drilling programmes, sub-sampling techniques were not available for review. In 2008, only blanks and certified reference material were used. No field duplicate/second –half or subsequent quarter sampling was conducted to Minxcon's knowledge. Later drilling programmes utilised only blanks and certified reference material. No field duplicate/second–half or subsequent quarter sampling was conducted. In the 2017-2019 drilling campaign, coarse field duplicates were added to the QAQC programme to test repeatability and thus representativity of samples. Out of 292 duplicates taken, three were identified as outliers. Once these were removed from the dataset, a correlation coefficient of 0.9683 was achieved, presenting very high correlation, thus supporting the view of sample representativity.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Pre-2007/2008: Not known. Historical sample size taken were not recorded. Later programmes considered sample length versus core diameter together with assay laboratory techniques and protocols to ensure sample sizes were appropriate relative to the material in question being sampled. It is Minxcon's view that the sample sizes take are appropriate to the gold grain size being sampled due to the fact that out of 292 duplicates taken (2017-2019 drilling programme), three were identified as outliers. Once these were removed from the dataset, a correlation coefficient of 0.9683 was achieved, presenting very high correlation, thus supporting the view of sample representativity.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Historical underground channel chips were reported in dwt, it is assumed that only fire assay was utilised and it is assumed that the technique represents total analysis. In 2008, all diamond core samples including blanks and certified reference material ("CRM") were dispatched to Set Point Laboratories ("Set Point") in Isando, Johannesburg, South Africa. Set Point is a SANAS certified laboratory, in accordance with the recognised international standard ISO/IES 17025:2005, with accreditation number T0223. The samples were analysed for Gold ("Au") by standard fire assay with ICP finish, and specific gravity ("SG") analysis were conducted on selected samples. It is assumed that the technique represents total analysis. Up to May 2007, all RC samples were sent to ALS Chemex Laboratory. From May 2007 onwards, RC samples were sent to Performance Laboratories (now SGS Performance Laboratories) and core samples to ALS Chemex (which is SANAS accredited) for fire assay by lead separation and AA finish. Each sample was also analysed for a spectrum of 34 metals using Inductively Coupled Plasma ("ICP") techniques. It is assumed that the technique represents total analysis. In 2017, samples from drillholes V6 and V8 including blanks and certified reference material were dispatched to Super Laboratory Services (Pty) Ltd ("Super Labs") in Springs, South Africa. Super Labs is a SANAS certified laboratory, in accordance with the recognised international standard ISO/IES 17025:2005, with accreditation number T0494. The assay samples are 50 g samples in mass and are assayed for gold (Au) by means of fire assay with gravimetric finish. It is assumed that the technique represents total analysis. For the 2017-2019 drilling campaign, all drillhole samples were sent to SGS Performance Laboratories in Barberton. SGS Performance Laboratories, Barberton is a SANAS certified laboratory, in accordance with the recognised international standard FAA303, with accreditation number T0565. Assays pertaining to the Theta Project were conducted by means of gold by fire assay

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
		with a gravimetric and/or flame AAS utilising a 30 g cupel. This assay technique is viewed as being total.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No assay methods other than those conducted by laboratories as mentioned above were utilised in the generation of any of the TGM projects sampling database.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	No records of Assay QAQC are available for the historical data due to the age there-of (*i.e.* pre-1946 for channel chip sampling, and for drilling predating 2007/2008) and due to the accepted practices in place at the time. Drilling campaigns conducted post 2007/2008 and the accompanying sampling was conducted according to industry standards. QAQC measures were implemented by regular insertion of blanks and standards into the sampling stream. Minxcon considers that the QAQC measures, as well as data used for Mineral Resource estimation, were of adequate quality. Approximately 17% of the samples sent to the laboratory represented assay control material. Minxcon is of the opinion that an adequate number of control samples were utilised during this drilling programme. No field duplicates were however used during the 2008 drilling and sampling programmes. During the 2012/2013 exploration programme, the project was stopped due to budgetary constraints and the completed drillholes were not assayed at the time. For the 2013 drilling programme the samples were analysed in 2017 and a total of 84 samples including blanks and certified reference material were dispatched to Super Labs. Two CRMs, namely AMIS0016 and AMIS0023, and silica sand blanks were used in the sampling sequence. Roughly every fifth sample inserted in the sampling sequence was a QAQC sample. A total of two AMIS0023, two AMIS0016, five duplicates and six blank samples were used. Approximately 18% of the samples sent to the laboratory represented assay control material. Minxcon is of the opinion that an adequate number of control samples were utilised. During the 2017-2019 drilling programme the CRMs and blanks were inserted at predetermined positions in the sampling sequence, namely: analytical blank samples were placed at the beginning and at the end of a drillhole. With the diamond drilling control samples were placed in the sampling stream at every tenth sample, with a sequential rotation between a blank, CRM and duplicate. With the RC drilling, this was similarly done, but at every twentieth sample position. In both cases the control sample spacing was based upon the batch size utilised by the laboratory in order to ensure each tray included at least one blank and an additional control sample during sample preparation and analysis. Approximately 2.75% of the samples sent to the laboratory represented CRM and 4.5% represented analytical blanks and 1.3% represented coarse duplicates. These samples are in addition to the in-laboratory assay conducted by the laboratory which traditionally adds up to 20% control samples to the total sample stream, usually incorporating a CRM as well as an analytical blank and two duplicate samples to each sample batch. Minxcon is of the opinion that an adequate number of control samples were utilised during this drilling programme.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	No verification of historical assay results is currently possible due to the historical nature of the data in question and the non-availability of the core. Minxcon verified the historically bagged samples for drillholes V6 and V8 for accuracy and representativeness before sending them to the laboratory in 2017. Those samples that were not representative or missing were re-sampled from the remaining core at TGM. Minxcon reviewed all historical datasets chip sampling and the historical drilling attributed to the various historical operations, as well as digital plans (scanned DXF plans of sampling plans) and found that captured sample positions had good agreement with those in the digital dataset. In addition, different versions of the

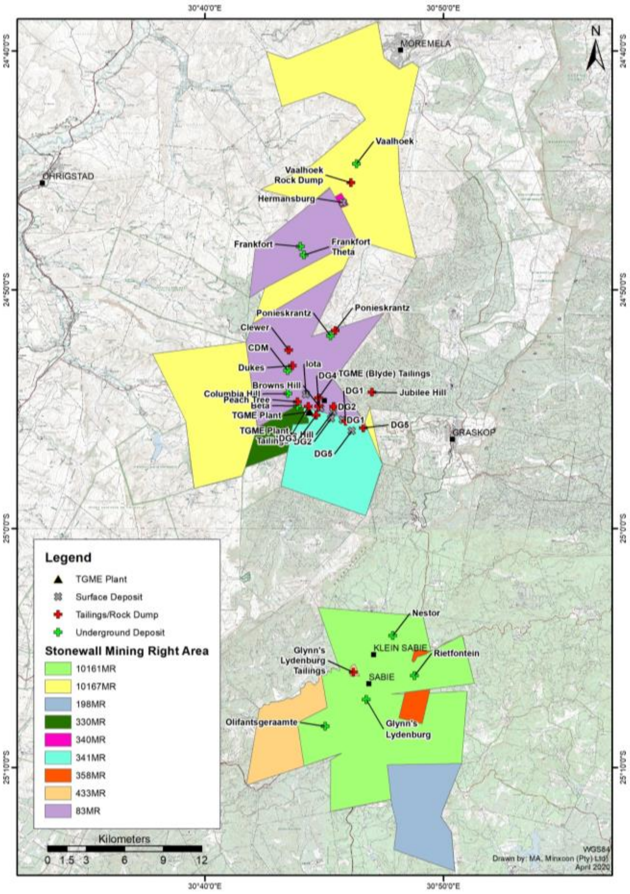
SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
		underground sampling file were found and cross validated to test for data changes or eliminations. These were corrected where applicable. Minxcon reviewed, verified and cross-checked captured assays relating to the 2008 drilling dataset by means of checking for transfer mistakes, gaps and overlaps in sampling intervals and also checked that all reef composites were correctly calculated for each reef intersection, before calculating the weighted mean of drillhole points with multiple intersections of wedges. Minxcon conducted checks on sampling during the 2017-2019 drilling programme by means of standard assay QAQC procedures and reviewing and cross-checking the .pdf assay results provided by the laboratory and those copied into the database utilised for evaluation. In addition, reviews of the sampling process were conducted by Minxcon personnel other than those managing the programme, namely the then Competent Person Mr Uwe Engelmann, and Mr Paul Obermeyer, the Minxcon Mineral Resource Manager.
	Discuss any adjustment to assay data.	No adjustments were made to raw assay data according to Minxcon's knowledge.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Not known. Historical data capture and data entry procedures were not available for review. The 2007/2008 and 2013 exploration programmes were logged and captured on hardcopy. These were then transferred to MS Excel™. Minxcon currently only has the data in this digital format for verification purposes. During the 2017-2019 drilling campaign, all logging and sampling were logged and captured on hardcopy and then captured in MS Excel™. Assay results were received from the laboratory in MS Excel™ .csv format as well as .PDF, thus allowing verification and comparison between hardcopy, source and digital data files.
	The use of twinned holes.	No twinned holes were drilled.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	TGM utilised a handheld GPS for the purpose of locating historical adits and mine entrances, which in turn have been utilised in conjunction with historical survey data in positioning the historical underground workings in 3D. Historical survey plans with plotted survey peg positions and elevations are available for most of the historical underground operations. These pegs were installed by mine surveyors relative to fixed local mine datum's. The survey pegs and workings have been digitised in ARCView GIS 10™. Each data point and stretch value on the original assay plans was marked and annotated with a reef width and gold grade. Assay plan images were imported into GIS and co-ordinates converted from a local grid co-ordinate (WG31) system to a WGS84 grid system. The plans were then captured into Datamine Studio 3™. The captured assay points were plotted on a plan of the underground workings to ensure that the points plotted correctly relative to development and stoping. The sampling has in turn been fixed to the underground development and stoping voids. It is Minxcon's opinion that sample positional accuracy would be within 5 to 10 m of the original sample point (within acceptable limits of a GPS). Drillhole collars were also located by means of handheld GPS co-ordinates. Assay plan images were imported into GIS and co-ordinates converted from a local grid co-ordinate system to a WGS84 grid system. The plans were then captured into Datamine®. The captured assay points were plotted on a plan of the underground workings to ensure that the points plotted correctly relative to development and stoping. Historically, sampling points were measured by means of measuring tape and the resultant offsets plotted on the sampling and development plans. Information pertaining to the instrument used for downhole survey conducted before and including the 2007/2008 drilling programmes is not available During the 2012/2013 drilling programme an EZ-Trac with EZ Com was used. Drillholes drilled at the Theta Project did not have downhole surveys conducted due to all being drilled vertically and due to them all being under 200 m in depth. Drillhole collars were located by two means. Of the 371 holes drilled some 99 collars were surveyed utilising an RTK Trimble R8 GPS Survey Total Station, while the balance was recorded by means of handheld GPS. TGM complete a LIDAR survey over the Theta Project in March 2019 which was then used to re-elevate the collar positions to the new LIDAR surface for improved accuracy. The 3D geological model was updated in June 2019 and the Mineral Resource was adjusted accordingly.
	Specification of the grid system used.	The grid system used is Hartebeeshoek 1994, South African Zone WG31.

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
	Quality and adequacy of topographic control.	Minxcon utilised the GPS co-ordinates provided by TGM for the adit positions, as well as ventilation openings to assist in verifying and fixing the underground workings in 3D space. Very good correlation between the digital topography and the underground mining profiles was found. The tailings and rock dump projects were surveyed utilising standard survey methods (Survey total station) and detailed topographical data collected. This data was subsequently rendered as digital contour plans. A LIDAR survey was conducted in March 2019 and was compared to the original digital topography utilised in the reef modelling. Discrepancies were found to be small with negligible impact on the geological model or the reef block models. The 3D geological model was revised in June 2019 and the Mineral Resource adjusted accordingly. There was an overall increase of 9% in the ounces in the Mineral Resource for the Theta Project due to the changes in the reef elevation and reef outcrop positions.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	In the stoping areas, the mean channel chip sample grid spacing was approximately on a 5 m x 5 m grid, while on development in older areas samples were taken at about 5 m to 6 m intervals, while in more recent areas sample sections were taken at between 2 m to 3 m spacing. Available information shows that diamond drillholes were drilled on an irregular grid of between 200 m to 500 m. Owing to the more advanced investigation stage (*i.e.* Mineral Resources and Ore Reserves), no Exploration Results have been reported. In the stoping areas, the sample stretch values were spaced approximately at 15 m on dip and 4 m on strike, while in more detailed areas sample spacing was found to be as little as 3 m between points. In the development, stretch values spacing varied from 4 m to 20 m, while in more detailed areas sample spacing is seen to be as close a 3 m. Drillhole spacing for the underground projects varies significantly and is considered during Mineral Resource classification. In one specific case (Vaalhoek) two drillholes (V6 and V8) did not significantly affect the Mineral Resource estimation as they were beyond the variogram range of the sample points (1,000 m) as Minxcon did not include the drillhole data with the stretch value data. They did however prove continuity of the reef. For the Glynn's Lydenburg and Blyde TSF projects, auger drilling was conducted on a 25 m x 25 m grid spacing, while on the TGM Plant TSF auger drilling was conducted on an approximate 50 m x 50 m grid. The Hermansburg eluvial deposit was drilled on an approximate 25 m x 25 m grid, while the DG deposits were drilled on an approximate 20 m x 20 m by 25 m x 25 m grid spacing, depending on local topography and access.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	It is Minxcon's opinion that drillhole and sample spacing is adequate for the purpose of conducting meaningful Mineral Resource estimation in and around stoping areas due to the density of the chip sampling data. It is Minxcon's view that the drillhole spacing pertaining to the Theta Project conducted during the 2017-2019 drilling programme is adequate for the purpose of conducting Mineral Resource estimation. Spacing per reef is viewed as being appropriate to the Mineral Resource categories applied.
	Whether sample compositing has been applied.	All channel chip sample points within the underground operations database represent full reef composites. Full reef composites were applied to drillholes belonging to the underground operations due to the inherent narrow nature of the reefs concerned. All eluvial, TSF drillholes and rock dump sample points were composite at fixed downhole sample intervals for the purposes of conducting full 3D Mineral Resource Estimations on these types of deposits. During the 2017-2019 drilling programme, in thin reef environments with reefs of <1 m (Upper Theta, Lower Theta and Beta Reefs) diluted (to 1 m) reef composites were utilised for evaluation purposes due to the minimum sample width obtained during the RC drilling being 1 m. In thick reef environments (Upper Rho, Lower Rho, Bevetts and Shale reefs), individual original sample widths of 1 m were maintained for utilisation in 3D estimation.
Orientation of data in relation to	Whether the orientation of sampling achieves	Concordant reefs are all near horizontal and as such these dip at between 3° to 12° to the west and strike in a north–south direction. Drillholes were drilled vertically (-90° dip) to intercept the mineralised shear zones at a near

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
geological structure	unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	perpendicular angle in order that the sampling of the drill core minimises the sampling bias. Chip sampling in concordant reef environments was conducted normal to reef dip. It is Minxcon's view that sampling orientation has attempted to reduce sample bias with respect to angle of intersection. All intersections represented corrected reef widths. Discordant reef as encountered at Rietfontein is vertical to sub-vertical. Drillholes were orientated at angles to intercept the mineralised shear zones at as near a perpendicular angle in plan and acute angle in section as possible in order that the sampling of drill core minimises the sampling bias. Chip sampling was conducted normal to reef dip. It is Minxcon's view that sampling orientation has attempted to reduce sample bias with respect to angle of intersection. All intersections represented corrected reef widths. All sampling of the TSF was conducted vertically. This is normal to the orientation of deposition and is therefore achieves unbiased sampling
	If the relationship between the drilling orientation and the orientation of key mineralised structures is	Available information indicates that the drilling orientation provides reasonably unbiased sampling of the mineralisation zones.
Sample security	The measures taken to ensure sample security.	Measures taken to ensure sample security pertaining to the historical chip sampling are not available due to the historical nature of the data in question. Measures taken to ensure sample security during historical drilling programmes (1995/1996 and 2008 drilling) are not available due to the historical nature of the data in question. During 2012/2013 all core samples were stored in a locked facility prior to dispatch to the laboratory. The samples from the 2013 drilling campaign were bagged and labelled in 2013 but were not sent away to a laboratory for assayed due to the project ending prematurely. The samples were stored at the TGM Plant in Pilgrims Rest and delivered to the Minxcon Exploration offices in Johannesburg in November 2017 to check and verify the previously bagged samples. A standard chain of custody was implemented during the 2017-2019 drilling campaign. Immediately when the core arrived in the core yard daily, the geologist or core yard manager was required to sign the core shed register
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Minxcon reviewed all historical datasets attributed to the various projects comprising the Mineral Resources, historical plans and sections as well as digital plans (scanned DXF plans of sampling plans) and found that historically captured sample positions had good agreement with those in the digital dataset. In addition, different versions of the underground sampling files were found and cross validated to test for data changes or eliminations. Minxcon also digitised a series of plans or sampling points and stretch values which were used in the various estimations. Minxcon was not able to audit or review the sampling techniques in

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
Mineral teneme nt and land tenure status	Type, reference name/number , location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and	The mining rights are held under Transvaal Gold Mining Estates Limited ("TGME"), a 74% indirect subsidiary of TGM. The mineral rights 83MR, 340MR, 341MR, 358MR and 433MR have been granted, registered and executed, held over certain Mineral Resource areas. Their accompanying environmental and social permits are also executed. The mining rights 10161MR and 10167MR have been granted and are pending execution. It is noted that the required Environmental Authorisations for these rights have not yet been awarded. The mining rights 330MR and 198MR are still in the approval process. A Section 102 amendment process for inclusion of underground redevelopment projects into 83MR is currently underway, with the environmental and socio-economic studies, as well as water use licence application process, following prescribed regulatory timelines.

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
	environmental settings.	
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	TGM is required to comply with DMRE regulations and instructions timeously in order to receive executed rights, as well as for the currently active rights to remain in force. Minxcon notes that a few years have lapsed since the last formal DMRE communication on 330MR and 198MR, and notes that the security of these rights may be at risk. There is reasonable basis to believe that 10161MR will be executed. The 83MR Section 102 application is following timelines as stipulated by applicable regulations and guided by government departments and processes. The Mineral Resources are located within the above permit areas as per the figure to follow.



Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Acknowledgement is hereby made for the historical exploration conducted from 1977 to 1982 by Placid Oil and Southern Sphere over the northern areas over the TGM holdings. From 1982 to 1992, Rand Mines conducted sporadic alluvial prospecting along the Blyde River, limited surface diamond drilling, re-opening of old workings and extensive exploration programmes around the town of Pilgrims Rest. TGME and Simmer & Jack conducted drilling, geochemical soil sampling, trenching and geological mapping.
Geology	Deposit type, geological setting and style of mineralisation.	Epigenetic gold mineralisation in the Sabie-Pilgrims Rest Goldfield occurs as concordant and discordant (sub-vertical) veins (or reefs) in a variety of host rocks within the Transvaal Drakensberg Goldfield, and these veins have been linked to emplacement of the Bushveld Complex. Mineralisation in the region occurs principally in concordant reefs in flat, bedding parallel shears located mainly on shale partings within the Malmani Dolomites. These bodies are stratiform, and are generally stratabound, and occur near the base of these units. The discordant reefs (or cross-reefs) are characterised by a variety of gold mineralisation styles. At Rietfontein, a sub-vertical quartz-carbonate vein occurs which reaches up from the Basement Granites and passes to surface through the Transvaal. They are found throughout the Sabie-Pilgrims Rest Goldfield, and are commonly referred to as cross reefs, blows, veins, and leaders and exhibit varying assemblage of gold-quartz-sulphide mineralisation generally striking northeast to north-northeast. They vary greatly in terms of composition, depth and diameter. In addition to the above, more recent eluvial deposits occur on the sides of some of the hills and are through to represent cannibalised

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
		mineralised clastic material resulting from the erosion of underlying reefs. Gold mineralisation is accompanied by various sulphides of Fe, Cu, As and Bi.
Drillhole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: * easting and northing of the drillhole collar * elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar * dip and azimuth of the hole * down hole length and interception depth * hole length.	A summary of the data types and the number of data attributable to each project is presented in the table below. It should be noted that all the projects listed are historical mining areas and do not constitute exploration projects in the true sense of the word. However, detailed drillhole summary tables are presented in the CPR in the appropriate sections pertaining to Exploration Targets. It should be noted that the numbers presented for drillholes in the table below represent all drillhole records, regardless of the status of the data concerned.

Project Area	Sampling Data Types	Historical datasets (Pre - 2007/2008)	Recent Datasets
		Quantity (Incl. Wedges)	Quantity
Rietfontein	Drillhole Data	8	-
	Channel Chip Sample Data	2,265	-
Beta	Drillhole Data	7	20
	Channel Chip Sample Data	4,553	-
Frankfort	Drillhole Data	15	59
	Channel Chip Sample Data	3,187	864
CDM	Drillhole Data	115	-
	Channel Chip Sample Data	24,483	-
Olifantsgeraamte	Drillhole Data	1	-
	Channel Chip Sample Data	316	-
Vaalhoek	Drillhole Data	16	8
	Channel Chip Sample Data	3,836	-
	Stretch Values	1,472	-
Glynn's Lydenburg	Drillhole Data	-	-
	Channel Chip Sample Data	26,435	-
	Stretch Values	872	-
Theta Project (Theta Hill, Browns Hill & Iota section of Columbia Hill)	Drillhole Data	263	371
	Trench Sampling	-	10
	Channel Chip Sample Data	7,472	-
Columbia Hill (remaining)	Drillhole Data	26	-
	Channel Chip Sample Data	14,478	-
Hermansburg	RC Drillhole Data		79
DG1	RC Drillhole Data	-	
DG2	RC Drillhole Data	-	221
DG5	Grab Samples	-	≈100
	RC Drillhole Data	-	19
Glynn's Lydenburg TSF	Auger Drillhole Data	-	140
Blyde TSFs (1, 2, 3, 3a, 4, 5)	Auger Drillhole Data	-	86
TGM Plant	Auger Drillhole Data	-	34
Vaalhoek (Rock dump)	Bulk Sampling Data	-	1
	Trench Sampling Data	-	13
	Sampling Pit Data	-	57
South East (DGs) (Rock dump)	Bulk Sampling Data	50	-
Peach Tree (Rock dump)	Bulk Sampling Data	8	-
Ponieskrantz (Rock dump)	Bulk Sampling Data	10	-
Dukes Clewer (Rock dump)	Bulk Sampling Data	13	-

	If the exclusion of this information is justified on	All the available drillholes on all projects and project types that were historically sampled and had the assay result available, were used for Mineral Resource estimation with the exception of four drillholes (in the case of Rietfontein) where out of eight drillholes, a total of four were excluded from the estimation due to excessive poor core recovery. All 10 drillholes drilled in 2012/2013 as well as three drillholes drilled in 2008 were only used for

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
	the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	geological modelling due to the fact that the project was stopped due to budget constraints and the mineralised zones were never assayed.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	All chip samples and drillhole samples were agglomerated. Data type biases were not investigated due to the small number of drillhole intersections. Where stretch values were used in the estimation these were composited to a 3 m composite based on a minimum stretch length. These values were treated separately and not included in the chip sample database. Areas utilising stretch values were immediately relegated to Inferred Mineral Resource classification. During the 2017-2019 drilling programme, in thin reef environments with reefs of <1 m (Upper Theta, Lower Theta and Beta Reefs) diluted (to 1 m) reef composites were utilised for evaluation purposes due to the minimum sample width obtained during the RC drilling being 1 m. In thick reef environments (Upper Rho, Lower Rho, Bevetts and Shale Reefs), individual original sample widths of 1 m were maintained for utilisation in 3D estimation.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	All chip samples and drillhole samples were agglomerated. Data type biases were not investigated due to the small number of drillhole intersections. Where stretch values were used in the estimation these were composited to a 3 m composite based on a minimum stretch length. These values were treated separately and not included in the chip sample database. Areas utilising stretch values were immediately relegated to Inferred Mineral Resource classification. During the 2017-2019 drilling programme, in thin reef environments with reefs of <1 m (Upper Theta, Lower Theta and Beta Reefs) diluted (to 1 m) reef composites were utilised for evaluation purposes due to the minimum sample width obtained during the RC drilling being 1 m. In thick reef environments (Upper Rho, Lower Rho, Bevetts and Shale reefs), individual original sample widths of 1 m were maintained for utilisation in 3D estimation.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents were calculated.
Relationship between minerali	If the geometry of the mineralisation	For the historical drillhole intersections (as well as intersections pertaining to the 2017-2019 drilling campaign) no downhole lengths have been reported – only true reef widths have been recorded in the estimation database on the historical sampling plans and sections. All drilling was conducted near normal to bedding so is reef width would be very

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
sation widths and intercept lengths	with respect to the drillhole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	closely related to the intersection length due to the low dip of the orebody and the vertical drilling of the drillholes. Historical underground chip sampling is sampled normal to the dip of the reef so is therefore the true width. Only true width data is available. All significant grades presented in the estimation dataset represent the value attributable to the corrected sample width and not the real sampled length.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	The TGM Mineral Resource is not a true greenfields exploration project but rather a mature mining operation with a wealth of historical underground chip sampling and drillhole intersections which have been collated, captured and digitised. The CPR has the detail diagrams of the sampling datasets for the various operations. These include chip samples and drillhole intersections.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The various Mineral Resource estimations were conducted by Minxcon and are based upon the information provided by TGM. This Report contains summary information for all historic sampling and drilling campaigns within the Project Area, as well as more recent 2019 data obtained during the evaluation drilling conducted at the Theta Project and provides a representative range and mean of grades intersected in the datasets.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological	Various exploration campaigns have been conducted over the years but not all information is available or relevant to the current Mineral Resource update. No other exploration data other than that presented for the purposes of the Mineral Resource estimation is therefore presented here. TGM has undertaken additional drilling at Columbia Hill (Iota), Theta Hill, Browns Hill and Iota (Theta Project). This data has been incorporated in the Mineral Resource estimate. TGM has completed and is still in the process of completing metallurgical testwork and studies for the recoveries of the various reefs. This testwork all forms part of the feasibility study that is being completed.

<table>
<tr><th colspan="3">SECTION 2: REPORTING OF EXPLORATION RESULTS</th></tr>
<tr><th>Criteria</th><th>Explanation</th><th>Detail</th></tr>
<tr><td></td><td>observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</td><td></td></tr>
<tr><td rowspan="2">Further work</td><td>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</td><td>The properties have a number of potential exploration targets that may increase the current Mineral Resource and Ore Reserve. These are spread over a number of the project areas and cover lateral extensions, depth extensions as well as compiling and re-interpreting historical datasets. The table below is a summary of the near-term potential exploration targets. The scale of the exploration depends on the available budget and therefore cannot be defined currently.
<table>
<tr><th>Project</th><th>Type of Potential</th><th>Comment</th></tr>
<tr><td>Rietfontein</td><td>Lateral and depth extensions</td><td>Lateral extension is possible to the south which is untested as well as at depth below the current historical mining areas</td></tr>
<tr><td>Beta</td><td>Lateral extension</td><td>Lateral extension of the main beta "Payshoot"</td></tr>
<tr><td>CDM</td><td>Lateral extension</td><td>Lateral extension to the south toward Dukes' Hill South</td></tr>
<tr><td>Theta</td><td>Lateral extension</td><td>Lateral extension to the south on both Theta Hill and Browns Hill once 341MR is available. Lateral extension to the west and southwest at Iota</td></tr>
<tr><td>Vaalhoek</td><td>Depth extensions and open-pit opportunities</td><td>Near surface potential (open pit) exists on the Vaalhoek Reef and Thelma Leaders Reef</td></tr>
<tr><td>Glynn's Lydenburg</td><td>Shallow lateral extensions</td><td>The new model has identified new high-grade exploration targets for possible near surface open pit opportunities</td></tr>
<tr><td>Columbia Hill</td><td>Shallow lateral extensions</td><td>The new geological interpretation has identified Columbia Hill as a potential open pit target that will be drilled in the near future</td></tr>
</table>
This table excludes all the other historical mines that have not been investigated yet.</td></tr>
<tr><td>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</td><td>The potential areas for the various mines have been detailed in the CPR. Detailed exploration strategy and budget has not been finalised due to the unknown available budget.</td></tr>
</table>

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
Database integrity	Measures taken to ensure that data has	Minxcon reviewed all historical datasets attributed to all the underground projects, as well as digital plans (scanned DXF plans of sampling plans) and found that captured sample positions had good agreement with those in the digital dataset except for a small number of chip samples (<1%), which Minxcon subsequently corrected. In addition, different versions of

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	the underground sampling file were found and cross validated to test for data changes or eliminations over the years. Minxcon found that database integrity was maintained over time. The chip sampling data that was captured was also verified on an ad-hoc basis by different personnel as to the personnel that captured the data. Prior to estimation a duplicate check in Datamine Studio RM™ was carried out on the datasets to eliminate duplicate data point errors, and found that less than 2% of the population included duplicate captured sample points. Minxcon reviewed existing digital drillhole logs and assay sheets for the historical drilling relative to scans of drillhole strip logs and found very good agreement. In cases were errors were encountered, these were corrected and incorporated into a date-stamped database for sign-off prior to submission for Mineral Resource estimation. With regards to the 2017-2019 exploration campaign, assay data integrity was maintained by cross-validating MS Excel™ .csv assay results files from the laboratory with the .pdf files also provided by the Laboratory. Hard copy geological logs were kept as a means of referral with reference to the geological information captured in the project database.
	Data validation procedures used.	Minxcon reviewed all historical datasets attributed to all the underground projects, as well as digital plans (scanned DXF plans of sampling plans) and found that captured sample positions had good agreement with those in the digital dataset except for a small number of chip samples (<1%), which Minxcon subsequently corrected. In addition, different versions of the underground sampling file were found and cross validated to test for data changes or eliminations over the years. Minxcon found that database integrity was maintained over time. The chip sampling data that was captured was also verified on an ad hoc basis by different personnel as to the personnel that captured the data. Prior to estimation a duplicate check in Datamine Studio RM™ was carried out on the datasets to eliminate duplicate data point errors, and found that less than 2% of the population included duplicate captured sample points. Minxcon reviewed existing digital drillhole logs and assay sheets for the historical drilling relative to scans of drillhole strip logs and found very good agreement. In cases were errors were encountered, these were corrected and incorporated into a date-stamped database for sign-off prior to submission for Mineral Resource estimation. With regards to the 2017-2019 exploration campaign, assay data integrity was maintained by cross-validating MS Excel™ .csv assay results files from the laboratory with the .pdf files also provided by the Laboratory. Hard copy geological logs were kept as a means of referral with reference to the geological information captured in the project database.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Minxcon personnel have consistently visited the gold properties in the Sabie-Pilgrims Rest area since 2007. Mr Uwe Engelmann, who is a Competent Person and who is responsible for the sign-off of the Mineral Resources, undertook a site visit to the Beta Mine on 15 December 2016, as well as on 23 November 2017 and 18 May 2018 to review the current RC and diamond drilling conducted at the Theta Project to inspect the drilling and sampling procedures. During the May visit Mr Engelmann also inspected the tailings storage facilities ("TSFs") and Vaalhoek Rock Dump for possible depletions. An additional site visit by Mr Engelmann was conducted on 10 April 2019 to review the close-out procedures associated with the protracted preceding drilling programme and again on 21 January 2020 to investigate the additional waste rock dumps for which the historical data was supplied. Further visits to Beta and Frankfort were conducted by Minxcon personnel in early 2022 to oversee sampling exercises.
	If no site visits have been undertaken indicate why this is the case.	Not applicable – refer to above.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	Four types of digital 3D geological models were created in Datamine Studio 3™ and Datamine Studio RM™ for the different types of orebodies within the TGM Projects. The four types of geological models relate to the type of orebodies encountered and include:- • Sub-vertical discordant (cross-reef) reef models • Sub-horizontal concordant (and leader) reef models • Topographical surficial reef models • Topographical TSF models The table below presents each of the four types of geological model and the projects that they were applied to:

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**

Geological Model Type	Project Area	Reef
Sub-vertical discordant (cross-reef) reef models	Rietfontein	Rietfontein
Sub-horizontal concordant (and leader) reef models	Beta (3D)	Beta
	Frankfort (2D)	Bevetts
		Theta
	CDM (2D)	Rho
	Olifantsgeraamte (2D)	Olifantsgeraamte
	Vaalhoek (3D)	Vaalhoek
		Thelma Leaders
	Glynn's Lydenburg (3D	Glynn's
	Theta Project (Theta Hill, Browns Hill & Iota section of Columbia Hill) (3D)	Shale Reefs
		Bevetts
		Upper Rho
		Lower Rho
		Upper Theta
		Lower Theta
		Beta
	Columbia Hill (3D)	Rho
		Shale
		Shale Leaders
Topographical surficial reef models	Hermansburg	Eluvial
	DG1	Eluvial
	DG2	Eluvial
	DG5	Eluvial
Topographical TSF models	Glynn's Lydenburg	Tailings
	Blyde 1	Tailings
	Blyde 2	Tailings
	Blyde 3	Tailings
	Blyde 4	Tailings
	Blyde 5	Tailings
	Blyde 3a	Tailings
	Vaalhoek	Rock Dump
	South East (DGs), Peach Tree, Ponieskrantz and Dukes Clewer	Rock Dump (manual)

The geological reef wireframes for the Concordant and Disconcordant mineralised zones for all the digital geological models were constructed by Minxcon geologists and are based upon mine development plans and historical surveyed peg files (honouring the on-reef development) provided by TGM. Where this information did not exist, Minxcon digitised the development, stoping outlines, pillars, chip sample data, geological mapping and interpretation data (where available) and survey pegs from digital scans of historical mine survey and sampling plans. Drillholes, survey pegs and thickness modelling were utilised to model the stacked concordant reefs for the Theta Project. The eluvial deposits and TSF models were also constructed by Minxcon geologists and are based upon surveyed contour lines (in the case of the TSFs) and drillhole collars. In the case of the eluvial deposits, topographical contours in conjunction with drillhole collars, were utilised to generate the geological and geographical 3D limits to the geological wireframe models.

Minxcon is of the view that the confidence in the geological wireframes is such that it supports the relevant Mineral Resource categorisation currently utilised in the Mineral Resource estimate.

Criteria	Explanation	Detail
	Nature of the data used and of any assumptions made.	Scanned plans were digitised to generate development strings. These were co-ordinated and repositioned relative to underground plans and survey pegs. Geological plans were also used in conjunction with limited underground geological mapping, underground survey pegs in conjunction with historical and new drillholes were used in the generation of the underground and open-pit project geological models.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The geological interpretation of the Sabie-Pilgrims Rest Goldfield (as discussed in the geology section) has not been re-interpreted but what Minxcon has undertaken is a process of collating, capturing and digitising the historical datasets (chip samples, drillhole intersections and historical plans into the electronic environment (GIS and Datamine) to assist in re-investigating the undiscovered potential at the different mines and re-estimation of Mineral Resources if there is potential. Due to the quality and volume of drilling conducted on the Theta Project during 2017-2019, Minxcon was able to generate a lithological model for the first time, which assisted greatly in correctly identifying and correlating individual reefs. In addition, the lithological modelling has played a significant role in the Mineral Reserving process associated with the Theta Project. The surficial or eluvial deposits utilised topographical control as opposed to geological control. The Mineral Resource estimation has been restricted to the hard boundaries defined in the geological interpretation in the form of faulting and outcrop lines. For Rietfontein, a maximum depth below surface of 440 m restricts the depth extension.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	The use of geology in guiding and controlling Mineral Resource estimation.	The geological reef wireframes for the various underground projects were constructed by a Minxcon geologist and are based upon mine development plans and historical surveyed peg files (honouring the on-reef development) provided by TGM. The resultant geological wireframes were then utilised as a closed volume to constrain the volume and spatial estimate of the Mineral Resources. Geological structures were constructed and utilised as hard boundaries for the purposes of Mineral Resource estimation. Due to the quality and volume of drilling conducted on the Theta Project during 2017-2019, Minxcon was able to generate a lithological model for the first time, which assisted greatly in correctly identifying and correlating individual reefs. In addition, the lithological modelling has played a significant role in the Mineral Reserving process associated with the Theta Project. The surficial or eluvial deposits utilised topographical control as opposed to geological control.
	The factors affecting continuity both of grade and geology.	The Mineral Resource estimation has been restricted to the hard boundaries defined in the geological interpretation in the form of faulting and outcrop lines. For Rietfontein a maximum depth below surface of 440 m restricts the depth extension.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The block model extents for all the digital project models are shown in the table below. The block models cover all the structures modelled.

Geological Model Type	Project Area	Reef	Block Size			Block Model Dimension		
			X (m)	Y (m)	Z (m)	X (m)	Y (m)	Z (m)
Sub-vertical discordant (cross-reef) reef models	Rietfontein	Rietfontein	20	30	30	900	4020	1080
Sub-horizontal concordant (and leader) reef models	Beta	Beta	50	50	10	4350	4550	10
	Frankfort	Bevetts	20	20	10	2100	1580	10
	Clewer, Dukes Hill & Morgenzon	Rho	50	50	10	3100	7100	10
	Olifantsgeraamte	Olifantsgeraamte	20	20	1	800	1000	1
	Vaalhoek	Vaalhoek	20	20	10	2500	4380	10
		Thelma Leaders	20	20	10	2500	4380	10
	Theta Hill & Browns Hill	Beta	20	20	5	4000	3000	600
		Lower Theta	20	20	5	4000	3000	600
		Upper Theta	20	20	5	4000	3000	600
		Bevetts	20	20	5	4000	3000	600
		Shales	20	20	5	4000	3000	600
	Iota section of Columbia Hill	Rho Upper	20	20	1	1140	1600	1820
		Rho Lower	20	20	1	1140	1600	1820
		Bevetts	20	20	1	1140	1600	1820
		Upper Theta	20	20	1	1140	1600	1820
	Glynn's Lydenburg	Glynn's	20	20	10	7840	7440	10
Topographical surficial reef models	Hermansburg	Eluvial	20	20	3	240	360	87
	DG1	Eluvial	20	20	3	292	432	103
	DG2	Eluvial	20	20	3	58	560	213
Topographical TSF models	Glynn's Lydenburg	Tailings	25	25	3	360	485	19
	Blyde 1	Tailings	25	25	3	340	260	20
	Blyde 2	Tailings	25	25	3	156	172	20
	Blyde 3	Tailings	25	25	3	155	190	23
	Blyde 4	Tailings	25	25	3	130	145	12
	Blyde 5	Tailings	25	25	3	95	60	12
	Blyde 3a	Tailings	25	25	3	120	135	7
	TGM Plant	Tailings	10	10	1.5	720	450	51
	Vaalhoek	Rock Dump	10	10	1	280	300	40
	South East (DGs)	Rock Dump	N/A	N/A	N/A	N/A	N/A	N/A
	Peach Tree	Rock Dump	N/A	N/A	N/A	N/A	N/A	N/A
	Ponieskrantz	Rock Dump	N/A	N/A	N/A	N/A	N/A	N/A
	Dukes Clewer	Rock Dump	N/A	N/A	N/A	N/A	N/A	N/A
Block Plans and/ or Block Listings	Ponieskrantz*	Portuguese	N/A	N/A	N/A	N/A	N/A	N/A
	Frankfort Theta*	Theta	N/A	N/A	N/A	N/A	N/A	N/A
	Nestor*	Sandstone	N/A	N/A	N/A	N/A	N/A	N/A

Note: ** These historical mines have not been converted yet and are still manual ore resource block lists.*

Estimation and modelling techniques	The nature and appropriateness of the estimation technique(	Estimations were carried out utilising Ordinary Kriging for the latest estimations, with the exception of the TGM Plant tailings where Inverse distance squared was seen as most appropriate. The table shows the different estimations techniques per project and the number of domains used. Domains were based on data type available and structural boundaries. The search parameters informed by the variography for the various areas are presented in the table below with the minimum and maximum number of samples used in the estimation.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	Explanation	Detail
	s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	See table below

Project Area	Reef	Vgram Range		Est no Samples		Type Estimation
		Min	Max	Min	Max	
Rietfontein	Rietfontein	40	120	5	15	Ordinary Kriging
Beta	Beta	40	297	5	20	Ordinary Kriging
Frankfort	Bevetts	115	120	3	30	Ordinary Kriging
CDM	Rho	383	583	10	25	Ordinary Kriging
Olifantsgeraamte	Olifantsgeraamte					Ordinary Kriging
Vaalhoek	Vaalhoek	68.9	174.8	4	20	Ordinary Kriging
	Thelma Leaders	86.7	96.5	4	20	Ordinary Kriging
Theta Hill & Browns Hill	Beta	90.3	90.3	3	15	Ordinary Kriging
	Lower Theta	99.7	99.7	3	15	Ordinary Kriging
	Upper Theta	10.4	10.4	3	15	Ordinary Kriging
	Bevetts	89.5	89.5	3	15	Ordinary Kriging
	Shale	79.6	79.6	3	15	Ordinary Kriging
Iota section of Columbia Hill	Upper Theta	72	72	3	15	Ordinary Kriging
	Lower Rho	72	72	3	15	Ordinary Kriging
	Upper Rho	126.9	126.9	3	15	Ordinary Kriging
	Bevetts	72.2	72.2	2	10	Ordinary Kriging
	Shale	72.2	72.2	3	15	Ordinary Kriging
Glynn's Lydenburg	Glynn's	75	488.5	3	30	Ordinary Kriging
Hermansburg	Eluvial	25.8	25.8	12	40	Ordinary Kriging
DG1	Eluvial	122.5	122.5	4	15	Ordinary Kriging
DG2	Eluvial	85.8	85.8	4	15	Ordinary Kriging
Glynn's Lydenburg	Tailings	92.3	195.8	4	40	Ordinary Kriging
Blyde 1	Tailings	31.8	31.8	4	40	Ordinary Kriging
Blyde 2	Tailings	30.1	30.1	4	40	Ordinary Kriging
Blyde 3	Tailings	25.1	25.1	4	40	Ordinary Kriging
Blyde 4	Tailings	30.7	30.7	4	40	Ordinary Kriging
Blyde 5	Tailings	7.1	7.1	4	40	Ordinary Kriging
Blyde 3a	Tailings	31.6	31.6	4	40	Ordinary Kriging
TGM Plant	Tailings	120	120	2	10	Inverse distance Squared
Vaalhoek	Rock Dump	18.2	32.9	2	40	Ordinary Kriging
South East (DGs)	Rock Dump					Manual/Historic
Peach Tree	Rock Dump					Manual/Historic
Ponieskrantz	Rock Dump					Manual/Historic
Dukes Clewer	Rock Dump					Manual/Historic
Ponieskrantz*	Portuguese					Manual/Historic
Frankfort Theta*	Theta					Manual/Historic
Nestor*	Sandstone					Manual/Historic

Note: ** These historical mines have not been converted yet and are still manual ore resource block lists.*

The Mineral Resource was then depleted with the mining voids. The estimation techniques applied are considered appropriate. Datamine Studio™ was utilised for the statistics, geostatistics and block model estimation.

Criteria	Explanation	Detail
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	See table below

Project Area	Reef	Historic Estimate Available Yes/No
Rietfontein	Rietfontein	Yes
Beta	Beta	Yes
Frankfort	Bevetts	Yes
Clewer, Dukes Hill & Morgenzon	Rho	No – not a combined resource
Olifantsgeraamte	Olifantsgeraamte	Yes
Vaalhoek	Vaalhoek	No – not a complete electronic resource
	Thelma Leaders	No – not a complete electronic resource
Glynn's Lydenburg	Glynn's	No – not a complete electronic resource
Theta Hill & Browns Hill	Beta	No
	Lower Theta	No
	Upper Theta	No
	Bevetts	No
	Shale	No
Iota section of Columbia Hill	Upper Theta	No
	Lower Rho	No

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**

	Upper Rho	No
	Bevetts	No
Hermansburg	Eluvial	Yes
DG1	Eluvial	Yes
DG2	Eluvial	Yes
Glynn’s Lydenburg	Tailings	Yes
Blyde 1	Tailings	Yes
Blyde 2	Tailings	Yes
Blyde 3	Tailings	Yes
Blyde 4	Tailings	Yes
Blyde 5	Tailings	Yes
Blyde 3a	Tailings	Yes
TGM Plant	Tailings	No – not from drill sampling
Vaalhoek	Rock Dump	Yes
South East (DGs)	Rock Dump	Yes
Peach Tree	Rock Dump	Yes
Ponieskrantz	Rock Dump	Yes
Dukes Clewer	Rock Dump	Yes
Ponieskrantz*	Portuguese	No
Frankfort Theta*	Theta	No
Nestor*	Sandstone	No

Note: ** These historical mines have not been converted yet and are still manual ore resource block lists.*

Criteria	Explanation	Detail
	The assumptions made regarding recovery of by-products.	No investigation has been conducted with regards secondary mineralisation or correlation between pyrite and gold.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No estimates pertaining to deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation) have been conducted.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	See table below.

Geological Model Type	Project Area	Reef	Block Size			Block Model Dimension			Sample Spacing
			X	Y	Z	X	Y	Z	
Sub-vertical discordant (cross-reef) reef models	Rietfontein	Rietfontein	20	30	30	900	4020	1080	3-5 m
Sub-horizontal concordant (and leader) reef models	Beta	Beta	50	50	10	4350	4550	10	3-5 m
	Frankfort	Bevetts	20	20	10	2100	1580	10	3-5 m
	Clewer, Dukes Hill & Morgenzon	Rho	50	50	10	3100	7100	10	3-5 m
	Olifantsgeraamte	Olifantsgeraamte	20	20	1	800	1000	1	3-5 m
	Vaalhoek	Vaalhoek	20	20	10	2500	4380	10	3-5 m
		Thelma Leaders	20	20	10	2500	4380	10	3-5 m
	Glynn’s Lydenburg	Glynn’s	20	20	10	7840	7440	10	3-5 m

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES											
Criteria	**Explanation**	**Detail**									
			Theta Hill & Browns Hill	Beta	20	20	5	4000	3000	600	3-100 m
				Lower Theta	20	20	5	4000	3000	600	3-100 m
				Upper Theta	20	20	5	4000	3000	600	50-100 m
				Bevetts	20	20	5	4000	3000	600	50-100 m
				Shales	20	20	5	4000	3000	600	50-100 m
			Iota section of Columbia Hill	Rho Upper	20	20	1	1140	1600	1820	3-75 m
				Rho Lower	20	20	1	1140	1600	1820	50-100 m
				Bevetts	20	20	1	1140	1600	1820	50-100 m
				Upper Theta	20	20	1	1140	1600	1820	50-100 m
		Topographical surficial reef models	Hermansburg	Eluvial	20	20	3	240	360	87	25 m
			DG1	Eluvial	20	20	3	292	432	103	25 m
			DG2	Eluvial	20	20	3	58	560	213	25 m
		Topographical TSF models	Glynn's Lydenburg	Tailings	25	25	3	360	485	19	25 m
			Blyde 1	Tailings	25	25	3	340	260	20	25 m
			Blyde 2	Tailings	25	25	3	156	172	20	25 m
			Blyde 3	Tailings	25	25	3	155	190	23	25 m
			Blyde 4	Tailings	25	25	3	130	145	12	25 m
			Blyde 5	Tailings	25	25	3	95	60	12	25 m
			Blyde 3a	Tailings	25	25	3	120	135	7	25 m
			TGM Plant	Tailings	10	10	1.5	720	450	51	50 m
			Vaalhoek	Rock Dump	10	10	1	280	300	40	25 m
			South East (DGs)	Rock Dump	N/A	N/A	N/A	N/A	N/A	N/A	
			Peach Tree	Rock Dump	N/A	N/A	N/A	N/A	N/A	N/A	
			Ponieskrantz	Rock Dump	N/A	N/A	N/A	N/A	N/A	N/A	
			Dukes Clewer	Rock Dump	N/A	N/A	N/A	N/A	N/A	N/A	
		Block Plans and/ or Block Listings	Ponieskrantz*	Portuguese	N/A	N/A	N/A	N/A	N/A	N/A	
			Frankfort Theta*	Theta	N/A	N/A	N/A	N/A	N/A	N/A	
			Nestor*	Sandstone	N/A	N/A	N/A	N/A	N/A	N/A	
		Note: ** These historical mines have not been converted yet and are still manual ore resource block lists.* The Block Models produced in Datamine Studio RM™ consisting of a cell sizes as shown in the above table. Final estimated models were projected to the reef plan based on the structural interpretation.									
	Any assumptions behind modelling of selective mining units.	No assumptions were made in terms of selective mining units with respect to the cell size selected.									
Estimation and modelling techniques (continued)	Any assumptions about correlation between variables.	Grade (Au g/t) and reef width were estimated - no correlation between thickness and grade was found during the statistical analysis, however a cm.g/t value was calculated on a post estimation basis.									
	Description of how the geological interpretation was used to control the	The Mineral Resource estimation has been restricted to the hard boundaries encompassed by the geological wireframes.									

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	resource estimates.	
	Discussion of basis for using or not using grade cutting or capping.	The data sets were capped per domain and the following table indicates the minimum and maximum capping of the upper limits of the data sets. Minxcon utilised 'Cumulative Coefficient of Variation' plots to assist with the capping. Reef widths were capped in the same manner due to anomalies in the sampling thickness and generally occur between the 95th to the 99th percentile. CAE Studio RM™ was utilised for the statistics, geostatistics and block model estimation. Capping ranges as depicted in the table below represent capping range for the various domains per project. These are broken up in detail in the CPR.

Geological Model Type	Project Area	Reef	Capping		Number of Estimation Samples
			RW (cm)	Au (g/t)	
Sub-vertical discordant (cross-reef) reef models	Rietfontein	Rietfontein	236	123.5	2,262
Sub-horizontal concordant (and leader) reef models	Beta	Beta	170.0	300	4,566
	Frankfort	Bevetts	200-281	46.6-57.5	4,114
	Clewer, Dukes Hill & Morgenzon	Rho	50	314.5	24,693
	Olifantsgeraamte	Olifantsgeraamte	142	147.3	316
	Vaalhoek	Vaalhoek	335.3	411.4	16,652
		Thelma Leaders	54 -78	137-304	901
	Glynn's Lydenburg	Glynn's	105-281	100-134	29,444
	Theta Hill & Browns Hill	Beta	176	14.0	1,673
		Lower Theta	176	18.2	5,609
		Upper Theta	176	63.4	148
		Bevetts	N/A	14.0	155
		Shale	N/A	4.9	59
	Iota section of Columbia Hill	Upper Theta	N/A	9.1	39
		Lower Rho	N/A	23.0	680
		Upper Rho	N/A	212.0	208
		Bevetts	N/A	19.4	26
Topographical surficial reef models	Hermansburg	Eluvial	N/A	67.1	1,076
	DG1	Eluvial	N/A	8.55	784
	DG2	Eluvial	N/A	22.5	234
Topographical TSF models	Glynn's Lydenburg	Tailings	N/A	1.8	793
	Blyde 1	Tailings	N/A	2.2	288
	Blyde 2	Tailings	N/A	2.1	176
	Blyde 3	Tailings	N/A	1.0	179
	Blyde 4	Tailings	N/A	0.9	104
	Blyde 5	Tailings	N/A	1.0	40
	Blyde 3a	Tailings	N/A	0.9	27
	TGM Plant	Tailings	N/A	2.6	288
	Vaalhoek	Rock Dump	N/A	4.1 -16.1	80
	South East (DGs)	Rock Dump	N/A	N/A	N/A
	Peach Tree	Rock Dump	N/A	N/A	N/A
	Ponieskrantz	Rock Dump	N/A	N/A	N/A
	Dukes Clewer	Rock Dump	N/A	N/A	N/A
Block Plans and/ or Block Listings	Ponieskrantz*	Portuguese	N/A	N/A	N/A
	Frankfort Theta*	Theta	N/A	N/A	N/A
	Nestor*	Sandstone	N/A	N/A	N/A

Note: ** These historical mines have not been converted yet and are still manual ore resource block lists.*

	The process of validation, the checking process used, the comparison of model data to	Swath analysis of the current estimated projects were conducted in the east-west and north-south directions in order to check correlations between the block modelled grades and the raw sampled values. Swath analysis shows a good correlation with the sample grade. In addition, correlation between the estimate and the average value of a block was investigated. Historic estimates (eluvials & TSFs and Olifantsgeraamte) were reviewed visually to ensure similar grade trends between drillholes or sampling points and the final block models. In addition, for the TSFs the mean sampled value was compared to the mean estimated value of the block models.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	drillhole data, and use of reconciliation data if available.	
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The density is based on a dry rock mass.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The Mineral Resource has been split into underground Mineral Resources, open pit Mineral Resources and tailings dams. The following parameters were used for the declaration and pay limit calculation: Gold price, % MCF, dilution, discount rate, plant recovery factor, mining cost total plant cost. The gold price of USD1,497/oz, is the 90th percentile of the historical real term commodity prices since 1980. **Description** / **Unit** / **Value** Gold Price / USD/oz / 1,500 % MCF / % / 90% Dilution / % / 0% Plant Recovery Factor / % / 90% Mining Costs / ZAR/t / 522 Total Plant Cost / ZAR/t / 472 Total Cost / ZAR / 994 For the open pit Mineral Resource cut-off, the following parameters were used. **Description** / **Unit** / **Value** Gold Price / USD/oz / 1,500 % MCF / % / 100% Dilution / % / 0% Plant Recovery Factor / % / 92% Mining Costs / ZAR/t / 24 Total Plant Cost / ZAR/t / 269 For the tailings Mineral Resource cut-off, the parameters were the same as above except the plant recovery factor which was 50% and the total mining and processing cost of ZAR135/t with a 10% discount. The resultant cut-offs were 160 cm.g/t for the underground (pay limit calculation); 0.5 g/t and 0.35 g/t for the Theta Project (economic cut-off calculation) for the open pit (with in the pit shell using Datamine Maxipit software) and 0.35 g/t for the tailings dam and rock dumps (pay limit calculation).
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It	A minimum stoping width of 90 cm was assumed. Where reef width (or channel width) was less than 70 cm, dilution was increased accordingly. Elsewhere, the stoping width was calculated by adding 20 cm dilution to the Mineral Resource Estimation. No dilution was applied to the open pit Mineral Resources, nor the TSF Mineral Resources, with the exception of the new Theta Project where narrow reefs (<100 cm reef thickness) were diluted to 100 cm due to the drilling sample run achieved in the RC drilling programme being at 1 m intervals.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	Explanation	Detail
	is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the	The ore will be processed via cyanide leach and carbon adsorbsion as is done with most gold ores. A Sulphide and carbon flotation step with an oxidative leach is included for any sulphides and for treating double refractory ore. A different recovery estimate was used for each mine. The recovery assumed for Beta is 88% as it is known to be a free milling ore with limited preg-robbing characteristics. Frankfort is a double refractory ore, with significant locked gold and preg-robbers, a 69% recovery was assumed. CDM also contains sulphides but historically gave fair recoveries, and 88% was assumed.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly	No environmental factors or assumptions were applied to this Mineral Resource estimation.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	No historical bulk density measurement data is available besides a tabulated summary table indicating historically applied densities for the various in situ reefs. However, bulk density tests have been carried out for the Theta Project reefs host lithologies. Reef samples suitable for bulk density tests were however limited due to the poor core recovery achieved in the 2017-2019 diamond drilling programme. A density of 3.6 g/cm^3 was used for the calculation of in situ underground and open pit hard rock ore tonnes, in line with the value used in previous declarations. A density of 2.84 g/cm^3, which is the average density of dolomite, was used for the waste or dilution tonnes. The Rietfontein estimate uses a 2.9 t/m^3 based on historical assumptions and estimates. The Theta Project uses a bulk density of 2.75 t/m^3 for the estimation in areas where there was new drilling data. The historical 3.6 t/m^3 for reef and 2.84 t/m^3 for the dolomites were still used in the historical areas as there was no new data. In these areas the diluted reef density is in the region of 3.1 t/m^3. The 2.75 t/m^3 is based on the field testing of the core samples only as the RC chips could not be used due to the weathered nature and fine material in the samples. 156 density readings were taken on the available reef core of which 27 were not reliable due to high clay (WAD) content and fine material. For the 129 representative core samples the density was 2.69 t/m^3 and for the solid core (53 samples) it was 2.78 t/m^3. Therefore, a density of 2.75 t/m^3 was utilised. More work is required on the density with further drilling campaigns to obtain more readings and a higher level of confidence in the density. The density is one of the reasons that the Mineral Resource categories in the Theta Project are only Indicated and Inferred with no Measured Mineral Resources. Densities were determined utilising the Archimedes principle. Bulk density for the eluvial deposits was assumed at 2.3 t/m^3 based on typical unconsolidated material densities. Minxcon used an SG of 1.4 t/m^3 for the modelling of all of the historical TSFs, with the exception of the TGM Plant TSF, where SG measurements were conducted utilising the “pipe method”. The SG for this TSF was calculated at 1.54 t/m^3 from a total of 40 samples taken at various locations all over the TSF. In Minxcon’s view this SG may be considered to representative for this TSF.
	The bulk density for bulk material must have been measured by	The pipe method (as utilised on the TGM Plant TSF) of measuring bulk density is utilised on soft sediments and is conducted in such a manner as to ensure that little to no compaction of the material within the pipe occurs. This serves to preserve the inherent sediment porosity.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	No historical bulk density measurement data is available besides a tabulated summary table indicating historically applied densities for the various in situ reefs. However, bulk density tests have been carried out for the Theta Project reefs host lithologies. Reef samples suitable for bulk density tests were however limited due to the poor core recovery achieved in the 2017-2019 diamond drilling programme. A density of 3.6 g/cm3 was used for the calculation of in situ underground and open pit hard rock ore tonnes, in line with the value used in previous declarations. A density of 2.84 g/cm3, which is the average density of dolomite, was used for the waste or dilution tonnes. The Rietfontein estimate uses a 2.9 t/m3 based on historical assumptions and estimates. The Theta Project uses a bulk density of 2.75 t/m3 for the estimation in areas where there was new drilling data. The historical 3.6 t/m3 for reef and 2.84 t/m3 for the dolomites were still used in the historical areas as there was no new data. In these areas the diluted reef density is in the region of 3.1 t/m3. The 2.75 t/m3 is based on the field testing of the core samples only as the RC chips could not be used due to the weathered nature and fine material in the samples. 156 density readings were taken on the available reef core of which 27 were not reliable due to high clay (WAD) content and fine material. For the 129 representative core samples the density was 2.69 t/m3 and for the solid core (53 samples) it was 2.78 t/m3. Therefore, a density of 2.75 t/m^3 was utilised. More work is required on the density with further drilling campaigns to obtain more readings and a higher level of confidence in the density. The density is one of the reasons that the Mineral Resource categories in the Theta Project are only Indicated and Inferred with no Measured Mineral Resources. Densities were determined utilising the Archimedes principle. Bulk density for the eluvial deposits was assumed at 2.3 t/m³ based on typical unconsolidated material densities. Minxcon used an SG of 1.4 t/m³ for the modelling of all of the historical TSFs, with the exception of the TGM Plant TSF, where SG measurements were conducted utilising the "pipe method". The SG for this TSF was calculated at 1.54 t/m³ from a total of 40 samples taken at various locations all over the TSF. In Minxcon's view this SG may be considered to representative for this TSF.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource classification for the all the block models is based on a positive kriging efficiency, calculated variogram ranges and number of samples informing the estimation. Where confidence in the historical sampling values or position were low the classification was downgraded to Inferred Mineral Resource. At the Theta Project, the highest Mineral Resource classification applied was Indicated (regardless of data spacing: 1) Historical nature associated with the chip sampling dataset, stretch values and block values and around the historical drillholes. 2) The low availability of detailed bulk density data 3) the low volume of diamond drilling conducted at the Project.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimation	Mineral Resources were only classified as Indicated and Inferred Mineral Resources in the vast majority of cases due to the age and spacing of the data utilised. Measured Mineral Resources were only identified on a small portion of Frankfort due to the recent nature of some areas of the channel chip sampling data. Minxcon utilised a combination of variogram ranges, spread in confidence limits and minimum number of samples to be utilised in the estimate, in conjunction with geological continuity to assign Mineral Resource categories. At the Theta Project, the highest Mineral Resource classification applied was Indicated (regardless of data spacing: 1) Historical nature associated with the chip sampling dataset, stretch values and block values and around the historical drillholes. 2) The low availability of detailed bulk density data 3) the low volume of diamond drilling conducted at the Project.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	s, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The additional rock dumps (South East (DGs), Peach Tree, Ponieskrantz and Dukes Clewer) have all been classified as Inferred Mineral Resources due to the historical nature of the database. A bulk sampling programme would have to be undertaken to confirm the Mineral Resource in order for them to be converted to an Indicated Mineral Resource.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	It is the Competent Person's opinion the Mineral Resource estimation conducted by Minxcon is appropriate and presents a reasonable result in line with accepted industrial practices.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Minxcon, as well as the Competent Person, conducted internal reviews of the Mineral Resource estimate, geological modelling and the data transformations from 2D to 3D.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an	Upon completion of the estimations, the older block models were visually checked with regards to the drillholes and sample points to the estimated values. Swath plot analysis was carried out on the newly estimated block models, comparing the chip samples and drillholes in a particular swath to the estimation block model also falling within the same swath. The swath plots produce a good correlation with regards the estimation and the data in both the north-south plots and the east-west plots. The Competent Person deems the Mineral Resource estimate for the current estimated projects. The estimation conducted at the Theta Project underwent similar swath and visual checks as the historical Mineral Resource block model estimates. The Competent Person deems the Mineral Resource estimate for the Current Estimated Projects to reflect the relative accuracy relative to the Mineral Resource categories as required by the Code for the purposes of declaration and is of the opinion that the methodologies employed in the Mineral Resource estimation, based upon the data received may be considered appropriate.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	Regional accuracy is considered acceptable as evidenced by the swath plots, and direct sample point versus block model checks have ensured acceptable local accuracy with regards the estimated Projects.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Accuracy of the estimate relative to production data (historical projects) cannot be ascertained at this point as the project is still in the exploration phase. Accurate historical production figures are not readily available. At the Theta Project, a feasibility study has been completed with no accurate production data being available from the historical workings for the various reefs. Production has not commenced, thus "ground-truthing" at this point is not possible. Also, proposed open pit mining methods are not aligned to the historical underground mining methods employed.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
Mineral Resource estimate for convers	Description of the Mineral Resource estimate used as a basis for the conversion	Ore Reserves and mining were investigated for the Beta, Rietfontein, Frankfort and CDM underground operations. The Ore Reserve estimation utilises the same Mineral Resource models used for the Mineral Resource classification as at 1 February 2021.

<table>
<tr><th colspan="3">SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES</th></tr>
<tr><th>Criteria</th><th>Explanation</th><th>Detail</th></tr>
<tr><td rowspan="2">ion to Ore Reserves</td><td>to an Ore Reserve.</td><td></td></tr>
<tr><td>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</td><td>All Mineral Resources are stated as inclusive of the Ore Reserves.</td></tr>
<tr><td rowspan="2">Site visits</td><td>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</td><td>The Competent Person Mr van Heerden has conducted a number of site visits of the gold properties held by TGM in the Sabie-Pilgrims Rest area since 2007. Mr van Heerden vistied Project Area near the plant facility throughout 2019. Further site visits were conducted on 7 March 2019 and 5 November 2019. On 22 September 2019, the Rietfontein Project was also visited with the purpose to identify access options for underground operations. Later site visits on 27-28 September 2021 were conducted to all the projects included in the underground redevelopment project.</td></tr>
<tr><td>If no site visits have been undertaken indicate why this is the case.</td><td>Site visits have taken place, as described above.</td></tr>
<tr><td rowspan="2">Study status</td><td>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</td><td>Two mining strategy scenarios have been proposed by Minxcon. The first scenario, the Base Case LoM schedule have not been converted to Ore Reserves. The second scenario, the Ore Reserve Plan LoM schedule for Beta, Rietfontein, Frankfort and CDM are at a Feasibility Level of Study and Measured Mineral Resources and Indicated Mineral Resources have been converted to Proved and Probable Ore Reserves respectively, using the appropriate modifying factors. Frankfort Mine is the only underground operation for which Measured Mineral Resources have been declared and converted to Proved Ore Reserves.</td></tr>
<tr><td>The Code requires that a study to at least Prefeasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</td><td>Detailed LoM plans and schedules have been completed for the four underground operations in the Ore Reserve Plan. All components are at a Feasibility Study Level including detailed geotechnical studies at each of the four underground mines. The studies conducted on the underground operations have been deemed at an overall FS Level.

Life of mine plans to a feasibility level of detail was the basis of the Ore Reserve classification. The mine plans take into consideration all relevant modifying factors and productivities. A financial valuation was conducted on the life of mine plans and was found economically viable. The table below is a summary of the general study status.

<table>
<tr><th>General</th><th>Status</th><th>Study Level</th><th>Comment</th></tr>
<tr><td>Mineral Resource categories</td><td>Measured and Indicated</td><td>FS</td><td>The areas that were targeted for mining were only Indicated and Measured Resources.</td></tr>
<tr><td>Ore Reserve categories</td><td>Proved and Probable</td><td>FS</td><td>Ore Reserve can be added as they are Proved and Probable Ore Reserve categories</td></tr>
<tr><td>Mining method</td><td>Detailed and Optimised</td><td>FS</td><td></td></tr>
<tr><td>Geotechnical Parameters</td><td>Detailed and Optimised</td><td>FS</td><td></td></tr>
<tr><td>Mine design</td><td>Detailed mine plan and schedule</td><td>FS</td><td></td></tr>
<tr><td>Infrastructure Design</td><td>Engineering 20% - 50% complete</td><td>FS</td><td></td></tr>
<tr><td>Scheduling</td><td>Monthly for the LoM</td><td>FS</td><td></td></tr>
<tr><td>Mineral Processing</td><td>Detailed and optimised</td><td>FS</td><td>FS done by Met63. Reviewed by Minxcon.</td></tr>
<tr><td rowspan="2">Tailings Deposition</td><td>TSF - Surface deposition</td><td>PFS</td><td>Detailed design completed by Eco-Elementum.</td></tr>
<tr><td>TSF - Underground deposition</td><td>PFS</td><td>Detailed design completed by Paterson & Cooke.</td></tr>
</table>
</td></tr>
</table>

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**

Permitting - (water, power, mining, prospecting & environmental)	Authorities engaged and applications submitted were not already in possession	FS	
Social licence to operate	Formal communication structures and engagement models in place	PFS	

The table below is a summary of the capital cost study status level.

Capital Cost Category	Discipline	Status	Study Level	Comment
Basis of Estimate to include the following areas:				
Civil/structural, architectural, piping/HVAC, electrical, instrumentation, construction labour, construction labour productivity, material volumes/amounts, material/equipment, pricing, infrastructure	Mining & Shared Infrastructure	Engineering 20% - 50% complete. Estimated material take-off quantities. Vendor quotations.	FS	
	Processing	Detailed and optimised.	FS	FS done by Met63 and reviewed by Minxcon.
	TSF - Surface deposition	Detailed from engineering at 20% to 50% complete, estimated material take-off quantities, and multiple vendor quotations	FS	FS completed by Eco Elementum.
	TSF - Underground deposition	Estimated from historic factors or percentages and vendor quotes based on material volumes. Engineering at 5-20%.	PFS	Underground deposition capital completed to PFS level by Paterson & Cooke.
Contractors	Mining & Shared Infrastructure	Percentage of direct cost by area for contractors; historic for subcontractors	PFS	
	Processing	Detailed and optimised.	FS	FS done by Met63 and reviewed by Minxcon.
	TSF - Surface deposition	Written quotes from contractor and subcontractors	FS	FS completed by Eco Elementum.
	TSF - Underground deposition	Included in unit cost or as a percentage of total cost	PFS	
Engineering, procurement, and construction management (EPCM)	Mining & Shared Infrastructure	Key parameters, Percentage of detailed construction cost	PFS	Owner will be managing the engineering, procurement and construction internally.
	Processing	Key parameters, Percentage of detailed construction cost	PFS	Owner will be managing the engineering, procurement and construction internally.
	TSF - Surface deposition	Percentage of estimated construction cost	PFS	
	TSF - Underground deposition	Percentage of estimated construction cost	PFS	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES						
Criteria	**Explanation**	**Detail**				
		Pricing	Mining	FOB mine site, including taxes and duties	PFS	
			Processing	Detailed quotations for major equipment.	FS	Capital accuracy factor below 15%.
			TSF	FOB mine site, including taxes and duties	PFS	Capital cost scaled from recent quotation.
		Owner's costs	Total Operation	Pre-production owner's costs currently funded through TGM and not included in project financials. Development owner's costs provided for in detail.	FS	Detailed Estimates
		Escalation	Mining & Shared Infrastructure	Escalation Applied	FS	Applicable escalation rates applied to relevant dated costs utilised to obtain costs in 2022 terms. Financial modelling done in real terms
			Processing	Escalation Applied	FS	Applicable escalation rates applied to relevant dated costs utilised to obtain costs in 2022 terms. Financial modelling done in real terms
			TSF	Escalation Applied	FS	Applicable escalation rates applied to relevant dated costs utilised to obtain costs in 2022 terms. Financial modelling done in real terms
		Accuracy Range (Order of magnitude)	Mining & Shared Infrastructure	Combined underground Mines ±10-15%	FS	
			Processing	Combined open pit and underground Plants ±10-15%	FS	
			TSF	Combined TSF and Backfill ±15-25%	PFS	
		Contingency Range (Allowance for items not specified in scope that will be needed)	Mining & Shared Infrastructure	Combined 12% (actual to be determined based on risk analysis)	FS	Contingencies not applied directly on capital cost estimates but in financial model
			Processing	Combined 14.4% (actual to be determined based on risk analysis)	FS	Contingencies not applied directly on capital cost estimates but in financial model
			TSF	Combined 19.44% (actual to be determined based on risk analysis)	PFS	Contingencies not applied directly on capital cost estimates but in financial model
		The table below is a summary of the operating cost study status level.				

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**

Operating Cost Category	Discipline	Status	Study Level	Comment
Basis	Mining	Detailed Estimates	FS	
	Processing	Estimated from historic factors or percentages and vendor quotes based on material volumes.	FS	Vendor quotes based on equipment list and material volumes.
	TSF - Underground deposition	Estimated from historic factors or percentages and vendor quotes based on material volumes.	PFS	
	TSF – Surface Deposition	Estimated from historic factors or percentages and vendor quotes based on material volumes. Factoring.	PFS	
Operating quantities	Mining	Detailed Estimates	FS	
	Processing	Specific consumption based on load list and testwork	FS	Specific estimates with no factoring.
	TSF - Surface deposition	Specific estimates with some factoring	PFS	
	TSF - Underground deposition	Specific estimates with some factoring	PFS	Conservative estimate for rates used
Unit costs	Mining	Detailed Estimates	FS	
	Processing	Unit cost based on vendor quotations and some historic pricing	FS	
	TSF - Surface deposition	Specific estimates for labour, power, and consumables, factoring	FS	FS completed by Eco-Elementum.
	TSF - Underground deposition	Specific estimates for labour, power, and consumables, factoring	FS	Detailed design by Paterson & Cooke.
Accuracy Range	Mining	Combined 10% - 15%	FS	
	Processing	Combined 10% - 15%	FS	
	TSF	Combined 15% - 25%	PFS	
Contingency Range (Allowance for items not specified in scope that will be needed)	Mining	+ 10% (actual to be determined based on risk analysis)	FS	
	Processing	+ 9.8% (actual to be determined based on risk analysis)	FS	
	TSF	+ 13% (actual to be determined based on risk analysis)	PFS	

Criteria	Explanation	Detail
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	A planning pay limit for each of the underground operations was calculated using current economic planning parameters and the cut-off grade was derived from the pay limit calculation. The planning pay limit was applied to the Mineral Resource model and blocks above the planning pay limit were included in the LoM designs. The Ore Reserve cut-offs applied to the underground operations are: • Beta Mine: 170 cm.g/t; • Rietfontein: 160 cm.g/t; • Frankfort Mine: 163 cm.g/t; and • CDM Mine: 121 cm.g/t
Mining factors or	The method and assumptions	Only Measured and Indicated Mineral Resources have been converted to Proved and Probable Ore Reserves, respectively. No Inferred Mineral Resources have been included

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
assumptions	used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	in the Ore Reserve estimation. The basis of the Ore Reserve estimation is detailed LoM designs and schedules for the four underground operations. The Mineral Resource to Ore Reserve conversion requires application of appropriate factors which would account for any changes to the Mineral Resources in the life of mine plan as a result of mining the ore. As part of the technical studies the Ore Reserve conversion factors were determined and applied to the Mineral Resources in the LoM plan available for conversion to reserves. This includes Inferred Resources that completes the credibility of practical and technical mining sequencing. The Inferred Resource portions are not included in the Ore Reserve estimations.
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	The mining method selected to be implemented on the underground operations at Beta Mine, Frankfort Mine and CDM Mine, is mechanised long hole drilling applied to a narrow reef orebody. The mining method requires pre-development of a mining block in preparation for stoping operations. Selective Blast mining will be applied to the development ends allowing separate extraction of the reef and waste cuts. The selected mining method allows for minimal dilution. A Shrinkage Stoping method have been selected for Rietfontein mine. Conventional drill and blast methods will break the rock and retrieved via mechanized loading through drawpoints on a lower level. Mechanised development of stoping blocks will be applied to prepare mining blocks for stoping. Detailed development and stoping plans have been designed using GEOVIA Minesched™ software. A combination of technical studies conducted at TGM and benchmarked parameters were used as mining constraints to produce a logical production sequence for each of the operations. A combination of existing and planned access will be used to expedite men, material and machine access to stoping operations.
	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.	Geotechnical studies for all four underground mines have been completed at a FS level. The recommendations as per the geotechnical reports have been applied to the Mineral Resources in the LoM plan to account for pillar losses, ore loss and dilution. Numerical modelling on the local geology within the parameters of the mining methods have been conducted. Detailed stope layout and support designs are included in the report.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	Geological Losses applied to the four underground operations are 0 % for Measured Mineral Resources, 5 % for Indicated Mineral Resources and 10 % for Inferred Mineral Resources.
	The mining dilution factors used.	The Ore Reserve conversion factors applied to the underground operations are detailed in the tables below. Detailed geotechnical studies from the four mines provided sufficient information to calculate the dilution factors used. Due to the different mining method used at Rietfontein, the modifying factors was determined differently than the other three mines.

Area	Factors		Unit	Value
Underground	Minor Geological Loss	Measured	%	0
		Indicated	%	5
		Inferred	%	10
	Pillar Loss Beta and CDM		%	7.05
	Pillar Loss Frankfort		%	11.46
	Ore loss		%	0.5
	Dilution		%	1
	MCF		%	85

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
		The pillar loss applied to the Frankfort Mine is higher than the pillar loss applied to the Beta and CDM operations. The Ore Reserve conversion factors applied to the Rietfontein mine is detailed below.

Factors		Unit	Value
Geological Losses	Measured	%	0
	Indicated	%	5
	Inferred	%	10
Pillar Loss		%	8.0
Ore Loss		%	3
Stoping and Raise Dilution		cm	20
MCF		%	85

The stoping and raise dilution to consider an overbreak into the waste of 10 cm on either side of the reef contact.

	The mining recovery factors used.	A MCF of 85 % was applied to the four underground operations which was derived from similar operations using a similar mining layout and mining method.
	Any minimum mining widths used.	A minimum mining width of 60 cm was applied in the design of Beta, Frankfort and CDM. A 15 cm hanging wall and 15 cm footwall dilution is included in the 60 cm mining width that will be used in the development end resume mining and stoping operations. A 0.9 m minimum mining width for shrinkage operations at Rietfontein was applied. The SMU design blocks for Rietfontein was 2.5 m x 0.9 m with 1.0 m interval slices.
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	The underground LoM designs and schedules of the Beta, Rietfontein, Frankfort and CDM mines includes a portion of Inferred Mineral Resources. The Inferred Mineral Resources have been excluded from the Ore Reserve estimate and the economic analysis. The Inferred Mineral Resources in the LoM plan for the underground operations are: • Beta Mine: 8.67%; • Rietfontein: 18.82%; • Frankfort Mine: 22.36% • CDM Mine: 26.17%
	Ore Reserve Estimation	Measured Mineral Resources have been converted to Proved Ore Reserves and Indicated Mineral Resources have been converted to Probable Ore Reserves. There is sufficient confidence in the modifying factors applied in the Mineral Resource to Ore Reserve conversion to convert diluted Measured Mineral Resources to Proved Ore Reserves. No Inferred Mineral Resources have been included in the Ore Reserve estimation. The Ore Reserve estimation for TGM is detailed in the table below.

Ore Reserve Category	Tonnes	Grade	Au Content	
	kt	g/t	kg	koz
Beta				
Proved	-	-	-	-
Probable	1,634	6.86	11,206	360
Rietfontein				
Proved	-	-	-	-
Probable	509	7.76	3,954	127
Frankfort				
Proved	58	4.26	245	8
Probable	258	4.08	1,053	34
CDM				
Proved	-	-	-	-
Probable	395	2.30	908	29
Combined				
Proved	58	4.26	245	8
Probable	2,796	6.12	17,121	550
Total	**2,853**	**6.09**	**17,366**	**558**

Notes:

7. An Ore Reserve cut-off of 170 cm.g/t has been applied for the Beta Mine.
8. An Ore Reserve cut-off of 150 cm.g/t has been applied for the Frankfort Mine.
9. An Ore Reserve cut-off of 121 cm.g/t has been applied for the CDM Mine.
10. An Ore Reserve cut-off of 160 cm.g/t has been applied for the Rietfontein Mine.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
		11. A gold price of USD1,465/oz and exchange rate of ZAR/USD 16.00 was used for the cut-off calculation
	The infrastructure requirements of the selected mining methods.	Infrastructure for the selected mining method includes:- • Mining contractor site – Earth Moving Vehicle workshops, stores, offices, changing facilities, fuel storage facility, wash bay and contractor's site power and water supply; • Administrative and other offices and facilities; • Underground trackless mining fleet and ancillary fleet; • Haul roads; • Waste rock dumps ("WRDs"); • Strategic ore stockpile; • RoM stockpile; • Surface water management infrastructure – Dirty and clean water separation and storage and dewatering system. • Underground water management infrastructure – Dewatering system and water storage facilities. • Water supply and distribution infrastructure; • Power supply and distribution infrastructure; • Underground ore transport (Conveyor systems and Incline Winding Plant); • Surface ore load out and storage facilities; and • Low level river crossing.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	Refractory Frankfort ore will be upgraded with DMS to reject some of the waste rock before the ore is trucked from the shaft to the plant. The plant will firstly remove the preg-robbing component and then with Ultrafine Grinding to liberate the sulphide locked gold. The liberated sulphide ore is processed in an oxidative leaching step and subsequent carbon adsorbsion, elution, elecrowinning and smelting. Free milling ore is processed using conventional CIL processing, with a sulphide flotation step to remove any sulphatic component.
	Whether the metallurgical process is well-tested technology or novel in nature.	Most of the gold ore in the world are cyanide leached and adsorbed onto activated carbon is either a CIL or CIP configuration. DMS is frequently used to concentrate ores, including gold. Ultrafine grinding is widely used in gold and other commodities to extract metals from sulphides. Flotation is a well-known technology for carbon and sulphide flotation.
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	A 10-tonne bulk sample was obtained from the Frankfort mine in late 2020 for DMS trails, mill modelling, carbon and sulphide flotation and oxidative leaching testwork. Further optimisations of the Frankfort ore process flow was done with a 55.5kg sample for effect of grind, and flotation optimisation. Four 20 kg samples from Dukes in CDM was sent to MAK Analytical for sulphide flotation and leach testwork. Composite samples were made from RC Drilling chips to represent Upper Theta, Lower Theta and Beta. A master composite of these three was also tested. Tested done included diagnostic leach, kinetic leach and the effect of grind.
	Any assumptions or allowances made for deleterious elements.	The significant amounts of preg-robbers in the Frankfort ore will be removed by a flotation circuit. Additionally, the Frankfort ore will be treated in a intensive CIL which will further reduce the effect of the preg-robber. A cyanide destruction circuit was included in the plant design which will ensure that the weak acid dissociable ("WAD") cyanide concentration in the tailings fraction that will be pumped to the TSF does not exceed the stipulated maximum level of 50 ppm.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	No bulk sampling or pilot plant testing was completed.

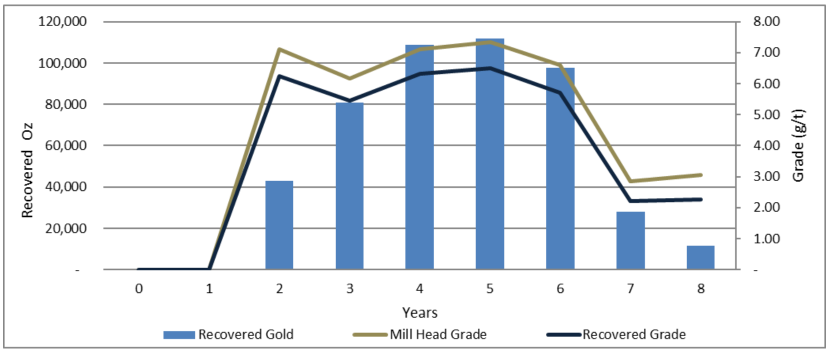
SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	Specifications are not applicable. The product will be sold as gold Doré to Rand Refinery with payability calculated based on the final gold content.
Environ mental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisatio n and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Waste rock from the TGM underground projects considered in the detailed studies will be placed on existing WRDs located at the CDM operation. Waste from the underground operations will be very limited as it will be placed in the stoping back areas and all development will be conducted on reef. Two options have been considered for the disposal of mine residue or tailings, and they will be used at the same time. There is an existing TSF that will be used for the initial deposition. This TSF will be brought up to the latest standards such as inclusion of an HDPE liner. Deposition on the surface TSF will be hydraulic placement and the underground deposition will be storage of tailings underground as a cemented paste backfill in the mined-out sections of the Beta Mine. Both these options will require relevant approvals which are still in progress.
Infrastru cture	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodatio n; or the ease with which the infrastructure can be provided, or accessed.	TGM has access to sufficient land for the development of required infrastructure and facilities. The TGM underground projects considered in the detailed studies are historical project with established access roads leading to the individual project areas. Road require some minor repairs and upgrades in areas. Power supply is currently available to the TGM plant area. Power is supplied from the Ponieskrans Eskom consumer substation located in close proximity to the TGM Plant at 22 kV via a single overhead line feeding from the Eskom Groothout Distribution substation. Power is stepped down at the Ponieskrans substation to 6.6 kV and feeds the TGM Plant intake and distribution substation. The current supply allocation to the operation is 2.5 MVA (1 x 2.5 MVA 22kV / 6.6 kV transformers and 1 x 2.5 MVA 22 kV / 6.6 kV transformers providing spare capacity). TGM is in the process of securing an additional 12 MVA allocation. This will require upgrades to the Lydenburg Eskom Transmission substation, Groothout Eskom distribution substation, overhead line from the Groothout substation to the Ponieskrans substation and the Ponieskrans substation. This will take 24 months to complete from the date of approval (accepted as August 2022). During the initial 17 months of mining only the Beta underground mine will be operational. Power requirements will thus consist of the first portion of the process plant as well as the requirements for the Beta operation. The requirement amounts to 7.2 MVA. The existing allocation of 2.5 MVA and the applications in process for a further 8 MVA will thus be sufficient to supply this phase of the project. Production at the process plant is however planned to start 4 months prior to the full grid power allocation being available and the process plant will thus be supplied from diesel generators. In month 34 of production the Rietfontein operation starts up and will require an additional 2 MVA. This will bring the total power requirement to 9.2 MVA. The available allocation of 10.5 MVA will thus be sufficient to support the addition of the Rietfontein operation.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
		Water supply will mainly consist of water sourced from dewatering the existing underground workings of the each operations, collected run-off water and abstraction from the Blyde River if required. Water requirements have been estimated for the individual water usage areas including the underground mining operations, process plant, offices and admin areas as well as the tailings storage facilities. A static water balance has been completed for each of the project operational areas (Plant, Beta, Rietfontein, Frankfort and CDM). Estimations indicate that the operation will be water-positive at peak inflow of water into the underground operations. Water from the underground operations will also be utilised for the supply of potable water to the Project, and this will pass through a potable water treatment plant. The treated water will subsequently be distributed to storage facilities located across the operation for use. The additional service water will be sourced from boreholes and potable water will be trucked from the town of Sabie and Pilgrims Rest if required Gold from the TGM projects considered in the detailed studies, will be transported from site to Rand Refineries via helicopter. Allowance has been made for the construction of a Helistop on site for this purpose. Well established roads are in place in the project areas that allows for easy access and transport of material and equipment to and from the projects. The TGM projects considered in the detailed studies are located in an area of Mpumalanga which has long been associated with mining. Skilled labour can be sourced from nearby towns such as Lydenburg, Nelspruit and Steelpoort. Towns such as Lydenburg, Graskop and Sabie are well developed with facilities such as hospitals, police stations, schools and churches. These towns are located within 57 km of the Theta project and can thus provide accommodation to employees of the project.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.	Capital costs were estimated from first principles and engineering designs. Bills of quantities were utilised to obtain quotations for the capital cost estimation. The project capital has a base date of April 2022 and an exchange rate of ZAR/USD 15.00 were utilised where applicable to convert to USD terms.
	The methodology used to estimate operating costs.	The mining and central services operating costs for the underground operations were derived from first principles cost estimations with some factoring. The plant operating costs were completed from first principles with consumable supplier quotes utilised were necessary. The corporate overheads were provided by TGM. Environmental and Social costs were calculated using the quatums provided by the Client as part of the Environmental Authorisation process.
	Allowances made for the content of deleterious elements.	Allowance has been made for the costs associated with removal of deleterious elements (WAD cyanide) prior to deposition onto the TSF.
	The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.	The price forecasts are based on forecasts from Consensus Economics which considers various brokers and analyst forecasts; the long-term price was derived using an in-house model based on the real historic price trends.
	The source of exchange rates used in the study.	The exchange rate forecasts are based on forecasts sourced from various South African banks (Investec, First National Bank and Nedbank) with the long-term exchange rate calculated using an in-house model based on the historic purchasing price parity of the Rand to the Dollar.
	Derivation of transportation charges.	Transport costs were provided by Client based on current actuals of similar mine
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet	Gold specification, refining charges and penalties are as per refining offer from Rand Refinery.

<table>
<tr><th colspan="3">SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES</th></tr>
<tr><th>Criteria</th><th>Explanation</th><th>Detail</th></tr>
<tr><td></td><td>specification, etc.</td><td></td></tr>
<tr><td></td><td>The allowances made for royalties payable, both Government and private.</td><td>The refined Mineral and Petroleum Resources Royalty Act formula was used for this Project.</td></tr>
<tr><td>Revenue factors</td><td>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</td><td>

The head-grade is based on an Ore Reserve LoM plan.

Saleable Product (Reserve Plan) - Annual



The price forecasts are based on forecasts from Consensus Economics which considers various brokers and analyst forecasts; the long-term price was derived using an in-house model based on the real historic price trends. The exchange rate forecasts are based on forecasts sourced from various South African banks (Investec, First National Bank and Nedbank) with the long-term exchange rate calculated using an in-house model based on the historic purchasing price parity of the Rand to the Dollar. Transport costs were provided by Client based on current actuals of similar mine. Gold specification, refining charges, penalties and payabilities as per refining offer from Rand Refinery.

Macro-economic forecasts and commodity prices as displayed in the table below were used in the discounted cash flow.

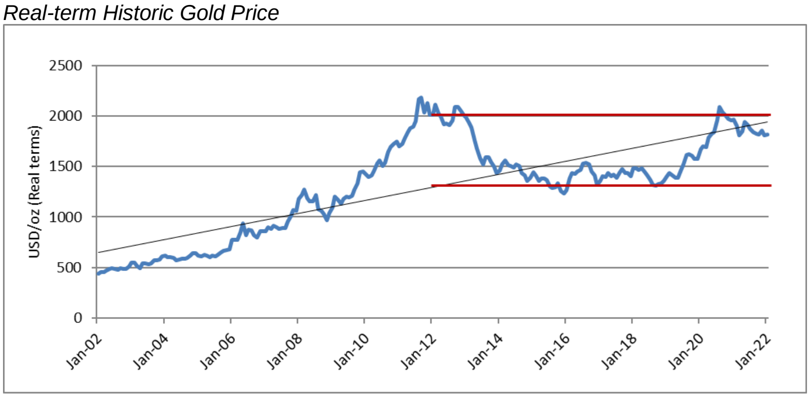
Macro-economic Forecasts and Commodity Prices over the Life of Project (Real Terms)

<table>
<tr><th rowspan="2">Item</th><th rowspan="2">Unit</th><th>2022</th><th>2023</th><th>2024</th></tr>
<tr><th>0</th><th>1</th><th>2</th></tr>
<tr><td>SA Inflation Rate</td><td>%</td><td>3.50%</td><td>2.70%</td><td>2.60%</td></tr>
<tr><td>Exchange rate</td><td>ZAR/USD</td><td>15.65</td><td>15.60</td><td>15.53</td></tr>
<tr><td>Gold</td><td>USD/oz</td><td>1,725</td><td>1,564</td><td>1,522</td></tr>
</table>

Source: Median of various Banks and Broker forecasts (Minxcon), IMF.

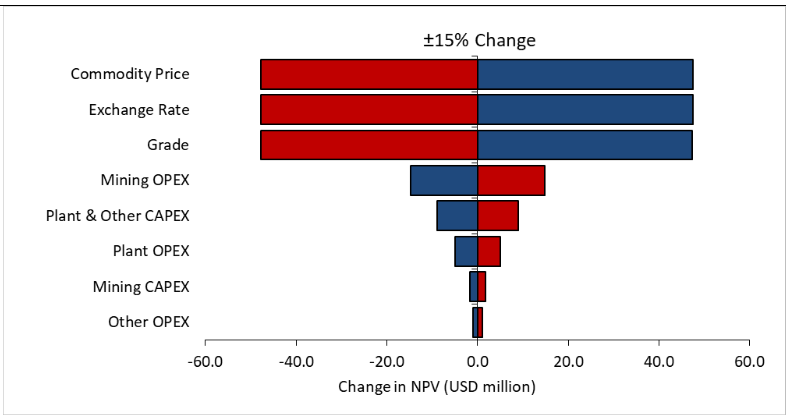
The figure below illustrates the 20-year real-terms historic gold price. For the past ten years, the gold price has been staying in a band between USD1,300/oz and USD2,000/oz. The long-term gold price was estimated as the real term average between the high and low gold price trading range over the past 10 years, USD1,650/oz.

Real-term Historic Gold Price



</td></tr>
</table>

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	No co-products.
Market assess ment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	• Strong demand in Q4 2021 lifted overall demand (excluding over-the-counter (“OTC”) demand) for 2021 by 10% year-on-year (“y-o-y”). • Gold demand for jewellery, technology, bar and coin and central banks and institutions were significantly higher than in 2020. • Demand for exchange traded funds (“ETFs”) was negative with net annual outflows. • Global central bank reserves grew by 208 t. • Total gold supply declined by 1% y-o-y primarily attributed to a significant drop in recycling. • The gold price averaged USD1,800/oz in 2021 compared to USD1,770/oz in 2020, and in August 2020 broke the USD2,000/oz barrier for the first time driven largely by global uncertainty and investors looking for safe-haven assets. The gold price ended 2021 at USD1,790/oz. • The average global All-In Sustaining Costs (“AISC”) rose to approximately USD1,068/oz over 2021, an increase of 7% y-o-y. The AISC in Q4 2021 was USD1,129/oz. High levels of uncertainty related to the COVID-19 pandemic and the low-interest rate environment supported strong investment in safe haven commodities such as gold in 2020 through 2021. Gold specifically benefited from investors’ need to reduce risk. Gold demand is forecast to increase by approximately 1% in 2022, driven primarily by increased jewellery demand (forecast to increase 6%). Chinese jewellery demand is expected remain strong as consumer confidence and income increase, while India jewellery demand is expected to continue recovering as more of the population gets vaccinated against COVID-19 and the economy recovers. The official sector is also expected to keep gold demand higher as tensions between Russia and Ukraine persist in 2022. Central banks are forecast to increase holdings by 5%. Over the medium term, the Australian Office of the Chief Economist (2022) projects gold demand to increase at an annual average rate of 4% to 2027. Jewellery demand is projected to grow at an annual average rate of 4.6% on the back of improved consumer sentiment, rising income and lower prices. A lower price environment is also projected to drive a 2.6% average annual growth in bar and coin demand, while central bank demand is projected to increase by an annual average rate of 2.7% between 2023 and 2027. World gold supply is also forecast to increase in 2022 by 2.7%, as lower scrap supply (-2.0%) will be more than offset by increased mine production (3.7%). Scrap is expected to decrease on the back of the lower expected price environment and improved income. Mine production is forecast to increase from Australia, Canada, the US and Papua New Guinea. Gold supply is projected to fall at an average 0.7% annually (Australian Office of the Chief Economist, 2022). The scrap supply is expected to decrease by an annual average of 4.6% between 2023 and 2027, as lower prices discourage selling of gold for jewellery. Mine supply, in contrast, is projected to increase up to 2024, before falling slightly to 2027. A number of large mines in South Africa have recently been mothballed due to the deep nature of the orebodies and thus high running costs and increased risk. Other parts of the world are also seeing mines become unprofitable as rising costs and lower prices squeeze margins. Significantly less funds have been spent on gold exploration in recent years, and less major gold discoveries are being made. Notwithstanding, Australia, Canada, Chile, Brazil and Argentina have a number of pipeline projects set to come into operation over the period, offsetting mine closures in China due to stricter environmental and safety regulations. Supply from recycling is forecast to decline as gold prices fall. Between 2022 and 2024, prices are forecast to fall by an average of 5% annually to around the USD1,660 mark by 2024. As described by the Australian Office of the Chief Economist (2022), rising real bond yields will restrict institutional gold investment demand. However, uncertainties regarding new strains of COVID-19 may again show intermittent enhanced support of gold as a safe haven asset. Geopolitical tensions due to the Russian invasion of Ukraine may also continue to provide higher price support.
	A customer and competitor analysis along	Gold is a commodity freely traded on the open market. Gold dorè will be produced for sale. In the case of the TGME Projects, Rand Refinery shall refine the material and if requested - sell, on their behalf.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
	with the identification of likely market windows for the product.	
	Price and volume forecasts and the basis for these forecasts.	Volume forecasts based on reserve LoM plan. The price forecasts are based on forecasts from Consensus Economics which considers various brokers and analyst forecasts; the long-term price was derived using an in-house model based on the real historic price trends.
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	N/A
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	In generating the financial model and deriving the valuations, the following were considered:- • The cash flow model is in real money terms and completed in ZAR. • The DCF valuation was set up in months and starts April 2022, but also subsequently converted to calendar years. • The annual ZAR cash flow was converted to USD using real term forecast exchange rates for the LoM period. • A company hurdle rate of 10.0% (in real terms) was utilised for the discount factor. • The impact of the Mineral Royalties Act using the formula for refined metals was included. • Sensitivity analyses were performed to ascertain the impact of discount factors, commodity prices, exchange rate, grade, operating costs and capital expenditures. • Valuation of the tax entity was performed on a stand-alone basis. • The full NPV of the operation was reported for the operations. • The Ore Reserve Plan includes only Measured and Indicated Mineral Resources in the LoM, to determine the viability of the Ore Reserves**.**
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	 The Project is most sensitive to the gold price, exchange rate, and grade, followed by mining operating costs. The project is least sensitive to capital and other operating costs.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES

Project Value	Reserve Plan
ZAR Terms	**ZARm**
NPV @ 0%	2,766
NPV @ 2.5%	2,375
NPV @ 5%	2,040
NPV @ 7.5%	1,753
NPV @ 10%	**1,505**
NPV @ 12.5%	1,291
NPV @ 15%	1,105
IRR	**49.7%**
USD Terms	**USDm**
NPV @ 0%	179.2
NPV @ 2.5%	154.0
NPV @ 5%	132.3
NPV @ 7.5%	113.8
NPV @ 10%	**97.8**
NPV @ 12.5%	83.9
NPV @ 15%	71.9
IRR	50.2%

Criteria	Explanation	Detail
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	A public participation process has taken place as part of the 83MR Section 102 amendment process to establish community views and potential project impacts and incorporate social upliftment measures into the social strategy. Social engagement is ongoing until such time as the EA has been approved. A revised SLP for the greater TGM portfolio has been submitted. A catchup plan for historical non-compliance with LED commitments is being developed. It is noted that as at the effective date, illegal mining operations are active at the CDM site. This may delay CDM project commencement and appropriate arrangement for the removal of these illegal miners should be initiated.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	None
	Any identified material naturally occurring risks.	The exact extent of underground flooding and ground conditions is not yet known in all existing underground workings, and underground conditions may be worse than expected once access has been obtained. Development tunnel dimensions are potentially too narrow for the primary mining machines as they were designed on OEM specifications with a low degree of tolerance.
	The status of material legal agreements and marketing arrangements.	There are no legal or marketing agreements in place for the Project.
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes	Commissioning of the Project can only commence once all permits and authorisations have been approved. A Section 102 amendment application has been submitted to the DMRE for the addition of the 83MR underground redevelopment project areas. Currently, a WULA process is underway to authorise the anticipated water uses. An EA process is also underway.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
	anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	The Ore Reserve estimation for TGM has been conducted in accordance with the guidelines as set out in the JORC Code (2012). The appropriate category of Ore Reserve is determined primarily by the relevant level of confidence in the Mineral Resource. The Mineral Resource estimate, which includes all the underground project areas for TGM, was the basis of the Ore Reserve estimation. The level of confidence in the Indicated Mineral Resource is sufficient to convert to Probable Ore Reserves. The level of confidence in the Measured Mineral Resource is sufficient to convert to Proved Ore Reserves.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The results as presented appropriately reflect the CP's view of the deposit.
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	Any Measured Mineral Resources in the LoM plan have been converted to Proved Ore Reserves. No portion of Measured Mineral Resources were converted to Probable Ore Reserves. .
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	This Report includes a maiden Ore Reserve estimation for TGM. No external audits or reviews of the Beta, Rietfontein, Frankfort and CDM Ore Reserves have been conducted.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an	A detailed mine design and monthly schedule has been completed for all four underground mines. The modifying factors applied in the Mineral Resource to Ore Reserve conversion have been derived from technical studies completed for TGM. The Ore Reserve conversion factors applied correlate well with operational values at similar operations. Diluted Measured Mineral Resources have been converted to Proved Ore Reserves and Indicated Mineral Resources have been converted to Probable Ore Reserves. There is sufficient confidence in the modifying factors applied in the Mineral Resource to Ore Reserve conversion to convert diluted Measured Mineral Resources to Proved Ore Reserves.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES		
Criteria	**Explanation**	**Detail**
	approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	A global Mineral Resource estimate was completed all the project areas for TGM. The Mineral Resource estimate completed by Minxcon as at 1 February 2022 formed the basis of the Ore Reserve estimation. The Ore Reserve estimation considers Beta, Rietfontein, Frankfort and CDM underground operations, and is therefore a local Ore Reserve estimate for TGM.
	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	The modifying factors applied were determined by technical studies at the appropriate level of confidence producing a mine plan and monthly production schedule that is technically achievable and economically viable. All relevant risks are included in the CPR Risk assessment table. It is Minxcon's view that the information provided to Minxcon is sound and no other undue material risks pertaining to mining, metallurgical, environmental, permitting, legal, title, taxation, socio-economic, marketing, political, and other relevant issues pose a material risk to the Ore Reserve estimates.
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No previous Ore Reserve statements are available. However, the modifying factors were determined by technical studies and based on current operations utilising the selected mining method and are at the appropriate level of confidence to produce a mine plan and production schedule that is technically achievable and economically viable.

End