Minxcon Consulting

BLYVOOR GOLD

Blyvoor Gold Capital (Pty) Ltd and Nomad Royalty Company Ltd.

An Updated NI 43-101 Technical Report on the Blyvoor Gold Mine, South Africa

QUALIFIED PERSONS:

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DATE AND SIGNATURE PAGE

This Report titled "An Updated NI 43-101 Technical Report on the Blyvoor Gold Mine, South Africa" was prepared on behalf of Blyvoor Gold Capital (Pty) Ltd. This Report is also addressed to Nomad Royalty Company Ltd., which company is the holder of a gold streaming arrangement on the Blyvoor Mine as described in Item 4(e) of this Report. The Report is prepared in accordance with National Instrument 43-101 and Form 43-101 F1. The effective date of this Report is 1 March 2021.

The Qualified Persons responsible for this Report are Mr. Uwe Engelmann (Geology and Mineral Resources), Mr. Daniel (Daan) van Heerden (Mineral Processing, Mineral Extraction and Mineral Reserves), and Mr. Nicolaas Johannes (Johan) Odendaal (Mineral Economics). Mr Odendaal also acts as the Qualified Valuator for this Report.

U ENGELMANN
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Signed at Little Falls, Gauteng, South Africa, on 25 June 2021.

ASSISTANT NON-QUALIFIED PERSONS

KC Osburn (Senior Resource Geologist)
MSc (Geol.), Pr.Sci.Nat., MGSSA

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D Terblanche (Senior Process Engineer)
B Eng (Chem.), Cand.Eng., MSAIMM

CERTIFICATE of QUALIFIED PERSON – U Engelmann

I, Uwe Engelmann, do hereby certify that:-

1. I am a Director of **Minxcon (Pty) Ltd**
   Suite 5, Coldstream Office Park,
   2 Coldstream Street,
   Little Falls, Roodepoort, South Africa
2. I graduated with a BSc Honours (Geology) degree from the University of the Witwatersrand in 1991.
3. I have more than 23 years' experience in the mining and exploration industry. This includes eight years as an Ore Resource Manager at the Randfontein Estates Projects on the West Rand. I have completed a number of assessments and technical reports pertaining to various commodities, including gold, using approaches described by the National Instrument 43-101 (Standards of Disclosure for Mineral Projects), Form 43-101F1 and the Companion Policy Document 43-101CP ("NI 43-101").
4. I am affiliated with the following professional associations which meet all the attributes of a Professional Association or a Self-Regulatory Professional Association, as applicable (as those terms are defined in NI 43-101):-

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

5. I am responsible for Items 7-12 and 14 of the technical report titled "An Updated NI 43-101 Technical Report on the Blyvoor Gold Mine, South Africa" prepared for Blyvoor Gold Capital (Pty) Ltd and Nomad Royalty Company Ltd. with an effective date of 1 March 2021 ("the Report").
6. I have read the definition of "Qualified Person" set out in NI 43-101 and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfil the requirements to be a Qualified Person for the purposes of the Report.
7. I have read NI 43-101 and the Report has been prepared in compliance with it.
8. As of the effective date, to the best of my knowledge, information and belief, the Report contains all scientific and technical information required to be disclosed to make the Report not misleading.
9. I am independent of Blyvoor Gold Capital (Pty) Ltd and Nomad Royalty Company Ltd. applying the test set out in Section 1.5 of NI 43-101 and have taken into consideration the guidance on independence provided at Subsection 1.5 (1) to Companion Policy to NI 43-101, namely independence as it relates to the vendor and the property. My compensation, employment or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report.
10. My previous involvement in the subject property relates to exploration data review and reworking, and Mineral Resource estimation, the most recent as compiled into the report titled "An Updated NI 43-101 Technical Report on the Blyvoor Gold Mine, South Africa", with an effective date of 1 February 2020.
11. I undertook an underground site visit with Mr van Heerden on 11 March 2021.

Signed at Little Falls, Roodepoort on 25 June 2021.

U ENGELMANN
BSc (Zoo. & Bot.), BSc Hons (Geol.)
Pr.Sci.Nat., MGSSA
DIRECTOR, MINXCON

CERTIFICATE of QUALIFIED PERSON – D v Heerden

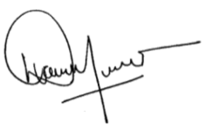
I, Daniel (Daan) van Heerden, do hereby certify that:-

1. I am a Director of **Minxcon (Pty) Ltd**
   Suite 5, Coldstream Office Park,
   2 Coldstream Street,
   Little Falls, Roodepoort, South Africa
2. I graduated with a B Eng (Mining) degree from the University of Pretoria in 1985 and an MCom (Business Administration) degree from the Rand Afrikaans University in 1993. In addition, I obtained diplomas in Data Metrics from the University of South Africa and Advanced Development Programme from London Business School in 1989 and 1995, respectively. In 1989 I was awarded with a Mine Managers Certificate from the Department of Mineral and Energy Affairs.
3. I have worked as a Mining Engineer for more than 30 years with my specialisation lying within Mineral Reserve and mine management. I have completed a number of Mineral Reserve estimations and mine plans pertaining to various commodities, including gold, using approaches described by the National Instrument 43-101 (Standards of Disclosure for Mineral Projects), Form 43-101F1 and the Companion Policy Document 43-101CP ("NI 43-101").
4. I am affiliated with the following professional associations, which meet all the attributes of a Professional Association or a Self-Regulatory Professional Association, as applicable (as those terms are defined in NI 43-101):-

Class	Professional Society	Year of Registration
Professional Engineer	Engineering Council of South Africa (Pr.Eng. Reg. No. 20050318)	2005

5. I am responsible Items 1-6, 13, 15-18, 20-21, 24-27 and the technical report titled "An Updated NI 43-101 Technical Report on the Blyvoor Gold Mine, South Africa" prepared for Blyvoor Gold Capital (Pty) Ltd and Nomad Royalty Company Ltd. with an effective date of 1 March 2021 ("the Report").
6. I have read the definition of "Qualified Person" set out in NI 43-101 and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfil the requirements to be a Qualified Person for the purposes of the Report.
7. I have read NI 43-101 and the Report has been prepared in compliance with it.
8. As of the effective date, to the best of my knowledge, information and belief, the Report contains all scientific and technical information required to be disclosed to make the Report not misleading.
9. I am independent of Blyvoor Gold Capital (Pty) Ltd and Nomad Royalty Company Ltd. applying the test set out in Section 1.5 of NI 43-101 and have taken into consideration the guidance on independence provided at Subsection 1.5 (1) to Companion Policy to NI 43-101, namely independence as it relates to the vendor and the property. My compensation, employment or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report.
10. I have previously acted as Qualified Person relating to the Blyvoor Mine, the most recent for the complete sign-off of the report titled "An Updated NI 43-101 Technical Report on the Blyvoor Gold Mine, South Africa", with an effective date of 1 February 2020.
11. I undertook a personal inspection of the property on 11 March 2021. A site visit for compilation of this Report was not deemed necessary.

Signed at Little Falls, Roodepoort on 25 June 2021.



D v HEERDEN
B Eng (Min.), MCom (Bus. Admin.), MMC
Pr.Eng., FSAIMM, AMMSA
DIRECTOR, MINXCON

CERTIFICATE of QUALIFIED PERSON and QUALIFIED VALUATOR - NJ Odendaal

I, Johan Odendaal, do hereby certify that:-

1. I am a Director of **Minxcon (Pty) Ltd**
   Suite 5, Coldstream Office Park,
   2 Coldstream Street,
   Little Falls, Roodepoort, South Africa
2. I graduated with a BSc (Geology) degree from the Rand Afrikaans University in 1985. In addition, I obtained a BSc Honours (Mineral Economics) from the Rand Afrikaans University in 1986 and an MSc (Mining Engineering) from the University of the Witwatersrand in 1992.
3. I have worked as a Geoscientist for over 30 years. As a former employee of Merrill Lynch, I was actively involved in advising mining companies and investment bankers on corporate-related issues, analysing platinum and gold companies. I have completed a number of valuations on various commodities, including gold, using approaches described by the National Instrument 43-101 (Standards of Disclosure for Mineral Projects), Form 43-101F1 and the Companion Policy Document 43-101CP ("NI 43-101").
4. I am affiliated with the following professional associations, which meet all the attributes of a Professional Association or a Self-Regulatory Professional Association, as applicable (as those terms are defined in NI 43-101):-

Class	Professional Society	Year of Registration
Professional Natural Scientist	South African Council for Natural Scientific Professions (Pr.Sci.Nat. Reg. No. 400024/04)	2003

5. I am responsible for Items 19, 22 and 23 of the technical report titled "An Updated NI 43-101 Technical Report on the Blyvoor Gold Mine, South Africa" prepared for Blyvoor Gold Capital (Pty) Ltd and Nomad Royalty Company Ltd. with an effective date of 1 March 2021 ("the Report").
6. I have read the definition of "Qualified Person" set out in NI 43-101 and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfil the requirements to be a Qualified Person for the purposes of the Report.
7. I have read NI 43-101 and the Report has been prepared in compliance with it.
8. As of the effective date, to the best of my knowledge, information and belief, the Report contains all scientific and technical information required to be disclosed to make the Report not misleading.
9. I am independent of Blyvoor Gold Capital (Pty) Ltd and Nomad Royalty Company Ltd. applying the test set out in Section 1.5 of NI 43-101 and have taken into consideration the guidance on independence provided at Subsection 1.5 (1) to Companion Policy to NI 43-101, namely independence as it relates to the vendor and the property. My compensation, employment or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report.
10. My previous involvement in the subject property relates to the economic analysis of the Blyvoor Mine, the most recent as compiled into the report titled "An Updated NI 43-101 Technical Report on the Blyvoor Gold Mine, South Africa", with an effective date of 1 February 2020.
11. I undertook a personal inspection of the property on 06 December 2019. A site visit for compilation of this Report was not deemed necessary.

Signed at Little Falls, Roodepoort on 25 June 2021.

NJ ODENDAAL
BSc (Geol.), BSc Hons (Min. Econ.), MSc (Min. Eng.)
Pr.Sci.Nat., FSAIMM, MGSSA
DIRECTOR, MINXCON

INFORMATION RISK

This Report was prepared by Minxcon (Pty) Ltd ("Minxcon"). In the preparation of the Report, Minxcon utilised information relating to operational methods and expectations provided to them by various sources. Where possible, Minxcon has verified this information from independent sources after making due enquiry of all material issues that are required in order to comply with the requirements of the NI 43-101 and Form 43-101 F1. Minxcon and its directors accept no liability for any losses arising from reliance upon the information presented in this Report. The authors of this report are not qualified to provide extensive commentary on legal issues associated with rights to the mineral properties and relied on the information provided to them by the issuer. No warranty or guarantee, be it express or implied, is made by the authors with respect to the completeness or accuracy of the legal aspects of this document.

OPERATIONAL RISKS

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

POLITICAL AND ECONOMIC RISK

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

FORWARD LOOKING STATEMENTS

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

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

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LIST OF UNITS AND ABBREVIATIONS

The following units were used in this Report, and are in metric terms:-

Unit	Definition
%	Per cent
/	Per
± or ~	Approximately
°	Degrees
°C	Degrees Celsius
a	Year
Boz	Billion ounces
cm	Centimetre
cm.g/t	Centimetre grammes per tonne
d	Day
ft	Foot
g	Grammes
g/t	Grammes per tonne
Ga	Billion years (1,000,000,000 years)
ha	Hectares
hr	Hour
kg	Kilogram (1,000 g)
km	Kilometre (1,000 m)
km^2	Square kilometres
koz	Kilo ounces (1,000 oz)
kt	Kilotonnes (1,000 t)
ktpa	Kilotonnes per annum
ktpm	Kilo tonnes per month
kV	Kilovolt (1,000 volts)
kVA	Kilovolt ampere
kW	Kilowatt (1,000 W)
l	Litre
m	Metre
m/crew/month	Meter per crew per month
m/month	Meter per month
m^2	Square metres
m^2/month	Square meter per month
m^3	Cubic metres
m^3/s	Cubic meters per second
Ma	Million years (1,000,000 years)
mbs	Metres below sea level
min	Minute
Ml	Million litres (1,000,000 l)
mm	Millimetre
Mm^3	Million cubic meters
mo	Month
Moz	Million ounces (1,000,000 oz)
Mt	Million tonnes (1,000,000 t)
MVA	Megavolt ampere
MW	Megawatt (1,000,000 W)
MWh	Megawatt hour
oz	Troy Ounces
per man/month	Per man month
s	second (time)
t	Tonne
t/m^3	Tonnes per cubic meter
t/man	Tonne per man
tpa	Tonnes per annum
tpd	Tonnes per day
tph	Tonnes per hour
tpm	Tonnes per month
V	Volts
W	Watt

Unit	Definition
x	By/Multiplied by
ZAR/ore t	South African Rand per ore tonne
µm	Micrometre

The following abbreviations have been used in this Report:-

Abbreviation	Description
AGA	AngloGold Ashanti Limited
AIC	All-in Costs
AISC	All-in Sustainable Costs
ASG	Advanced Strike Gully
BEE	Black Economic Empowerment
BGMC	Blyvooruitzicht Gold Mining Company Limited (in provisional liquidation)
Blyvoor Gold	Blyvoor Gold Capital (Pty) Ltd
Blyvoor or Mine	Blyvoor Gold Mine
CAE	CAE Mining (Datamine™)
CAPEX	Capital Expenditure
CAPM	Capital Asset Pricing Model
CIL	Carbon-in-Leach
CIP	Carbon-in-Pulp
Coffey Mining	Coffey Mining (SA) Pty Ltd
CPI	Consumer Price Indices
Cwb	Köppen and Geiger classification acronym for subtropical highland climate or temperate oceanic climate with dry winters
CWC	Covalent Water Company (Pty) Ltd
DCF	Discounted Cash Flow
DMR	Department of Mineral Resources
DMRE	Department of Mineral Resources and Energy
DRD	DRDGold Ltd
EA	Environmental Authorisation
EBIT	Earnings before Interest and Taxes
EBITDA	Earnings before Interest, Tax, Depreciation and Amortization
EIA	Environmental Impact Assessment
EMP	Environmental Management Programme
FCFE	Free Cash Flow to Equity
FCFF	Free Cash Flow to the Firm
FEL	Front-End Loader
FoG	Fall of Ground
FWRDWA	Far West Rand Dolomitic Water Association
GDP	Gross Domestic Product
Guardrisk	Guardrisk Insurance Company Limited
Harmony	Harmony Gold Mining Company Limited
HDSAs	Historically Disadvantaged South Africans
HRD	Human Resource Development
IPC	Intermediate Pump Chamber
IRL	In-Line Leach Reactor
IRR	Internal Rate of Return
JPLs	Joint Provisional Liquidators
KE	Kriging Efficiencies
LED	Local Economic Development
LoM	Life of Mine
M&I	Measured and Indicated (Mineral Resources)
MCF	Mine Call Factor
Minxcon	Minxcon (Pty) Ltd
MPRDA	Mineral and Petroleum Resources Development Act, No 28 of 2002
MR143GP	Converted Mining Right GP 30/5/1/2/2/143 MR
NEMA	National Environmental Management Act, No. 107 of 1998

Abbreviation	Description
NI 43-101	National Instrument 43-101, Form 43-101 F1 and the Companion Policy Document 43-101CP
CL	Carbon Leader Reef
MR	Middelvlei Reef
No.	Number
NPV	Net Present Value
NWA	National Water Act, No. 36 of 1998
OHMS	Open House Management Solutions
OPEX	Operating Expenditure
Orphans	Acquired components of the historical Mining Right 46/99 that were not grouped under Blyvoor Gold Capital (Pty) Ltd or Blyvoor Gold Operations (Pty) Ltd
PEM	Prospectivity Enhancement Multiplier
PFS	Pre-Feasibility Study
ProOptima	ProOptima Audit Services
QAQC	Quality Assurance and Quality Control
RoM	Run of Mine
RTO	Reverse Takeover
SAMREC Code	South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves
SBM	Selective Blast Mining
SG	Specific Gravity
SIB	Stay in Business
SLP	Social and Labour Plan
SoR	Slopes of Regression
STC	Secondary Tax on Dividends
TSF	Tailings Storage Facility
USD	United States Dollar
Village Main Reef	Village Main Reef Limited
ZAR	South African Rand
ZAR/USD	South African Rand: United States Dollar
ZARm	Million South African Rand

GENERAL

Figures in tables may not compute due to rounding.

ITEM 1 – EXECUTIVE SUMMARY

Minxcon (Pty) Ltd ("Minxcon") was commissioned by Blyvoor Gold Capital (Pty) Ltd ("Blyvoor Gold", "the Client" or "the Company") to complete an Independent Technical Report (this "Report") on the Blyvoor Gold Mine ("Blyvoor Mine", "Blyvoor" or the "Mine"), situated in Gauteng Province, South Africa. This Report is also addressed to Nomad Royalty Company Ltd., which company is the holder of a gold streaming arrangement on the Blyvoor Mine as described in Item 4(e) of this Report.

Blyvoor Gold acquired the No. 5 Shaft underground gold mining operations of the old Blyvooruitzicht Gold Mine. This Report focuses on the underground operations and associated infrastructure only.

The Report is compiled in accordance with the guidelines of the National Instrument 43-101, Form 43-101 F1 and the Companion Policy Document 43-101CP, collectively NI 43-101. The scope of work mandated was inclusive of a full mineral asset valuation aligned to standards, guidelines and definitions of the Canadian Institute of Mining, Metallurgy and Petroleum on the Valuation of Mineral Properties Code for Valuation of Mineral Properties.

The overall accuracy of the Project, including mine planning and project construction to date, is deemed to be greater than pre-feasibility study ("PFS") level.

The Blyvooruitzicht Gold Mine was one of the richest and most profitable gold mines in the world over a period of some 75 years. During this period, the Blyvooruitzicht Gold Mine produced more than 1,500 t of gold, holding the title of being the richest gold mine in the world for some 30 years, and achieved numerous awards for excellent safety achievements. Historical records show that by the end of 1983, after some 50 years of operation, the Blyvooruitzicht Gold Mine had milled over 60 Mt of ore, with an average 50-year head grade of over 35 g/t and a recovered grade of over 17 g/t.

Item 1 (a) – Property Description

Notwithstanding that the Blyvooruitzicht Gold Mine was one of the world's most profitable gold mines, the Blyvooruitzicht Gold Mine fell victim to the business rescue and liquidation processes of its then corporate owner, and was itself liquidated in 2013 and as a result all operations on the mine were ceased. Illegal miners subsequently occupied the site and stripped the majority of the electrical infrastructure on the surface. The underground workings from 10 m above 29 Level at No. 5A Sub-vertical Shaft are flooded and are currently inaccessible.

The Blyvoor No. 5 Shaft project consists of reopening the No. 5 Shaft Complex and returning the operation to steady state production.

Numerous activities have been initiated and/or completed since cessation of the operation, including transfer of the mining right and water use licence to Blyvoor Gold, award of an Environmental Authorisation, Mineral Resource update, mine planning, operating cost estimates, capital cost estimates and financial modelling.

The general activities completed on-site include the following:-

- security was upgraded and the property secured;
- an outer perimeter fence and a concrete wall (5 m high) have been constructed;
- shaft inspections have been completed;
- data is captured and stored on site;
- carbon-in-leach tanks have been repaired;

- small change house refurbishment completed;
- No. 5 Shaft access walkway; and
- installing traffic safety and control signs.

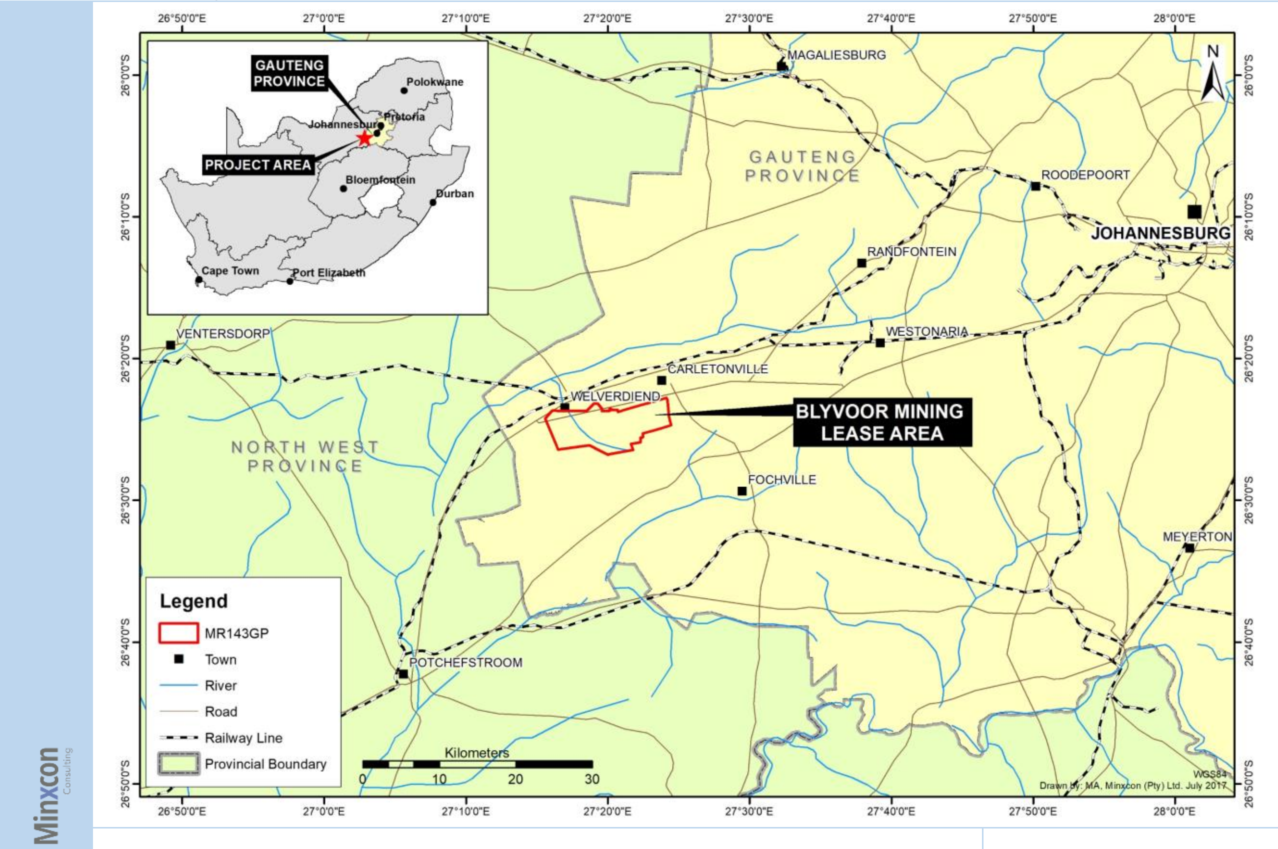
Completed and Remaining project works specifically with regards to infrastructure are listed below:-

- Completed Infrastructure Work:-
  - surface power supply and electrical reticulation re-instated;
  - winder re-commissioning completed – No. 5 Shaft (man and rock winders) and No. 5A Sub-vertical Shaft (East man winder);
  - re-licensing of the No. 5 Shaft man winder and No. 5A Sub-vertical Shaft East man winder completed.
  - No. 5 Shaft, shaft repairs completed and shaft re-instated;
  - power established to No. 5A Sub-vertical Shaft winder;
  - housekeeping and refurbishment of change houses, surface area completed;
  - traffic control measures completed;
  - opening up of 15, 25 and 27 Level haulages;
  - access to the 15 Level workings have been secured;
  - re-instating power to 25 and 27 Levels;
  - purchase and delivery of hydro mining equipment; and
  - construction and commissioning of process plant.
- Remaining Infrastructure Project Works:-
  - Re-instatement of No.5A Sub-vertical Shaft Infrastructure:-
    - re-commissioning and re-licensing of No.5A Sub-vertical rock winder – In progress;
    - re-commissioning and re-licensing of Sub-vertical West man winder – In progress;
    - re-equipping of underground workings – ongoing process; and
    - development and installation of 27.5 level mid-shaft loading station.
- New Infrastructure Projects required for increased production requirements, or for production beyond the initial 5 years of the plan:-
  - establish connecting development from Doornfontein section to old Blyvooruitzicht section;
  - re-establish services to old Blyvooruitzicht section (power, water and communications);
  - establish main surface ventilation fans at the historic Doornfontein No. 2 Shaft and the Blyvooruitzicht No. 3 Ventilation Shaft;
  - re-equip A6, A5, B5 and B5A Incline shafts and their winders; and
  - establish shaft tips in above mentioned incline shafts.

The Blyvoor operation is located in a historically prolific gold mining area within the Carletonville Goldfield and is well serviced by all amenities. The No. 5 Shaft Complex is located some 14 km by road southwest of the town of Carletonville, in the southwestern extremity of the Gauteng Province, South Africa, within the Oberholzer Magisterial District. The town of Fochville lies 30 km due southeast. To the northeast, Johannesburg can be accessed over a road network of 80 km.

The location of Blyvoor is shown in the following figure.

Location of the Blyvoor Mine



Location of the Blyvoor Mine	February 2021

Item 1 (b) – Ownership of the Property

The Blyvoor Mine is encompassed under a converted mining right GP 30/5/1/2/2/143 MR, or MR143GP, valid for 30 years until 16 February 2047. MR143GP was registered on 4 August 2017 and was successfully ceded and transferred under a Section 11 application from Blyvooruitzicht Gold Mining Company Limited (in provisional liquidation) to Blyvoor Gold Capital (Pty) Ltd on 7 August 2017 and was registered at the Mineral and Petroleum Titles Registration Office on the same day. Blyvoor Gold Capital (Pty) Ltd is a registered subsidiary (74%) of Blyvoor Gold (Pty) Ltd. The remaining 26% ownership is held by Black Economic Empowerment entities as required by the South African Mining Charter.

An application for an Environmental Authorisation was submitted on 13 February 2019, triggering the requirement for a revised Environmental Impact Assessment and a revised Environmental Management Plan for the mine to align the management document to their underground mining plans and the components of the surface mining infrastructure which they have acquired. The Environmental Authorisation was granted on 19 February 2020.

Several servitudes and usufructs for services are required for the operation. Servitudes and usufructs, with a validity period of 99 years, have been approved and surveyed and have been registered for all operational areas that are required by the Blyvoor Mine.

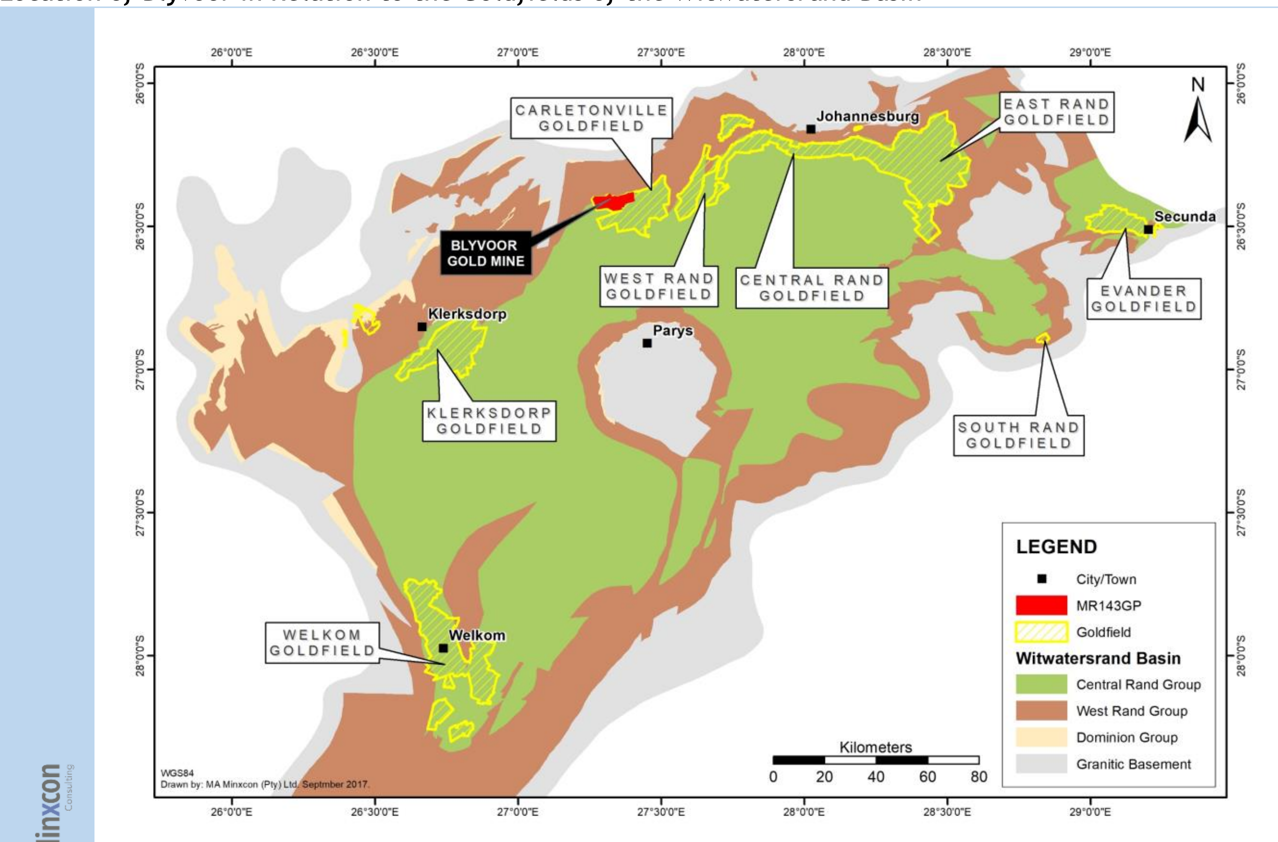
Item 1 (c) - Geology and Mineral Deposit

Blyvoor lies within the late Archaean (2.7-2.8 Ga) Witwatersrand Basin. This basin comprises up to 7,000 m thick interbedded sequence of argillaceous and arenaceous sedimentary rocks mainly dipping at shallow angles towards the centre of the basin and extend laterally for some 350 km northeast-southwest and 120 km northwest-southeast on the Kaapvaal Craton. The upper portion of the basin-fill (Central Rand Group), which contains the sedimentary reefs or mineralised zones, outcrops at its northern extent near Johannesburg. Further west, south and east, the basin is overlain by a combination of up to 4,000 m of younger Archaean, Proterozoic and Mesozoic volcanic and sedimentary rocks.

Economic gold mineralisation in the Witwatersrand Basin sediments occurs typically within quartz pebble conglomerate reefs. These reefs are mined within seven separate goldfields located along the eastern, northern, and western margins of the basin, as well as in the South Rand Goldfield. The reefs are generally less than 2 m in thickness. Stratigraphically, the majority of economic placers have been found in the Central Rand Group at various stratigraphic levels and usually represent significant stratigraphic unconformities. The gold deposits of the Witwatersrand Basin are considered to be associated with the formation of a foreland basin bounded by faulting resulting in uplift along the north-western margin, causing erosion of the hinterland and thus feeding gravels into the Basin.

The location of Blyvoor in relation to the Witwatersrand Basin is illustrated in the figure to follow.

Location of Blyvoor in Relation to the Goldfields of the Witwatersrand Basin



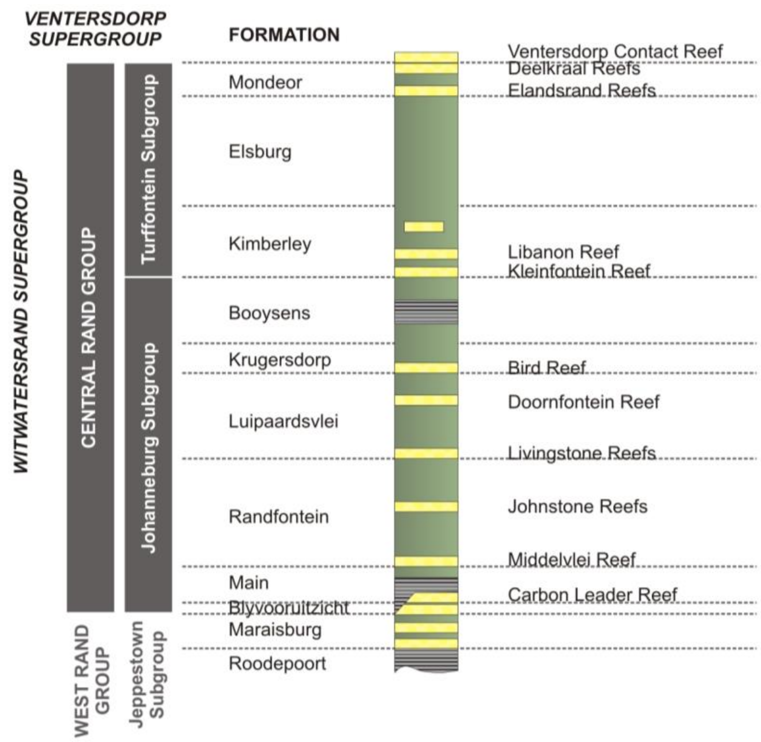
Location of Blyvoor in Relation to the Goldfields of the Witwatersrand Basin	February 2021

Locally, Blyvoor falls within the Carletonville Goldfield, or Far West Wits Line, that, in addition to gold, produced uranium and pyrite for the production of sulphuric acid, as by-products. The goldfield is separated into two distinct sections or compartments, *i.e.* the western and eastern sections, separated by the prominent Bank Fault (a reactivated thrust fault which is hinged in the basement). Although similar stratigraphy is present in both sectors, the unit thicknesses differ due to the interpreted syn-sedimentary tectonics associated with the Bank Fault during basin formation.

The goldfield is stratigraphically subdivided into the Blyvooruitzicht, Main, Randfontein, Luipaardsvlei, Krugersdorp, Booysens, Kimberly and Elsburg Formations. Each formation is characterised by a regionally persistent basal conglomerate deposited on a regional unconformity and overlain by quartzites, grits and pebble bands, while argillaceous quartzites and shales are confined to the Booysens and Robinson Formations.

Numerous economically viable conglomerate horizons occur in the Carletonville Goldfield within the Central Rand Group, which in turn is unconformably overlain by the Venterspost Conglomerate Formation at the base of the Ventersdorp Supergroup. Three principal economic placer units are exploited, namely the Carbon Leader, which correlates with the Main Reef, near the base of the Central Rand Group, overlain by the Middelvlei Reef (stratigraphically correlated with the South Reef elsewhere in the Witwatersrand Basin) and the Venterspost Conglomerate Formation (colloquially termed the “Ventersdorp Contact Reef”). At Blyvoor, the Carbon Leader occurs at the base of the Main Formation and the Middelvlei Reef at the base of the Randfontein Formation. These two reefs form the most important economic horizons at Blyvoor.

General Stratigraphy of the Upper Carletonville Goldfield



Source: Redrawn after McCarthy (2006) after SACS, 2006

General Stratigraphy of the Upper Carletonville Goldfield	February 2021

Item 1 (d) - PROPERTY GEOLOGY AND MINERALISATION

The Carbon Leader Reef overlies the North Leader Reef. The North Leader Reef is an oligomictic, small pebble conglomerate, less than 15 cm thick and stratigraphically situated 0-15 m below the Carbon Leader Reef and is poorly and sporadically mineralised. The separation between these reefs increases southwards due to a minor angular unconformity. The North Leader has only been mined in isolated areas where the grade and parting between this reef and the Carbon Leader permits extraction of both horizons with minimum internal dilution. The footwall of the Carbon Leader is alternating coarse-grained siliceous and argillaceous quartzites.

Overlying the Carbon Leader is a mature, light grey, fine-grained siliceous quartzite, above which is the Rice Pebble Conglomerate, a dark pyritic quartzite with small white quartz pebbles. Some 2-2.5 m above the Carbon Leader is a dark grey to khaki coloured chlorite-rich argillite, the Green Bar, the lower part of which tends to be laminated and the upper part massive. If exposed during mining, the laminated nature of the Green Bar can cause support problems. The hanging wall of the Green Bar is a mature grey to light grey cross-bedded quartzite with thin semi argillaceous horizons. Approximately 15 m above the Green Bar, the lower hanging wall small pebble conglomerates are moderately mineralised with sulphides and interbedded with coarse-grained, grey quartzites.

The footwall of the Middelvlei Reef comprises coarse-grained to gritty, dark grey to brown, cross-bedded quartzites, with scattered pebbles and thin lenticular conglomerate horizons. The hanging wall comprises grey quartzites with occasional poorly packed small pebble conglomerates.

The majority of Blyvoor is structurally relatively undisturbed. In the western section, however, the area is structurally complex due to the presence of the Master Bedding Fault which rejuvenated older faults and formed new ones in close proximity to its plane. The Master Bedding Fault has eliminated a large percentage of the Carbon Leader to the north of Doornfontein No. 2 Shaft, but the Middelvlei is present over the whole lease area.

Major structures in close proximity to historical mining activities at 35 Level and below, are the Boulder and Alpha Dykes. The Boulder Dyke has a downthrow of 40 m to 95 m to the north and strikes east-west.

At Blyvoor, two economic placer horizons have been exploited. These are namely the Carbon Leader and Middelvlei Reefs and occur in quartzites of the Main Reef Conglomerate Formation of the Johannesburg Subgroup of the Central Rand Group. The auriferous conglomerates dip uniformly at 22°S.

The Carbon Leader is a high grade, predominantly thin (<40 cm) carbon-rich reef and is the principle economic horizon at the Blyvoor Mine. Grades decrease towards the south and southwest. The origin of the carbon is in debate as to whether it originated hydrothermally or from algae. Within the deeper southern section of the project area (below 35 Level), carbon is scarcer and hence likely responsible for the decline in grade.

The Middelvlei Reef is the second economic horizon at the Blyvoor Mine and lies stratigraphically 50 m to 75 m above the Carbon Leader. Towards the south, the separation increases due to a minor angular unconformity. The Middelvlei Reef is characterised by lower grades than the Carbon Leader. Owing to the historical variable payability and presence of sedimentologically controlled pay shoots, the Middelvlei Reef has been mined in scattered payable areas.

Item 1 (e) – STATUS OF EXPLORATION

The Blyvoor Mine is a mature operation focussing on mining of readily accessible areas with significant exposure of the two reef horizons across the whole property.

Further exploration work is deemed to be unnecessary, as Blyvoor Gold will concentrate its mining activity adjacent to well-known historical mining areas. Additionally, the depth of the deposit and the extent of underground development does not warrant further exploration from surface. Given that the Mine was in production for some 75 years, the deposit, its reefs and its grades are well understood. There is a database of over 500,000 underground chip sampling data points which have been used to estimate the Mineral Resources and Mineral Reserves for the Mine.

It is anticipated that routine underground production drilling for the purposes of confirming reef elevations and structural interpretations will be required to a limited extent. Owing to the highly carbonaceous nature of the reefs and the significant gold loss associated with drilling through the brittle carbon seams, any core recovered from the underground drilling will not be representative of the gold grade expected during mining and will not be useable for the purposes of Mineral Resource estimation as drillhole assays, by default, this renders a bias of low results.

Chip sample data from adjacent mining faces are utilised in conjunction with other available project data for interpretations and Mineral Resource estimations. Historical mine call factors and plant recoveries indicate that the Mineral Resources estimates conducted utilising the chip sample data are representative for both reefs.

Item 1 (f) – MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

All errors identified in the database were corrected. As a result of the data changes, it was required that the Mineral Resource estimate for Blyvoor was redone by Minxcon. Variography and sample statistics were re-performed as a result of the data change, however all estimation setups and parameters remained unchanged.

A mean dip correction factor representing a global mean dip of 22°was utilised to calculate a true dip related to the area determined from the block model. A diluted stoping width of 117 cm was applied, along with a mining cut of 65cm for Middelvlei Reef and 50cm for Carbon Leader Reef. A Specific Gravity of 2.737 t/m^3 was utilised to convert the volume to tonnes. A geological loss of 5% for Measured, 10% for Indicated and 15% for Inferred Mineral Resources was applied. The Mineral Resource is declared inclusive of Mineral Reserves.

The Mineral Resources for the Carbon Leader Reef of the Blyvoor Mine as at 1 March 2021 are presented to follow.

Mineral Resources for the Carbon Leader Reef for the Blyvoor Mine as at 1 March 2021

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Measured	117	16.66	10.71	1,253	50	7.15	24.95	178,458	5.74
Indicated	117	2.45	8.67	1,014	50	1.05	20.19	21,190	0.68
Total M&I	**117**	**19.11**	**10.45**	**1,222**	**50**	**8.20**	**24.34**	**199,648**	**6.42**

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Inferred	117	8.88	8.36	978	50	3.81	19.50	74,291	2.39

Notes:

1. Mineral Resources are reported at a 300 cm.g/t (2.56 g/t over 117 cm stoping width equivalent) pay limit.
2. Depletions have been applied.
3. Boundary pillars have been excluded from the Mineral Resources, reported inclusive of internal pillars and shaft pillars.
4. A geological loss of 5% for Measured, 10% for Indicated and 15% for Inferred Mineral Resources has been applied.
5. All Mineral Resources are 100% attributable to the Company and occur within the mining right perimeter.

The Mineral Resources for the Middelvlei Reef as at 1 March 2021 are presented below.

Mineral Resources for the Middelvlei Reef for the Blyvoor Mine as at 1 March 2021

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Measured	117	25.29	5.06	592	65	14.41	8.87	127,854	4.11
Indicated	117	5.69	4.63	541	65	3.19	8.25	26,300	0.85
Total M&I	**117**	**30.97**	**4.98**	**582**	**65**	**17.60**	**8.76**	**154,153**	**4.96**

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Inferred	117	70.89	3.90	457	65	39.65	6.98	276,776	8.90

Notes:

1. Mineral Resources are reported at a 300 cm.g/t (2.56 g/t over 117 cm stoping width equivalent) pay limit.
2. Depletions have been applied.
3. Boundary pillars have been excluded from the Mineral Resources, reported inclusive of internal pillars and shaft pillars.
4. A geological loss of 5% for Measured, 10% for Indicated and 15% for Inferred Mineral Resources has been applied.
5. All Mineral Resources are 100% attributable to the Company and occur within the mining right perimeter.

The combined total Mineral Resources of the Blyvoor Mine as at 1 March 2021 are presented to follow.

Combined Total Mineral Resources for the Blyvoor Mine as at 1 March 2021

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Measured	117	41.95	7.30	854	60	21.56	14.21	306,311	9.85
Indicated	117	8.13	5.84	683	61	4.24	11.21	47,489	1.53
Total M&I	**117**	**50.08**	**7.06**	**827**	**60**	**25.80**	**13.71**	**353,801**	**11.37**

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Inferred	117	79.77	4.40	515	64	43.46	8.08	351,067	11.29

Notes:

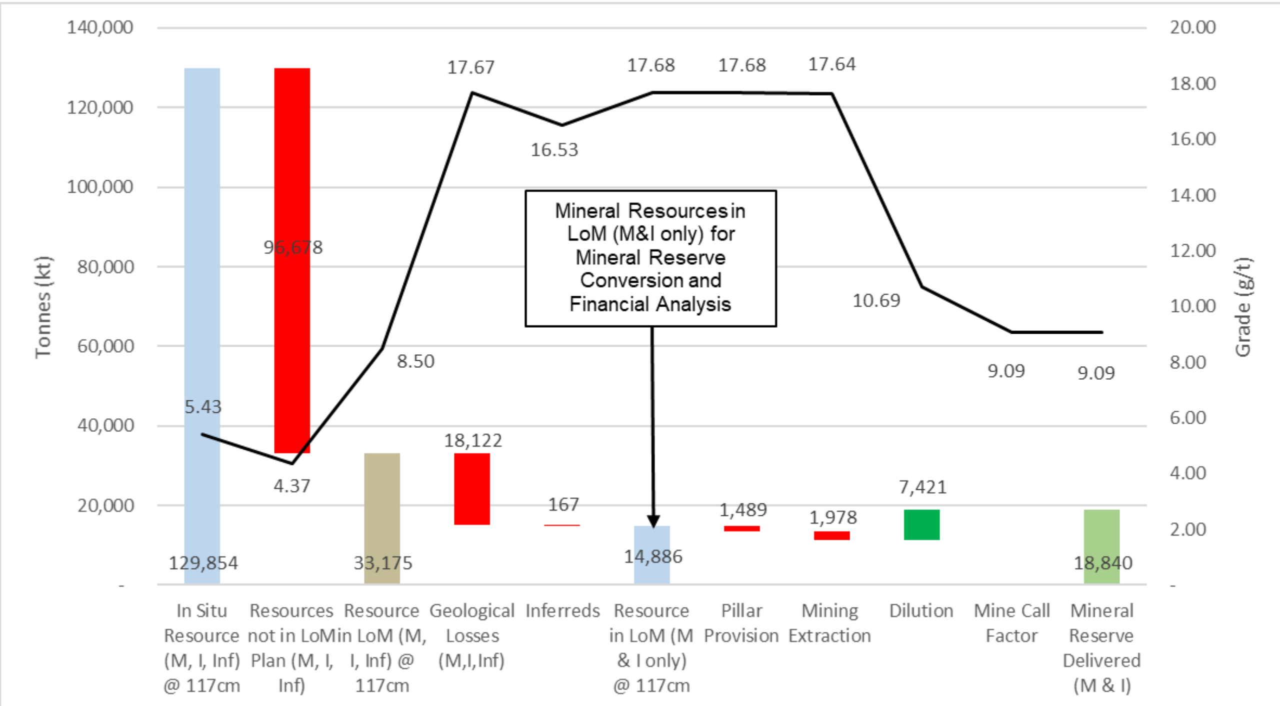
1. Mineral Resources are reported at a 300 cm.g/t (2.56 g/t over 117 cm stoping width equivalent) pay limit.
2. Depletions have been applied.
3. Boundary pillars have been excluded from the Mineral Resources, reported inclusive of internal pillars and shaft pillars.
4. A geological loss of 5% for Measured, 10% for Indicated and 15% for Inferred Mineral Resources has been applied.
5. All Mineral Resources are 100% attributable to the Company and occur within the mining right perimeter.

All Mineral Reserves have been categorised and reported in compliance with the definitions embodied in the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM Council (incorporated into NI 43-101). As per CIM Code specifications, Mineral Reserves have been reported separately in the Proved and Probable Mineral Reserve categories. Inferred Mineral Resources have not been incorporated with the Proved and Probable Mineral Reserves.

The mining plan targets Measured Mineral Resources and Indicated Mineral Resources only, with no economic benefit for Inferred Mineral Resources. The mine design and scheduling utilise the updated 2021 Mineral Resource model.

The Mineral Resource to Mineral Reserve conversion is illustrated in the figure below. The *in situ* Mineral Resource is as per the Mineral Resource statement estimated for the project area at a stoping width of 117 cm.

In Situ Mineral Resource to Mineral Reserve Conversion



Notes:

1. The purpose of the waterfall chart is to illustrate the *in situ* Mineral Resources to Mineral Reserve conversion.
2. Only Measured and Indicated Mineral Resources in the LoM plan have been included for the conversion to Mineral Reserves.
3. No Inferred Mineral Resources have been included in the Mineral Reserve estimation.
4. No Inferred Mineral Resources have been included in the financial valuation.

The combined total Mineral Reserves for Blyvoor Mine as at 1 March 2021 are presented in the table below.

Combined Total Mineral Reserves for Blyvoor Mine as at 1 March 2021

Mineral Reserve Classification	Delivered Grade	Delivered Tonnes	Delivered Au Content	
	g/t	Mt	kg	Moz
Proved	8.85	5.20	46,044	1.48
Probable	9.18	13.64	125,163	4.02
Total	**9.09**	**18.84**	**171,208**	**5.50**

Notes:

1. Mineral Reserves stated at an average gold price of USD1,535/oz and an average exchange rate of ZAR/USD 17.00.
2. Mineral Reserves are reported at a 479 cm.g/t cut-off grade applied.
3. Minimum remnant area of 1,000 m^2 applied.
4. Mining extraction of 80% applied to all remnants.
5. Pillar provision of 10% applied.
6. Stope width is the average SBM mining cut over a 160 cm mining width.
7. Stope content has been calculated using the stope grade and average SBM mining cut.
8. The Mineral Resources are at 100% attributable.

Item 1 (g) DEVELOPMENT AND OPERATIONS

I. MINING

The current mining infrastructure, namely the existing main surface shaft (No. 5 Shaft), underground sub-vertical shaft (No. 5A Sub-vertical Shaft) and the orepass system of the No. 1A Sub-vertical Shaft, existing footwall drives, and crosscuts will be utilised as access to the workings. All the existing excavations necessary to access the underground workings (stopes and development ends) will be refurbished to ensure safe access for men and material.

The mining strategy for the Blyvoor Mine is to extract both the Carbon Leader Reef and Middelvlei Reef utilising the No. 5 Shaft Complex via conventional ledging and opening up to the required stoping width of 160 cm for SBM stoping. The first month of production on each panel will consist of conventional ledging (approximately 8 m linear advance) and conventional opening-up from a 117 cm stoping width to the planned SBM stoping width of 160 cm.

It is expected that a 2 m linear face advance will be required to open-up the stoping width from 117 cm to 160 cm (43 cm). The conversion to SBM stoping will require an additional 4 m linear face advance using conventional stoping, to create sufficient volume in the back area for waste packing once SBM commences. It has been estimated that 50% of the waste within the 4 m advance will be packed, and the remaining 50% will contribute to dilution.

There after SBM stoping will be implemented. Some of the targeted workings cannot currently be accessed and opening-up with re-equipping will be required prior to mining.

Drilling will be conducted by means of handheld hydropower drills, whilst cleaning of the stopes will be conducted by conventional winch and scraper cleaning. Cleaning of the development ends will be conducted by means of rail-bound hydropower bucket loaders or LHDs. Battery operated locomotives and hoppers will be used for ore transport on a rail-bound system. Ore and waste will be transported to tips situated on the production levels at the shaft station.

The existing haulages and crosscuts require refurbishment or re-opening prior to mining, and this has been allowed for in both the capital and operating cost estimates. It is essential to establish sufficient access to ensure the required face length is available for stoping to produce the planned production per month. Development of haulages, crosscuts, travelling ways, raises, and orepasses has been planned to be done conventionally using handheld hydropower drills.

Planned mining will initially take place between 15 Level and 27 Level. A ramp up of 17 months has been planned to reach steady state production of approximately 20,000 m^2, which equates to approximately 40 ktpm. This production rate will be sustained for a period of 15 months followed by a second ramp up. The second ramp up to a steady state production rate of approximately 40,000 m^2, which will produce approximately 80 ktpm, has been planned over a 12-month period.

The underground workings up to 10 m above 29 Level at the No. 5 Shaft Complex are currently flooded and inaccessible and require dewatering. Once it is necessary to mine on and below 29 Level, dewatering of the flooded lower levels will commence with the use of submersible pumps.

Blyvoor Mine's ventilation system is well-established and has been professionally planned and efficiently operated in the past. During the first five years of production, current ventilation infrastructure will provide sufficient ventilation and cooling of the underground workings. When mining proceeds below 2,500 m (31 Level), refrigeration and the use of the second main ventilation fan will be required to ensure effective cooling of the working areas. In addition, once mining commences in the extremities of the Project Area, it will be required to establish additional ventilation fans at the historic Doornfontein No. 2 Shaft and the Blyvooruitzicht No. 3 Ventilation Shaft to provide additional ventilation capacities for these areas.

A cut-off of 479 cm.g/t has been applied to the Mineral Resources which has been included in the LoM plan. Converting Mineral Resources to Mineral Reserves, requires the application of modifying factors. These factors are applied to adjust the *in situ* Mineral Resources in the LoM plan to realistic and accurate mill feed, volumes, and grade. The Mineral Reserve conversion factors applied are detailed in the table below.

Mineral Reserve Conversion Factors

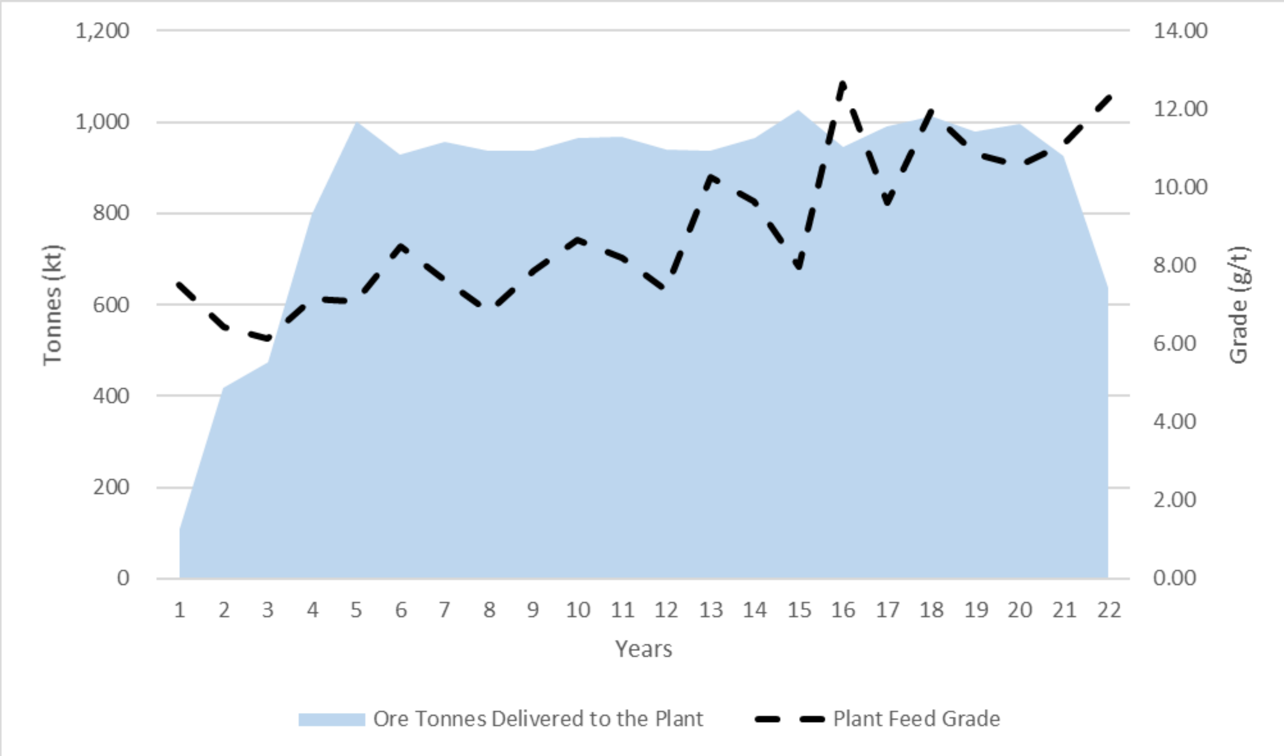
Description	Units	Value
Geological Losses (applied to Mineral Resources)		
Measured	%	5
Indicated	%	10
Inferred	%	15
Pillar Provision and Mining Extraction		
Pillar Provision	%	10
Mining Extraction	%	80
Dilution		
Dilution-Reef Cut (above and below the reef)	cm	10
Dilution-Sundries Carbon Leader Reef	%	23.1
Dilution-Sundries Middelvlei Reef	%	18.9
Dilution-Discrepancy Carbon Leader Reef	%	25.3
Dilution-Discrepancy Middelvlei Reef	%	20.7
SBM Conversion Dilution Carbon Leader Reef	%	23.3
SBM Conversion Dilution Middelvlei Reef	%	20
Mine Call Factor		
Mine Call Factor	%	85

Notes:

1. The Mineral Reserve conversion factors are applied to individual mining blocks within the mining schedule.
2. Mining extraction has been applied to all mining blocks in the schedule which do not form part of the initial five years of the LoM plan.

The life of mine profile for the Blyvoor Mine, illustrating delivered tonnes and grade to the plant, is illustrated in the figure below.

Life of Mine Plan



The current plan considers only Measured and Indicated Mineral Resources which have been converted to Proved and Probable Mineral Reserves, respectively.

II. PROCESSING

The current plant with a RoM capacity of 40 ktpm consists of crushing, ball milling, gravity concentration, leach and carbon-in-pulp and elution circuits to produce gold doré. Tailings will be deposited onto the existing No. 6 TSF by means of daywall deposition. The TSF has a total capacity of approximately 21 Mt which is sufficient for the Mineral Reserve tonnes of 20.7 Mt.

Recent metallurgical testwork has not been conducted to verify the recoveries. A fixed residue grade was used to estimate the recovery. The indicated reserve grade of TSF No. 6 is 0.304 g/t and this is the fixed tails grade used to calculate the expected recovery.

A plant upgrade is proposed at a cost of ZAR54 million to enable the plant to double its ore throughput. A new silo is needed in the crushing circuit, a new mill at the grinding circuit and more tanks in the leach circuit. The higher processing rate will improve the processing costs form ZAR208/t to ZAR177/t.

Item 1 (h) - ECONOMIC ANALYSIS

The evaluator performed an independent mineral asset economic analysis on the Blyvoor Mine and its Mineral Reserves. The Discounted Cash Flow, or DCF, is based on the production schedule and all costs and capital associated to develop, mine and process the orebody. Relevant taxation and other operating factors, such as recoveries and stay-in-business costs were incorporated into the economic analysis to produce a cash flow over the life cycle of the project.

Both the ZAR/USD exchange rate and USD commodity prices are in real money terms. The table below details the forecasts for the first three calendar years as well as the long-term forecast used in the financial model. Both the price forecast and the exchange rate forecast are taken as the median of various analyst and bank forecasts and is presented in calendar years. The inflation rate forecasts were sourced from the International Monetary Fund ("IMF").

Macro-Economic Forecasts and Commodity Prices over the Life of Mine

Basis	Item	Unit	2021	2022	2023	LT
Calendar Years (Nominal)	Gold Price	USD/oz	1,963	1,890	1,800	N/A
Calendar Years (Real)	**Gold Price**	**USD/oz**	**1,910**	**1,801**	**1,680**	**1,494**
Calendar Years (Nominal)	Exchange Rate	ZAR/USD	16.98	17.31	17.62	N/A
Calendar Years (Real)	**Exchange Rate**	**ZAR/USD**	**16.80**	**16.77**	**16.67**	**17.04**
Calendar Years	US Inflation	%	2.8%	2.1%	2.1%	2.2%
Calendar Years	SA Inflation	%	3.9%	4.3%	4.5%	4.5%

Source: Median of various Banks and Broker forecasts (Consensus, October 2020); Minxcon; IMF.

I. Financial Cost Indicators

The operating costs in the financial model were subdivided into different categories:-

a. Adjusted Operating Cost (Cash Cost incurred at each processing stage, from mining through to recoverable metal delivered to market less net by-product credits - if any - and includes government royalty payments);
b. All-in Sustainable Cost (AISC) (sum of Operating Costs, SIB Capital, Reclamation Costs and Corporate General and Administrative Costs); and
c. All-in Cost (AIC) (sum of the AISC, Non-current Operational Costs and non-sustaining Capital Costs).

The full definitions of these costs are explained in detail in the operating cost section of this Report. Costs reported for the Blyvoor Mine, which consists of mining, plant, and other operating costs, as well as government royalty payments are displayed in the table below. Other costs in the Adjusted Operating Costs category include the social and labour plan, general and administration, transport, security, and other services costs. Other costs for the AISC category include the corporate general and administrative costs. The costs are displayed per milled tonne as well as per recovered gold ounce. Operating costs are inclusive of a 10% contingency, while capital costs are inclusive of a 15% contingency. The high cost per milled tonne can be attributed to the SBM method, which allows for hoisting ore at a higher grade.

Production Costs Summary

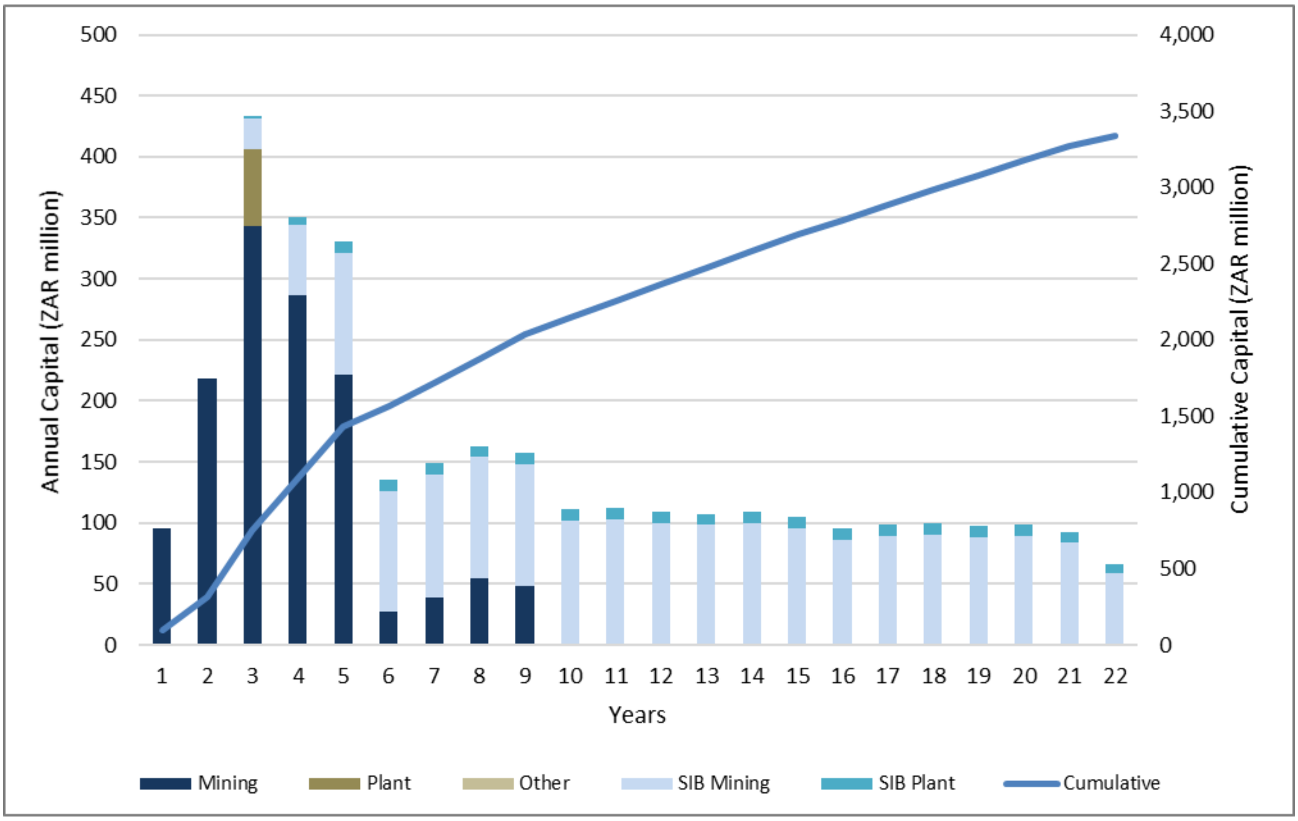
Item	Unit	Blyvoor Gold
Net Turnover	**ZAR/Milled tonne**	**6,899**
Mine Cost	ZAR/Milled tonne	1,988
Processing Costs	ZAR/Milled tonne	199
Other Costs	ZAR/Milled tonne	79
Royalties	ZAR/Milled tonne	330
Adjusted Operating Costs	**ZAR/Milled tonne**	**2,596**
SIB CAPEX	ZAR/Milled tonne	103
Reclamation	ZAR/Milled tonne	4
Other Costs	ZAR/Milled tonne	33
All-in Sustainable Costs (AISC)	**ZAR/Milled tonne**	**2,736**
Outstanding Initial Capital	ZAR/Milled tonne	74
Other Cash Costs	ZAR/Milled tonne	-
All-in Costs (AIC)	**ZAR/Milled tonne**	**2,810**
All-in Cost Margin	**%**	**59%**
EBITDA*	ZAR/Milled tonne	4,265
EBITDA Margin	%	62%
Gold Recovered	oz	5,320,311
Net Turnover	**USD/Gold oz**	**1,437**
Mine Cost	USD/Gold oz	414
Processing Costs	USD/Gold oz	41
Other Costs	USD/Gold oz	16
Royalties	USD/Gold oz	69
Operating Costs	**USD/Gold oz**	**541**
SIB CAPEX	USD/Gold oz	21
Reclamation	USD/Gold oz	1
Off-Mine Overheads	USD/Gold oz	7
All-in Sustainable Costs (AISC)	**USD/Gold oz**	**570**
Outstanding Initial Capital	USD/Gold oz	15
Other Cash Costs	USD/Gold oz	-
All-in Costs (AIC)	**USD/Gold oz**	**585**
EBITDA	USD/Gold oz	888

Notes:

1. * EBITDA excludes capital expenditure.

The capital costs over the life of mine are described in the following figure. The total capital including the SIB capital and contingencies amounts to ZAR3,336 million over the project life.

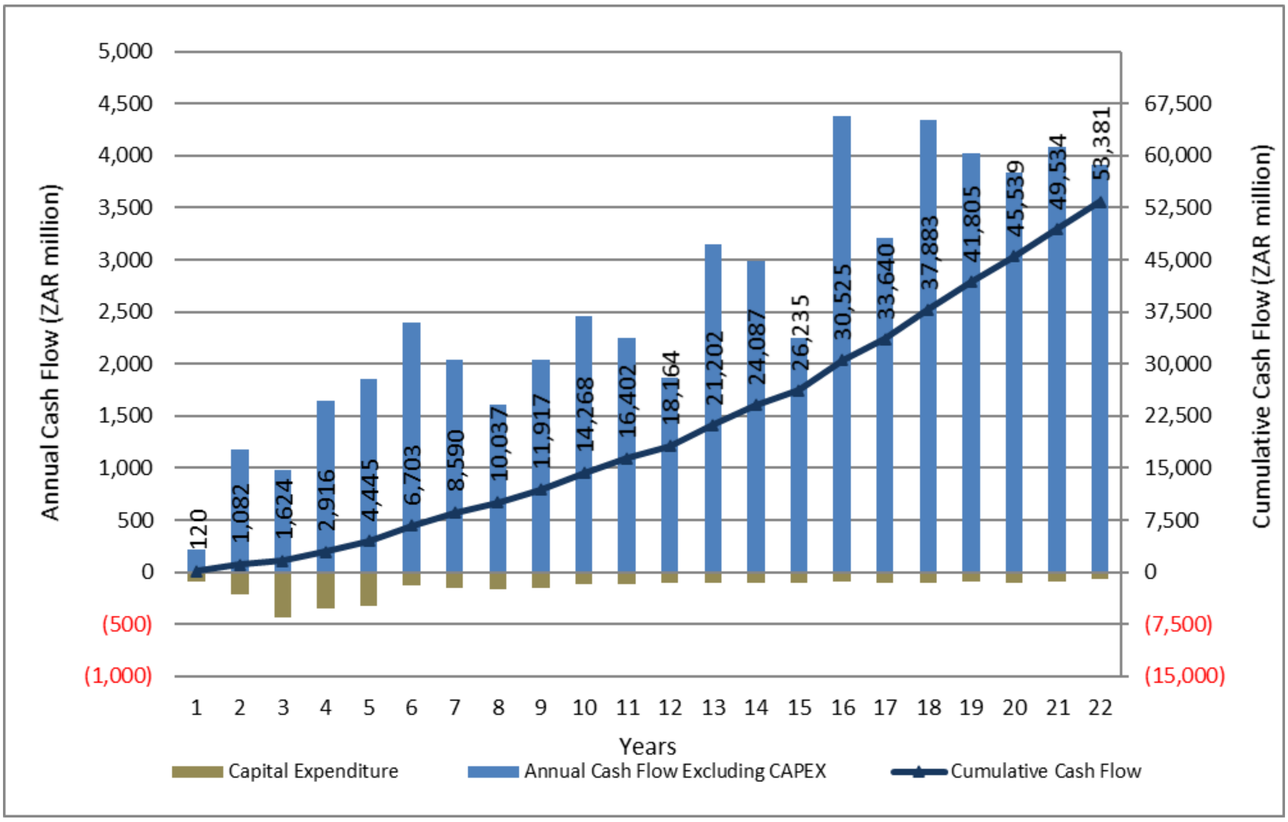
Capital Cash Flow Schedule (Outstanding Initial Capital + SIB)



II. Economic Analysis Summary

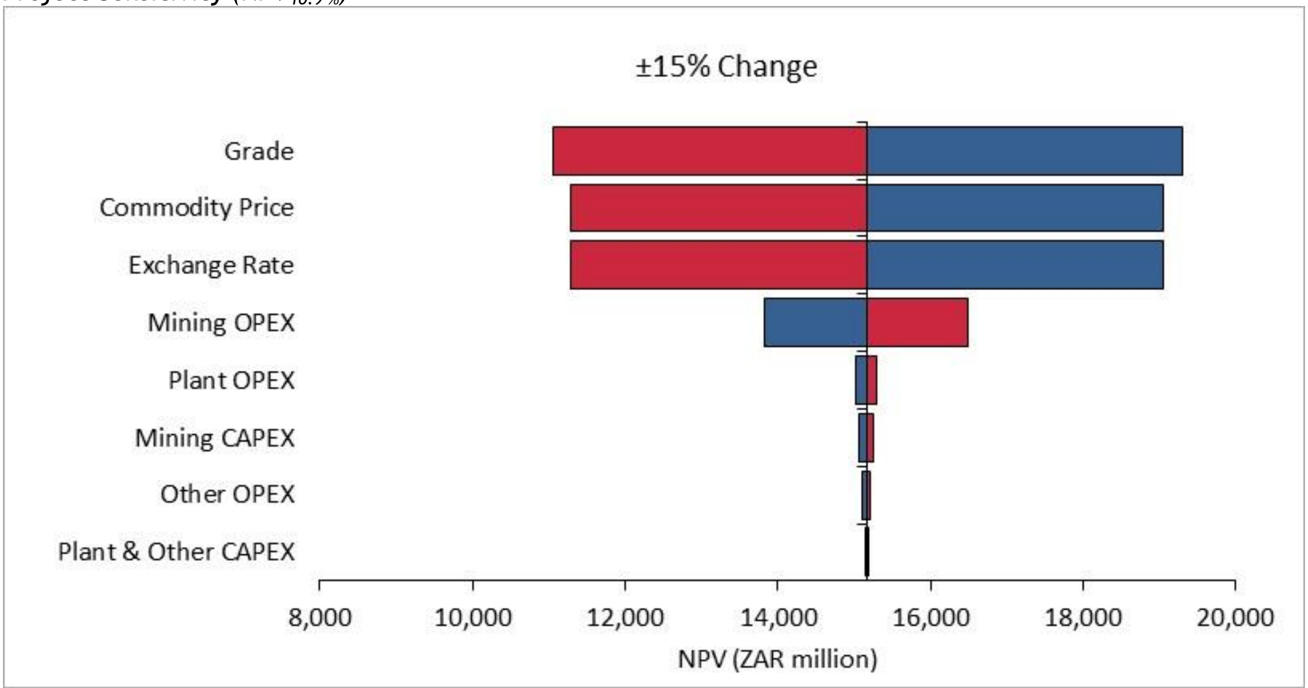
The annual and cumulative cash flow forecast is displayed in the figure below. The mine has no funding requirement since the majority of initial capital has been spent. The capital planned for year 1 of ZAR96 million is offset by revenue in the same year.

Undiscounted Cash Flow



For the DCF, the grade, commodity prices and exchange rate have the most significant impact on the sensitivity of the project followed by the fixed and variable cost. The project is least sensitive to capital and plant and other operating costs.

Project Sensitivity (NPV$_{10.9\ \%}$)



The economic analysis was done at the Blyvoor Capital (Pty) Ltd level. The value derived for the income approach only reflects the Reserve in the life of mine. The Mineral Reserve is economically viable with a best estimated NPV of ZAR15,159 million. IRR is not applicable to the Project as most of the capital has already been spent. Capital totalling ZAR96 million (inclusive of contingencies) is required in year 1, which is offset by revenue from month 1.

Project Economic Analysis Summary – Real Terms

Item	Unit	Blyvoor Gold
NPV @ 0%	ZAR million	53,436
NPV @ 5%	ZAR million	28,200
NPV @ 10%	ZAR million	16,525
NPV @ 10.9%	**ZAR million**	**15,159**
NPV @ 15%	ZAR million	10,618
NPV @ 20%	ZAR million	7,367
IRR	%	N/A
All-in Cost Margin	%	59%
Peak Funding Requirement (Annualised)	ZAR million	N/A
Payback	Years	N/A
Break-even Gold Price	USD/oz.	585

Note: Economic Analysis completed using forecast prices and exchange rates, with an average gold price of USD1,535/oz and an average exchange rate of ZAR/USD 17.00 over the LoM.

Item 1 (i) – Financial Valuation

The Qualified Valuator performed an independent Mineral Asset valuation using two methodologies, namely the income approach using a discounted cash flow (or DCF) and the market approach utilising the comparable methodology.

I. Income Approach

The valuator performed an independent mineral asset valuation on the Project and its Mineral Resources. The DCF is based on the Production Schedule and all costs associated to develop, mine and process the Mineral Reserve that forms part of the LoM plan.

The table below details the DCF valuation summary. The DCF analysis yielded a best-estimated value of ZAR15,159 million at a real discount rate of 10.9%. There is no funding requirement as the majority of capital has already been spent and any additional capital is offset by revenue from month 1. Total capital in year one totals ZAR96 million.

Project Valuation Summary – Real Terms

Item	Unit	Blyvoor Gold
NPV @ 0%	ZAR million	53,436
NPV @ 5%	ZAR million	28,200
NPV @ 10%	ZAR million	16,525
NPV @ 10.9%	**ZAR million**	**15,159**
NPV @ 15%	ZAR million	10,618
NPV @ 20%	ZAR million	7,367
IRR	%	N/A
All-in Cost Margin	%	59%
Peak Funding Requirement (Annualised)	ZAR million	N/A
Payback	Years	N/A
Break-even Gold Price	USD/oz.	585

Note: Income Approach Valuation completed using forecast prices and exchange rates, with an average gold price of USD1,535/oz and an average exchange rate of ZAR/USD 17.00 over the LoM.

II. Market Approach using Comparable Methodology

For the second valuation method the market approach was used on the total Mineral Resources to determine the full value of the Project on a comparative basis. Based on the current Measured and Indicated Mineral Resources, the best estimated full value of ZAR10,378 million was calculated at USD60.76/oz Au. Based on the current Inferred Mineral Resources, the best estimated full value of ZAR491 million was calculated at USD2.89/oz Au, as shown below.

Market Approach Valuation based on Measured and Indicated Mineral Resources

Area	Resource Area	Mineral Resource Category	Tonnage	Grade	Gold Value	Value
			'000 t	g/t	USD/oz	ZARm
Blyvoor	CL + MR	Measured	41.95	7.30	66.28	9,810
Blyvoor	CL + MR	Indicated	8.13	5.84	25.14	577
Total			**50.08**	**7.06**	**60.76**	**10,387**

Market Approach Valuation based on Inferred Mineral Resources

Area	Resource Area	Mineral Resource Category	Tonnage	Grade	Gold Value	Value
			'000 t	g/t	USD/oz	ZARm
Blyvoor	CL + MR	Inferred	79.77	4.40	2.89	491
Total			**79.77**	**4.40**	**2.89**	**491**

III. Range of Values

A minimum and maximum value was determined for the two valuation approaches as displayed in the tables to follow. The two valuations include the cash flow approach for the total Mineral Resources and the market approach for the total Mineral Resources to determine the second value of the Project.

Income Approach Range of Values Derived

Valuation Approach	Minimum Value	Median Value	Maximum Value
	ZARm		
Full Value			
Income Approach	13,944	15,159	16,768

Market Approach Range of Market Values Derived based on Measured and Indicated Mineral Resources

Mineral Resource Category	Total Au Content	Lower Price	Risk-Adjusted Price	Upper Price	Lower Value	Median Market Value	Upper Value
	Moz	USD/oz			ZARm		
Full Value							
Measured	9.85	64.80	66.28	67.77	9,591	9,810	10,031
Indicated	1.53	24.58	25.14	25.71	564	577	590
Combined	**50.08**	**59.32**	**60.76**	**62.23**	**10,142**	**10,387**	**10,639**

Market Approach Range of Market Values Derived based on Inferred Mineral Resources

Mineral Resource Category	Total Au Content	Lower Price	Risk-Adjusted Price	Upper Price	Lower Value	Median Market Value	Upper Value
	Moz	USD/oz			ZARm		
Full Value							
Inferred	11.28	2.54	2.89	3.25	430	491	552
Combined	**11.28**	**2.54**	**2.89**	**3.25**	**430**	**491**	**552**

Minxcon has higher confidence in the income approach as the value is derived from a PFS and is based on a mine plan derived from Mineral Reserves. A final fair value of ZAR15,159 million is therefore recommended for the Project.

Item 1 (j) – Qualified Person's Conclusions and Recommendations

I. Conclusions

Mineral Resources:-

- The geology and structure of the mine is well understood.
- The operation is a typical mature Witwatersrand Gold Mine with years of historical data.
- There are no fatal flaws with regards to the Mineral Resource and Minxcon is satisfied that the Mineral Resource is reliable.
- Some channel width data is less reliable in certain areas but will not have a negative impact on the Mineral Resource. This erroneous data was removed when the channel width was estimated but the cm.g/t estimation was still reliable in these areas.

Mining:-

- SBM has been selected as the mining method.
- Although SBM has been proven as a mining method, the viability of the method on a large-scale operation is yet to be confirmed.
- The mining sequence is logical. Mining commences in areas in which require minimal opening-up and re-development, in close proximity to the shaft area.
- The availability and accessibility of the initially planned mining areas on 15 Level and 27 Level has been confirmed by reconnaissance. Continuous reconnaissance has been planned to confirm the availability of all planned mining areas.
- The mine plan is subject to opening up of the existing mining infrastructure. Opening up activities have been planned for.
- Initially, cage hoisting in the No. 5A Sub-vertical Shaft from 27 Level to 15 Level (approximately 548 m) is planned until the mid-shaft hoisting arrangement has been completed.
- The mine plan targets Measured Mineral Resources and Indicated Mineral Resources only, with no economic benefit being derived from Inferred Mineral Resources.

Engineering and Infrastructure:-

- The No. 5 Shaft operation is well-established and equipped. Repairs have been conducted on equipment and infrastructure that had been damaged and/or vandalised since the operation's closure and this infrastructure has been restored to service. The established equipment and infrastructure includes offices, change houses, lamp room, Eskom and Blyvoor electrical sub-stations, winding plants, main ventilation fans, shafts, pumping infrastructure, as well as a sewage plant.
- Power supply and electrical distribution infrastructure had been extensively damaged and vandalised. Refurbishment and re-equipping of the power supply and electrical distribution infrastructure has been completed and recommissioned – 2 x 20 MVA transformers have been installed.
- Blyvoor has procured diesel generators with a supply capacity of 14 MVA to provide backup / additional power supply to the project.
- Potable water is sourced from Rand Water. A supply line has been installed and connected to the existing supply line leading onto the Blyvoor Mine lease area.
- Service water will mainly be sourced from underground and the estimated available 25 Ml/day of fissure water ingress is deemed sufficient for the planned production rates.
- Owing to No. 5A Sub-vertical Shaft being flooded from 10 m above 29 Level, ore cannot be hoisted from the installed loading station located on 43 Level. Construction of a mid-shaft loading station on 27.5 Level will be required to facilitate rock hoisting in No. 5A Sub-vertical Shaft with the rock winder. During the development and construction of this mid-shaft loading station, cage hoisting will be utilised to transport ore and, where necessary, the waste from 27 Level to 15 Level.

- Ventilation of the underground workings is a critical part of the mining operation. A review of the initial mining plan has been conducted by a ventilation specialist and it has been deemed that utilisation of only one ventilation fan and no refrigeration will be required during production above 31 Level. When mining at a production rate of 80 ktpm below 31 Level refrigeration will be required together with the utilisation of the second installed main ventilation fan.
- Once mining moves further away from the No. 5 Shaft complex, establishment of ventilation fans at the historic Doornfontein No. 2 Shaft and the Blyvooruitzicht No. 3 Ventilation Shaft will be required.
- Dewatering of the underground workings will commence in month 37, which is one year prior to mining activities proceeding below 27 Level. Initial dewatering will be conducted with submersible pumps via No. 5A Sub-vertical Shaft and No. 5 Shaft. Once the permanent pump stations and associated infrastructure below 31 Level have been replaced and recommissioned, this infrastructure and equipment will be utilised to dewater the underground workings. The selected pumping equipment and infrastructure will have sufficient capacity for the required dewatering and sufficient capital has been allowed for the acquisition thereof.
- Re-equipping and recommissioning of Incline shafts in the old Blyvooruitzicht section will be required to sustain the targeted production rates. This will include rails, sleepers, winders, ore tipping arrangements and all services required for mining and re-equipping of the old workings. Sufficient capital has been allowed for this purpose.

Processing:-

- Recent metallurgical testwork has not been conducted. However, the mine was in production for over 75 years and the metallurgical properties are well understood. A recovery of over 95% was achieved historically and therefore the planned recovery of 94.5% is deemed appropriate.
- The process plant can be upgraded from the current 40 ktpm to 80 ktpm at a cost of ZAR54 million. Increased buffer capacity and increasing the hours of operation of the crushing circuit will be required. An additional grinding mill and more tanks for conditioning and leaching will be required.
- OPEX was estimated at ZAR208/t and ZAR177/t when operating the process plant at 40 ktpm and 80 ktpm, respectively.
- The current capacity of TSF No. 6 where the tailings will be deposited has sufficient capacity for the reserve of 20.7 Mt.

Economic Analysis:-

- The Blyvoor Mine plan analysed is financially feasible at a 10.9% real discount rate.
- The DCF value of ZAR15,159 million (full value) for the Blyvoor Mine was calculated at a real discount rate of 10.9%.
- IRR was not deemed applicable since most of the pre-production capital has been spent.
- Blyvoor Mine has an all-in cost margin of 59%, which is high compared to similar mines.
- No funding is required as majority of initial capital has been spent. Capital planned in first year totals ZAR96 million, offset by revenue.
- The Project is most sensitive to grade, commodity prices and exchange rate.
- The Project has a break-even gold price of USD585/oz including capital.
- All-in sustainable costs for the Blyvoor Mine amount to ZAR2,736/milled t, which equates to USD570/oz.
- All-in costs for the Blyvoor Mine amount to ZAR2,810/milled t, which equates to USD585/oz.
- The relatively high cost per milled tonne can be attributed to the SBM method, which allows for hoisting ore at a higher grade.
- The low cost per recovered ounce is a function of the high grades (averaging 9.1 g/t) being processed.

Financial Valuation:-

- A range of values was calculated for the income approach of between ZAR13,944 million and ZAR16,768 million with a median DCF value of ZAR15,159 million (100% attributable).
- A range of values was calculated for the comparable methodology of the market approach. The Project value based on Measured and Indicated Mineral Resources was calculated at between ZAR10,142 million and ZAR10,639 million with a best estimated market value of ZAR10,387 million. Based on Inferred Mineral Resources, the value was calculated at between ZAR430 million and ZAR552 million with a best estimated market value of ZAR491 million (100% attributable).
- Minxcon has higher confidence in the income approach as the value is derived from a PFS and is based on a mine plan derived from Mineral Reserves. A final fair value of ZAR15,159 million is therefore recommended for the Project.

II. RECOMMENDATIONS

Mineral Resources:-

- It is recommended that when mining starts, the channel widths be reviewed in the areas where the current estimate of these widths is in question. The channel width data can then be remodelled for more complete channel width modelling. The current model does, however, utilise the cm.g/t data and not the channel width or grade (g/t) and therefore the estimation is reliable.
- It is recommended that the geological model domaining of the Middelvlei Reef be reviewed with further Mineral Resource updates to refine the estimation for future mine planning.

Mining:-

- Reconnaissance should be conducted on an ongoing basis to assess the availability and condition of underground access and workings that are planned after year 5. Re-planning may need to be undertaken where required if the reconnaissance identifies inaccessible areas.
- The capital estimate of the shaft refurbishment, dewatering, pump stations, sub-stations, mining equipment and rail-bound equipment needs to be updated with the knowledge gained from the reconnaissance.
- A detailed ventilation plan inclusive of refrigeration should be developed for the later years of operation. Ventilation simulations should be conducted to determine the ventilation requirements beyond the first five years of mining.
- Ongoing rock engineering investigations and re-modelling are required to optimise the extraction and support methodologies.
- It is recommended that a risk register and seismic monitoring plan is implemented considering the Rock Engineering Codes of Practice for SBM.

Engineering and Infrastructure:-

- Detailed designs for the mid-shaft loading stations are required.
- Investigations need to be conducted to fully understand the requirements for re-equipping the old Blyvooruitzicht section incline shafts.

ITEM 2 - INTRODUCTION

Item 2 (a) - ISSUER RECEIVING THE REPORT

Minxcon (Pty) Ltd ("Minxcon") was commissioned by Blyvoor Gold Capital (Pty) Ltd ("Blyvoor Gold", "the Client" or "the Company") to complete an Independent Technical Report (this "Report") on the Blyvoor Gold Mine ("Blyvoor Mine", "Blyvoor" or the "Mine"), situated in Gauteng Province, South Africa. This Report is also addressed to Nomad Royalty Company Ltd., which company is the holder of a gold streaming arrangement on the Blyvoor Mine as described in Item 4(e) of this Report.

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

Minxcon was commissioned to compile this Report in compliance with the National Instrument 43-101, Form 43-101 F1 and the Companion Policy Document 43-101CP (collectively "NI 43-101"). The scope of work mandated was inclusive of a full mineral asset valuation aligned to standards, guidelines and definitions of the Canadian Institute of Mining, Metallurgy and Petroleum on the Valuation of Mineral Properties Code for Valuation of Mineral Properties (2019 Edition) ("CIMVAL Code").

Following completion of a pre-feasibility study ("PFS") on Blyvoor Mine, the purpose of this Report is to present updated technical information, Mineral Resources, and Mineral Reserves for the Mine. Based on these updated parameters, a financial valuation was performed.

The scope of work is to update all aspects of the Technical Report in line with NI 43-101 standards and requirements, based on the results of the PFS. The scope includes the completion of two independent mineral asset valuations in accordance with the CIMVAL Code.
The effective date of this Report is 1 March 2021.

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

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

- Personal communication with Blyvoor Gold personnel, Mr L. Lamsley (General Manager) and Mr D. Whittaker (Mineral Resource Manager).
- An Independent NI 43-101 Technical Report on the Blyvoor Gold Mine, South Africa. Minxcon, 2020.

Minxcon scrutinised all the information provided by Blyvoor Gold and other sources and is satisfied that the information is sound and can be utilised in the estimation of the gold Mineral Resources and Mineral Reserves.

For further details on references, please refer to Item 28.

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

Minxcon is an independent advisory company. Its consultants have extensive experience in preparing technical and economic advisors' and economic analysis reports for mining and exploration companies. Neither Minxcon nor its staff have any interest capable of affecting their ability to give a fair opinion and will not receive any pecuniary or other benefits in connection with this assignment, other than normal consulting fees.

The Qualified Persons for this Report are Mr D. van Heerden and Mr U. Engelmann. Mr N.J. Odendaal is the Qualified Valuator for this Report.

Mr van Heerden and Mr Engelmann undertook an underground site visit on 11 March 2021 accompanied by various Blyvoor Gold staff members to inspect the recent mining start up and geology on 15 Level.

The authors of this Report are members in good standing of appropriate professional institutions. The following persons are Qualified Persons, as defined by the compliance reporting requirements for NI 43-101, and are responsible for the preparation of the Report:-

Mr Daniel (Daan) van Heerden (Director, Minxcon): B Eng (Min.), MCom (Bus. Admin.), MMC, Pr.Eng. (Reg. No. 20050318), FSAIMM (Reg. No. 37309), AMMSA.

Daan has worked in the mining industry for over 30 years. He has a vast amount of experience in managing underground and open cast mining operations in South Africa and abroad for world-class mining majors and junior mining companies. He was responsible for new business development for two major mining companies and has experience in mining mergers and acquisitions. He is currently heading the Mining Engineering division of Minxcon, where he is integrally involved in activities such as valuation, due diligence, finance structuring, post event change management, feasibility studies, life of mine plans, technical reviews and writing of technical reports for various commodities.

Mr Uwe Engelmann (Director, Minxcon): BSc (Zoo. & Bot.), BSc Hons (Geol.), Pr.Sci.Nat. (Reg. No. 400058/08), MGSSA (Reg. No. 966310).

Uwe Engelmann has gained over 23 years' experience in the mining and exploration industry working for various mining companies in South Africa. During this time, he was involved in research in Antarctica, held various geological positions including as Ore Resource Manager for eight years where he was involved in the production and exploration on the shafts, strategic planning, ore resources and reserves as well as the daily management of the shafts. He has been heading up the exploration division of Minxcon Exploration (formerly Agere Project Management) since 2007 where he has been involved in most aspects of exploration, predominantly in Africa, in a wide range of commodities including gold, platinum, copper, coal, manganese, chrome and iron ore. From 2014 he has been heading up the geology/Mineral Resource and exploration division at Minxcon.

Mr Johan Odendaal (Director, Minxcon): BSc (Geol.), BSc Hons (Min. Econ.), MSc (Min. Eng.), Pr.Sci.Nat. (Reg. No. 400024/04), FSAIMM (Reg. No. 702615), MGSSA (Reg. No. 965119).

Johan Odendaal has over 30 years' experience in the mining and financial industry. This includes 15 years as independent mining consultant specialising in the valuation of Mining Projects and 12 years as a mining analyst at two major stockbroking firms and an investment bank. During this time, he was rated one of the top platinum and gold mining analysts and became a globally recognised industry specialist in various commodities. As a former employee of a global investment bank, he was actively involved in financial analysis and advising mining companies and investment bankers on corporate mining transactions. Johan has a vast experience in fundamental analysis of commodity markets. His experience with regard to Mineral Asset Valuations, Concept Studies, Competent Persons Reports, Due Diligence and Technical Reports includes precious metals, ferrous and non-ferrous metals, coal, diamonds and a number of minor metals and commodities. Johan also serves on the JSE Issuer Regulation Advisory Committee and SAMVAL Working Group.

ITEM 3 – RELIANCE ON OTHER EXPERTS

Minxcon has accepted information supplied by Blyvoor Gold regarding the permits and licences as valid and complete, as provided by Mr Dave Whittaker. Reliance was made on documentation prepared by Digby Wells Environmental for calculations on environmental liabilities.

ITEM 4 - PROPERTY DESCRIPTION AND LOCATION

Item 4 (a) - AREA OF THE PROPERTY

Blyvoor Gold acquired the No. 5 Shaft underground gold mining operations of the Blyvooruitzicht Gold Mine. This Report focuses on the underground operations.

The Blyvooruitzicht Gold Mine Company ("BGMC") was liquidated in 2013 and as a result all operations on the mine were ceased. The Blyvoor Gold project consists of reopening the No. 5 Shaft Complex and returning the operation to steady state production.

Numerous activities have been initiated and/or completed since cessation of the operation, including extensive infrastructure maintenance and upgrades.

Adjacent to No. 5 Shaft plant foundations were available upon which a hard rock gold extraction plant has been constructed and commissioned.

The Blyvoor Mine is located in a prolific gold mining area within the Carletonville Goldfield. The region hosts a number of well-established gold mines and is well serviced by all amenities.

Item 4 (b) - LOCATION OF THE PROPERTY

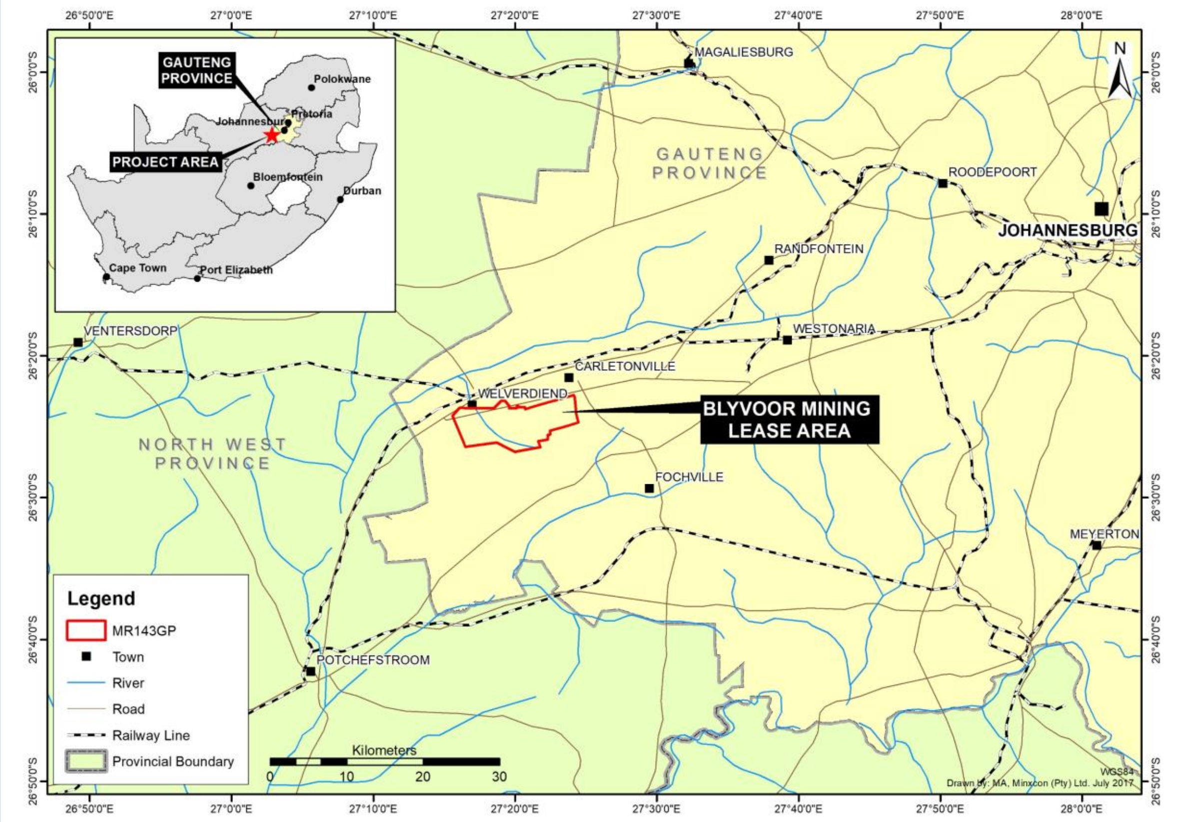
No. 5 Shaft is located some 14 km by road southwest of the town of Carletonville, in the south-western extremity of the Gauteng Province, South Africa, and within the Oberholzer Magisterial District. The town of Fochville lies 30 km due southeast and Westonaria 42 km due northeast. To the northeast, Johannesburg can be accessed over a well-established road network of 80 km.

The Mine is centred around No. 5 Shaft on the following co-ordinates:-

- Latitude 26°25'31"S; and
- Longitude 27°20'42"E.

The regional location of the Project Area is illustrated in Figure 1.

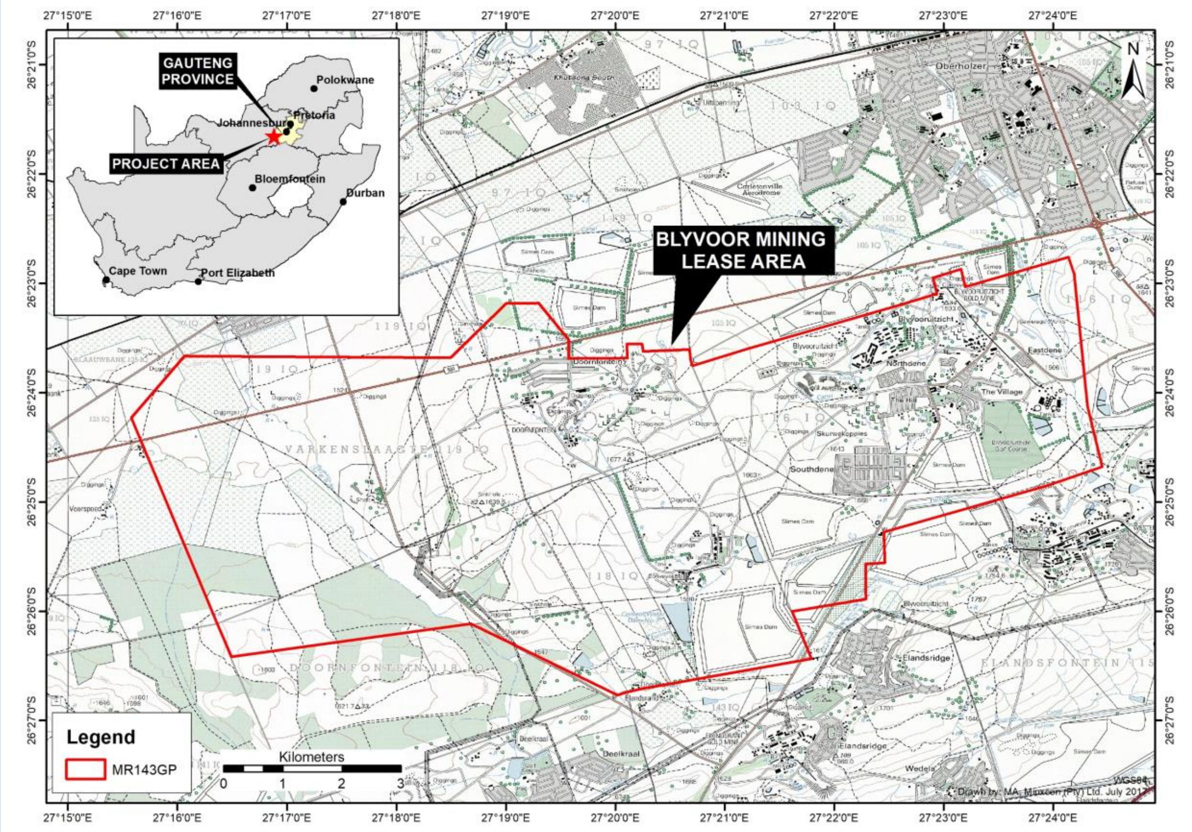
Figure 1: Location of the Blyvoor Mine



Location of the Blyvoor Mine | **February 2021**

The mining lease area occurs on the topo-cadastral map sheet 2627AD as published by the Surveyor General. An illustration of this is provided in Figure 2.

Figure 2: Topo-cadastral Map of the Blyvoor Mine



Topo-cadastral Map of the Blyvoor Mine	February 2021

Item 4 (c) – Mineral Deposit Tenure

I. Mining and Prospecting Rights

Mining rights are issued by the South African Department of Mineral Resources and Energy ("DMRE", previously Department of Mineral Resources) in accordance with the Mineral and Petroleum Resources Development Act, No 28 of 2002 ("MPRDA").

The Blyvoor Mine is encompassed under a converted mining right GP 30/5/1/2/2/143 MR ("MR143GP"; previously old order Mining Licence ML46/1999) valid for 30 years until 16 February 2047. MR143GP was originally issued to BGMC (in provisional liquidation) and was subsequently ceded and transferred under a Section 11 application to Blyvoor Gold Capital (Pty) Ltd.

On 28 June 2017, consent was granted under the authority of the Minister of Mineral Resources in terms of Section 11 of the MPRDA to cede and transfer the right from BGMC to Blyvoor Gold Capital (Pty) Ltd. The Notarial Deed of Cession was executed on 7 August 2017 and was registered at the Mineral and Petroleum Titles Registration Office on the same day.

Table 1 provides a summary of the details of MR143GP.

Table 1: Summary of Mining Right for Blyvoor Mine

Right Number	Holding Company	Farm	Area ha	Commodity	Commencement Date	Expiry Date
MR143GP	Blyvoor Gold Capital (Pty) Ltd	Various portions of the farms Blyvooruitzicht 116 IQ, Doornfontein 118 IQ, and Varkenslaagte 119 IQ	6,708.4273	Gold	17 Feb 2017	16 Feb 2047

II. SURFACE RIGHTS

A number of servitudes and usufructs for services are required for the operation. These services include water, electricity, and pumping, amongst others. Servitudes and usufructs have been surveyed and registered for all operational areas of the Mine. The usufructs have a validity period of 99 years.

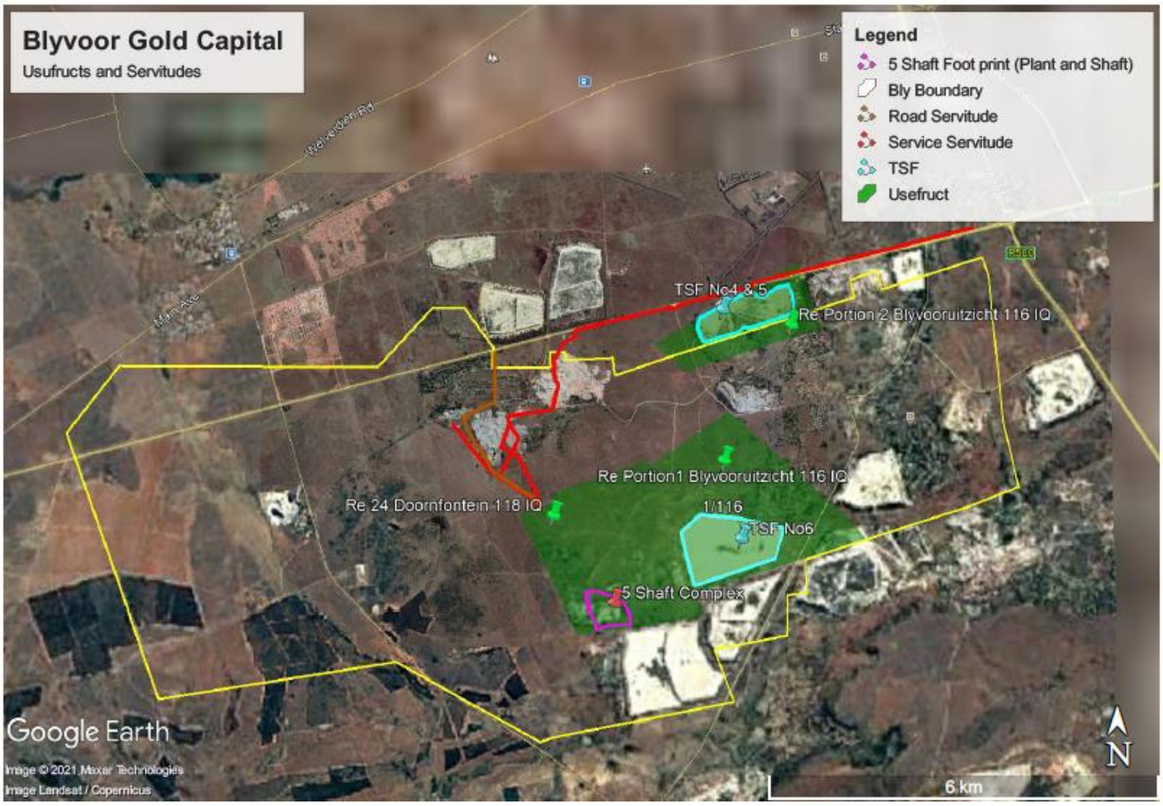
Table 2 outlines the servitudes and usufructs for the operation applicable to Blyvoor Mine.

Table 2: Blyvoor Mine Surface Usufruct Areas and Servitudes

Type	Description	Ownership	Purpose
Usufruct	Re Portion 24 Doornfontein 118 IQ	Blyvoor Gold Capital (Pty) Ltd	Mining activities No. 5 Shaft area.
Usufruct	No. 6 TSF on Re Portion 1 Blyvooruitzicht 116 IQ	Blyvoor Gold Operations (Pty) Ltd *In process of transfer to Blyvoor Gold Capital (Pty) Ltd*	Blyvoor Mine tailings to be deposited here. An agreement is in place between the Company and Blyvoor Gold Operations (Pty) Ltd providing for use of No. 6 TSF by the Company for the deposition of its tailings.
Servitude	Road	Blyvoor Gold Capital (Pty) Ltd	Access from R501 to Remaining Extent of Portion 24.
Servitude	Services	Blyvoor Gold Capital (Pty) Ltd	Services Water supply from Mine Mechanisation and Equipment (Pty) Ltd to Blyvoor.
Servitude	Re Portion 24 Varkenslaagte 119 IQ	Blyvoor Gold Capital (Pty) Ltd	Service supply.

These servitudes and usufructs are illustrated in Figure 3.

Figure 3: Surface Usufruct Areas and Servitudes



Source: D. Whittaker

Surface Usufruct Areas and Servitudes	February 2021

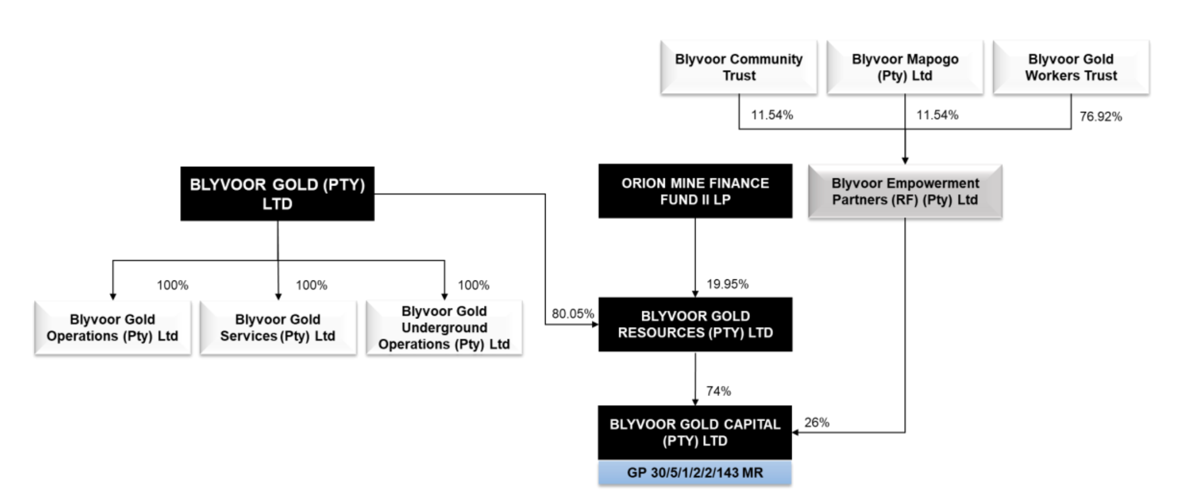
Adequate surface rights, usufructs and servitude are available to accommodate future infrastructure requirements for underground mining including an increase in treatment plant capacity and TSFs.

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

The mineral right MR143GP encompassing the Blyvoor Mine is currently held by Blyvoor Gold Capital (Pty) Ltd. Blyvoor Gold Capital (Pty) Ltd is a registered subsidiary (74%) of Blyvoor Gold Resources (Pty) Ltd, as illustrated in Figure 4. The remaining 26% ownership of Blyvoor Gold Capital (Pty) Ltd is held by Blyvoor Empowerment Partners (RF) (Pty) Ltd, which represents Black persons as defined in terms of the Black Economic Empowerment ("BEE") Act and as set out in the Mining Charter. The MR143GP was issued prior to gazetting of the 2018 Mining Charter which requires mines to hold a 30% BEE representation, thus the 26% BEE requirement of the previous Charter remains in force. With respect to MR143GP Blyvoor Gold (Pty) Ltd is a majority shareholder in Blyvoor Gold Resources (Pty) Ltd.

With the exception of Orion Mine Finance Fund II LP, all companies shown in this structure are registered and incorporated in the Republic of South Africa.

Figure 4: Group Structure

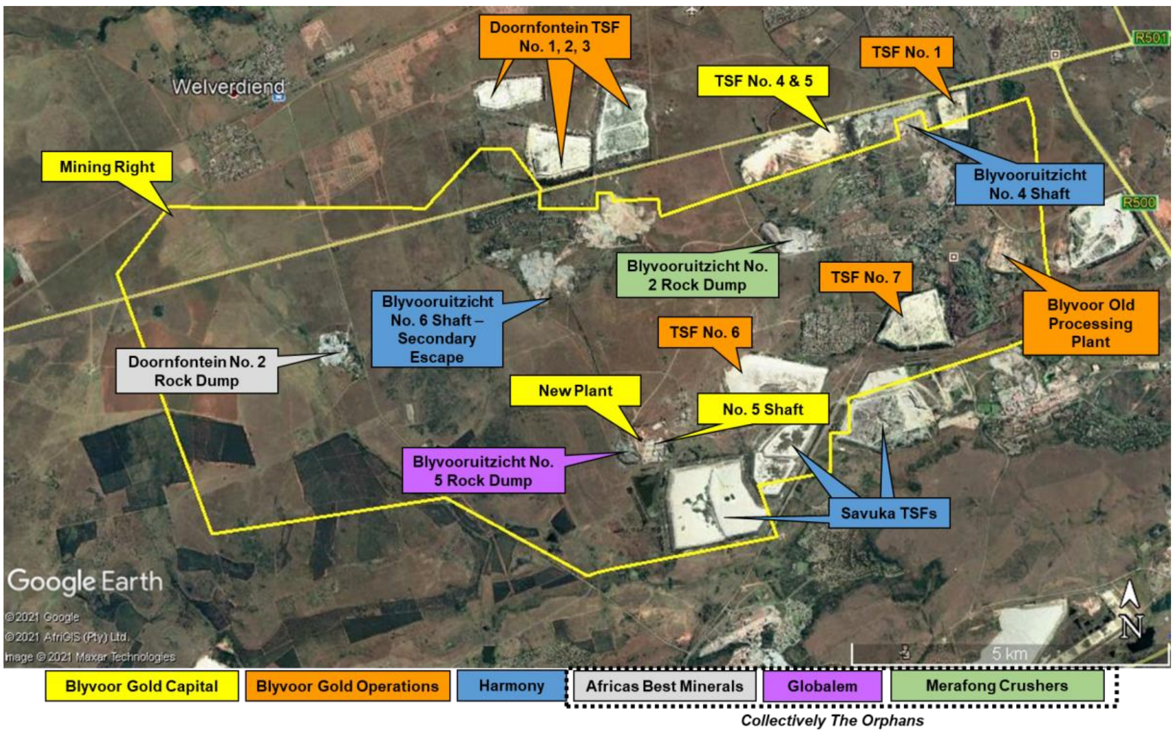


Group Structure	February 2021

On 24 June 2016, Blyvoor Gold acquired the No. 5 Shaft and the movable assets situated in the No. 5 Shaft area, making provision for Blyvoor Gold to take cession of the mining right. Blyvoor Gold acquired the No. 5 Shaft.

Figure 5 illustrates the Blyvoor assets in relation to other assets in the Area.

Figure 5: Location of Blyvoor Gold Assets in Relation to the Other Assets



Location of Blyvoor Gold Assets in Relation to the Other Assets	February 2021

The yellow areas in the Figure 5 indicate the Blyvoor Gold Capital (Pty) Ltd assets, who intends to mine the mining right area (project area). The orange areas indicate Blyvoor Operations (Pty) Ltd assets, who intend to process tailings. The blue areas indicate the former Anglo Gold Ashanti Limited ("AGA") assets that were sold to Harmony Gold Mining Company Limited ("Harmony") in 2020, who are currently pumping in order to protect the integrity of the underground pillar between the Blyvoor No. 5A Sub-vertical Shaft underground workings and their neighbouring Savuka Gold Mine. The grey area indicates assets of Africa's Best Minerals, who own the Doornfontein No. 2 Rock Dump. The light green area indicates assets of Merafong Crushers, who own the Blyvooruitzicht No. 2 Rock Dump. The purple area indicates Globalem, who own the Blyvooruitzicht No. 5 Rock Dump.

Item 4 (e) - ROYALTIES AND PAYMENTS

The current Mineral and Petroleum Resources Royalty Act came into effect on 1 March 2010. The law requires all companies extracting minerals in South Africa to pay royalties at a rate of between 0.5% and 7% based on gross sales. Companies are taxed on either the refined or unrefined formula:-

- Refined mineral formula = 0.5 + [EBIT/Gross sales x 12.5] x 100
- Unrefined mineral formula = 0.5 + [EBIT/Gross sales x 9] x 100

The refined mineral formula has been used for Blyvoor Mine as the gold will be refined to at least 99.5% purity at Rand Refinery, and the Company will sell the refined product at spot prices.

Rand Refinery, who will be contracted to refine the gold doré produced at the Blyvoor Mine, is the largest gold refinery in the world and has historically refined 95% to 99% of all gold produced in South Africa.

Blyvoor also has a streaming arrangement in place with Nomad Royalty Company Ltd. whereby gold will be sold to Nomad Royalty Company Ltd. (the purchaser) at a fixed price of USD572/oz for gold volumes amounting to the following:-

- For the first 300,000 oz delivered to the purchaser:-
  - 10% of production to be delivered to the purchaser, capped at 16,000 oz delivered/ 160,000 oz produced per annum.
  - Thereafter, 5% of the production in excess of 160,000 oz per annum for that year.
- After the purchaser has received 300,000 oz, with production capped at 10,320,000 oz:-
  - 0.5% of production to be delivered to the purchaser, capped at 500 oz delivered or 100,000 oz produced per calendar year.
  - Thereafter, 0% of the remaining production for that year (*i.e.* no charge).

Item 4 (f) - ENVIRONMENTAL LIABILITIES

In terms of Regulation 54(2) of the MPRDA, Blyvoor Gold is required to make financial provision for the interim and final rehabilitation activities on the site. The provision is required to be reviewed annually for adequacy and amended to compensate for new activities and/or inflation.

An Environmental Authorisation ("EA") process for MR143GP has been completed. The rehabilitation liability provision was assessed and updated by Digby Wells Environmental as part of the EA application and apportioned to the three entities/groupings as set out in Table 3. The exercise specifically included the re-estimation of closure costs of "the Orphans" (acquired components of the historical Mining Right 46/99) together with Blyvoor Gold Capital (Pty) Ltd and Blyvoor Gold Operations (Pty) Ltd closure costs. These new assessments came into force upon the granting of the EA by the authorities. The Orphans liability was subsequently apportioned 35% to Blyvoor Gold Capital (Pty) Ltd and 65% Blyvoor Gold Operations (Pty) Ltd, which would place Blyvoor Gold Capital (Pty) Ltd total closure liability at ZAR128.97 million.

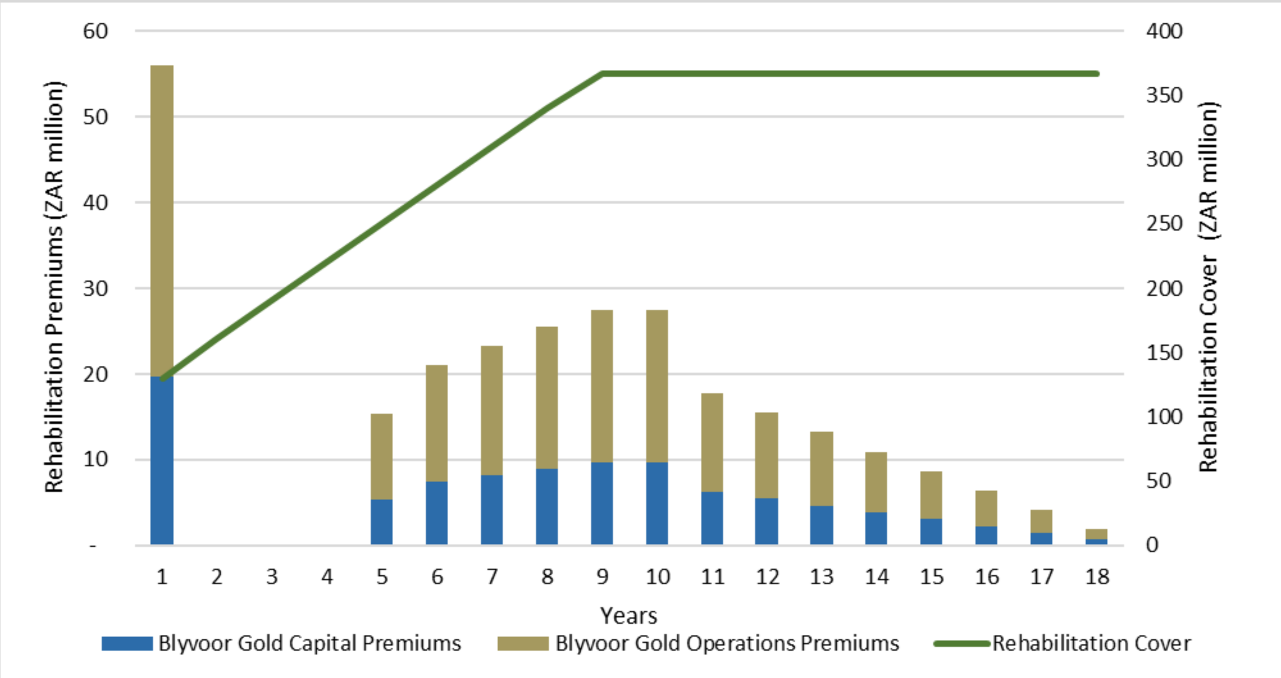
Table 3: Assessed Rehabilitation Liabilities attached to MR143GP as at January 2019 with Amended Splits

Description	DMRE Financial Provision Assessment ZARm	Percentage of Liability
Blyvoor Gold Capital (Pty) Ltd	90.5	25%
Blyvoor Gold Operations (Pty) Ltd	166.6	45%
Orphans	109.2	30%
Total	**366.3**	**100.0%**

In October 2020 Blyvoor Gold Operations (Pty) Ltd applied to the DMRE to amend the closure liability funding by consolidating all existing guarantees and funding arrangements into a single financial guarantee through Guardrisk. The existing guarantees of ZAR39.2 million, guarantees to be provided in 2020 of ZAR35.2 million and the Trust Fund balance of ZAR55.8 million would all be consolidated into a new guarantee of ZAR130.2 million, with the remaining ZAR236.1 million to be funded through guarantees over a period of eight years. This arrangement was accepted by the DMRE in a letter dated 26 October 2020, and a Guardrisk guarantee in the amount of ZAR130.2 million was provided to the DMRE on 22 October 2020.

A payment schedule was provided to Minxcon detailing a period of 18 years to fully fund the guarantees of ZAR366.3 million. The available funds transferred to Guardrisk are sufficient to fully fund premiums to Guardrisk for four years. The payment schedule was apportioned between Blyvoor Gold Capital (Pty) Ltd and Blyvoor Gold Operations (Pty) Ltd (Figure 6).

Figure 6: Rehabilitation Premiums Apportioned and Cover



Blyvoor Gold, through the granting of the EA, has commenced the process of formally reverting the accountability of the Orphans liability to the new owners of the assets. In addition, Blyvoor Gold Operations (Pty) Ltd is intended for sale and once concluded, its liability will be separated through a Section 102 Amendment of the Mining Right.

Once these developments have been concluded, Blyvoor Gold Capital (Pty) Ltd will have a total liability of ZAR90.5 million. In the unlikely event that the Orphans liability cannot be passed on to the new owners of the assets and Blyvoor Gold Capital (Pty) Ltd carries the entire Orphans liability, then the total liability will amount to ZAR199.7 million. The payment plan already in place, which Blyvoor Gold Capital (Pty) Ltd and Blyvoor Gold Operations (Pty) Ltd are currently funding, already provides for a ZAR366 million liability. Any success in reducing the overall liability through the allocation of liabilities to the owners of the Orphans will result in a reduction of cost to Blyvoor Gold.

Item 4 (g) – Permits to Conduct Work

I. Environmental Authorisation

As part of the MR143GP and previous ML46/1999, Environmental Impact Assessment ("EIA") and Environmental Management Programme ("EMP") reports, dating back to 2000, in terms of the National Environmental Management Act, No. 107 of 1998 ("NEMA") were approved by the Acting Regional Manager, DMRE Gauteng. Subsequent EMP amendments were submitted in 2007 and 2012.

Blyvoor Gold was required to make application for EA by 26 January 2018 as per the revised Directive. This was submitted on 13 February 2019 and triggered the requirement for a revised EIA and a revised EMP in terms of the requirements of Section 102 of the MPRDA for the mine to align the management document to their underground mining plans and the components of the surface mining infrastructure which they have acquired. The EA was granted on 19 February 2020.

II. Additional Permits

A water use licence ("WUL") no. 08/C23E/AEFGJ/1000 in terms of the National Water Act, No. 36 of 1998 ("NWA") was issued in 2011 for the Mine. This was transferred to Blyvoor Gold and is valid until 19 July 2021.

When operations were ceased in 2013, AGA approached the courts to compel the Department of Water and Sanitation to issue the directive allowing AGA to pump water from underground in order to protect their down-dip operations from the threat of being flooded unexpectedly. Following the sale of AGA's assets to Harmony, the latter through their subsidiary Covalent Water Company ("CWC"), are currently pumping water from Blyvooruitzicht No. 4 Shaft and Blyvooruitzicht No. 6 Shaft under a directive from the Department of Water and Sanitation. Blyvoor Gold via environmental consultants Digby Wells is currently in the process of applying for a new WUL, with the objective of the application to be as close as possible to the current licence. New uses applied for include 21(c) Piping from the new treatment plant for depositing of tailings material and the return of water back to the plant, and 21(g) authorisation of process water dam in the new plant (if required by DWS). Operations, extraction, and deposition will be as per the current WUL. Wastewater treatment plants for the villages, *i.e.* Blyvoor and Doornfontein, will be removed from the new application as they are not owned by Blyvoor Gold. Blyvoor Gold continues to work closely with Harmony regarding water issues.

The waste management licence in terms of the National Environmental Management: Waste Act, No. 59 of 2008 forms part of the EA which was granted on 19 February 2020.

Application for the air emissions licence ("AEL") in terms of the National Environmental Management: Air Quality Act, No. 39 of 2004 was submitted. A provisional AEL no. AEL/GP/WR-BGC/01/06/20 was issued to Blyvoor Capital by the Department of Environment, Forestry and Fisheries for the listed activity of precious and base metal refining. The licence was issued on 22 September 2020 and is valid for a period of 12 months. The authorities are required to inspect and assess a fully operational facility prior to awarding the formal AEL.

An application for a Certificate of Registration in terms of the National Nuclear Regulatory Act of 1999, was submitted to National Nuclear Regulator on 27 June 2019. The authorities are conducting site visits and the process is progressing positively.

Minxcon is not aware of any further permits in addition to those described above, which are required for implementation of the underground Project.

Item 4 (h) – OTHER SIGNIFICANT FACTORS AND RISKS

To the knowledge of the Qualified Persons, all governmental requirements as may be required have been approved, or there is reasonable basis to believe that all governmental requirements for the Project can be obtained. Blyvoor Gold is required to adhere to all environmental and sustainability principles as set out in the MPRDA.

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

Item 5 (a) – Topography, Elevation and Vegetation

The surface topography of the mining lease area is characterised by undulating hills and forms part of the northern slopes of the Gatsrand Ridge. Elevations vary from some 1,400 m to 1,680 m above mean sea level.

One distinct watercourse carries seasonal rainwater from the higher catchment areas across the eastern side of the property to the Wonderfonteinspruit.

Per Golder Associates (2016), the Blyvoor mining right area is located in the Gauteng Shale Mountain Bushveld and Carletonville Dolomite Grassland vegetation types. Gauteng Shale Mountain Bushveld occurs on low broken ridges varying in steepness and generally with a high surface rock cover and is distributed mainly on the ridge of the Gatsrand south of Carletonville, Westonaria and Lenasia. The vegetation is characterised by short (3–6 m), semi-open thicket, dominated by a variety of woody species. The understory is dominated by a variety of grasses. Some of the ridges form plateaus that support scrubby grassland. Carletonville Dolomite Grassland occurs on undulating plains dissected by rocky chert ridges.

It is noted, however, that the site has largely been disturbed by mining activities over the decades. A number of exotic and invasive species occur on the mine property usually associated with areas such as the TSFs and developed mining areas.

The grassland is sour in nature due to severely frosty winters, combined with regular burning. Trees and shrubs typically occur on rocky outcrops and protected areas. Typical grassland is restricted to the exposed sites in the irregular, undulating landscape. This veld type is not suited for crop production due to the shallow and rocky nature of the soils. Grazing of livestock is limited due to the dominance of sour grass species, which results in a low nutrient status of the fodder during winter.

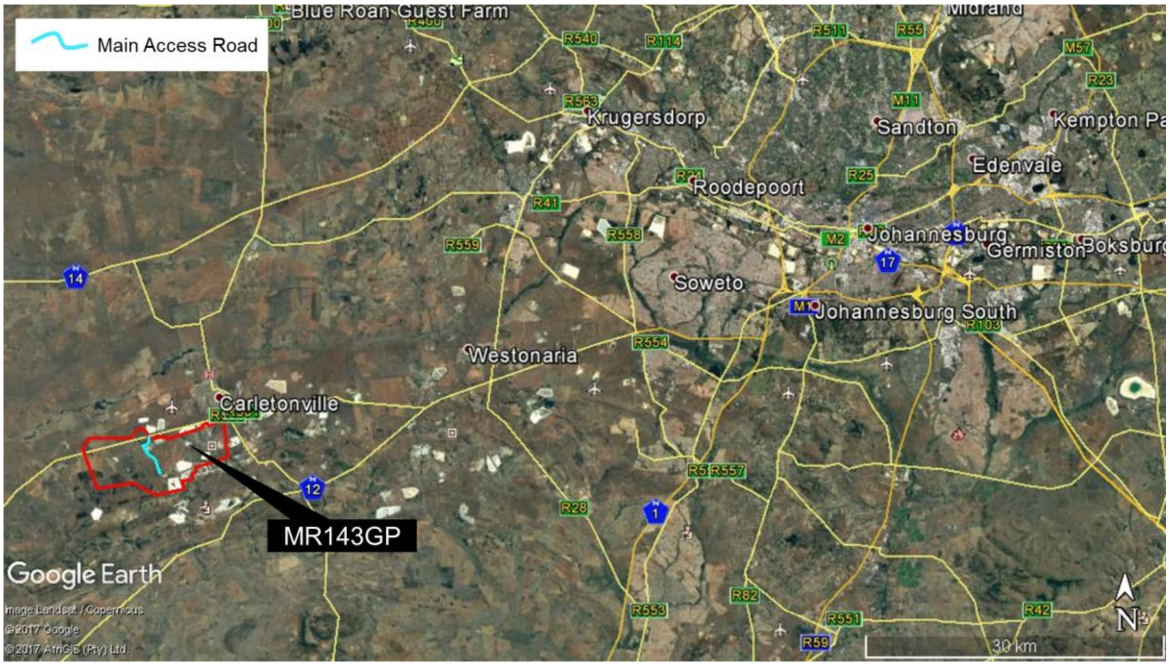
This area is typical of the transitional-type grassland between the high inland plateau and the bushveld of the lower inland plateau, with the resultant low incidence of tree species.

Item 5 (b) – Access to the Property

The Blyvoor mining right area is directly accessible via the R501 main tarred road that connects Carletonville and Potchefstroom. The R501 runs along the northern boundary of the mining property and traverses the lease area to the west. From this main road, the Mine is accessed via a direct tarred road onto the lease area that branches off the R501. The road was previously well maintained by BGMC and is in reasonable condition. Numerous all-weather gravel roads provide access to various sites on the Mine.

The regional road network as well as the main access road on the Mine property providing access to No. 5 Shaft, are illustrated in Figure 7.

Figure 7: Regional Road Network



Regional Road Network	February 2021

Item 5 (c) – Proximity to Population Centres and Nature of Transport

The local Carletonville region is a well-established mining area. Skilled and semi-skilled labour are readily available, along with all service requirements.

The nearby towns of Carletonville and Fochville provide a full range of urban amenities, including medical and educational facilities, financial, retail, and commercial services. Telephone and mobile phone services are reliable, as are the high-speed internet facilities.

The area is well served by good road infrastructure. The Blyvoor Mine lies some 80 km southwest of Johannesburg, from which it is accessed by a good network of dual carriageway and sealed roads.

Oberholzer is the closest railway station, located approximately 12 km northeast of No. 5 Shaft and just north of Carletonville, and is situated on the Johannesburg-Klerksdorp railway line.

The O.R. Tambo and Lanseria International Airports in the Johannesburg area support high volumes of daily domestic and international flights. The Carletonville Aerodrome is located some 5 km north of No. 5 Shaft.

Item 5 (d) – Climate and Length of Operating Season

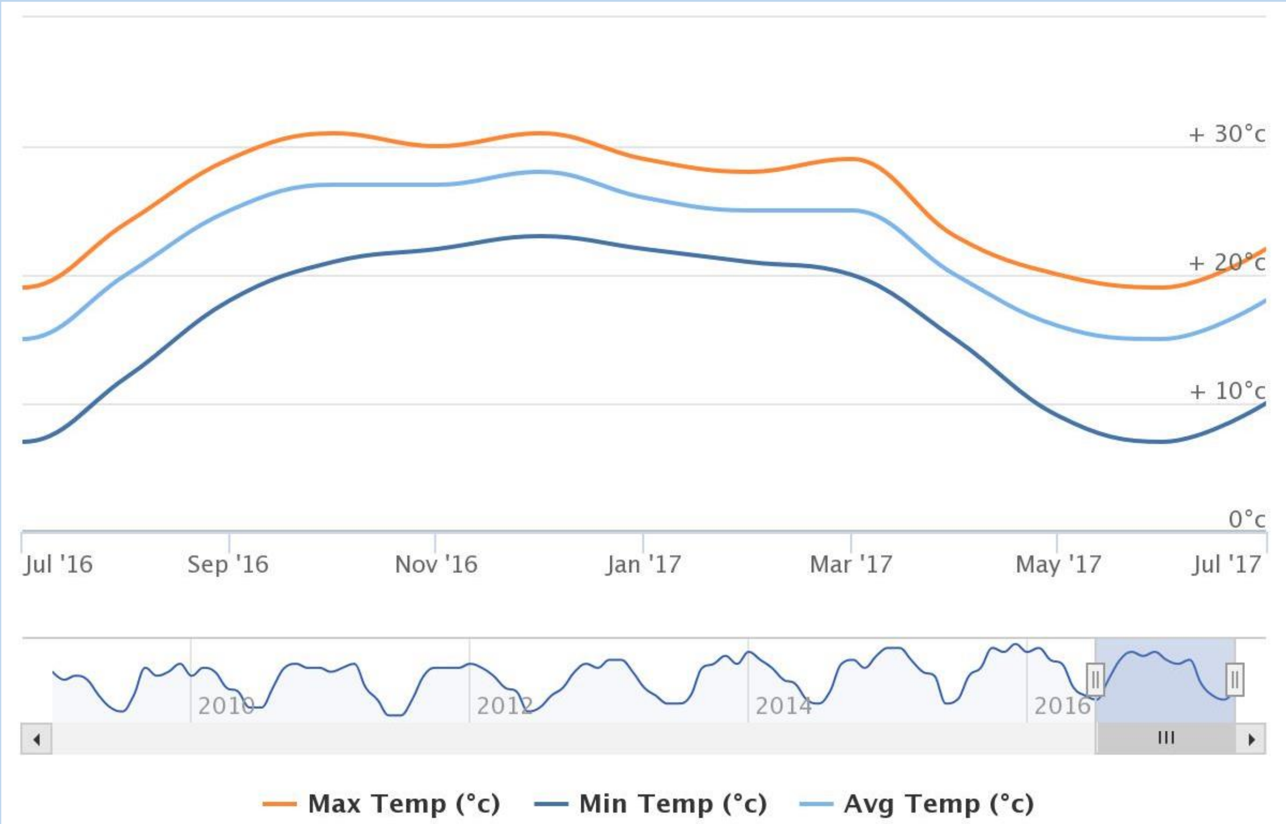
The climate in Carletonville is warm and temperate and classified as *Cwb* by Köppen and Geiger (climate-data.org). *Cwb* is characterised by a subtropical highland climate or temperate oceanic climate with dry winters, where the ‘C’ refers to mild temperature, the ‘w’ refers to dry winter and the ‘b’ refers to warm summers.

The Blyvoor Mine is located in the Highveld climatic zone, which receives average annual precipitation of about 900 mm on its eastern border to about 650 mm in the west. Rainfall occurs mainly in the summer months from October to March in the form of showers and thundershowers. Maximum rainfall occurs in

January, and heavy showers of 125-150 mm may fall in a single day. Winters are typically dry (Golder Associates, 2016). The average annual rainfall at Carletonville is 660 mm (climate-data.org). A number of distinct watercourses carry seasonal rainwater from the higher catchment areas across the property to the Wonderfonteinspruit (Golder Associates, 2016).

Temperatures are warm to mild with an average annual temperature of 15.9°C at Carletonville (climate-data.org). Maximum and minimum temperatures recorded in the Mine area are 37.1°C in January 1973 and -9.1°C in June 1967, respectively. Figure 8 graphically illustrates the maximum, minimum and average annual temperatures recorded at Carletonville.

Figure 8: Carletonville Maximum, Minimum and Average Annual Temperature (°C)



Source: worldweatheronline.com

The dominant wind direction in the vicinity of Blyvoor is northwest to northeast.

There are no major climatic conditions that will hinder mining activities. Mining operations can continue year-round.

Item 5 (e) - Infrastructure

I. Regional Power Supply

Power supply in the general area is well-established. The Mine was previously supplied with power via two independent 132 kV overhead lines. These lines remain live and feed directly from the Carmel and Elandsrand sub-stations. Sufficient power supply capacity is available in the region and Blyvoor has secured a 40 MVA power supply capacity allocation from Eskom.

Owing to the removal of the sub-station by Eskom when the Mine was liquidated, the Eskom consumer sub-station at No. 5 Shaft required re-equipping and re-commissioning. Blyvoor Gold has completed this re-equipping and commissioning of the No. 5 Shaft substation. Power supply infrastructure and capacity is thus deemed sufficient for the planned LoM production profile.

II. Regional Water Supply

Potable water can be sourced from the Rand Water Board Utility via the Merafong Municipality supply infrastructure which is available on the Blyvoor Mine lease area. Installation of potable water supply lines to the No. 5 Shaft surface infrastructure have been completed. Servitudes for the pipelines have been submitted, approved, and registered.

Water in underground workings in the West Rand, and particularly the Carletonville area, is well reported. The Covalent Water Company (Pty) Ltd ("CWC"), have taken over the pumping of water to surface from the existing Blyvooruitzicht No. 4 Shaft and Blyvooruitzicht No. 6 Shaft. CWC were compelled to take over this pumping post the liquidation of Blyvooruitzicht Gold Mine, in order to protect the integrity of the underground pillar between the Blyvoor No. 5A Sub-vertical Shaft underground workings and the neighbouring Savuka Gold Mine. No. 5A Sub-vertical Shaft has been allowed to flood to just above 29 Level where the water level is maintained by Savuka Gold Mine and the operating Mponeng Mine.

As a result of a court interdict, CWC have been granted servitudes at Blyvooruitzicht No. 4 Shaft and Blyvooruitzicht No. 6 Shaft for access to the existing pumping infrastructure. CWC (through Anglo Gold Ashanti) at the time purchased and now own the surface infrastructure at Blyvooruitzicht No. 4 Shaft and Blyvooruitzicht No. 6 Shaft. CWC will continue to pump ±20 Ml/day from the Blyvooruitzicht No. 4 Shaft and Blyvooruitzicht No. 6 Shaft.

According to information obtained from CWC, the estimated 5 Ml bypassing the CWC pumps is being pumped from the basin by the neighbouring Savuka Gold Mine via their tertiary sub-shaft. Once production commences at Blyvoor No. 5 Shaft, the water required for production purposes is anticipated to be approximately 1.5 Ml/day at commencement of mining and will ramp up to 3 Ml/day for the period month 18 to 31. Service water requirements will further increase to a maximum of 6Ml/day from month 44 and remain at this level whilst producing the planned 80 ktpm of ore. The existing fissure water ingress into No. 5 Shaft and water from the dewatering activities below 27 Level, once dewatering has commenced, will be captured into and circulate in the mines' water reticulation system. Considering the ±20 Ml/day pumped by CWC and the 5Ml/day pumped by the neighbouring Savuka Gold Mine, the total groundwater ingress into the Blyvoor mining area amounts to 25Ml/day. As the majority of service water will be recirculated underground it is evident that sufficient ingress groundwater will be available to sustain the maximum planned production rate.

III. No. 5 Shaft Infrastructure

The majority of the surface infrastructure of No. 5 Shaft, with the exception of the electrical supply infrastructure and surface winder electrical systems, was in a fair to good condition prior to the commencement of the Blyvoor Gold reinstatement project. Areas such as offices, change houses, workshops, stores, lamp room, winder house, compressor house and shaft headgear required minor repairs, maintenance, and replacement of all electrical (copper) cabling. This has been completed and the surface infrastructure is now fully operational.

A complete electrical refurbishment of all the cabling, infrastructure and equipment was required for the Blyvoor Gold reinstatement project. This included, but was not limited to, the two winders, two surface fans and surface buildings including offices, change houses, medical stabilisation facility, time and attendance facility and lamp room, amongst others. This has all been completed during the execution of the No. 5 Shaft reinstatement project.

No. 5 Shaft and No. 5A Sub-vertical Shaft has been accessed down to 27 Level. No. 5 Shaft has been fully repaired and recommissioned and only the relicensing of the No. 5 Shaft rock winder to be completed. No. 5A Sub-vertical Shaft still requires some repair work to fully restore the shaft to operation. The two Man winders in No. 5A Sub-vertical shaft have been recommissioned. The East man winder has been relicensed for use and the relicensing of the West man winder and rock winder is in progress. This completed commissioning and relicensing of the East man winder allows for some repairs to take place in the shaft and enables one to complete the recommissioning of the No. 5A Sub-vertical Shaft rock and West man winders. Once these winders have been fully recommissioned and relicensed, final repairs and refurbishment can be completed in No. 5A Sub-vertical Shaft.

The No. 1A Sub-vertical Shaft was operational down to 21 Level at the time that operations ceased in 2013. Blyvoor Gold requires this shaft as an emergency secondary escape route. The shaft is in the process of being recommissioned with a reinstated single drum winder. Various equipment such as the winder rope and the capsule to be utilised for the transport of persons in an emergency has been procured.

ITEM 6 - HISTORY

Item 6 (a) - Prior Ownership and Ownership Changes

The farm Blyvooruitzicht (Dutch for "Happy Outlook" or "Happy Prospect") was initially farmed by one Pieter Daniel Roux. Following successful exploration over the property in the early 1930s by Canadian mining engineer Guy Carlton Jones (after whom the nearby town of Carletonville was named) and a German Geologist, Rudolf Krahmann, Rand Mines showed interest in the new potential goldfield and acquired ground on the farm Blyvooruitzicht No. 640. This ground belonged to a deceased estate administered by Standard Bank. BGMC was registered on 10 June 1937 with equity capital of three million pounds by Sir Ernest Oppenheimer. At that time, what is currently the MR143GP lease area was divided into Blyvooruitzicht Gold Mine in the east owned by Rand Mines and Doornfontein Gold Mine in the west, owned by Goldfields South Africa.

In June of 1971 Barlow Rand Ltd purchased Rand Mines, South Africa's oldest mining house. Rand Mines was acquired for 39 million rand in stock, the largest takeover in South African history. At the time, Barlow Rand Limited was primarily a manufacturer and distributor of industrial products. Rand Mines, on the other hand, was South Africa's oldest, and reportedly largest, mining house.

In 1995, Blyvooruitzicht Gold Mine and Doornfontein Gold Mine merged to form the greater Blyvooruitzicht Gold Mine under Rand Mines.

In 1997, DRDGold Ltd ("DRD") purchased the greater Blyvooruitzicht Gold Mine from Rand Mines. Mining activities were concentrated on Blyvooruitzicht No. 4 Shaft, No. 5 Shaft and No. 6 Shaft.

In November 2011, DRD made a strategic decision to exit deep level mining when it purchased the massive tailings retreatment ERGO operation and it then sold its shareholding in BGMC to Village Main Reef Limited ("Village Main Reef"). Village Main Reef concentrated its mining activities at the No. 5 Shaft Complex.

Village Main Reef experienced losses and strikes at other gold mines in their portfolio during the period 2011-2013. Following an additional significant drop in gold price and resultant strain on sustainable operations, Village Main Reef was placed into business rescue and the majority of their assets went into liquidation. BGMC was placed under provisional liquidation in August 2013. In 2014, 2015 and 2016, Blyvoor Gold Capital (Pty) Ltd and Blyvoor Gold Operations (Pty) Ltd purchased assets from the Joint Provisional Liquidators ("JPLs") appointed to manage the liquidation of BGMC (Golder Associates, 2016).

Following the liquidation, in order to protect their down dip mining assets, AGA purchased Blyvooruitzicht No. 4 Shaft and Blyvooruitzicht No. 6 Shaft, and took over pumping activities through these shafts via their subsidiary CWC. Access to the deeper section of the mine is via the A2 and B2 inclines in the vicinity of the Blyvooruitzicht No. 4 Shaft over which CWC holds a servitude (Whittaker, 2016).

In 2014, Blyvoor Gold Operations (Pty) Ltd purchased from the JPLs the Blyvooruitzicht processing plant and all TSFs. TSF No. 4 and No. 5 were later acquired by Blyvoor Capital.

In March 2016, Razisign (Pty) Ltd bought the Blyvooruitzicht No. 2 Shaft Complex for scrap.

On 24 June 2016, Blyvoor Gold acquired from the JPLs the movable assets situated in the No. 5 Shaft area, making provision for Blyvoor Gold to take cession of the mining right. Blyvoor Gold Capital acquired the No. 5 Shaft Complex.

Blyvoor Gold holds the underground mining infrastructure with the exception of Blyvoor No. 4 and No. 6 Shafts held by Covalent. On surface, Blyvoor Gold holds No. 5 Shaft Complex (including the plant area), servitudes and usufructs. Certain areas within the lease area are owned/operated by third parties. Blyvoor Gold has acquired No. 4 and 5 TSFs. The balance of surface rights is held by BGMC (still under provisional liquidation at the time of writing this report).

Refer to Item 4 (d) for details on the location of the various Blyvoor Gold assets acquired in relation to other assets in the area.

BGMC successfully ceded the MR143GP to Blyvoor Gold in July 2017.

Item 6 (b) – HISTORICAL EXPLORATION AND DEVELOPMENT

Mining commenced at Blyvoor Mine in the 1930s and continued until the mine went into liquidation in 2013. The information presented in this section is sourced from Whittaker, 2016.

Blyvoor has the historical distinction of being the first Witwatersrand gold mine where a geophysical magnetometer survey assisted in identifying the potential for economic reef occurrences. A magnetometer survey was conducted at Doornfontein (the western half of the modern Blyvoor) between 1930 and 1932 by Dr. Krahmann, which successfully identified the presence of the magnetic Jeppestown shales in the area. From mining activities conducted on the Central Rand, the Jeppestown shales of the Roodepoort Formation were known to underlie the traditional auriferous reef horizons of the Central Rand Group.

In 1936, the first drillhole to intersect an economic horizon (Carbon Leader) on the West Wits Line, or Carletonville Goldfield, was drilled on Blyvooruitzicht, confirming the interpretation of the geophysical survey. Further drilling established the payability of the Carbon Leader Reef, resulting in the establishment of BGMC in 1937. The Blyvooruitzicht Gold Mine was the first mine to exploit the Carbon Leader Reef.

Exploration drilling was limited due to gold losses associated with the carbonaceous seams containing the gold mineralisation, resulting in underestimation of gold content. Under-evaluation of the mineralisation via drilling was discovered early in the mines history when drillholes under-estimated the mineral content due to gold losses associated with the carbonaceous nature of the mineralisation. The gold losses were confirmed by Blyvooruitzicht in 1944 when they compared short drillhole intersections to stoping results. C.J. Engelbrecht states in the publication *Witwatersrand 100 years The West Wits Line*, “The values obtained from the sampling were appreciably higher than those obtained from the core assays indicating that much of the friable carbon leader was ground away”. As a result, from an early stage on-reef exploration development was conducted in favour of exploration drilling.

Underground exploration drilling was conducted to locate and define pay shoot directions. Once identified, the pay shoots were defined by on-reef development and associated face chip sampling.

The sinking of Blyvooruitzicht No. 1 Shaft commenced in November 1937 and was completed to its final depth of 1,536 m in June 1941. Blyvooruitzicht No. 1 Shaft intersected the Carbon Leader at a depth of 1,428 m in early 1941. The sampling averaged 69.07 g/t and 4,807 cm.g/t.

The first gold was produced in February 1942. Work on Blyvooruitzicht No. 2 Shaft began the same year but was suspended due to lack of finance as a result of World War II. By the end of 1943, Blyvooruitzicht was declared the richest gold mine in the world. Soon after, Goldfields opened the neighbouring mine Driefontein.

The sinking at Blyvooruitzicht No. 2 Shaft was resumed in February 1944 and reached its final depth of 1,547 m in December 1945. Mining was initially restricted to development ore, as stoping was not permitted in a single exit mine due to ventilation restrictions. A connecting haulage between the Blyvooruitzicht No. 1 Shaft and Blyvooruitzicht No. 2 Shaft on 6 Level, 1,470 mbs, holed on October 1945, resulted in the monthly ore milling rates increasing from 20,000 tpm in March 1946 to 105,000 tpm by May 1951. In 1946 the Blyvooruitzicht No. 3 Ventilation Shaft was sunk. On 25 February 1947, the Doornfontein Gold Mining Company Limited was registered, which would later be purchased by its neighbour BGMC. From 1947, the Annan Shaft was sunk by Doornfontein, and produced an average grade of 29 g/t. In January 1948, sinking commenced on Blyvooruitzicht No. 6 Shaft (formerly Doornfontein No. 1 Shaft) and was completed in May 1954. In July of that year, Blyvooruitzicht's ventilation shaft was completed to a depth of 1,215 m.

In 1950, Blyvooruitzicht Gold Mine was declared the most profitable mine in South Africa. In 1951, Blyvooruitzicht Gold Mine was the largest producer of gold worldwide, producing 24.0 t of gold per annum. Twenty years later in 1971 the mine produced a record 37.6 t of gold. During the 1950s the first uranium plant was built at Blyvooruitzicht. In 1951, the Mine broke the world record for annual gold production.

In February 1963, No. 4 Shaft was commissioned. The shaft is concrete-lined and has a total depth of 1,537 m. No. 4 Shaft handled all personnel for the eastern section of the mine, the bulk of the reef hoisting and material handling.

Four sub-inclined shafts, known as the A shafts, were sunk from 6 Level to 16 Level. These shafts dip at 26°and are sited at approximately 1,000 m intervals. Access to the reef horizon is via horizontal crosscuts at 92 m intervals. Below the A series is the B series of five sub-inclined shafts from 16 Level to 30 Level (2,409 m). The B5A Shaft is an extension of the B5 decline down to 35 Level.

From February 1980 to October 1984, No. 5 Shaft (previously Doornfontein No. 3 Shaft) was sunk and commissioned in March 1985. Sinking of No. 5A Sub-vertical Shaft (previously Doornfontein No. 3A Sub-vertical Shaft) commenced in February 1984, was completed in mid-1987 and commissioned in March 1988.

By the late 1980s, mining was restricted to Carbon Leader remnant pillars and limited lower grade Middelvlei Reef. In October 1995, Blyvooruitzicht Gold Mine acquired the neighbouring Doornfontein Gold Mine from Goldfields South Africa. The merger with Doornfontein and the purchase of the Western Deep Level Tribute area in December 1996 from AGA substantially increased the Mineral Resource and Mineral Reserve base, opening up additional virgin ground.

In 1997, mining activities were concentrated on Blyvooruitzicht No. 4 Shaft, No. 5 Shaft and No. 6 Shaft.

In 2013, the operation was placed into business rescue and then into provisional liquidation in August of that year.

Table 4 provides an overview of the history of the Blyvoor Mine.

Table 4: Historical Development Summary of the Mine

Year	Month	Gold Price USD/oz	Event
1932		20	First geophysical survey.
1937		35	Blyvooruitzicht Gold Mine is founded, the first to mine gold of the West Wits Line. Owned by Rand Mines.
1942		35	Production started at Blyvooruitzicht Gold Mine.
1947	Mar	43	Doornfontein Gold Mining Company begins sinking the Annan Shaft.
1948	Jan	42	Work begins sinking No. 1 Shaft (now Blyvooruitzicht No. 6 Shaft). All mining is on the Carbon Leader Reef.
1950		40	Blyvooruitzicht declared the most profitable mine in the country.
1951		40	Blyvooruitzicht produces the greatest amount of gold globally.
1953		36	Yields are over 20 g/t.
1956		35	Doornfontein begins producing uranium, continuing through to 1965.
1957-1961			Doornfontein No. 1 Shaft sunk.
1960-1964			Doornfontein No. 2 Shaft sunk.
1965		36	Doornfontein No. 2 Shaft commissioned.
1966-1969			Doornfontein No. 2 Sub-vertical Shaft sunk.
1971		44	37.6 t of gold produced at Blyvooruitzicht Gold Mine.
1960-1970s			Blyvoor Village boast having highest earning per capita in the world.
1979		459	Mining of Middelvlei Reef begins. Average grades are less than half the Carbon Leader.
1980		594	Doornfontein extends its lease to the southeast and begins sinking No. 3 Shaft (now No. 5 Shaft).
1984-1987			No. 5A Sub-vertical Shaft sunk.
1988	June	410	No. 5A Sub-vertical Shaft commissioned. Development starts.
1991	Mar	353	No. 5 Shaft stoping operations begin and blending of surface waste with ore.
1992	June	350	No. 2 Shaft and No. 2 Sub-vertical Shafts are closed. Contractors doing much mining.
1995	June	390	Underground mining averages 50 ktpm at a grade of 5.3 g/t.
1996	Jan	369	Doornfontein Gold Mine officially merged with Blyvooruitzicht Gold Mine.
1996		369	Tribute area purchased from AGA.
1997		287	Purchase of Blyvooruitzicht Gold Mine by DRD.
1996-2012			Doornfontein mined at <40 ktpm at 5.3 g/t recovered for the next 17 years. Total <8 Mt.
1937-2005			Blyvooruitzicht total historical production = 1,160 t gold.
2011		1,531	Purchase of Blyvooruitzicht Gold Mine by Village Main Reef.
2013		1,204	Village Main Reef placed into business rescue and Blyvooruitzicht into liquidation.
2014		1,199	Goldrich purchases and partially strips old plant.
2014	Dec	1,199	Blyvoor Gold Capital (Pty) Ltd purchases Blyvooruitzicht metallurgical plant.
2015	Dec	1,068	Blyvoor Gold Operations (Pty) Ltd purchases the six TSFs.
2016	June	1,276	Blyvoor Gold Capital (Pty) Ltd purchases No. 5 Shaft Complex and the mining right.

Item 6 (c) – HISTORICAL MINERAL RESOURCE ESTIMATES

The previous owners, Village Main Reef, published Mineral Resources in June 2013 for the Mine. The Mineral Resources were estimated in accordance with the SAMREC Code and are presented in Table 5.

Table 5: Historical Mineral Resources as at 30 June 2013

Mineral Resource Category		Cut-off	Tonnes	Grade	Au Content		Stope Width
		cm.g/t	Mt	g/t	t	koz	m
Measured	Underground	200	38.96	7.23	282	9,062	120
	Surface	-	-	-	-	-	-
Indicated	Underground	200	37.66	5.63	212	6,813	120
	Surface	-	142.89	0.31	44	1,419	-
Measured + Indicated	Underground	200	76.62	6.44	494	15,876	120
	Surface	-	142.89	0.31	44	1,419	-
Inferred	Underground	200	133.28	3.74	498	16,025	120
	Surface	-	8.09	0.25	2	65	-

The Qualified Person does not presume to classify the historical estimate as current Mineral Resources. The Company is not treating the historical estimate as current Mineral Resources. The historical estimates are presented here for information only.

Item 6 (d) - HISTORICAL MINERAL RESERVE ESTIMATES

Village Main Reef presented non-compliant Mineral Reserves in June 2013. The latest compliant historic underground Mineral Resources for the Blyvoor Mine are as at 30 June 2011 as shown in Table 6.

Table 6: Historical Delivered Mineral Reserves as at 30 June 2011

Mineral Reserve Category	Tonnes	Grade	Au Content	
	Mt	g/t	t	koz
Proved	6.33	12.08	76.5	2,458
Probable	3.17	11.29	35.8	1,151
Total	**9.50**	**11.82**	**112.3**	**3,609**

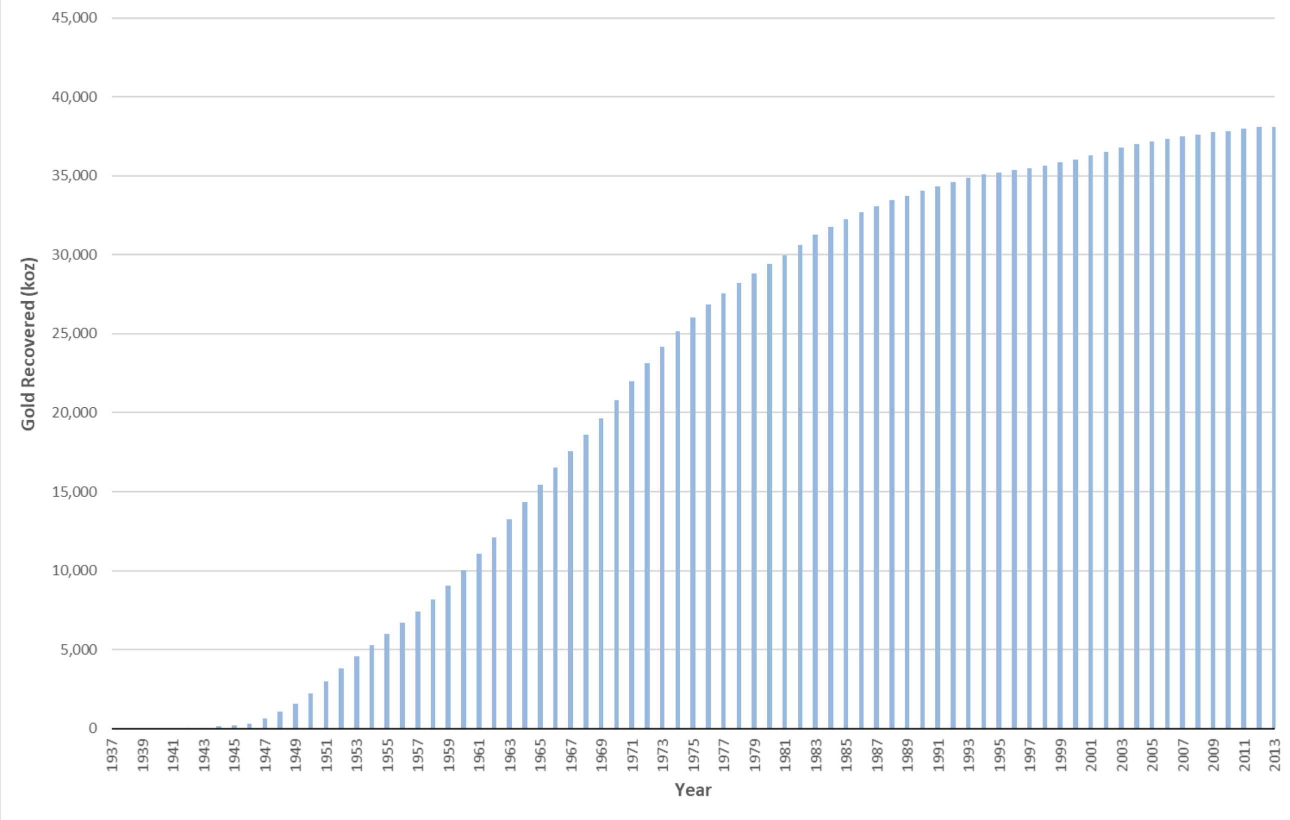
The Qualified Person does not presume to classify the historical estimate as current Mineral Reserves. The Company is not treating the historical estimate as current Mineral Reserves. The historical estimates are presented here for information only.

Item 6 (e) - HISTORICAL PRODUCTION

By the end of 1983, after 50 years of operation, Blyvooruitzicht Gold Mine had milled over 60 Mt of ore, with an average 50-year grade of over 35 g/t and a recovered grade of over 17 g/t. By 2002, the Mine (excluding Doornfontein pre-1996) had mined over 100 Mt of ore at an average grade of 11.3 g/t. In 2005, Blyvooruitzicht's total historical gold production was in excess of 1,160 t of gold (Whittaker, 2016).

Figure 9 graphically illustrates the progressive gold ounces recovered for Blyvooruitzicht Gold Mine per year for the period 1942 to mine closure in 2013. In this time, 38.1 Moz of gold was recovered. An additional 19.5 Moz was recovered from Doornfontein Gold Mine before the merger with BGMC. The total gold recovered from the Blyvoor Gold lease area is estimated at 57.6 Moz.

Figure 9: Blyvooruitzicht Gold Mine Progressive Gold Recovered 1942-2013



Data Source: D. Whittaker

ITEM 7 - GEOLOGICAL SETTING AND MINERALISATION

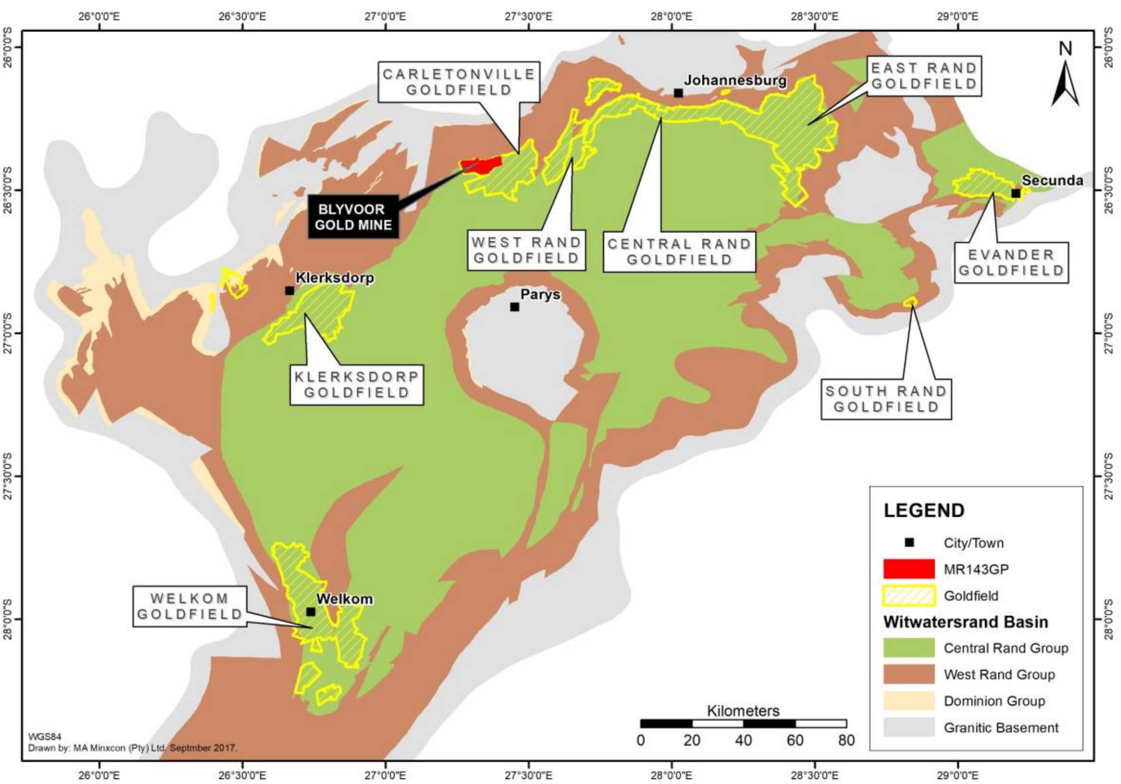
Item 7 (a) - Regional Geology

Blyvoor lies within the late Archaean (2.7-2.8 Ga) Witwatersrand Basin. This basin comprises up to 7,000 m thick interbedded sequence of argillaceous and arenaceous sedimentary rocks mainly dipping at shallow angles towards the centre of the basin and extend laterally for some 350 km northeast-southwest and 120 km northwest-southeast on the Kaapvaal Craton. The upper portion of the basin-fill (Central Rand Group), which contains the sedimentary reefs or mineralised zones, outcrops at its northern extent near Johannesburg. Further west, south and east the basin is overlain by a combination of up to 4,000 m of younger Archaean, Proterozoic and Mesozoic volcanic and sedimentary rocks.

The basin units have been folded along a northeast to southwest axis into an asymmetrical synclinorium (Pretorius, 1974). The sediments consist mainly of quartzites and shales and less prevalent, but generally economically important, gold-bearing conglomeratic zones occur on regional unconformities. These are commonly referred to as “reefs” or placers. The reefs occur in goldfields that are geographically separated. These are namely the Welkom, Klerksdorp, Carletonville, West Rand, Central Rand, East Rand, South Rand, and Evander Goldfields.

The location of Blyvoor in relation to the Witwatersrand Basin is illustrated in Figure 10. The regional goldfields are also depicted in the image.

Figure 10: Location of Blyvoor in Relation to the Goldfields of the Witwatersrand Basin



Location of Blyvoor in Relation to the Goldfields of the Witwatersrand Basin	February 2021

Units of the Witwatersrand Basin overlie basalts, volcaniclastics and minor quartzites of the Dominion Group, which represent rifting. These units were laid down 3,086-3,074 Ma.

Basin evolution occurred in response to the tectonic encroachment and collision of the Zimbabwe and Kaapvaal Cratons. Subsequent thermal subsidence and development of a foreland basin created the Witwatersrand Basin. Sedimentary units were deposited in pulses:-

1. 2,097-2,914 Ma – West Rand Group; and
2. 2,894-2,714 Ma – Central Rand Group (Robb and Meyer,1995).

Collectively, the West Rand Group and Central Rand Group comprise the Witwatersrand Supergroup. The 2,500-4,500 m thick West Rand Group sediments are interpreted to have been laid down in a shallow sea environment. Northern uplift of the Kaapvaal Craton and orogenesis towards the end of the West Rand Group deposition caused the sea to retreat. The 2,500 m thick Central Rand Group was deposited with this subsequent retreat in a coastal plain setting. Central Rand Group lithologies are categorised by sandstone and conglomerate which dominate over the shale. Braided river deltas developed into which gold deposits settled, giving rise to the rich goldfields that are recognised today. Deposition of Central Rand Group units ceased abruptly following massive outpourings of Ventersdorp lavas at about 2,715 Ma.

As per Robb and Meyer (1995), progressive loading of the basin by the volcanoclastic Ventersdorp and later sedimentary Transvaal cover sequences metamorphosed the Witwatersrand lithologies, occurring at circa 2,500 Ma and 2,300 Ma. Peak metamorphism and redistribution of gold occurred circa 2,000 Ma with the intrusion of the Bushveld Complex and/or the impact of the Vredefort meteorite.

The basin's sedimentary rocks outcrop to the south of Johannesburg, but further to the west, south and east these are progressively overlain by up to 4,000 m of Proterozoic and Mesozoic age volcano-sediments. In the East Rand and Central Rand, the basin is underlain by 3.1 Ga Archaean granite greenstone basement. It is overlain unconformably by rocks of the Ventersdorp Group in the Central Rand and the Transvaal Group in the East Rand.

From the base of the Witwatersrand Basin, the West Rand Group comprises the Hospital Hill, Government and Jeppestown Subgroups that are overlain by the Central Rand Group that has been subdivided into the Johannesburg and Turffontein Subgroups.

The impact of the Vredefort meteorite caused the Witwatersrand lithologies to be uplifted and upturned, exposing outcrop in an arc 25 km from the centre of the impact. Though no economic gold deposits occur along these exposed outcrops, the impact lowered the Witwatersrand units inside the crater, effectively protecting them from weathering and erosion and preserving gold mineralisation. Along the rim of the crater, units were tilted to bring the mineralised reefs closer to surface, allowing for discovery and mining thereof. The mineralisation is mainly confined to quartz pebble conglomerate reefs that are continuous over large areas, associated with sulphides. Reefs are generally less than 2 m thick, and locally >10 m depending on the original depositional palaeo-environment.

Item 7 (b) - Local and Property Geology

I. Carletonville Goldfield

Locally, Blyvoor falls within the Carletonville Goldfield, or Far West Wits Line, that, in addition to gold, produced uranium and pyrite (for sulphuric acid production) as by-products. The goldfield is separated into two distinct sections or compartments, *i.e.* the western and eastern sections, separated by the prominent Bank Fault (a reactivated thrust fault which is hinged in the basement) and each representing a separate palaeo-alluvial system. Although similar stratigraphy is present in both sectors, the unit thicknesses differ due to the interpreted syn-sedimentary tectonics associated with the Bank Fault during basin formation.

The eastern section represents a natural sedimentological extension of the West Rand Goldfield, and the western section is sedimentologically distinct (Robb and Robb, 1998).

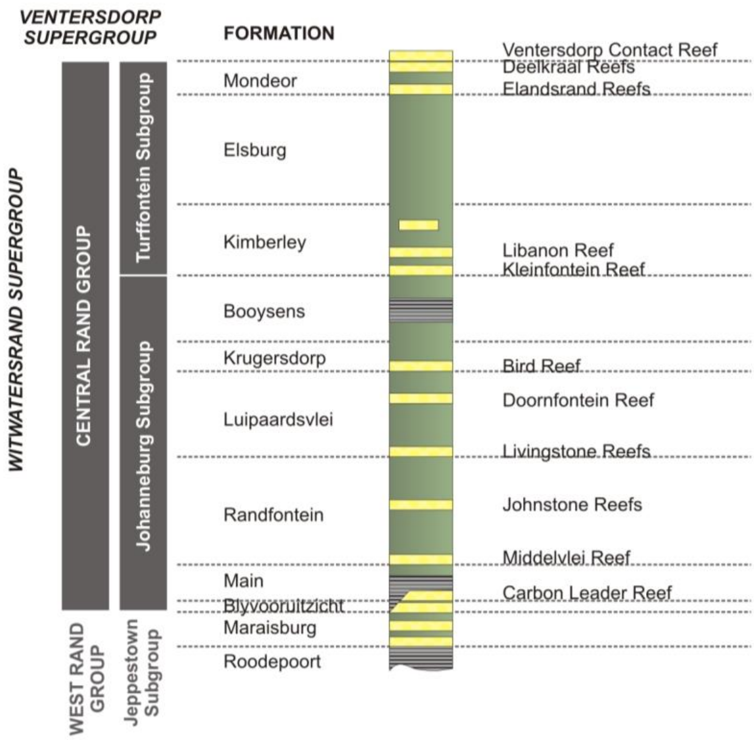
The goldfield is stratigraphically subdivided into the Blyvooruitzicht, Main, Randfontein, Luipaardsvlei, Krugersdorp, Booysens, Kimberly and Elsburg Formations (SACS,2006). Per Robb and Robb (1998), each formation is characterised by a regionally persistent basal unconformity-bound conglomerate and overlain by quartzites, grits and pebble bands, while argillaceous quartzites and shales are confined to the Booysens and Robinson Formations.

As described by McCarthy (2006), at the base of the Central Rand Group, the Blyvooruitzicht Formation quartzites and sporadic conglomerates occur and is disconformably overlain by the Main Formation. The base of the Main Formation in the Carletonville Goldfield is defined by the Carbon Leader Reef. The Carbon Leader is overlain by a siliceous quartzite of the Main Formation up to 3.5 m thick. Quartzites with intercalated conglomerates of the Randfontein and Luipaardsvlei Formations overlie the Middelvlei Reef. The Krugersdorp Formation quartzites grade upwards into the upward-coarsening Booysens Formation shale. The thin conglomerate of the sporadically developed Kleinfontein Reef forms the base of the quartzitic-conglomeritic Kimberley Formation. In the western sector, the Channel Shale is locally present. The Libanon Reef occurs on a marked disconformity within the Kimberley Formation. Quartzites of the following Elsburg Formation coarsen upwards. Several conglomerate horizons are developed in the Mondeor Formation.

The Central Rand Group is unconformably overlain by the basal volcanic rocks of the Ventersdorp Supergroup, the latter interfingering with sediments of the Venterspost Conglomerate Formation that contains the VCR. In the upper Central Rand Group and Venterspost Formation, sediment deposition was controlled by fault-related uplift to the east, with sediments derived from the north in the eastern section (Robb and Robb, 1998).

A schematic illustration of the stratigraphy across the Carletonville Goldfield as it occurs in the Blyvoor area is provided in Figure 11.

Figure 11: General Stratigraphy of the Upper Carletonville Goldfield



Source: Redrawn after McCarthy (2006)

General Stratigraphy of the Upper Carletonville Goldfield	**February 2021**

Numerous economically viable conglomerate horizons occur in this goldfield within the Central Rand Group, which in turn is unconformably overlain by the Venterspost Conglomerate Formation (colloquially called the Ventersdorp Contact Reef or “VCR”) at the base of the Ventersdorp Supergroup. Three principal economic horizons are exploited, namely the Carbon Leader and Middelvlei Reef and the VCR. The Carbon Leader and the Middelvlei Reef are the most important economic horizons, both of which occur within the lowermost Randfontein Formation. In the western sector of the goldfield, the Carbon Leader is the principal gold producer, while in the eastern sector, the Middelvlei Reef increases in economic importance. The Carbon Leader lies on the disconformity at the base of the Main Formation and consists of a thin bitumen seam associated with high concentrations of gold and uranium. The bitumen is overlain by closely packed pebbles, interspersed with thicker conglomerates with intercalated quartzites. The Carbon Leader exceeds 10 cm, but seldom exceeds 40 cm in thickness. The Middelvlei Reef consists of single to multiple conglomerates separated by quartzites up to 7 m thick, with mineralisation concentrated in the lowermost units (McCarthy, 2006) at Blyvoor. The Carbon Leader correlates regionally with the Main Reef of the Central Rand Goldfield, and the Middelvlei with the South Reef (Robb and Robb, 1998).

The West Rand and Bank Faults are major structural features in this goldfield, with dips to the west and progressive deepening of lithologies towards the faults. Per Manzi *et al* (2013), the West Rand Group, Central Rand Group and Ventersdorp Supergroup are all crosscut and offset by these faults. The relative age of the normal faulting of both faults is 2,714 Ma to 2,588 Ma and predates the Transvaal sequences. Regional gentle folding has also occurred. The Bank Anticline is the largest fold structure in the region. Common bedding-parallel, late-Ventersdorp, or post-Transvaal thrusts occur, predominantly in the Venterspost Formation. The Master Bedding Fault, a major post-Transvaal structure, is developed mainly in the Jeppestown Subgroup. Finally, post-Transvaal, right-lateral wrench faults affected the area (McCarthy, 2006).

Chuniespoort Dolomites of the Transvaal Supergroup, overlying the Witwatersrand Supergroup, occur as outcrops over large areas. Dewatering of the compartments has led to sinkhole development (McCarthy, 2006). The dolomites are divided into a number of groundwater compartments by the intrusion of dykes, acting as impervious barriers, which cut across the bedding (Whittaker, 2016).

II. PROPERTY GEOLOGY

The Blyvoor property geology has been summarised from Whittaker (2016).

At the Blyvoor Mine property, the two most important lithologies exposed include the upper zone of the Jeppestown Subgroup and the two basal formations of the Johannesburg Subgroup.

The upper portion of the Jeppestown Subgroup, the Roodepoort Formation consists of well laminated dark grey shales with an upward-coarsening and increase of quartzite content.

At the base of the Johannesburg Formation, the lower square pebble zone of the Maraisburg Quartzite Formation consists of dark grey, fine grained argillaceous quartzite. The middle square pebble zone is a mature, light grey to slightly green tinged, cross-bedded quartzite. The overlying top square pebble zone is a thin, dark grey, argillaceous quartzite.

Directly below the North Leader Reef is a fairly mature, medium grained, cross-bedded quartzite. Containing sporadic gold, the North Leader Reef is an oligomictic, small pebble conglomerate, less than 15 cm thick and stratigraphically situated 0-15 m below the Carbon Leader Reef, with this separation increasing southwards due to a minor angular unconformity. The North Leader has only been mined in isolated areas where the parting between this reef and the Carbon Leader permits extraction of both horizons with minimum internal dilution. The footwall of the Carbon Leader is alternating coarse grained siliceous and argillaceous quartzites.

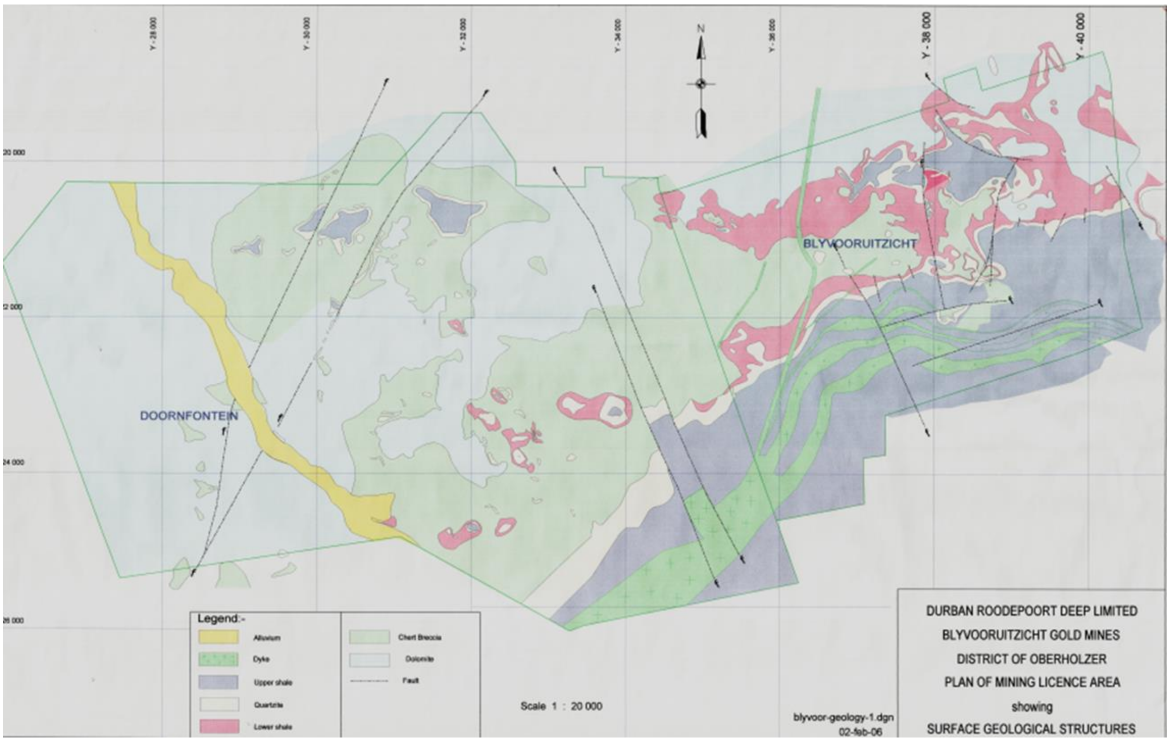
Overlying the Carbon Leader is a mature, light grey, fine-grained siliceous quartzite, above which is the Rice Pebble Conglomerate, a dark pyritic quartzite with small white quartz pebbles. Some 2 m above the Carbon Leader is a dark grey to khaki coloured chlorite-rich argillite called the Green Bar, the lower part of which tends to be laminated and the upper part massive. If exposed during mining, the laminated nature of the Green Bar can cause support problems. The hanging wall of the Green Bar is a mature grey to light grey cross-bedded quartzite with thin semi argillaceous horizons. Approximately 15 m above the Green Bar, the lower hanging wall small pebble conglomerates are moderately mineralised and interbedded with coarse-grained, grey quartzites.

The footwall of the Middelvlei Reef comprises coarse-grained to gritty, dark grey to brown, cross-bedded quartzites, with scattered pebbles and thin lenticular conglomerate horizons. The hanging wall comprises grey to very grey quartzites with occasional poorly packed small pebble conglomerates.

Malmani dolomites of the Transvaal Supergroup, striking east-west and dipping 7°S, occur over the northwest of Blyvoor. The thickness of the dolomite varies from 850 m in the north to over 1,300 m in the south. The southeast of the Mine property is overlain by units of the Pretoria Group, comprising mainly Rooihoogte Formation chert breccia at the base with overlying Timeball Hill quartzites and shales. These lithologies strike northeast-southwest and dip 15°S.

A plan of the surface geology at Blyvoor is provided in Figure 12.

Figure 12: Blyvoor Surface Geology Plan, 2006

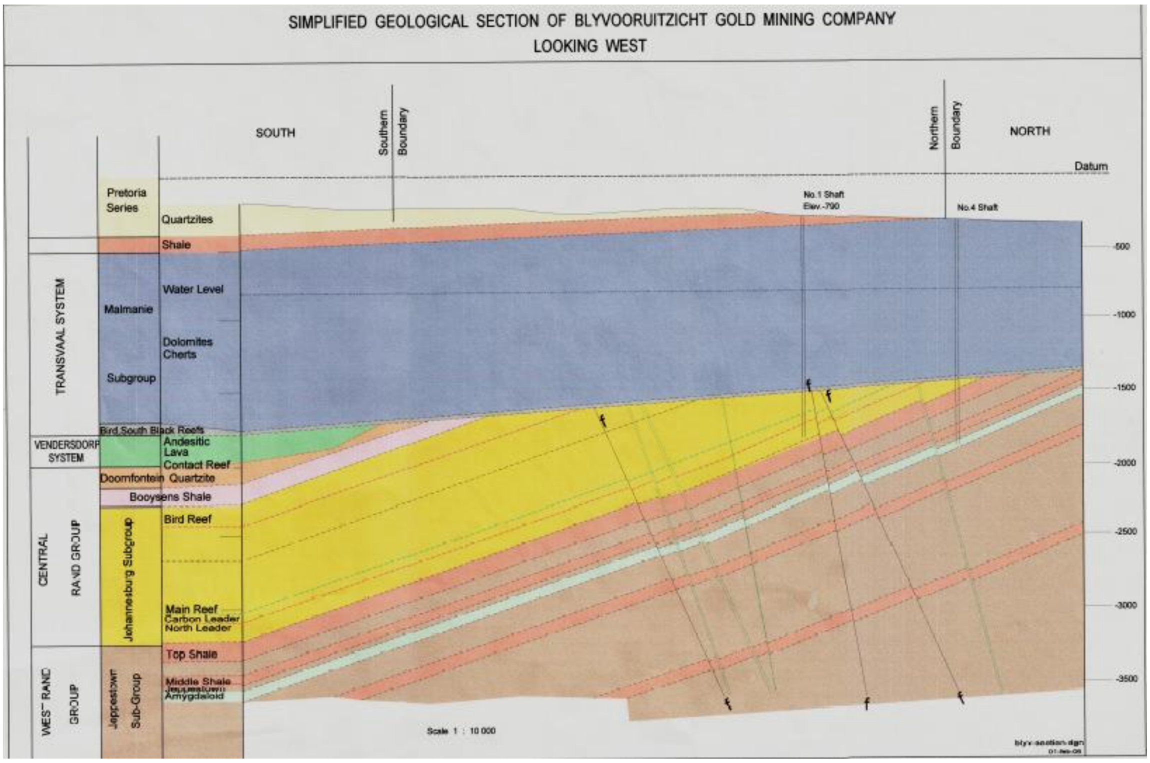


Source: Whittaker (2016)

Blyvoor Surface Geology Plan, 2006	February 2021

A simplified geological section at the Mine is depicted in Figure 13.

Figure 13: Blyvoor Simplified Geological Section Looking West



Source: Whittaker (2016)

Blyvoor Simplified Geological Section Looking West	February 2021

i. *Structure – Faults and Dykes*

The majority of Blyvoor is structurally relatively undisturbed. In the western section, however, the area is structurally complex due to the presence of the Master Bedding Fault which rejuvenated older faults and formed new ones in close proximity to its plane. The Master Bedding Fault has eliminated a large percentage of the Carbon Leader to the north and west of Doornfontein No. 2 Shaft but the Middelvlei is present over the whole lease area.

The major structure on the Mine is an angular unconformity between the Witwatersrand quartzites, dipping at 22°S, and the overlying, 850-1,300 m thick Malmani dolomites of the Transvaal Sequence. At the base of the dolomite is the Black Reef Formation, which dips 7°S.

Major structures in close proximity to historical mining activities below 35 Level are the Boulder and Alpha Dykes. The Boulder Dyke has a downthrow of 40 m to 95 m to the north and strikes east-west.

ii. *Structure – Sinkholes and Methane*

Large areas of the Mine are underlain by dolomite and have been subjected to various types of surface instability as a result of dewatering. Various groundwater compartments are developed across the goldfield, bounded generally by impermeable dykes. Groundwater occurs in the inter-connected conduits within the dolomite. At Blyvoor, the Oberholzer groundwater compartment occurs in the east and the Turffontein groundwater compartment in the west. Impermeable dykes comprise boundaries of the compartments in the east and west, while basement granite-gneiss forms a barrier to the north and the younger Pretoria

Group rocks form a similar barrier on the south. Mining within the Oberholzer compartment has resulted in the dewatering of the compartment and hence a significant lowering of the water table.

Within each compartment, the water level is flat or near horizontal, the height of which is controlled by the level of a spring (or eye) which occurs at the western end of each compartment. The eye emerges on the surface at the position where the dyke intersects the deepest drainage feature in the area, namely the Wonderfonteinspruit.

Underground, the major ingress occurs in the vicinity of the sub-outcrops of the reefs against the overlying Black Reef Formation at the base of the Transvaal Supergroup. Fissure water is predominately confined to the western part of the property and is associated with post–Transvaal tear faults. Major water intersections also occur in the vicinity of the sub-outcrops of the reefs against the overlying Black Reef Formation.

Methane intersections tend to be associated with dykes, especially in the deeper sections of the mine.

Item 7 (c) - MINERALISATION

The information presented in this section has largely been summarised from Whittaker (2016).

At Blyvoor, two economic placer horizons have been exploited. These are namely the Carbon Leader and Middelvlei Reefs and occur in quartzites of the Main Reef Conglomerate Formation of the Johannesburg Subgroup of the Central Rand Group. The auriferous conglomerates dip uniformly at 22°S.

The Carbon Leader is a high grade, predominantly thin (<40 cm) carbon-rich reef and is the principle economic horizon at Blyvoor. The origin of the carbon is in debate as to whether it originated hydrothermally or from algae. Within the deeper southern section of the Mine, carbon is scarcer and hence likely responsible for the decline in grade.

In the western area, the Carbon Leader is eliminated by a northwest-southeast striking, 1,900 m wide erosional channel. The erosion channel is truncated to the north by the Master Bedding Fault. Its eastern boundary is well defined by mining, while the western boundary is less certain and has only been defined by drilling.

The Carbon Leader is divided into seven facies areas, namely F1 to F7 (Table 7), based on channel width and carbon content. Four types of Carbon Leader are recognised:-

- carbon seam;
- channel reef;
- thin single reef; and
- thick single reef.

Table 7: Carbon Leader Facies

Facies	Ave Channel Width	Ave Grade	Description	
	cm	cm.g/t		
F1	21	2,980	Carbon Seam Reef	High grade carbon seam mined out with the exception of isolated pillars
F2A	30	710	Low Grade Channel	More than one reef horizon separated by internal quartzite.
F2B	27	1,846	High Grade Channel	
F3	22	1,514	Thick Single Reef	
F4	36	1,671	Channel Facies	More than one reef horizon separated by internal quartzite.
F5	20	1,738	Thick Single Reef	
F6	15	1,426	Thin Single Reef	
F7	16	1,497	Thick Single Reef	

Grade generally decreases down dip (south) and towards the west associated with a reduction in carbon.

The Middelvlei Reef is the second economic horizon at Blyvoor and lies stratigraphically 50 m to 75 m above the Carbon Leader. Towards the south, the separation increases due to a minor angular unconformity. The Middelvlei Reef is characterised by lower grades than the Carbon Leader. Owing to the variable payability and presence of sedimentologically controlled pay shoots, the Middelvlei Reef has been mined in scattered payable areas and is present over the whole lease area.

On the Middelvlei Reef, facies areas have similarly been identified using grade, channel direction and reef characteristics.

ITEM 8 - DEPOSIT TYPES

Item 8 (a) - Mineral Deposits being Investigated

Gold and uranium deposits in the Witwatersrand Basin are hosted by quartz-pebble conglomerates, which are generally less than 2 m in thickness and developed on laterally continuous unconformity surfaces. These reefs are generally characterised by shallow dips of between 10° to 25° and thicknesses of 1.0 m to 2.5 m that make them suitable for exploitation by means of typical narrow stoping techniques.

The gold deposits of the Witwatersrand Basin are considered to be associated with coalesced fluvial braid-plains, where gold was concentrated within braided stream gravels developed on unconformities which have been correlated around the basin.

Most early theories on the origin of gold believed the gold to be deposited syngenetically (placer theory) with the conglomerates or by epigenetic means (hydrothermal origin), but subsequent research by Kirk *et al* (2004) concluded that metamorphism caused the post depositional local redistribution of gold (modified placer theory).

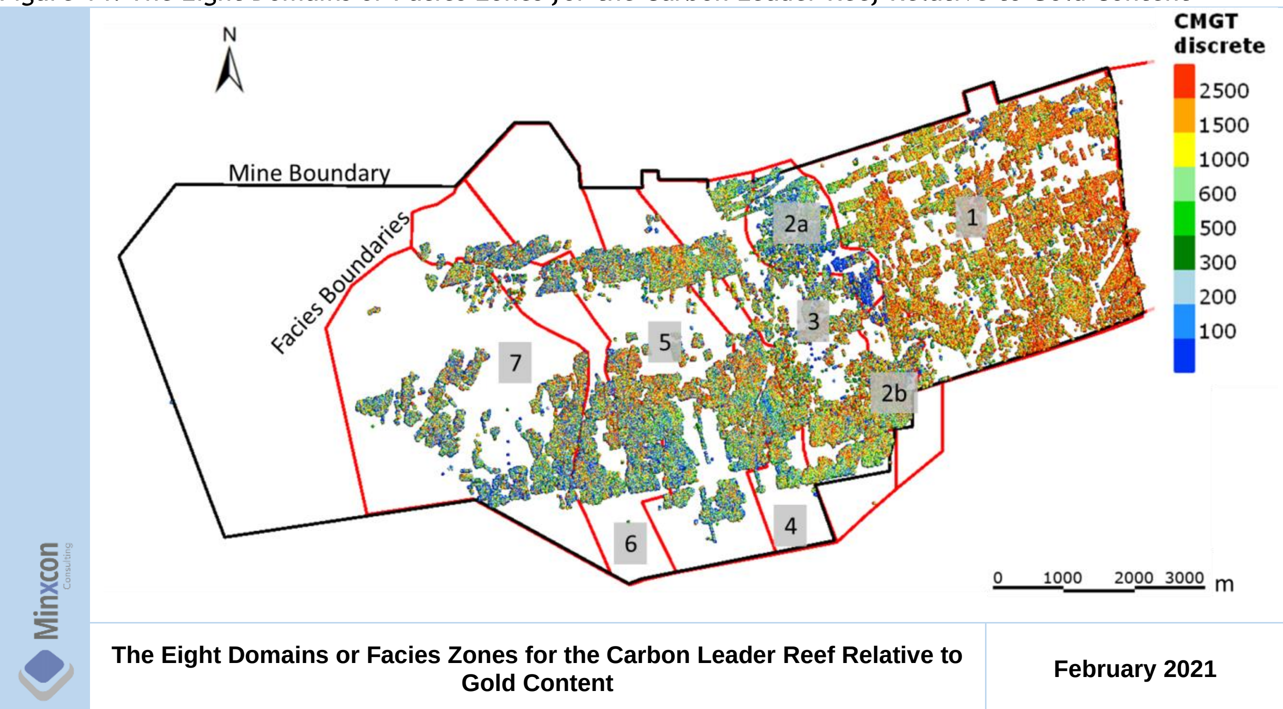
Generally, gold occurs in native form often associated with pyrite (less commonly pyrrhotite) and carbon, with quartz as the main gangue mineral.

Item 8 (b) - Geological Model

Geological modelling in the form of facies modelling and construction of reef polygons and resource blocks excluding major structures and historical mining was conducted by CAE on both reefs.

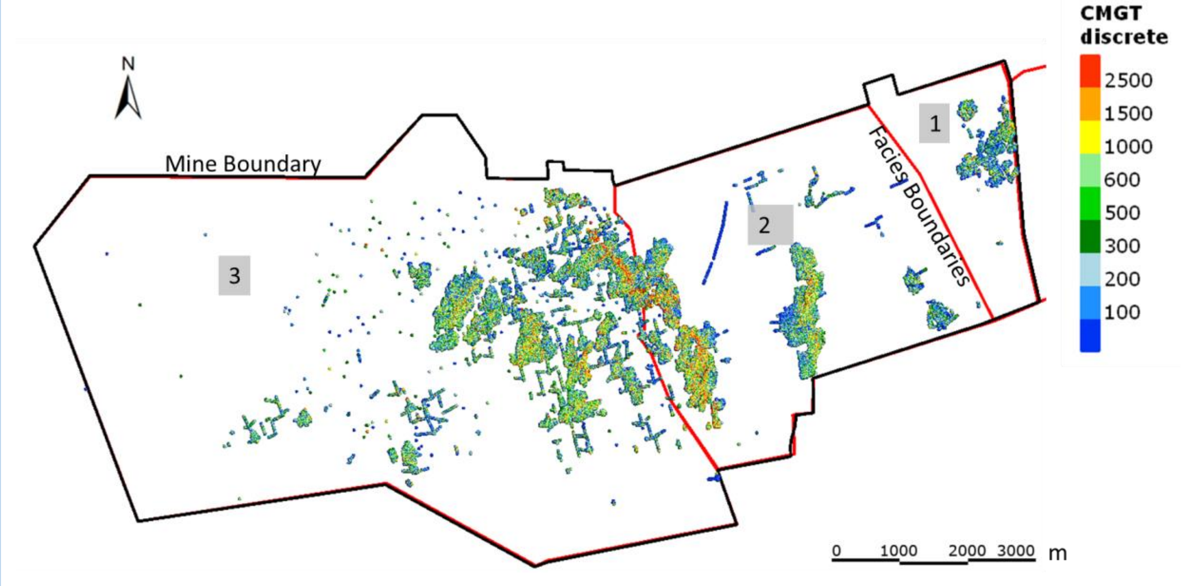
A total of eight domains or facies zones were defined for the Carbon Leader Reef and are presented relative to gold content in Figure 14.

Figure 14: The Eight Domains or Facies Zones for the Carbon Leader Reef Relative to Gold Content



A total of three domains or facies zones were defined for the Middelvlei Reef and are presented relative to gold content in Figure 15.

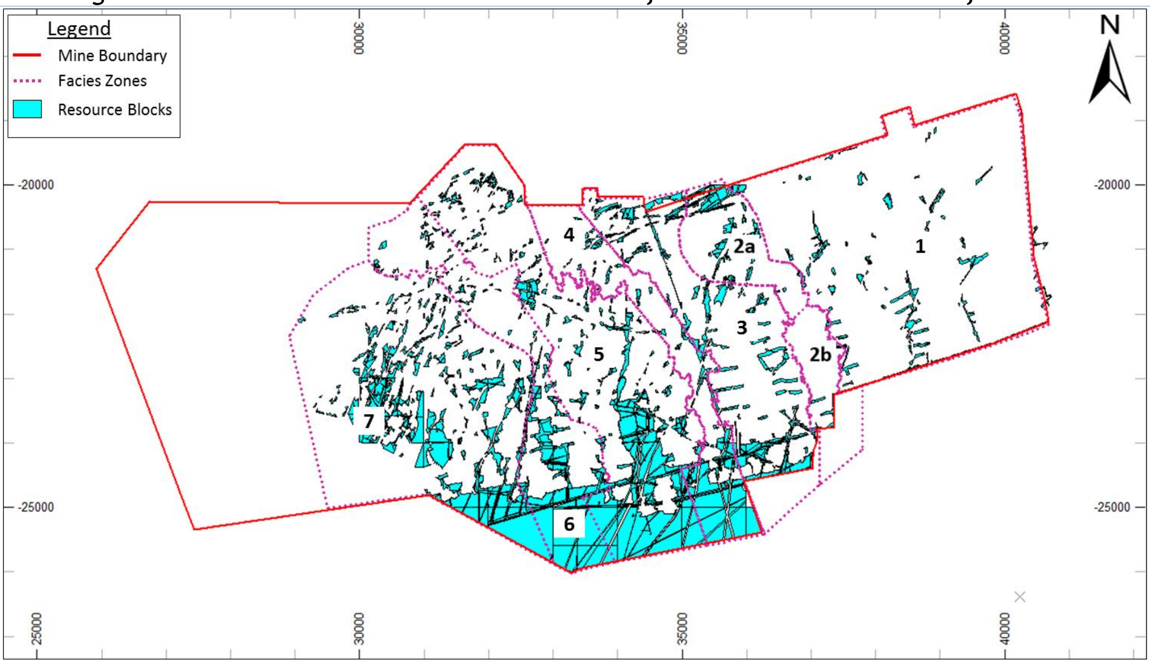
Figure 15: The Three Domains or Facies Zones for the Middelvlei Reef Relative to Gold Content



The Three Domains or Facies Zones for the Middelvlei Reef Relative to Gold Content | **February 2021**

The Mineral Resource blocks and facies boundaries for the Carbon Leader are presented in Figure 16.

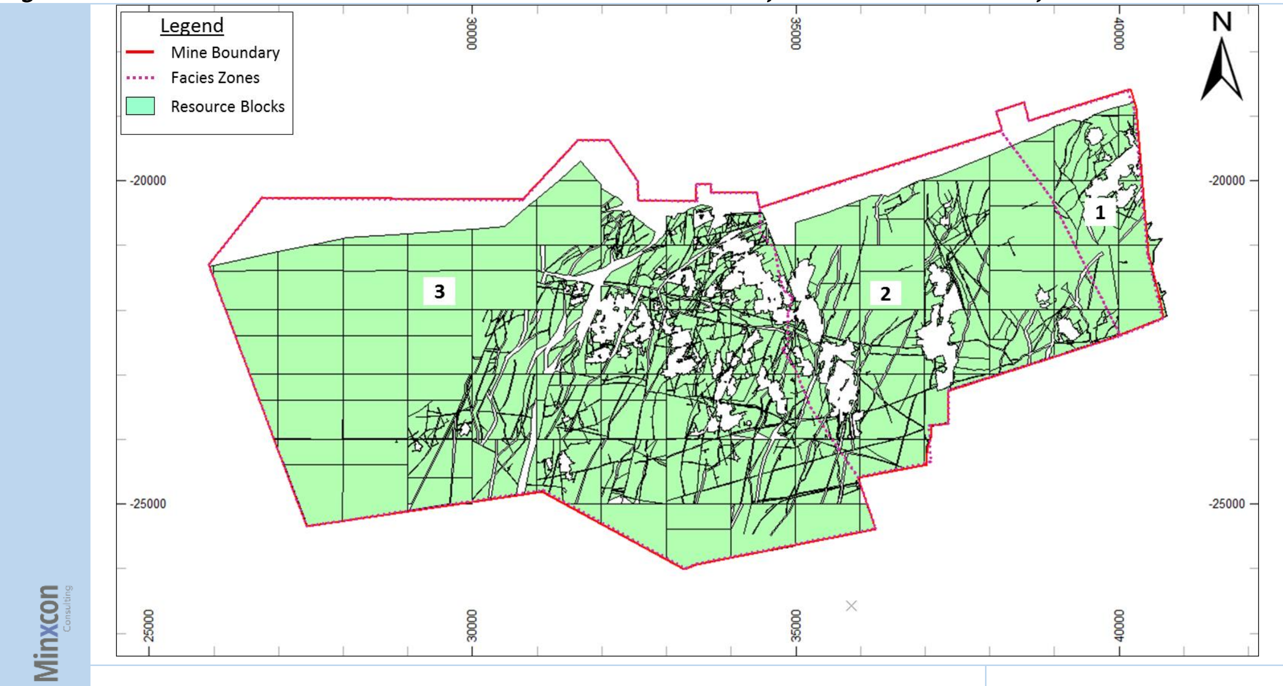
Figure 16: The Eight Facies Zones and Mineral Resource Blocks for the Carbon Leader Reef



The Eight Facies Zones and Mineral Resource Blocks for the Carbon Leader Reef | **February 2021**

The Mineral Resource blocks and facies boundaries for the Middelvlei are presented in Figure 17.

Figure 17: The Three Facies Zones and Mineral Resource Blocks for the Middelvlei Reef



The Three Facies Zones and Mineral Resource Blocks for the Middelvlei Reef	February 2021

ITEM 9 - EXPLORATION

Exploration for Blyvoor Gold is strictly of a historical nature as the Mine is a mature operation. Blyvoor Gold's LoM is concentrated in close proximity to historical mining areas. Minxcon is of the opinion that no further exploration work is deemed necessary due to the fact that the no new ground is being explored. Data from adjacent operations is utilised in conjunction with available project data for interpretations and Mineral Resource estimations.

It is noted that sampling information is recorded over the whole of the Blyvoor Mine area. All exploration aspects as covered in this section are historical in nature.

Item 9 (a) - Survey Procedures and Parameters

I. Geophysical Survey

Gold mines of the Witwatersrand have utilised 3D seismic reflection surveys to facilitate reliable mine planning and design since the late 1980s. Manzi *et al* (2012) have amalgamated the historical 3D seismic reflection surveys across the West Wits Line to provide a regional interpretation in relation to mineralisation. Although surveys from all the adjacent leases to the south of Blyvoor are presented, no surveys were conducted for the MR143GP due to the historical nature of the operation and the extent of underground workings which would render seismic surveys null and void.

Blyvoor however has the historical distinction of being the first Witwatersrand gold mine where a geophysical magnetometer survey assisted in identifying the potential for economic reef occurrences. A magnetometer survey was conducted on the property between 1930 and 1932 by Dr. R. Krahmann, which successfully identified the presence of the magnetic Jeppestown shales in the area. To Minxcon's knowledge no additional geophysical surveys over the project area have been conducted nor are they required due to the mature nature of the Project.

II. Geological Mapping

The locations of a number of sedimentological facies have been mapped for both the Carbon Leader and the Middelvlei Reef, the latest account thereof being mentioned by Coffey Mining (2011). Historically, these were used for boundaries during grade and channel width interpolation.

Geological mapping is strictly underground in the form of production geological mapping which would utilise survey pegs for the purposes of mapping offsets and plotting on production plans. No exploration mapping is required.

III. Underground Chip Sampling

A large volume of underground chip sampling data (in excess of 0.5 million data points) is available for Blyvoor. The methods of sample collection are provided in Item 9 (b) to follow. The sampling procedures pertaining to drilling as described are of historical relevance only and have not been reviewed for the current Report as sampling is not currently taking place. This, however, should not result in the reader discounting the quality of the available data, as the Blyvooruitzicht operations were successfully operated for many years and mining house standards were effectively adhered to and considered accepted practice at the time.

Item 9 (b) - Sampling Methods and Sample Quality

Two types of sampling techniques are utilised on all South African gold mines and were historically utilised on the Blyvooruitzicht operations. These constitute:-

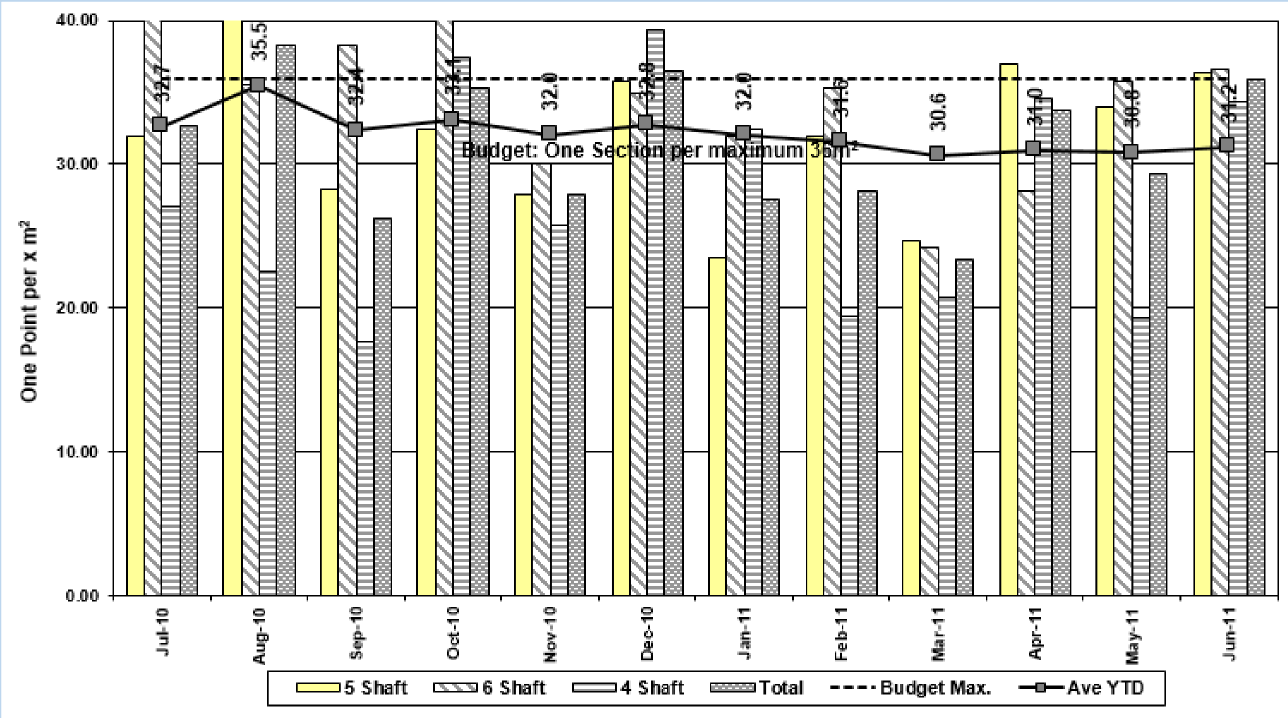
1. a wide-spaced drilling grid, achieved by means of advance drilling; and
2. a close-spaced sampling grid achieved by means of face chip sample sections.

The former is not deemed to be relevant in the generation of Mineral Resource models in carbon rich reefs due to core and associated gold loss, whilst the latter is more often used for the maintenance of grade control models. However, chip sample sections are usually utilised for Mineral Resource estimation for reefs where a wide drilling grid is not easily achieved (due to depth or due to primary development occurring in the reef horizon itself), or where the local variability of mineralisation has proven to be very high, and this variability is not evidenced in the wide-spaced drilling grid due to poor core recovery friability of the carbon seams resulting in significant gold loss and under-evaluation. Carbon-rich reefs such as the Carbon Leader and Middelvlei Reefs are typical candidates for this thus supporting the use of chip sampling in their Mineral Resource estimation. Chip sampling, is normally spaced on approximately a 6 m x 6 m sampling grid. This is a well-accepted and entrenched sampling technique utilised on all typical narrow-reef Witwatersrand gold mines in South Africa. These techniques as utilised by Blyvooruitzicht will be discussed in detail in this section.

The following methodology is largely sourced from Whittaker (2016).

The database used to estimate the Mineral Resource is sourced from underground development and stope chip sampling. The sampling coverage target was based on a face sample position every 36 m^2. The sampling coverage was reviewed and graphed on a monthly basis. The sample coverage steadily decreased from one sample per 20.7 m^2 in July 2009 to 54.6 m^2 in April 2010. The data available for July 2010 – March 2011 indicates that the target was achieved. The sampling coverage for the period from July 2010 to June 2011 is shown in Figure 18. For that twelve-month period, the average value was one sample per 34.2 m^2, with only August and December 2010 total mine not obtaining the target of one sample per 36 m^2. The periods 2008-2009 and 2009-2010 recorded total mine averages of 28.5 m^2 and 31.0 m^2 per samples, respectively. Over the three-year period, the best sampling coverage was at Blyvooruitzicht No. 4 Shaft, likely as a result of a lower face advance compared to the other shafts.

Figure 18: Blyvooruitzicht Sampling Coverage July 2010 - June 2011



Source: Whittaker (2016)

The sampling procedure was divided into the following:-

- an office procedure prior to going underground;
- underground procedure; and
- office procedure post returning to surface.

The sampler liaised with the geologist prior to going underground to ascertain working places that required sampling, thereby ensuring sampling of all panels at regular intervals. The plans for the working areas to be sampled would be geologically scrutinised to identify features such as faults and dykes, off-reef mining, and survey pegs to be used. The responsible mining personnel would be contacted to ensure that the working places are available and obtain permission to work in the area.

Development sampling was conducted at 2 m intervals. Stope panel sampling was done every 3 m for the Middelvlei Reef and 5 m intervals for the Carbon Leader, with a duplicate sample taken on the bottom contact due to the high mineralisation associated with basal contact of the Carbon Leader with the footwall quartzite.

Prior to entering the panel, the stope face was checked to ensure the support was to standard. The applicable survey pegs were located, and the peg to face distance measured and recorded in a field book. The panel gully was sampled from hanging wall to footwall, ensuring all mineralised zones were included in the sample. The mining face from the advanced strike gully ("ASG") was inspected, to correlate the mineralised reef horizons with the first section, at 2.5 m from the side of the ASG. Using tapes from the survey pegs, the position was measured and marked. The mining face was tested for loose rocks, made safe and washed down to remove contamination. The face was opened to solid rock and washed down again.

The sampler marked two parallel lines, 10 cm apart, with a wax crayon or paint, from hanging wall to footwall at 90° to the dip of the reef plane, defining the sample section. The individual sample sections were marked according to geology and grade (*i.e.* mineralisation), bottom contact, top contact, internal channels, internal quartzites, footwall waste, and hanging wall waste. Two centimetres of waste below and above the mineralisation bottom and top contacts were included in the mineralised sample. The minimum and maximum individual sample lengths were 8 cm and 15 cm, respectively.

Two clino-rulers were used to measure the individual sample section at right angles to dip (true width). The individual widths were recorded to the nearest centimetre, recorded in the field book, and checked with an independent face width measurement taken 0 m to 1 m from the face. A stope width was measured 1.5 m from the stope face at 90° to the reef dip.

Sampler assistants wore safety equipment, including goggles and gloves, and chipped individual samples from the bottom to the top so as to prevent contamination. This process was constantly monitored to verify that no foreign rock entered the sample dish. This was achieved by shielding the sample area being chipped with a plastic bag. Samples were chipped to an even depth throughout the sample area to obtain a representative sample. Overseen by the sampler, the sample packer placed the sample in a plastic bag and allocated the corresponding ticket number to the sample before closing the bag to prevent any spillage or losses. The equipment was cleaned of fines before proceeding to the next sample. After the sample had been chipped, the chipped area was re-measured and if any width discrepancies were identified, they were corrected in the field book for that respective sample before proceeding to the next section.

The mineralised horizons were correlated from section to section, recording internal waste, geological features (such as dykes, faults, reef folding, partings, sills), as well as off-reef mining (Reef in Hanging or RIH, and Reef in Footwall or RIF). The position (or areas) of these features was measured in relation to the previous section. The strike, dip and throw and type of faults and dykes were measured and recorded in the field book.

Item 9 (c) – Sample Data

The following methodology is sourced from Whittaker (2016).

At the end of the shift, the samples collected as described in Item 9 (b) were counted and compared to the amount logged in the field book. On proceeding back to the station, the sampler followed the sampling team to ensure that no samples were lost along the way and to ensure the whole crew arrived safely at the station, where the samples were re-counted.

At surface, the samples were again checked and placed in a secure locked bin. The samples were then transported daily to the assay laboratory for analysis.

On returning to the office, all underground sampling data was captured in an electronic format. The software used was a sampling reporting programme specially developed by CAE consultants for Blyvooruitzicht Gold Mine. With regard to the sampling database, CAE developed a sampling system into which all sampling information on Blyvooruitzicht was captured. This system was in place on the Mine for some time. CAE scripted an interface between the sampling system and Datamine Studio 3™ software, in which Mineral Resource estimation was undertaken (Minxcon, 2012). The sampling database was managed by the mine owners at that time.

Individual sample locations were coordinated, using two survey pegs, peg to face measurements and offset distances. A sampling report and sketch were produced per stope sampled. The grade (g/t and cm.g/t), channel width, stope width, off-reef mining, hanging wall and footwall dilution were recorded per section and reported per panel. A sketch printout was produced in plan and cross section showing sample positions and geological structures per section. The individual underground sampling data points were composited per reef horizon over the reef width. Hanging wall and footwall widths were also recorded. This information was validated by the Chief Geologist prior to being transferred to a secure sampling database.

For each panel sampled, cm.g/t, g/t, stope width, footwall, hanging wall, number of sections and date of sample were plotted on 1:200 stope sheet, along with off-reef mining. All faults and dykes were plotted on 1:200 stope sheet and shown to the relevant geologist to update the geological structure.

Planned Task Observations were conducted on the samplers by the geologists and grade control officers to ensure the sampling was conducted to standard.

Item 9 (d) – Results and Interpretation of Exploration Information

Given the historical and mature nature of Blyvoor, exploration data is deemed to be of historical interest only. Data and interpretations regarding geology, including mineralisation and structure, have largely been sourced from continuous assessment along mining faces and on-reef development, as well as underground chip sampling.

Details regarding the analyses of the sampling are provided in Item 11 of this Report.

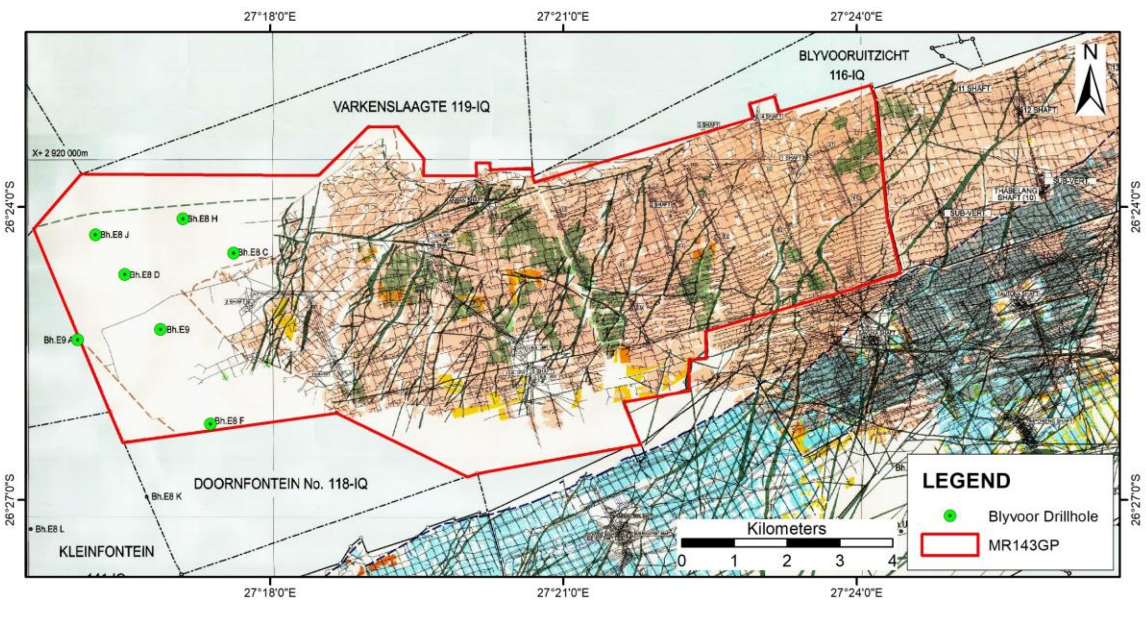
ITEM 10 - DRILLING

Item 10 (a) - Type and Extent of Drilling

Blyvoor is currently in the process of starting up the operation again. Historical drilling was conducted from surface during the 1930s and the data does not form part of the database utilised for Mineral Resource estimation, with the exception of the Middelvlei surface drillholes drilled west of No. 5 Shaft. No in-stope drillhole data has been used in the evaluation of the Mineral Resources of Blyvoor since at least the 2011 estimate. This is due to the poor representivity of the drillhole sampling as a result of gold loss associated with the high carbon content of the reefs in question, as well as the excellent coverage and significant volume of chip sample data, which would provide comparatively superior information for this deposit.

Goldfields has created, and is custodian of, a regional plan of the West Wits Line showing all operators and underground workings. On this compilation plan is reflected the location of drillholes that the authors of the plan have been able to source over a number of years. As shown in the plan dated 30 June 2007, six historic drillholes were drilled in the western undeveloped portion of the current Blyvoor lease area. These are namely drillholes E8C, E8D, E8F, E8H, E8J and E9 and are illustrated in Figure 19. Drillhole E9A was drilled just outside of the current Blyvoor lease boundary. Due to the lack of data in the western portion of the mine, these drillholes were included in the estimation, these are currently in Inferred areas, and data is currently extrapolated from chip samples up to 2 km away, prior to the inclusion of these samples.

Figure 19: Blyvoor Underground and Drillholes Plan, 2007



Source: *Modified after* Goldfields – The West Wits Line, Underground Plan, 30-06-2007

Blyvoor Underground and Drillholes Plan, 2007	February 2021

Diamond drilling on Blyvoor is additionally utilised to confirm structural interpretations and reef positions within already well-informed areas.

Item 10 (b) – Factors Influencing the Accuracy of Results

Generally, the industry standard is that if a reef intersection had excessive core loss it would be marked as incomplete and would not be utilised in evaluation, hence the use of the chip sampling for the purposes of Mineral Resource estimation.

The carbon content of the reefs at Blyvoor is very high; thus, the chance of core loss and poor recoveries is greatly enhanced. Consequently, the chance of under-evaluating Mineral Resources by using such drilling is very high.

Item 10 (c) – Exploration Properties – Drillhole Details

This section is not applicable to Blyvoor as it was historically mined and is an established operation, albeit in need of refurbishment prior to recommencement.

ITEM 11 - SAMPLE PREPARATION, ANALYSES AND SECURITY

Item 11 (a) - Sample Handling Prior to Dispatch

The samples discussed in this section pertains to the chip sampling which is utilised in Mineral Resource estimation.

Once the samples had been collected, placed in plastic bags, and ticketed as described in Item 9 (b), the bags were immediately stapled closed.

The sampler was responsible for the security of the sample from the time the sample was collected until it was delivered to the shaft head. On surface, the sampler verified that no samples had been misplaced and secured the samples in a lockable bin. The samples were then transported daily via a vehicle by mine personnel directly to the Blyvooruitzicht mine laboratory for analysis. Samples were checked against samplers' books and laboratory sheets.

The samples were secured in the laboratory and processed within 24 hours.

Surveillance equipment was also installed in the laboratory and live-streamed to the Mine's security control room.

Item 11 (b) - Sample Preparation and Analysis Procedures

The following section has been sourced from Whittaker (2016 and pers. comm.).

I. Sample Preparation and Analysis

Gold analyses were conducted at the Blyvooruitzicht laboratory using fire assay. All sample preparation and analyses were done by the Blyvooruitzicht laboratory during and prior to DRD's tenure. Strict sample preparation was followed as per laboratory procedure No. 5 and analysis conducted to appropriate industry standards. This procedure is provided in Table 8.

Table 8: Blyvooruitzicht Sample Preparation Procedure No. 5 as per DRD

Step	Task/Description	Key Points = Do and Don't	Procedure
1.	Transfer the total of each sample into a sample dish.	Ensure each sample dish is absolutely clean before transferring.	
2.	Sort the samples in numerical order and place ticket in sample.	The ticket must be well covered with sample to prevent it from subsequent burning in the dryer.	
3.	The samples are placed on the dryer in numerical order.	Stop conveyor belt of dryer in time to prevent samples falling off at delivery end.	Infra-red drying equipment must be used.
4.	When samples are dry remove them from dryer at delivery end. Uncover the tickets.	Pink tickets which are waste samples (low values) will go through. Pink crusher, pulveriser and buff ticketed samples are reef (high values) will go through cream crusher and pulveriser to reduce contamination. Also, separate splitters are used.	
5.	The complete sample is transferred to the jaw breakers and reduced to box – + 3 mm.	The jaw breakers must be cleaned prior to crushing and there must be no hold up of sample which might contaminate succeeding samples. Check plates are renewed at frequent intervals and crusher maintained at peak performance.	
6.	Reduce the sample size by means of a Jones Riffler.	The sample must not be reduced to less than 300 grams. The sample must cascade over the riffler in a continuous stream and no arching must occur during the process. The splitter must be cleaned with a paint brush before each sample is split.	
7.	Pulverise the sample after splitting in the vertical spindle pulverises.	After each sample is pulverized blow out the pulveriser by its own compressed air device so as to prevent contamination with the next sample. Ensure to adjust machine correctly. Blow out mixer before the next sample is mixed.	Adjustment to be checked regularly.
8.	Staple each ticket to a ½ lb paper packet and throw each pulverised sample in a separate paper packet after it is mixed.		

After preparation by crushing grinding and quartering, 23 g of the sample was taken to the fluxing room; the remaining portion of the sample was retained for a period, for use in a check assay if required.

In the fluxing room, the 23 g sample was mixed with 85 g of stock flux. This stock flux was a mixture of 27% litharge, 6% fluorspar, 43% sodium carbonate, 11% borax, and 3% maize meal.

The mixture of ore and fluxes was then placed in a fire-clay pot or crucible and heated to 1,000°C. At this temperature, the finely ground ore, consisting mainly of silica and the flux, melts and becomes fluid. Simultaneously, the litharge reacts with the charcoal, forming minute globules of metallic lead. The finely dispersed cloud of lead assists the gold particles in settling to the bottom of the crucible and results in the gold being collected in a lead-gold button which, after cooling, was separated from the mixture of silica and fluxes.

After about 30 minutes in the furnace, the contents of the crucible were poured into a conical cast-iron mould and allowed to cool until set. The mould was then inverted, and the lead-gold button was broken away from the attached glass-like combination of silica and fluxes know as slag. To discard adhering slag, and to make for ease in handling the button was hammered into the form of a cube measuring about 1 cm across.

To dispose of the lead, a cupellation process was completed. The lead-gold button was placed on a cupel (a small circular block of compressed magnesite powder with a concave top) and is heated in a small oven or muffle furnace to 1,000°C. Lead and other base metals, such as copper, form liquid oxides at this temperature and are absorbed by the cupel, or are lost as fumes, and the gold is left behind in the cupel in the form of spherical bead. The gold bead was then weighed on a sensitive balance and the result calculated back to give the value of the ore in grams per tonne.

These values were written next to the relevant sample numbers in duplicate. One copy was sent to the Mine Survey Office and the other copy was filed in the Assay Office.

II. Bulk Density Determination

Blyvooruitzicht used a standard density figure for Mineral Resource and Reserve estimation. This figure was checked by measuring the density of 234 footwall, hanging wall and reef (Middelvlei Reef and Carbon Leader) samples. There have been no significant changes in the geology and rock quality since these measurements were taken and the official figure of 2.737 g/cm^3 is still considered an appropriate density for Mineral Resource estimation.

Item 11 (c) – Quality Assurance and Quality Control

Minxcon has depended on the views of historical reviews and audits conducted during the period of sample collection.

The following section has been compiled from Coffey Mining (2011) and Whittaker (2016).

Given the historical nature of the Mine, limited quality assurance and quality control ("QAQC") data is available, as the bulk of the sampling was undertaken prior to the introduction of mineral reporting codes and requirements for detailed QAQC practices and audits. Prior to 1996, the sampling conducted at the Doornfontein area of the Blyvooruitzicht lease area would have been analysed at the neighbouring Goldfields laboratory, which is not accredited and for which no QAQC data is available.

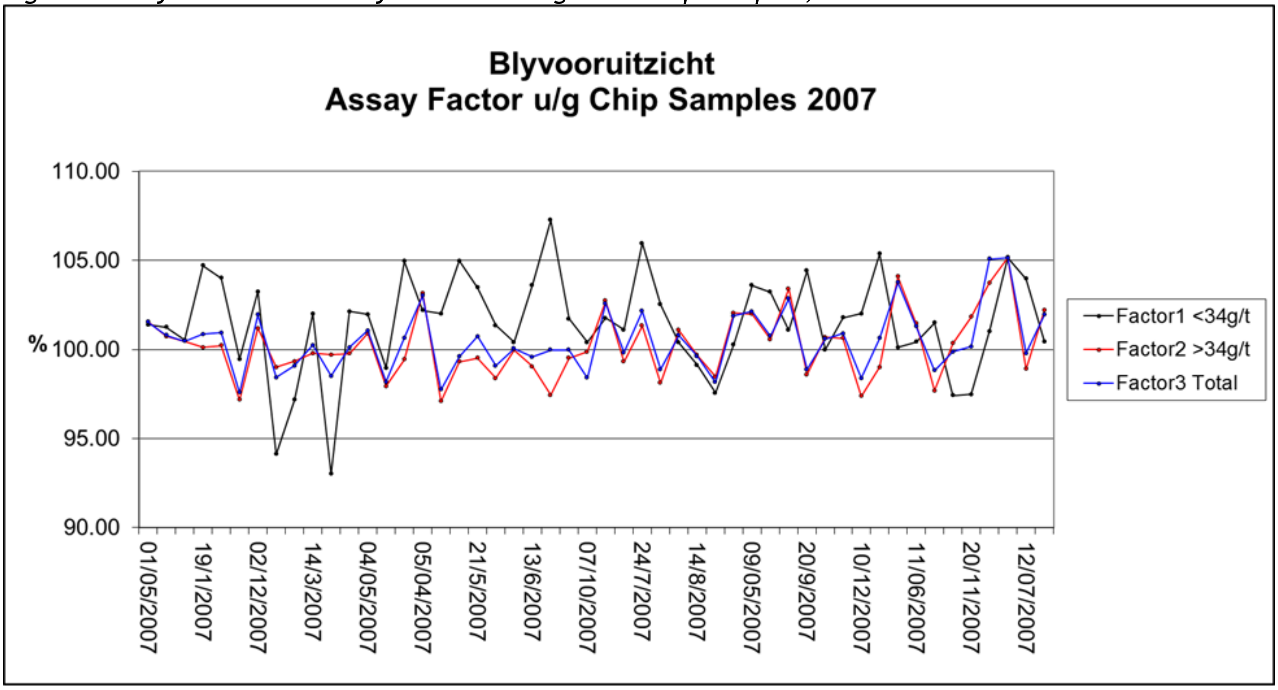
More recently, no standards, blanks or duplicates were inserted into the sample stream before dispatch to the assay laboratory, however Blyvooruitzicht relied on routine quality control procedures implemented at the assay laboratory. Laboratory internal QAQC and round robin checks were regularly conducted by the assay laboratory during the ownership period of DRD and Village Main Reef. The assay laboratory produced quality assurance data to ensure that the analysis conducted had the accuracy and precision appropriate for Mineral Resource and Mineral Reserve declarations.

The following QAQC procedures were adhered to:-

- As routine, approximately 10% of all mine assays were checked. As these 10% were randomly selected, they constituted a valid statistical sample of the totality of mine assays. Any errors found in the checks would also be present in the 90% of mine assays which were not checked. Checked assays were compared with routine mine assays and graphically displayed on an Assay Factor graph (Figure 20).
- Head Grade and Residue Samples (Internal Checks): All head grade and residue samples were assayed in duplicate (twin streams). Different furnaces, muffles and balances were used for each stream to provide a control on accuracy. The difference between the duplicate values were plotted as Assay Control plots (Figure 21).
- Duplicate values were compared on a control fan which indicated whether the values obtained are within acceptable limits. The difference between duplicate values was plotted on control charts for analysis. New charts were prepared monthly.

- Head Grade and Residue Samples (External Checks): Round Robin analyses of head grade and residue samples were undertaken to provide external checks. Four participating laboratories all supplied a head grade and a residue sample. Participating laboratories over time included Blyvooruitzicht, Driefontein (not accredited), MAED Metallurgical Laboratories (Pty) Ltd (not accredited) in Brakpan, Gauteng, Super Laboratory Services (SANAS ISO 17025 accreditation number T0494) in Springs, Gauteng, and Ready Lead Assay Laboratory (SANAS accreditation number T0689) in Springs, Gauteng. All laboratories supplied a head grade and a residue sample. The samples were analysed, and the laboratories submitted their results for statistical evaluation. Graphic representations of results were forwarded to the respective mines, displayed on Intermine Exchange graphs (Figure 22).
- Belt Samples: 10% of all belt samples were routinely checked. All assays were parted (routine and checks) and the data obtained graphed on charts designated Bin Check (Figure 23).
- Fire Assays: A reference sample was randomly processed daily, and the results plotted on a fire assay reference graph (Figure 24). New charts were prepared monthly.
- Top pan balances were checked daily by the use of a known mass. Micro balances were calibrated by either external or internal calibration masses where the instruments allowed.
- The Atomic Absorption Instrument was calibrated daily, and a high and low reference sample was checked before samples were processed.
- Carbon blank samples were processed, and corrections were made when required.
- Charges of flux were analysed by fire assay as a check that there was no gold present in the flux.

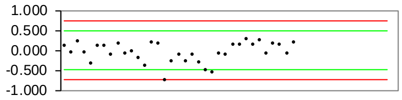
Figure 20: Blyvooruitzicht Assay Factor Underground Chip Samples, 2007



Source: Whittaker (2016)

Figure 21: Blyvooruitzicht Assay Laboratory Controls, March 2012

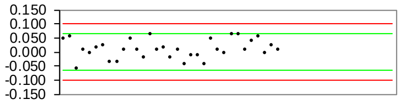
CONTROL CHART CIP HEADS
Diff (A-B) Au g/t



		Head Grade Mean
Mean	-0.044	**95%Confidence level**
Standard Error	0.042	**5.939 Upper boundary**
Median	-0.048	**5.109 Lower boundary**
Mode	-0.104	
Standard Deviation	0.247	**Comment:**
Count	35	As displayed by the graph there is a high standard of accuracy

Standard deviation of difference
The quality is reflected by the number of differences between check assays falling within the various plotted multiples of Sd.

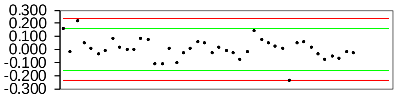
CONTROL CHART CIP RESIDUES
Diff (A-B) Au g/t



		Residue Grade Mean
Mean	0.012	**95%Confidence level**
Standard Error	0.006	**0.377 Upper boundary**
Median	0.008	**0.318 Lower boundary**
Mode	0.008	
Standard Deviation	0.033	**Comment:**
Count	33	As displayed by the graph there is a high standard of accuracy

Standard deviation of difference
The quality is reflected by the number of differences between check assays falling within the various plotted multiples of Sd.

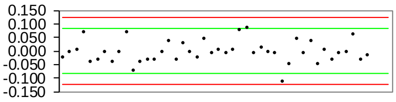
CONTROL CHART SLIME HEADS
Diff (A-B) Au g/t



		Slime Head Grade Mean
Mean	0.005	**95%Confidence level**
Standard Error	0.012	**0.663 Upper boundary**
Median	0.004	**0.626 Lower boundary**
Mode	0.008	
Standard Deviation	0.079	**Comment:**
Count	42	As displayed by the graph there is a high standard of accuracy

Standard deviation of difference
The quality is reflected by the number of differences between check assays falling within the various plotted multiples of Sd.

CONTROL CHART SLIME RESIDUES
Diff (A-B) Au g/t

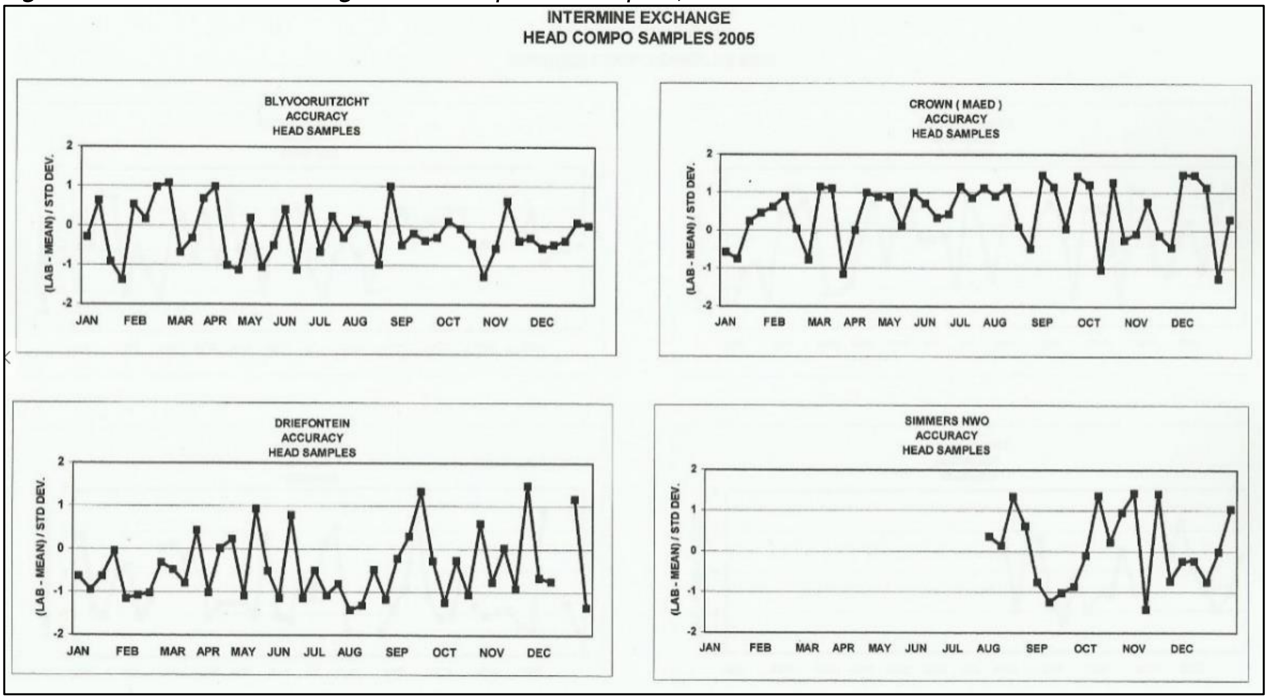


		Slime Residue Grade Mean
Mean	-0.002	**95%Confidence level**
Standard Error	0.006	**0.447 Upper boundary**
Median	-0.004	**0.409 Lower boundary**
Mode	0.000	
Standard Deviation	0.041	**Comment:**
Count	44	As displayed by the graph there is a high standard of accuracy

Standard deviation of difference
The quality is reflected by the number of differences between check assays falling within the various plotted multiples of Sd.

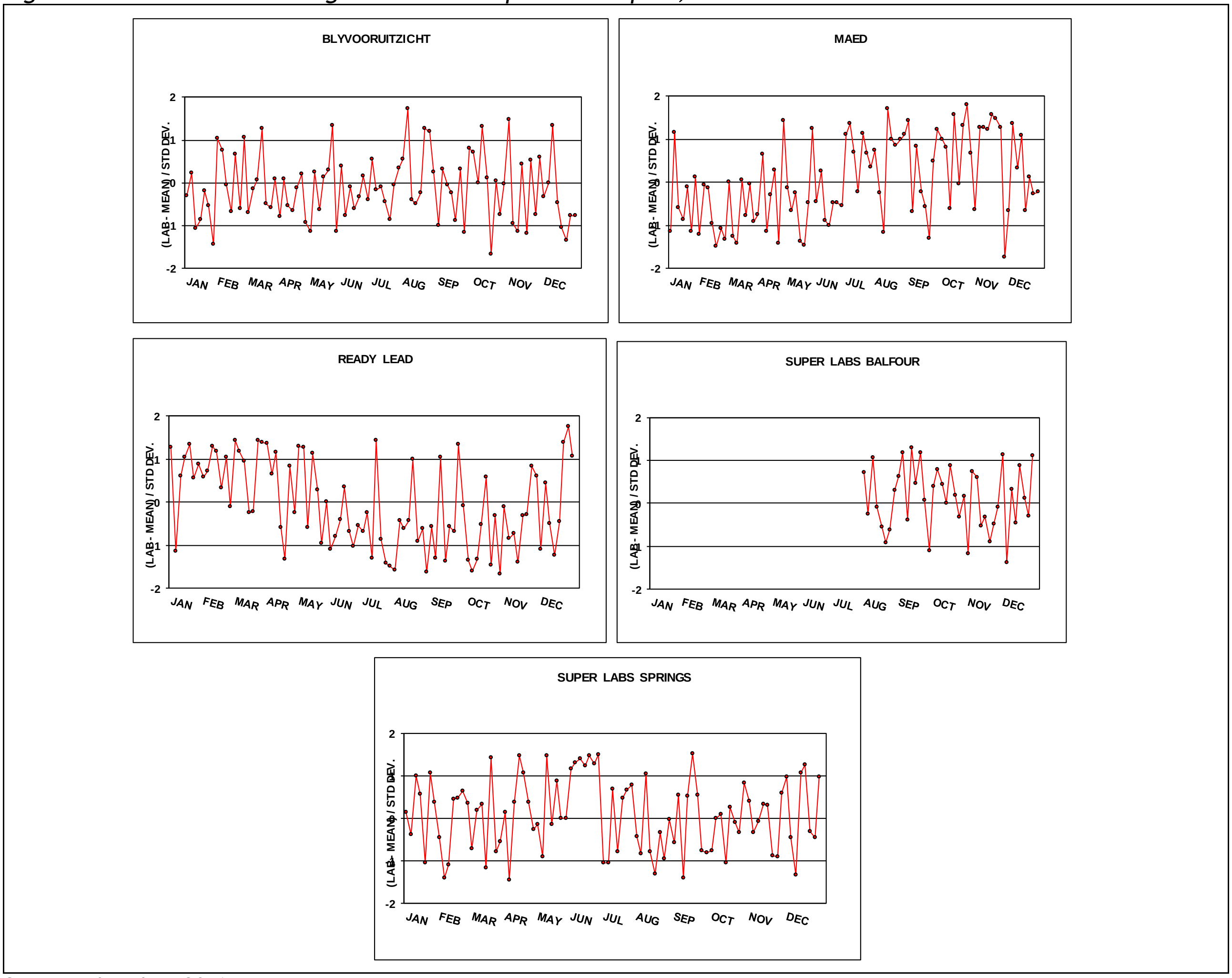
Source: Whittaker (2016)

Figure 22: Intermine Exchange Head Composite Samples, 2005



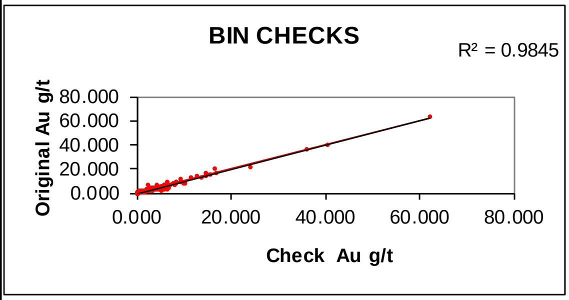
Source: Whittaker (2016)

Figure 23: Intermine Exchange Residue Composite Samples, 2011



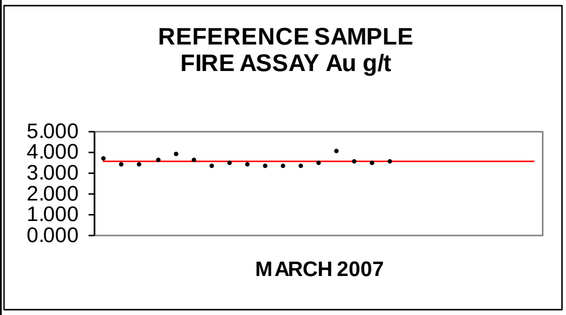
Source: Whittaker (2016)

Figure 24: Bin Checks and Fire Assay Reference Samples, March 2007



Comment:
These checks represent 10% of all bin samples received inclusive of bins of contractors.

The slope of the regression line through the points (**red**) should be close to1 and nearly coincide with the ideal correlation (**black**).
A high correlation (expressed by R^2 aproaching 100% is expected)



Comment:
A good distribution about the reference line.

Reference value	**3.56**
Monthly mean ref. value	**3.52**

Source: Whittaker (2016)

The Blyvooruitzicht laboratory was not an accredited laboratory, however the laboratory was audited in April 2005 by ProOptima Audit Services ("ProOptima"). ProOptima concluded that the laboratory was efficiently and effectively managed and that it achieved a high level of compliance to the applicable standards, laws, and regulations through a disciplined and systematic approach.

It is also noted that surface dump sampling using both Blyvooruitzicht laboratory and ALS Chemex, an independent, SANAS-accredited laboratory, had previously confirmed that the level of accuracy and precision were high.

Minxcon is not aware of subsequent laboratory audits. Annually, however, quality controls were actively monitored, and all relevant data was supplied to Coffey Mining on an annual basis for analysis. No significant changes had been made to the laboratory procedures and assay data was considered comparable to that of previous years.

In 2012, the Blyvooruitzicht and Buffelsfontein laboratories merged at the Buffelsfontein site and as a result, Blyvooruitzicht no longer has an assay laboratory. Post the laboratory merger, SGS (Randfontein) was used as the reference laboratory.

Item 11 (d) – Adequacy of Sample Preparation

Annually from 2002 to 2011, Coffey Mining reviewed the graphical analyses of the QAQC results and the results from the round robin check assays. It was found that the analyses demonstrate that the Blyvooruitzicht laboratory results can be considered reliable. Further, Coffey Mining found that the measures used to ensure accuracy and precision of analysis were considered appropriate for the purposes of Mineral Resource and Mineral Reserve estimations.

Details pertaining to the grinding and pulverisation of the chip samples is not available due to the historical nature of the sampling. It is, however, assumed that the mine standard as applied in South Africa of 80% passing 75 µm was utilised as a preparation guide. The sheer volume of the sampling and the coarse nature of the gold associated with carbon seams and the high sampling grades obtained attests to adequate sample preparation.

It is the opinion of the Qualified Person responsible for the Mineral Resources of this Report that the database utilised for the Mineral Resource estimation is adequate and appropriate based on the following:-

- the Mineral Resources were audited by an independent consultancy / Qualified Person at the time of operation;
- the Blyvooruitzicht Gold Mine was a reputable gold mining operation following the sampling protocols and practices recognised by the South African mining industry;
- the Mine has been operating since the early 1940s with historical production substantiating the grades produced by the two orebodies;
- the sheer number of samples utilised; and
- the Qualified Person of this Report is familiar with these sampling principles having been a Mineral Resource Manager on similar "Witwatersrand gold" operations which utilised the same practices.

ITEM 12 – DATA VERIFICATION

Item 12 (a) – DATA VERIFICATION PROCEDURES

Minxcon reviewed the following data which was used or produced by previous contractors in their Mineral Resource estimation exercises:-

- chip sample data;
- QAQC data;
- survey data (mining outlines including stoping and development); and
- block models.

Minxcon conducted the following verifications on the data:-

- Minxcon reviewed the QAQC data as presented by Mr Whittaker and shares the view of both himself and Coffey Mining as to the validity of the use of the gold content (cm.g/t) data for Mineral Resource estimation processes.
- Minxcon cross-checked mapping plans in the Blyvoor geological office with the various iterations of estimation models to ensure that changes in geology were carried over to the relevant estimations. This was found to be of good quality. All geological losses incorporated on geological plans were found to be included in the Mineral Resource models.

In 2012, Minxcon reviewed the Mineral Resources and Mineral Reserves for Blyvooruitzicht. The sampling database was reviewed, and no apparent fatal flaws were noted with respect to the gold content data.

Coffey Mining undertook an independent review of the Mineral Resources and Reserves for Blyvooruitzicht Gold Mine in 2011 on behalf of DRD. Coffey Mining carried out similar reviews in August 1998 and yearly since June 2002. Minxcon additionally reviewed the Mineral Resource estimation and the associated processes in 2012 for the purposes of Mineral Resource sign-off. This Report takes cognisance of the findings of those audits and reviews, as Minxcon is of the opinion that those findings are still relevant to the data.

In addition, SRK reviewed the data in 2018, and their observations and recommendations are included.

I. CHIP SAMPLE DATA

Historical chip sampling data (dated up to August 2013) making up the Mineral Resource estimation database for Blyvooruitzicht was received for both the Carbon Leader and Middelvlei Reefs from Blyvoor Gold

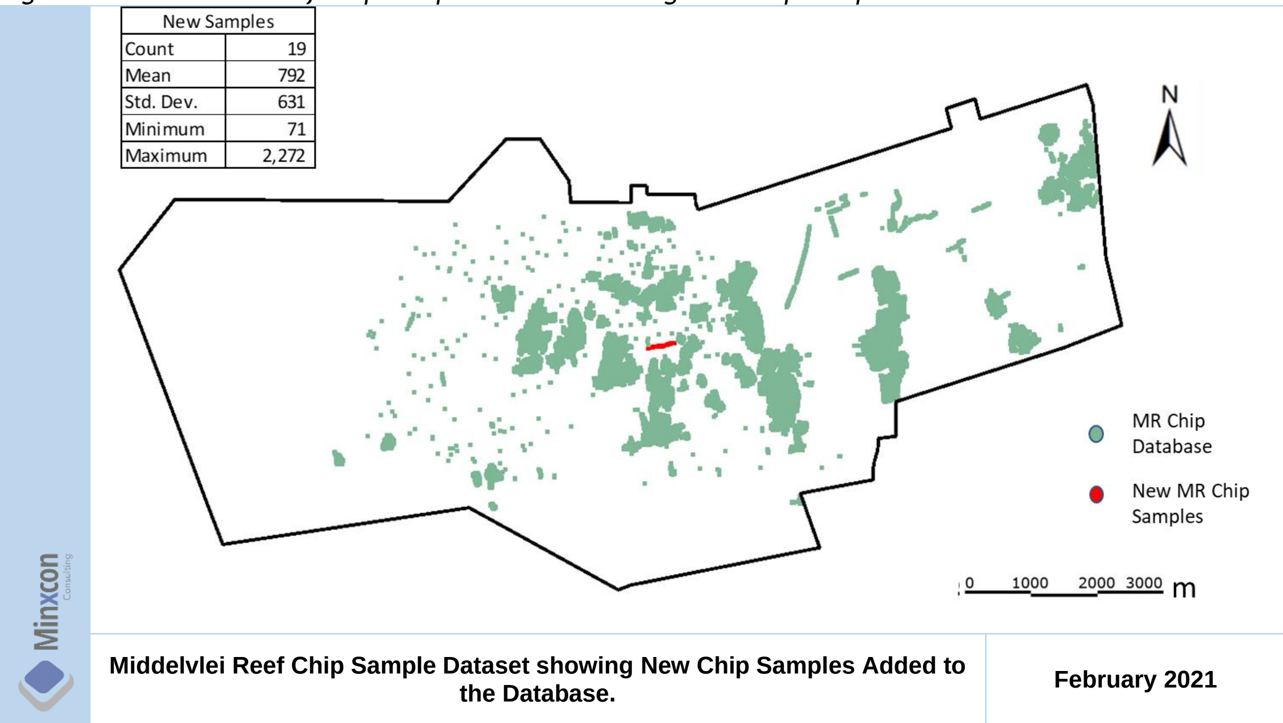
A summary of the chip sample data as supplied by Blyvoor Gold is provided in Table 9.

Table 9: Summary of the Chip Sample Provided

Reef	No. of Data Points
Carbon Leader	362,831
Total Carbon Leader Reef	**362,831**
Middelvlei Reef	141,328
New Middelvlei Reef Chips	19
Total Middelvlei Reef	**141,347**

Additional Middelvlei Reef sampling data was sourced by Blyvoor in 2021, this is displayed in red in Figure 25.

Figure 25: Middelvlei Reef Chip Sample Dataset showing New Chip Samples Added to the Database



Some issues were identified with the database as utilised in the 2018 and previous estimates:-

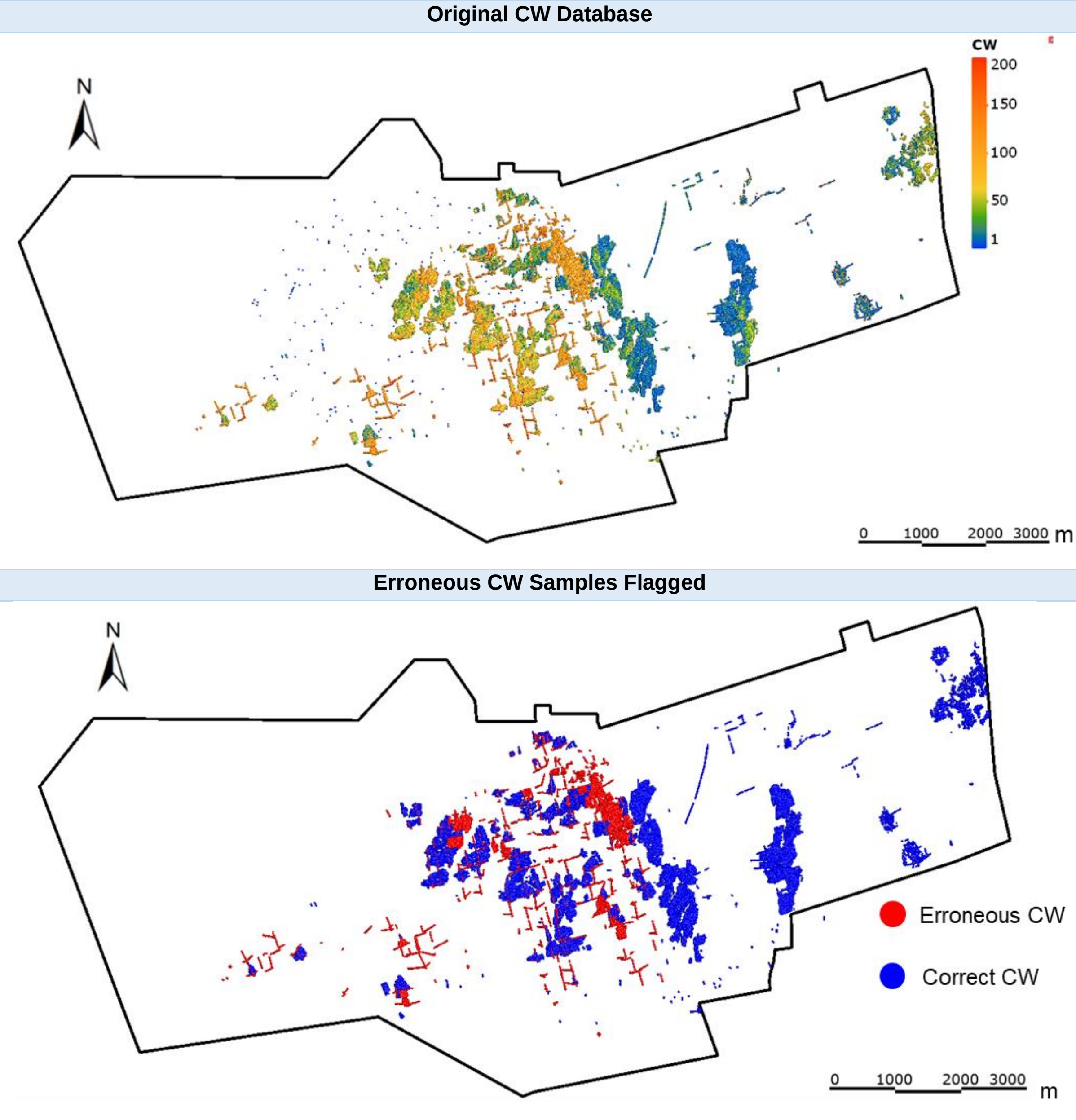
- Erroneous CW values in the CW database, this was identified and mentioned in previous estimates, but the database was not corrected, and the CW estimate was not used.
- Erroneous chip data, some samples occurring within unmined areas were identified:-
  - If these could be assigned to another reef, these samples were reassigned; or
  - If they could not be re-assigned, the erroneous data was removed from the database.

For the channel width database, there were significant areas where it appeared that historical stoping width had been captured instead of true channel width.

It is known that the typical channel widths of both the Carbon Leader and Middelvlei Reefs are generally thinner than approximately 40 cm when compared with traditional stoping widths which are generally in excess of 1 m. This would mean that the gold content (cm.g/t) would not change whether taken over the channel or the stoping width.

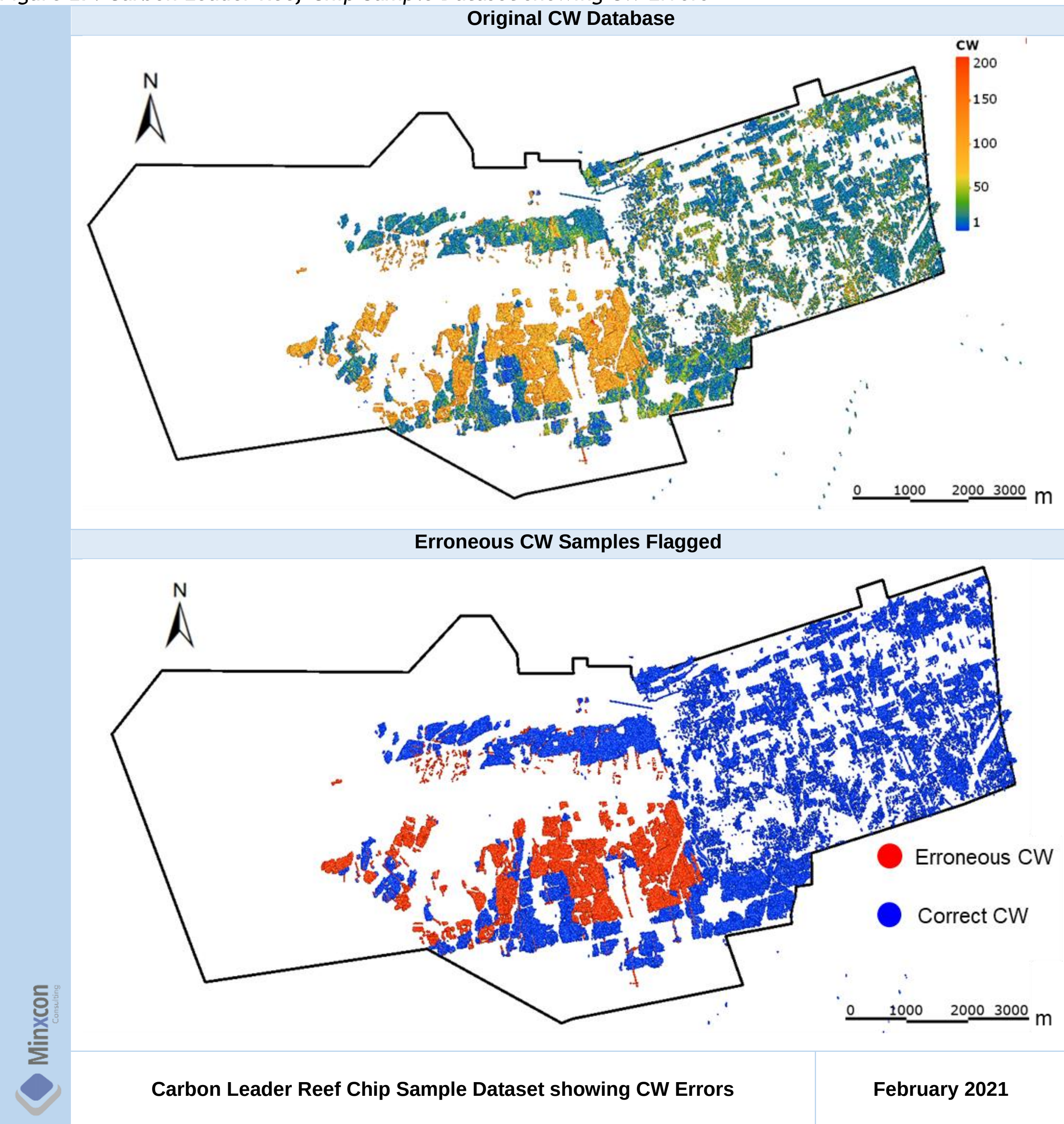
This arose from a database error where in certain areas, HW and FW values were allocated the value of -1. CW was then calculated as SW + HW and + FW (+2). This could easily be flagged, and the relevant CW values removed. These samples can be seen in Figure 26 and, along with the CW values, shows these clearly erroneous CW values.

Figure 26: Middelvlei Reef Chip Sample Dataset Showing CW Errors



Middelvlei Reef Chip Sample Dataset Showing CW Errors	February 2021

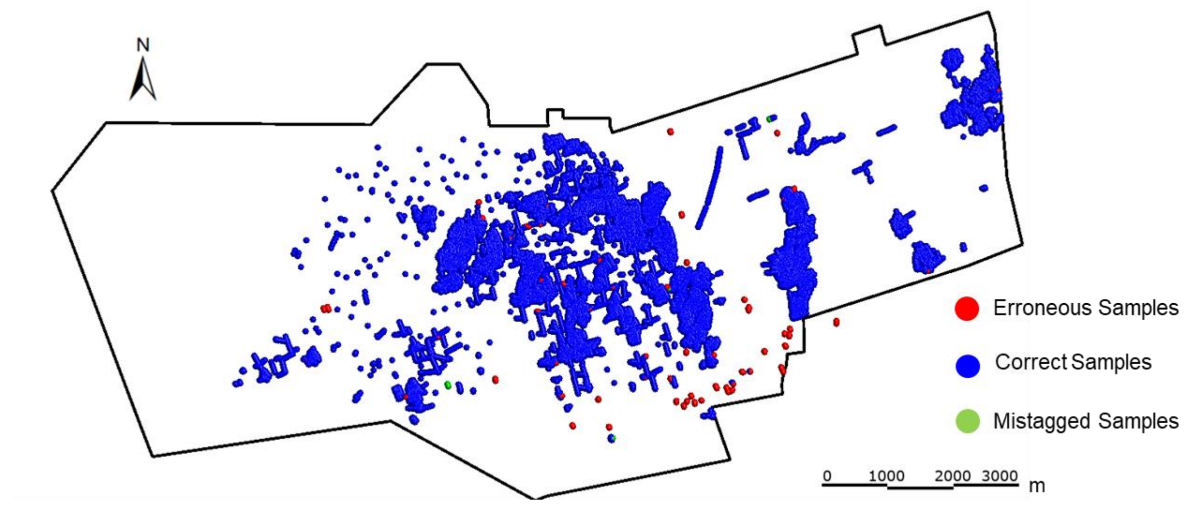
Figure 27: Carbon Leader Reef Chip Sample Dataset showing CW Errors



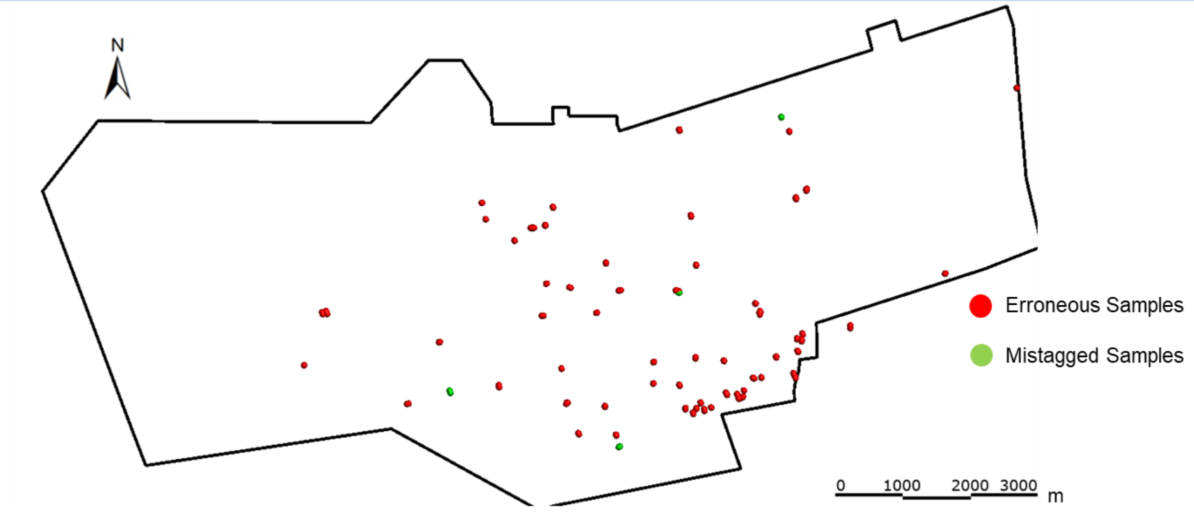
In addition, some erroneous datapoints were identified, these were typically datapoints within an unmined area, and in some cases could be clearly traced to another reef. In this case some Middelvlei Reef datapoints were traced to Carbon Leader Reef plans, and these datapoints were removed from Middelvlei Reef and added to the Carbon Leader Reef database. The erroneous samples are shown in Figure 28 and Figure 29.

Figure 28: Middelvlei Reef Chip Sample Dataset showing Sample Status

Error Status



Error Status, only Errors Shown



Middelvlei Reef Chip Sample Dataset showing Sample status	February 2021

Figure 29: Carbon Leader Reef Chip Sample Dataset showing Sample Status

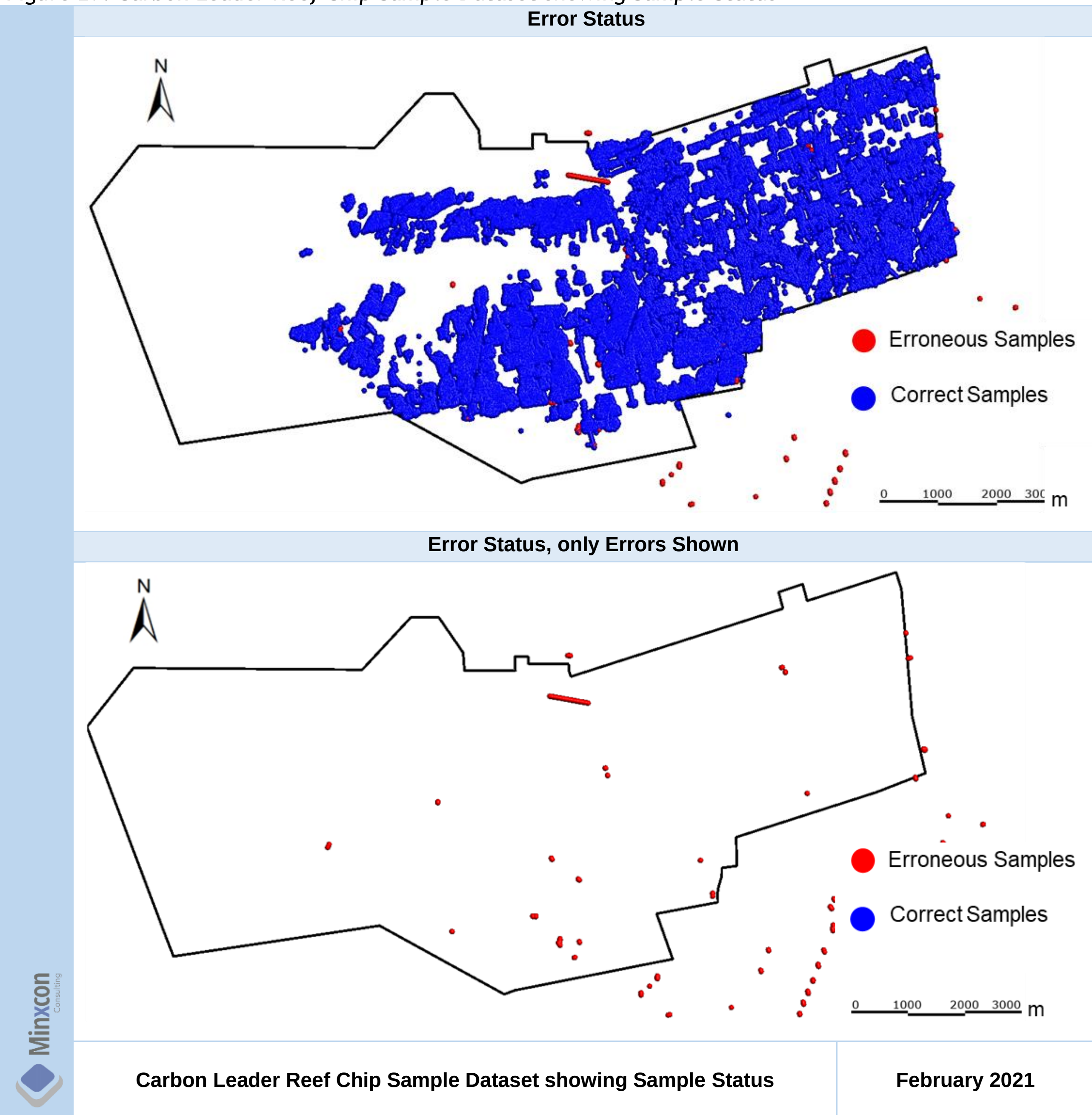


Table 10 and Table 11. Despite new samples and correction of errors, the change in samples did not have a significant effect on the average value of the dataset. However, the location of the samples that were removed would have an influence on the estimation specifically if these samples were in more sparsely informed areas.

Table 10: Database Summary for Middelvlei Reef

Name	Variable	Count	Mean	Std Dev	Minimum	Maximum
Original 2018 Database	CMGT	137,678	817	1,251	1	121,144
Original 2018 Database	CW	137,678	59	48	1	637
CW Error Only	CW	38,365	122	26	47	637
Moved To CL	CMGT	45	769	1,009	10	4,474
Moved To CL	CW	45	79	47	8	145
Errors Removed	CMGT	419	957	1,446	12	12,871
Errors Removed	CW	419	52	55	1	243
New data from DH	CMGT	9	380	329	68	483
New data from DH	CW	9	49	25	13	62
New chip data	CMGT	19	792	631	71	2,272
New chip data	CW	19	85	32	33	146
Final 2021 Database	CW	98,972	35	30	1	327
Final 2021 Database	CMGT	137,214	817	1,251	1	121,144
Reduction from CW error	**CW**	**-28%**	**-41%**			
Reduction from errors	**CMGT**	**-0.34%**	**0.03%**			
Total Change in CW	**CW**	**-28%**	**-41%**			
Total Change in CMGT	**CMGT**	**-0.34%**	**-0.05%**			

Table 11: Database Summary for Carbon Leader Reef

Name	Variable	Count	Mean	Std Dev	Minimum	Maximum
Original 2018 Database	CMGT	359,970	1,880	3,361	1	443,143
Original 2018 Database	CW	359,757	48	45	1	591
CW Error Only	CW	105,613	110	24	20	591
Errors Removed	CMGT	534	2,135	2,734	10	18,926
Errors Removed	CW	534	31	40	8	248
Moved from MR	CMGT	45	769	1,009	10	4,474
Moved from MR	CW	45	79	47	8	145
New data from DH	CMGT	1	195			
New data from DH	CW	1	14			
Final 2021 Database	CW	253,656	22	21	1	356
Final 2021 Database	CMGT	359,481	1,879	3,361	1	443,143
Reduction from CW error	**CW**	**-29%**	**-53%**			
Reduction from errors	**CMGT**	**-0.15%**	**0.05%**			
Total Change in CW	**CW**	**-29%**	**-53%**			
Total Change in CMGT	**CMGT**	**-0.14%**	**-0.03%**			

Both sets of data were reviewed for their cm.g/t and channel width value. The cm.g/t values and their distribution were found to be sound and of adequate quality for the purposes of conducting Mineral Resource estimation.

Item 12 (b) – Limitations on/Failure to Conduct Data Verification

Minxcon reviewed a number of historical production sampling sheets to assess adherence to historical standards and that data was correctly incorporated into the digital database. No transcription errors were found in the checked sample sheets. The sheer volume of available data precludes an exhaustive review of all sampling data. Minxcon is of the opinion that the historical standards under the various owners were carried over between the various owners and were adhered to, and that the digital database (based on the data reviewed) is representative of the captured hardcopy historical production chip sample sheets.

Item 12 (c) – Adequacy of Data

It is the view of the Qualified Person responsible for the Mineral Resources of this Report, Mr Uwe Engelmann, that the volume and spacing of chip sample data on both the Carbon Leader and Middelvlei Reefs are adequate for the purposes of conducting Mineral Resource estimations in line with the requirement as outlined by the requirements of NI 43-101.

ITEM 13 – MINERAL PROCESSING AND METALLURGICAL TESTING

Item 13 (a) – NATURE AND EXTENT OF TESTING AND ANALYTICAL PROCEDURES

The Blyvoor Mine was an operating mine which ceased operations in 2013. Recent metallurgical laboratory testwork has not been conducted.

Item 13 (b) – BASIS OF ASSUMPTIONS REGARDING RECOVERY ESTIMATES

Recoveries are based on historic production figures sourced from Blyvoor Gold. The historic recoveries are detailed in Item 17 .

Item 13 (c) – REPRESENTATIVENESS OF SAMPLES

Recent laboratory testwork has not been conducted. Recoveries are based on historic production which are deemed to be representative of the orebody.

Item 13 (d) – DELETERIOUS ELEMENTS FOR EXTRACTION

No deleterious elements and materials are expected in the current orebodies.

ITEM 14 – MINERAL RESOURCE ESTIMATES

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

I. INTRODUCTION

The 2013 Mineral Resource estimation was carried out by Blyvooruitzicht Gold Mine personnel under guidance from CAE as a follow on from the 2011 CAE Mineral Resource estimate. Minxcon restated the Resources in 2017 based on the 2013 estimate. In 2018 SRK reviewed the dataset and estimation methodology. Due to some concerns with some erroneous CW values in the dataset, these samples were excluded from the previous estimation. However, this potentially resulted in an incorrect cm.g/t estimation in certain areas when the cm.g/t values were also excluded as a result of the erroneous CW data. This was corrected by including the cm.g/t samples in the estimation as the estimation was performed on cm.g/t and not CW. SRK therefore reran the estimates including these samples but utilised all the same estimation parameters employed previously. Due to the changes in data in 2021, resulting from the database clean up, Minxcon re-estimated the Resources. The Facies, estimation setup and block sizes remained unchanged (as carried out by Blyvooruitzicht Gold Mine), but all factors were considered and checked prior to re-estimation.

In addition, Minxcon received depletion and shaft pillar strings (indexed in terms of workplace names and elevations) for the purposes of conducting a depletion of the 2021 Mineral Resource estimate.

II. DATABASE VALIDATION

Minxcon's review and data validations, including SRK's findings, are described in detail in Item 12 (a) of this Report.

i. Compositing

Each sample point as presented by Blyvooruitzicht on both reefs represent full reef composite gold content values after compositing over the full true reef width. Minxcon considers this compositing strategy to be appropriate for conducting a 2D Mineral Resource estimate, as is typical on most Witwatersrand narrow reef tabular orebodies.

ii. Bias and Stationarity Checks

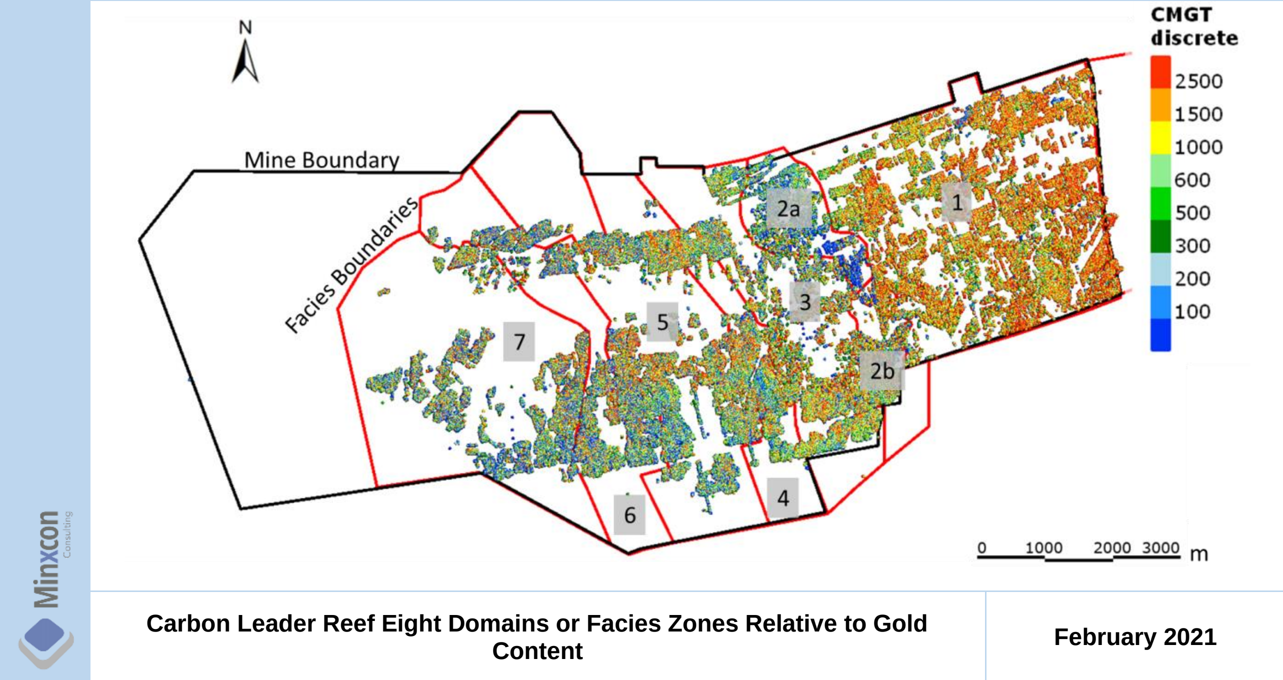
Owing to only channel chip sampling being available, bias and stationarity checks relative to other data types was not possible.

iii. Domaining

Domaining was conducted making use of hard estimation boundaries representing historical mine reef facies descriptions on both the Carbon Leader and Middelvlei Reefs. Segregation of populations was based upon delineable populations of samples exhibiting distinctive gold content and channel width characteristics. Upon investigation of the populations, it immediately becomes apparent that the gold grade was the primary basis for domaining of the Middelvlei Reef, while channel width variations in conjunction with gold content were utilised for the definition of the Carbon Leader facies zones.

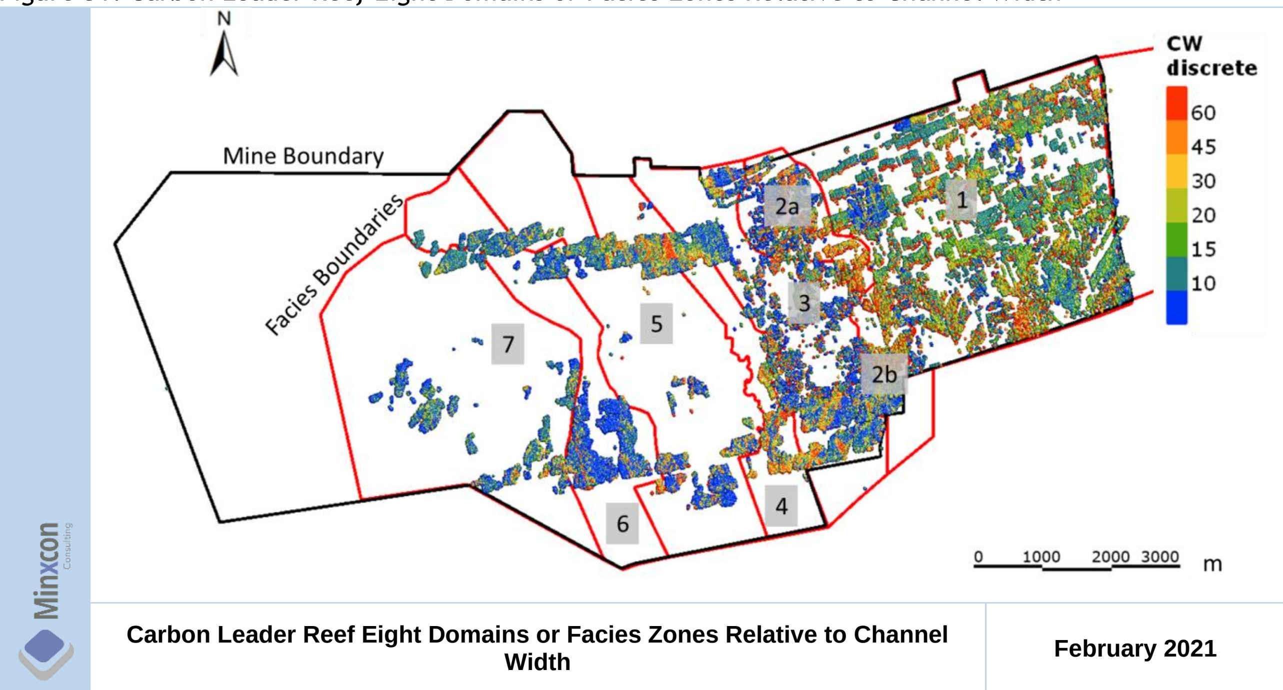
A total of eight domains or facies zones were defined for the Carbon Leader Reef and are presented relative to gold content in Figure 30.

Figure 30: Carbon Leader Reef Eight Domains or Facies Zones Relative to Gold Content



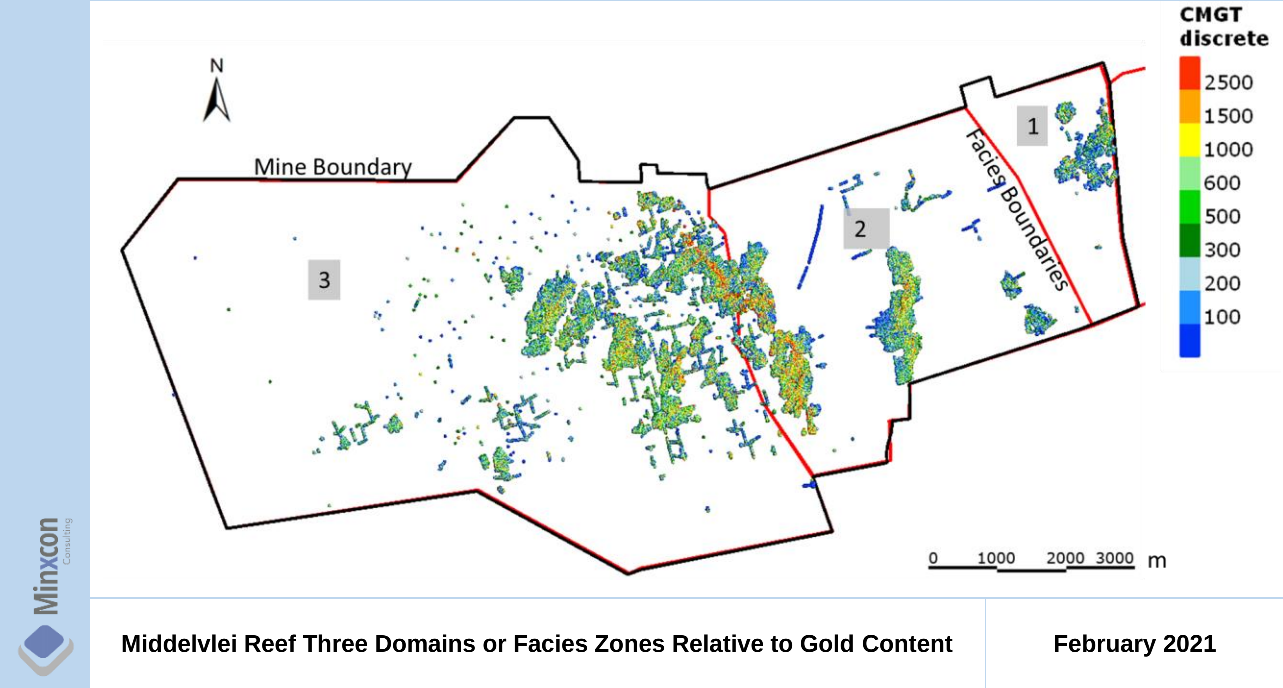
The eight domains or facies zones were defined for the Carbon Leader Reef are presented relative to channel width in Figure 31 below.

Figure 31: Carbon Leader Reef Eight Domains or Facies Zones Relative to Channel Width



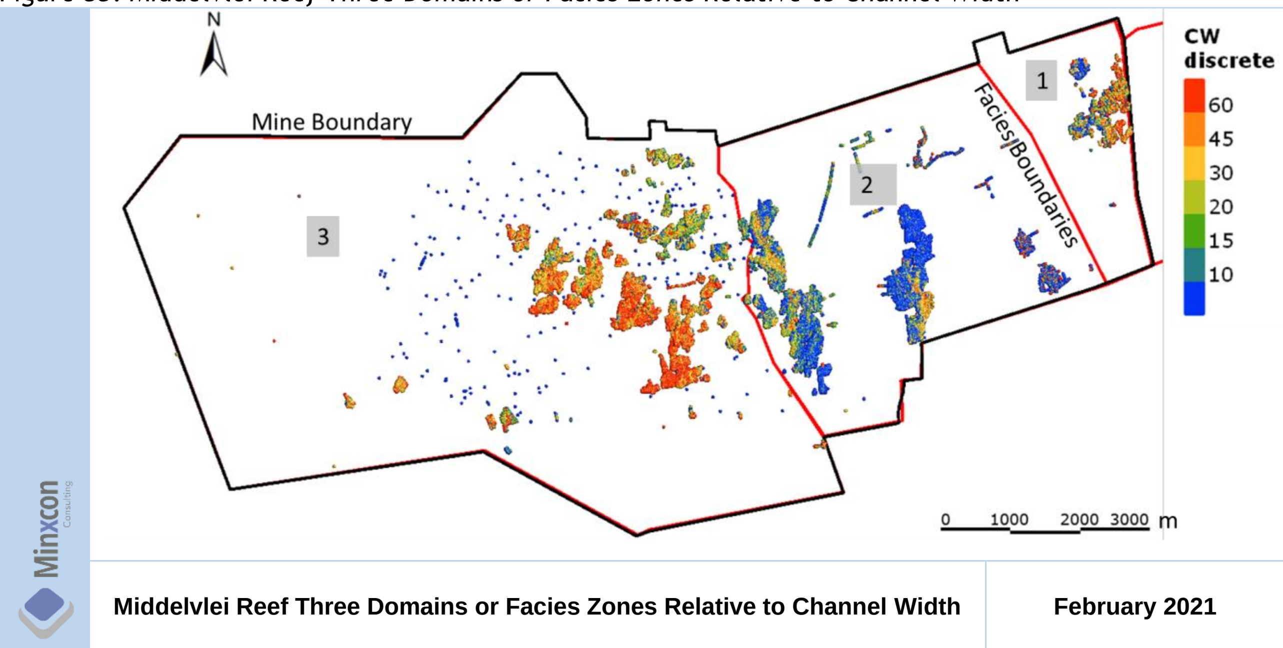
A total of three domains or facies zones were defined for the Middelvlei Reef and are presented relative to gold content in Figure 32.

Figure 32: Middelvlei Reef Three Domains or Facies Zones Relative to Gold Content



The three domains or facies zones defined for the Middelvlei Reef are presented relative to channel width in Figure 33.

Figure 33: Middelvlei Reef Three Domains or Facies Zones Relative to Channel Width



iv. Statistical Analysis

Due to the changes and corrections performed to the data, the statistics shown below (Table 12) show the original database utilised in 2018 by SRK versus the final cleaned dataset utilised in the 2021 estimate. The data for both Middelvlei Reef ("MR") and Carbon Leader Reef ("CL") has had the following corrections performed:-

- erroneous CW values were removed;
- additional erroneous data points plotting within unmined areas removed;

- Carbon Leader Reef samples that were removed from Middelvlei Reef and added back to Carbon Leader; and
- addition of surface drillholes to the west of the Mine.

The statistics for the gold content for Carbon Leader and Middelvlei Reef are presented in Table 12.

Table 12: Raw Statistics for Gold Content for the 2018 and 2021 Datasets.

	2018 Dataset	2021 Dataset	Difference	2018 Dataset	2021 Dataset	Difference
Reef	CL	CL	CL	MR	MR	MR
Variable	cm.g/t	cm.g/t	cm.g/t	cm.g/t	cm.g/t	cm.g/t
Count	359,970	359,481	-0.14%	137,678	137,214	-0.34%
Mean	1,880	1,879	-0.03%	817	817	-0.05%
Standard deviation	3,361	3,361	-	1,251	1,251	-
Minimum	1	1	-	1	1	-
Lower quartile	321	320	-	216	216	-
Median	905	904	-	470	470	-
Upper quartile	2,178	2,178	-	969	968	-
Maximum	443,143	443,143	-	121,144	121,144	-

The raw statistics for channel width comparing the 2018 to the 2021 Middelvlei Reef and Carbon Leader Reef datasets are presented in Table 13 for comparison.

Table 13: Raw Statistics for Channel Width for the 2018 and 2021 Datasets

	2018 Dataset	2021 Dataset	Difference	2018 Dataset	2021 Dataset	Difference
Reef	CL	CL	CL	MR	MR	MR
Variable	CW	CW	CW	CW	CW	CW
Count	359,970	253,655	-29.53%	137,678	98,972	-28.11%
Mean	48	22	-53.36%	59	35	-40.57%
Standard deviation	45	21	-	48	30	-
Minimum	1	1	-	1	1	-
Lower quartile	12	10	-	14	10	-
Median	23	14	-	46	25	-
Upper quartile	91	26	-	106	53	-
Maximum	591	356	-	637	327	-

v. Capping

Owing to the high carbon content and high grade of the reefs on Blyvoor, as well as the associated friability and potential for gold loss or gain, a more conservative data capping strategy is applied. Relative to each facies zone, data is capped at the mean + (2X Standard Deviations), which equates to between the 96th and 97th percentile, whereas many operations cap data on the 99th percentile.

The raw point data was regularised on a 15 m x 15 m grid and basic statistics conducted. The raw as well as regularised data was then capped and basic statistics conducted. The uncapped statistics for raw versus regularised data are shown in Table 14 for Middelvlei Reef and in Table 15 for Carbon Leader Reef.

Table 14: Basic Statistics for the uncapped Data of the Middelvlei Reef

Facies	Value	Data	Count	Mean	Std. Dev.	Minimum	Maximum
1	cm.g/t	Raw	6,026	527	702	2	11,180
		Reg	1,459	505	605	6	10,940
	CW	Raw	6,026	35	27	8	203
		Reg	1,459	38	26	8	195
2	cm.g/t	Raw	53,274	889	1,253	1	37,383
		Reg	7,833	862	854	3	17,030
	CW	Raw	51,956	19	18	1	327
		Reg	7,688	20	19	1	327
3	cm.g/t	Raw	77,941	790	1,277	1	121,144
		Reg	13,260	758	788	5	17,900
	CW	Raw	41,017	55	30	1	253
		Reg	8,152	52	27	1	178

Table 15: Basic Statistics for the uncapped Data of the Carbon Leader Reef

Facies	Value	Data	Count	Mean	Std. Dev.	Minimum	Maximum
1	cm.g/t	Raw	81,624	2,980	3,536	1	77,236
		Reg	21,237	2,873	2,496	6	41,592
	CW	Raw	81,624	21	19	2	356
		Reg	21,237	24	20	3	249
2a	cm.g/t	Raw	14,150	710	1,120	3	22,246
		Reg	3,176	712	971	3	17,370
	CW	Raw	14,150	30	26	4	247
		Reg	3,176	33	25	4	247
2b	cm.g/t	Raw	5,585	1,846	2,536	1	32,767
		Reg	1,746	1,917	2,104	4	32,767
	CW	Raw	5,585	27	22	8	235
		Reg	1,746	33	23	8	235
3	cm.g/t	Raw	48,644	1,514	2,165	1	67,108
		Reg	9,330	1,569	1,534	4	22,441
	CW	Raw	48,421	22	22	4	332
		Reg	9,287	23	20	4	329
4	cm.g/t	Raw	37,191	1,671	2,954	1	111,256
		Reg	5,366	1,598	1,632	1	35,731
	CW	Raw	27,758	36	28	1	291
		Reg	3,916	36	24	2	213
5	cm.g/t	Raw	86,815	1,738	3,952	1	443,143
		Reg	12,108	1,699	2,121	5	63,154
	CW	Raw	29,033	20	19	1	193
		Reg	4,447	21	16	1	148
6	cm.g/t	Raw	38,068	1,426	3,358	1	246,735
		Reg	6,463	1,377	1,632	5	37,722
	CW	Raw	28,055	15	15	1	167
		Reg	4,980	15	13	1	150
7	cm.g/t	Raw	47,353	1,497	3,272	1	238,238
		Reg	8,397	1,423	1,896	5	53,257
	CW	Raw	18,978	16	12	1	113
		Reg	3,680	16	10	1	100

Histograms and log histograms were generated for each facies zone for each reef on the raw data on gold content are presented in Appendix 1.

The capped values as determined for the cleaned datasets are shown in Table 16 and Table 17 along with the statistics for the capped data for raw and regularised datasets.

Table 16: Basic Statistics for the Capped Regularised and Raw Data for the Middelvlei Reef

Facies	Value	Data	Count	Mean	Std. Dev.	Minimum	Maximum	Capping Value
1	cm.g/t	Raw	6,026	484	488	2	1,931	1,931
		Reg	1,459	459	379	6	1,931	1,931
	CW	Raw	6,026	34	24	8	88	88
		Reg	1,459	37	23	8	88	88
2	cm.g/t	Raw	53,274	811	849	1	3,395	3,395
		Reg	7,833	788	621	3	3,395	3,395
	CW	Raw	51,956	18	14	1	55	55
		Reg	7,688	18	12	1	55	55
3	cm.g/t	Raw	77,941	723	748	1	3,344	3,344
		Reg	13,260	697	540	5	3,344	3,344
	CW	Raw	41,017	55	29	1	115	115
		Reg	8,152	52	27	1	115	115

Table 17: Basic Statistics for the Capped Regularised and Raw Data for the Carbon Leader Reef

Facies	Value	Data	Count	Mean	Std. Dev.	Minimum	Maximum	Capping Value
1	cm.g/t	Raw	81,624	2,756	2,513	1	10,053	10,053
		Reg	21,237	2,684	1,869	6	10,053	10,053
	CW	Raw	81,624	20	13	2	58	58
		Reg	21,237	22	14	3	58	58
2a	cm.g/t	Raw	14,150	636	715	3	2,949	2,949
		Reg	3,176	618	574	3	2,949	2,949
	CW	Raw	14,150	30	23	4	82	82
		Reg	3,176	32	22	4	82	82
2b	cm.g/t	Raw	5,585	1,679	1,757	1	6,919	6,919
		Reg	1,746	1,735	1,420	4	6,919	6,919
	CW	Raw	5,585	26	18	8	71	71
		Reg	1,746	31	19	8	71	71
3	cm.g/t	Raw	48,644	1,382	1,451	1	5,845	5,845
		Reg	9,330	1,426	1,089	4	5,845	5,845
	CW	Raw	48,421	21	17	4	65	65
		Reg	9,287	22	15	4	65	65
4	cm.g/t	Raw	37,191	1,490	1,803	1	7,579	7,579
		Reg	5,366	1,598	1,632	1	7,579	7,579
	CW	Raw	27,758	35	24	1	92	92
		Reg	3,916	34	20	2	92	92
5	cm.g/t	Raw	86,815	1,531	2,095	1	9,641	9,641
		Reg	12,108	1,498	1,308	5	9,641	9,641
	CW	Raw	29,033	19	15	1	57	57
		Reg	4,447	19	13	1	57	57
6	cm.g/t	Raw	38,068	1,249	1,790	1	8,142	8,142
		Reg	6,463	1,228	1,107	5	8,142	8,142
	CW	Raw	28,055	14	11	1	44	44
		Reg	4,980	14	9	1	44	44
7	cm.g/t	Raw	47,353	1,305	1,825	1	8,041	8,041
		Reg	8,397	1,247	1,128	5	8,041	8,041
	CW	Raw	18,978	16	9	1	40	40
		Reg	3,680	16	8	1	40	40

vi. Geostatistics

Variography was conducted on the gold content or cm.g/t for each facies zone for each of the two reefs. Variography was conducted on the capped raw point data as well as the capped regularised data. Channel width variograms were generated as part of this re-estimate, due to the CW errors being corrected. The relevant variograms for each of the facies zones for each of the reefs are presented in Appendix 1. Due to large changes in the database, all variograms were re-generated in 2021, the ranges and search directions compared well with previous variograms generated in 2011, with some variance in the facies where larger data changes were observed. All variograms were generated in normal space, with two spherical structures. The variogram parameters are displayed along with estimation parameters in the proceeding section.

vii. Search Parameters and Estimation Methodology

Due to database updates, all estimates for all facies were rerun in 2021. The estimation procedures and estimation parameters as employed previously by the Mine were employed.

Three separate 2D block models were generated for each reef during the estimation process corresponding to each of the Mineral Resource categories and their associated parameters. The Measured category block models were modelled on a 15 m x 15 m x 1 m block size, using the respective capped point data variogram search distance per facies zone. The search parameters for the Carbon Leader measured model are presented in Table 18.

Table 18: Search Parameters for the Carbon Leader Reef Measured Model

Facies	Value	Direction			Norm. Nugget	Norm. Sill	Structure 2		Samples	
		Dip	Dip Azimuth	Pitch			Major Distance	Semi-major Distance	Min	Max
Facies1	cm.g/t	0	90	120	0.57	0.89	151.4	124.2	15	40
Facies2a	cm.g/t	0	90	150	0.58	0.02	99.88	98.78	15	40
Facies2b	cm.g/t	0	90	0	0.55	0.09	226.9	160.8	15	40
Facies3	cm.g/t	0	90	0	0.54	0.23	180.5	102.1	15	40
Facies4	cm.g/t	0	90	0	0.61	0.19	170.5	123.9	15	40
Facies5	cm.g/t	0	90	0	0.62	0.03	132.6	109.4	15	40
Facies6	cm.g/t	0	90	165	0.71	0.03	133.9	108.6	15	40
Facies7	cm.g/t	0	90	165	0.75	0.02	150.1	134.3	15	40
Facies1	CW	0	90	120	0.32	0.42	134.1	183.4	15	40
Facies2a	CW	0	90	150	0.21	0.47	154.1	131.5	15	40
Facies2b	CW	0	90	0	0.24	0.18	161.6	77.22	15	40
Facies3	CW	0	90	0	0.27	0.25	161.3	137.7	15	40
Facies4	CW	0	90	0	0.25	0.30	130.8	126	15	40
Facies5	CW	0	90	0	0.19	0.30	186.8	105.8	15	40
Facies6	CW	0	90	165	0.28	0.36	209.6	156.1	15	40
Facies7	CW	0	90	165	0.30	0.31	156.1	137.7	15	40

The search parameters for the Middelvlei Measured model are presented in Table 19.

Table 19: Search Parameters for the Middelvlei Reef Measured Model

Facies	Value	Direction			Norm. Nugget	Norm. Sill	Structure 2		Samples	
		Dip	Dip Azimuth	Pitch			Major Distance	Semi-major Distance	Min	Max
Facies1	cm.g/t	0	90	30	0.61	0.13	148.6	61.79	15	40
Facies2	cm.g/t	0	90	0	0.44	0.20	198.6	152.2	15	40
Facies3	cm.g/t	0	90	150	0.47	0.25	131.3	123	15	40
Facies1	CW	0	90	30	0.17	0.30	90.04	74.95	15	40
Facies2	CW	0	90	0	0.24	0.44	215.4	153.6	15	40
Facies3	CW	0	90	151	0.22	0.27	159.1	94.42	15	40

The Indicated category block models were modelled on a 30 m x 30 m block size, using the respective capped regularised data variogram search distance per facies zone. The search parameters for the Carbon Leader Indicated model are presented in Table 20.

Table 20: Search Parameters for the Carbon Leader Reef Indicated Model

Facies	Value	Direction			Norm. Nugget	Norm. Sill	Structure 2		Samples	
		Dip	Dip Azimuth	Pitch			Major Distance	Semi-major Distance	Min	Max
Facies1	cm.g/t	0	90	120	0.52	0.14	225	216	10	25
Facies2a	cm.g/t	0	90	120	0.54	0.10	267	155	10	25
Facies2b	cm.g/t	0	90	120	0.48	0.05	147	126	10	25
Facies3	cm.g/t	0	90	120	0.53	0.25	330	298	10	25
Facies4	cm.g/t	0	90	138	0.42	0.83	237	224	10	25
Facies5	cm.g/t	0	90	0	0.34	0.15	298	183	10	25
Facies6	cm.g/t	0	90	165	0.52	0.10	241	95	10	25
Facies7	cm.g/t	0	90	150	0.51	0.08	225	169	10	25
Facies1	CW	0	90	62	0.35	0.37	319	89	10	25
Facies2a	CW	0	90	120	0.36	0.37	291	303	10	25
Facies2b	CW	0	90	120	0.32	0.09	135	119	10	25
Facies3	CW	0	90	120	0.32	0.19	210	213	10	25
Facies4	CW	0	90	157	0.09	0.43	273	154	10	25
Facies5	CW	0	90	0	0.11	0.51	305	177	10	25
Facies6	CW	0	90	165	0.15	0.43	217	163	10	25
Facies7	CW	0	90	150	0.23	0.27	165	149	10	25

The search parameters for the Middelvlei Indicated model are presented in Table 21.

Table 21: Search Parameters for the Middelvlei Reef Indicated Model

Facies	Value	Direction			Norm. Nugget	Norm. Sill	Structure 2		Samples	
		Dip	Dip Azimuth	Pitch			Major Distance	Semi-major Distance	Min	Max
Facies1	cm.g/t	0	90	30	0.48	0.30	222	61	10	25
Facies2	cm.g/t	0	90	0	0.20	0.38	365	205	10	25
Facies3	cm.g/t	0	90	150	0.38	0.32	217	167	10	25
Facies1	CW	0	90	0	0.08	0.15	187	157	10	25
Facies2	CW	0	90	0	0.13	0.34	211	161	10	25
Facies3	CW	0	90	151	0.09	0.18	209	179	10	25

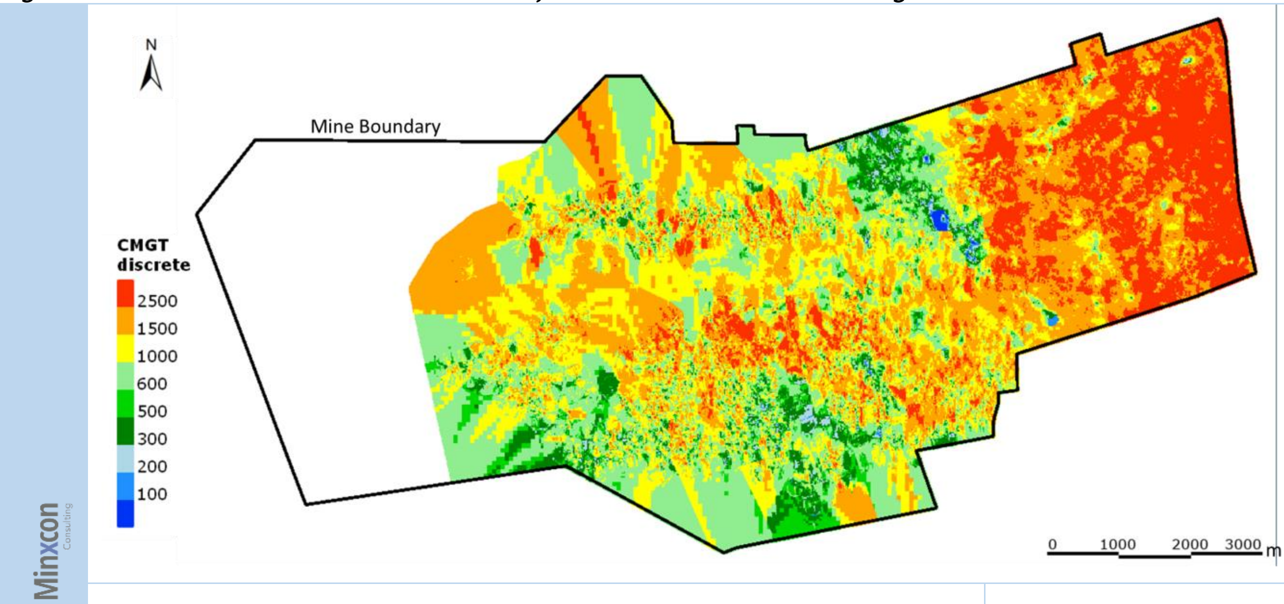
The Inferred category block models were modelled on a 60 m x 60 m x 1 m block size, using the respective capped regularised data variogram search distance per facies zone. The search distances were exaggerated to 3,000 m in order to ensure the entire lease area was covered. All other search parameters were the same as utilised for the Indicated models.

Ordinary kriging was utilised for estimating cm.g/t as well as CW.

The extent of the 15 m x15 m estimate was employed as the Measured model, the extents of the 30 m x 30 m regularised model as the Indicated model, whilst the remainder of the facies as informed by the 60 m x 60 m was defined as Inferred. All three models per reef were then added together to generate final reef block models. The extent of the classification compared very well with the previous classification employed at Blyvoor, with minor changes where data was corrected and removed.

The final combined Carbon Leader block model filtered on cm.g/t is illustrated in Figure 34.

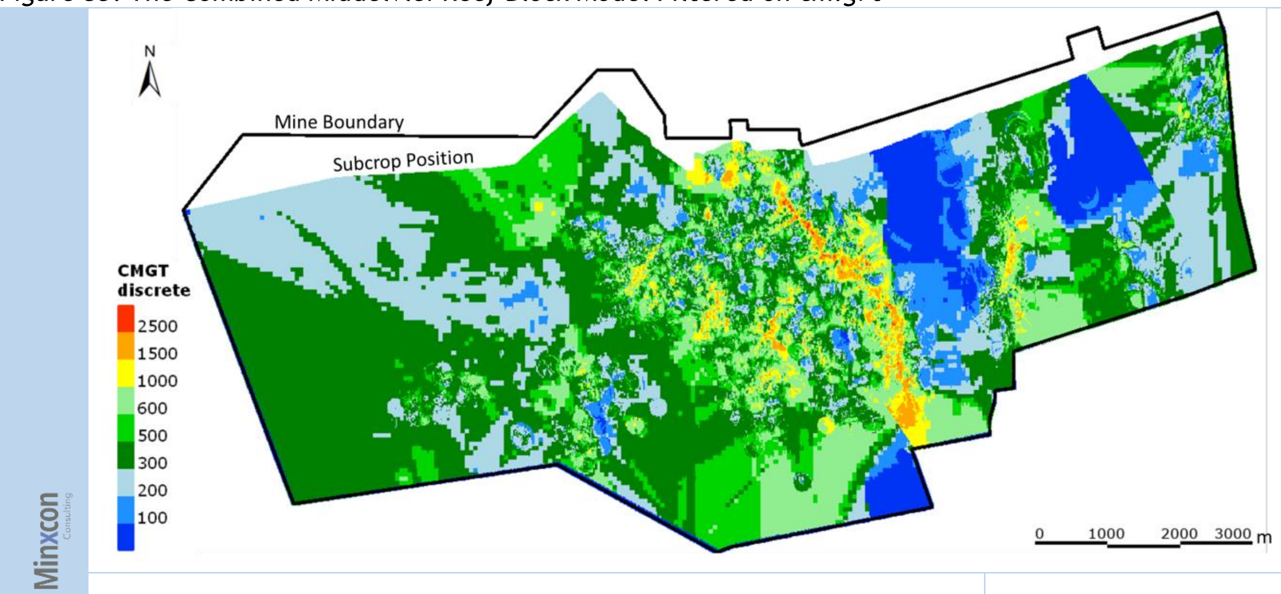
Figure 34: The Combined Carbon Leader Reef Block Model Filtered on cm.g/t



The Combined Carbon Leader Block Model Filtered on cm.g/t	February 2021

The final Middelvlei block model filtered on cm.g/t is illustrated in Figure 35.

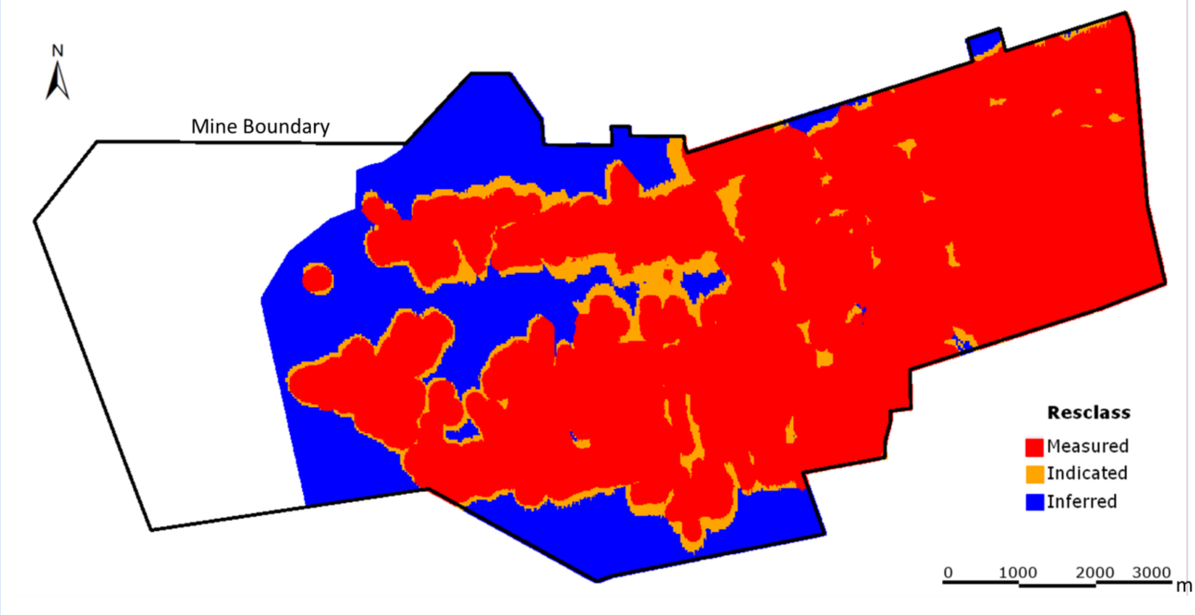
Figure 35: The Combined Middelvlei Reef Block Model Filtered on cm.g/t



The Combined Middelvlei Block Model Filtered on cm.g/t	February 2021

The Mineral Resource classification for the Carbon Leader is depicted in Figure 36.

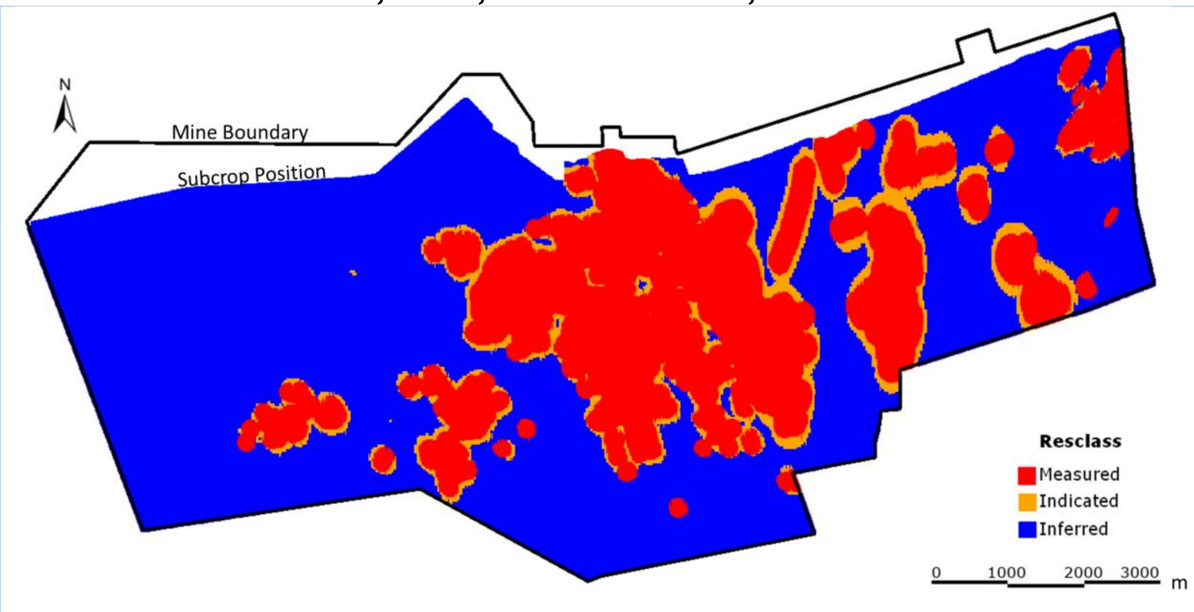
Figure 36: The Mineral Resource Classification for the Carbon Leader Reef



The Mineral Resource Classification for the Carbon Leader Reef	February 2021

The Mineral Resource classification for the Middelvlei is depicted below in Figure 37.

Figure 37: The Mineral Resource Classification for the Middelvlei Reef



The Mineral Resource Classification for the Middelvlei Reef	February 2021

III. Reporting of Mineral Resources

An MS Excel™ block listing was provided by Blyvoor Mine. The block listing was generated from 2D closed polygons representing unmined areas. The 2D polygons were depleted with polygons representing stoping activity between 2011 and 2013 and was undated in 2021 where previous pillars were now included in the mineable portion of the block listing. Mineral Resource Classification was assigned to the blocks that were previously used in the Mineral Resource Reporting. However, this was reviewed and updated for the latest estimate. Minxcon reviewed the block listing, for Middelvlei Reef, changes were made to the block listing, including splitting of 34 blocks where they significantly overlapped both Indicated and Inferred categories. In addition, 11 blocks were downgraded from Indicated to Inferred where they plotted outside the Indicated Classification. The area, tonnage and gold accumulation were calculated manually in MS Excel™ from the block model. The MS Excel™ block listing as provided by Blyvoor Mine was utilised to define the portion of unmined ground to be classified as mineable or as boundary pillar. Only blocks classified as "Mineable" were reported as Mineral Resources. Blocks with an area of less than 250 m^2 were excluded from the Mineral Resource.

The reporting of Mineral Resources made use of the Mineral Resource Classification derived from the block model to define resource categories. Previous Resource Reporting has made use of the block listings classification which are originally derived from the Resource model. Minxcon did observe some inaccuracy where block listings include Measured, Indicated and Inferred Mineral Resources but the larger block was classified as Indicated. In addition, a single area with an average gold accumulation value per block was determined. It was observed, especially where the blocks are large and the grade within the block variable, that the total block grade does not accurately represent the variability present in the grade. Minxcon determined area and gold accumulation per estimated block (15 m X 15 m) and determined if the block was above cut-off per individual block. A reconciliation of the two methods is discussed in the following section. A mean dip correction factor representing a global mean dip of 22°was utilised to calculate a true dip related polygon area. A diluted stoping width of 117 cm was applied to calculate a true volume per polygon and a mean Specific Gravity ("SG") of 2.737 t/m^3 was utilised to convert the volume to tonnes. The SG of 2.737 t/m^3 is based upon historical Blyvooruitzicht laboratory testwork. A degree of geological loss is already accounted for in the blocking process, where geological losses attributable to faulting and intrusives are excluded. Historically, an additional geological loss of 25% was applied to the Carbon Leader resource blocks located in older areas occurring above 25 Level. However, for the re-estimate, the geological loss was re-assessed and changed to 5% for Measured, 10% for indicated and 15% for Inferred Mineral Resource Categories. These geological losses would take cognisance of any further unforeseen faulting and possible pillars that would be required.

Some minor disagreement between mining and sampling is observed. This may be as a result of the way the digitising of the sampling was performed, or the way the sampling data was captured. However, these are minor and will not materially affect the mine planning/schedule. The geological loss applied to the Measured Mineral Resources for both reefs accounts for this. All larger sample errors were cleaned, and data removed where deemed erroneous.

The Mineral Resources are report as inclusive of Mineral Reserves.

The Mineral Resources for the Carbon Leader Reef for Blyvoor Mine as at 1 March 2021 are presented in Table 22, Table 23 and Table 24.

Table 22: Mineral Resources for the Carbon Leader Reef for Blyvoor Mine as at 1 March 2021

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Measured	117	16.66	10.71	1,253	50	7.15	24.95	178,458	5.74
Indicated	117	2.45	8.67	1,014	50	1.05	20.19	21,190	0.68
Total M&I	**117**	**19.11**	**10.45**	**1,222**	**50**	**8.20**	**24.34**	**199,648**	**6.42**

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Inferred	117	8.88	8.36	978	50	3.81	19.50	74,291	2.39

Notes:

1. Mineral Resources are reported at a 300 cm.g/t (2.56 g/t over 117 cm stoping width equivalent) pay limit.
2. Depletions have been applied.
3. Boundary pillars have been excluded from the Mineral Resources, reported inclusive of internal pillars and shaft pillars.
4. A geological loss of 5% for Measured, 10% for Indicated and 15% for Inferred Mineral Resources has been applied.
5. All Mineral Resources are 100% attributable to the Company and occur within the mining right perimeter.

The Mineral Resources for the Middelvlei Reef for Blyvoor Mine as at 1 March 2021 are presented in Table 23.

Table 23: Mineral Resources for the Middelvlei Reef for Blyvoor Mine as at 1 March 2021

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Measured	117	25.29	5.06	592	65	14.41	8.87	127,854	4.11
Indicated	117	5.69	4.63	541	65	3.19	8.25	26,300	0.85
Total M&I	**117**	**30.97**	**4.98**	**582**	**65**	**17.60**	**8.76**	**154,153**	**4.96**

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Inferred	117	70.89	3.90	457	65	39.65	6.98	276,776	8.90

Notes:

1. Mineral Resources are reported at a 300 cm.g/t (2.56 g/t over 117 cm stoping width equivalent) pay limit.
2. Depletions have been applied.
3. Boundary pillars have been excluded from the Mineral Resources, reported inclusive of internal pillars and shaft pillars.
4. A geological loss of 5% for Measured, 10% for Indicated and 15% for Inferred Mineral Resources has been applied.
5. All Mineral Resources are 100% attributable to the Company and occur within the mining right perimeter.

The combined total Mineral Resources for Blyvoor Mine as at 1 March 2021 are presented in Table 24.

Table 24: Combined Total Mineral Resources for Blyvoor Mine as at 1 March 2021

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Measured	117	41.95	7.30	854	60	21.56	14.21	306,311	9.85
Indicated	117	8.13	5.84	683	61	4.24	11.21	47,489	1.53
Total M&I	**117**	**50.08**	**7.06**	**827**	**60**	**25.80**	**13.71**	**353,801**	**11.37**

Mineral Resource Classification	Stope Width	Stope Tonnes	Stope Grade	Stope Content	Mining Cut Width	Mining Cut Tonnes	Mining Cut Grade	Gold Content	
	cm	Mt	g/t	cm.g/t	cm	Mt	g/t	kg	Moz
Inferred	117	79.77	4.40	515	64	43.46	8.08	351,067	11.29

Notes:

1. Mineral Resources are reported at a 300 cm.g/t (2.56 g/t over 117 cm stoping width equivalent) pay limit.
2. Depletions have been applied.
3. Boundary pillars have been excluded from the Mineral Resources, reported inclusive of internal pillars and shaft pillars.
4. A geological loss of 5% for Measured, 10% for Indicated and 15% for Inferred Mineral Resources has been applied.
5. All Mineral Resources are 100% attributable to the Company and occur within the mining right perimeter.

The combined total Mineral Resources divided by shaft are shown in Table 25. The water level is also tabulated, relative to Level 27, which is the operating level immediately above the water level. Mining width of 65 cm is applied to Middelvlei Reef and 50 cm to Carbon Leader Reef, and a stope width of 117 cm is applied to both reefs.

Table 25: Mineral Resources Displayed by Shaft and Water Level

Shaft	Water Level	Reef	Mineral Resource Classification	Stope Tonnes	Stope Grade	Mining Cut Tonnes	Mining Cut Grade	Gold Content
				Mt	g/t	Mt	g/t	Moz
No. 4	Above	CL	M&I	1.40	17.79	0.60	41.50	0.80
		MR	M&I	7.20	4.82	4.01	8.66	1.12
	Above Total			**8.60**	**6.93**	**4.61**	**12.94**	**1.92**
	Below	CL	M&I	0.22	14.46	0.10	33.84	0.10
	Below Total			**0.22**	**14.46**	**0.10**	**33.84**	**0.10**
No. 4 Total				***8.83***	***7.12***	***4.70***	***13.36***	***2.02***
No. 5	Above	CL	M&I	4.48	11.90	1.91	27.85	1.71
		MR	M&I	5.32	4.76	3.02	8.38	0.81
	Above Total			**9.80**	**8.03**	**4.93**	**15.94**	**2.53**
	Below	CL	M&I	9.12	8.46	3.92	19.68	2.48
		MR	M&I	6.98	5.52	4.05	9.52	1.24
	Below Total			16.11	7.19	7.97	14.52	3.72
No. 5 Total				***25.90***	***7.50***	***12.91***	***15.06***	***6.25***
No. 6	Above	CL	M&I	3.88	10.56	1.67	24.57	1.32
		MR	M&I	11.38	4.85	6.47	8.54	1.78
	Above Total			15.26	6.30	8.14	11.82	3.09
	Below	CL	M&I	0.00	14.27	0.00	33.39	0.00
		MR	M&I	0.08	3.82	0.05	6.79	0.01
	Below Total			0.09	4.20	0.05	7.52	0.01
No. 6 Total				***15.35***	***6.29***	***8.19***	***11.80***	***3.10***
Grand Total				**50.08**	**7.06**	**25.80**	**13.71**	**11.37**

Shaft	Water Level	Reef	Mineral Resource Classification	Stope Tonnes	Stope Grade	Mining Cut Tonnes	Mining Cut Grade	Gold Content
				Mt	g/t	Mt	g/t	Moz
No. 4	Above	MR	Inferred	11.04	4.12	6.13	7.42	1.46
	Below	MR	Inferred	0.29	2.84	0.16	5.11	0.03
No. 4 Total				***11.33***	***4.09***	***6.30***	***7.36***	***1.49***
No. 5	Above	CL	Inferred	0.23	9.87	0.10	23.10	0.07
		MR	Inferred	6.47	3.83	3.60	6.88	0.80
	Above Total			**6.70**	**4.04**	**3.70**	**7.31**	**0.87**
	Below	CL	Inferred	7.30	7.81	3.13	18.21	1.83
		MR	Inferred	22.63	4.40	12.83	7.76	3.20
	Below Total			29.93	5.23	15.97	9.81	5.04
No. 5 Total				***36.63***	***5.02***	***19.66***	***9.34***	***5.91***
No. 6	Above	CL	Inferred	1.35	11.08	0.58	25.82	0.48
		MR	Inferred	29.32	3.48	16.29	6.25	3.28
	Above Total			30.67	3.81	16.87	6.93	3.76
	Below	MR	Inferred	1.14	3.64	0.63	6.55	0.13
No. 6 Total				***31.81***	***3.80***	***17.50***	***6.91***	***3.89***
Grand Total				**79.77**	**4.40**	**43.46**	**8.08**	**11.29**

Notes:

1. Mineral Resources are reported at a 300 cm.g/t (2.56 g/t over 117 cm stoping width equivalent) pay limit.
2. Depletions have been applied.
3. Boundary pillars have been excluded from the Mineral Resources, reported inclusive of internal pillars and shaft pillars.
4. A geological loss of 5% for Measured, 10% for Indicated and 15% for Inferred Mineral Resources has been applied.
5. All Mineral Resources are 100% attributable to the Company and occur within the mining right perimeter.

The Mineral Resources are reported as inclusive of shaft pillars: these are tabulated separately in Table 26.

Table 26: Mineral Resources Falling within the Shaft Pillars

Shaft	Reef	Mineral Resource Classification	Stope Tonnes	Stope Grade	Mining Cut Tonnes	Mining Cut Grade	Gold Content
			Mt	g/t	Mt	g/t	Moz
No. 5	CL	1.Measured	0.86	5.74	0.37	13.43	0.16
		2.Indicated	0.23	5.95	0.10	13.92	0.04
	CL Total		**1.09**	**5.79**	**0.46**	**13.54**	**0.20**
	MR	1.Measured	0.40	5.21	0.22	9.37	0.07
		2.Indicated	0.07	4.21	0.04	7.58	0.01
	MR Total		**0.48**	**5.06**	**0.26**	**9.10**	**0.08**
No. 5 Total			***1.56***	***5.56***	***0.73***	***11.93***	***0.28***
No. 6	CL	1.Measured	0.26	15.42	0.11	36.08	0.13
		2.Indicated	0.00	12.40	0.00	29.03	0.00
	CL Total		**0.26**	**15.37**	**0.11**	**35.96**	**0.13**
	MR	1.Measured	0.27	4.36	0.15	7.81	0.04
		2.Indicated	0.06	3.42	0.04	6.15	0.01
	MR Total		**0.33**	**4.18**	**0.19**	**7.49**	**0.05**
No. 6Total			***0.60***	***9.09***	***0.30***	***18.15***	***0.17***
Grand Total			**2.16**	**6.54**	**1.03**	**13.73**	**0.45**

Shaft	Reef	Mineral Resource Classification	Stope Tonnes	Stope Grade	Mining Cut Tonnes	Mining Cut Grade	Gold Content
			Mt	g/t	Mt	g/t	Moz
No. 5	MR	3.Inferred	0.36	4.06	0.20	7.29	0.05
No. 6	MR	3.Inferred	0.03	3.06	0.02	5.50	0.00
Grand Total			**0.39**	**3.98**	**0.22**	**7.16**	**0.05**

i. Reconciliation of Mineral Resource Block Model

Since the last Mineral Resource estimation, changes include the removal of erroneous data and additional surface drillholes added, as well as samples that were incorrectly tagged were added to the dataset. The removal of erroneous CW was also performed, as was done with previous estimates. The estimation methodology and parameters remained unchanged, with some changes to variography and estimated grades resulting from the change in data. In addition, the resource was reported directly from the classification derived from the block model, as opposed to the block listing. A check of the block listing revealed that there was some discrepancy between the Mineral Resource Classification assigned to the block listing and the Resource classification derived from the block model in previous versions of the resource estimate. It was thus deemed more accurate to utilise the block model only for Mineral Resource classification. Previous estimations also made use of the total area for an area calculation and the classification of the total block as either above or below cut-off, while the preferred method is to calculate area per estimated block (15 m x 15 m) and assign cut-off per individual block. The result is the overall area above cut-off is smaller than when calculated from the block listing, while the grade derived above cut-off is higher from the block model.

It was thus important to compare the effect that each of these factors has on the Resource tabulations.

Waterfall graphs for the total Mineral Resource ounces and grade of Middelvlei reef are shown in Figure 38 and Figure 39 whilst Measured and Indicated comparisons are shown in Figure 40 and Figure 41. To determine the variability resulting from the change in data and re-estimation, the 2021 estimate was reported utilising the previous block listing, with the same classification and exact same reporting methodology, thus only the data change is quantified. To determine the effect of the updated and cleaned block listing strings (downgrades, pillar inclusions etc.), the 2021 estimate was reported with the updated block listing, utilising the same reporting methodology as previously employed (updated strings). The reporting resolution was improved from 2018 to 2021 in that the area and cut-off was calculated per estimated block as opposed to averaged for a larger block as part of the block listing, the effect of this was tested in the reporting resolution. The dip previously employed for dip corrections (20.5°) was revised to 22° after discussions with the previous Mineral Resource Manager, Mr D. Whittaker, who from project knowledge deems this to be a more appropriate dip to use. As part of reviewing the block listings, codes within the listings including, "Not in Resource", "below 2g/t" and pillars (excluding boundary pillars) were included as mineable (Resources are reported inclusive of internal pillars and shaft pillars). In the waterfall charts this is shown as "Mineable update". All isolated blocks <250 m^2 were removed from resources, this had a minor effect on grade and tonnage. The update of the Geological Losses also had a large effect on Middelvlei Reef, where previously no geological loss was applied.

Figure 38: Ounce Waterfall Chart for Middelvlei Reef for Total Resource

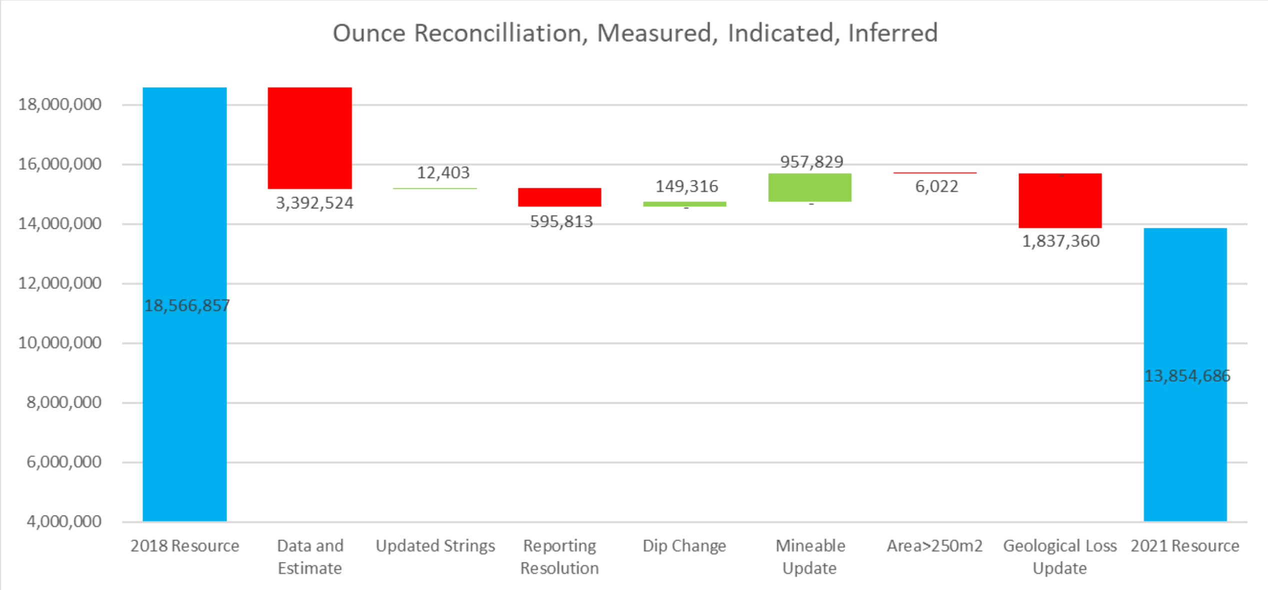
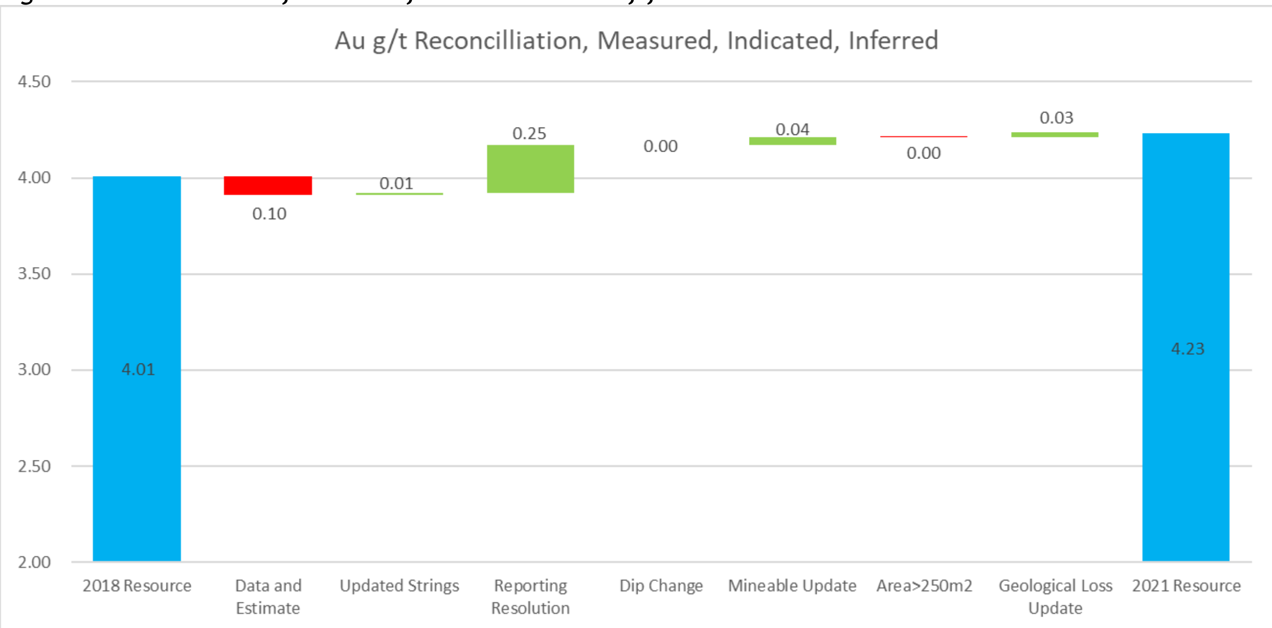


Figure 39: Grade Waterfall Chart for Middelvlei Reef for Total Resource



The change just on Measured and Indicated is also shown to visualise the difference for those categories Figure 40, Figure 41.

Figure 40: Ounce Waterfall Chart for Middelvlei Reef for Measured and Indicated

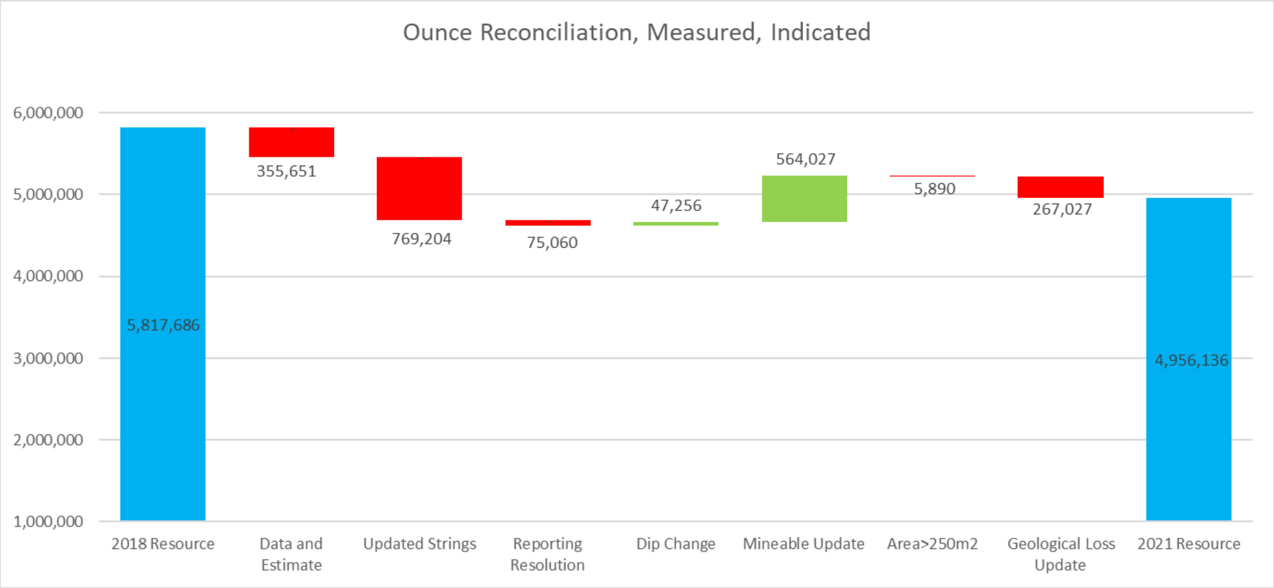
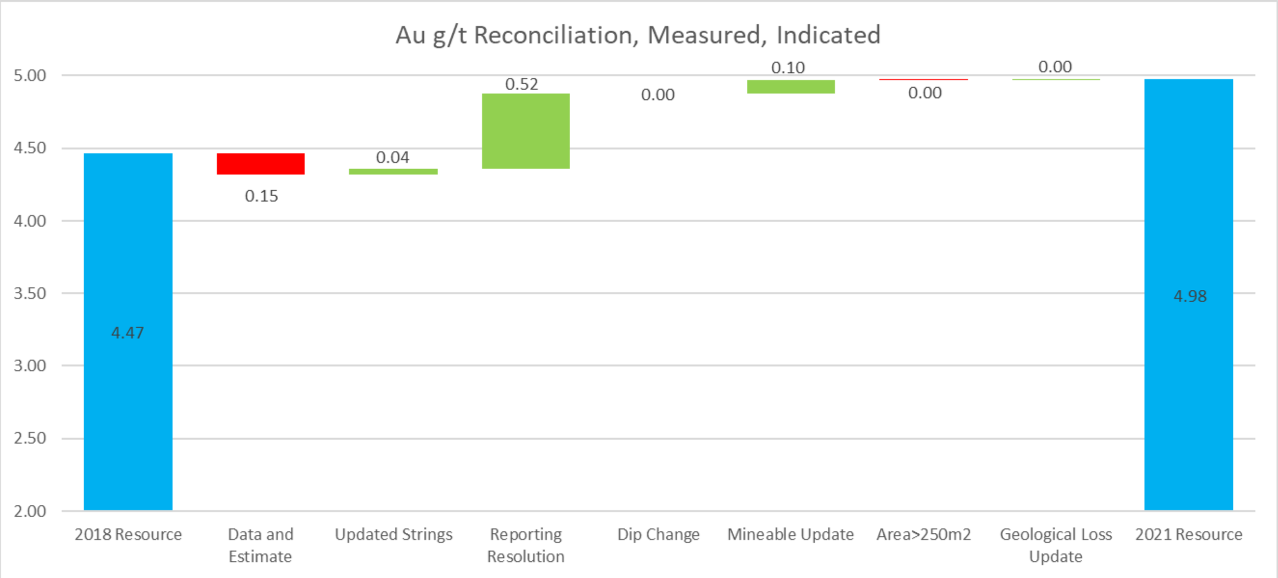


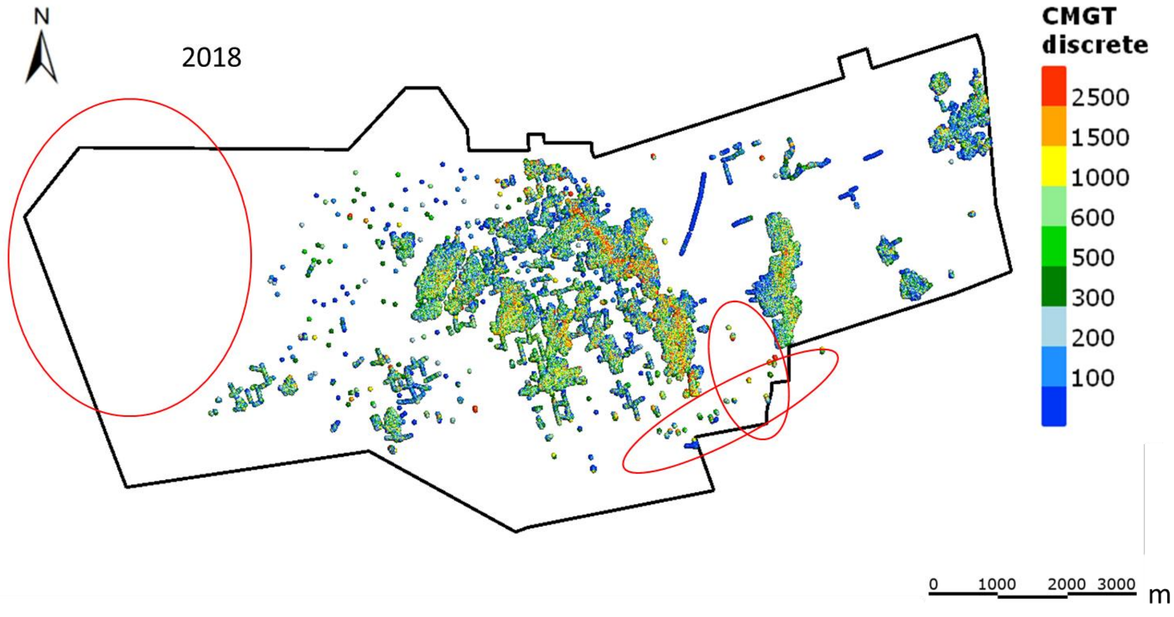
Figure 41: Grade Waterfall Chart for Middelvlei Reef for Measured and Indicated



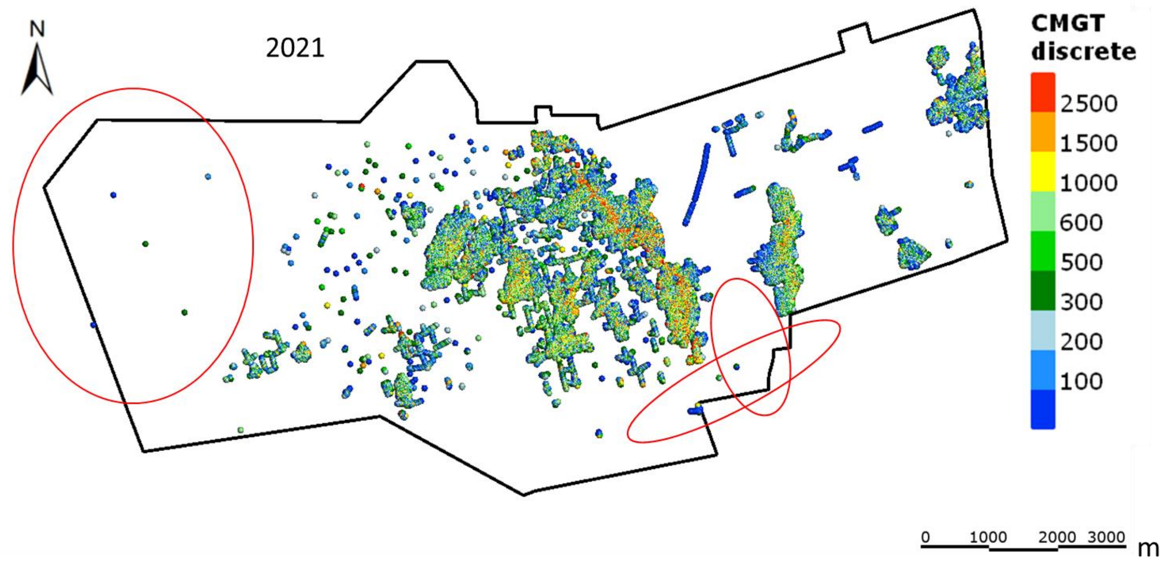
From the reconciliation, it is apparent that the change in estimation database for Middelvlei Reef had the most significant effect on the overall ounces, this includes the inclusion of surface drillholes that were previously not included to the west of the estimated area, as well as the exclusion of erroneous data that was increasing the grade to the south east of the mine. This same data update had the effect of a decrease in grade. The bulk of the changes occurred within the Inferred areas, where the change in sample database has a larger effect on the sparser data distribution. The biggest change from the update to strings was from the downgrading from Indicated to Inferred (due to the data changes), as well as splitting of larger blocks into Indicated and Inferred. The methodology of calculating area and defining cut-off per estimated block yielded a higher grade and showed a large decrease in the Inferred areas where larger blocks are the most affected by this update to the reporting resolution. The Middelvlei Reef database is shown in Figure 42, and indicates the two areas that had the most significant change on the estimate. The drillholes in the west informed an area that was previously interpolated from samples much further away and thus the estimate changes, while in the area to the south east, some erroneous high-grade samples were excluded which had a large influence on the estimate.

Figure 42: Middelvlei Sample Database Showing Significant Changes from 2018 to 2021

Middelvlei Reef Sample Database 2018, Areas of Significant Change Encircled



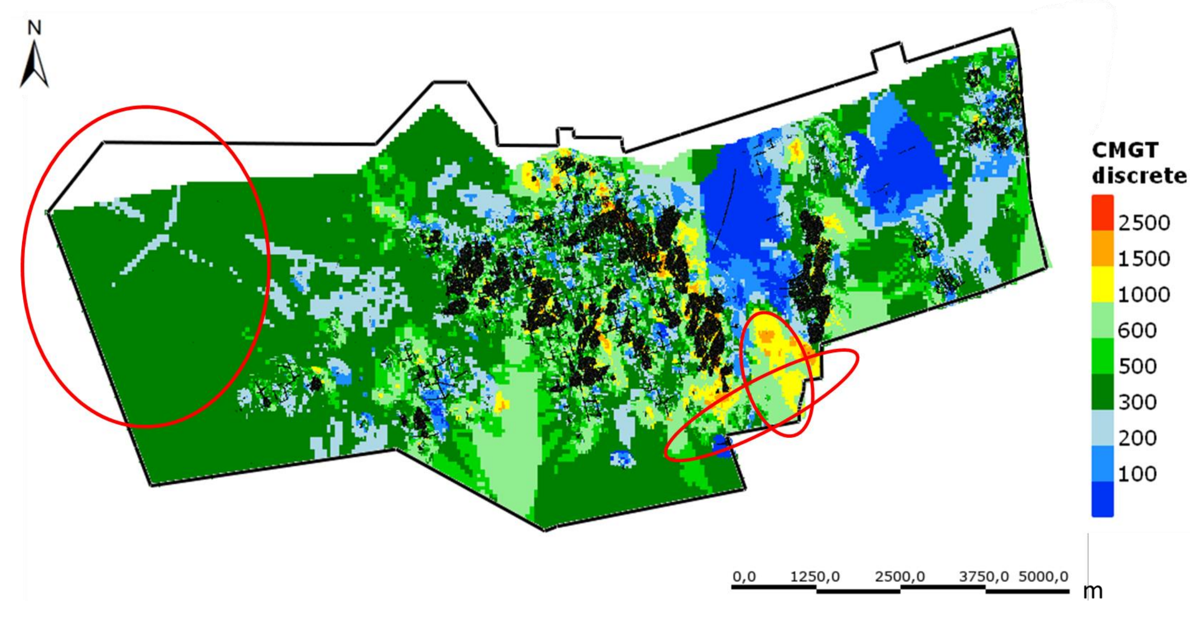
Middelvlei Reef Sample Database 2021, Areas of Significant Change Encircled



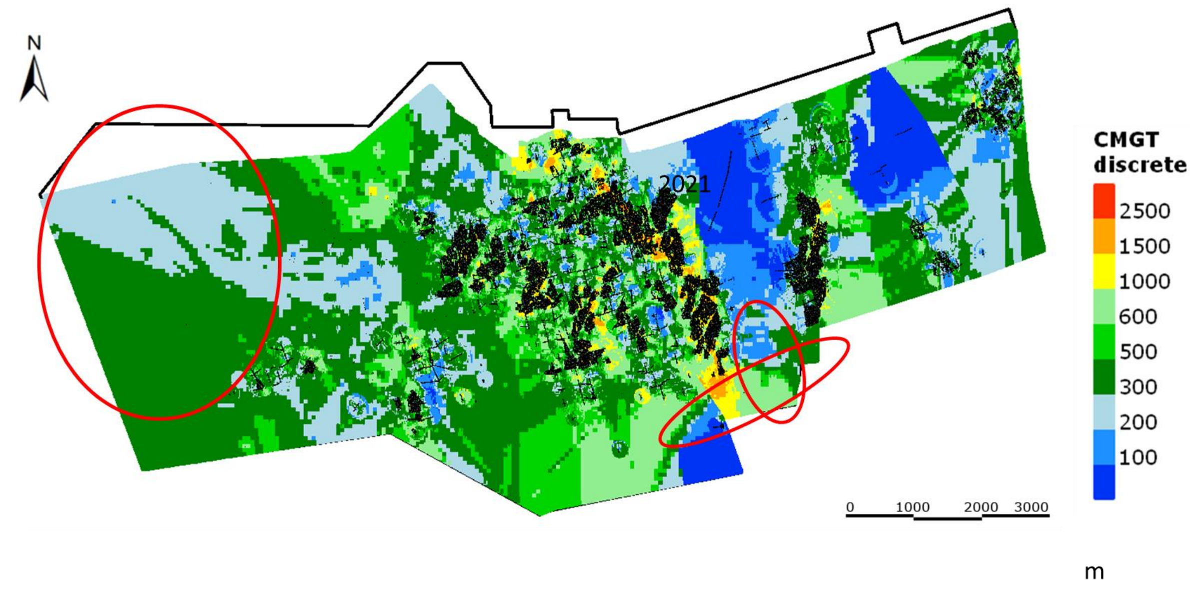
Middelvlei Sample Database Showing Significant Changes from 2018 to 2021	February 2021

Figure 43: Middelvlei Estimates showing Changes From 2018 to 2021

Middelvlei Reef Estimate 2018, Areas of Significant Change Encircled



Middelvlei Reef Estimate 2021, Areas of Significant Change Encircled



Middelvlei Estimates showing Changes From 2018 to 2021	February 2021

For Middelvlei Reef, the change in dip and exclusion of small, isolated Resource blocks had a very minor effect on the tonnage or grade. While the update to the mineable codes, and inclusion of areas that were previously excluded had a significant increase to Measured, Indicated and Inferred. The addition of geological loss to Middelvlei Reef did also have a significant effect, as previously only a 1% loss to Measured was applied.

Waterfall graphs for the total Resource of Carbon Leader reef are shown in Figure 44 and Figure 45, whilst Measured and Indicated comparisons are shown in Figure 46 and Figure 47. To determine the change as the result of the change in data and re-estimation, the 2021 estimate was reported utilising 2017 block listings, with the same classification and exact same reporting methodology, thus only the data change is quantified.

To determine the effect of the updated and cleaned block listing strings (downgrades, pillar inclusions etc.), the 2021 estimate was reported with the updated block listing, utilising the same reporting methodology as previously employed (updated strings). The reporting resolution was improved from 2018 to 2021 in that the area and cut-off was calculated per estimated block as opposed to averaged for a larger block as part of the block listing, the effect of this was tested in the reporting resolution. The dip previously employed for dip corrections (20.5°) was revised to 22° after discussions with the previous Mineral Resource Manager, Mr Whittaker, who from project knowledge deems this to be a more appropriate dip to use. As part of reviewing the block listings, codes within the listings including, "Not in Resource", "below 2g/t" and pillars (excluding boundary pillars) were included as mineable (Resources are reported inclusive of internal pillars and shaft pillars). In the waterfall charts this is shown as "Mineable update". All isolated blocks < $250m^2$ were removed from resources, this had a minor effect on grade and tonnage. The update of the geological losses in Carbon Leader Reef had a minor effect, as a geological loss of 25% over all Mineral Resource categories is replaced by 5%, 10% and 15%.

Figure 44: Ounce Waterfall Chart for Carbon Leader Reef for Total Mineral Resource

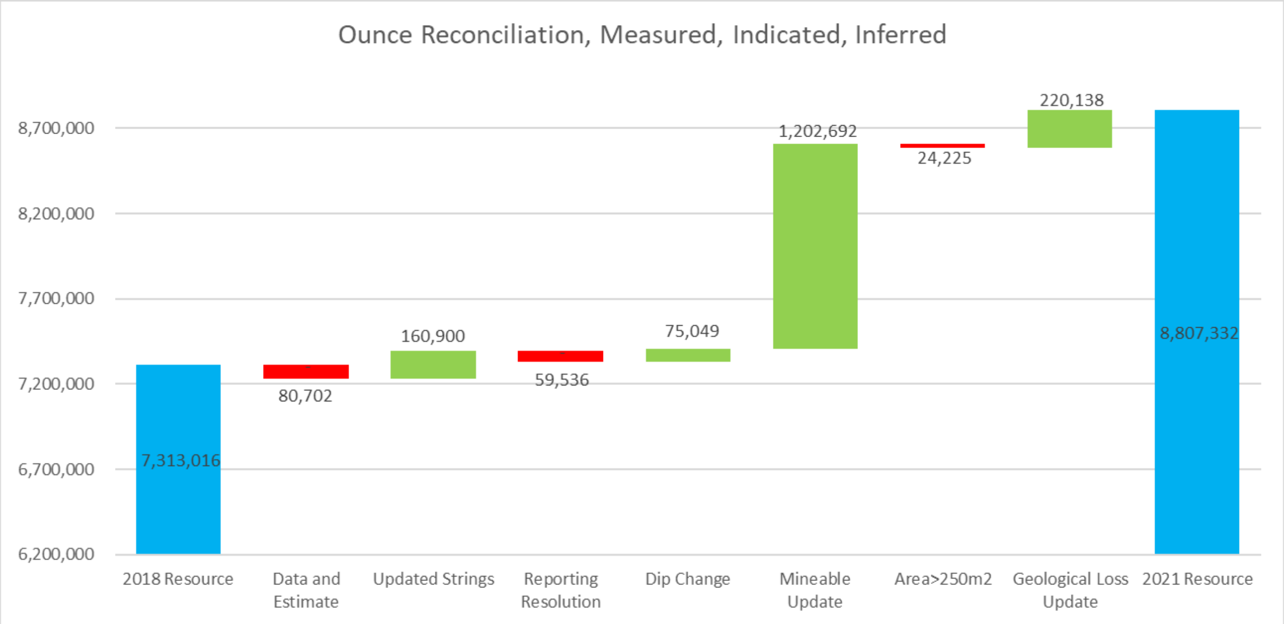


Figure 45: Grade Waterfall Chart for Carbon Leader Reef for Total Mineral Resource

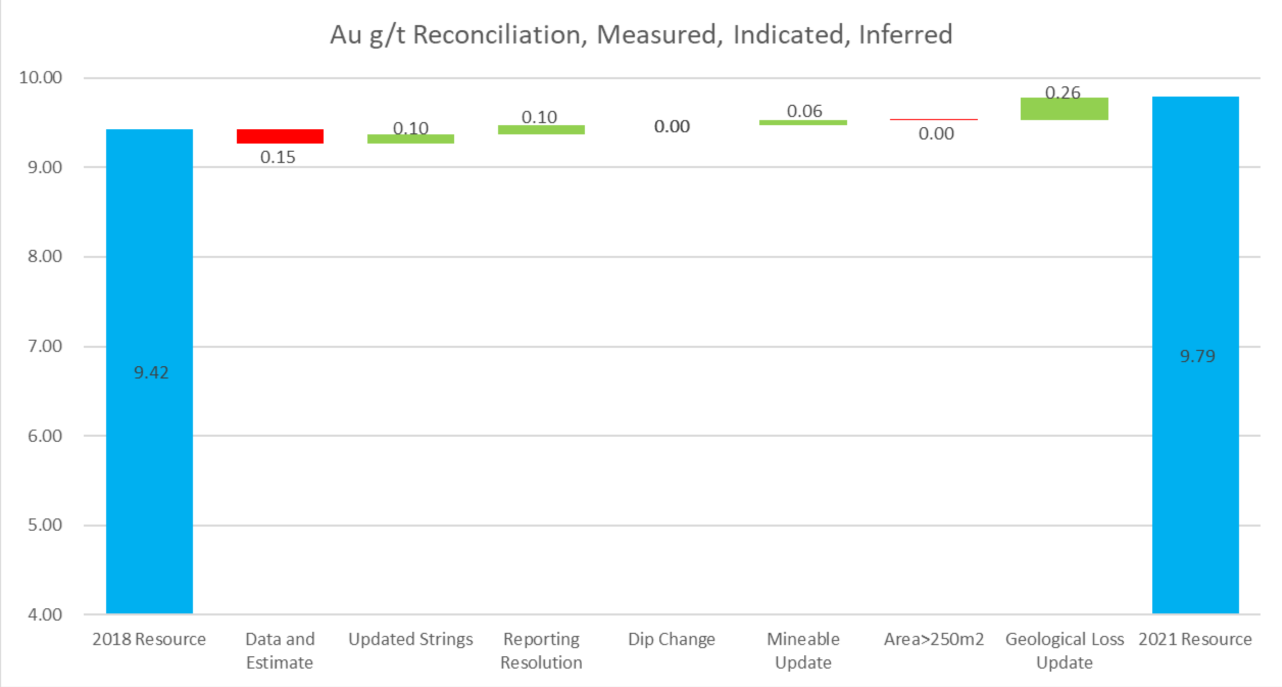


Figure 46: Ounce Waterfall Chart for Carbon Leader Reef for Measured and Indicated Mineral Resources

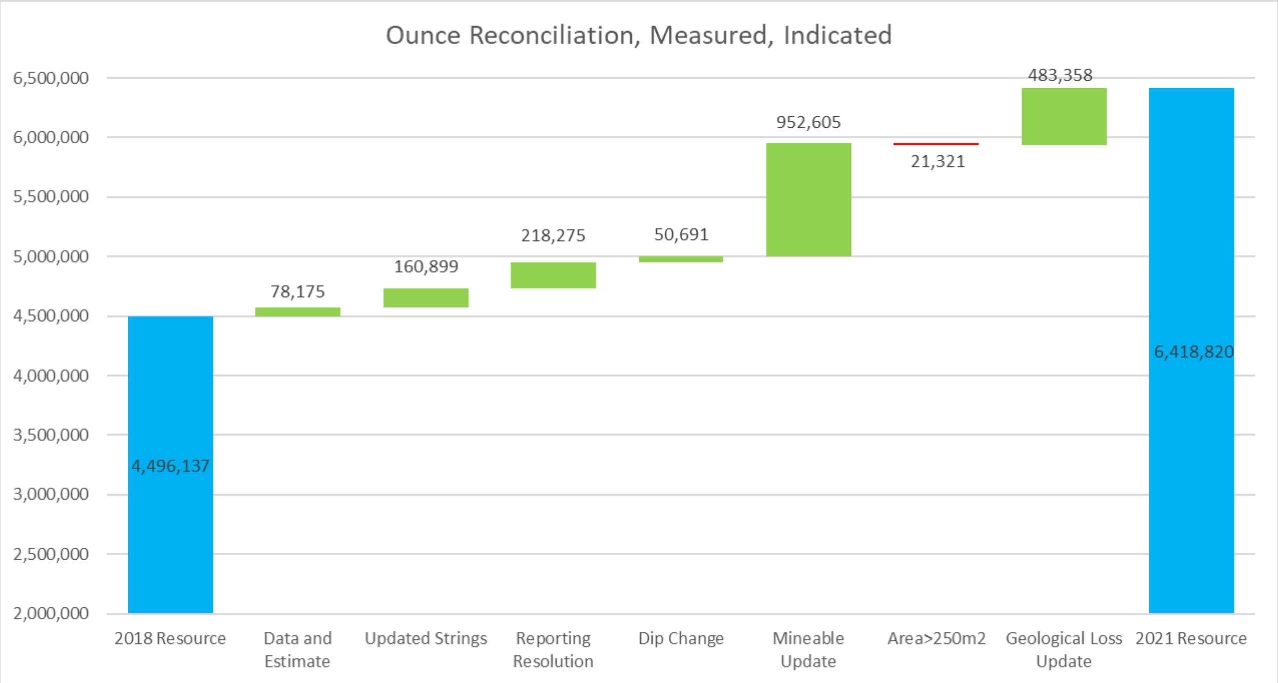
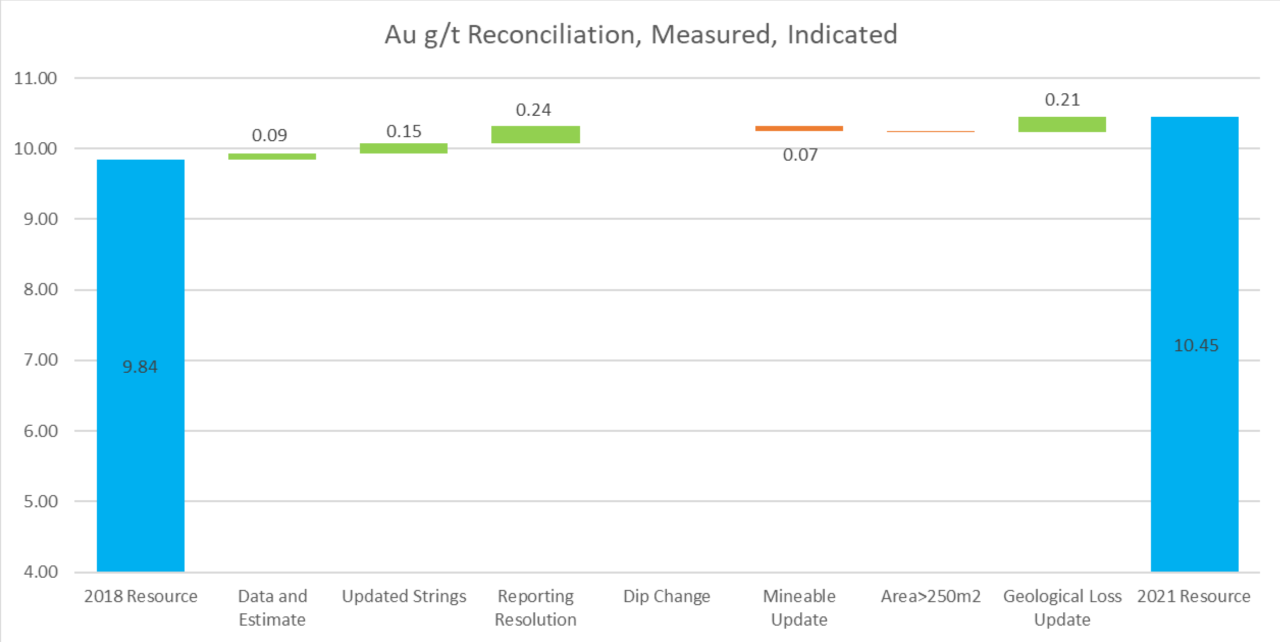


Figure 47: Grade Waterfall Chart for Carbon Leader Reef for Measured and Indicated Mineral Resources

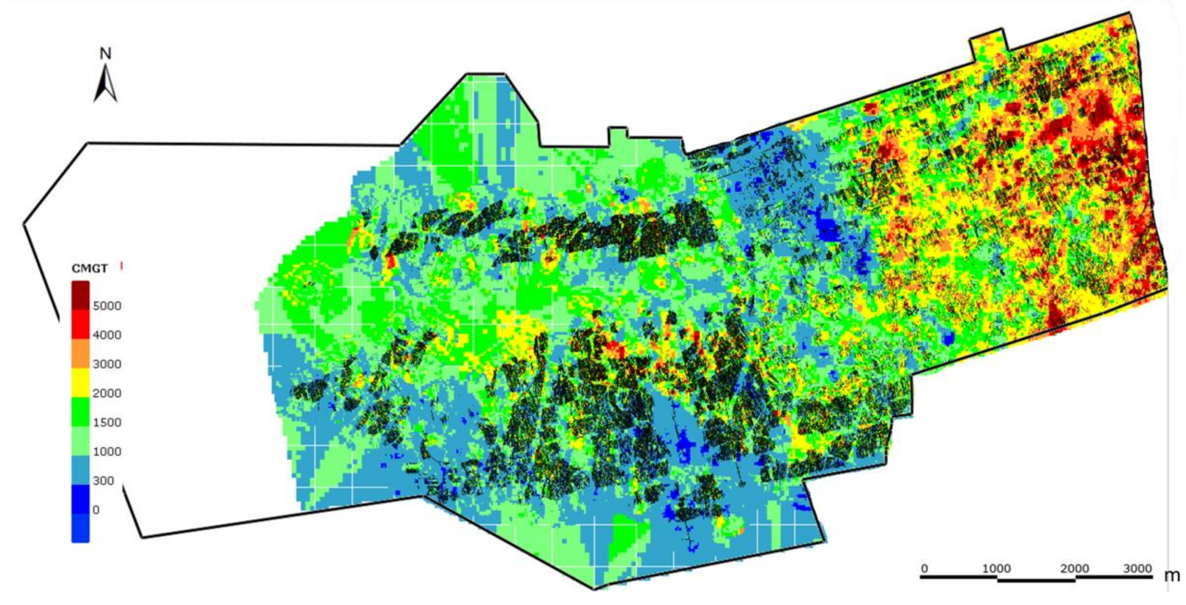


For the Carbon Leader Reef, the database updates had a decrease in content as well as grade primarily for Inferred, while Measured and Indicated showed a slight increase (Figure 48). The updated strings from 2017 to 2021 had an effect of increasing the content and grade, this resulted from the inclusion of pillars into the minable portion of the Resource. The reporting resolution resulted in a decrease in content for Inferred, which shows the larger Inferred blocks that previously were assigned an average grade were replaced by only a portion being above cut-off (at a slightly higher grade). This same issue of larger blocks was not seen in Measured and Indicated, and an increase in grade from the change in methodology resulted in an increase in content.

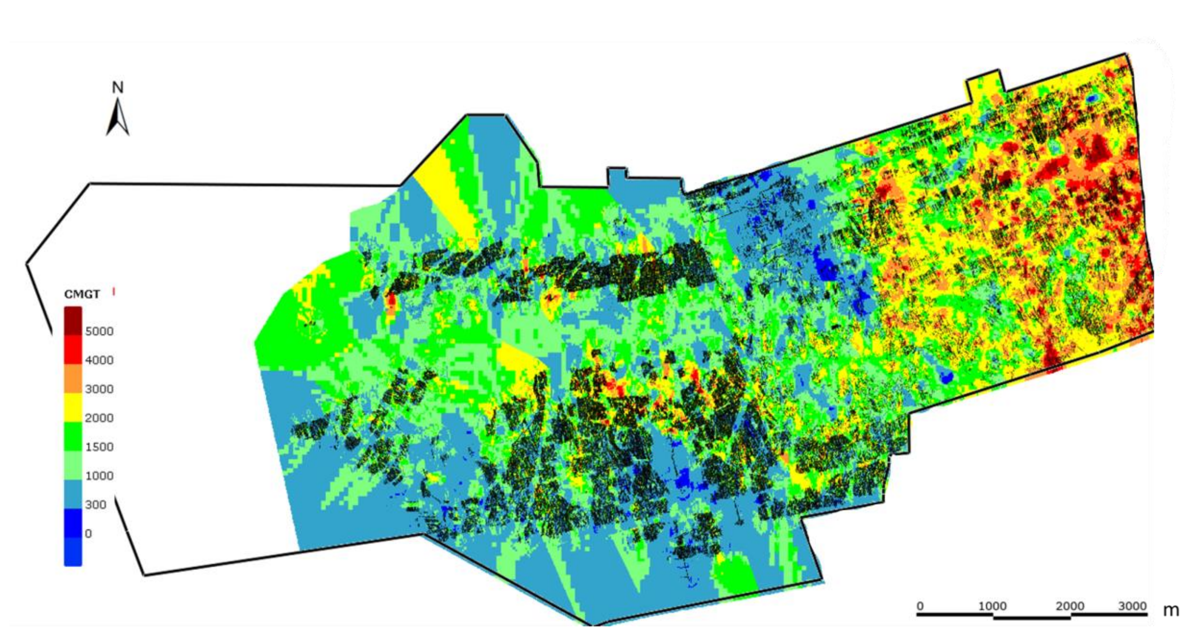
For Carbon Leader Reef, the change in dip and exclusion of small, isolated Resource blocks had a very minor effect on the tonnage or grade. While the update to the mineable codes, and inclusion of areas that were previously excluded had a significant increase to Measured, Indicated and Inferred, with a minor change to grade. The addition of geological loss to Carbon Leader Reef had the opposite effect than for the Middelvlei Reef, as a 25% geological loss was previously applied to Measured indicated and Inferred (above 25 level), this was replaced with a Measured and Indicated and Inferred of 5%, 10% and 15% loss respectively, resulting in an overall increase for Carbon Leader.

Figure 48: Carbon Leader Reef Estimates showing Changes From 2018 to 2021

Carbon Leader Estimate 2018



Carbon Leader Reef Estimate 2021



Carbon Leader Reef Estimates showing Changes From 2018 to 2021	February 2021

ii. *Validation of Mineral Resource Block Model*

The 2021 estimates were validated against the samples by swath analyses. Swaths were generated along the X and Y axis. Samples and block model estimates were queried within each swath, and the mean statistic compared. The results of the swath validation for cm.g/t sample data and block model estimates are shown in Figure 49, Figure 50 and Figure 51 . The swaths do demonstrate some smoothing of the estimate relative to data. Only the Measured 15 m x 15 m estimate versus raw data is shown, as this shows the estimate most closely related to the data. Swaths are shown per domain as hard boundary domained estimation is performed.

Figure 49: Swath Plots for Middelvlei Reef Facies1

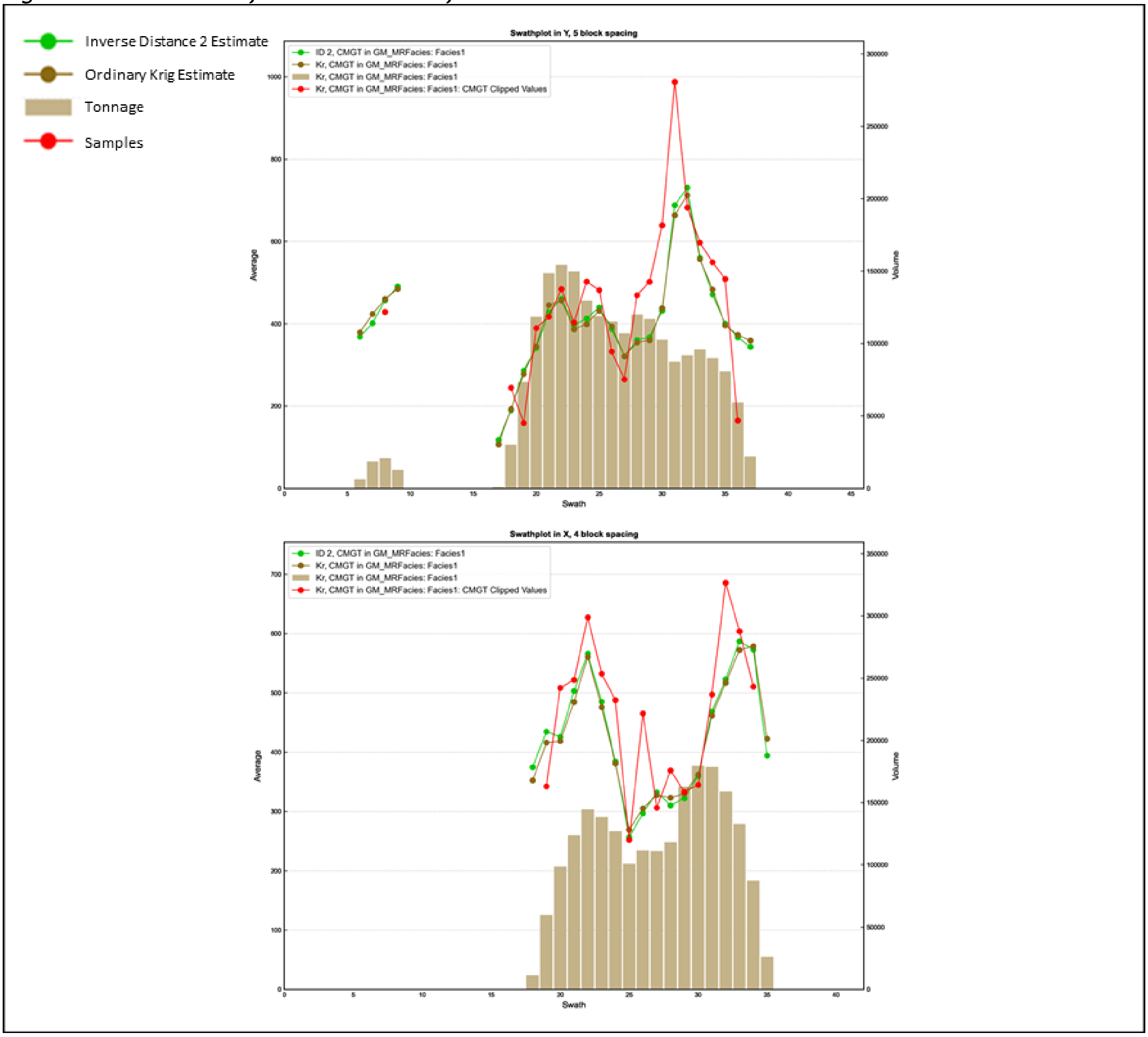


Figure 50: Swath Plots for Middelvlei Reef Facies 2

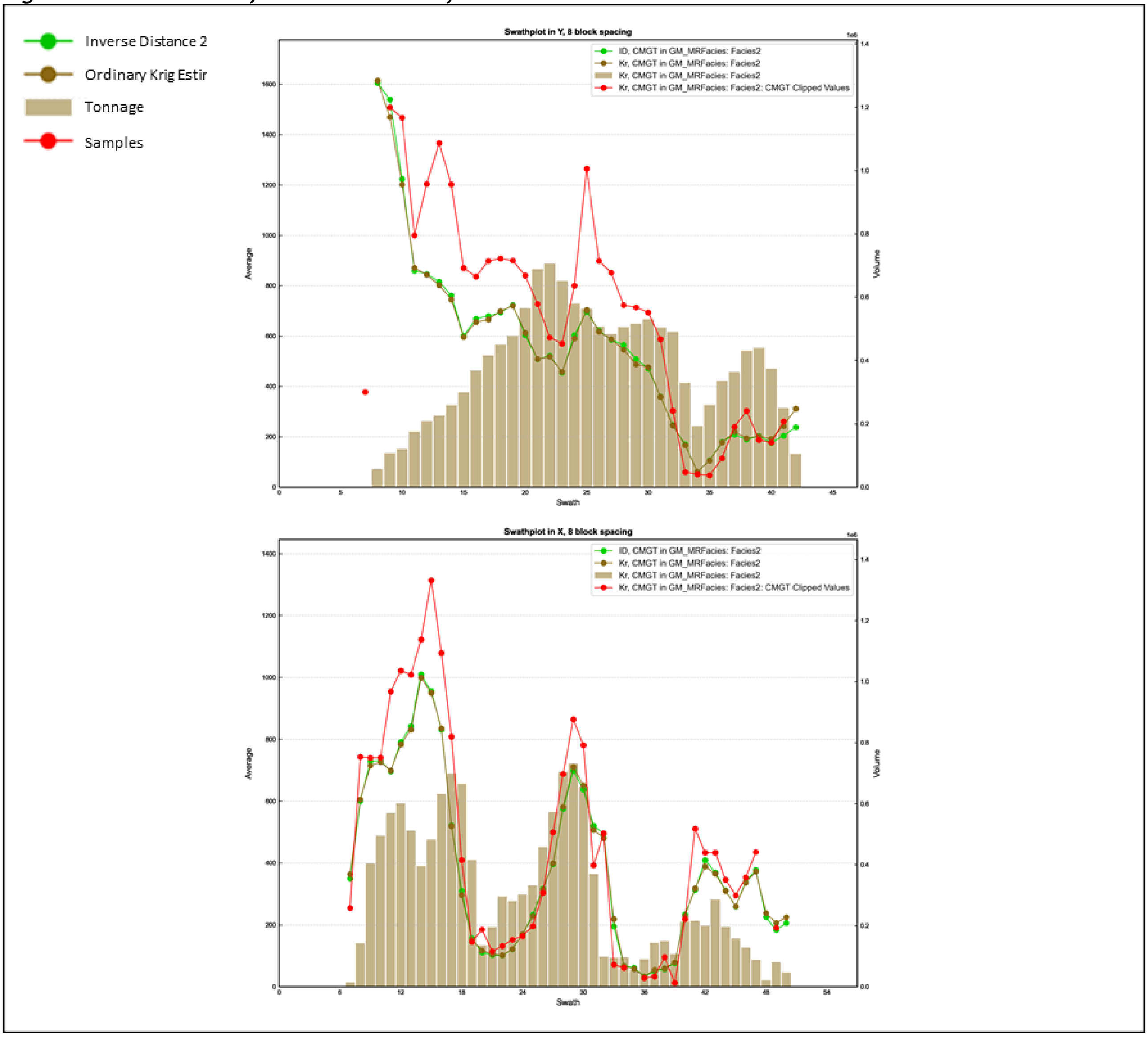
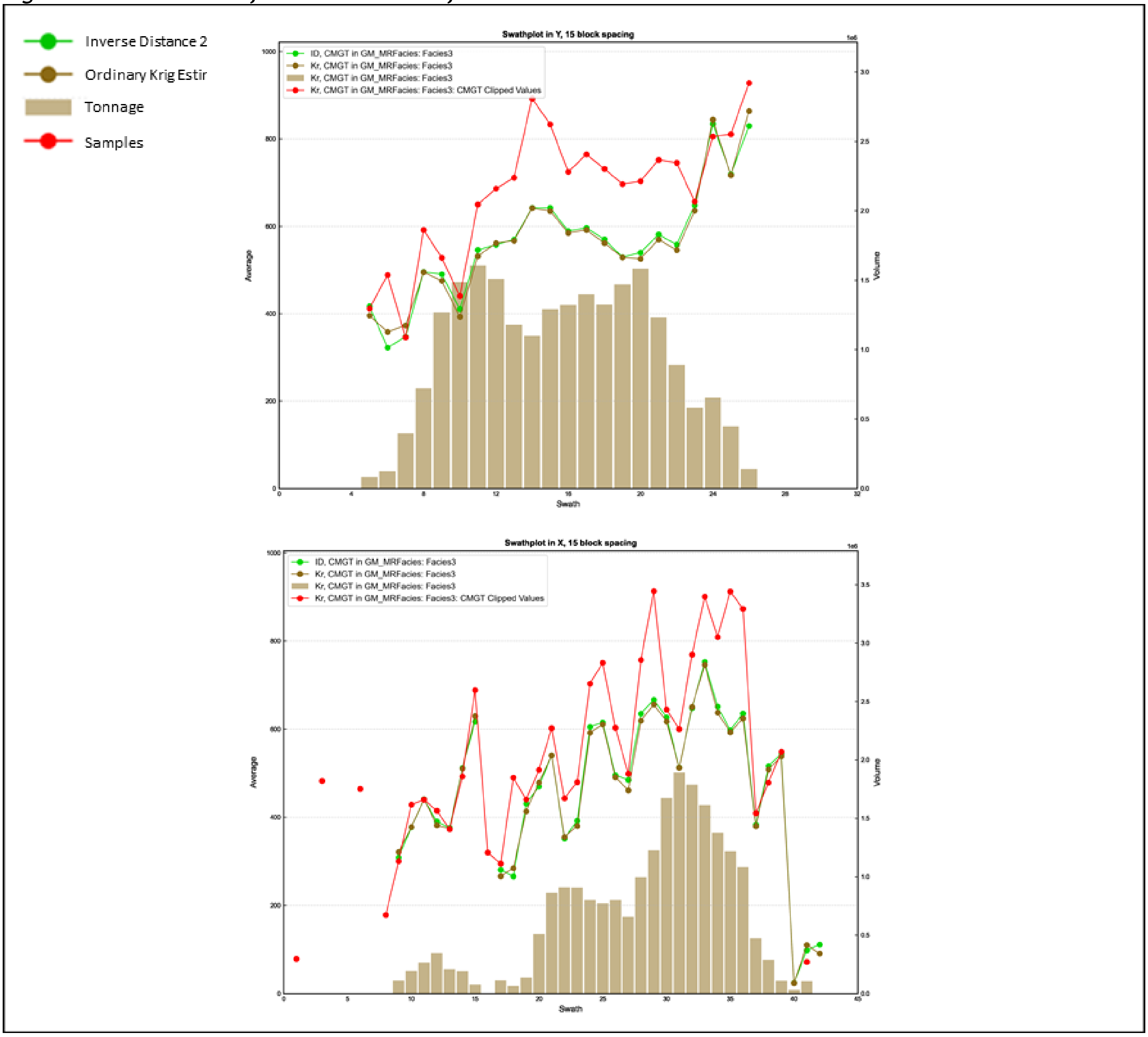


Figure 51: Swath Plots for Middelvlei Reef Facies 3



The swaths for Middelvlei Reef, do show under estimation relative to data, particularly in a West-east swath direction (swaths in Y). This smoothing can be attributed to distinct north south trends of isolated narrow pay shoots associated with the Middelvlei Reef. In Whitaker's 2016 CPR document, the underestimation of the Mineral Resource estimates is attributed to the lenticular nature of the orebody, oblique direction of the pay shoot compared to swath direction and the selective mining which has taken place, resulting in preferential sampling of high-grade areas. The swaths are generated at an oblique angle to the pay shoots and will thus show a mixture of high-grade data with a larger low-grade area and vice versa. In addition, it is recommended that more detailed domaining is undertaken for Middelvlei Reef, historically higher resolution domains were defined for Middelvlei Reef, this can be reviewed, this may help alleviate the mixing of high and low-grade areas that is apparent in the swaths.

The swath plots for Carbon Leader Reef are shown in Figure 52 to Figure 59. The Swaths for Carbon Leader agree well with the original data, with some smoothing noticeable. The Carbon Leader swaths display a better correlation to data than is seen for Middelvlei, this is attributed to the more numerous domains defined for Carbon Leader which separates corridors of similar grade. While the Middelvlei Reef consists of larger domains which contain localised areas of very high or very low grade, which combined with the larger domains, and swaths at oblique angles may show some over smoothing relative to data.

Figure 52: Swath Plots for Carbon Leader Reef Facies 1

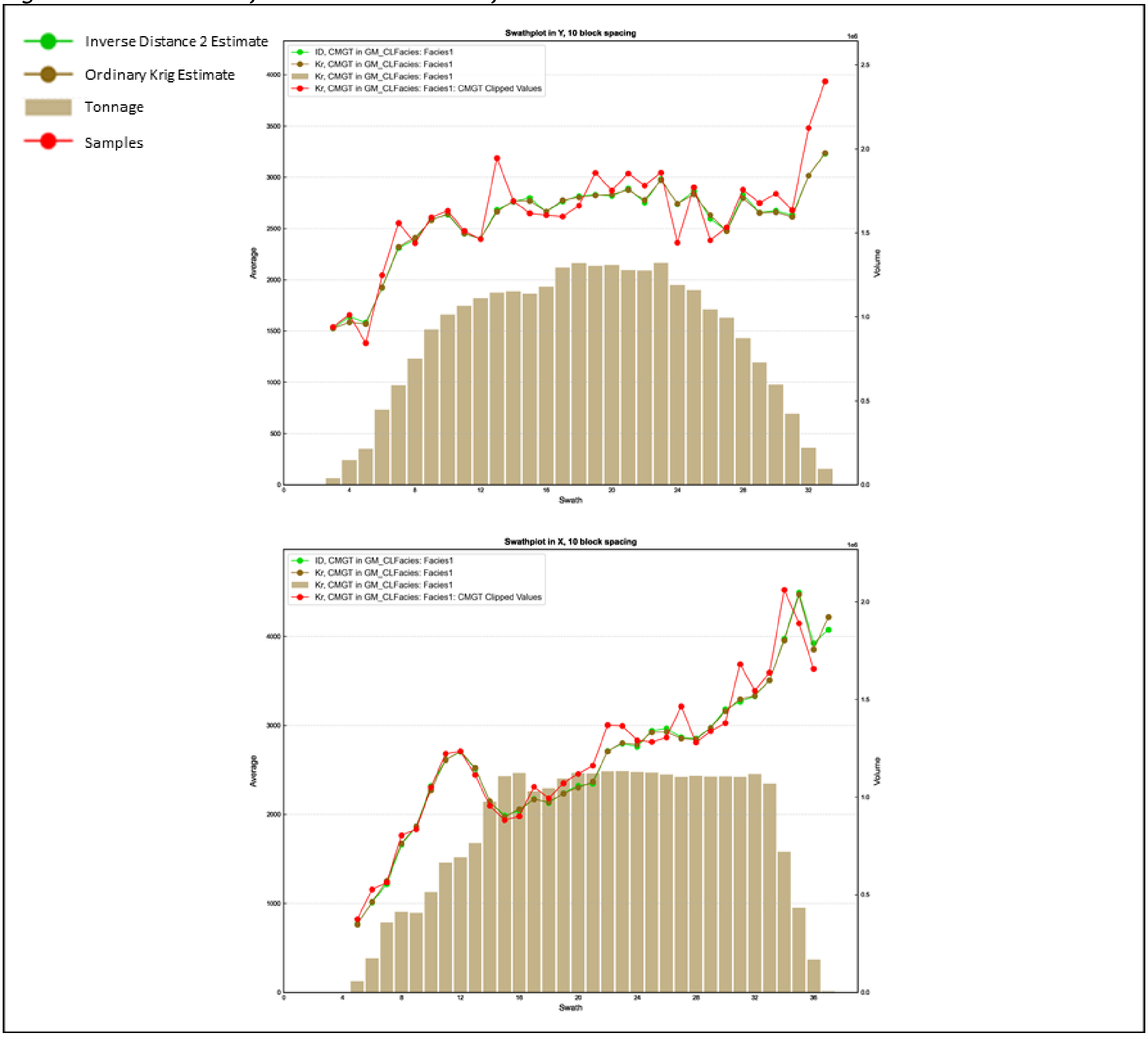


Figure 53: Swaths Plots for Carbon Leader Reef Facies 2a

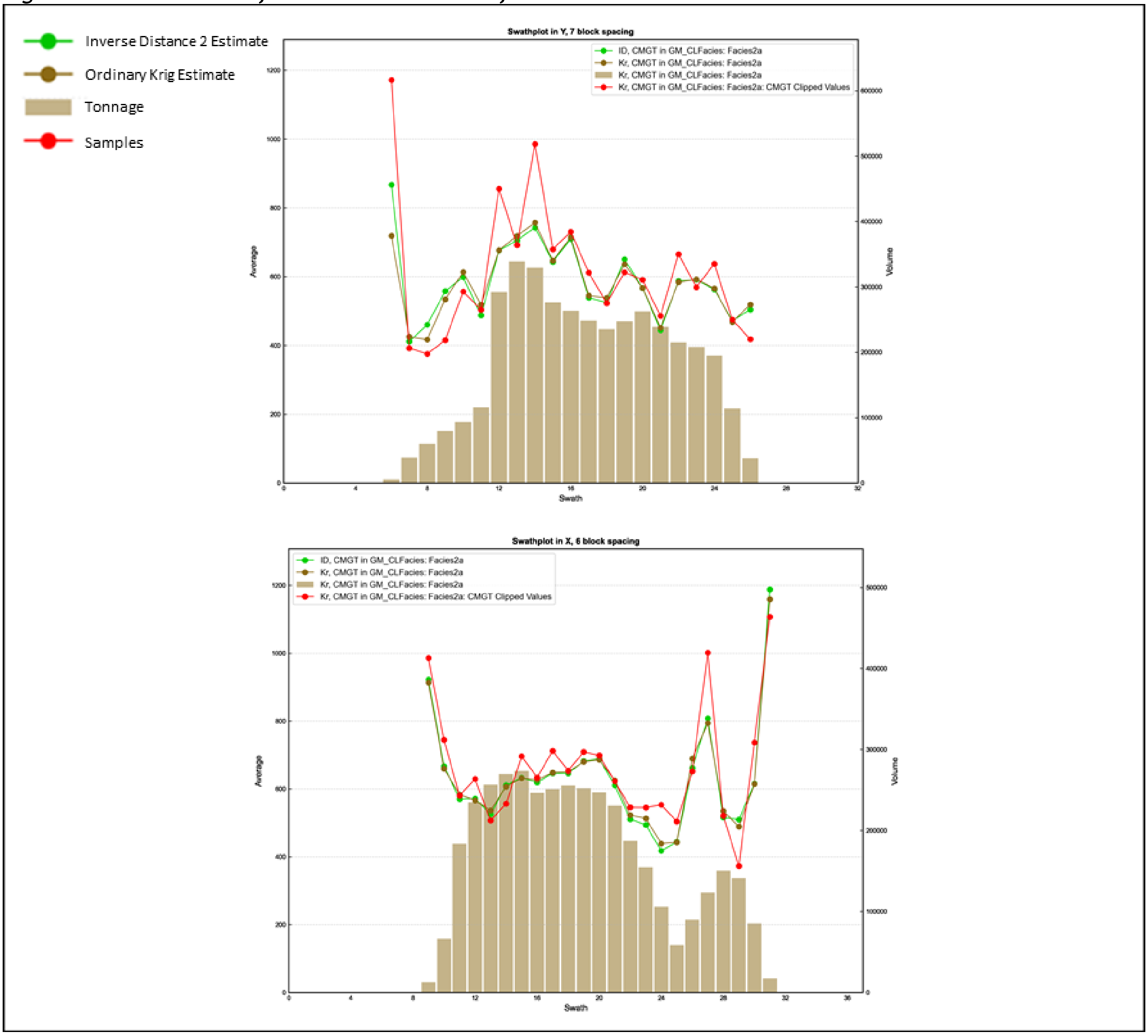


Figure 54: Swath Plots for Carbon Leader Reef Facies 2b

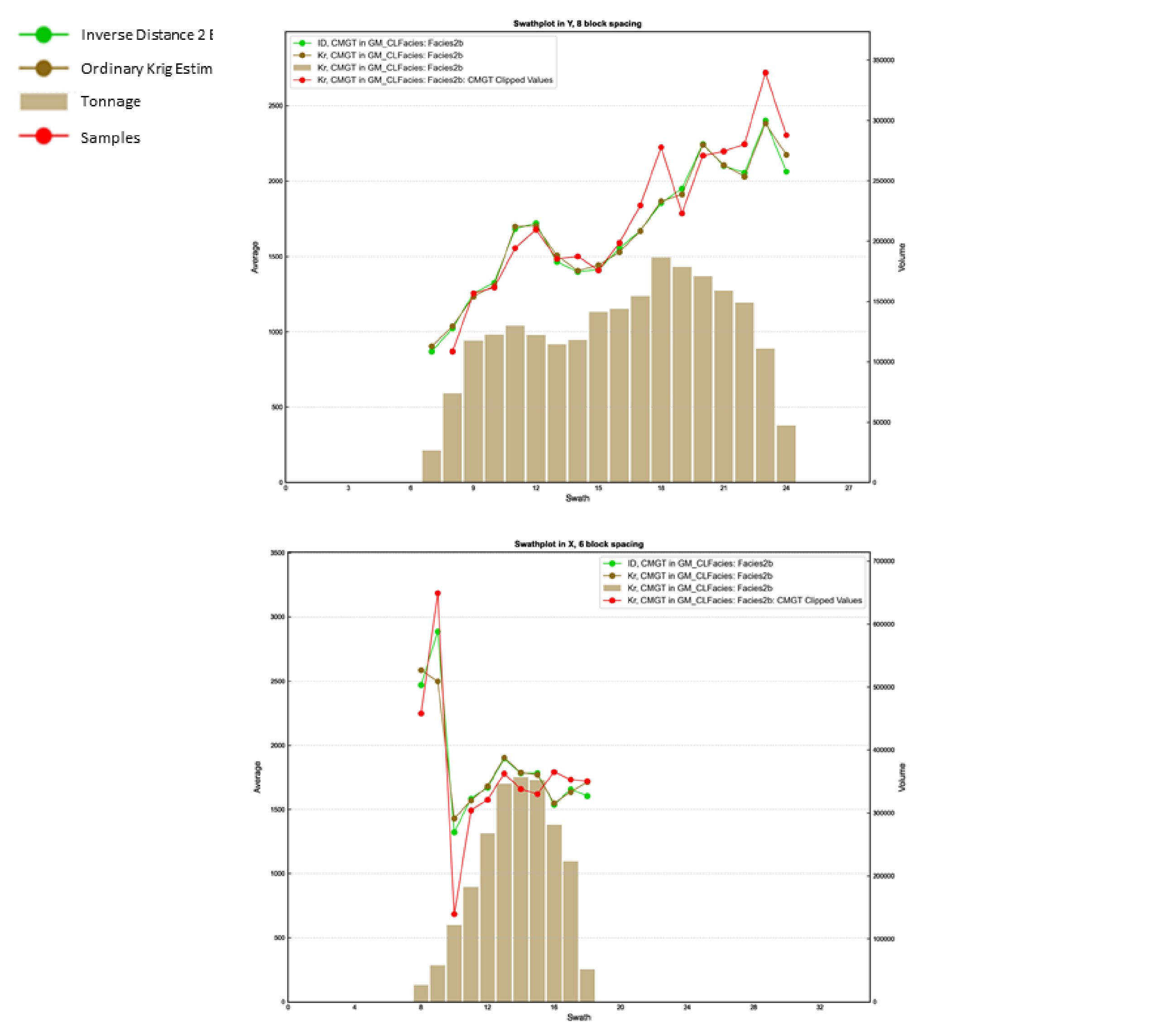


Figure 55: Swath Plots for Carbon Leader Reef Facies 3

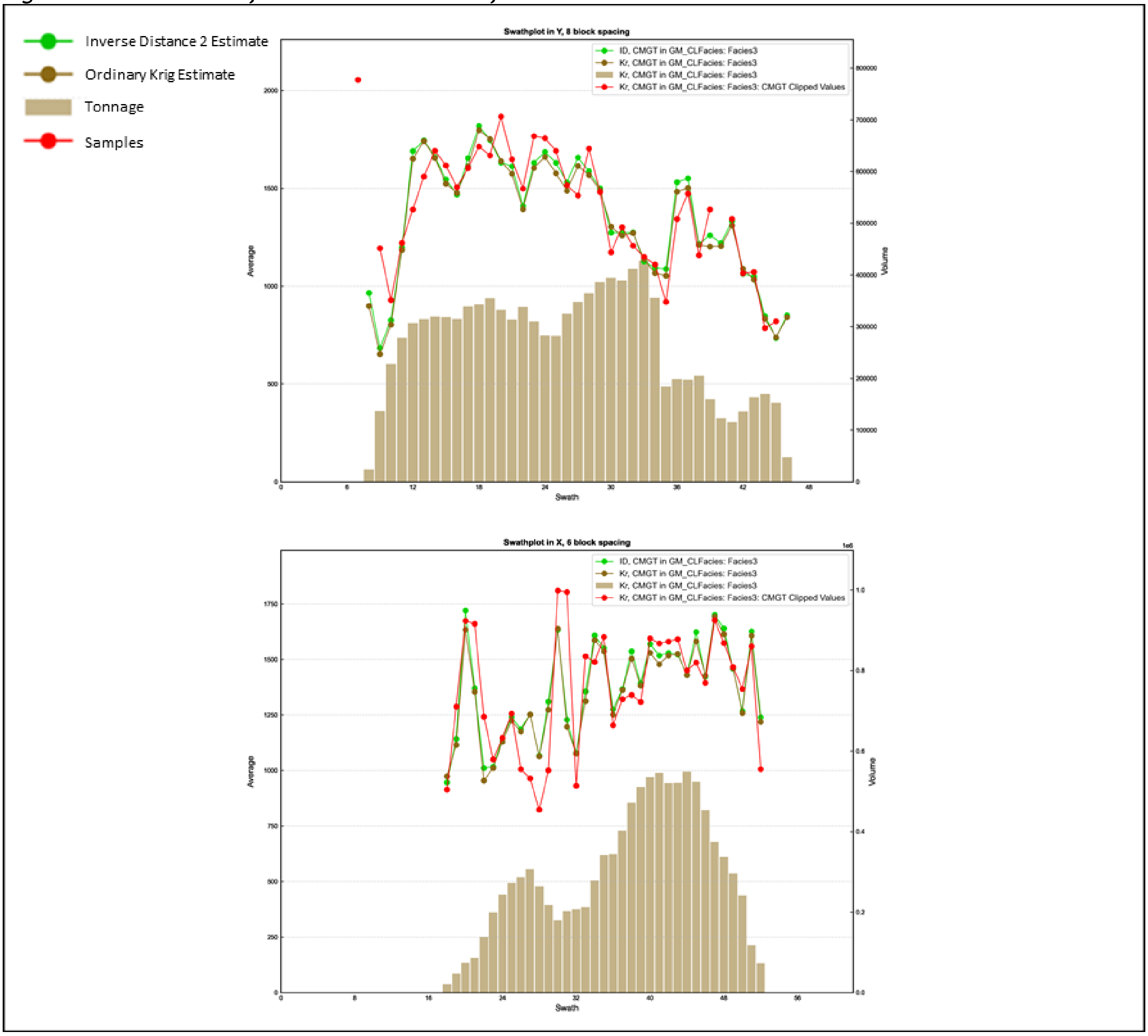


Figure 56: Swath Plots for Carbon Leader Reef Facies 4

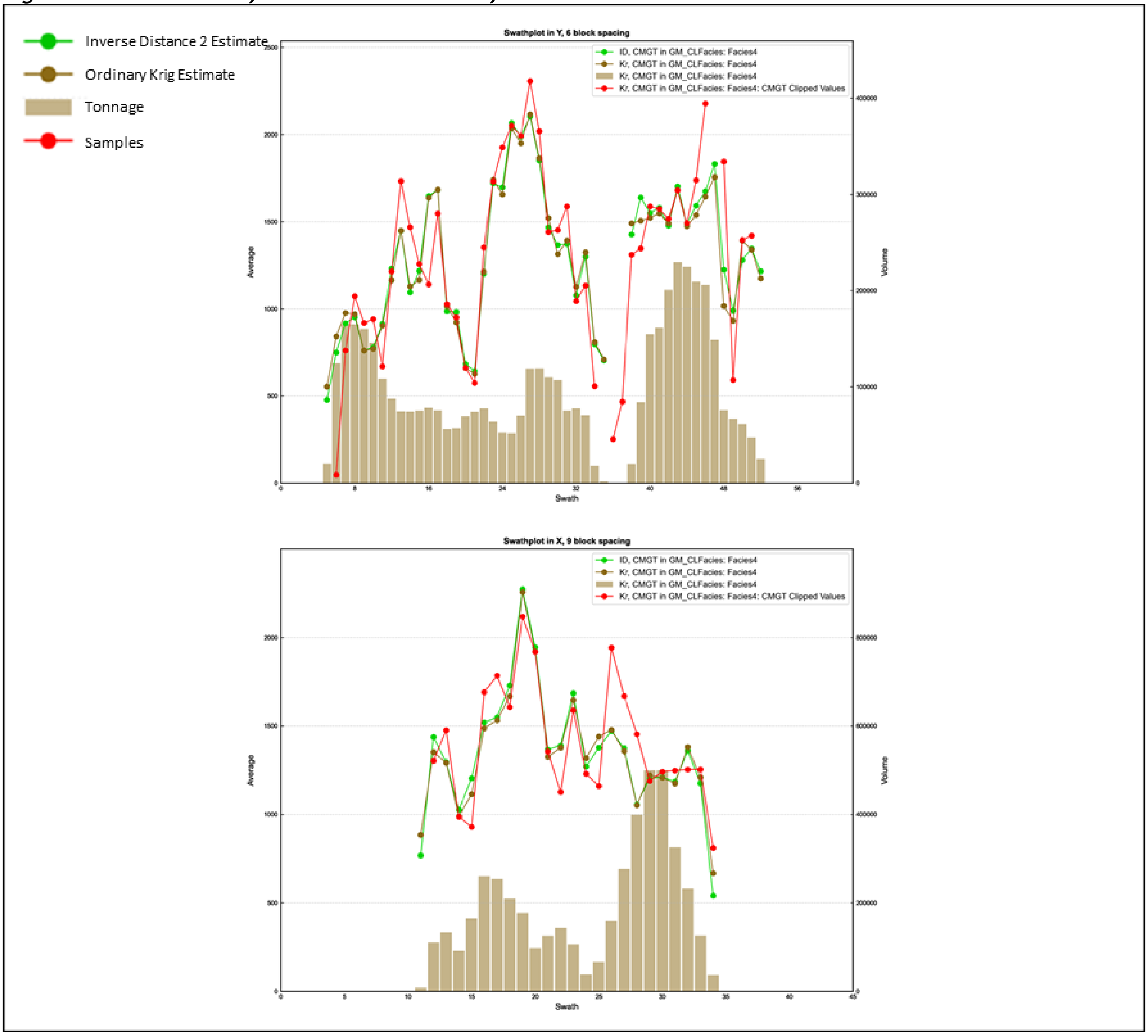


Figure 57: Swath Plots for Carbon Leader Reef Facies 5

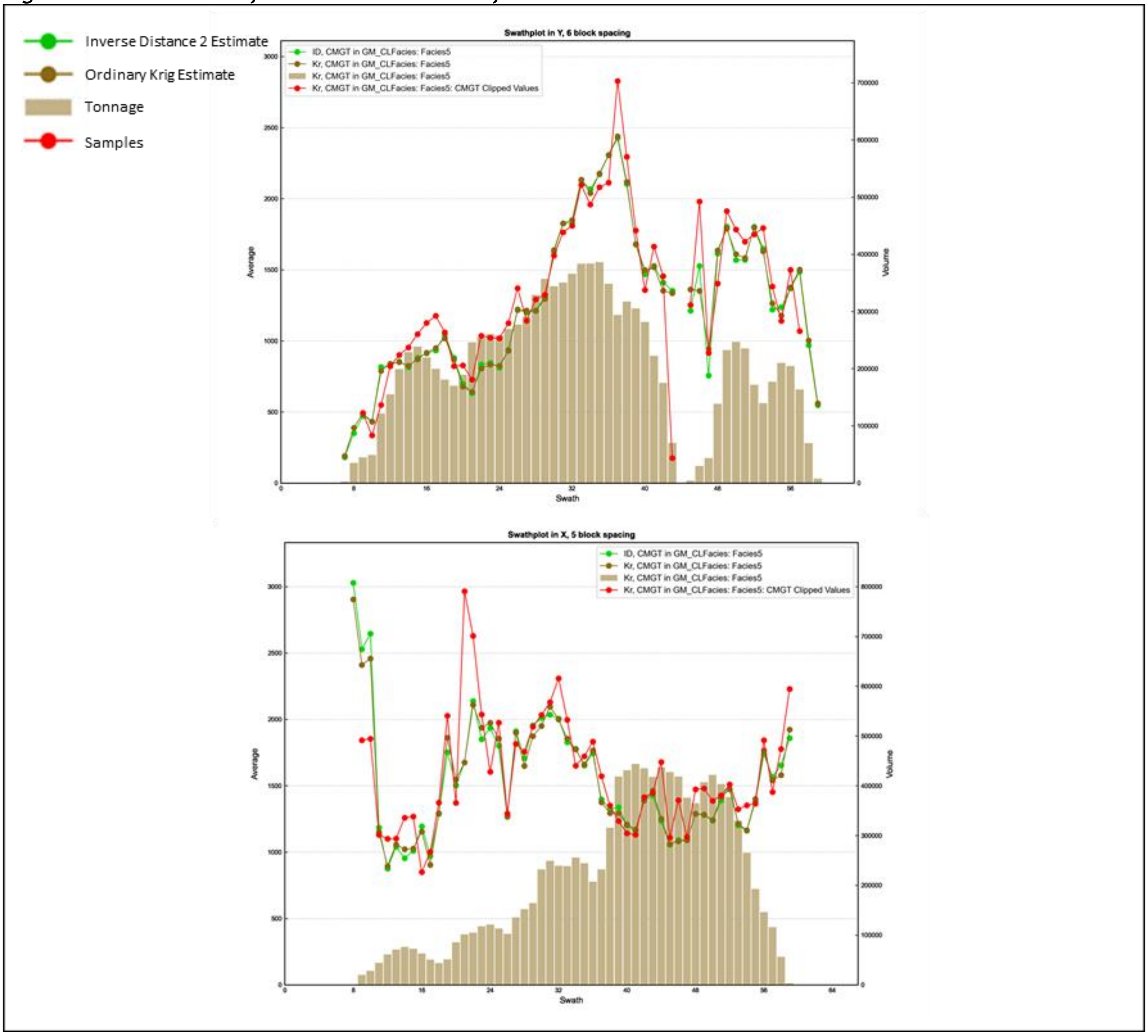


Figure 58: Swath Plots for Carbon Leader Reef Facies 6

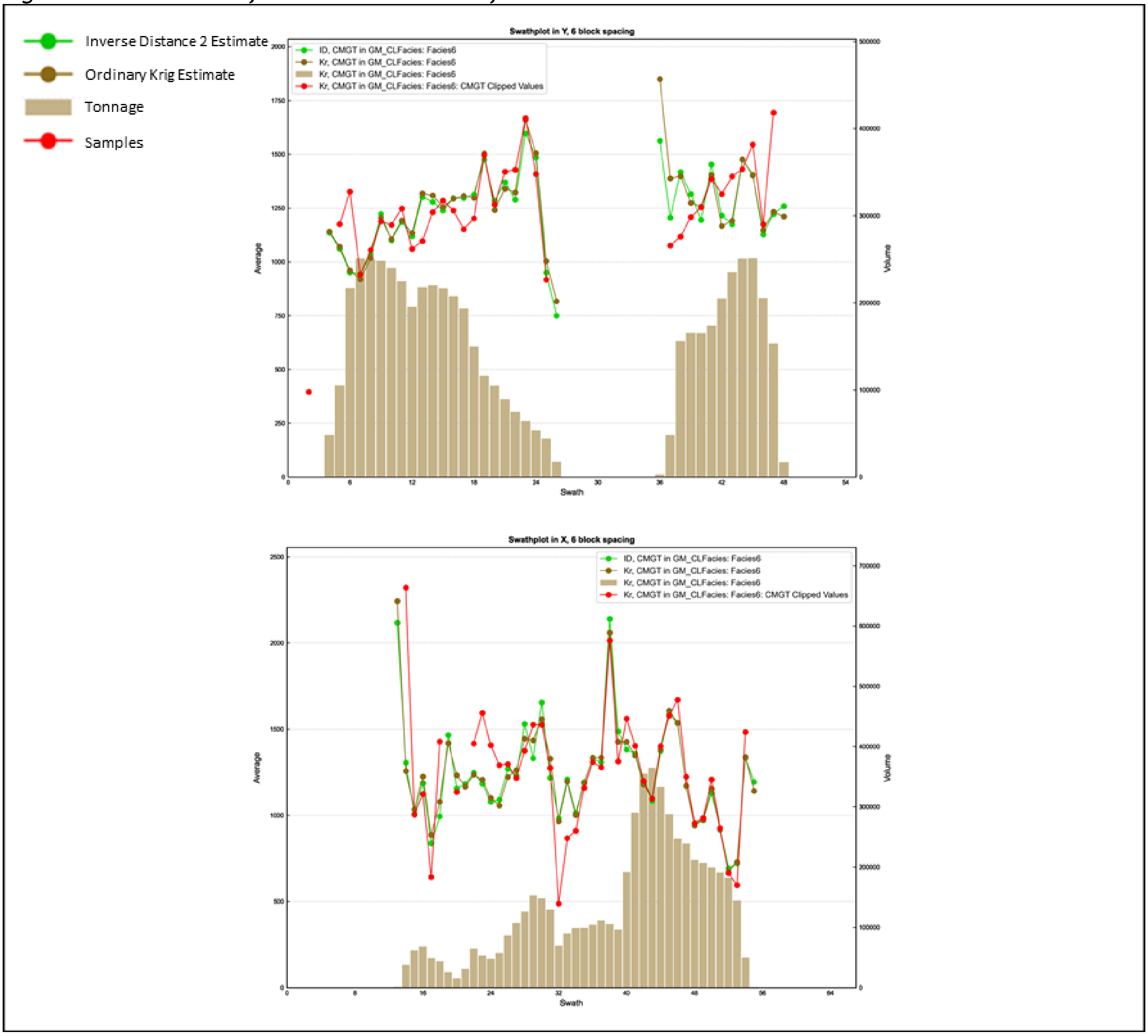
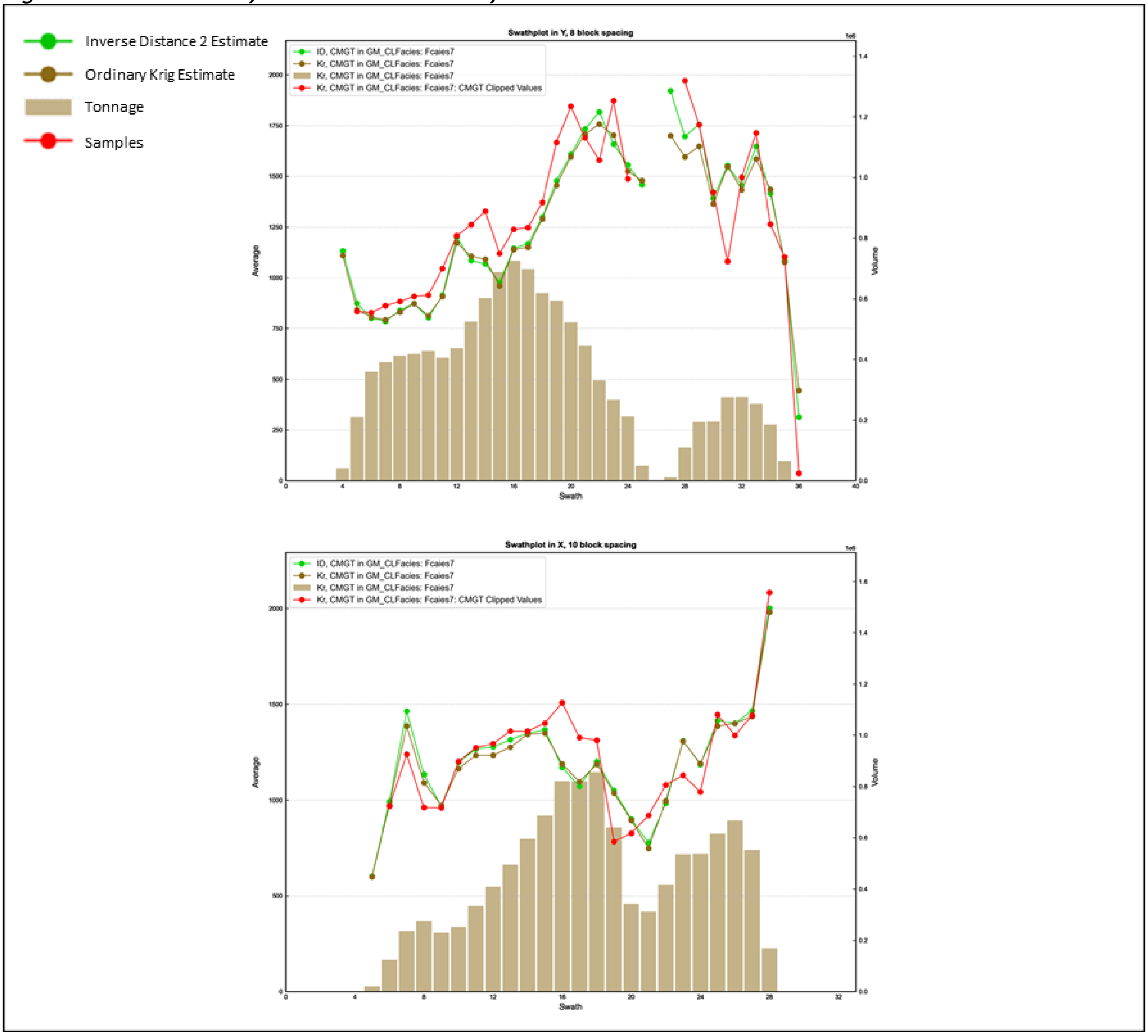


Figure 59: Swath Plots for Carbon Leader Reef Facies 7



Item 14 (b) – Disclosure Requirements for Resources

All Mineral Resources have been categorised and reported in compliance with the definitions embodied in the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM Council (incorporated into NI 43-101). As per CIM Code specifications, Mineral Resources have been reported separately in the Measured, Indicated and Inferred Mineral Resource categories. Inferred Mineral Resources have been reported separately and have not been incorporated with the Measured and Indicated Mineral Resources.

Item 14 (c) – Individual Grade of Metals

Mineral Resources for gold have been estimated for Blyvoor Gold. No other metals or minerals have been estimated for the Project.

Item 14 (d) – Factors Affecting Mineral Resource Estimates

No socio-economic, legal, or political modifying factors have been taken into account in the estimation of Mineral Resources for Blyvoor Gold. Minxcon is not aware of any known environment, permitting, legal, title, taxation, socio-economic, marketing, political or other factor that will materially affect the Mineral Resource estimates.

All underground Mineral Resources were stated at a cut-off of 300 cm.g/t, equating approximately to 2.57 g/t.

I. Derivation of Mineral Resource Cut-Off

Economic, metallurgical, and mining parameters were used to derive the pay limit. The parameters are tabulated in Table 27 below.

The gold price used is the 90% percentile of the real term gold price since 1980. The MCF and costs are the reserve cut-off costs and MCF but with a 10% improvement to account for potential improvements in the future.

Table 27: Pay Limit Derivation Factors

Description	Unit	Value 2021
Gold Price	USD/oz	1,650
Exchange Rate	ZAR/USD	16.00
Gold Price	ZAR/kg	848,750
Stoping Width	cm	117
Operating Cost	ZAR/milled tonne	1,710
Dilution	%	5
MCF	%	86
PRF	%	95
Cut-off	cm.g/t	300

ITEM 15 – MINERAL RESERVE ESTIMATES

Item 15 (a) - Key Assumptions, Parameters and Methods

I. Background

The Blyvoor Mine is an operational mine and the LoM planning has been completed in line with current and future operational planning. Blyvoor Gold has planned a 17-month ramp-up to an initial steady state production rate of approximately 20,000 m² per month, which equates to approximately 40 ktpm. This production rate will be sustained for 15 months, followed by a second ramp up to steady state production of approximately 40,000 m² per month, which equates to approximately 80 ktpm for the remainder of the LoM. The LoM plan targets the areas included in the 2020 15-year LoM plan as well as RMPs and NIRs which have been converted to mineable areas, which yields a longer LoM due to changes in the planning criteria from a 15-year LoM plan to a LoM plan which considers the total Mineral Reserve.

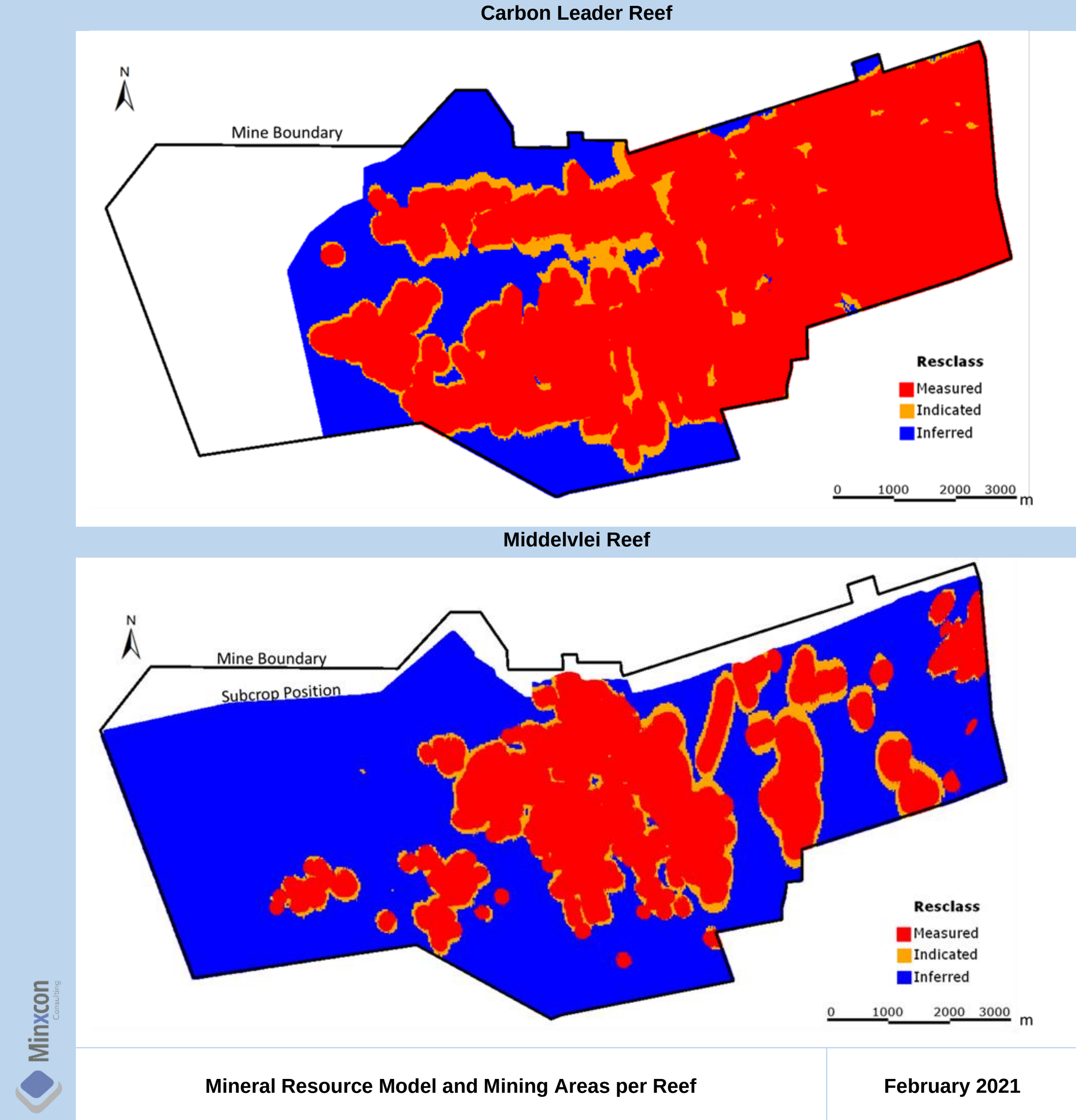
II. Mineral Resource Model

The LoM plan was developed utilising the 2D Mineral Resource model, estimates as completed by Minxcon. The details pertaining to the Mineral Resource model is described under Item 14. The Mineral Resource model and classifications were updated as detailed in Item 14. The mine design and scheduling utilise the updated 2021 Mineral Resource model.

III. Link between Mineral Resource and Mineral Reserve

The 2D block model within the MR143GP lease area and proposed mining areas is illustrated in Figure 60. The Carbon Leader Reef has been mined extensively. The Middelvlei Reef has been exposed to some mining activities, however the area contains additional resources to be extracted, while taking cognisance of economic parameters.

Figure 60: Mineral Resource Model and Mining Areas per Reef



IV. Planning Process

The initial mine planning files provided by Blyvoor Gold to Minxcon were in the form of manual paper drawn mine plans. These plans were scanned, the existing development and panels digitised in ArcGIS software and converted into the local coordinate system WG27. The mine design utilised the existing development and panels as mined-out areas, which were digitised and used as a starting point for new development. Blyvoor Gold provided a detailed LoM plan and schedule utilising Blyvoor's determined mine design criteria; this plan was duplicated by Minxcon in the design process and sequencing logic.

The design process involved LoM planning and scheduling completed in Surpac and MineSched software reporting production outputs, and Mineral Resource categories from the 2D model used to report the Mineral Resource. The production schedule output is reported as *in situ* Mineral Resources within the mine plan.

The extraction of these Mineral Resources is adjusted by applying modifying factors to estimate the actual grade and gold content delivered to the processing facility.

V. CUT-OFF APPLIED

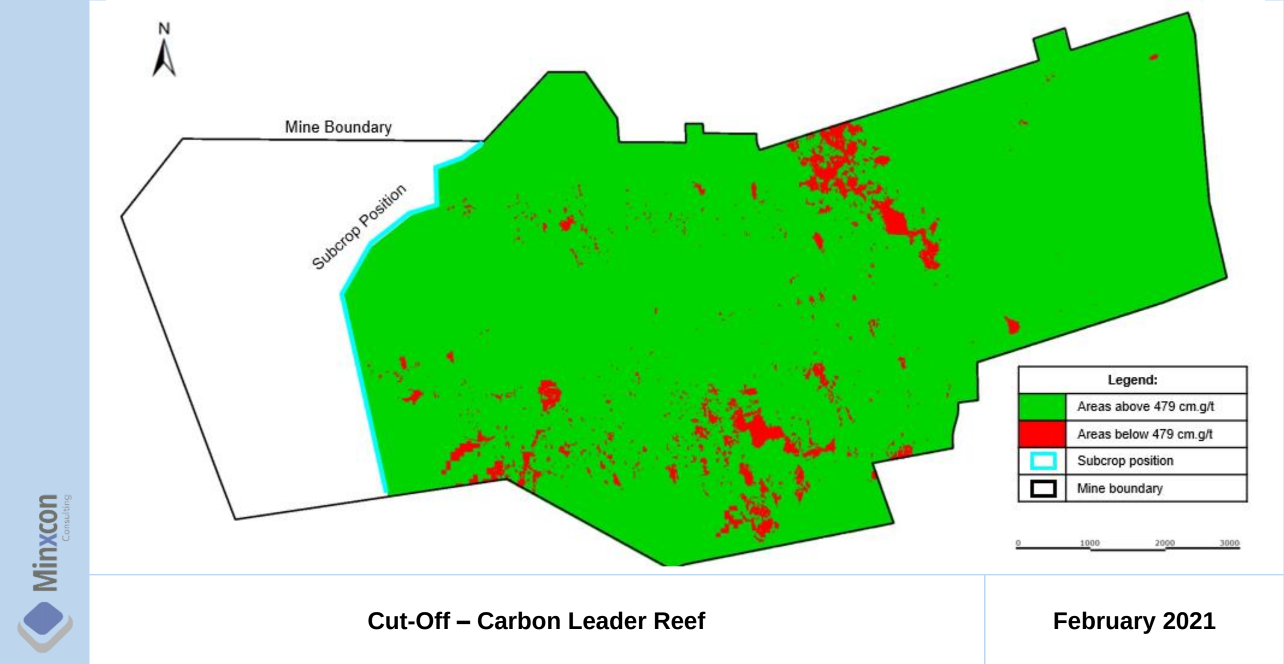
A cut-off of 479 cm.g/t for both the Carbon Leader Reef and Middelvlei Reef has been used to determine the mining areas to be included in the LoM plan. The assumptions and calculation to determine the cut-off are detailed in Table 28.

Table 28: Cut-off Calculation

Description	Unit	Value 2020
Gold Price	USD/oz	1,500
Exchange Rate	ZAR/USD	16.00
Gold Price	ZAR/kg	771,618
Stoping Width	cm	160
Operating Cost	ZAR/milled tonne	1,900
Sundries Dilution	%	12.8
Discrepancies	%	10.4
MCF	%	78
PRF	%	95
Cut-off	cm.g/t	479

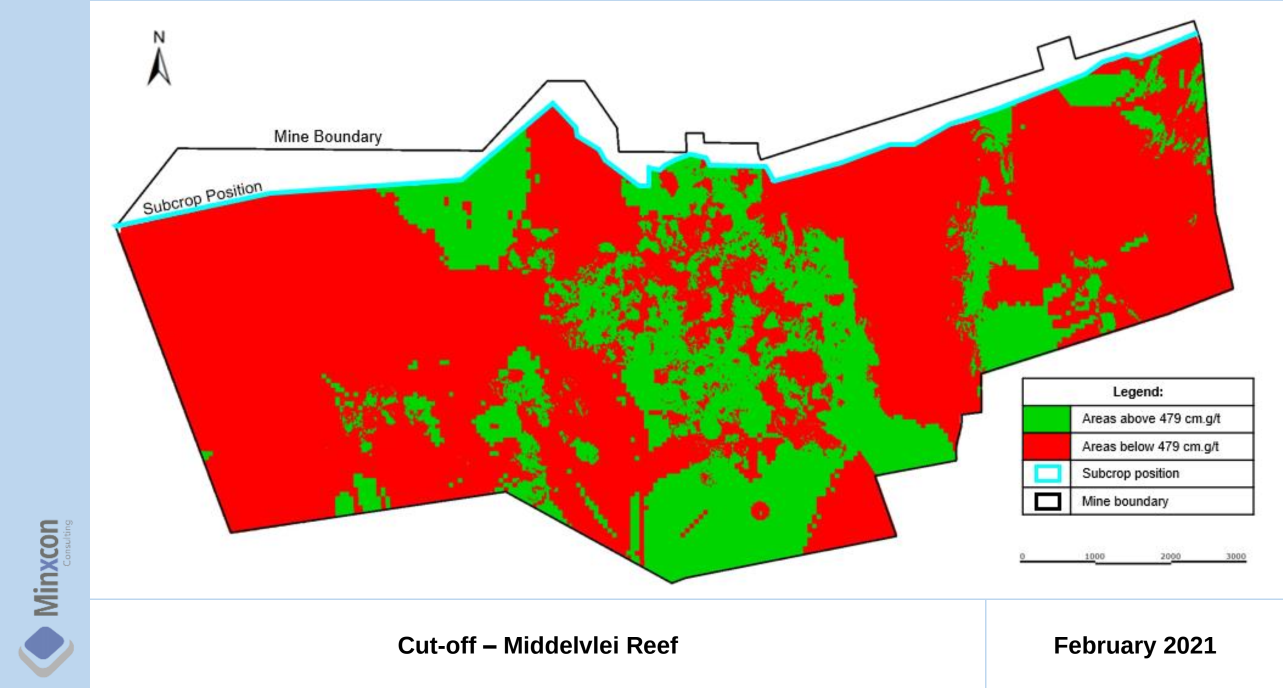
It is noted that the cut-off applied is deemed conservative taking into consideration the current gold price, exchange rate and improved MCF for SBM stoping. The Mineral Resource blocks identified above the cut-off were selected to be included in the LoM planning. The mining areas above the cut-off for the Carbon Leader Reef are illustrated in Figure 61. The blocks included in the mining area are above cut-off for the Carbon Leader Reef.

Figure 61: Cut-off – Carbon Leader Reef



The mining areas above the cut-off for the Middelvlei Reef are illustrated in Figure 62. The blocks included in the mining areas are above the cut-off.

Figure 62: Cut-off - Middelvlei Reef



VI. Level of Detail

The Blyvooruitzicht Gold Mine historically extracted ore with conventional stoping. The existing development may require opening up to provide access to the workings. The operation requires additional development for the LoM plan and panel layouts. The existing development and panels are at an operational level of accuracy. The first five years of the LoM plan have been designed in detail and is at a level of accuracy better than PFS level. The additional development and stoping panels for the remainder of the LoM plan are at a PFS level of accuracy. The level of detail for the project is detailed in Table 29.

Table 29: Level of Detail

Item	Area	Accuracy (%)	Study Level	Comment
Resources	Mineral Resources	Measured, Indicated and Inferred Resources	SAMREC Feasibility Study	Resources are at a greater than PFS level of detail.
Mineral Reserves	Mineral Reserves	Proved and Probable Mineral Reserves	SAMREC Feasibility Study	The Mineral Reserve estimate contains both Proved and Probable Mineral Reserves. Measured Mineral Resources in the first five years of mining have been converted to Proved Mineral Reserves. Thereafter, Measured Mineral Resources in the Polygon estimation were converted to Probable Mineral Reserves. Indicated Mineral Resources were converted to Probable Mineral Reserves.
Geotechnical	Support	At operational level*	Operational	The same support standards and procedures will be applicable as during previous operation for conventional mining. Special attention and investigations will be required for pillar and remnant mining. Support standards and accompanying COP's for SBM should be implemented.
	Seismic Monitoring	At operational level*	Operational	A seismic monitoring system is currently in place. The current seismic monitoring system will be required to be extended when mining progresses to the extremities of the planned project area.
	Pillar Design	15% to 25%	SAMREC PFS	Provision for pillars has been made in the mine plan, using previous pillar allowances. Rock Engineering modelling is required to determine the pillar requirements for the planned mining areas.
LoM Plan	Mine Plan - First Five Years	10% to 15%	SAMREC Feasibility Study	A detailed mine design, mine plan and schedule for the first five years of the LoM has been completed.
	Mine Plan -Beyond Five Years	15% to 25%	SAMREC PFS	A detailed polygon design, mine plan and schedule after the initial five years of the LoM plan has been completed.
Mining Infrastructure	Power Supply	At operational level*	Operational	Bulk Power Supply to the operation has been re-established. Power supply to all currently accessible and required areas have been restored.
	Water Supply	At operational level*	Operational	Potable water supply to the operation has been re-established. Service water supply to the plant is established and mining service water is sourced from underground pumping activities.
	Pumping System	15% to 25%	SAMREC PFS	Pumping requirements is well understood with studies conducted prior commencement of the current project. Pumping infrastructure is a based on similar infrastructure historically employed at the Blyvoor mine. Temporary additional pumping capacity has been allowed for and is based on the estimated dewatering requirements.
	Ventilation (Current)	At operational level*	Operational	Ventilation and Cooling study conducted by specialist on initial 5-year production plan. Ventilation capacity of existing ventilation infrastructure has been commissioned and is deemed sufficient during initial 5 years of planned production.
	Ventilation (Future Planned)	25% to 50%	SAMREC Scoping / Conceptual	Ventilation simulation to be conducted to determine and model ventilation requirements from year 6 onward and infrastructure allowances should be updated accordingly.

Item	Area	Accuracy (%)	Study Level	Comment
	Refrigeration/Cooling	25% to 50%	SAMREC Scoping / Conceptual	Ventilation and Cooling study conducted by specialist on initial 5-year production plan. Cooling is deemed sufficient for the underground workings during initial 5 years of planned production with some spot cooling required. Ventilation and cooling simulations to be conducted to determine and model ventilation and cooling requirements from year 6 onward and below 31 Level. It is assumed that larger scale cooling will be required below 31 Level. Allowance has been made for the re-equipping of historic refrigeration plant on 34 Level with similar equipment that previously employed.
	Shaft Refurbishment - No. 5 Shaft and No. 5A Sub-vertical Shaft	At operational level*	Operational	No. 5 Shaft and No. 5 A Sub-vertical Shaft have been inspected and all essential repairs have been completed in No. 5 Shaft. Some repairs in No. 5A Sub-vertical shaft have been completed up to 27 Level. Further repairs will be completed once all No. 5A Sub-vertical Shaft winders have been commissioned and licensed as well as when dewatering below 27 Level has commenced.
	Shaft Refurbishment - Incline Shafts (No. 6A, No. 5A, No. B5 and No. B5A)	15% to 25%	SAMREC PFS	Incline shafts (No. 6A, No. 5A, No. B5 and No. B5A) is existing shafts but needs to be re-equipped and recommissioned. Sufficient allowance has been made for the re-equipping of these shaft based on available information. This includes, rails, sleepers, services, winders etc. The actual condition of these incline shafts is however unknown due to accessibility limitations.
	Interconnecting Level Development -	15% to 25%	SAMREC PFS	Interconnecting development between the old Blyvooruitzicht section and the old Doornfontein section is planned and designed in the mine plan. Designs are based on the same parameters as all other new developments.
	Mid-shaft Loading	25% to 50%	SAMREC Scoping / Conceptual	Number of arrangements still under consideration / Investigation. Designs and costing at concept level.
Operating Cost	Mining and Overheads	15% to 25%	SAMREC PFS	Mining operating costs and overheads have been derived from first principle cost estimations with some factoring
	Plant and Tailings Disposal	15% to 25%	SAMREC PFS	Plant and TSF operating costs and overheads have been derived from first principle cost estimations with some factoring
Capital	Power Supply	15% to 25%	SAMREC PFS	Mainly Refurbishment of existing infrastructure and equipment is required. Quotations have been sourced for the majority of the outstanding requirements.
	Water Supply	15% to 25%	SAMREC PFS	Mainly Refurbishment of existing infrastructure and equipment is required. Quotations have been sourced for the majority of the outstanding requirements.
	Pumping System	15% to 25%	SAMREC PFS	Mainly Refurbishment of existing infrastructure and equipment is required. Quotations have been sourced for the majority of the outstanding requirements.
	Ventilation (Future Planned)	25% to 50%	SAMREC Scoping / Conceptual	Uncertainty with regards to ventilation requirements after the first 5 years of production. Capital allowance needs to be upgraded once ventilation studies and simulations has been conducted.

Item	Area	Accuracy (%)	Study Level	Comment
	Refrigeration/Cooling	25% to 50%	SAMREC Scoping / Conceptual	Uncertainty with regards to cooling requirements after the first 5 years of production. Capital allowance needs to be upgraded once ventilation and cooling studies and simulations has been conducted.
	Shaft Refurbishment - No. 5 Shaft and No. 5 A Sub-vertical Shaft	15% to 25%	SAMREC PFS	Mainly Refurbishment of existing infrastructure and equipment is required. Quotations have been sourced for the majority of the outstanding requirements.
	Shaft Refurbishment - Incline Shafts (No. 6A, No. 5A, No. B5 and No. B5A)	15% to 25%	SAMREC PFS	Mainly Refurbishment of existing infrastructure and equipment is required. Quotations have been sourced for the majority of the outstanding requirements.
	Interconnecting Level Development -	15% to 25%	SAMREC PFS	Interconnecting development is based on first principle rate estimation and applied to designed and scheduled development
	Mid-shaft Loading	25% to 50%	SAMREC Scoping / Conceptual	Designs to be conducted on loading station and capital costs updated accordingly.
	Mining and Railbound Equipment	15% to 25%	SAMREC PFS	Mining (Hydropower drilling systems, winches etc.) and railbound equipment requirements based on number of planned crews and logistics requirements (ore and material transport). Cost based primarily on recent quotations form OEM's and operational mine stock ledgers.
	Plant	15% to 25%	SAMREC PFS	The process plant has been constructed and commissioned. The plant expansion costs are based on costs for the recently constructed plant as well as budget quotes for major items.
Permitting	Rights to mine	In place	SAMREC Feasibility Study	Mining right active and in place, valid until 2047.
	Water use license	In place	SAMREC Feasibility Study	WUL currently in place and valid until 19 July 2021.
Social Licence	Social	In place	SAMREC Feasibility Study	SLP in place for the mine. Local procurement is preferred.

VII. MODIFYING FACTORS

The NI 43 – 101 incorporates the CIM definition standards for Mineral Resources, Mineral Reserves and Mining Studies. The CIM defines modifying factors as considerations used to convert Mineral Resources to Mineral Reserves, which include but are not restricted to mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social, and governmental factors.

i. Mineral Reserve Conversion Factors

Mineral Reserve conversion factors are the consideration of mining factors used to convert Mineral Resources to Mineral Reserves. These factors are applied to adjust the *in situ* Mineral Resources in the LoM planning to realistic and accurate mill feed, volumes, and grade.

The Mineral Reserve conversion factors applied to the Mineral Resources in the LoM plan, are detailed in Table 30. All Mineral Reserve conversion factors have been applied equally to the Carbon Leader and Middelvlei Reefs.

Table 30: Mineral Reserve Conversion Factors

Description	Units	Value
Geological Losses (applied to Mineral Resources)		
Measured	%	5
Indicated	%	10
Inferred	%	15
Pillar Provision and Mining Extraction		
Pillar Provision	%	10
Mining Extraction	%	80
Dilution		
Dilution-Reef Cut (above and below the reef)	cm	10
Dilution-Sundries Carbon Leader Reef	%	23.1
Dilution-Sundries Middelvlei Reef	%	18.9
Dilution-Discrepancy Carbon Leader Reef	%	25.3
Dilution-Discrepancy Middelvlei Reef	%	20.7
SBM Conversion Dilution Carbon Leader Reef	%	23.3
SBM Conversion Dilution Middelvlei Reef	%	20.0
Mine Call Factor		
Mine Call Factor	%	85

Notes:

1. The Mineral Reserve conversion factors are applied to individual mining blocks within the mining schedule.
2. Mining extraction has been applied to all mining blocks in the schedule which do not form part of the initial five years of the LoM plan.

ii. Processing and Metallurgical Factors

The plant with a RoM capacity of 40 ktpm consists of crushing, ball milling, gravity concentration, leach and carbon-in-pulp and elution circuits to produce gold doré. Tailings will be deposited onto the existing No. 6 TSF by means of daywall deposition. A fixed residue grade of 0.304 g/t is anticipated.

iii. Infrastructure Factors

No infrastructure constraints have been identified.

iv. Economic and Marketing Factors

No economic factors affecting the Mineral Reserve have been identified.

v. Legal, Environmental, Social and Governmental Factors

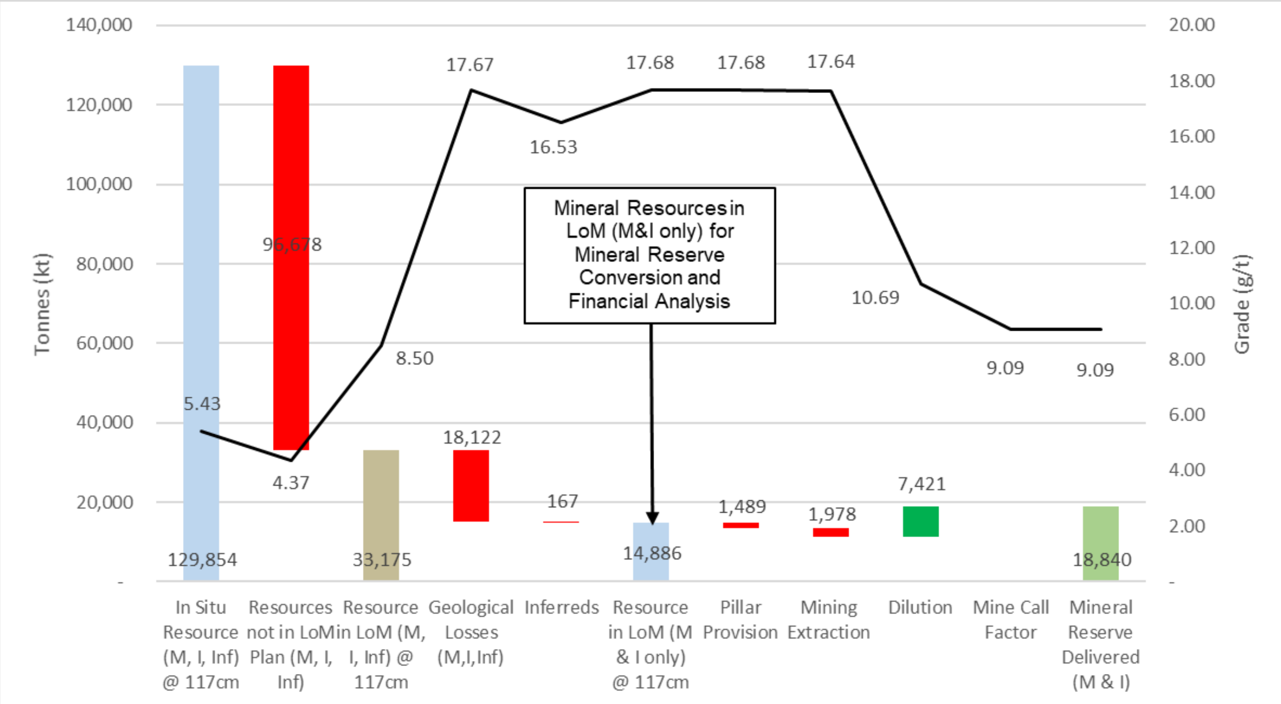
No legal, environmental, social, and governmental factors affecting the Mineral Reserve have been identified.

VIII. MINERAL RESOURCE TO MINERAL RESERVE CONVERSION

i. Tonnes and Grade

The Mineral Resource to Mineral Reserve conversion is illustrated in Figure 63. The *in situ* Mineral Resource is as per the Mineral Resource statement estimated for the project area at a stoping width of 117 cm. The Mineral Resources within the LoM plan are adjusted with Mineral Reserve conversion factors for the estimation of Mineral Reserves. Geological losses, pillar provision and mining extraction discounts tonnes and content equally. Dilution increases tonnes only, with no influence on content. The MCF only influences content. The Mineral Reserves exclude any Inferred Mineral Resources.

Figure 63: In Situ Mineral Resource to Mineral Reserve



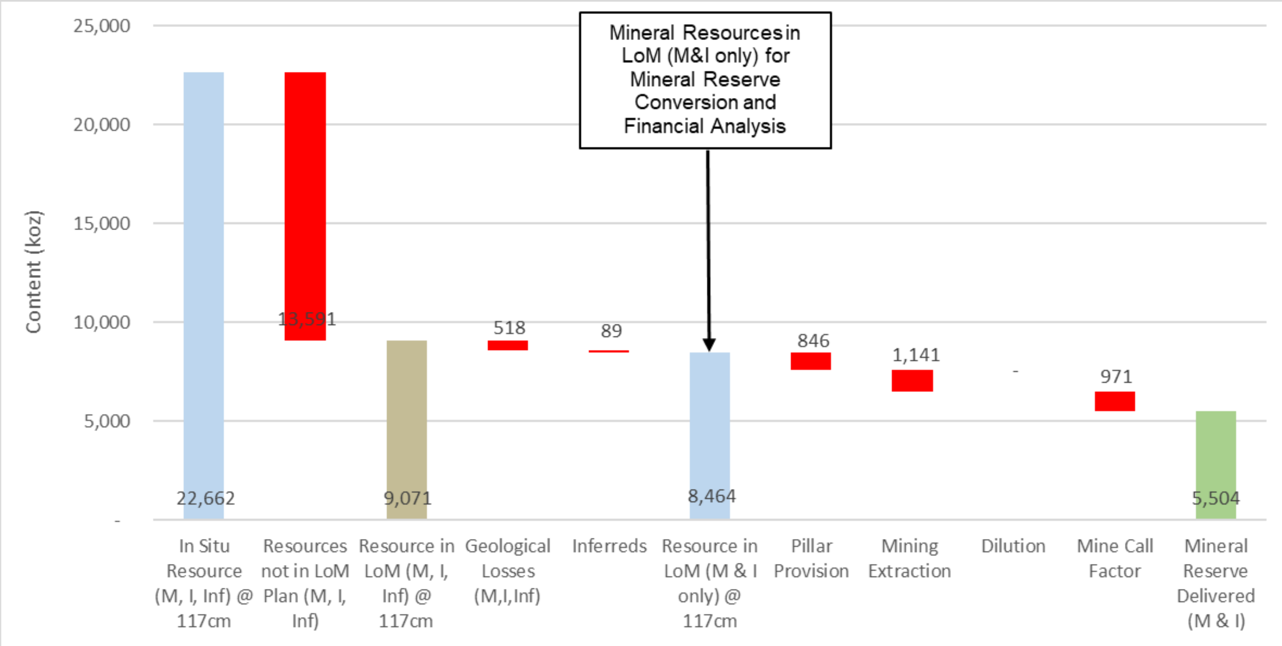
Notes:

1. The purpose of the waterfall chart is to illustrate the *in situ* Mineral Resources to Mineral Reserve conversion.
2. Only Measured and Indicated Mineral Resources in the LoM plan have been included for the conversion to Mineral Reserves.
3. No Inferred Mineral Resources have been included in the Mineral Reserve estimation.
4. No Inferred Mineral Resources have been included in the financial valuation.

ii. Product

The Mineral Resource to Mineral Reserve product conversion is illustrated in Figure 64. The *in situ* content is reduced by excluding areas outside the planned mining areas. The MCF reduces the gold content.

Figure 64: In Situ Mineral Resource to Mineral Reserve - Product



Notes:

1. The purpose of the waterfall chart is to illustrate the *in situ* Mineral Resources to Mineral Reserve conversion.
2. Only Measured and Indicated Mineral Resources in the LoM plan have been included for the conversion to Mineral Reserves.
3. No Inferred Mineral Resources have been included in the Mineral Reserve estimation.
4. No Inferred Mineral Resources have been included in the financial valuation.

IX. MINERAL RESERVES

i. Reserves

The Mineral Reserves for the Carbon Leader Reef for Blyvoor Mine as at 1 March 2021 are detailed in Table 31.

Table 31: Mineral Reserves for the Carbon Leader Reef for Blyvoor Mine as at 1 March 2021

Mineral Reserve Classification	Delivered Grade	Delivered Tonnes	Delivered Au Content	
	g/t	Mt	kg	Moz
Proved	15.19	1.88	28,592	0.92
Probable	11.77	6.77	79,653	2.56
Total	**12.52**	**8.65**	**108,245**	**3.48**

Notes:

1. Mineral Reserves stated at an average gold price of USD1,535/oz and an average exchange rate of ZAR/USD 17.00.
2. Mineral Reserves are reported at a 479 cm.g/t cut-off grade applied.
3. Minimum remnant area of 1,000 m² applied.
4. Mining extraction of 80% applied to all remnants.
5. Pillar provision of 10% applied.
6. Stope width is the average SBM mining cut over a 160 cm mining width.
7. Stope content has been calculated using the stope grade and average SBM mining cut.
8. The Mineral Resources are at 100% attributable.

The Mineral Reserves for the Middelvlei Reef for Blyvoor Mine as at 1 March 2021 are detailed in Table 32.

Table 32: Mineral Reserves for the Middelvlei Reef for Blyvoor Mine 1 March 2021

Mineral Reserve Classification	Delivered Grade	Delivered Tonnes	Delivered Au Content	
	g/t	Mt	kg	Moz
Proved	5.25	3.32	17,453	0.56
Probable	6.62	6.87	45,510	1.46
Total	**6.18**	**10.19**	**62,962**	**2.02**

Notes:

1. Mineral Reserves stated at an average gold price of USD1,535/oz and an average exchange rate of ZAR/USD 17.00.
2. Mineral Reserves are reported at a 479 cm.g/t cut-off grade applied.
3. Minimum remnant area of 1,000 m² applied.
4. Mining extraction of 80% applied to all remnants.
5. Pillar provision of 10% applied.
6. Stope width is the average SBM mining cut over a 160 cm mining width.
7. Stope content has been calculated using the stope grade and average SBM mining cut.
8. The Mineral Resources are at 100% attributable.

The combined total Mineral Reserves for Blyvoor Mine as at 1 March 2021 are presented in Table 33.

Table 33: Combined Total Mineral Reserves for Blyvoor Mine as at 1 March 2021

Mineral Reserve Classification	Delivered Grade	Delivered Tonnes	Delivered Au Content	
	g/t	Mt	kg	Moz
Proved	8.85	5.20	46,044	1.48
Probable	9.18	13.64	125,163	4.02
Total	**9.09**	**18.84**	**171,208**	**5.50**

Notes:

1. Mineral Reserves stated at an average gold price of USD1,535/oz and an average exchange rate of ZAR/USD 17.00.
2. Mineral Reserves are reported at a 479 cm.g/t cut-off grade applied.
3. Minimum remnant area of 1,000 m² applied.
4. Mining extraction of 80% applied to all remnants.
5. Pillar provision of 10% applied.
6. Stope width is the average SBM mining cut over a 160 cm mining width.
7. Stope content has been calculated using the stope grade and average SBM mining cut.
8. The Mineral Resources are at 100% attributable.

ii. Comments

The Mineral Reserves exclude Inferred Mineral Resources in the LoM plan. Tonnes in the Mineral Reserve refers to metric tonnes delivered to the metallurgical plant. The conversion of kilogram to ounces is 1 kg = 32.15076 oz. The totals in the Mineral Reserve may not add-up due to rounding.

X. Balance of Resources

The balance of Mineral Resources for the Carbon Leader is detailed in Table 34. The balance shows the amount of *in situ* Mineral Resources excluding the Mineral Resources in the LoM plan.

The total remainder is 13.6 Mt of Measured Resources and 3.7 Mt Indicated Mineral Resources with 79 Mt of Inferred Mineral Resources. This provides a potential upside to increase the Mineral Reserves by extending the mining areas, while considering the economic parameter.

Table 34: Balance of Mineral Resources – Carbon Leader Reef

Mineral Resource Classification	Stope Grade	Stope Width	Stope Content	Stope Tonnes	Gold Content	
	g/t	cm	cm.g/t	Mt	kg	Moz
Measured	9.16	117	1,072	2.35	21,497	0.69
Indicated	5.30	117	620	0.31	1,626	0.05
Total M&I	**8.71**	**117**	**1,020**	**2.65**	**23,123**	**0.74**

Mineral Resource Classification	Stope Grade	Stope Width	Stope Content	Stope Tonnes	Gold Content	
	g/t	cm	cm.g/t	Mt	kg	Moz
Inferred	8.33	117	974	8.71	72,523	2.33

The balance of Mineral Resources for the Middelvlei Reef is detailed in Table 35.

Table 35: Balance of Mineral Resources – Middelvlei Reef

Mineral Resource Classification	Stope Grade	Stope Width	Stope Content	Stope Tonnes	Gold Content	
	g/t	cm	cm.g/t	Mt	kg	Moz
Measured	3.54	117	415	11.22	39,746	1.28
Indicated	3.52	117	412	3.43	12,052	0.39
Total M&I	**3.54**	**117**	414	**14.64**	**51,798**	**1.67**

Mineral Resource Classification	Stope Grade	Stope Width	Stope Content	Stope Tonnes	Gold Content	
	g/t	cm	cm.g/t	Mt	kg	Moz
Inferred	3.90	117	456	70.67	275,296	8.85

The balance of Mineral Resources for the combined reefs are shown in Table 36.

Table 36: Balance of Mineral Resources – Combined

Mineral Resource Classification	Stope Grade	Stope Width	Stope Content	Stope Tonnes	Gold Content	
	g/t	cm	cm.g/t	Mt	kg	Moz
Measured	4.51	117	528	13.57	61,242	1.97
Indicated	3.66	117	429	3.73	13,678	0.44
Total M&I	**4.33**	**117**	**507**	**17.30**	**74,920**	**2.41**

Mineral Resource Classification	Stope Grade	Stope Width	Stope Content	Stope Tonnes	Gold Content	
	g/t	cm	cm.g/t	Mt	kg	Moz
Inferred	4.38	117	513	79.38	347,819	11.18

Item 15 (b) - Mineral Reserve Reconciliation - Compliance with Disclosure Requirements

I. Compliance

All Mineral Reserves have been categorised and reported in compliance with the definitions embodied in the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM Council (incorporated into NI 43-101). As per CIM Code specifications, Mineral Reserves have been reported separately in the Proved and Probable Mineral Reserve categories. Inferred Mineral Resources have not been incorporated with the Proved and Probable Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

The mining plan targets Measured Mineral Resources and Indicated Mineral Resources only, with no economic benefit for Inferred Mineral Resources.

II. Mineral Reserve Reconciliation

A Mineral Reserve estimate for Blyvooruitzicht underground was declared by Minxcon in February 2020. The reconciliation between the Mineral Reserve statements for 2020 and 2021 is detailed in Table 37.

The following updates have been carried out on the current Mineral Reserves stated 1 February 2020:-

- Blyvoor has an existing Mineral Reserve of 1.61 Moz Au as at 1 February 2020.
- The Mineral Resources have been updated to include the Rock Mechanic Pillars ("RMP") and Mineral Resources previously flagged as Not in Reserve ("NIR").
- The Mineral Reserve for 2020 was stated for a detailed 15-year LoM plan excluding RMPs and NIRs.
- The 2021 Mineral Reserve estimation includes RMPs and NIRs which have been converted to mineable areas, which yields a longer LoM due to changes in the planning criteria from a 15-year LoM plan to a LoM plan which depletes the total Mineral Reserve. Minxcon has applied the following Mineral Reserve conversion factors to the Mineral Resource of the Blyvoor Mine to include Mineral Reserves that were not previously included in the 15 year LoM plan:-
- mining only in a 5 km radius of the No. 5 Shaft;
- all remnants smaller than 1,000 m^2 have been excluded;
- a Mineral Reserve cut-off of 479 cm.g/t applied;
- mining extraction factor of 80% applied;
- pillar provision of 10% applied;
- Selective Blast Mining ("SBM") and its associated mining factors have been applied to the Mineral Resources in the LoM plan for all stoping panels from 14 m advance onwards;
- the first month of production on each panel will consist of conventional ledging (approximately 8 m linear advance) and conventional opening-up from a 117 cm stoping width to the planned SBM stoping width of 160 cm; and
- it is expected that a 2 m linear face advance will be required to open-up the stoping width from 117 cm to 160 cm (43 cm). The conversion to SBM stoping will require an additional 4 m linear face advance using conventional stoping, to create sufficient volume in the back area for waste packing once SBM commences. It has been estimated that 50 % of the waste within the 4 m advance will be packed, and the remaining 50 % will contribute to dilution.

Table 37: Mineral Reserve Reconciliation between 2020 and 2021

Description	Units	2020 Minxcon Mineral Reserve Estimate	2021 Minxcon Mineral Reserve Estimate	Variance	Variance (%)
Proved					
Tonnes	Mt	3.76	5.20	1.44	38%
Au Grade	g/t	8.60	8.85	0.25	3%
Au Content	kg	32,340	46,044	13,704	42%
Au Content	Moz	1.04	1.48	0.44	42%
Probable					
Tonnes	Mt	3.75	13.64	9.89	264%
Au Grade	g/t	4.77	9.18	4.41	92%
Au Content	kg	17,864	125,163	107,299	601%
Au Content	Moz	0.57	4.02	3.45	606%
Total					
Tonnes	Mt	7.51	18.84	11.33	151%
Au Grade	g/t	6.69	9.09	2.40	36%
Au Content	kg	50,205	171,208	121,003	241%
Au Content	Moz	1.61	5.50	3.89	242%

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

The Mineral Reserve estimate considers gold only and no other commodity has been included in the Mineral Reserve estimation.

Item 15 (d) - FACTORS AFFECTING MINERAL RESERVE ESTIMATION

No processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social, or governmental modifying factors which materially affects the estimation of Mineral Reserves for Blyvoor Mine have been identified. Minxcon is not aware of any known environment, permitting, legal, title, taxation, socio-economic, marketing, and political or other factors that will materially affect the Mineral Reserve estimates.

The Mineral Reserve conversion factors detailed in Table 30 have been applied to the Mineral Resource for conversion to Mineral Reserves.

I. RISK ASSESSMENT

Minxcon has identified material and non-material risks associated with the project as detailed in Table 38 Table 39.

Table 38: Material Risks

Risk Category	Risk	Description / Cause	Risk (%) Likelihood	Impact 1 to 5	Risk Rating	Mitigation/Control	Completed/To be completed	Risk (%) Likelihood	Impact 1 to 5	Residual Risk
Mining	SBM not successful and have to revert to conventional mining	Although proven as a mining method, SBM is yet to be proven at the planned scale of production	**25%**	**4**	14	If SBM is unsuccessful, revert back to conventional mining. This will result in the production targets being achieved, at the expense of a lower grade delivered to the plant.	To be completed	**15%**	**3**	6
Mining	Inability to achieve planned face advance	The scattered nature of the planned mining areas and small mining blocks, may not provide sufficient face length and effective face time to achieve the planned face advance	**50%**	**3**	13	Reconnaissance to be done continuously to ensure that planned mining areas are accessible, and if not, re-planning is required to provide sufficient face length for production targets.	To be Completed	**25%**	**3**	9
Infrastructure	Delay in obtaining access below 29 Level	Delays in the establishment of the planned dewatering system.	**15%**	**3**	6	Ensure pumping commences when required. Sufficient capital allowance made for the re-equipping of required pump stations and the associated pumping systems.	To be Completed	**15%**	**3**	6

Table 39: Non-Material Risks

Risk Category	Risk	Description / Cause	Risk (%) Likelihood	Impact 1 to 5	Risk Rating	Mitigation/Control	Completed/To be completed	Risk (%) Likelihood	Impact 1 to 5	Residual Risk
Infrastructure	Insufficient capital provision	The level of detail for planned accesses in the future is low. Little information is available to determine the work required to replace or refurbish existing infrastructure. The current condition of these accesses is unknown.	**25%**	**2**	5	The current condition of planned future underground infrastructure that is required needs to be determined. Reconnaissance of the planned infrastructure will inform the capital requirements.	To be Completed	**25%**	**2**	5
Mining	Failure to achieve production build up and maintain steady state production	The majority of planned mining areas within the first five years has been confirmed by reconnaissance. Future planned areas might be inaccessible and will require re-planning.	**25%**	**2**	5	Confirm availability of planned mining areas through reconnaissance and adjust planning accordingly	To be completed	**15%**	**1**	1
Mining	Lack of flexibility	The SBM methodology requires more square meters to be opened up to produce the same number of ore tonnes as with conventional mining as only the reef is extracted. Thus more active faces are required. The availability of faces can only be determined through reconnaissance.	**25%**	**2**	5	Reconnaissance to be done continuously to ensure that planned mining areas are accessible, and if not, re-planning is required to provide sufficient face length for production targets.	To be Completed	**15%**	**2**	3
Mining	More dilution than planned	Poor mining and blasting discipline such as excessive	**25%**	**2**	5	Ensure proper drilling control reduce the risk of an increase in dilution and adhere to SBM standards.	To be Completed	**15%**	**2**	3

Risk Category	Risk	Description / Cause	Risk (%) Likelihood	Impact 1 to 5	Risk Rating	Mitigation/Control	Completed/To be completed	Risk (%) Likelihood	Impact 1 to 5	Residual Risk
		overbreak, can result in increased dilution, reducing the grade especially with the SBM method.								
Ventilation	Insufficient ventilation due to scattered and widespread planned mining areas	Historical ventilation districts may not cater for the ventilation of scattered and widely distributed working places causing insufficient ventilation of these areas.	**25%**	**2**	5	A full and comprehensive ventilation study and plan should be drafted and implemented prior to mining commencing in scattered and widespread areas around the No. 5 Shaft Complex. Portable cooling units to be deployed in isolated distant areas, as necessary. Allowance has been made in capital costs for the installation of two surface ventilation fans each at the historic Doornfontein No. 2 Shaft and the Blyvooruitzicht No. 3 Ventilation Shaft (Provision for ventilation when mining extremities) as well as the re-equipping of the 34 Level refrigeration plant for when mining progresses below 31 Level.	To be Completed	**25%**	**2**	5
Operational Readiness	Lack of operational management systems	Operational systems such as survey, mine planning and ventilation control are in place but not fully effective yet.	**15%**	**2**	3	Current operational systems should be optimized to ensure efficient operation.	To be Completed	**15%**	**1**	1
Geotechnical	Delays in production as a result of seismicity	The Blyvoor Mine has a history of seismic activity. Seismicity is often associated with deep mines and remnant mining such as the Blyvoor Mine.	**15%**	**2**	3	Seismic monitoring program to be implemented beyond current area	To be completed	**15%**	**1**	1
Resources	Channel width estimation could be inaccurate for throw blasting calculations in isolated mining areas.	Erroneous channel width removed from estimation, resulting in gaps within channel width model.	**15%**	**2**	3	Conduct channel width sampling within affected areas, and update channel width model.	To be Completed	**15%**	**2**	3

Risk Category	Risk	Description / Cause	Risk (%) Likelihood	Impact 1 to 5	Risk Rating	Mitigation/Control	Completed/To be completed	Risk (%) Likelihood	Impact 1 to 5	Residual Risk
Infrastructure	Reduced hoisting capacity during cage hoisting period	Additional hoppers required during the cage hoisting period may cause congestion on the shaft stations as the stations were not designed for this process.	**15%**	**2**	3	Logistics associated with cage hoisting should be properly managed	To be Completed	**25%**	**2**	5

Notes:

1. Red: High Risk. A high risk exists that management's objectives may not be achieved. Appropriate mitigation strategy to be devised immediately.
2. Orange: Significant Risk. A significant risk exists that management's objectives may not be achieved. Appropriate mitigation strategy to be devised as soon as possible.
3. Yellow: Medium Risk. A moderate risk exists that management's objectives may not be achieved. Appropriate mitigation strategy to be devised as part of the normal management process.
4. Green: Low Risk. A low risk exists that management's objectives may not be achieved. Monitor risk, no further mitigation required.

ITEM 16 MINING METHODS

I. MINING PROCESS

i. History of the Mine/Project

Blyvooruitzicht Gold Mine had historically mined over 100 Mt of ore at an average recovered grade of 11.3 g/t. The total historical gold production was in excess of 38 Moz of gold excluding an additional 19.5 Moz from Doornfontein Gold Mine pre-merger.

The Blyvooruitzicht Gold Mine commenced production in 1942 and mined continuously up until it was placed into business rescue in early 2013 and into liquidation in August of 2013. The liquidation was as a result of various factors, namely corporate activity of the then owner Village Main Reef, the failure to convert the old mining right, short term economic view on mining, downturn in the gold price, treatment at a neighbouring mine (some 120 km away) and union unrest.

Following the liquidation, the mechanical infrastructure assets were secured with a security force, however the majority of the electrical infrastructure on the surface was ransacked and will require replacement.

ii. Recent Activities

Numerous activities have been initiated and/or completed since cessation of the operation, including transfer of the mining right and water use licence to Blyvoor Gold, award of an EA, Mineral Resource update, mine planning, operating cost estimates, capital cost estimates, financial modelling, and implementation of the Blyvoor Project which has now reached the production build up phase.

The activities completed on-site include the following:-

- security was upgraded and the property secured;
- An outer perimeter fence and a five-meter high concrete wall have been constructed;
- generator-powered lights have been installed;
- shaft inspections have been completed;
- No. 5 Shaft, shaft repairs completed and shaft re-instated;
- power established to No. 5A Sub-vertical Shaft winders;
- housekeeping and refurbishment of change houses and surface area completed;
- traffic control measures completed;
- opening-up of 15 Level haulage and access to the production area has been secured;
- opening-up of 25 and 27 Level haulages have been completed;
- purchase and delivery of hydro mining equipment; and
- construction and commissioning of process plant has been completed; and
- reconnaissance of the initial planned mining areas has been completed.

iii. Orebody Description

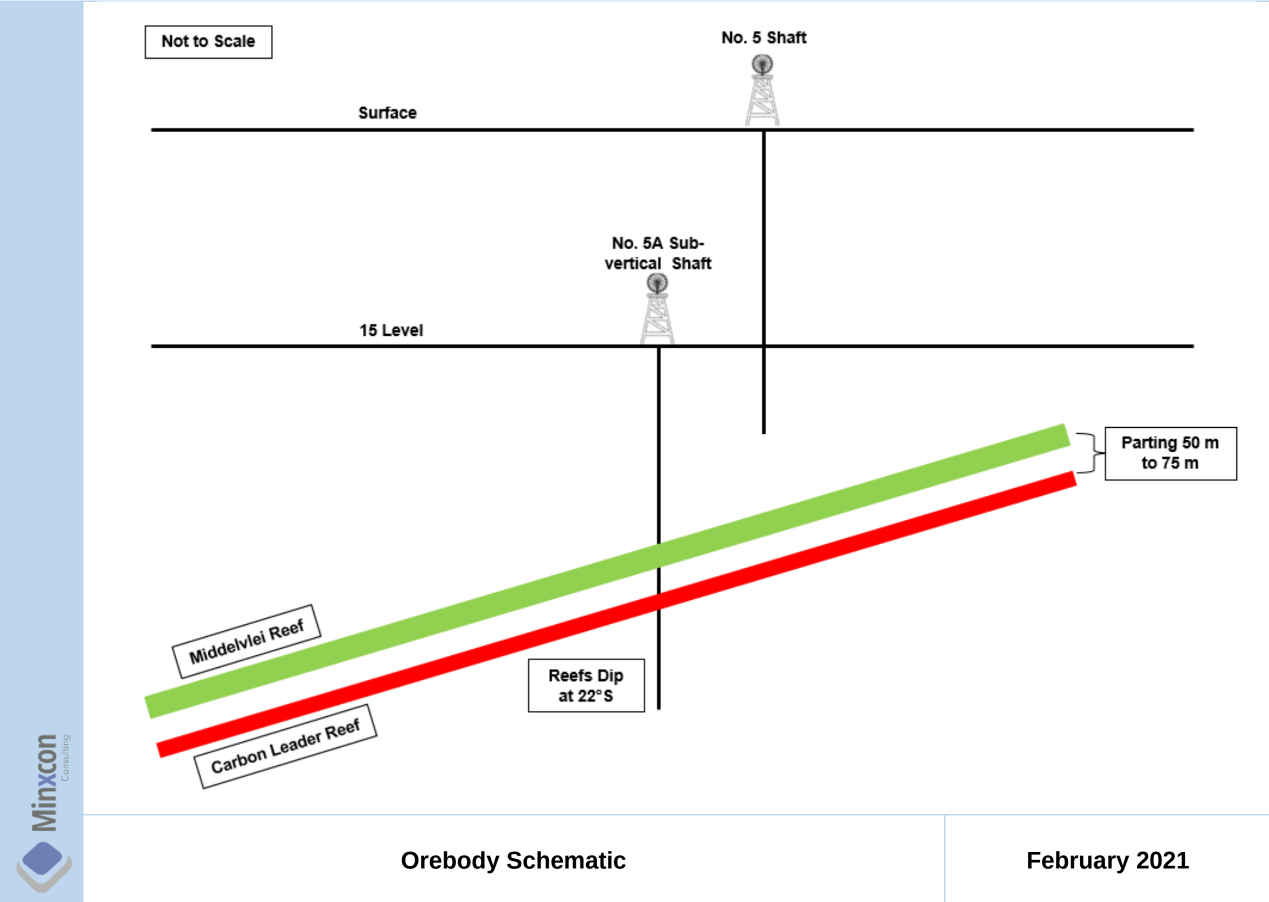
The two reefs considered for economic extraction are the Carbon Leader Reef and Middelvlei Reef located between 1,800 mbs to 2,700 mbs. Both reefs are narrow, and the average dip of both reefs is 22°S.

The Carbon Leader Reef is the principle economic horizon, and is a high grade, thin (less than 40 cm on average) carbon rich reef with siliceous quartzite in the hanging wall. The grade decreases towards the south and southwest due to reduction in carbon content. In the western area, the Carbon Leader is eliminated by a northwest-southeast striking, 1,900 m wide erosional channel. The Carbon Leader has been mined over 90% of where it occurred within the mining lease area. The average grade for the Carbon Leader Reef is 1,222 cm.g/t (excluding Inferred Mineral Resources).

The Middelvlei Reef is the second economic horizon and is 50 m to 75 m above the Carbon Leader with an average thickness of less than 60 cm. The Middelvlei is characterised by lower grades than the Carbon Leader. The Middelvlei Reef has been mined in scattered payable areas, owing to the variable historical payability and presence of sedimentologically controlled pay shoots. The average grade for the Middelvlei Reef is 582 cm.g/t (excluding Inferred Mineral Resources).

A graphical representation of the orebodies is illustrated in Figure 65.

Figure 65: Orebody Schematic



The reef thickness encountered within the mining area for the Carbon Leader Reef averages approximately 20 cm, and for the Middelvlei Reef it averages approximately 43 cm. The average SBM cut for the Carbon Leader Reef and Middelvlei Reef is 50 cm and 61 cm, respectively.

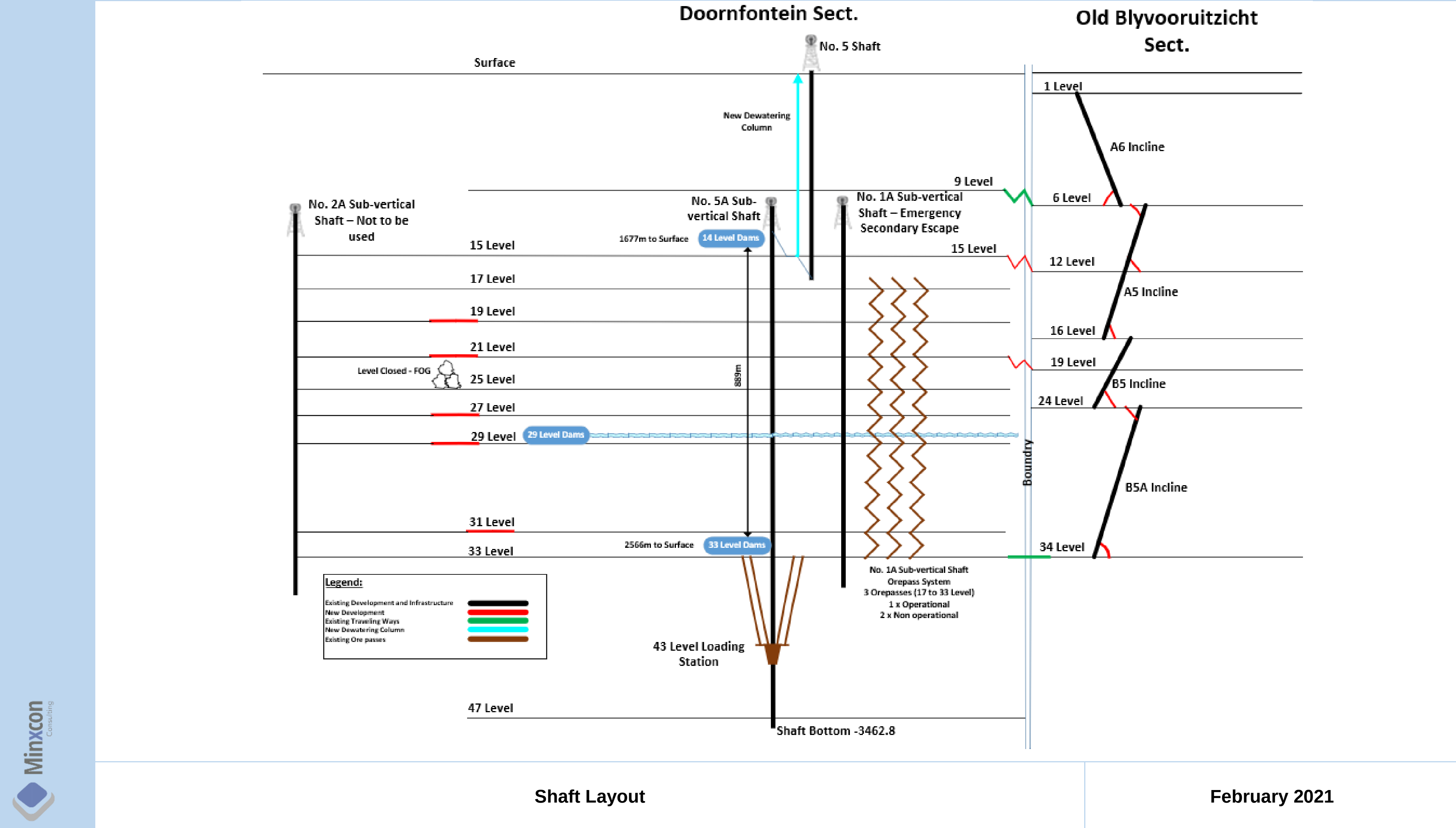
iv. Mining Layout

The general mine layout in the area is shown in Figure 5. No. 5 Shaft, No. 5A Sub-vertical and No. 1A Sub-vertical orepass system will be used in the planned mining operations. The shaft system provides access to the current workings and to future workings.

The No. 6 Shaft is utilised as a second egress to surface as per agreement with the current owner, CWC (subsidiary of Harmony). No. 6 Shaft is fully equipped and capable of being utilized as a second egress.

The general shaft layout for the greater Blyvoor mining area is illustrated in Figure 66.

Figure 66: Shaft Layout



II. MINING STRATEGY

The mining strategy for the Blyvoor Mine is to extract both the Carbon Leader Reef and Middelvlei Reef utilising the No. 5 Shaft Complex via conventional ledging and opening up to the required stoping width of 160 cm for SBM stoping. The first month of production on each panel will consist of conventional ledging (approximately 8 m linear advance) and conventional opening-up from a 117 cm stoping width to the planned SBM stoping width of 160 cm.

It is expected that a 2 m linear face advance will be required to open-up the stoping width from 117 cm to 160 cm (43 cm). The conversion to SBM stoping will require an additional 4 m linear face advance using conventional stoping, to create sufficient volume in the back area for waste packing once SBM commences. It has been estimated that 50% of the waste within the 4 m advance will be packed, and the remaining 50% will contribute to dilution.

There after SBM stoping will be implemented. Some of the targeted workings cannot currently be accessed and opening-up with re-equipping will be required prior to mining.

Planned mining will initially take place between 15 Level and 27 Level. A ramp up of 17 months has been planned to reach steady state production of approximately 20,000 m^2, which equates to approximately 40 ktpm. This production rate will be sustained for a period of 15 months followed by a second ramp up. The second ramp up to a steady state production rate of approximately 40,000 m^2, which will produce approximately 80 ktpm, has been planned over a 12-month period.

The production rate was determined by Blyvoor Gold and is a realistically achievable rate considering the current infrastructure. The initial production rate is limited by the capacity of cage hoisting and the requirement to install a mid-shaft loading station.

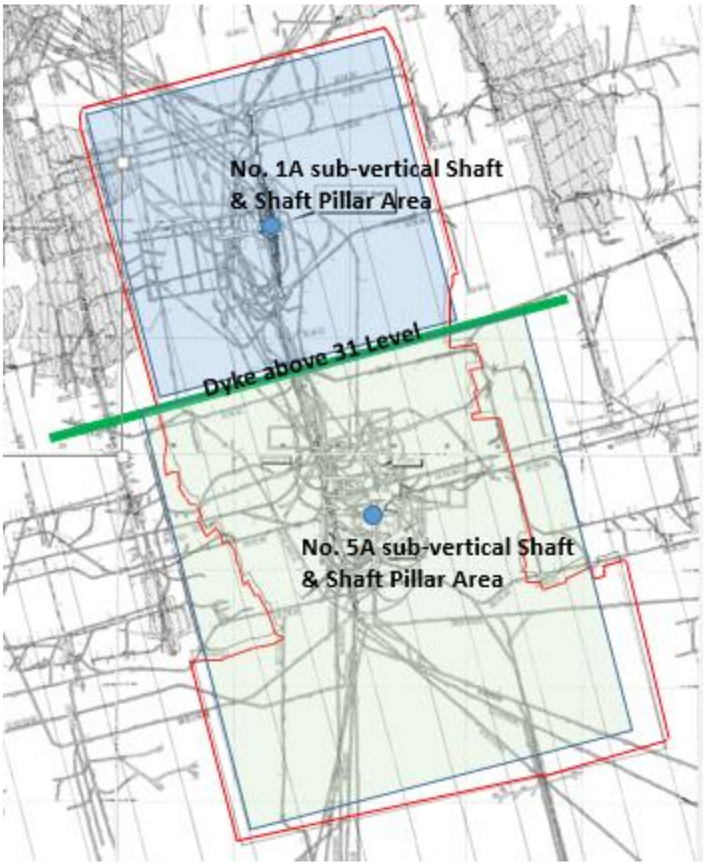
Reconnaissance of the initial planned mining areas has been conducted to assess the availability and condition of underground access and workings. Ongoing reconnaissance will be conducted to assess the availability of planned mining areas and to determine the extent of opening-up and re-equipping required. Re-planning may be required if the reconnaissance identifies inaccessible areas.

Opening-up and re-equipping has advanced sufficiently for development and early stoping to commence on 15 and 27 Levels. The aim is to produce at the initially planned production rate of 20,000 m^2, from these levels, allowing ample time for opening-up and re-equipping on other levels which are required to sustain the planned 40,000 m^2 per month. The No. 5A Sub-vertical shaft is currently flooded up to 10 m above 29 Level. Dewatering as well as opening-up and re-equipping will be required, prior to the commencement of production on and below 29 Level.

A schematic of the No. 1A Sub-vertical Shaft, No. 5A Sub-vertical Shaft and the shaft pillar for the Middelvlei Reef are illustrated in Figure 67. The Carbon Leader Reef has a similar layout. The two sub-vertical shafts are divided into two areas by the presence of a dyke above 31 Level.

The shaft pillars have been included in the updated Mineral Resources and Mineral Reserve estimation. Mining of the shaft pillar areas will be subject to a geotechnical study and specific rock engineering recommendations for mining the shaft pillars.

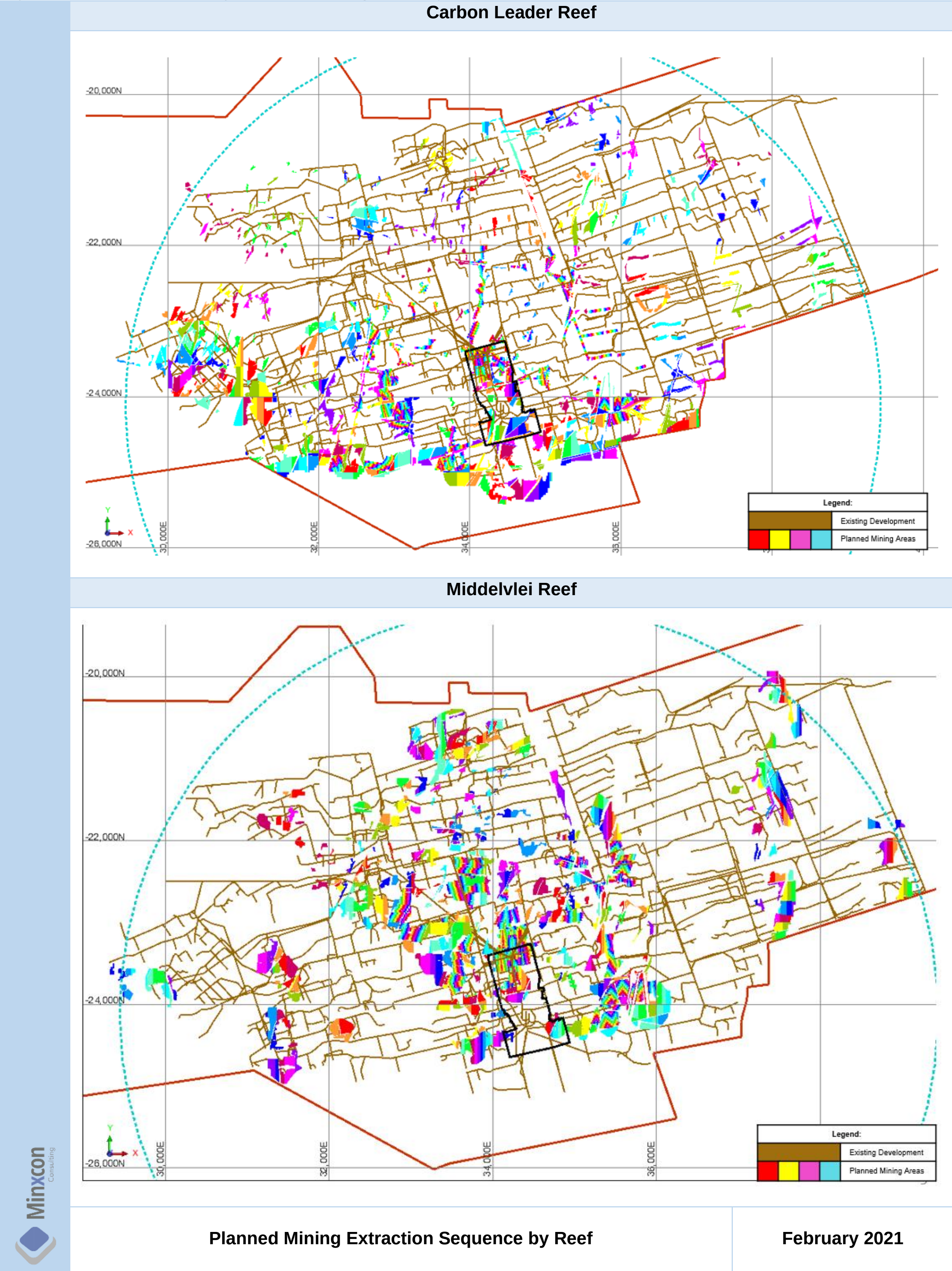
Figure 67: Shaft Pillar Area: Middelvlei Reef



Shaft Pillar Area: Middelvlei Reef	February 2021

The mining layout and extraction sequence for the Carbon Leader and Middelvlei Reefs are illustrated in Figure 68. The blue dotted circle represents a 5 km radius around the No. 5 Shaft Complex.

Figure 68: Planned Mining Extraction Sequence by Reef



III. Mine Access

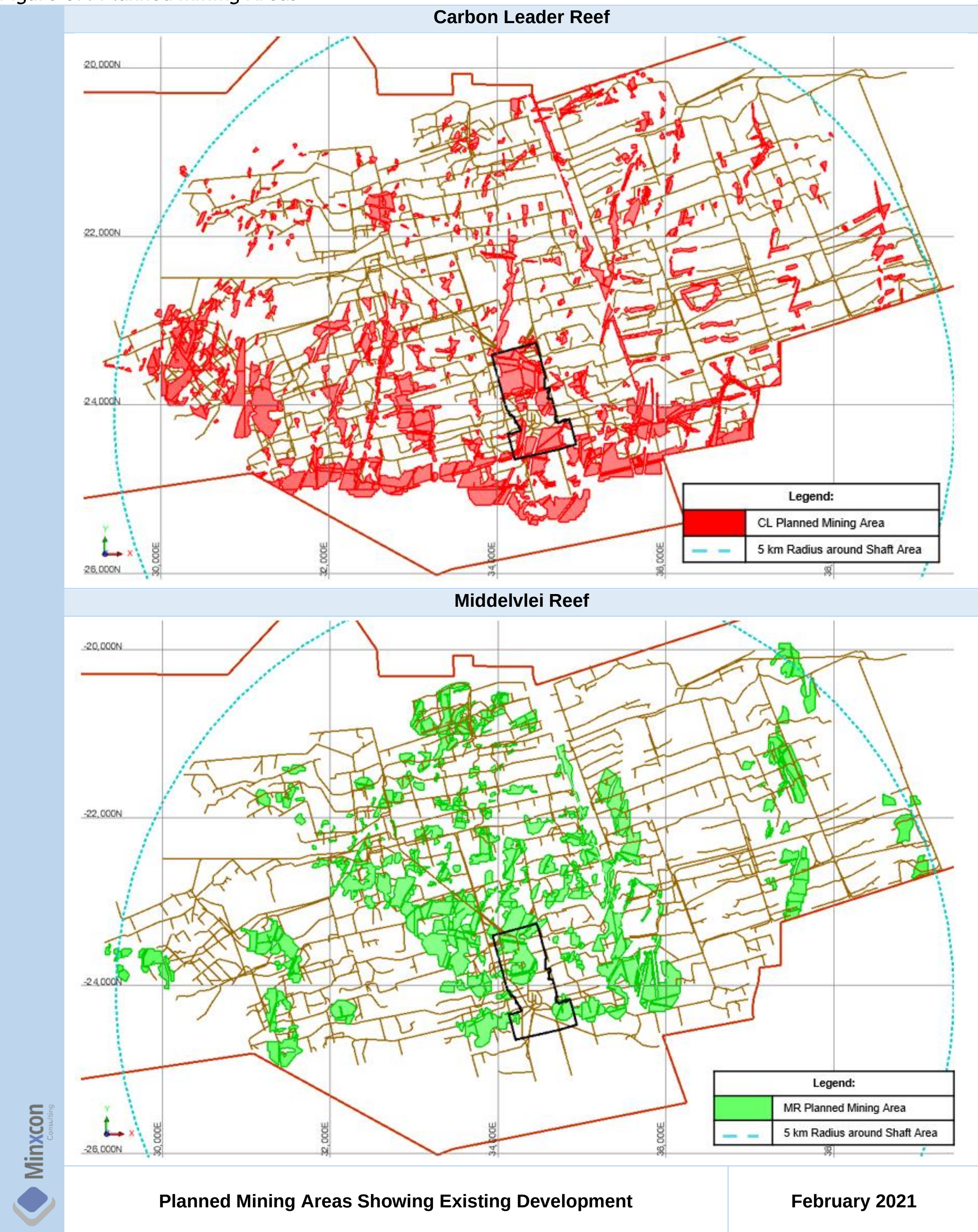
The current mining infrastructure, namely the existing main surface shaft (No. 5 Shaft), underground sub-shafts (No. 5A Sub-vertical Shaft and No. 1A Sub-vertical Shaft and orepass system, existing footwall drives and crosscuts will be utilised as access to the workings. All the existing excavations required to access the underground workings (stopes and development ends) have been, or will be, refurbished as necessary to provide safe access for men and material.

Men and material will be transported via No. 5 Shaft and No. 5A Sub-vertical Shaft. Ore will be transferred via the orepass system located at No. 1A Sub-vertical Shaft down to 27 Level and cross-trammed to No. 5A Sub-vertical Shaft. Initially ore will be hoisted to 15 Level via cage hoisting, where the ore is then cross-trammed to No. 5 Shaft and hoisted to surface. Once the No. 5A Sub-vertical shaft rock winder and 27.5 Level mid-shaft loading station has been commissioned, the No. 5A Sub-vertical Shaft orepass system will be utilised from where the ore is hoisted to 14 Level and then transferred to No. 5 Shaft loading station by way of an existing conveyor installation and hoisted to surface.

IV. MINING AREAS

The mining area for both the Carbon Leader Reef and Middelvlei Reef are illustrated in Figure 69. Most of the planned mining areas are within a 5 km radius from the No. 5 Shaft Complex.

Figure 69: Planned Mining Areas

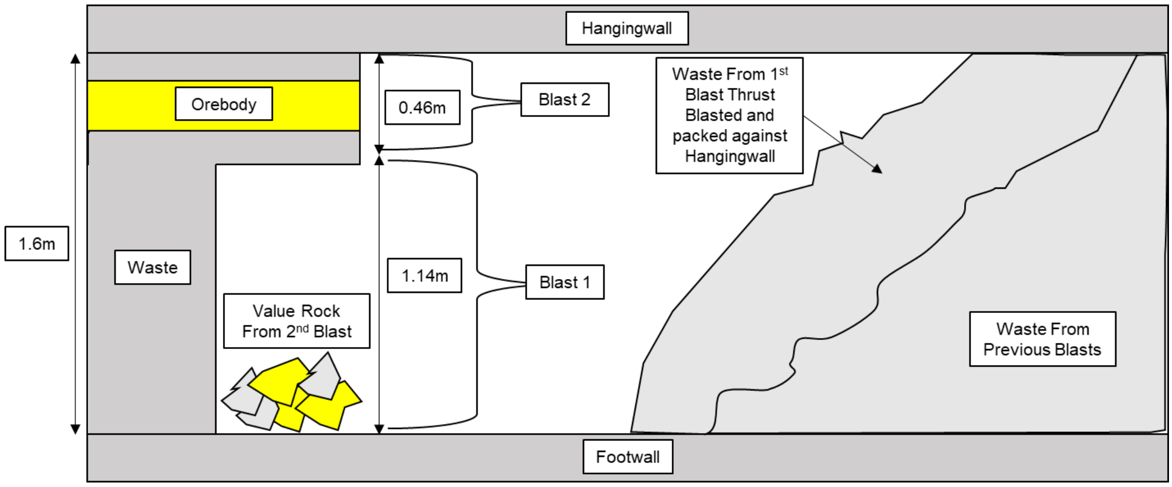


V. MINING METHOD

i. Selective Blast Mining

SBM makes use of milli-second sequential blasting technology to separate the valuable reef material from waste rock in the blasting operation at the stope faces in the mining of tabular ore bodies. In resue mining or SBM, the waste rock is thrust blasted by creating a 'secondary footwall' above or below the reef and advancing the blast in the waste region by one meter per blast. The reef above the true footwall or below the hanging wall is then lifted or dropped and collected. The ore is shattered but not displaced and only the reef material is transported to the surface. The principle of this mining method is stowing or packing of waste material in the mined-out area behind the advancing stope face. A schematic representation of SBM stoping is illustrated in Figure 70.

Figure 70: Schematic Representation of SBM Stoping

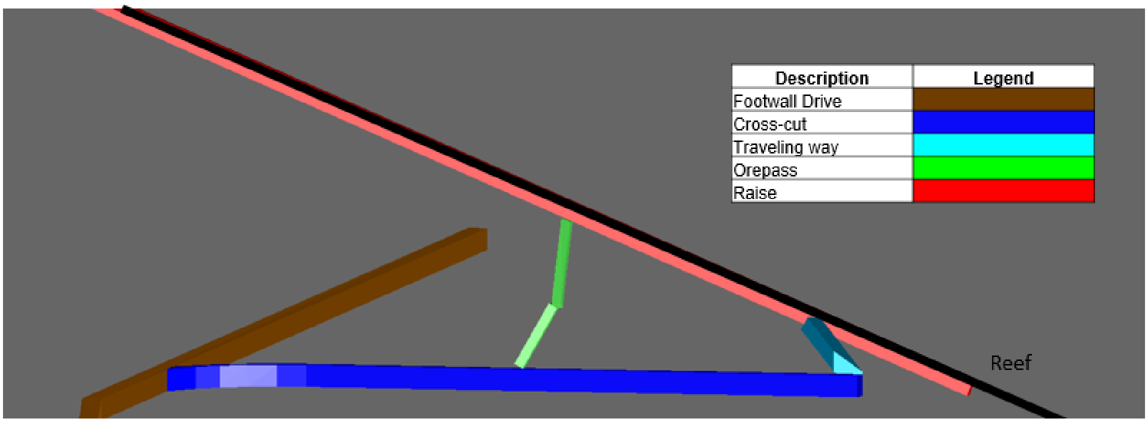


SBM Stoping Schematic Section | **February 2021**

ii. Development

All new development ends that are required will be developed by conventional methods. The required development consists of footwall drives, crosscuts, traveling ways, raises and orepasses. A basic layout of the development is illustrated in Figure 71.

Figure 71: Development



Development Design | **February 2021**

The footwall drive/haulage is an underground entry or passageway that is designed for the transport of personnel or equipment from the shaft towards the underground workings and transporting the ore towards the shaft. The footwall drives are developed off-reef. From the footwall drive, a crosscut is developed horizontally perpendicular to the drive and towards the orebody. Once the reef is intersected, a horizontal reef drive is installed along the strike of the orebody. A traveling way is also developed from the crosscut towards the orebody to provide entry exclusively for personnel to travel from the crosscut into the workings. A raise is developed on-reef from the reef drive following the dip of the orebody from one level towards the next to provide access to the stoping panels for men and materials and for the extraction of ore. A raise follows the line (dip) of the reef connecting one working level to another. An orepass is located between two operating levels and allows gravitational movement of ore from a higher mining location to the level below, namely the on-reef raise to the crosscut, from where it will be transported to the shaft and hoisted to surface.

iii. Stoping

a. Method

The mining method that will be employed at the No. 5 Shaft Complex will consist of a month of conventional ledging (approximately 8 m linear advance) and conventional opening-up from a 117 cm stoping width to the planned SBM stoping width of 160 cm.

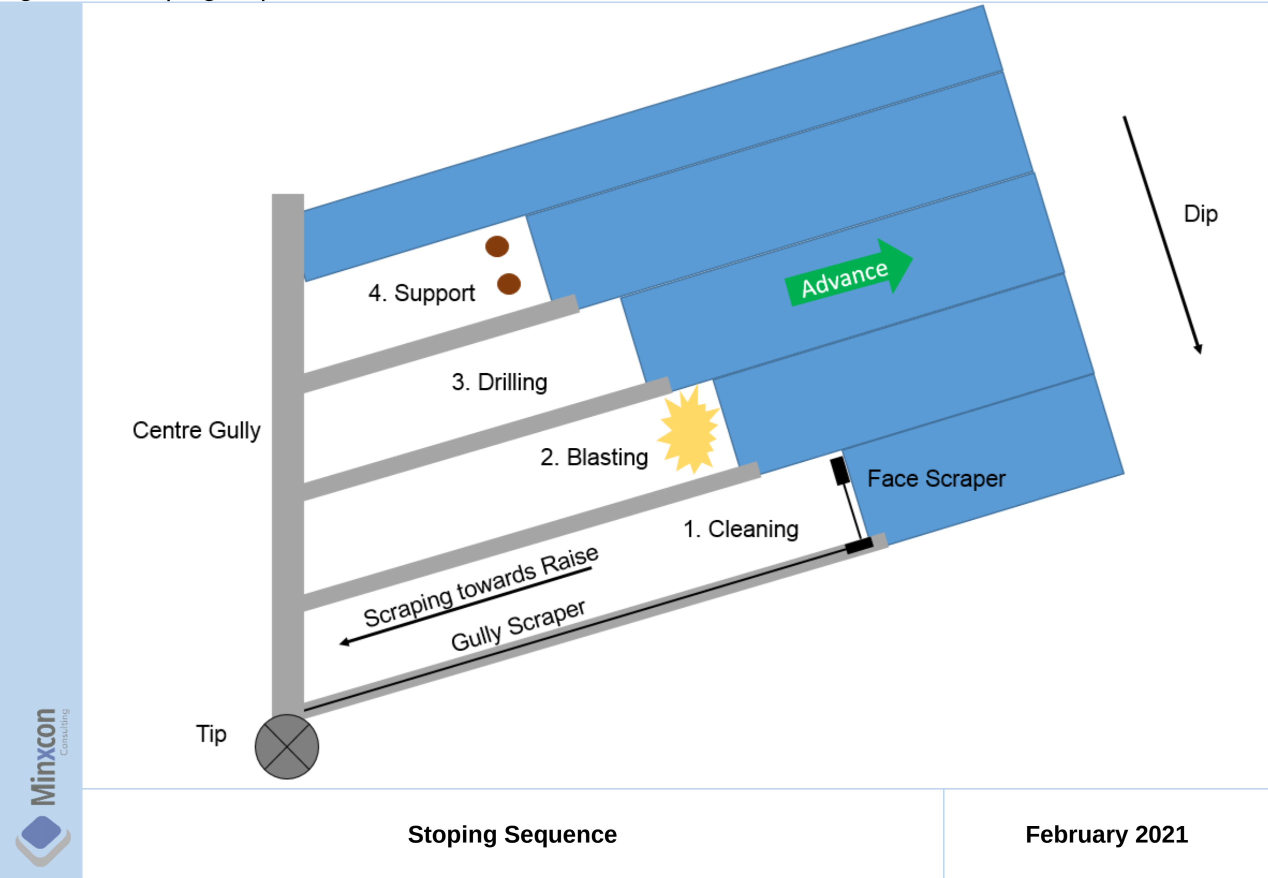
It is expected that a 2 m linear face advance will be required to open-up the stoping width from 117 cm to 160 cm (43 cm). The conversion to SBM stoping will require an additional 4 m linear face advance using conventional stoping, to create sufficient volume in the back area for waste packing once SBM commences. It has been estimated that 50% of the waste within the 4 m advance will be packed, and the remaining 50% will contribute to dilution.

Conventional mining is a mining method whereby the drilling is conducted by means of handheld hydropower drills. The cleaning of the stopes is conducted by face, strike gully and centre gully scraping into orepasses that are connected to the underlying crosscut.

b. Sequence

The stoping sequence layout is illustrated in Figure 72. The first activity is to support the area, followed by drilling, blasting and finally cleaning.

Figure 72: Stoping Sequence



c. Support

The support of the area is required to ensure safe working conditions. The support of the face includes the installation of roof bolts, the installation of mine poles with jack pots and the placement of timber packs.

d. Drilling and Blasting

The drilling of the face is conducted by handheld hydropower rock drills. After drilling the holes are charged with explosives and blasted at the end of the shift.

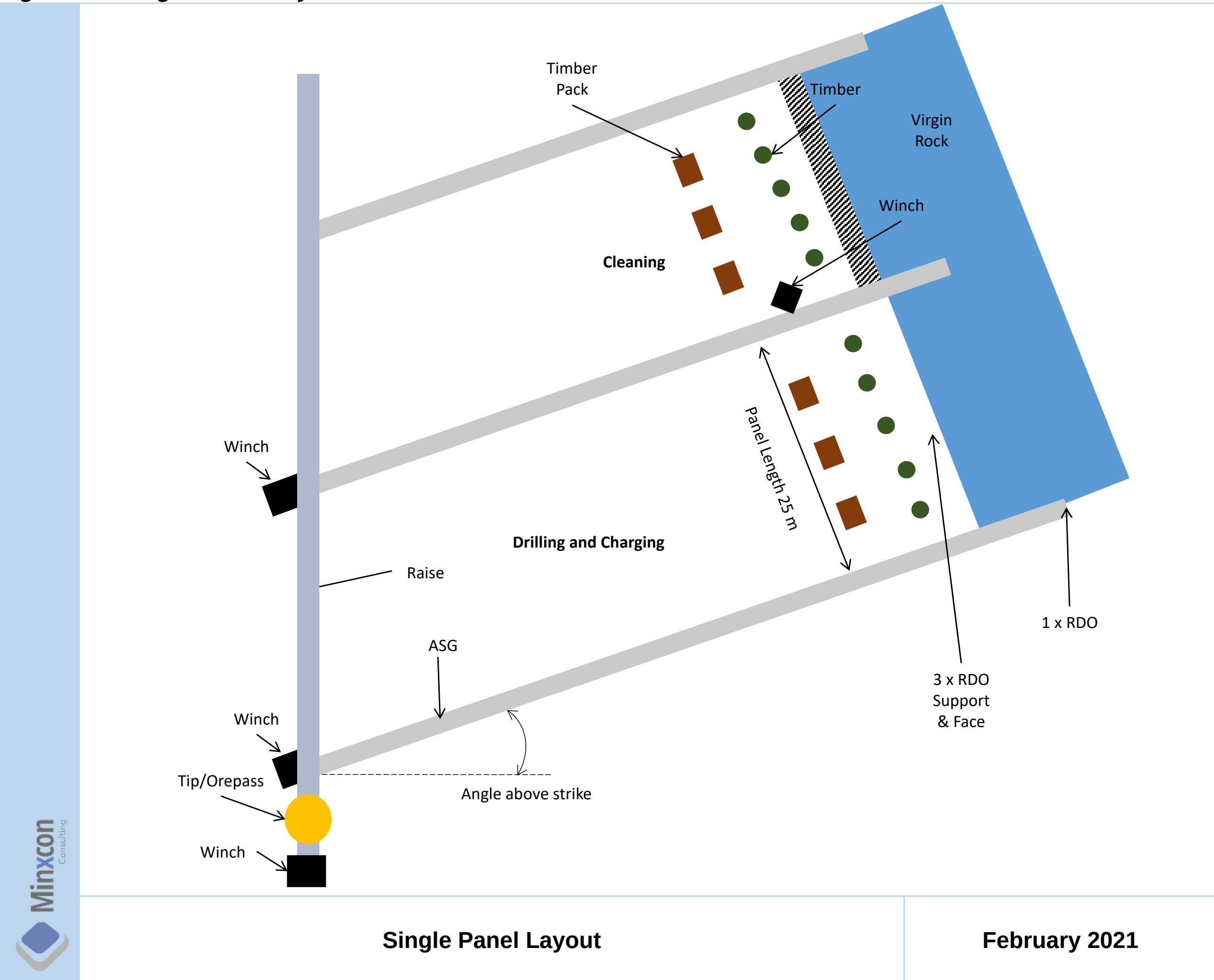
e. Cleaning

Cleaning of the blasted face is conducted with face scrapers scraping into the gully. The gully is cleaned by scraping the ore towards the raise, into an orepass. The orepass is connected to a crosscut from where the ore is loaded into hoppers. The battery powered loco trams the material towards the loading station located at the shaft.

f. Layout

A schematic representation of the panel layout is illustrated in Figure 73. A single panel layout will be utilised. Each crew is anticipated to achieve an overall face advance of 16 m/month and 14 m/month for conventional and SBM stoping, respectively. Drilling and blasting activities will be conducted on dayshift with nightshift performing cleaning activities.

Figure 73: Single Panel Layout



g. Hauling - Horizontal Transport

The horizontal transport for ore and waste removal is by track-bound equipment. A 10 t loco with eight 6 t hoppers at a load factor of 4.8 t per hopper, will transport the ore and waste to the shaft. The average tramming distance is assumed to be 5,000 m. SBM stoping requires 15 locos and 27 locos for the planned 40 ktpm and 80 ktpm steady state production rates, respectively.

The hoppers are loaded in the crosscut from the orepass, and the material is trammed to the shaft loading station prior to hoisting to surface.

The development ends are cleaned with a rail-bound hydropower loader or LHD, transferring the broken material into the hoppers. The material is trammed to the shaft loading station prior to hoisting to surface.

The upper levels (up to 27 Level) utilise the orepass system located at No. 1A Sub-vertical Shaft. Ore will be cross-trammed towards No. 5A Sub-vertical Shaft on 27 Level. Cage hoisting will be initially required until the loading station at 27.5 Level has been completed. During cage hoisting the ore is again cross-trammed towards No. 5 Shaft and hoisted to surface.

No. 5A Sub-vertical Shaft extends below 43 Level, with an orepass system and loading station at 43.5 Level. The lower levels that are currently flooded will utilise the loading station at 43.5 Level when the area has been dewatered and mining commences.

Item 16 (a) – PARAMETERS RELEVANT TO MINE DESIGN

I. GEOTECHNICAL PARAMETERS

The mining operation has historically been mined via conventional mining methods. Rock engineering and seismic monitoring services for Blyvooruitzicht Gold Mine were undertaken by OHMS between 2003 and 2013. During these years it was established that the majority of seismic events are mainly associated with major geological features.

The rock mass characteristics are not unique to Blyvoor. The adjacent mines that mine at similar and greater depths, experience similar and more severe response characteristics.

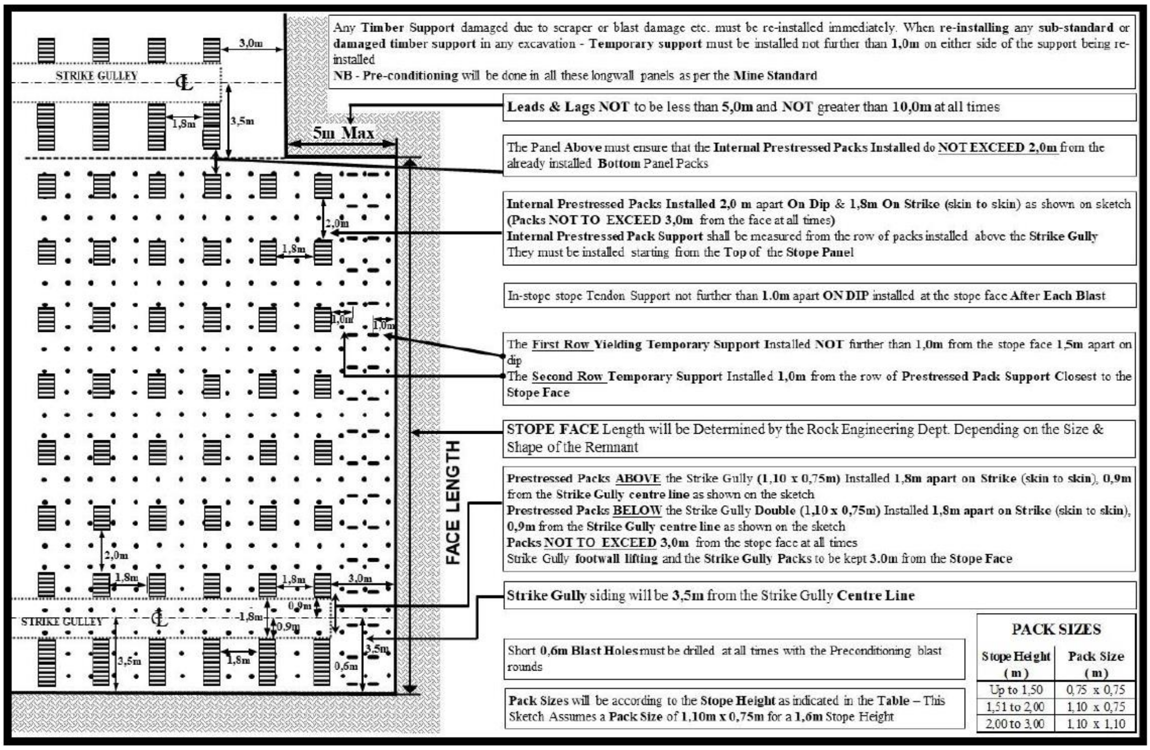
The Blyvoor Rock Engineer determined that mining of remnants and stabilising pillars require specific rock engineering strategies which considers the mining layout, mining method and support designs. It is envisaged that the mining of remnants will be associated with geological structures and potential poor ground conditions, which will require additional development to re-establish the mining faces.

Prior to the commencement of remnant and pillar mining, the following design factors should be taken into consideration:

- A computer elastic theory simulation package must be used to simulate the extraction of these pillars, the rock mass can be described by using the Young's Modulus (E), also called the elastic modulus or 'stiffness' of the rock mass as input parameter;
- Determine the preferrable mining layout, face shapes, face length, clamping pillars on geological features;
- Determine (ERR) energy release rate, (ESS) Excess Shear Stress on faults;
- Determine average stress on pillars to be extracted;
- Seismic history, seismic hazard and risk associated with mining of the remnant should be investigated; and
- Stresses on access tunnels to the pillars – (RCF). Rock Condition Factors.

The proposed support standard for remnant mining is illustrated in Figure 74.

Figure 74: Blyvoor Proposed Support Standard for Remnant Mining



Proposed Support Standard for Remnant Mining **February 2021**

No new geotechnical work has been conducted for the newly targeted mining areas. The geotechnical studies and work associated with remnant and pillar mining will be addressed by the Blyvoor Rock Engineer as data pertaining to underground structures and the ground conditions is obtained through reconnaissance and opening-up. This information will further inform the geotechnical model and support design requirements.

II. Seismic Management

Blyvoor Mine has a detailed seismic management plan in place. The seismic management plan addresses the following parameters:-

- delineation of geological structures;
- identification of hazardous geological structures;
- evaluation of mine design criteria;
- evaluation of mining sequences;
- controlled centralised blasting systems; and
- rock engineering analysis and recommendations.

The details pertaining to the Blyvoor seismic management is described in the *Blyvoor Mine Seismic Management* document available from the Blyvoor Rock Engineering Department.

III. Hydrological Parameters

No new hydrological studies have been undertaken for the targeted mining areas. There is an ingress of significant volumes of groundwater into the underground workings of the area (approximately 25 Ml/day). Neighbouring mines currently pump the water to surface. Blyvoor is flooded up to 10 m above 29 Level, above which water is not expected to rise since Harmony is pumping excess water to surface discharge to protect their downstream operations. These deeper levels will require dewatering before operations can continue at those depths, and provision has been made in the capital schedule for dewatering.

IV. VENTILATION

Blyvoor Mine's ventilation systems are well-established and have been professionally planned and efficiently operated in the past. The expected virgin rock temperature for the deepest working level (27 Level) in the initial plan is approximately 41°C. The intake temperature at the down-cast ventilation from the shaft is approximately 25°C on 27 Level. No. 5 Shaft is a brattice split shaft with the capability to be used as a down-cast shaft in one section of its area and as an up-cast shaft in the other section of its area.

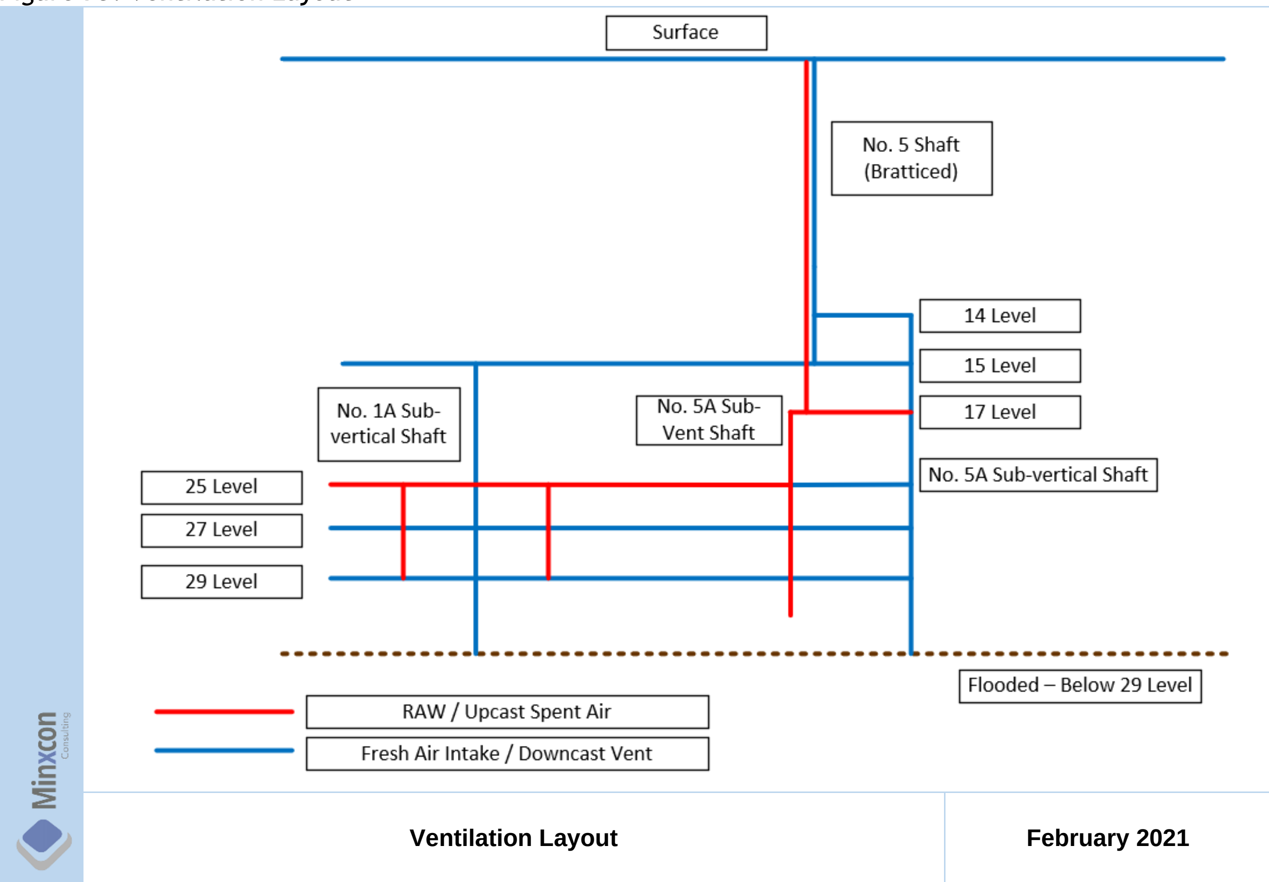
There are two ventilation fans on surface at No. 5 Shaft, with a motor rating of 2,750 kW each. One of these fans has been refurbished and recommissioned. A spare diesel driven fan is available as a backup unit. The second fan is planned to be refurbished and recommissioned from working capital and will be aligned with the commencement of the 80 ktpm mining phase above 31 Level. The main parameters in determining the ventilation flow for the No. 5 Shaft are detailed in Table 40.

Table 40: No. 5 Shaft Ventilation Parameters

Description	Unit	Value
Shaft Diameter	m	8.6
Total Area No. 5 Shaft	m^2	58.05
Area Down-cast	m^2	40
Historic Down-cast	m^3/s	220
Air Velocity Down-cast	m/s	5.5
Area Up-cast	m^2	18
Historic Up-cast	m^3/s	400
Air Velocity Up-cast	m/s	22

Seals and doors should be in place at the No. 5A Sub-vertical Shaft, which is used as a down-cast shaft. All levels not in use should be sealed or walled off. Where these sealed levels are opened up for mining, ventilation doors will need to be installed. The ventilation flow is shown in Figure 75.

Figure 75: Ventilation Layout



The existing ventilation infrastructure is deemed sufficient for the first five years of mining which is concentrated close to the No. 5 Shaft Complex. Allowance has been made for the installation of two additional ventilation fans each at the historic Doornfontein No. 2 Shaft and the Blyvooruitzicht No. 3 Ventilation Shaft for when planned mining progresses to areas further from the No. 5 Shaft Complex.

Additional provision has been made for refurbishment of the refrigeration plant on 34 Level for when mining proceeds below 2,500 m (31 Level), and the use of both main ventilation fans as well as refrigeration will be required to ensure effective cooling of the working areas.

V. Refrigeration

Historically four 1,300 kW underground cooling plants were installed on 34 Level to assist with cooling in the deeper areas of the Mine. Previous mining of 31 Level and above had no cooling capacity installed. It has been determined that the ventilation capacity for the Mine will be adequate to cool down the working areas, particularly whilst operations remain above 31 Level and are in close proximity to the shaft system. When mining proceeds below 2,500 m (31 Level), refrigeration and the use of the second main ventilation fan will be required to ensure effective cooling of the working areas.

Allowance has been made for the recommissioning of the historic refrigeration plants for efficient cooling once mining progresses below 31 Level at a production rate of 80 ktpm.

Item 16 (b) - Production Rates, Expected Mine Life, Mining Unit Dimensions, and Mining Dilution Factors

I. Production Rates

i. Operational Cycle

The underground mining operation consists of one nine-hour shift per day for drilling and blasting activities. Cleaning activities are performed on a nine-hour night shift. The initial operational cycle, for mining areas in proximity of the shaft is detailed in Table 41.

Table 41: Underground Operation Shift Cycle

Item	Unit	Value
Days per Month	Days	23
Shifts per Day	Shifts	1
Hours per Shift	hours	9
Travelling Time In	min	20
Pre-shift Meeting	min	10
Pre-shift Check List	min	15
Post Production	min	20
Travelling Time Out	min	20
Total Non-productive shift time	hours	1.42
Total effective face time per shift	**hours**	**7.58**
Total effective face time per month	**hours**	**174.3**

The operating cycle for the Blyvoor Mine consists of a single day shift for drilling and blasting activities. The effective face time per shift is 7.58 hours (7 hours and 35 minutes).

The typical mining cycle will be as follows:-

- Dayshift – support, drill and blast; and
- Nightshift – clean, sweep and prepare the face for the dayshift activities.

ii. Development

The planned development ends for the operation consists of footwall drives, crosscuts, on-reef drives, raises or winzes, ore passes and traveling ways.

The proposed development rates are detailed in Table 42 for each development type, which are aligned to typical Wits rates and standards.

Table 42: Planned Development Advance Rates

Description	Planned Advance Per Day	Planned Advance Per Month
	m	m
Opening Up	10.8	250
Footwall Drive	1.8	30
Crosscut	1.8	30
Travelling Way	1.5	20
Reef Drives, Raises or Winzes	1.5	20
Orepass	1.5	20

Re-opening of existing haulages, crosscuts, travelling ways, orepasses and raises may be required prior to the commencement of any mining activities. The re-opening refers to existing development to be re-established and re-equipped. The haulages and other access ways require assessing, repair and replacement of support according to the Blyvoor Mine standard. The cleaning of haulage drains to allow flow of water and the replacement of old and sub-standard rails and sleepers may be required. The replacement or repair of services may also be required. This includes the replacement or repair of water supply and pumping columns, main level haulages and cross-cut isolation valves, power supply cables and circuit breakers.

iii. Stoping

Stoping will be conducted on a single panel system for both conventional mining and SBM. A practical and logical production ramp-up is planned to be utilised to allow for an appropriate increase in the number of active stopes over time. The first month of production on each panel will consist of conventional ledging (approximately 8 m linear advance) and conventional opening-up from a 117 cm stoping width to the planned SBM stoping width of 160 cm.

It is expected that a 2 m linear face advance will be required to open-up the stoping width from 117 cm to 160 cm (43 cm). The conversion to SBM stoping will require an additional 4 m linear face advance using conventional stoping, to create sufficient volume in the back area for waste packing once SBM commences. It has been estimated that 50% of the waste within the 4 m advance will be packed, and the remaining 50% will contribute to dilution.

The stoping production parameters for conventional stoping are detailed in Table 43.

Table 43: Conventional Stoping Production Parameters

Item	Unit	Value
Panel Length	m	25
Stoping Width	m	1.17
Face Advance	m/crew/month	16
Square Meters Produced	m²/crew/month	400
Blasting Shifts	no/shift	1.0
Advanced Strike Gully	m	1.4 m wide and 2.5 m high
Tonnes Produced (Ore and Waste)	Tonnes/crew/month	1,280

The stoping production parameters at steady state SBM production are detailed in Table 44.

Table 44: SBM Stoping Production Parameters

Item	Unit	Value
Panel Length	m	25
Stoping Width	m	1.60
Face Advance	m/crew/month	14
Square Meters Produced	m²/crew/month	350
Blasting Shifts	no/shift	1.0
Advanced Strike Gully	m	1.4 m wide and 2.5 m high
Minimum Reef Cut	cm	46
Tonnes Produced (Ore and Waste)	Tonnes/crew/month	1,530

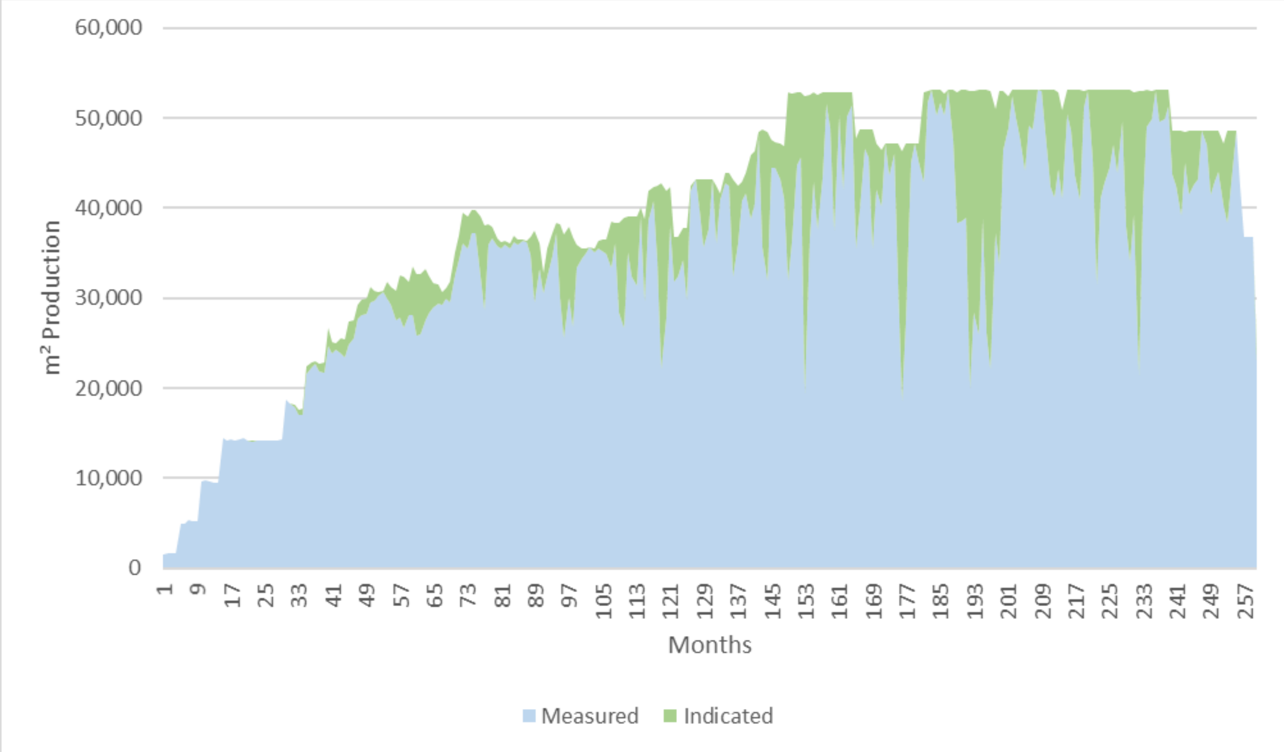
II. Expected Life of Mine and Life of Mine Plan

A LoM of approximately 22 years is envisaged, providing for the entire Mineral Reserve to be depleted. The Mineral Reserve includes only Measured and Indicated Mineral Resources.

A 17 month ramp up to approximately 20,000 m² (approximately 40 ktpm) has been planned. The steady state production rate for SBM stoping is planned initially at approximately 20,000 m², from month 18 to 31 and thereafter the production rate ramps up to approximately 40,000 m², (approximately 80 ktpm) over a 12-month period.

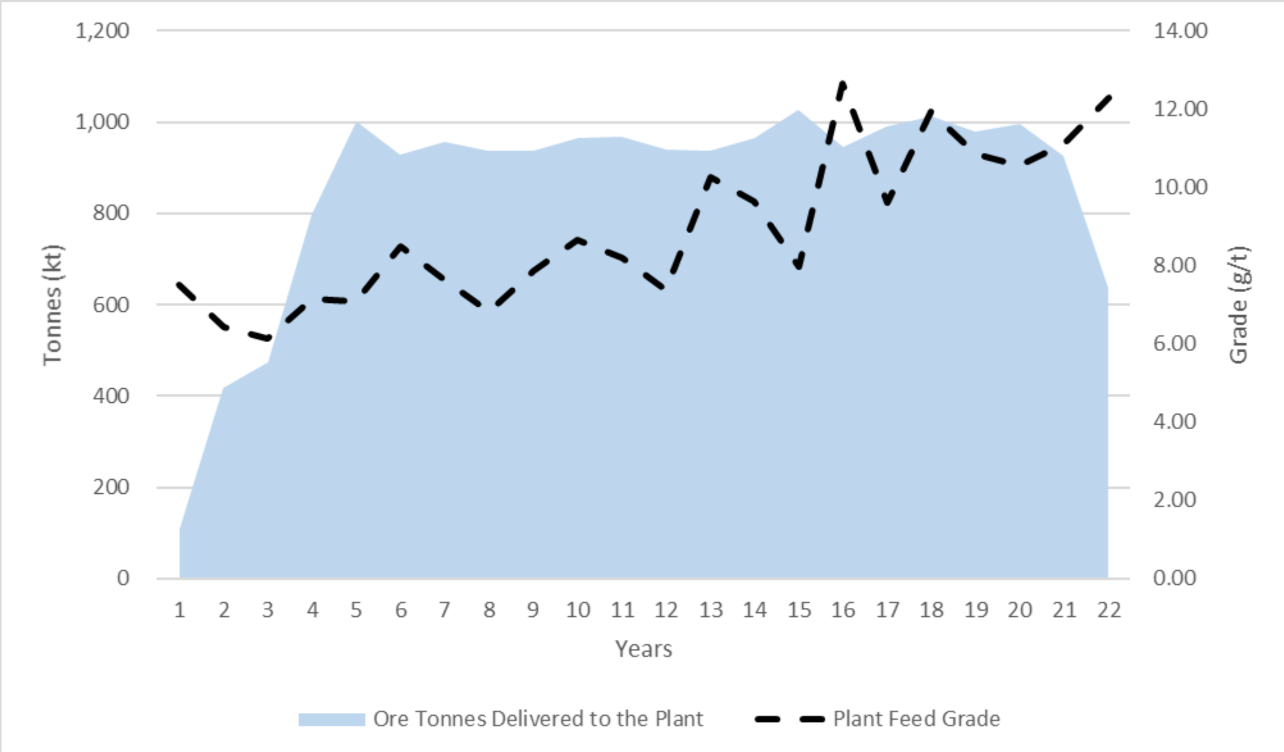
The square meter production profile by Mineral Resource Category is illustrated in Figure 76.

Figure 76: Square Meter Production Profile by Mineral Resource Category



The diluted LoM production schedule is illustrated in Figure 77.

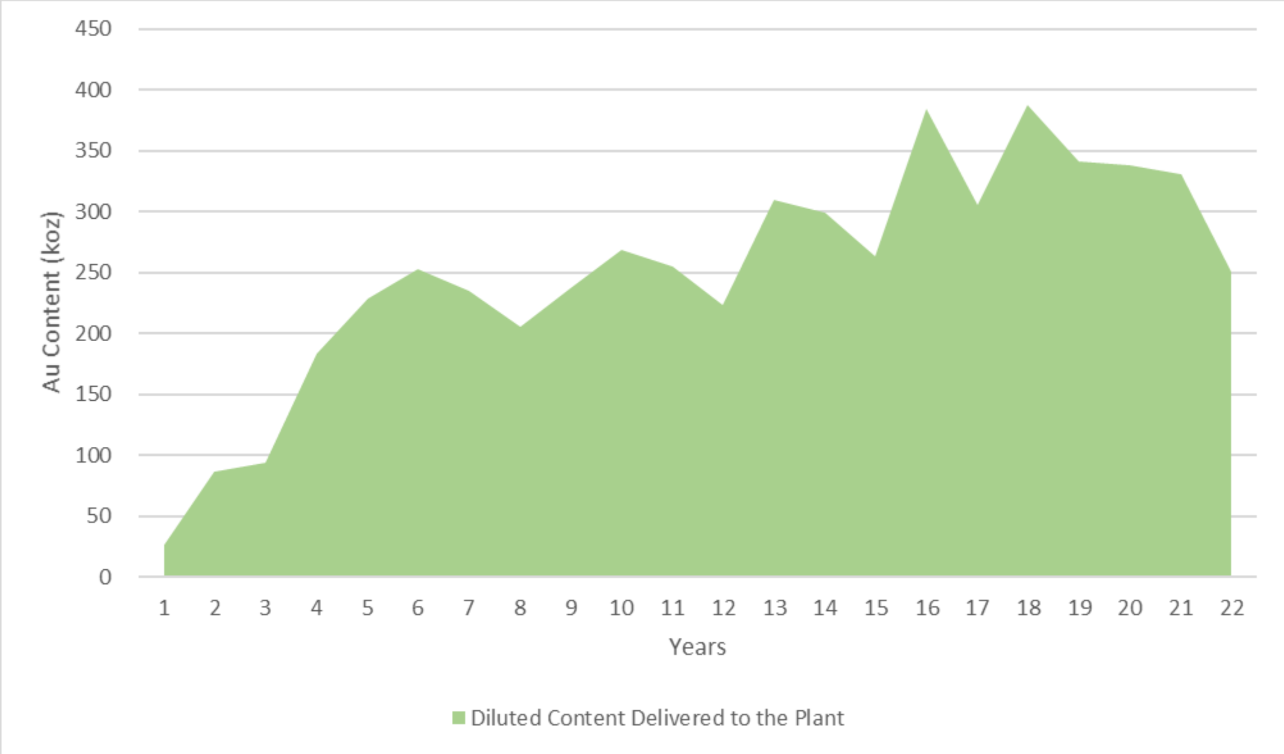
Figure 77: Diluted Tonnes Delivered to Plant over Life of Mine



A total of 5.20 Mt Measured Mineral Resources at a grade of 8.85 g/t and 13.64 Mt Indicated Mineral Resources at a grade of 9.18 g/t is included in the LoM plan.

The content delivered to the plant from the Blyvoor Mine is illustrated in Figure 78.

Figure 78: Diluted Content Delivered to the Plant



The LoM plan includes a total of 1.48 Moz and 4.02 Moz of gold from the Measured and Indicated Mineral Resource Classifications, respectively.

III. Mining Unit Dimensions

i. Development

The development ends for the operation consist of footwall drives, crosscuts, on-reef drives, raises or winzes, orepasses and traveling ways. The design dimensions to be utilised underground are shown in Table 45.

Table 45: Development Dimensions

Development End	Width	Height
	m	m
Footwall Drive	3	3.4
Crosscut	3	3.4
Travelling Way	2.5	2.5
Raise/Winze	1.4	2.8
Orepass	1.5	1.5

The development parameters are summarised in Table 46.

Table 46: Development Parameters

Description	Value
Footwall Drive Spacing	80 m below reef in direction of strike.
Stations Spacing	90 m vertical spacing.
Crosscut Spacing	Crosscuts are developed at right angles to the footwall drives and spaced at 160 m intervals.
Raise Inclination	The orebody dips at 22 degrees and the raises are developed along dip at right angles to strike. Diagonal development is only done to accommodate stoping where major geological structure creates the requirement.
Orepass	Orepasses are developed at 55° to the horizontal, usually from the crosscuts to the reef horizon. The ore passes spaced to intersect reef at either 25 m, 50 m or 75 m, the spacing is also influenced by geological intrusions.
Travelling Way	Travelling ways are developed at 34° to the horizontal.
Horizontal Development	Horizontal development (footwall drives and crosscuts) to be cleaned with rail bound hydropower loaders or LHDs loading into hoppers.
Inclined Development	< 34 degrees to be cleaned with scrapers and electric scraper winches and >34 degrees to be by means of gravitation.

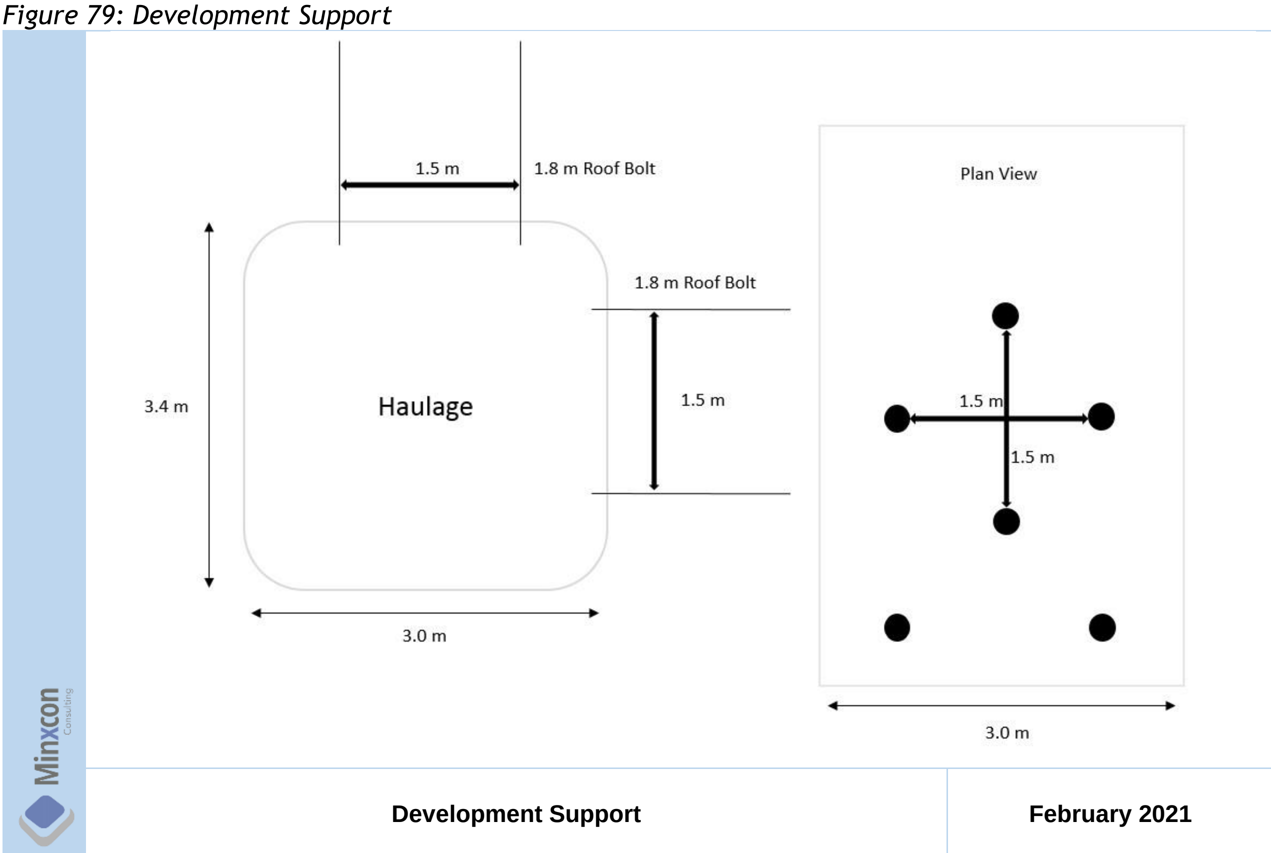
ii. Ancillary Development

Excavations for storage bays, dams, infrastructure, loading bays, chambers, drilling/cementation cubbies and vertical ore-passes exist within the current infrastructure.

iii. Development Support

It has been assumed that all development will be located in competent rock supported with 1.8 m roof bolts with a 1.5 m x 1.5 m spacing. 4 m Long cable anchors may be required in wider excavations and at breakaways. The support for a footwall drive/haulage is illustrated in Figure 79.

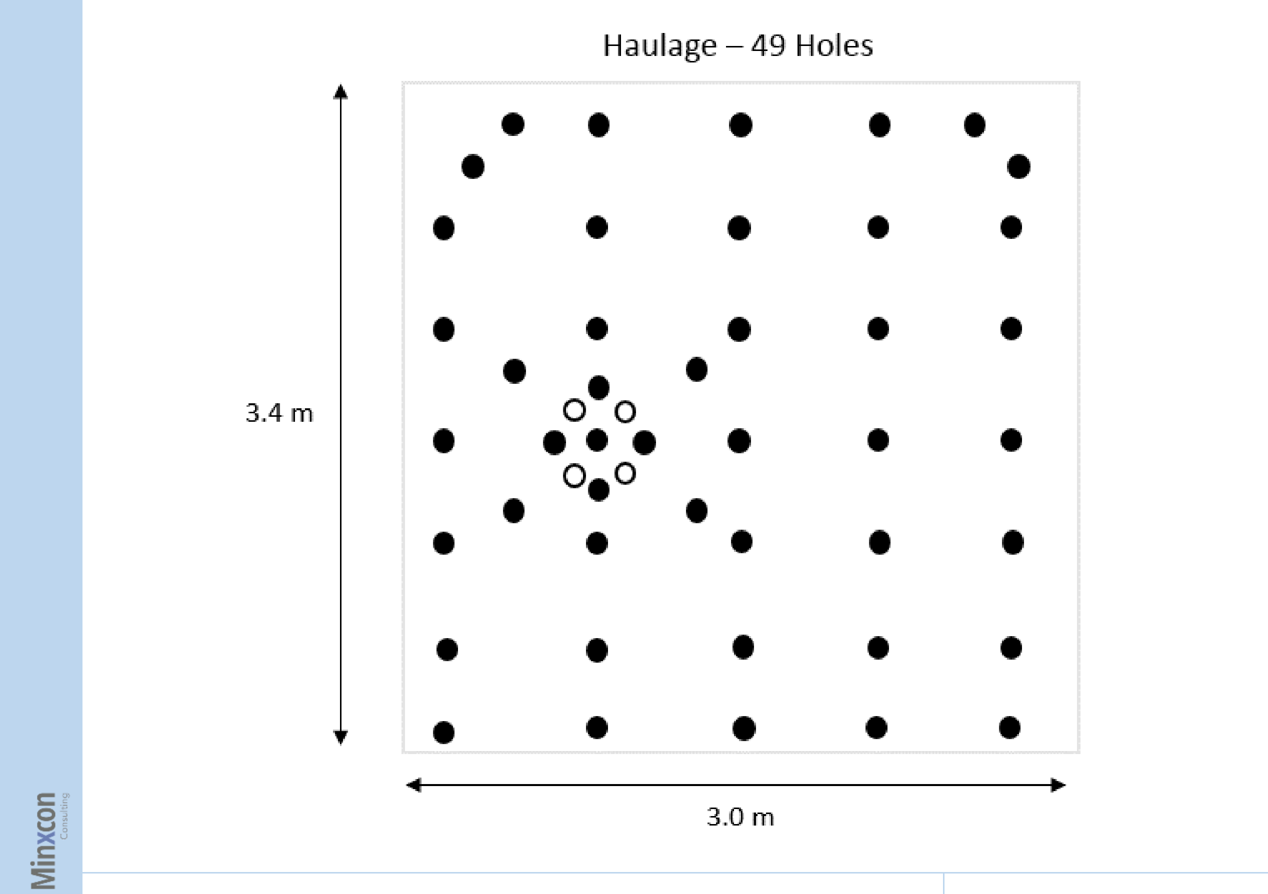
Figure 79: Development Support



iv. Drilling and Blasting - Development

The drilling of development ends and stoping will be via hydropower handheld rock drills. The development drilling pattern was benchmarked against similar operations. The drilling pattern for a footwall drive/haulage and crosscut is illustrated in Figure 80.

Figure 80: Development Drilling Pattern



Drilling Development	February 2021

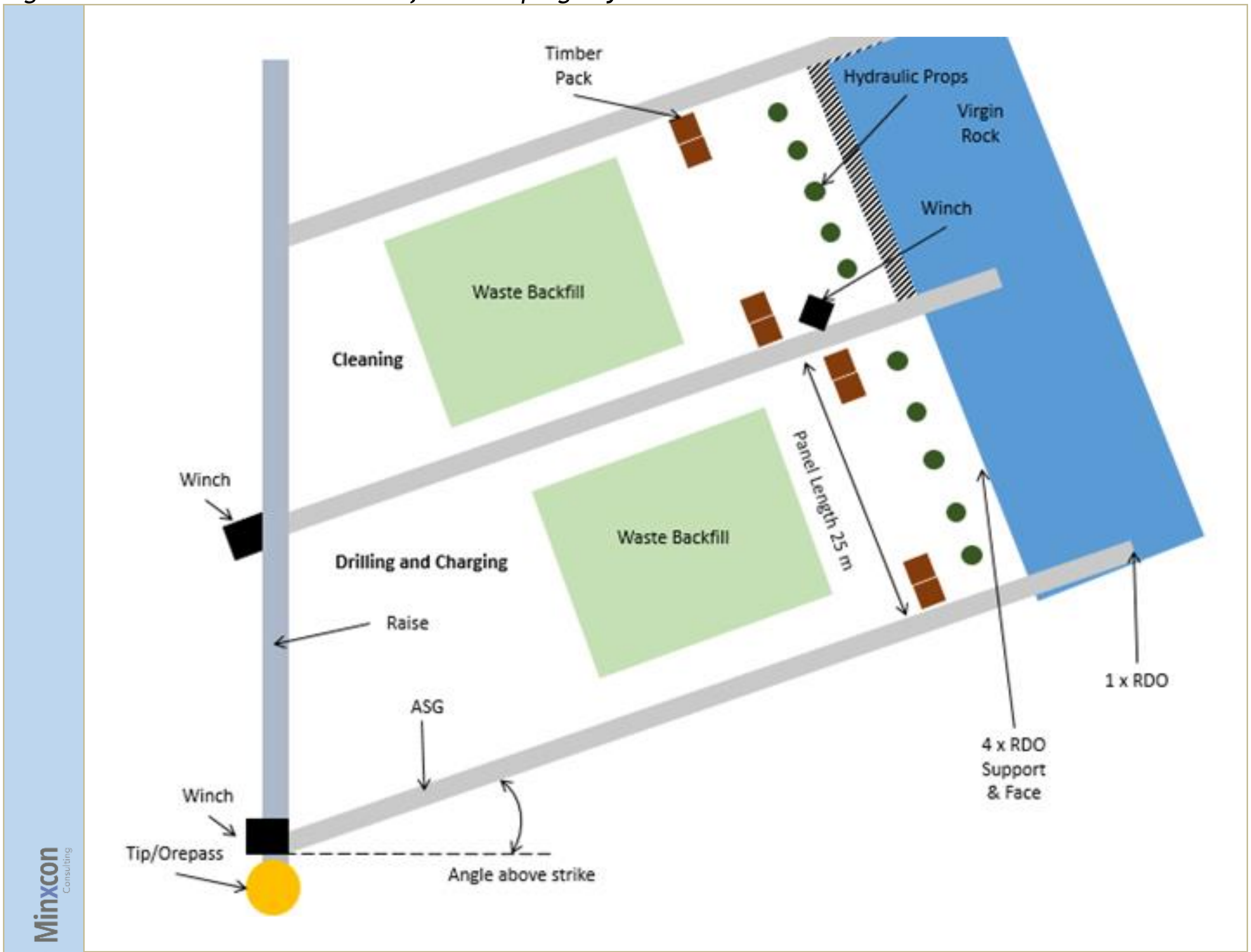
v. Development Cleaning

Horizontal development ends will be cleaned with a rail-bound hydropower loader or LHD, transferring the broken material to the hoppers. The material will be trammed to the shaft loading station prior to hoisting.

vi. Conventional and SBM Stoping

The stoping consists of a stoping width of 117 cm and 160 cm for conventional and SBM stoping respectively, and a panel length of 25 m with a single panel per crew. A schematic representation of the SBM stoping layout is illustrated in Figure 81. Support, drilling and blasting activities will be conducted on dayshift with cleaning operations being conducted on nightshift.

Figure 81: Schematic Illustration of SBM Stoping Layout

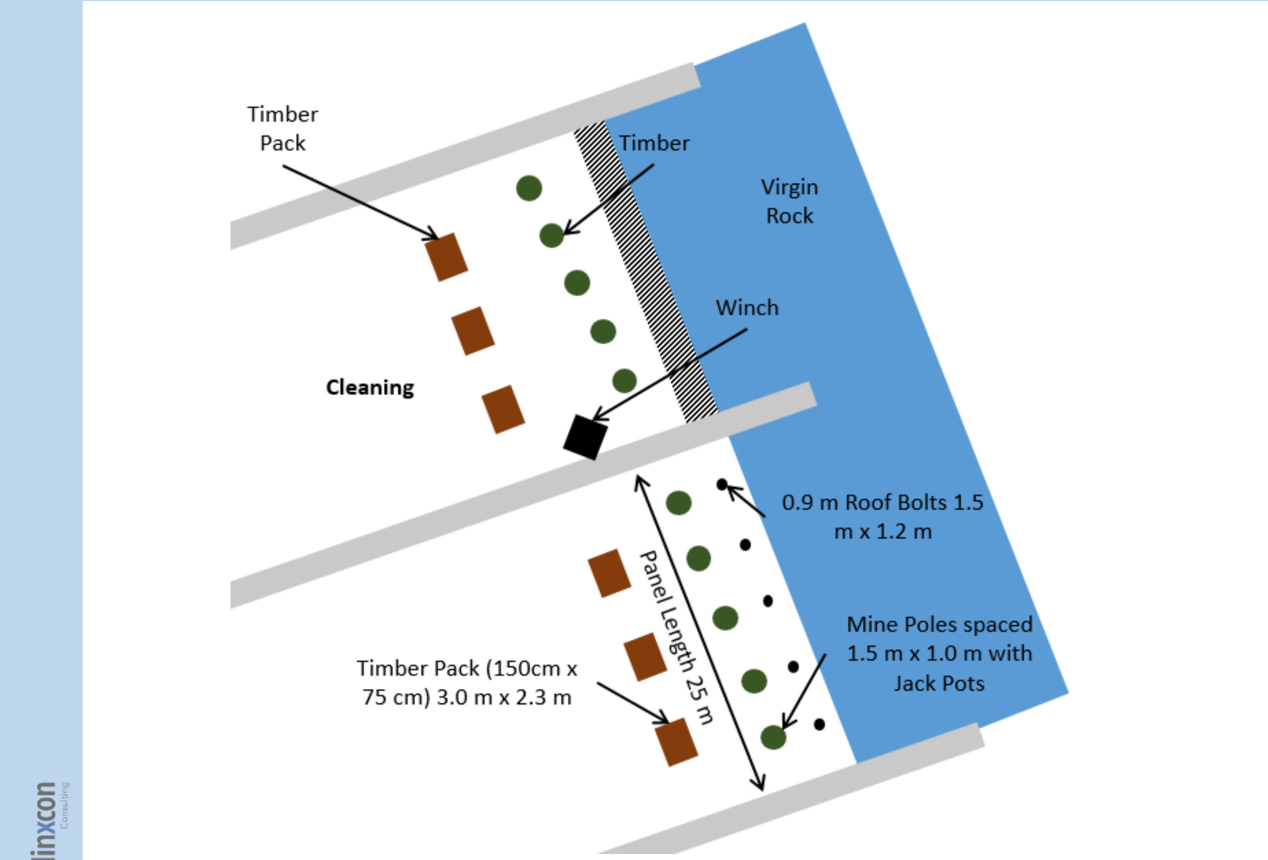


Single Panel SBM Layout	February 2021

vii. Stope Support

The stope support for conventional stoping will incorporate 0.9 m roof bolts with a 1.5 m x 1.2 m spacing. Mine poles with jackpots, 20 cm in diameter, are required at a spacing of 1.5 m x 1.0 m. Timber packs are also required, at 150 cm x 75 cm, at a spacing of 3 m x 2.3 m. The stope support layout is illustrated in Figure 82.

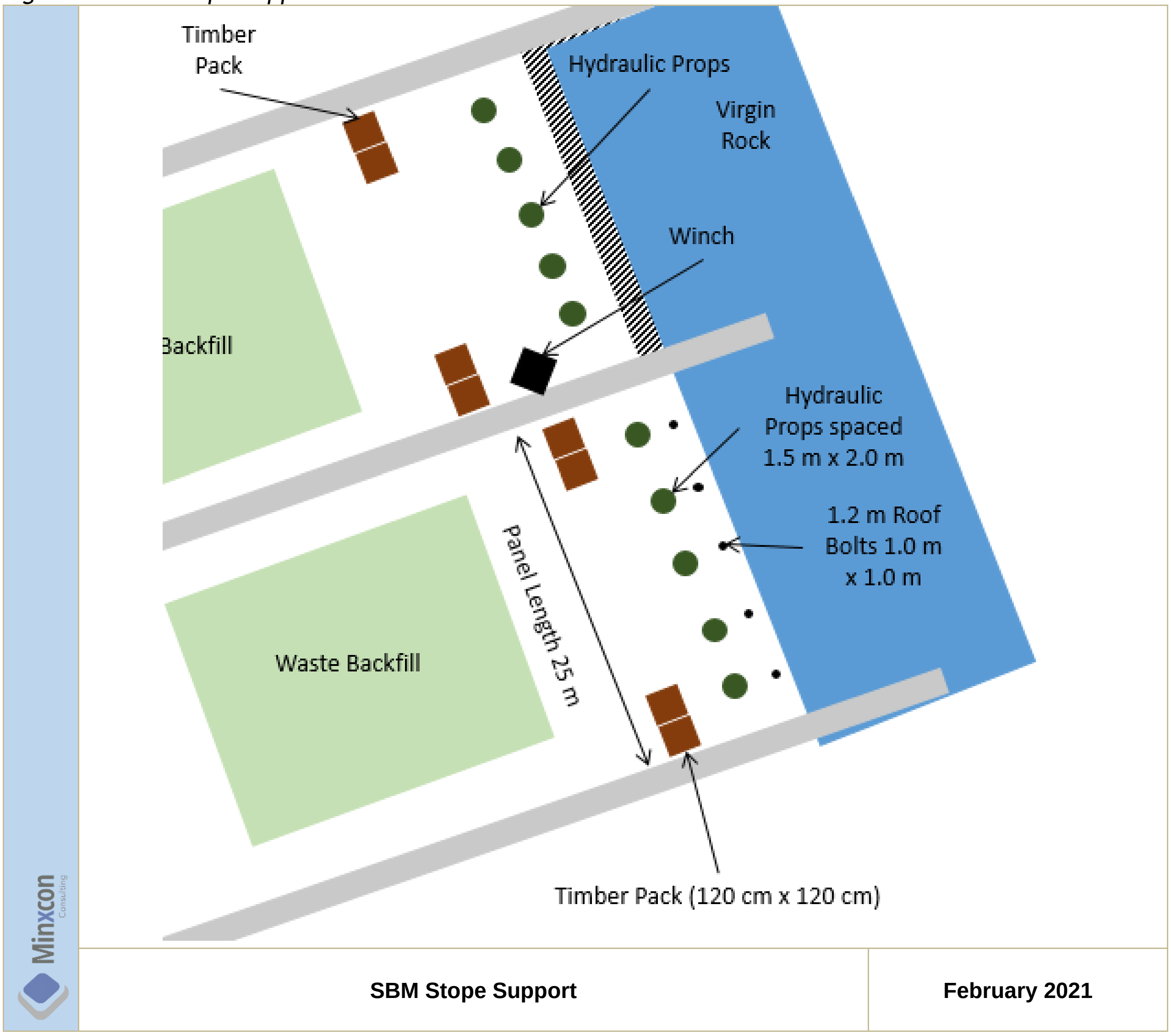
Figure 82: Stope Support



Conventional Stope Support	February 2021

The stope support for SBM will incorporate 1.2 m roof bolts with a 1.0 m by 1.0 m spacing. Hydraulic props will be placed at 1.5 m spacing on strike 2.0 m from the face. Timber packs of 1.2 m by 1.2 m are also required on the up and down dip sides of the advanced strike gullies. Temporary support, namely camlock props, will be utilised for roof bolt drilling. The stope support layout is illustrated in Figure 83.

Figure 83: SBM Stope Support



viii. Drilling and Blasting - Stoping

The blasting layout for conventional stoping is different to the layout for SBM. The blasting layout for conventional stoping comprise two rows, drilled on a staggered pattern with a 0.6 m burden, as illustrated in Figure 84.

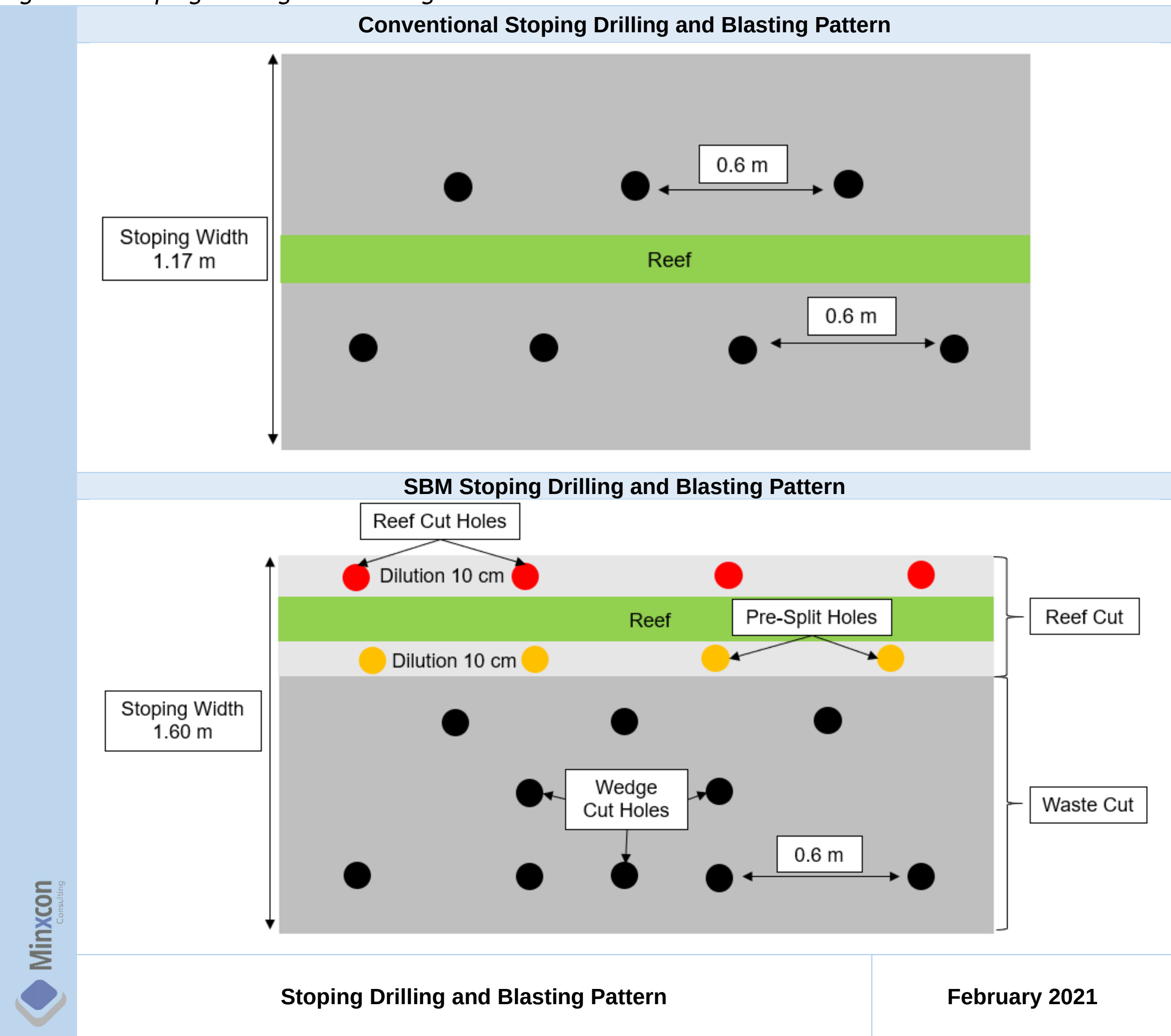
SBM involves millisecond sequencing blasting and applies to mines where the gold bearing conglomerate band is clearly demarcated and separated from the waste rock in the hanging wall and footwall. A blasting sequence takes place in two consecutive steps spaced ± 1/2 sec. apart.

The following parameters are required to ensure optimal blasting:-

- In order to throw-blast fractured material, a fast-firing sequence must be followed to emulate the effect of several holes blasting simultaneously; and
- Holes must be properly tamped to ensure gas build-up within the holes to achieve better results.

The reef should be blasted with a portion of the waste above and below the reef to ensure all gold is recovered. The blasting pattern is illustrated in Figure 84. The waste band holes, with a 0.6 m burden, are spaced to ensure a wedge cut is produced to provide a free face for the material to be cast blasted. Below the reef band pre-split holes are spaced 0.5 m apart and notched. The purpose of these holes is to provide a breaking plane to ensure the reef remains intact. The blasting of the reef would be with lower energy explosive cartridges to only fracture and liberate the reef.

Figure 84: Stoping Drilling and Blasting Pattern



ix. Stope Cleaning

Cleaning of the blasted face will be conducted via face scrapers into the strike gully from where the ore material is scraped towards the centre gully and then transferred into an orepass via scraping. Ore is then pulled from the boxes into hoppers.

x. Services

a. Compressed Air

Currently mobile compressors located on 15 and 27 Level are used to supply compressed air to refuge bays and currently utilised pneumatic equipment.

b. Service Water

Services water for mining purposes will be sourced from fissure water that will be captured in the underground workings. The water will be collected and pumped to the 14 Level dam. The water will cascade downwards from the 14 Level dam to supply the working areas. It is estimated that 25 Ml/day of fissure water flows into the underground workings. Some 20 Ml/day will be available for utilisation in mining activities. The daily inflow of fissure water in addition to the recirculation of used mining water is deemed to be sufficient for the planned production rate of 80 ktpm.

IV. MINERAL RESERVE CONVERSION FACTORS

The Mineral Reserve conversion factors applied, are detailed in Table 47.

Table 47: Mineral Reserve Conversion Factors

Description	Units	Value
Geological Losses (applied to Mineral Resources)		
Measured	%	5.0
Indicated	%	10.0
Inferred	%	15.0
Pillar Provision and Mining Extraction		
Pillar Provision	%	10.0
Mining Extraction	%	80.0
Dilution		
Dilution-Reef Cut (above and below the reef)	cm	10.0
Dilution-Sundries Carbon Leader Reef	%	23.1
Dilution-Sundries Middelvlei Reef	%	18.9
Dilution-Discrepancy Carbon Leader Reef	%	25.3
Dilution-Discrepancy Middelvlei Reef	%	20.7
SBM Conversion Dilution Carbon Leader Reef	%	23.3
SBM Conversion Dilution Middelvlei Reef	%	20.0
Mine Call Factor		
Mine Call Factor	%	85.0

Notes:

1. The Mineral Reserve conversion factors are applied to individual mining blocks within the mining schedule.
2. Mining extraction has been applied to all mining blocks in the schedule which do not form part of the initial five years of the LoM plan.

i. Geological Losses

Geological loss is applied to account for geological uncertainty associated with different Mineral Resource categories. Geological losses of 5%, 10% and 15% has been applied to Mineral Resources in the Measured, Indicated and Inferred categories, respectively. Geological losses have been applied equally to the Carbon Leader and Middelvlei Reefs.

ii. Pillar Provision

A pillar provision of 10% has been applied to all Mineral Resources in the LoM plan. The pillar provision allows for potential rock mechanic pillars which will be left *in situ* in strategic areas for the purpose of local and regional support within the planned mining areas.

iii. Mining Extraction

A mining extraction of 80% has been applied to Mineral Resource blocks within the polygon estimation. The Mineral Resource blocks within the polygon estimation do not form part of the initial five years of the LoM plan. Mining extraction accounts for a portion of ground left behind due to unanticipated ground conditions or restricted access to a block.

iv. Reef Cut Dilution

Dilution implies that a certain amount of waste is mixed with the ore during the mining process and ends up in the primary crusher or delivered to the plant. This portion effectively increases the ore tonnages, but, as the waste material contains no grade or is of low grade value, it decreases the overall grade delivered to the plant.

SBM requires a 10 cm waste strip above and below the reef included as the reef cut. A minimum reef cut of 46 cm for a stoping width of 160 cm is required to ensure sufficient space in the back area for cast blasting waste material. The waste strip above and below the reef, dilutes the in-situ channel grade.

v. Sundries Dilution

Sundries dilution accounts for off-reef mining, winch beds, gullies, sliping and overbreak. Off-reef mining accounts for waste material included as ore due to minor geological features displacing the reef. Dilution from winch beds due to the increased size of the required excavation into the footwall. The ASGs are developed into the footwall for each stope to provide capacity for scraping. Overbreak and sliping occur as a result of the explosive charge damaging the hanging wall and/or sidewall.

vi. Discrepancy Dilution

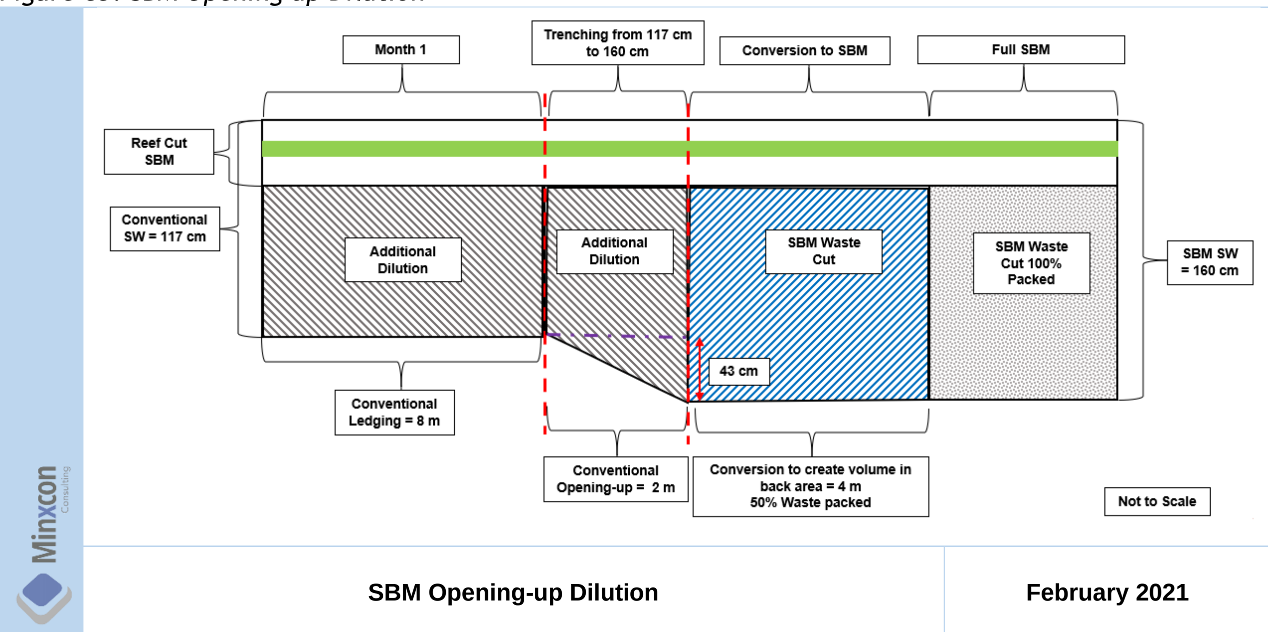
Discrepancies comprise of Fall of Ground (“FoG”), scaling and waste development trammed as reef. These discrepancies account for dilution not measured or estimated.

vii. SBM Conversion Dilution

The first month of production on each panel will consist of conventional ledging (approximately 8 m linear advance) and conventional opening-up from a 117 cm stoping width to the planned SBM stoping width of 160 cm.

It is expected that a 2 m linear face advance will be required to open-up the stoping width from 117 cm to 160 cm (43 cm). The conversion to SBM stoping will require an additional 4 m linear face advance using conventional stoping, to create sufficient volume in the back area for waste packing once SBM commences. It has been estimated that 50% of the waste within the 4 m advance will be packed, and the remaining 50% will contribute to dilution. The additional dilution because of conversion to SBM of any panel is illustrated in Figure 85.

Figure 85: SBM Opening up Dilution



viii. Mine Call Factor

Mine Call Factor (“MCF”) is the ratio, expressed as a percentage, which the specific product accounted for in recovery plus residues bears to the corresponding product called for by the mine's measuring methods.

A reduction in MCF typically occurs due to inaccurate measurements, sampling error, gold reporting to waste underground and on surface, cross-tipping of ore, accumulation of ore and sweepings in the workings and losses in the plant. The MCF only affects the gold grade; it has no impact on the plant feed tonnes.

The cast blasting ensures the waste material is removed prior to the liberation of the reef. The low explosive energy of the reef blasts ensures the reef is only fractured. This ensures less fines lost due to suspension into the surrounding air.

Proper sweeping and reduced ore losses of the extracted reef increases the amount of gold recovered, for SBM of both reefs. The MCF applied by Blyvoor of 85%, is supported by historical performance and is considered to be conservative with respect to SBM.

Item 16 (c) – Requirements for Stripping, Underground Development and Backfilling

The first month of production on each panel will consist of conventional ledging (approximately 8 m) and conventional opening-up to the planned SBM stoping width of 160 cm, for which no backfill will be utilised.

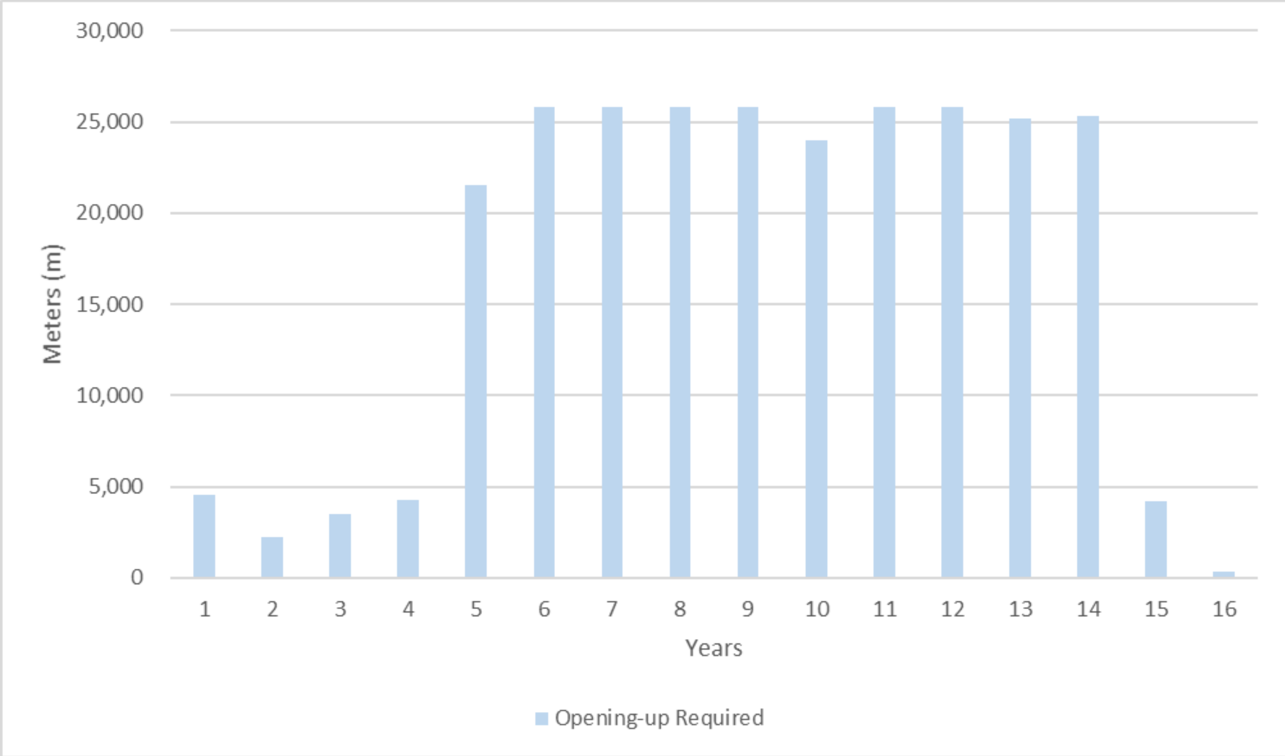
It is expected that a 2 m linear face advance will be required to open-up the stoping width from 117 cm to 160 cm (43 cm). The conversion to SBM stoping will require an additional 4 m linear face advance using conventional stoping, to create sufficient volume in the back area for waste packing once SBM commences. It has been estimated that 50% of the waste within the 4 m advance will be packed, and the remaining 50% will contribute to dilution.

SBM will be implemented thereafter, which utilises cast blasting whereby the waste band is cast into the mined-out areas as backfill.

I. Opening Up

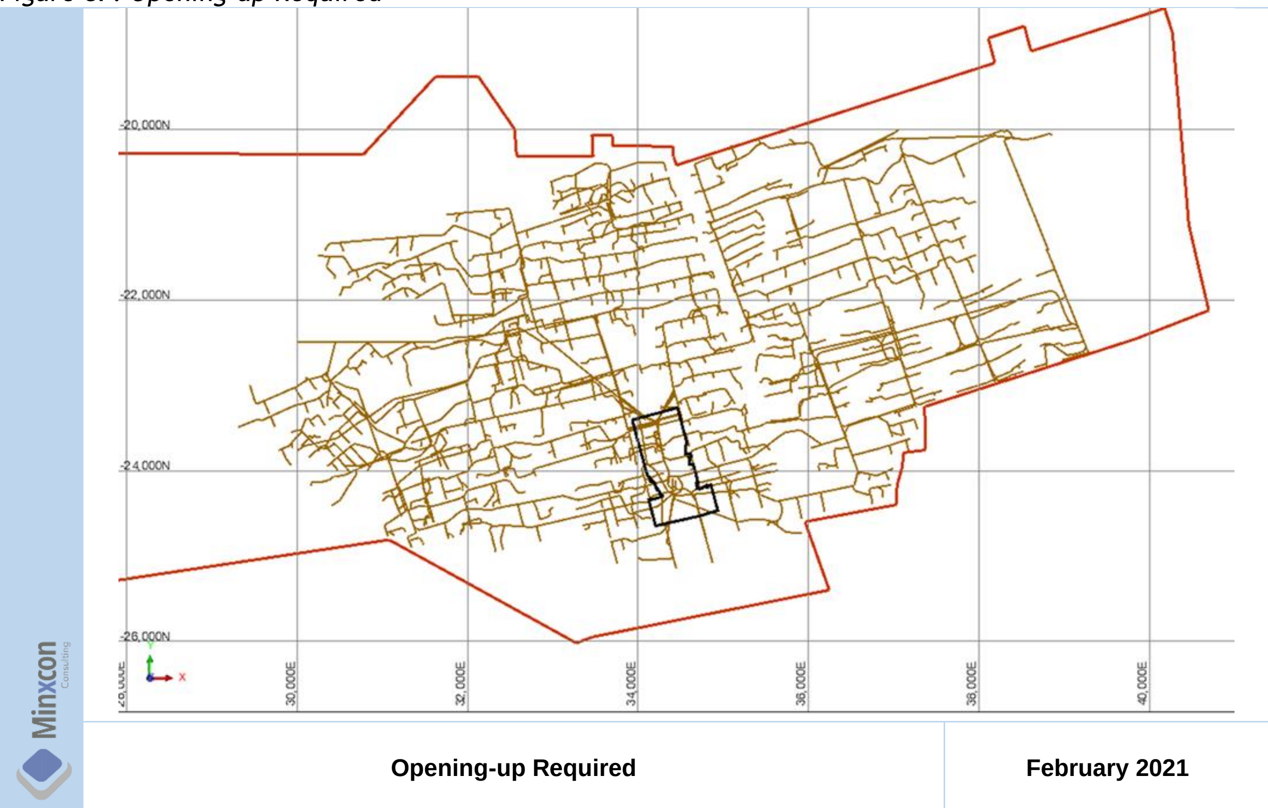
Blyvoor Mine is an existing mine with existing underground infrastructure. The existing development requires re-equipping or re-opening prior to mining. The amount of re-opening required for the total LoM is 269,930 m. The required opening-up over the LoM is illustrated in Figure 86.

Figure 86: Opening Up Required Over Life of Mine



The opening-up required for both the Carbon Leader and Middelvlei Reefs is illustrated in Figure 87.

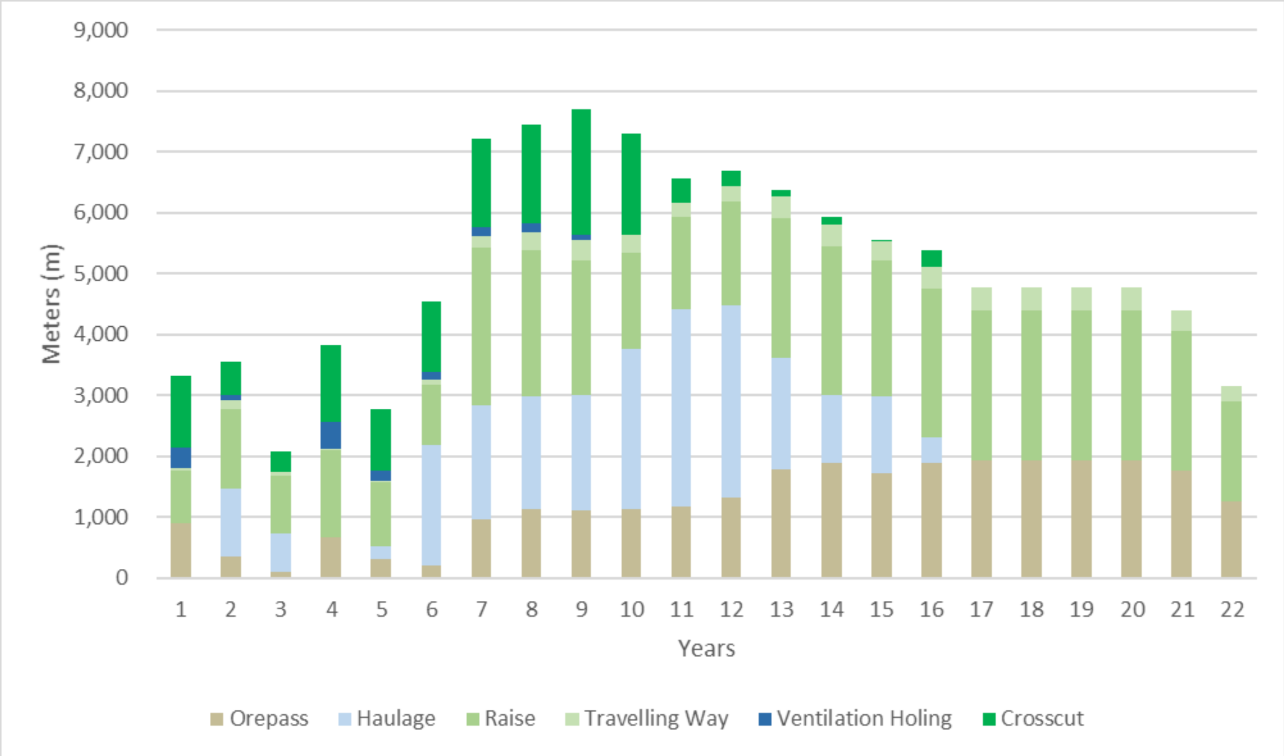
Figure 87: Opening-up Required



II. Underground Development

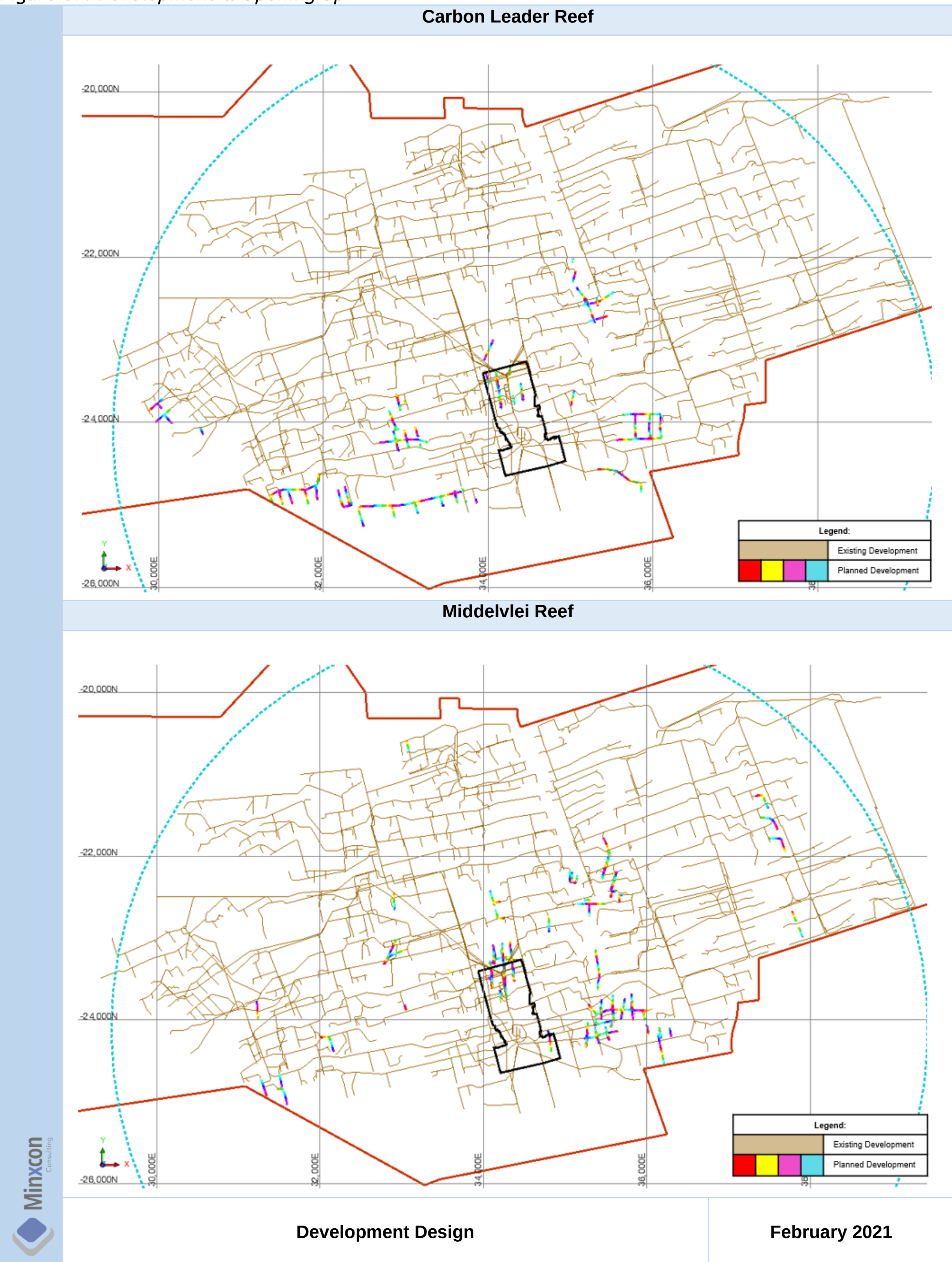
New development is required to open up sufficient ground for stoping to produce the required planned production rate. Development of haulages, crosscuts, travelling ways, on-reef raises, and orepasses will be done conventionally using handheld hydro-powered drilling machines. The required development for the total operation is illustrated in Figure 88. Once opening-up has advanced sufficiently, the new development will commence. The total conventional development required for the LoM is 112,867 m. The on-reef development required, namely the raises, is 41,800 m for both the Carbon Leader Reef and Middelvlei Reef over the 22 years LoM.

Figure 88: Development Requirement over Life of Mine



The development layout is illustrated separately in Figure 89 for the Carbon Leader Reef and the Middelvlei Reef. The brown strings illustrate the existing development and are utilised to access both reefs. Newly planned development (green, red, yellow, pink and blue strings) are also illustrated.

Figure 89: Development & Opening Up



III. Dewatering

The underground workings up to 10 m above 29 Level at the No. 5 Shaft Complex have been flooded and are currently inaccessible and require dewatering. Once it is necessary to mine on and below 29 Level, dewatering of the flooded lower levels will commence with the use of submersible pumps. Once pumping commences the water will be pumped vertically via the No. 5A Sub-vertical Shaft to 14 Level and from there to the No. 5 Shaft intermediate pump chamber ("IPC") and subsequently to surface via No. 5 Shaft.

IV. Ledging

The ledging and stoping for the operation are detailed in Figure 90. Ledging will be done conventionally up to a ledging limit of 8 m, at a width of 117 cm. The brown strings indicate opening-up of existing haulages and crosscuts. Ledging is required once newly developed raises are completed prior to stoping. In areas where existing infrastructure permits, stoping commences without the need for ledging.

Figure 90: Planned Ledging and Stoping Design

Carbon Leader Reef

Middelvlei Reef

Planned Ledging and Stoping Design	February 2021

Item 16 (d) - Required Mining Fleet and Machinery

I. Equipment List

The machine fleet for Blyvoor was specified for SBM stoping and conventional development. The fleet primarily includes hydropower drills, face, and gully scrapers, mobile powerpacks, locos, hoppers and hydropower loaders and LHDs. The required equipment is detailed in Table 48.

Table 48: Required Equipment

Description	Specification
Mono Winch	22 kW – Complete with Guard and Signalling System
Face Winch	37 kW – Complete with Guard and Signalling System
Gully Winch	55 kW – Complete with Guard and Signalling System
Raise Winch	55 kW – Complete with Guard and Signalling System
Hydro Power Drill - Stoping	Novatek Hydropower Drills
Hydro Power Drill - Development	Novatek Hydropower Drills
Mobile Powerpacks	HPE Hydropower Powerpacks
Locos	10 Tonne Trident loco complete with battery and charger
Hoppers	2.5m³ Wide door hoppers
Rail Bound Loaders	Hydropower loaders
LHDs	2 Ton LHDs

II. Equipment Schedule

The fleet requirement was based on an initial steady state production rate of 40 ktpm followed by an 80 ktpm steady state production rate. The equipment requirements are detailed in Table 49. The equipment required for the 80 ktpm production rate has been specified as additional to the equipment already acquired for the 40 ktpm production rate.

Table 49: Equipment Schedule

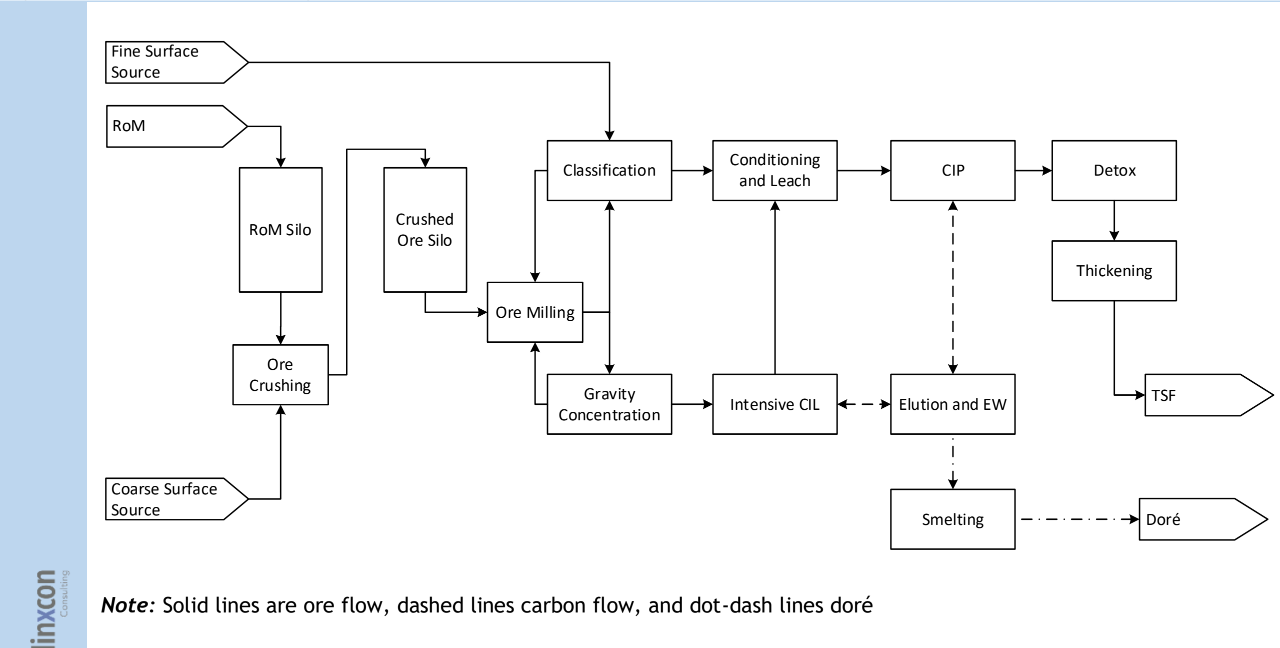
Description	Units	Equipment Required 40 ktpm	Additional Equipment Required 80 ktpm
Face Winch	No.	88	124
Gully Winch	No.	88	124
Centre Gully Winch	No.	30	42
Hydropower Drill - Stoping	No.	270	270
Hydropower Drill - Development	No.	100	100
Locos	No.	15	12
Hoppers (inclusive of cage hoisting)	No.	180	144
Hydropower Loaders	No.	10	10
LHDs	No.	4	0

ITEM 17 - RECOVERY METHODS

Item 17 (a) - Flow Sheets and Process Recovery Methods

The plant was designed with a total RoM feed capacity of 40 ktpm and an expansion to 80 ktpm is planned. The upgraded plant will follow the same process flow as the existing plant (Figure 91) with some of the circuits only being expanded. The flowsheet does also accommodate the addition of surface stockpiles directly into the crushing circuit or sluicing of fine material into the classification circuit. The addition of these sources is however not planned, but they remain available in case of emergency and are useful during the start-up and commissioning phase.

Figure 91: Block Flow Diagram



Note: Solid lines are ore flow, dashed lines carbon flow, and dot-dash lines doré

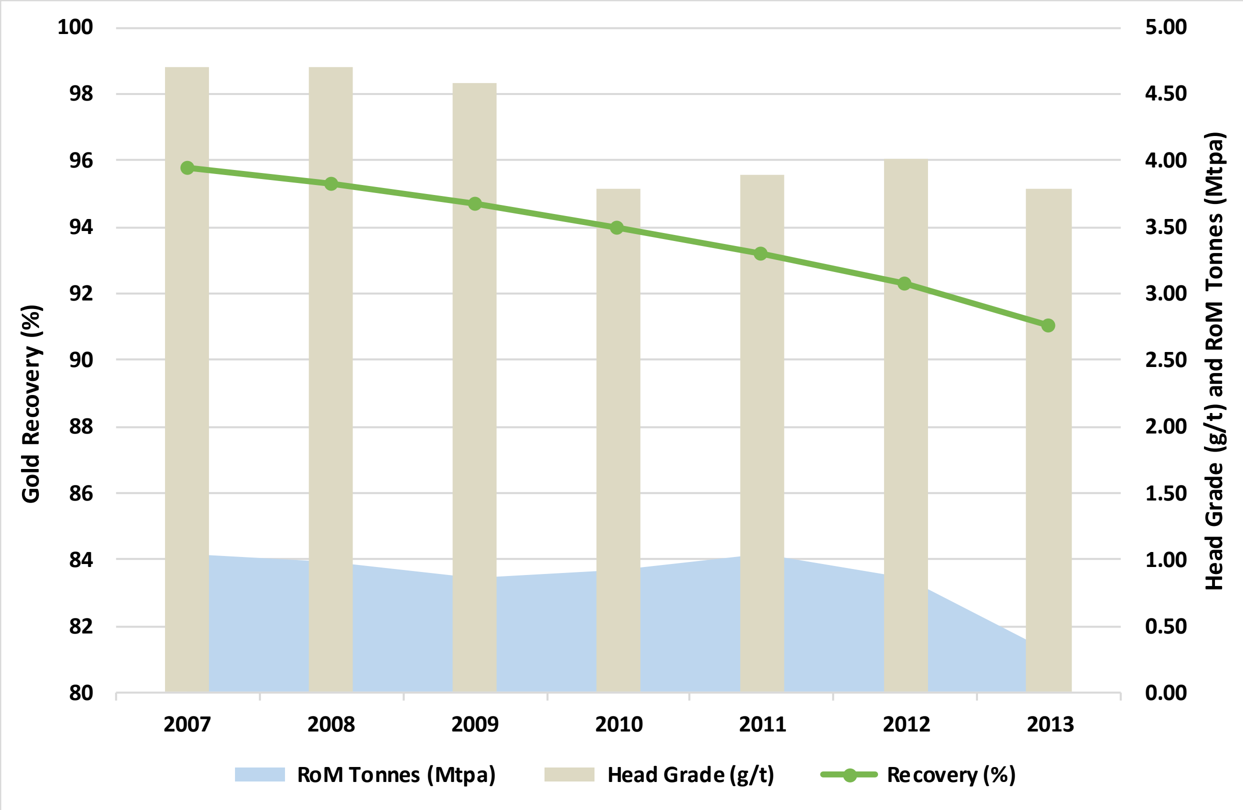
Block Flow Diagram	February 2021

The recovery method is the most widely used for processing hard rock ore that does not have significant preg-robbers. The circuit is the same as the old plants that treated this ore, and the recovery performance is expected to be similar.

Item 17 (b) - Operating Results Relating to Gold Recovery

Production from the historic Blyvoor operation between 2007 and 2013 is shown in Figure 92. Operations ceased in July 2013.

Figure 92: Historic Grades and Recoveries



Note: The recoveries from 2010 are lower to due to co-treatment of low-grade surface material

Blyvoor achieved recoveries of between 91% and 95.8% since 2007. The decrease in recovery could be attributed to a combination of poor processing efficiencies, lower grades as well as the toll treatment of the higher-grade underground material with lower grade material at the Buffelsfontein South Plant since 2012. The Buffelsfontein South Plant is located in Stilfontein some 120 km from No. 5 Shaft.

The expected plant feed grade of the new Blyvoor Mine will vary between 5 g/t and 10 g/t. This is higher than the historic mined grade. Recovery performance can be expected to be the same or better than previously. Recovery was assumed to be variable, but with a fixed residue grade as in Equation 1.

Equation 1: Recovery Formula

$$\mathrm{R} = \left(1 - \frac{k}{\mathrm{F}}\right).100$$

Where R is recovery in percentage, F is the feed grade in g/t and k is a constant of 0.304 g/t which is the grade of TSF No. 6 as determined by drilling. The 0.304 g/t represents the most recent tailings reject grades from the old treatment plant, which reject grades are anticipated from the Blyvoor Mine.

Item 17 (c) - Plant Design, Equipment Characteristics and Specifications

Construction of the plant was recently completed, and the plant is currently being ramped up to full capacity of 40 ktpm.

I. Process Design Criteria

The process design criteria are summarised in Table 50 with the updates required to enable planned operation at 80 ktpm.

Table 50: Process Design Criteria

Item	Current 40 ktpm	Planned 80 ktpm	Unit	Source
Operating parameters				
Days per year	365	365	days/year	Best practice / Estimate
RoM throughput per year	40	**80**	ktpm	Mine plan / requirement
Ore SG	2.737	2.737	t/mA3	Benoryn design
Head grade	7.96	7.96	g/ton	Mine plan / requirement
Average gravity recovery	40	40	%	Best practice / Estimate
Average overall recovery	94.5	94.5	%	Benoryn design
Crushing circuit				
crushing plant operation per day	12	**18**	hrs/day	Mine plan / requirement
crushing plant operation per week	5	**7**	days/week	Mine plan / requirement
availability	90	90	%	Best practice / Estimate
Utilisation	90	90	%	Best practice / Estimate
running percentage	81	81	%	Calculation
Throughput	190	190	tph	Calculation
Design throughput	200	200	tph	Benoryn design
Design sizing screen aperture size	16	16	mm	Benoryn design
Design product 80% passing size		0		
Milling and gravity				
Availability	95	95	%	Best practice / Estimate
Utilisation	90	90	%	Best practice / Estimate
Running percentage	85.5	85.5	%	Calculation
Throughput	65	**128**	tph	Calculation
Ball Mills	12x16, 900 x 2	12x16, 900 x 2	ft, kW	Benoryn design
Ball Mills		14x21, 1500 x 1	ft, kW	Calculation
Circulating load	250	250	%	Best practice / Estimate
Total circulating load	227.5	227.5	tph	calculation
Design milled product 80% passing	75	75	microns	Best practice / Estimate
Carbon Leach				
Number of preconditioning tanks	1	**2**	tanks	Benoryn design/ Calculation
Number of tanks operated as leach tanks	3	**6**	tanks	Benoryn design/ Calculation
Tank height and diameter	12, 9.5	12, 9.5	m	Benoryn design
Number of tanks operated as CIP	6	6	tanks	Benoryn design
CIP tank capacity	100	100	mA3	Benoryn design
Total CIP retention time	6.18	**3.09**	hrs	Benoryn design/ Calculation
Feed grade	4.78	4.78	g/ton	Calculation
CIL feed density	1.46	1.46	t/mA3	Benoryn design
CIL feed density	50	50	% solids	Benoryn design
Total retention time	24	24	hrs	Mine plan / requirement
Zadra Elution				
Acid wash and elution column capacity	6	6	tons	Benoryn design
Carbon loading assumption	1,500	**3000**	kg Au /t C	Benoryn design/ Calculation
Carbon to be eluted per month	120	120	t C / month	Calculation
Elutions per month	20	20	elutions	Benoryn design
Regeneration kiln capacity	300	300	kg/hr	Benoryn design

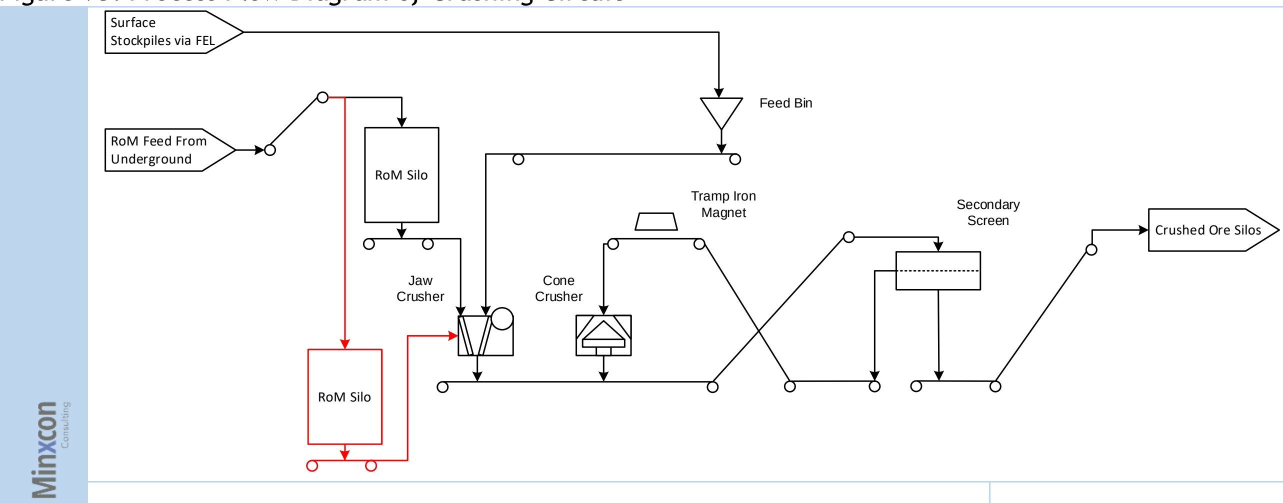
Note: Changes to Process Design criteria highlighted and in bold

II. Process Description

The crushing circuit consists of two stages as seen in Figure 93 and Figure 94. RoM will be conveyed from the shaft into the plant feed silo or added with a front-end loader ("FEL") via a static grizzly into the primary jaw crusher. A heavy-duty apron feeder extracts material from the silo and discharges it into a jaw crusher. The jaw crusher product is conveyed to the secondary screen which returns the oversize to the cone crusher and discharges the undersize onto the product conveyor running to the crushed ore silo's. The cone crusher product is also discharged onto the secondary screen feed conveyor.

The crushing circuit throughput is enough to accommodate higher ore throughput, it only needs to run for longer. The hours of operation need to be increased from 12 to 18 hours per day, and the circuit should run 7 days per week instead of 5. A second RoM bin will be be added to enable a larger buffer between the crushing plant and the ore hoisting operations.

Figure 93: Process Flow Diagram of Crushing Circuit



Process Flow Diagram for Crushing Circuit	February 2021

Figure 94: Photo of the RoM Silo and Crushers

Photo of the RoM Silo and Crushers	February 2021

Crushed ore can be discharged into either one of the two crushed ore silos. Each silo is however dedicated to one mill as seen in Figure 95 via an apron feeder and conveyor belt. The mills have a trommel discharge as seen in Figure 96 that removes scats and wood chips. The two mills discharge into a common sump from where the slurry is pumped to either a cyclone cluster or a Falcon Screen. The cyclone cluster returns the oversize material to the mills while the Falcon screen protects the gravity concentrator from blockage by larger material. The Falcon concentrator's tails are returned to the mill sump while the concentrate flows straight into the gold room for further processing. The cyclone overflow is first passed over a linear trash screen before being sent to the conditioning tank.

The two 900 kW mills that are currently installed have a specified throughput of 32.5 tph, and a third 14' x 21' mill will be added to increase the milling throughput to the required 128 tph. This mill will be fed with a new apron feeder and conveyor system. The new sump pumps will pump to an existing cyclone and another new pump will discharge onto an existing Falcon screen. The underflow from the screen will feed the existing Falcon concentrator.

Figure 95: Process Flow Diagram for Milling Circuit

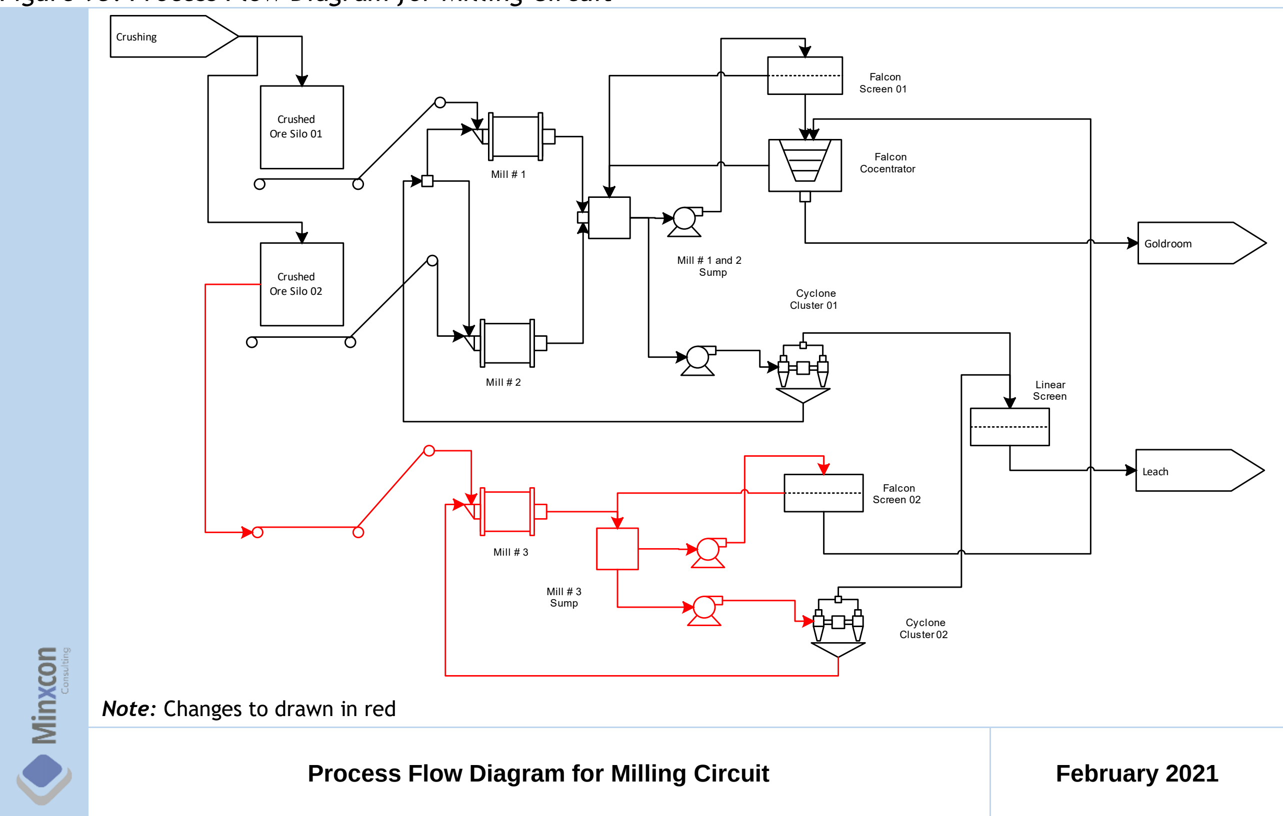


Figure 96: Photo of the Milling and Gravity Circuits

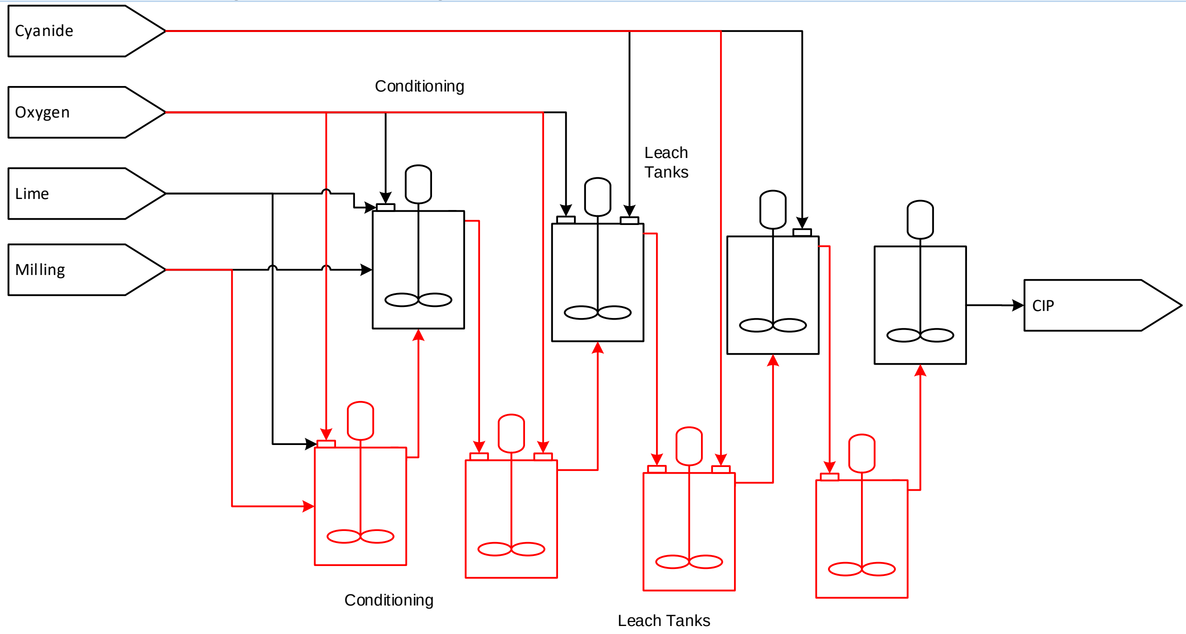
Note: Two mills are in the foreground (only one with trommel installed), with cyclones and Falcon concentrator on the steel structure behind them. Crushed ore silos are in the background and the gold room to the right

Photo of the Milling and Gravity Circuits	February 2021

Ore slurry from the milling section is added to a conditioning tank where lime and oxygen are added (Figure 97). Oxygen is added via a high shear reactor. The overflow from the conditioning tank flows into the first of three leach tanks in series where cyanide is added (Figure 98).

The number of conditioning and leach tanks needs to be doubled to accommodate the higher ore throughput and maintain the same residence time.

Figure 97: Process Flow Diagram for Leaching



Note: Changes to drawn in red

Process Flow Diagram for Leaching	February 2021

Figure 98: Photo of the Leach Tanks

Photo of the Leach Tanks	February 2021

Ore slurry flows to the carbon-in-pulp ("CIP") carousel after the last leach tank. All the tanks are filled with activated carbon and the ore slurry and carbon follow a counter-current contacting sequence. Ore slurry is periodically drained from the first tank in the sequence and the loaded carbon is sent to elution. The second tank, then becomes the first tank in the sequence and the drained tank is filled with eluted carbon and becomes the last tank in the sequence.

No changes are planned for the CIP circuit apart from the requirement for higher gold loading on the loaded carbon.

Loaded carbon slurry from the CIP tanks will be pumped via recessed impellor pumps to a horizontal vibrating carbon harvesting screen fitted above the acid wash weigh tank. The underflow will be collected in the screen underflow launder and gravitate back to the leach feed box to provide attenuation of the tails flow through the plant. The screen oversize will be washed and report into the acid wash weigh tank.

The carbon will then be discharged from the weigh tank into the acid wash column where it is washed and soaked in a 5% HCL solution. Once the acid wash is completed, the acid will be drained back to the acid wash tank and the carbon rinsed using a combination of raw water and injected caustic solution until it is pH neutral. The carbon is then conveyed to the elution column by pressurised water (Figure 99).

Leach elution will be completed by the Zadra process that uses a stainless-steel elution column with a capacity to treat 6 tons of carbon at a time. The barren eluate is stored in an agitated eluate tank and is pumped into the circuit by positive displacement screw pumps. The eluate will first pass through a recovery heat exchanger that raises the temperature by recovering the heat from the eluate reporting to the electrowinning cells. It is then heated to an operating temperature of 125°C through a heat exchanger that is heated by thermal oil from an electric boiler. The heated eluant then passes through the carbon in the pressurised elution column and desorbs the gold back into solution. The hot pregnant eluate is then cooled as it passes through the recovery heat exchanger before it flows into the electrowinning cell feed distributor. Two electrowinning cells are used for this purpose.

The elution cycle is expected to take about 16 hours, after which the eluate is drained to the eluate tank and the carbon transferred to the regeneration feed bin. The excess water is drained from the regeneration feed bin using strainers and discharged to the carbon fines recovery tank.

No changes are planned for the elution circuit to enable the higher throughput.

Figure 99: Photo of the Carbon Vessels and Elution Column

Photo of the Carbon Vessels and Elution Column	February 2021

The carbon is discharged from the regeneration feed bin using a vibrating screen feeder drier. Dried hot air from a heated air drier fan will be fed to the underside of the screen and pass through the carbon to remove excess moisture. The dried carbon will then fall into the regeneration kiln feed box where it will be heated to 700°C using direct current applied to the carbon. Discharge from the regeneration kiln will be controlled using a vibrating feeder. The carbon discharged from the feeder will fall onto a wetted carbon fines screen where it will be cooled and all carbon fines below 0.9 mm removed. The underflow water and fines will gravitate to the carbon fines tank for processing and the overflow will report to the eluted carbon transfer tank. Once the eluted carbon tank is filled, carbon will be transferred to the CIP or CIL tanks as required.

The Gold room houses two separate electrowinning circuits: the leach circuit described above and the gravity circuit which processes the pregnant solution produced by the ILR. The pregnant and rinse solution from the ILR is delivered to a gravity eluate tank. Two eluate pumps that are interchangeable with the Leach eluate pumps will circulate the gravity eluate through two gravity dedicated electrowinning cells. During elution, the pregnant gold solution from both the leach and the gravity processes is electrowon to produce gold sludge loaded cathodes.

The barren eluate is pumped to the leach feed box to ensure that any residual gold is re-adsorbed onto carbon before the spent eluate is delivered to tails. The sludge is removed by washing the cathodes, passing the sludge through a filter press, calcining for at least 12 hours in an electrically fired calcine furnace and then smelting it in an induction furnace.

The gold room is designed for two separate calcining and smelting circuits to facilitate high gold production and optimise the individual accounting for the leach and gravity circuits. The Doré produced will then be transported to Rand Refinery for further processing.

The cyanide content in the tailings will be lowered in a detox reactor that employs the INCO process. This process uses Sodium metabisulphite ("SMBS") and oxygen with copper sulphate added as a catalyst. The product from the detox reactor will be sent to the tailings thickener before being pumped to the TSF.

III. Tailings Deposition

Plant tailings will be deposited on the existing No. 6 TSF. A geotechnical professional, Mr I. Hammond of Geotheta (Pty) Ltd, has been appointed as an Engineer of Record to oversee operation of the TSF as per the new tailings guidelines.

The available area on No. 6 TSF is estimated to have a capacity of up to 21 Mt (Geotheta, 2020) which is sufficient for the current Reserve of approximately 20.7 Mt.

Item 17 (d) - Energy, Water and Process Materials Requirements

I. Plant Power Requirements

A power consumption rate of 45.8 kWh/t of ore was estimated for the 40 ktpm plant, and 39.1 kWh/t for the 80 ktpm expansion. This equates to a power draw of approximately 1,833 MWh per month and 2778 MWh per month when operating at steady state throughput of 40 ktpm and 80 ktpm, respectively.

II. Plant Make-up Water Requirements

It is estimated that the plant will need a maximum of 0.90 m^3 make-up water per RoM tonne. This equates to a daily consumption of 1.18 Mega litres for 40 ktpm and 2.37 for 80 ktpm. Make-up water will be pumped from either No. 6 Shaft or from No. 5 Shaft to the process water storage tanks.

Potable water will be received from the Merafong local municipality and will be exclusively used for drinking, washing, showering and sewage.

The potable water requirements for the plant surface operations are based on 100 litre per person per day.

III. Process Material Requirements

The major consumables and reagent consumptions are summarised in Table 51.

Table 51: Major Consumables and Reagent Consumptions

Consumable	Value (Minimum)	Value (Maximum)	Unit	Source
Steel Balls	0.7	1.2	kg/t	Best practice / estimate
Cyanide	0.30	0.50	kg/t	Mine plan / requirement
Lime	1.25	1.75	kg/t	Benoryn design
Flocculant	2.50	5.00	g/t	Mine plan / requirement
Caustic Soda	125.00	175.00	g/t	Best practice / estimate
Hydrochloric Acid	0.75	1.25	kg/t	Best practice / estimate
Carbon	30.00	50.00	g/t	Benoryn design
Sodium Metabisulphite	0.76	1.38	kg/t	Benoryn design
Copper Sulphate	130	260	g/t	Benoryn design
Oxygen	1.40	1.60	kg/t	Benoryn design

ITEM 18 – PROJECT INFRASTRUCTURE

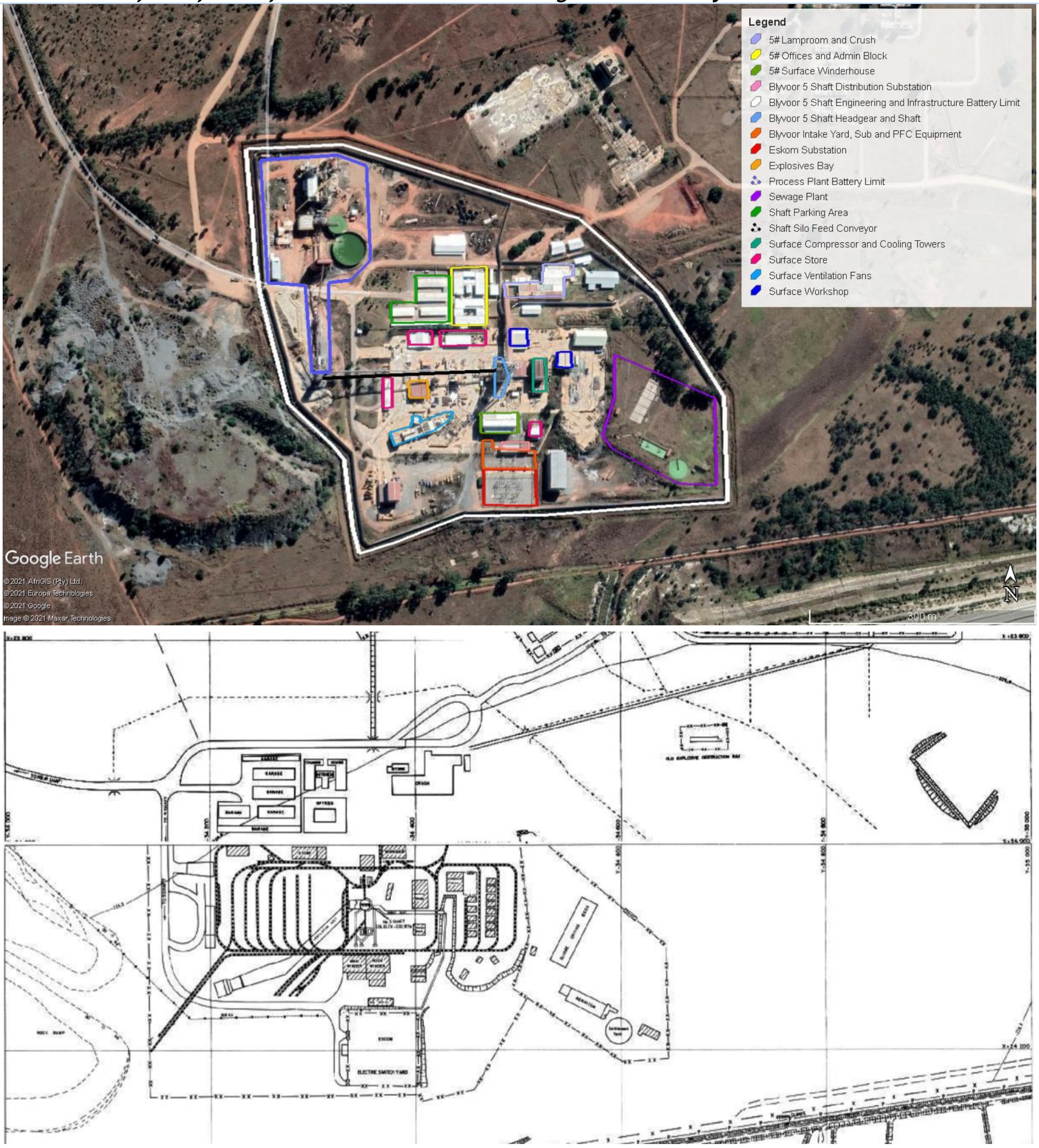
Item 18 (a) - Mine Layout and Operations

I. Project General Arrangement and Layout

ix. Surface

No. 5 Shaft is a historically operated mine and is thus very well-established in terms of infrastructure. The surface infrastructure is in place and in a fair to good condition and has been repaired/upgraded during the execution the No. 5 Shaft project. The infrastructure includes mine offices, mine parking area, change houses, lamp room and crush, workshops, compressor house, stores, headgear, winder house, sub-stations, main vent fans, explosives magazine, sewage plant, ore conveyor, waste rock dump and access road. The general arrangement and layout of this infrastructure is illustrated in Figure 100.

Figure 100: No. 5 Shaft Surface Infrastructure General Arrangement and Layout

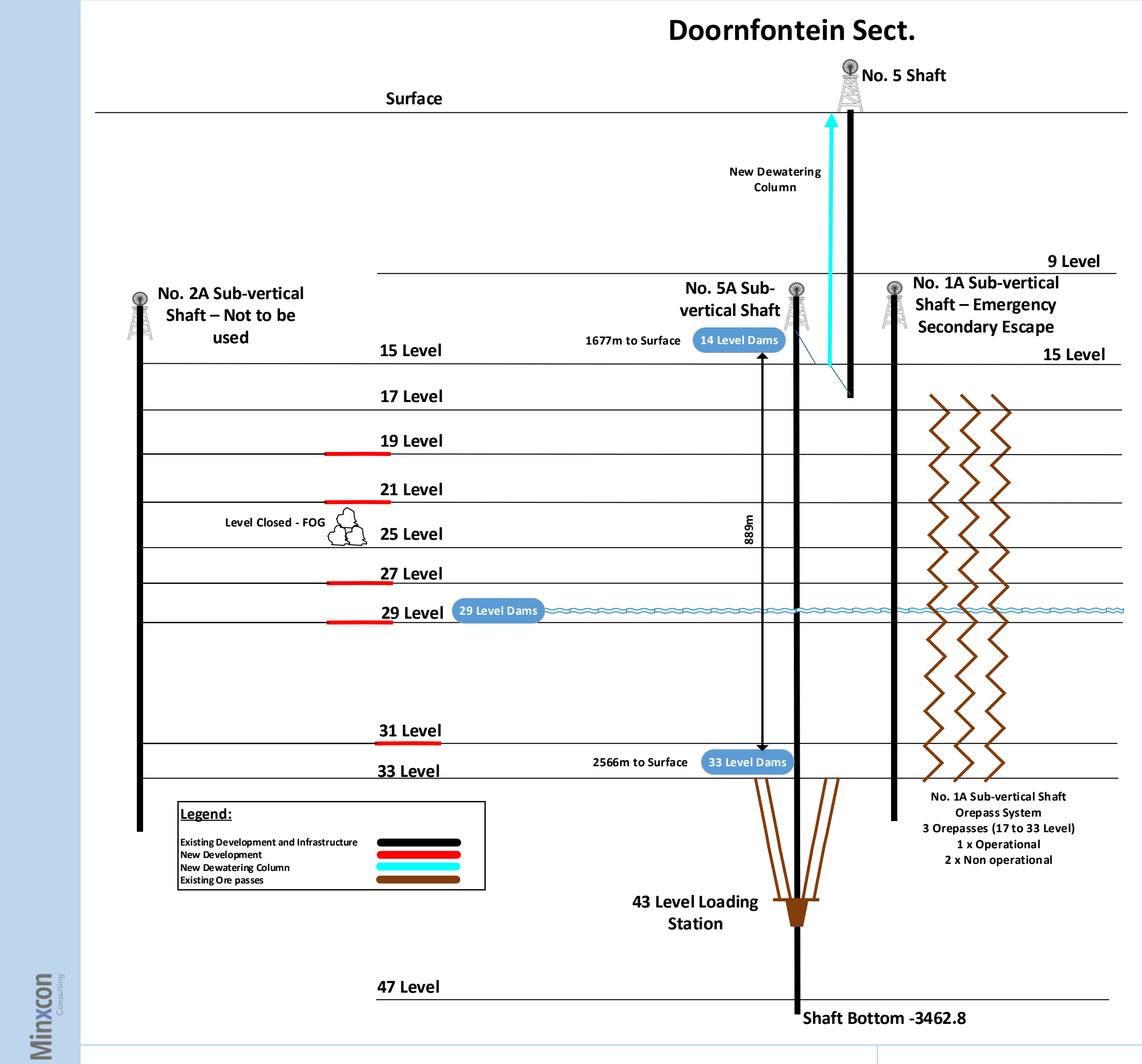


No. 5 Shaft Surface Infrastructure General Arrangement and Layout	February 2021

x. *Shafts and Underground*

The No. 5 Shaft Complex consists of a system of vertical hoisting and ventilation shafts. These include No. 5 Shaft (surface to 17 Level), No. 5A Sub-vertical Shaft (15 Level to 47½ Level), No. 1A Sub-vertical Shaft and a Sub-vent Shaft in the vicinity of No. 5A Sub-vertical Shaft. No. 1A Sub-vertical Shaft also includes an orepass system consisting of three independent ore passes from 17 Level to 33 Level. No. 1A Sub-vertical Shaft will be equipped with a winch and pod and utilised as an emergency secondary escape only. A sectional schematic indicating the layout of the shaft and underground workings are illustrated in Figure 101.

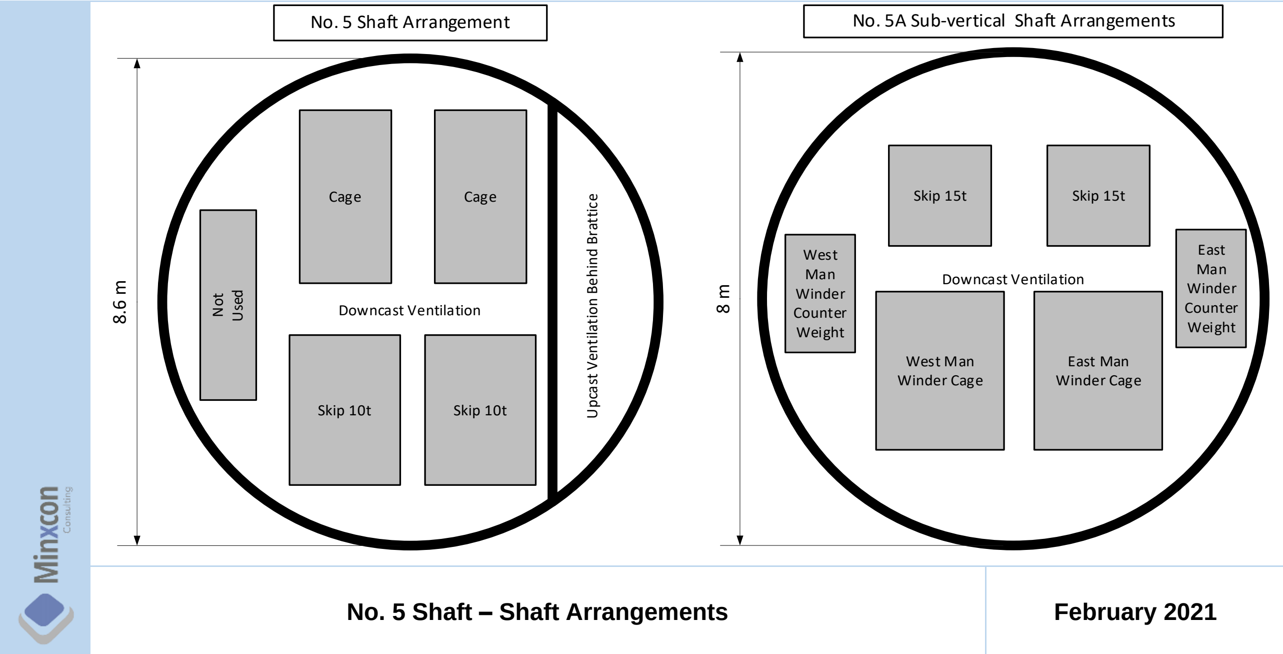
Figure 101: Sectional Schematic of Blyvoor Shaft Systems



Sectional Schematic of Blyvoor Shaft Systems | February 2021

The layout and shaft arrangements for the various shafts are illustrated in Figure 102.

Figure 102: No. 5 Shaft - Shaft Arrangements



Item 18 (b) - INFRASTRUCTURE

I. SURFACE INFRASTRUCTURE

The surface infrastructure of No. 5 Shaft is in a good working condition and has been repaired/upgraded during the execution of the Blyvoor Gold No. 5 Shaft project. Areas such as offices, change houses, workshops, stores, lamp room, winder house, compressor house and shaft headgear required minor repairs and maintenance which has subsequently been completed.

The major infrastructure and equipment on surface are listed in Table 52.

Table 52: No. 5 Shaft Surface Infrastructure

Area	Location	Description	Quantity
No. 5 Shaft Surface Mining Assets	Winder House	4250 kW Double Drum Man Winder – Mechanical	1
		4250 kW Double Drum Man Winder – Electrical	1
		3300 kW Double Drum Rock Winder – Mechanical	1
		3300 kW Double Drum Rock Winder – Electrical	1
		Morris 30 t Overhead Travelling Crane	1
		287 kVA Standby Diesel Generator	1
		Sulzer CZ 250-315 Centrifugal pump	1
		Weipert Centre Lathe	1
	Headgear	Headgear Structure 800 t	1
		18ft Sheave Wheels	4
		3 Deck Man Cages	2
		10 Ton Skips	2
		Rock Surge Bin 4x4x4 m	1
		250 m Incline Belt Conveyor	1
		Rock Silo 9m diameter, 14m height	1
		Wire Rope Winch	1
		14m Overhead Mono Rail Support Runway with pneumatic chain hoist	2
		Rock silo reclaim tunnel civil works	1
		Sampling/Waste conveyor, 3,	1
	Fans	2750/1160 kW Fan and Drive Motor	2
		Mild steel fabricated operators platform	1
		Wall mounted ventilation, fan	1
		Emergency diesel powered fan	1
	Reclamation/Boilermaker Workshop	10 t Overhead travelling crane, 17m span	1
		Hydraulic press with power pack	1
		WKL 150 5 Stage centrifugal pump	1
		MK 11 centrifugal pump	1
	Mechanical Workshop	10 t Overhead Travelling Crane, 14m span	1
		Heavy duty pedestal grinder	1
		Pillar mounted drilling machine	1
		Alexander Engineering pillar mounted drilling machine	1
		Heavy duty drill press RDM 250-F	1
	General Shaft Area	41 mm diameter 6x29 triangle steel wire rope 1,800 m	2
		45 mm diameter 6x30 triangle steel wire rope 1,860 m	2
		52 mm diameter 6x33 triangle steel wire rope 2,300 m	2
		50 mm diameter 6x32 triangle steel wire rope 2,300 m	2
		Refurbished James Howden Fan Blade	1
		Spare 3 deck man cage	2
		Spare 10 t skip	1
		11 kW Filter Press	1
		Underground Loading Chute	3
		Sulzer 11 Stage Centrifugal pump	1
		Spare Sheave Wheel	2
	Capacitor Bank Yard	Capacitor Bank with 9 capacitors for power factor correction	3

The buildings at No. 5 Shaft are listed in Table 53.

Table 53: No. 5 Shaft Available Buildings

Area	Location	Dimensions	Floor Area m²
No. 5 Shaft Surface Buildings	Main Office	40 m x 45 m	1,800
	2nd Office (Boardroom)	45 m x 40 m	1,440
	Small Change House	15 m x 15 m	225
	Crush and Lamp Room	75 m x 30 m	2,250
	Asbestos Office	10 m x 30 m	300
	Store under walkway 1	8 m x 7 m	56
	Store under walkway 2	27 m x 25 m	675
	Banksman's Cabin	10 m x 15 m	150
	Compressor House	35 m x 20 m	700
	Store behind Compressor House	17 m x 19 m	323
	Winder House	56 m x 36 m	2,016
	Ventilation Store	20 m x 10 m	200
	Big Sub-station Building	8 m x 24 m	192
	Small Sub-station Building	8 m x 10 m	80
	Electrical Store	35 m x 15 m	525
	Mechanical Store	12 m x 20 m	240
	Main Store	45 m x 15 m	675
	Shaft open air store	24 m x 24 m	576
	Fan House	15 m x 10 m	150
	Diesel Fan House	10 m x 8 m	80
	Ventilation Cowling	75 m x 16 m x 2 m	2,400
	Car Port	-	-
	New Change House	Refubished	-
	Sewage Plant	Refurbished	-
	Explosives Store		

A complete electrical refurbishment of all the surface infrastructure and equipment was required. This included, but is not limited to, the two surface winders, one surface fan and surface buildings which include the offices, change houses, medical stabilisation facility, time and attendance facility, lamp room, etc. The refurbishment and recommissioning of this infrastructure have been completed during the execution phase of the Blyvoor Gold No. 5 Shaft project.

An initial inspection of the mechanical infrastructure, confirmed by OEM suppliers, indicated that the equipment was in a fair condition and that the refurbishment required was predominantly confined to modernisation upgrades of the equipment. The upgrades and legal inspection and commissioning of the rock winder have been completed and the process of relicensing this winder is in progress.

II. UNDERGROUND INFRASTRUCTURE

No. 5 Shaft and No. 5A Sub-vertical Shaft has been accessed down to 17 Level and 27 Level respectively. No. 5 Shaft has been fully repaired and recommissioned. No. 5A Sub-vertical Shaft still requires some repair work to fully restore the shaft to operation. The two man winders in No. 5A Sub-vertical shaft have been recommissioned. The East man winder has been relicensed for use and the licensing of the West man winder is in progress. This allows for repairs to take place in the shaft to enable the recommissioning of the No. 5A Sub-vertical Shaft rock winder.

The No. 1A Sub-vertical Shaft was fully operational down to 21 Level at the time that operations ceased in 2013. Blyvoor Gold requires this shaft as an emergency secondary escape route between 27 Level and 15 Level. The shaft is in the process of being recommissioned with a reinstated single drum winder. Various equipment such as the winder rope and capsule to be utilised for the transport of persons in an emergency has been procured.

A portion of the underground workings is flooded. The flooded area is expected to include all the workings from 10 m above 29 Level. All infrastructure in the flooded area will need to be replaced and working places re-equipped once dewatering of these areas has been conducted.

Most of the infrastructure on the various levels that are not flooded is expected to be in a fair condition. With input from the Blyvoor team it has been assumed that 70% of infrastructure will need to be replaced. This will include, cables, water supply and pumping columns, rails, sleepers, rail-bound equipment, workshops, battery bays, pump stations, sub-stations, mini sub-stations, and stope infrastructure.

The replacement of the infrastructure and equipment will be conducted in line with the planned for active mining areas.

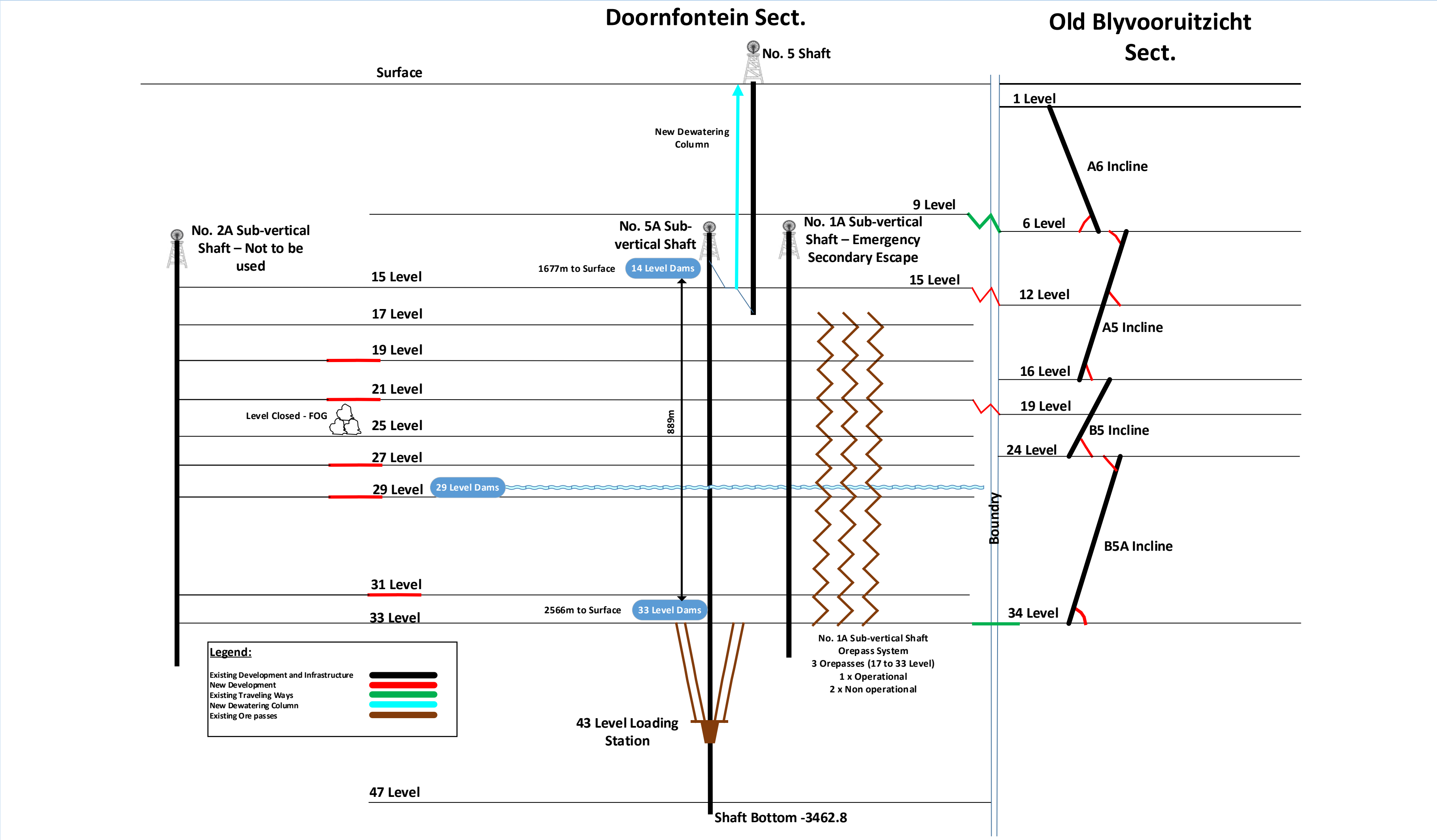
Power has currently been reinstated to 15 Level enabling the repair and recommissioning of No. 5A Sub-vertical Shaft. Repairs and recommissioning of No. 5A Sub-vertical Shaft is currently 60% complete. The recommissioning of the East and West Man winders of No. 5A Sub-vertical shaft have been completed and the recommissioning of the Rock winder of No. 5A Sub-vertical Shaft has commenced.

The replacement of the infrastructure on the planned mining levels is currently underway.

The ramp up of production to 80 ktpm necessitates the opening up of additional mining areas which includes some of the old Blyvooruitzicht mining areas. Currently the Doornfontein section holes into the old Blyvooruitzicht section at Doornfontein 9 Level and Blyvooruitzicht 6 Level as well as Doornfontein 33 Level to Blyvooruitzicht 34 Level. These developments will be utilised to access the old Blyvooruitzicht areas for production. In addition to the existing developments, it is planned to establish connections at Doornfontein 15 Level to Blyvooruitzicht 12 Level as well as Doornfontein 21 Level to Blyvooruitzicht 19 Level.

Similar to the mining areas planned around the No. 5 Shaft Complex, the mining areas in the old Blyvooruitzicht section will require re-equipping. This will include the re-establishment of a series of Incline shafts, substations, haulages, stoping areas, services, and water management infrastructure. The connection between the Doornfontein sections and old Blyvooruitzicht sections as well as the planned Incline shafts to be recommissioned is illustrated in Figure 103.

Figure 103: Sectional Schematic of Blyvoor Shaft Systems Including Old Blyvooruitzicht Section



Sectional Schematic of Blyvoor Shaft Systems Including Old Blyvooruitzicht Section

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Item 18 (c) – Mining Operations

The No. 5 Shaft Complex is a well-established mining operation that was still in operation during 2013. The operation is thus well equipped and set up. The majority of the required refurbishments, repairs and maintenance on infrastructure and equipment has been completed and recommissioned. The majority of outstanding work entails the re-equipping of the planned levels and workings.

I. Surface Operations

Surface operations for the No. 5 Shaft include the man and rock winding plants, two main ventilation fans, electrical intake/distribution sub-station, shaft headgear and ore conveyor and surface buildings and facilities.

The shaft bank area is well-established and equipped with numerous stores and workshops in place. The bank also includes an extensive rail network for the transport of material and equipment on the bank area as well as a salvage and reclamation yard and explosives delivery bay.

The rock winder is equipped with two 10 t skips while the man winder is equipped with two, three deck cages with a capacity of 120 persons each. During ore hoisting, ore will be tipped into bins located in the headgear that will in turn feed onto the ore conveyor that will transport ore to the existing silo and eventually to the process plant.

The two main ventilation fans where previously utilised for the ventilation of the total underground workings. During the ramp up phase of the project to 40 ktpm, it is planned that only one of the main fans will be required for the ventilation of the underground workings. The second main ventilation fan will be required when production ramps up to 80 ktpm. This will be the case while mining takes place in close proximity to the No. 5 Shaft Complex. Once mining moves to the extremities of the No. 5 Shaft Complex additional main surface ventilation fans will be required. It is planned to initially install two fans at Doornfontein No. 2 Shaft and during the later phases of the project an additional two main surface fans at Blyvooruitzicht No. 3 Vent Shaft. This should ensure sufficient and effective ventilation and cooling of the planned underground workings. A diesel-driven emergency standby ventilation fan is also available at No. 5 Shaft to provide emergency ventilation in case of a power failure.

Currently compressed air is supplied to refuge chambers and limited pneumatic equipment from a mobile compressor located on 15 Level and 27 Level. A similar approach will be followed going forward where mainly refuge bays on working levels will be supplied of compressed air from mobile compressors.

II. Underground Operations

Planned mining for the project will initially take place on 15 Level and 27 Level. Ore from 15 Level will be trammed to the 15 Level ore pass feeding the loading bins of No. 5 Shaft. From here the ore is loaded into the skips and hoisted to surface by the rock winder. On the levels below 15 Level ore will be trammed to No. 1A Sub-vertical Shaft and tipped into the existing orepass system. The orepass system extends from 17 Level to 27 Level and consist, of three independent orepasses of which only one is currently operational. Ore will, subsequent to traveling through the orepass system, initially be trammed on 27 Level from No. 1A Sub-vertical Shaft to No. 5A Sub-vertical Shaft. Prior to the establishment of a mid-shaft loading system, cage hoisting will be done from 27 Level to 15 Level where ore will be transferred to No. 5 Shaft's loading station and hoisted to surface. Allowance has been made for the development of a new orepass system at No. 5A Sub-vertical Shaft from 27 Level down to 27.5 Level. In addition to the orepass system, a mid-shaft loading station will be developed at 27.5 Level. Once these developments have been completed ore will be tipped into the new orepass system on 27 Level and via the loading station loaded into skips and hoisted within No. 5A Sub-vertical Shaft to 14 Level.

When mining commences below 29 Level, dewatering of the flooded workings below 27.5 Level will be required. Once the water level has lowered to below 43 Level, the existing permanent main pump station on 34 Level will be re-established. The settlers and mud pumps associated with this pump station is located at 33 ½ Level. Another pump station is located at 44 Level. This pump station together with the original mid-shaft loading station at 43 Level will be re-established. Dewatering of the underground operations will then be done from these pump stations. This will enable ore that is mined below 29 Level to be hoisted from the 43 Level loading station to 15 Level within No. 5A Sub-vertical Shaft.

i. Shafts and Hoisting

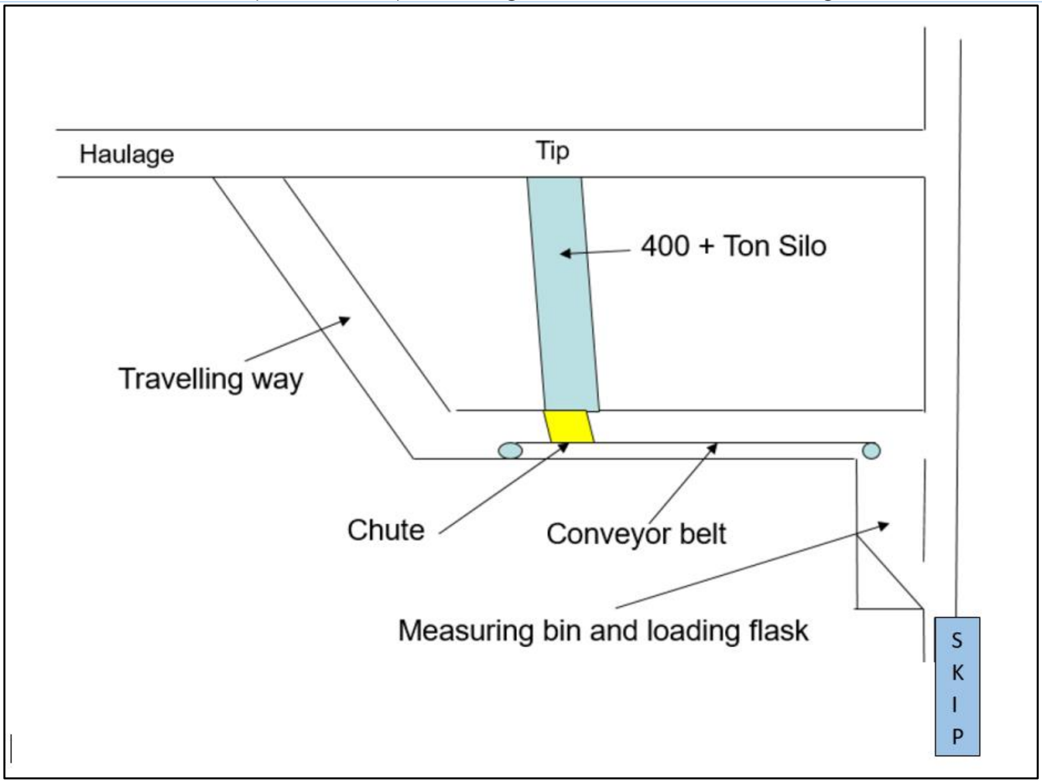
Owing to the flooding of the No. 5A Sub-vertical Shaft basin with CWC maintaining the water level 10 m above 29 Level, the existing rock loading arrangements in the No. 5A Sub-vertical Shaft, which is situated below 43 Level, are currently submerged under water and alternative loading arrangements will be required.

A new loading arrangement will have to be developed and installed on 27.5 Level. The development and establishment of this loading station will take an estimated 12 months. Cage hoisting with hoppers will thus be required in No. 5A Sub-vertical Shaft between 27 Level and 15 Level during the first year of production. Once the 27.5 Level mid-shaft loading arrangement is in place, hoisting will commence with the No. 5A Sub-vertical Shaft rock winder.

Once mining commences on 29 Level, connecting development will be required on 29 Level between No. 1A Sub-vertical Shaft and No. 5A Sub-vertical Shaft. This is due to development on 29 Level only being completed to just beyond the 29 Level station (±8 m) at No. 5A Sub-vertical Shaft and not holed into the 29 Level haulage leading from No. 1A Sub-vertical Shaft. Subsequent to dewatering of No. 5A Sub-vertical Shaft and the re-establishment of the original loading station on 43 Level, ore below 27 Level will be transferred via the No. 1A Sub-vertical Shaft ore pass system and the No. 5A Sub-vertical Shaft orepass system to the 43 Level loading station for hoisting.

Schematics of the 27.5 Level mid-shaft loading arrangement that is being considered is illustrated in Figure 104.

Figure 104: No. 5A Sub-vertical Shaft – Mid-shaft Loading Vertical Bin & Silo Arrangement



No. 5A Sub-vertical Shaft – Mid-shaft Loading Vertical Bin & Silo Arrangement | **February 2021**

The old Blyvooruitzicht and Doornfontein sections has a boundary pillar between them. In order to access the old Blyvooruitzicht section from No. 5A Sub-vertical Shaft development is required through the boundary pillar. This is planned on 15 Level and 21 Level on the Doornfontein side. Currently two holings between the two sections exist. The existing interconnecting levels have a slight elevation difference, and this will be the case for the newly planned interconnections as well. The existing interconnections levels and their elevation differences are listed in Table 54.

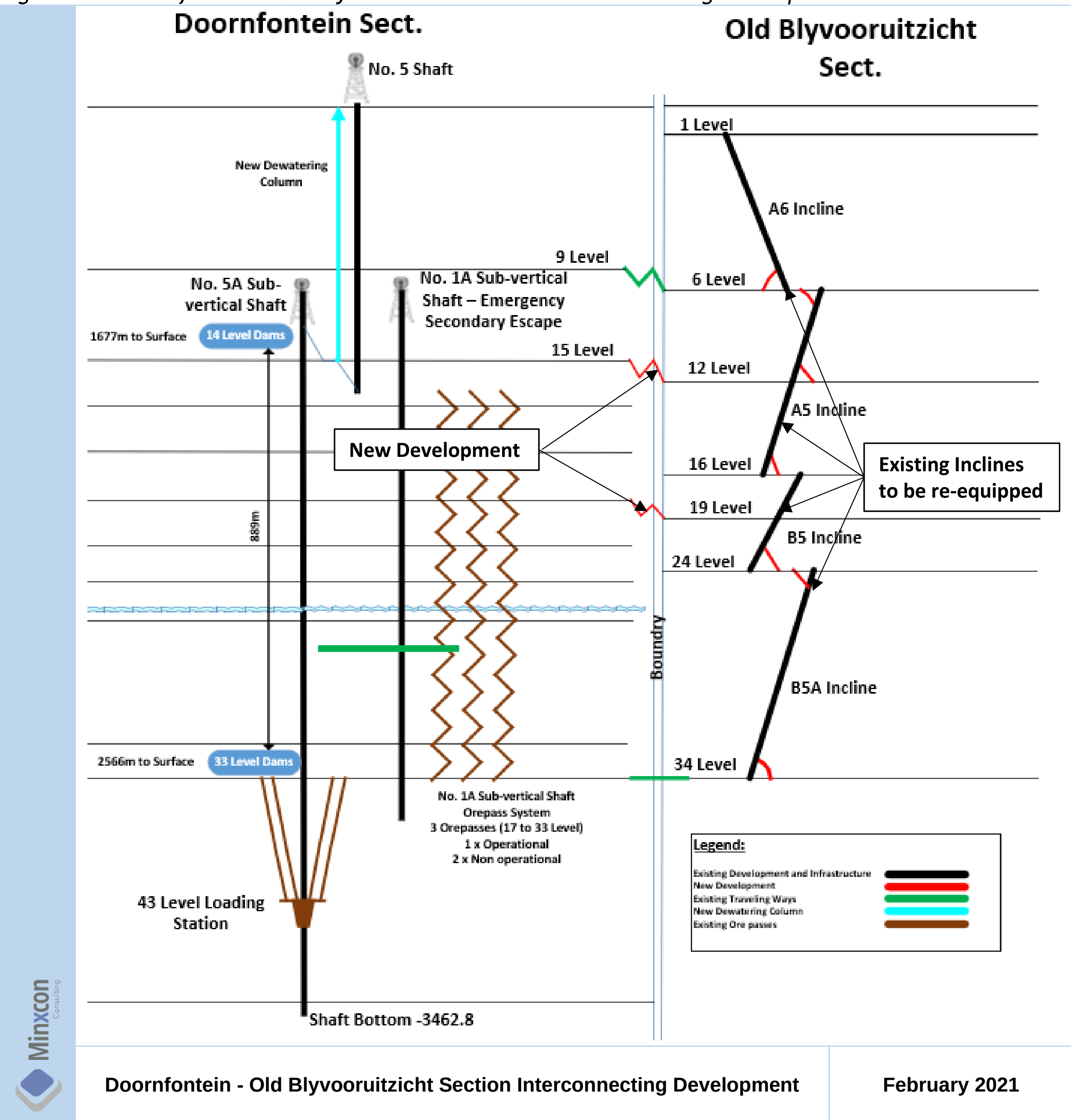
Table 54: Doornfontein - Blyvooruitzicht Boundary Connection Development

Status	Level		Unit	Elevation Difference
	Historic Doornfontein	Historic Blyvooruitzicht		
Existing - Traveling Way	9 Level	6 Level	m	25
Existing - Cross Tram Level	33 Level	34 Level	m	71
Planned - Cross Tram Level	15 Level	12 Level	m	6
Planned - Cross Tram Level	21 Level	19 Level	m	7

Interconnecting development will be done at a gradient that will allow for efficient tramming.

Once access has been obtained to the old Blyvooruitzicht section re-equipping of haulages and working places will commence. This will include the re-establishment of a number of incline shafts and their associated winding plants. These incline shafts will, once re-equipped, be utilised for the transport of material to workings and ore from the workings to the interconnected levels for cross tramming to No. 5A Sub-vertical Shaft for hoisting to surface. The above mentioned planned and existing development is illustrated in Figure 105.

Figure 105: Doornfontein - Old Blyvooruitzicht Section Interconnecting Development



III. Completed and Remaining Project Works - Infrastructure

i. Completed Work

The following has been completed:-

- Surface power supply and electrical reticulation;
- Winder refurbishment completed – No. 5 Shaft (man and rock winders) and No. 5A Sub-vertical Shaft (East and West man winders);
- No. 5 Shaft man winder has been recommissioned, cleared for service by DMRE Chief Inspector of Machinery and re-licensed;
- No. 5A Sub-vertical Shaft East man winder has been recommissioned, cleared for service by the DMRE Chief Inspector of Machinery and re-licensed;
- No. 5A Sub-vertical rock winder and West man winder in the process of being recommissioned;

- Re-licensing of No. 5 Shaft rock winder and No. 5A Sub-vertical Shaft West man winder is in progress;
- No. 5 Shaft, shaft repairs completed and shaft re-instated;
- Power established in No. 5A Sub-vertical Shaft winder to 25 Level and 27 Level;
- Re-instating power to 25 Level and 27 Levels;
- House Keeping and refurbishment of change houses, surface area completed;
- Traffic control measures completed;
- Opening up of 15 Level haulage;
- Purchase and delivery of hydro mining equipment; and
- Construction and commissioning of process plant

ii. Remaining Project Works

- Remaining Infrastructure Project Works
  - Re-instatement of No.5A Sub-vertical Shaft Infrastructure:-
    - re-commissioning of Sub-vertical rock winder and West man winder;
    - re-equipping of underground workings;
    - development and installation of 27.5 Level mid-shaft loading station; and
    - dewatering of flooded workings and recommissioning of main pump stations on 34 Level, 14 Level and the IPC in No. 5 Shaft as well as the settlers on 33½ Level.
- New Infrastructure Projects required for increased production requirements, or for production beyond the initial 5 years of the plan:-
  - establish connecting development from Doornfontein section to old Blyvooruitzicht section;
  - re-establish services to old Blyvooruitzicht section (power, water and communications);
  - establish main surface ventilation fans at the historic Doornfontein No. 2 Shaft and the Blyvooruitzicht No. 3 Ventilation Shaft;
  - re-equip A6, A5, B5 and B5A Incline shafts and their winders; and
  - establish shaft tips in above mentioned incline shafts.

ii. Shaft Dewatering

The existing underground pumping infrastructure at No. 5A Sub-vertical Shaft, according to existing available information, will have become flooded with the water being allowed to rise to above 29 Level (information acquired from AGA's CWC).

Once it is required to mine below 27 Level dewatering of the flooded lower levels will commence to below 41 Level with the use of submersible pumps. Dewatering is to commence in month 37 and will take a period of 12 months to ensure access can be gained to the required levels in month 50. Allowance has been made for two submersible pumps with a rating of 1000 kW and a flow rate of 200 m^3/h at a head of 820 m. In conjunction with the dewatering, re-equipping of all shaft infrastructure, level infrastructure, permanent pump stations and sub-stations will have to be established to supply services to the future mining areas.

Once pumping commences the water will be pumped vertically via the No. 5A Sub-vertical Shaft to 14 Level and from there to the No. 5 Shaft IPC and subsequently to surface via No. 5 Shaft. The main portion of the existing permanent underground pumping infrastructure at No. 5 Shaft Complex is situated below 33 Level in No. 5A Sub-vertical Shaft. This includes a settling arrangement on 33 ½ Level and main pump stations on 34 Level and 44 Level.

The existing installed pumping infrastructure consists of two multistage pumps installed in series, pumping in reverse cascade from 44 Level to similar intermediate pump stations on 41 Level and 38 Level, finally delivering the water to large storage dam facilities on 34 Level. Once the refurbishment of the permanent pump stations and other infrastructure has been completed the submersible pumps will be removed from the shaft and pumping will commence from 34 Level with the permanent pump station pumps, the water will be pumped to 14 Level from where the water will be pumped to surface via the IPC located in No. 5 Shaft.

Information obtained from a Village Main Reef report dated June 2013 two months prior to closure, stated that a dam had been constructed on 29 Level (No. 5A Sub-vertical shaft) to enable the recirculation of approximately 1Ml of service water per day which will be utilised for initial production purposes below 27 Level.

Historically the pump station on 34 Level in No. 5A Sub-vertical Shaft section is equipped with 3 x 11 stage Sulzer pumps with a rated head of ±1,100 m. Similar pumps will be installed once the main pump station is recommissioned.

iii. Mining Logistics

All mining levels are or will be equipped with a workshop and battery bay to service rail-bound equipment and mining areas on each level.

The mining areas will be supplied with mobile hydro power packs that will directly supply pressurised water to the active mining areas for rock drill operation.

iv. Underground Ventilation and Air Conditioning

A review has been done on the detailed 5-year mining plan by a ventilation specialist. Mining during this period will take place on 27 Level and above.

Blyvoor Mine at No. 5 Shaft, is relatively shallow compared to other the mines in the Carletonville area where the neighbouring workings are between 3,000 mbs and 4,000 mbs. Blyvoor will be mining, according to the plan at elevations of 2,383 m. The greater stoping depths of the neighbouring mines in the region require refrigeration for their stoping operations whilst historically at Blyvoor cooling was only introduced at depth below 2,500 mbs (below 31 Level).

From the above information, it has been assumed that minimal to no refrigeration will be required whilst mining above 31 Level. Spot cooling will be implemented as and where necessary.

Up to 2013, prior to mine closure, the No. 5 Shaft and Blyvooruitzicht No. 6 Shaft were ventilated by two surface fans handling approximately 400 m^3/s. Both fans were in use to support mining at depths of +3,200 mbs. With the proximity of the working places relative to No. 5A Sub-vertical Shaft in regard to the initial years of the LoM plan, it is assumed that during the first five years of production, one fan delivering ±200 m^3/s will be sufficient at production rates of 40 ktpm and a second ventilation fan will be required at 80 ktpm to ventilate and cool the underground workings.

Allowance has been made for nine air conditioning units, each with a cooling capacity of 100 kW, which is sufficient for cooling six stoping panels. The air conditioning units will be utilised to facilitate spot cooling between the working places as and where required whilst mining above 31 Level.

Once mining proceeds below 2,500 m (31 Level), refrigeration will be required to ensure effective cooling of the working areas. Provision has been made to re-establish and recommission the 4 x 1,300 kW refrigeration plants located on 34 Level.

Item 18 (d) - SERVICES

I. POWER SUPPLY

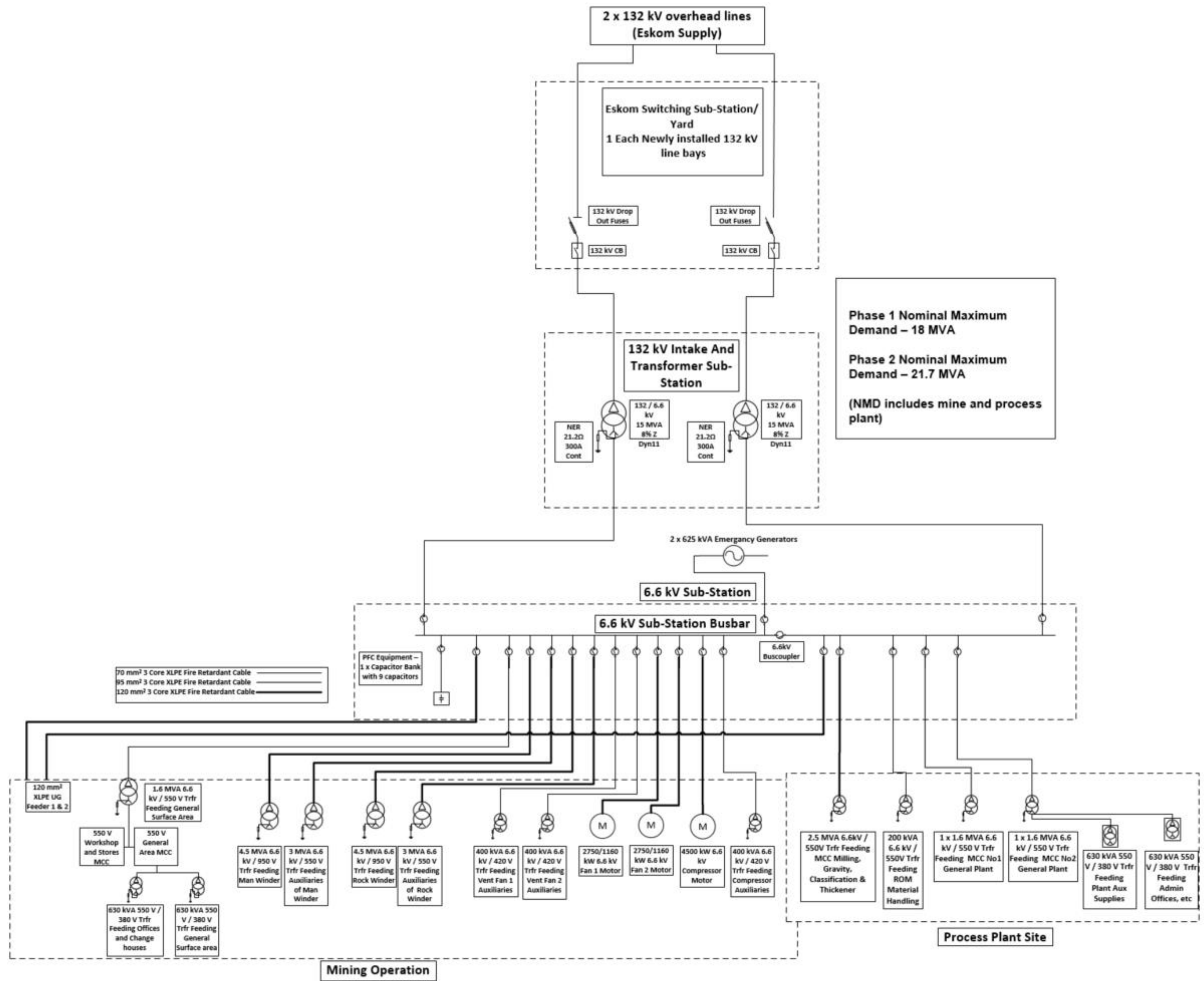
Power has previously been supplied to No. 5 Shaft via two 132 kV overhead lines that feed from the Elandsrand and Carmel sub-stations respectively. These lines are connected and live. The Eskom switching yard and consumer sub-station at Blyvoor was stripped by Eskom as well as damaged and vandalised, and thus needed to be fully re-equipped and re-commissioned. This work has been completed during the execution of the Blyvoor Gold No. 5 Shaft project.

The Blyvoor intake and distribution sub-station is be fed from the Eskom consumer sub-station located at No. 5 Shaft. This distribution sub-station was vandalised and stripped of major components. The repairs and commissioning of the intake substation have subsequently been completed and the various areas such as the winding plants, surface fans, surface compressor, workshops, stores, offices, general shaft surface areas, process plant and the underground workings are fed from this distribution sub-station.

The underground workings are fed with two HT feeder cables that will create a ring feed system for the underground workings. Allowance has been made for the refurbishment and re-commissioning of five underground sub-stations that will facilitate the control and distribution of power throughout the underground workings. These sub-stations will be located on 17, 21, 25 and 29 Levels. Power has currently been restored to 14 Level, 15 Level and 27 Level. The remainder of the power reticulation into the production sections is required.

The power supply and distribution network of No. 5 Shaft Complex is illustrated in Figure 106.

Figure 106: No. 5 Shaft – Power Supply and Distribution SLD



No. 5 Shaft – Power Supply and Distribution SLD

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Backup power supply capacity has been secured in the form of diesel generator sets. The generator sets have been purchased and the facility to house them is under construction. Blyvoor Gold needs to apply for approval to install these generators.

II. WATER SUPPLY

Water will be supplied to the project from three main sources. Potable water will be purchased from Rand Water via Merafong. A supply line has been installed from the project and ties into the existing main line connected to the Blyvoor lease area.

A pump column has been installed from Blyvoor No. 6 Shaft and supplies 1 Ml / day of process make up water to the No. 5 Shaft process plant.

Service water for the underground mining section will be sourced from the underground workings and fissure water. Once production commences at Blyvoor No. 5 Shaft, the water required for production purposes is anticipated to be approximately 1.5 Ml/day at commencement of mining and will ramp up to 3 Ml/day for the period month 18 to 31. Service water requirements will further increase to a maximum of 6 Ml/day from month 44 and remain at this level whilst producing the planned 80 ktpm of ore. The existing fissure water ingress into No. 5 Shaft and water from the dewatering activities below 27 Level, once dewatering has commenced, will be captured into, and circulate in the underground mines' water reticulation system. Considering the ±20 Ml/day pumped by CWC and the 5Ml/day pumped by the neighbouring Savuka Gold Mine, the total groundwater ingress into the Blyvoor mining area amounts to 25Ml/day. As the majority of service water will be recirculated underground it is evident that sufficient ingress groundwater will be available to sustain the maximum planned production rate.

Allowance has been made for the anticipated pumping and water distribution infrastructure and equipment.

ITEM 19 – MARKET STUDIES AND CONTRACTS

Item 19 (a) Market Studies and Commodity Market Assessment

I. Gold Commodity Overview - 2020

The gold market comments have largely been extracted from the World Gold Council's Gold Demand Trends report for the quarters 1, 2 and 3 2020 from investor information published into the public domain.

- Gold demand fell by 10% year-on-year ("y-o-y") in the first three quarters of 2020 compared to 2019 primarily due to a slump in consumer demand as the world continues to fight the Covid-19 pandemic.
- Global central bank reserves grew by 247 t (-53% y-o-y), with Q3 seeing net sales for the first time since 2010.
- Total gold supply declined by 5% to y-o-y in the first three quarters of 2020 to 3,394 t primarily attributed to Covid-19 restrictions hampering both mining and recycling production.
- The gold price averaged USD1,770/oz in 2020, and in August 2020 broke the USD2,000/oz barrier for the first time. The gold price ended the year at USD1,883/oz. The elevated pricing was driven largely by global uncertainty and investors looking for safe-haven assets.
- The average global All-In Sustaining Costs rose to approximately USD950/oz.

II. World Gold Deposits and Reserves

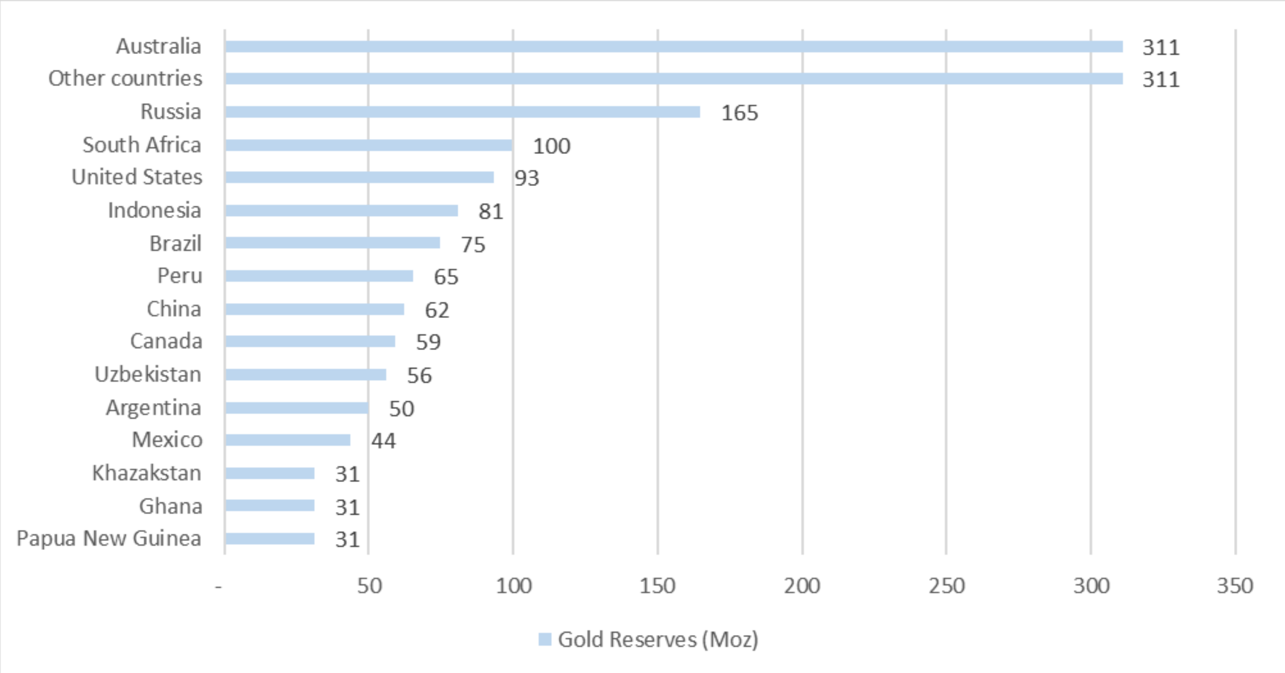
According to the USGS minerals commodity database, there are almost 66,000 identified deposits in the world where gold features as the primary mineral. The geographical distribution of these is illustrated in Figure 107.

Figure 107: Global Distribution of Gold Deposits

From the image it can be seen that the majority of occurrences are concentrated in North America. The global minable gold reserves, however, are dominated by Australia, Russia, and South Africa due to the higher grade deposits found in these regions, with averages generally well above the global average of 1.01 g/t. Africa continues to be home to some of the highest grade (and highest risk) projects in the world. The average grade differs significantly (33%) between producing and undeveloped deposits. This has important implications on future gold production, and at a gold price reaching low levels, many of these projects will simply not be economically feasible.

Gold reserves are distributed globally as graphically portrayed in Figure 108, totalling 50 Bt (rounded) for some 1,555 Moz Au.

Figure 108: Country Listing of Gold Reserves as at End 2019



Data Source: US Geological Survey, Gold Data Sheet - Mineral Commodity Summaries 2020, January 2020

III. Gold Supply and Demand Fundamentals

i. Gold Supply

Total gold supply declined by 5% to y-o-y in the first three quarters of 2020 to 3,394 t - largely due to a decrease in mine production and recycling in response to COVID-19 restrictions.

Mine Production

According to the World Gold Council (2020), mine production dropped 5% in the first three quarters of 2020 to 2,477 t. This was due to many countries imposing Covid-19 lockdown restrictions that prevented mines from operating or restricted operations from ramping up to full production.

Table 55 the top 20 gold mining countries for the years 2018 to 2019. China the largest producer followed more significantly than in 2018 by Russia, whilst South Africa occupies the 8th position.

Table 55: Top 20 Gold Mining Countries

Country	Mine Production (t)		Change %
	2018	2019	year-on-year
China	404.1	383.2	-5
Russia	295.4	329.5	12
Australia	317.0	325.1	3
United States	225.0	200.2	-11
Canada	188.9	182.9	-3
Peru	157.6	143.3	-9
Ghana	149.1	142.4	-4
South Africa	128.0	118.2	-8
Mexico	118.4	111.4	-6
Brazil	96.7	106.9	11
Uzbekistan	100.0	104.0	4
Indonesia	141.5	82.6	-42
Kazakhstan	68.4	76.8	12
Sudan	76.6	76.6	0
Papua New Guinea	68.9	72.9	6
Burkina Faso	62.0	62.0	0
Mali	61.3	61.2	0
Argentina	59.3	53.1	-10
Tanzania	47.8	48.0	0
Colombia	43.0	46.3	8
Rest of World	*752.3*	*807.1*	*7*
World Total	**3,561**	**3,534**	**-1**

Source: World Gold Council (2021)

Net Producer Hedging

The first three quarters of 2020 saw net de-hedging of 28 t (World Gold Council, 2020). With prices hitting record-levels in many currencies, miners accelerated deliveries and winding up of hedge books.

Recycling

Overall recycling was only slightly down year-on-year for the first three quarters of 2020 (World Gold Council, 2020). This is primarily due to lockdown restrictions in the first half of 2020. The third quarter saw a significant jump in recycling with prices reaching record levels and many lockdown restrictions relaxed.

ii. Gold Demand

Gold demand fell by 10% y-o-y in the first three quarters of 2020 compared to 2019 primarily due to a slump in consumer demand as the world continues to fight the Covid-19 pandemic. The slump was largely offset by investment demand as investors sought safe-haven assets.

Investment

Gold exchange-traded products are traded on the major global stock exchanges including Zurich, Mumbai, London, Paris and New York and most funds are physically backed by vaulted gold. According to the World Gold Council (2020), total investment demand in the first three quarters of 2020 was up 61% y-o-y to 1,617 t.

ETF investment inflows drove the trend with inflows of 1,005 t in the first three quarters of 2020, a 166% increase y-o-y. Inflows were primarily fuelled by investors seeking safe haven assets as the economic impact of the Covid-19 pandemic started to materialize. Rate cuts and liquidity injections from governments and central banks also drove ETF inflows.

Demand for coins and bars was almost flat, falling 2% y-o-y in the first three quarters of 2020. This is due to an increase in Western coin demand being offset by a decline in Eastern demand for coins and bars.

Technology

Application of gold in the technology sector remains relatively small. According to the World Gold Council (2020), the demand in the first three quarters of 2020 contracted 11% year-on-year to 217 t mainly due to high gold prices and global economic downturn.

Jewellery

According to the World Gold Council (2020), over 2019 the net jewellery demand contracted 41% y-o-y in the first three months of 2020 to 910 t. This mainly attributed to elevated gold prices and a lower disposable income throughout the world due to the impact of the COVID-19 pandemic.

Central Banks

Central banks adding 247 t to official gold reserves in the first three months of 2020, a decline of 53% y-o-y with Q3 seeing net sales for the first time since 2010. Sales were primarily from Uzbekistan and Turkey.

Gold is politically independent and bears no credit risk. Some central banks have been pursuing an overt policy of dedollarisation. In response to the pressure of financial sanctions from the West, the Bank of Russia has been actively dedollarising their reserves, purchasing some 274 t of gold in 2019 (slowed sharply in 2020), and also equally substantially decreasing the country's holdings of US Treasuries. Gold is a safe haven as the international monetary system shifting towards multipolarity, thus will continue to be an important reserve asset for central banks.

The top 40 countries' official gold holdings as at September 2020 are displayed in Table 56.

Table 56: Top 40 Reported Official Gold Holdings (as at September 2020)

Rank	Country	Tonnes		Rank	Country	Tonnes
1	United States	8,133		21	Spain	282
2	Germany	3,362		22	Austria	280
3	IMF	2,814		23	Poland, Rep. of	229
4	Italy	2,452		24	Belgium	227
5	France	2,436		25	Philippines	190
6	Russian Federation	2,299		26	Algeria	174
7	China, P.R.: Mainland	1,948		27	Venezuela, Republica Bolivariana de	161
8	Switzerland	1,040		28	Thailand	154
9	Japan	765		29	Singapore	127
10	India	668		30	Sweden	126
11	Netherlands, The	612		31	South Africa	125
12	Turkey	561		32	Mexico	120
13	ECB	505		33	Libya	117
14	Taiwan Province of China	424		34	Greece	114
15	Kazakhstan, Rep. of	383		35	Korea, Rep. of	104
16	Portugal	383		36	Romania	104
17	Saudi Arabia	323		37	BIS	102
18	United Kingdom	310		38	Iraq	96
19	Uzbekistan, Rep. of	307		39	Egypt, Arab Rep. of	80
20	Lebanon	287		40	Australia	80

Source: World Gold Council (2020)

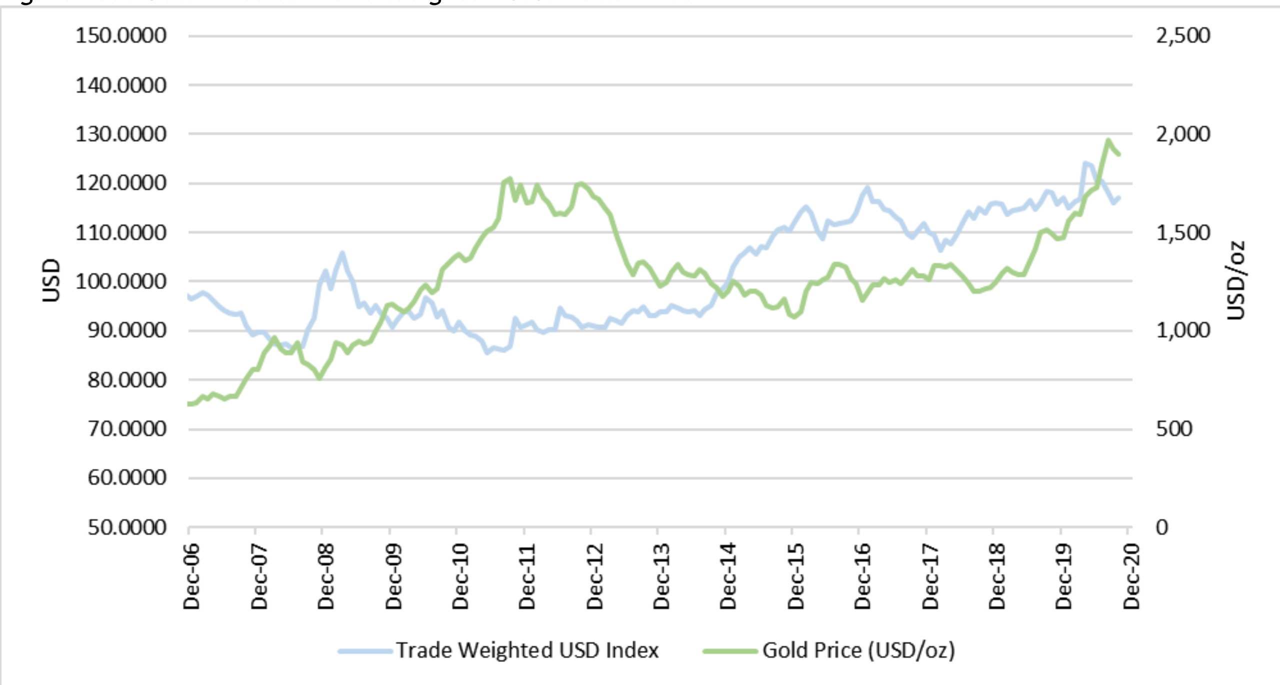
IV. Currency

As gold is usually traded relative to its USD price, the value of the dollar has a meaningful impact on gold. More importantly, gold is viewed as a natural hedge to the USD as it is not directly linked to the monetary or fiscal policies of a particular government. +

+This characteristic strengthens their inverse relationship. Because the USD is also the primary currency used in global transactions and is seen as a stable and reliable unit of exchange, countries aim to have ample reserves to be able to meet their USD denominated liabilities. As such, the dollar forms the lion's share of foreign reserve portfolios. However, governments need to manage the concentration risk in their reserves by diversifying into high quality, liquid assets that lack credit risk – like gold.

Gold is often seen as a currency that provides a natural alternative to money. Gold satisfies many criteria that define a currency, including its use as convertibility, store of value and medium of exchange. Through the years it can be seen that gold has the evolving nature of the relationship with the USD, its geological scarcity and its physical/chemical qualities as a non-corrosive, durable metal make it a natural hedge to paper currencies. Because fiat money can be printed as a result of monetary policies, part of gold's value as a hard asset is derived from its lack of supply growth. Gold is a highly liquid asset, with daily trading volumes comparable to major currency pairs such as the USD-pound sterling and is eclipsed only by USD-Yen and USD-Euro transactions. The trade weighted US dollar index, which compares the US dollar to 23 different world currencies, can be compared to the gold price to demonstrate the relationship between the gold price and world currencies (Figure 109).

Figure 109: Gold Price vs Trade Weighted U.S. Dollar Index



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

An allocation to gold, denominated in USD, represents an implicit exposure to a foreign currency, providing international investors with protection against falls in their local currency.

Further, when evaluating a portfolio's exchange risk in light of its foreign currency denominated holdings, gold can be used as a cost-effective and better-rounded complement to other hedging strategies. For example, for a US investor trying to hedge currency risk stemming from emerging market exposure, gold has been historically less costly than a basket of currencies and including gold as part of the hedging strategy has significantly reduced drawdowns.

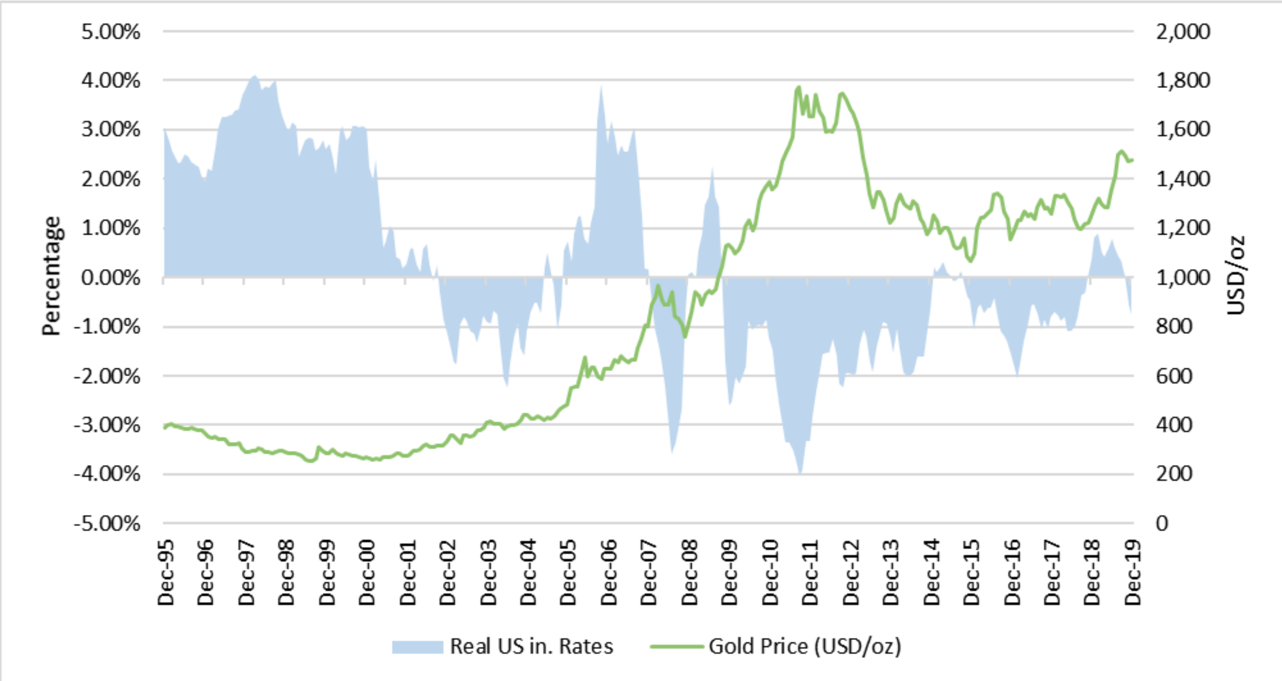
Driven by China's desire to increase its financial influence, the Chinese Renminbi is likely to emerge gradually as a genuine international currency as Beijing eases restrictions on its use in transactions and investments abroad. It is expected that during the coming period of uncertainty and transition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

V. US Inflation and Interest Rates

A common argument for buying gold is that it is seen as an inflation hedge. CPIs measure 'representative' baskets of goods that may well reflect a general price trend, but these will likely not reflect everyone's experience of inflation. The reason for the US CPI being the measure most widely used to measure gold's effectiveness as hedge, is due to the fact that gold is traded by the USD and that real interest rates create an opportunity cost for holding gold make US inflation a logical candidate to use as a reference in long-term pricing.

Real US rate is the lending interest rate adjusted for inflation, as measured by the gross domestic product deflator. From Figure 110 it can be seen that when the real US rate becomes negative, the gold price increases, which indicates that investors start investing in gold rather than the banks to receive better returns. The change in real interest rates since 2018 has been a supportive driver of the gold price.

Figure 110: Gold Price vs Real USD Rate



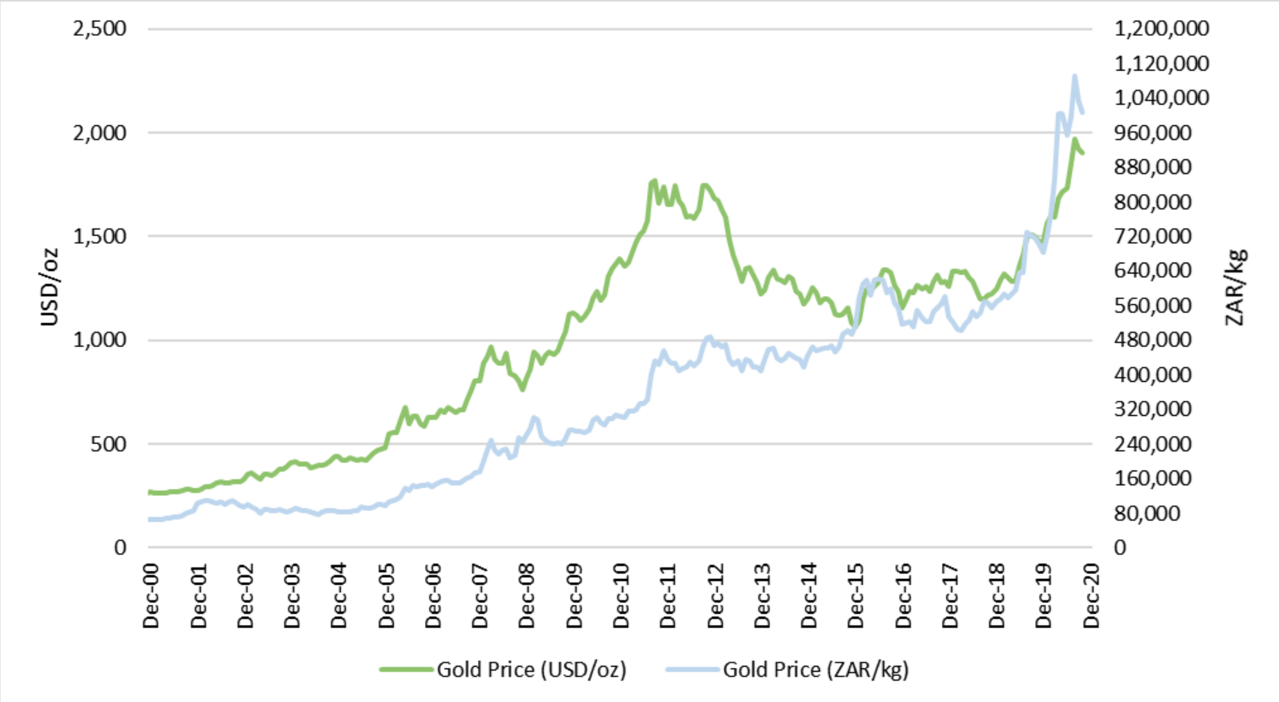
VI. GOLD PRICING

Gold was certainly one of the best performing assets in 2020. The December 2020 average gold price of USD1,857/oz was 26% higher than the December 2019 price.

Early in 2020 gold traded at around USD1,560/oz and started increasing in April, reaching a record high of USD2,067/oz on 7 August 2020 which was followed by a correction with the Q3 closing price being approximately USD1,900/oz. The gains were primarily driven by investors turning to gold as a safe-haven investment amid the COVID-19 pandemic uncertainties as well as the very low interest rate environment.

Figure 111 shows the gold price since 2000.

Figure 111: Gold Yearly Prices



Consensus opinion has the real gold price remaining relatively constant (and high) over the short term and reducing over the medium to long term.

Table 57: Gold Price Forecast (Nominal Terms)

	Unit	2021	2022	2023	Long-Term (Real)
Gold	USD/oz	1,963	1,890	1,800	1,494

Source: *Consensus (Oct 2020)*

VII. GOLD OUTLOOK

High levels of uncertainty related to the COVID-19 pandemic and the low-interest rate environment has supported strong investment in safe haven commodities, especially gold in the first half of 2020. According to the World Gold Council (2020[2]), gold has benefited from investors' need to reduce risk, as seen with record inflows in gold-backed ETFs.

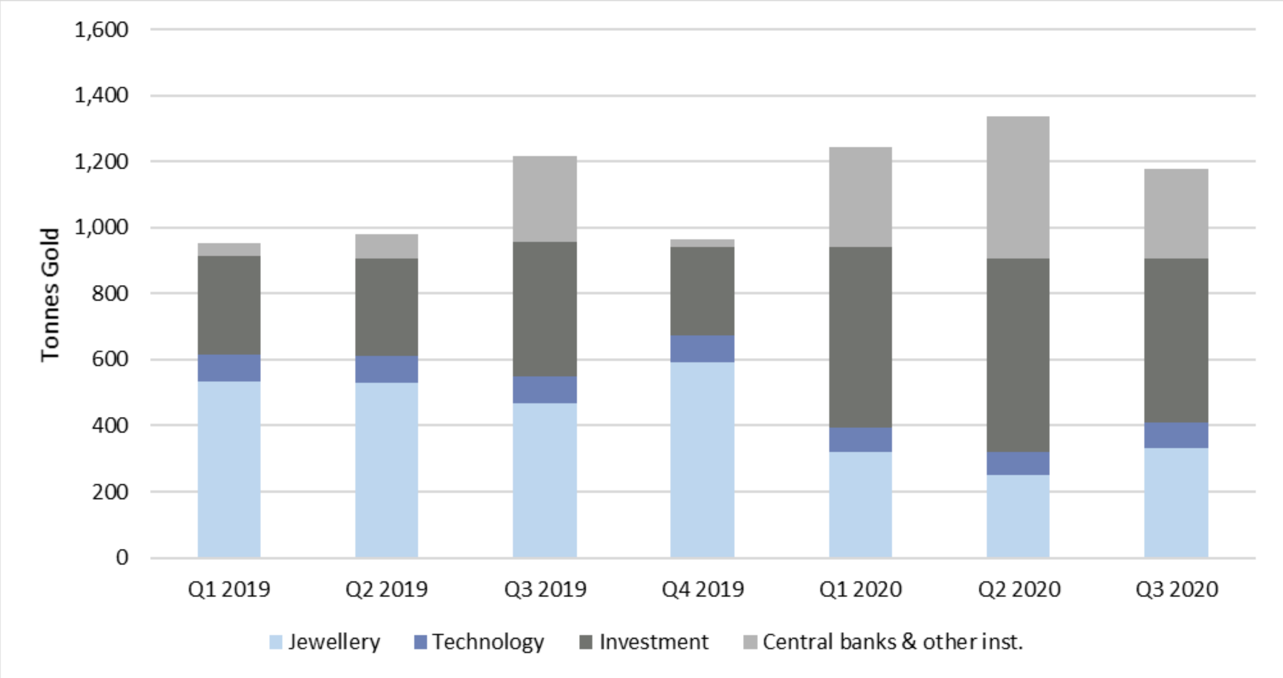
The global economy has been hit hard by the COVID-19 pandemic, with the IMF having projected a 4.9% contraction in global growth in 2020. Economic recovery is also unlikely to be swift, with a U-shaped recovery or even W-shaped recovery due to recurring waves of infection being the most realistic outcome (World

Gold Council, 2020b). The high levels of uncertainty coupled with long-lasting impact to investor portfolio performance make gold an attractive asset.

Global equities have been climbing in price almost uninterrupted for a decade. The COVID-19 pandemic changed that trend, at least in Q1 of 2020, with major equity indices dropping by as much as 30%. Equities did recover sharply in Q2, but there is concern that company fundamentals are not supported by overall state of the economy. Risks associated with equity volatility may be mitigated by gold hedging. As discussed by Clark (2020), "*interest in gold from investors is likely to remain high this year, because the reasons they bought gold—to hedge against overvalued markets and insure against the possibility of a recession or crisis—haven't materialized yet*". Although demand for gold in the jewellery and technology sectors has declined, global central banks net gold purchases have been accelerated. With the shift towards multipolarity in the international monetary system, gold will continue to be an important reserve asset for central banks.

Investment demand for gold is currently supported by high risk and uncertainty, low opportunity cost and positive price momentum. The economic contraction will however result in lower consumer demand, especially for jewellery, historically the largest segment of gold demand, as evidenced in Figure 112.

Figure 112: Gold Demand 2019 vs. 2020



As the demand for gold trends higher, new supply from gold producers is set to decline in the medium-term. A number of large mines in South Africa have been mothballed due to the deep nature of the orebodies and thus high running costs and increased risk, significantly less funds have been spent on gold exploration in recent years, and less major gold discoveries are being made. According to Clark (2020), the gold industry spent USD11.8 billion on exploration in 2012 and only USD4.4 billion in 2019. Gold grades being mined are generally lower today than two decades ago (the average gold grade mined in 1985 was 5.17 g/t and in 2017 it was 1.64 g/t), and the average cost to discover a new gold deposit has risen to almost threefold of the value of a discovery (30 years ago the average cost to discover a new gold deposit was USD53 million, whereas now it is around USD149 million). If demand remains at its current levels or further increases while supply falls, the price of gold could increase.

Item 19 (b) – CONTRACTS

A fixed price streaming arrangement is in place with Nomad Royalty Company Ltd. for a specific amount of gold, as described in Item 4 (e).

A gold offtake arrangement is in place and all remaining produced gold will be sold into this offtake. All gold refining will be performed at Rand Refineries (Pty) Ltd. Minxcon has received updated terms of the Refining agreement, which were applied to the financial model.

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

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

I. LAND USE AND SITE

The Mine has been in operation since 1937 and is also located in an area that hosts numerous similar gold workings. Prior to mining activities, the land was utilised mainly for grazing. Minimal crop farming was carried out due to the nature of the terrain in the lease area.

During refurbishment, surface and underground infrastructure and installations were assessed for safety, stability, and appropriate working conditions. Refurbishment of infrastructure took place within brownfield footprints on areas already disturbed by prior infrastructure and/or mining activities.

There is sufficient capacity to store initial waste rock from underground workings and tailings from the treatment process. TSF No. 6 is sited in a strategic area where minimal additional impact is likely to occur. Drainage systems and pollution control dams are in place. Waste rock will be deposited on an existing rock dump which is sited away from sensitive areas. The prevention of contaminated water flowing into streams and water course is controlled by the use of pollution control dams, sited at strategic points.

II. FAUNA AND FLORA

The 2000 EMP for the Mine identified that a number of protected plant species occur on site, including Vaalbos, Hibiscus and Wild Heliotrope. A large number of invader species were identified, as well as a few exotic species, including Australian Blackwood and Lantana.

The local fauna mainly comprises small terrestrial animals such as hedgehogs, tortoises, hares, and reptiles, in addition to a variety of bird species. Although no threatened species occur locally, endangered animals in the area include the aardvark, aardwolf, and civet.

III. SURFACE INSTABILITY

As described in the 2012 EMP, large areas of the surface are underlain by dolomite and have been subjected to various types of surface instability as a result of the historical dewatering of compartments and poor water management. Surface instability consists of the formation of rapidly forming sinkholes that may have catastrophic consequences, or it may consist of gradually forming doline subsidence or depressions which have associated perimeter tension cracks.

On dewatering of a compartment, materials of the blanketing layer may mobilise into a receptacle at depth. This action eventually stabilises, and arching conditions develop in the profile. This meta-stable condition may be disturbed by the development of additional mobilising agencies such as concentrated ingress of surface water or earth tremors. Historically, BGMC maintained drawings and records showing the locations and characteristics of such ground movements.

On eventual closure of a mine and the associated cessation of pumping, the water table will rise and may return to its original level prior to dewatering. Partial water table recharge may also take place as a consequence of a period of excessive rainfall. The subsequent rise in water level may initiate a renewed cycle of ground movement in the form of sinkholes and more gradual surface settlements.

The Far West Rand Dolomitic Water Association ("FWRDWA"), inaugurated in July 1964, is composed of mines on the Far West Rand who are dewatering dolomitic groundwater compartments as part of their mining operations. The main role of the FWRDWA is to undertake measures to promote the safety of the affected area through controls, surveys, investigations, and monitoring. The State Coordinating Technical Committee on Sinkholes and Subsidences assists the FWRDWA by investigating claims, maintaining a database, and undertaking classifications of areas prone to ground movements in terms of potential risk of damage.

A system involving the individual mines and the Oberholzer Geological Centre is in place for the patrolling of areas, detection of movement areas and follow-up investigations, remedial action and reports. Reports on all movement incidents are sent to the State Coordinating Technical Committee on Sinkholes and Subsidences for information and action where required.

In addition to the above, the placement of water/effluent storage could cause standing water on dolomitic areas this could result in subsidence or collapse. Placement of such infrastructures have therefore been well considered.

IV. Ionising Radiation

Uranium and thorium occur in association with the gold deposits in the region. Ionizing radiation emitted from these radio nuclides and their daughter products can be hazardous to health. Radioactive TSF footprints may emanate radon, making them unsuitable for residential developments. The philosophy of radiation protection is based on the concept of limiting exposure (including exposure to water) and will need to be implemented at the Mine and for post-closure.

V. Acid Mine Drainage

The potential exists for acid generation in sulphide rich tailings. The mined material is exposed to the environment with the natural processes of oxidation, biological activity, and leaching by infiltration water. Natural leaching of the contained minerals, with or without acid generation, can carry deleterious substances downstream into the receiving environments.

VI. Groundwater

There is an ingress of significant volumes of groundwater into the underground workings of the area. Neighbouring mines pump water to surface. Blyvoor is flooded to 10 m above 29 Level, above which water is not expected to rise since AGA/CWC are pumping excess water to surface discharge to protect their downstream operations. These deeper levels will require dewatering before operations can continue at those depths.

Item 20 (b) – Waste Disposal, Site Monitoring and Water Management

I. Waste Disposal

As described in the 2017 EMP, general domestic waste will be collected in bins and skips on site and transported to the Merafong Municipal landfill site.

Hazardous waste including used oil and grease, and oil sludges from oil separators, will be temporarily stored in a central collection point (in a bunded area), such as the on-site salvage yard. The waste will then be removed by a reputable company for recycling disposal.

Scrap metal will be sent to the salvage yard for removal by an approved scrap dealer for recycling.

A wastewater treatment plant is now operational to treat sewerage. The plant is located at No. 5 Shaft and uses the activated sludge process and is designed to handle 1 Ml/day. Treated effluent is discharged to the Wonderfonteinspruit or used for irrigation of vegetated areas on the current TSFs.

II. Site Monitoring

i. ***Water***

Pre-mine closure in 2013, water samples were collected on a monthly basis on two sites upstream and downstream from the plant, and underground. Typically, daily samples were collected from discharge water and upstream of discharge points, and the underground pumped water.

Regular water monitoring was conducted on underground pumped water. Samples were analysed for pH, TDS, chlorides, hardness, iron, aluminium, suspended solids, cyanide and manganese.

Daily data was collected in January 1994 for the return water dam. This water consisted of stormwater overflow from the plant area, which is diverted into the return water dam, and water that is derived from the TSF. This water was subsequently re-used in the plant. Samples were analysed for pH, TDS, chlorides, hardness, iron, aluminium, suspended solids and cyanide.

Ongoing surface and groundwater monitoring programmes will be required now that the Blyvoor operations have recommenced. Currently, this is the responsibility of CWC (Harmony), who are performing the dewatering activities.

ii. Sinkholes

Owing to sinkhole occurrences, 1,805 surface boreholes were drilled in the 1960s to 1970s and benchmarked in the areas where infrastructures exist. These benchmarks were monitored on a quarterly basis up to the year 2000, and weekly if movement was observed. In the period between 2009 and 2012, some ten sinkholes had formed at Blyvooruitzicht. The surface damage was minimal and there was no impact on any infrastructure or buildings.

Blyvoor Gold intends to initiate a subsidence monitoring programme at the No. 5 Shaft Complex.

iii. ***Dust Fallout***

A dust monitoring programme has been in place at the Mine since 2018 and has been compliant during that period. A total of seven sites are analysed on a monthly basis by a SANAS-accredited laboratory. Monitoring is based on the American Society of Testing and Materials standard method for collection and analysis of dustfall (ASTM D1739), with modifications. SANS 1929:2005 has been used to evaluate the level of dust deposition.

iv. Radioactivity

A monitoring programme for radioactivity was implemented in 2020.

v. Water Management

A stormwater management system is in place at the plant with bunding. Water is pumped into a process steel water dam.

Stormwater from the Mine site, which flows down a tributary into a Harmony Dam, also impacts on the Doorndraai Dam.

The Mine lies within the catchment of a tributary of the Mooi River, or Western Deep Spruit. In about 1985, a river diversion structure was constructed by the FWRDWA on the Western Deep Spruit just inside the mine property, below the main road between Blyvooruitzicht Gold Mine and West Driefontein Mine. The purpose of the diversion is to take static and low flow water away from the dolomite areas downstream. The design ensures that a moderate and more constant flow of water is made available to the downstream environment. The low flows are diverted, and this results in water being available for other users downstream. The low flows would disappear into the dolomites should the diversion structure not be in place. Diverted water is discharged into the same canal that takes the stormwater from the residential and office areas.

Excess water pumped from underground and treated sewage water, is also discharged into the canal system.

Item 20 (c) – PERMIT REQUIREMENTS

The EA application was submitted on 13 February 2019 and granted on 19 February 2020. The Waste Management Licence forms part of the EA. A WUL no. 08/C23E/AEFGJ/1000 is in place for the Mine, was transferred to Blyvoor Gold and is valid until 19 July 2021. A provisional AEL is in place and can be upgraded to a full AEL after one year. The application for a nuclear Certificate of Registration is progressing well.

Item 20 (d) – SOCIAL AND COMMUNITY-RELATED REQUIREMENTS

As part of the MPRDA requirements for the application for a mining right, the applicant company is required to submit a SLP for the project. The objectives of the SLP are to:-

- Promote economic growth and mineral and petroleum resources development;
- Promote employment and advance the social and economic welfare of all South Africans;
- Ensure that holders of mining rights contribute towards the socio-economic development of the areas in which they are operating as well as the areas from which the majority of the workforce is sourced; and
- Utilise and expand the existing skills base for the empowerment of historically disadvantaged South Africans ("HDSAs") and to serve the community.

Programmes with regards to Human Resource Development ("HRD"), Local Economic Development ("LED") and the Management of Downscaling and Retrenchment are outlined in the SLP. An SLP progress report is required to be submitted to the DMRE regional department annually.

A revised SLP for the Blyvoor Mine for the conversion of the old order Mining Licence ML46/1999 to MR143GP dated 31 July 2017 has been submitted to the DMRE by Blyvoor Gold Capital (Pty) Ltd and Blyvoor Gold Operations (Pty) Ltd and is currently pending approval. The SLP was submitted in terms of a directive issued to BGMC (refer to Item 4 (h)) and compiled in line with the following principles:-

- defined area of influence extends out to a 10–15 km radius from the project area;
- promote the employment of locals from the Merafong City Local Municipality wherever possible;
- promote local procurement of goods and services wherever possible;
- support diversification of the local economy; and
- support LED projects that are feasible and sustainable.

At least 70% of the workforce will be locally recruited from the Merafong City Local Municipality and the West Rand District Municipality, with the remaining 30% anticipated to be recruited from the rest of South Africa.

A training and development programme has been implemented to ensure employees are competent in their positions. Adult basic education and training, or ABET, is undertaken. Training and development objectives focus on literacy and numeracy skills development for all employees; ABET training is also offered to community members. A skills audit will be undertaken 6-12 months after commencement of mining operations, to align training and development initiatives with the needs of the workforce.

Two internal and two external learnerships in equipment operations will be provided annually from the first year of production.

It is intended that portable skills training will initially be offered through an accredited and reputable institution.

A detailed career progression plan is provided in the SLP. It is intended that a mentorship plan will be linked to the talent pool and individual development plans, and also to performance assessment outcomes and individual training and development needs. Employee bursaries relevant to their career development will be offered. HDSA employees will be particularly encouraged to apply. Bursaries will also be made available to applicants from neighbouring communities. Internships will be offered to external students from neighbouring communities.

The employment equity plan aims to include into the workforce 10% women and 40% HDSA participation in management.

The following LED projects are proposed, as per the SLP:-

- Training on all mining related skills which will include community members aimed at future employment opportunities.
- Provision of financial assistance towards refurbishment of the Ekuphakameni Wastewater Treatment Works, and assistance with running of the plant.
- Clean storm water channels in the Blyvoor Village.
- Reinstate and maintain the waste management service in the Blyvoor Village.
- Provide financial assistance to the Blyvoor schools and orphanage for mutually identified and agreed to projects and needs.

Financial provision for the HRD programme, LED programme, and process of management of downscaling and retrenchment projects is calculated in the SLP to a total amount of ZAR62,320,000 over five years.

Item 20 (e) – Mine Closure Costs and Requirements

The ultimate closure objective will be to return the disturbed land as close to its initial natural state as practically possible, and thus maintain the overall ecological and environmental balance. Decommissioning will require final rehabilitation of infrastructure and reclaimed TSF footprints, and groundwater risk mitigation.

Residual effects of salinisation and compaction will persist after removal of a TSF, processing plant or shaft infrastructure, which may limit return of these areas to their pre-mining land capability and land use. Testing and remediation measures to decontaminate the site would need to be implemented, and it should be ensured that the site is free draining and appropriately vegetated to yield a self-sustaining plant cover.

During and after mine closure, the demolition of surface infrastructure and services will be confined to those that cannot be effectively utilised. All surface shafts will be sealed (2000 EMP). Decommissioning of infrastructure and final site rehabilitation may generate noise and dust and will require active management.

In addition, mine infrastructure may qualify as heritage infrastructure by the time that the mine is closed. A phase 1 heritage assessment will thus be required prior to any demolition activities.

Mine closure planning and execution will include detailed human resource planning, including retrenchment considerations, and the opportunity for re-training employees to enhance employment and livelihood prospects post mine closure. Mine closure management measures as outlined in the SLP will be adhered to. Staff numbers will gradually be reduced during the decommissioning and closure phase.

The mine closure costs associated with the Blyvoor Mine have been described in Item 4 (f) of this Report.

ITEM 21 – CAPITAL AND OPERATING COSTS

Item 21 (a) – Capital Costs

Blyvoor Gold compiled a capital cost estimate for the recommissioning of the Blyvoor Gold Project. The execution of the project commenced in June 2018. A large portion of the capital has been spent to date. Plant construction was completed in January 2021 with mining and ramp up to commence in June 2020.

The project is targeting initially to achieve some 40 ktpm production and then increasing up to 80 ktpm which will be require additional capital to be spent. A capital estimation has been completed for the mining infrastructure and equipment required to meet the increased targeted production demand. The mining infrastructure capital estimated is summarised in Table 58.

Table 58: No. 5 Shaft Complex - Capital Estimation Summary

Infrastructure Area	Sub Area	Cost
		ZARm
UG Infrastructure	Shafts	24.98
UG Infrastructure	Winders	46.09
UG Mining Infrastructure	UG Pump Stations	97.81
UG Mining Infrastructure	Stopes	37.56
UG Mining Infrastructure	Shafts	99.88
UG Mining Infrastructure	UG Substations	68.41
UG Mining Infrastructure	UG Power Reticulation	24.72
UG Mining Infrastructure	Winders	192.45
UG Mining Infrastructure	Compressed Air	3.17
UG Mining Infrastructure	Refrigeration Plant	82.68
UG Mining Infrastructure	UG Workshops	0.41
UG Mining Infrastructure	Battery Bays	0.46
UG Mining Infrastructure	Haulages & X-Cuts	0.33
UG Mining Infrastructure	Loading Station	16.68
Surface Mining Infrastructure	Surface Substations	4.95
Surface Mining Infrastructure	Winders	31.73
Surface Mining Infrastructure	Fans	46.65
Surface Mining Infrastructure	Compressed Air	-
UG Mining Equipment	Stopes	212.61
UG Mining Equipment	UG Material & Ore Transport	106.46
UG Mining Equipment	Lamp room	2.86
Overheads	EPCM	60.12
Total		**1,160.98**

The scheduling of the mining infrastructure capital is based on the following scheduling of the main project packages listed in Table 59.

Table 59: Infrastructure Capital Packages - Schedule

Project Package	Task No	Description	Timeframe
A: Sub Shaft Commissioning		**Winder Refurbishment & Commissioning**	**Month 1 to 8 (8 Months)**
	1	Winder Electrical	
	2	Winder Mechanical	
	3	Legal Inspections	
	4	Winder Ropes - 4 x Ropes	
	5	Skip and Bridle - 15t skips	
	6	Refurbish and Commission Load Out Station on 15 Level (Sub shaft and Main shaft ore transfer)	
	7	Shaft Repairs (Buntons, Guides, Feeders,)	
		27.5 L Mid Shaft Loading	**Month 3 to 12 (10 Months)**
	1	Development +- 100m 29k per meter	
	2	Ore pass Silo Development	
	3	Boxes & Tips (x3)	
	4	Conveyor	
	5	Control Panels	
	6	Measuring Flask	
	7	Directional Chute	
B: Dewatering Project		**Power Supply - No. 5 Shaft**	**Month 24 to 29 (6 Months)**
	1	Switch Gear in Surface Sub	
	2	2 x New Feeders down shaft	
	3	Pump Control Panels	
		Dewatering Column -No. 5 Shaft	**Month 12 to 20 (9 Months)**
	1	Install Pump Columns + spare	
	2	Recommission IPC	
	3	Recommission 14L Pump Station and 15L Mud Pump Station	
		No.5A Sub Shaft	**Month 27 to 55 (29 Months in Stages)**
	1	Refurbish Shaft Pump Column	
	2	Install Submersible Pump	
	3	Refurbish and Recommission 34L Pump Station	
	4	Refurbish and Recommission 41L Pump Station	
Dewatering		Dewatering Below 29 Level (29L to 41L)	**Month 37 to 49 (13 Months)**
C: Incline Shaft System		**Development**	**Month 20 to 32 (13 Months)**
	1	Develop Connection 15L to 12L (Doornfontein to Blyvooruitzicht)	
	2	Develop Connection 21L to 19L (Doornfontein to Blyvooruitzicht)	
		Power Supply	

Project Package	Task No	Description	Timeframe
	1	Expand 15L Substation	Month 11 to 19 (9 Months)
	2	Install 2 x Feeders to Incline section	
	3	Establish Substations at Blyvooruitzicht Area (x 2)	
	4	Establish Substations at Blyvooruitzicht Area (x 8)	
		Winders Re-equipping - A5 Incline	Month 33 to 41 (9 Months)
	1	Winder Electrical	
	2	Winder Mechanical	
	3	Legal Inspections	
	4	Winder Ropes	
	5	Incline Shaft Hoppers - 8t	
		Shaft Refurbishment - A5 Incline	Month 35 to 41 (7 Months)
	1	Re-equip Shaft - Rails, Power, Water	
	2	Development - Drop Raise shaft Tip	
	3	Install Shaft Tip	
	4	Install Ore pass Box Front	
		Winders Re-equipping - A6 Incline	Month 42 to 50 (9 Months)
	1	Winder Electrical	
	2	Winder Mechanical	
	3	Legal Inspections	
	4	Winder Ropes	
	5	Incline Shaft Hoppers - 8t	
		Shaft Refurbishment - A6 Incline	Month 47 to 50 (4 Months)
	1	Re-equip Shaft - Rails, Power, Water	
	2	Development - Drop Raise shaft Tip	
	3	Install Shaft Tip	
	4	Install Ore pass Box Front	
		Winders Re-equipping - B5 Incline	Month 24 to 32 (9 Months)
	1	Winder Electrical	
	2	Winder Mechanical	
	3	Legal Inspections	
	4	Winder Ropes	
	5	Incline Shaft Hoppers - 8t	
		Shaft Refurbishment - B5 Incline	Month 28 to 31 (4 Months)
	1	Re-equip Shaft - Rails, Power, Water	
	2	Development - Drop Raise shaft Tip	
	3	Install Shaft Tip	
	4	Install Ore pass Box Front	
		Winders Re-equipping - B5A Incline	

Project Package	Task No	Description	Timeframe
	1	Winder Electrical	Month 33 to 41 (9 Months)
	2	Winder Mechanical	
	3	Legal Inspections	
	4	Winder Ropes	
	5	Incline Shaft Hoppers - 8t	
		Shaft Refurbishment - B5A Incline	Month 35 to 38 (4 Months)
	1	Re-equip Shaft - Rails, Power, Water	
	2	Development - Drop Raise shaft Tip	
	3	Install Shaft Tip	
	4	Install Ore pass Box Front	
		Water Management	Month 38 to 40 (3 Months)
	1	Install pump column to 41L pump station at 5A sub shaft	
D: Ventilation		**Main Surface Ventilation**	Month 45 to 51 Month 96 to 102 (6 Months Each)
	1	Surface Vent Fan Installation @ 2#	
	2	Surface Vent Fan Installation @ 3#	
E: Refrigeration		**Deep Level Refrigeration Plant**	Month 45 to 53 (8 Months)
	1	Re-Establish 34 Level Refrigeration Plant	
F: Compressed Air		**Compressed Air**	Month 1 to 8 (8 Months)
	1	Refurbish Surface Compressor	
	2	Install Compressed Air Column Down 5 Shaft (4")	
	3	Install Compressed Air Column Down 5A Sub Shaft (4")	
G: General Infrastructure Refurbishment		**Power Distribution / Reticulation**	Month 1 to 47 (47 Months)
	1	Establish UG Sub Stations - (15L to 27L)	
	2	Establish UG Sub Stations - (27L to 35L)	
	3	Establish UG Sub Stations - (35L to 44L)	
	4	Establish Reticulation per Level (15L to 27L) - Mini-Subs 1 x every 600 m, Cabling, Stoping Gully Tanks, Lighting	
	5	Establish Reticulation per Level (27L to 35L) - Mini-Subs 1 x every 600 m, Cabling, Stoping Gully Tanks, Lighting	
	6	Establish Reticulation per Level (35L to 44L) - Mini-Subs, Cabling, Lighting	
		Water Distribution / Reticulation	
	1	Install Service Water Pipes per Level - (15L to 27L)	
	2	Install Service Water Pipes per Level - (27L to 35L)	
	3	Install Service Water Pipes per Level - (35L to 44L)	
	4	Install Potable Water Pipes per Level - (15L to 27L)	
	5	Install Potable Water Pipes per Level - (27L to 35L)	
	6	Install Potable Water Pipes per Level - (35L to 44L)	
		Battery Bays and Workshops	

Project Package	Task No	Description	Timeframe
	1	Establish Battery Bay per Level (15L to 27L) - 5T Elec. Chain Hoist, Crawl Beam, Battery Chargers, Water Distiller, Eye Wash	
	2	Establish Battery Bay per Level (27L to 35L) - 5T Elec. Chain Hoist, Crawl Beam, Battery Chargers, Water Distiller, Eye Wash	
	3	Establish Battery Bay per Level (35L to 44L) - 5T Elec. Chain Hoist, Crawl Beam, Battery Chargers, Water Distiller, Eye Wash	
	4	Establish Workshops per Level (15L to 27L) - Workbench, Cutting Torch with bottles, Toolboxes, 5T Elec. Chain Hoist, Crawl Beam	
	5	Establish Workshops per Level (27L to 35L) - Workbench, Cutting Torch with bottles, Toolboxes, 5T Elec. Chain Hoist, Crawl Beam	
	6	Establish Workshops per Level (35L to 44L) - Workbench, Cutting Torch with bottles, Toolboxes, 5T Elec. Chain Hoist, Crawl Beam	
		Refuge Bays	
	1	Establish Refuge Bays per Level (15L to 27L) - Vent Door, Signage, First Aid Kit - 2 per level	
	2	Establish Refuge Bays per Level (27L to 35L) - Vent Door, Signage, First Aid Kit - 2 per level	
	3	Establish Refuge Bays per Level (35L to 44L) - Vent Door, Signage, First Aid Kit - 2 per level	

I. Processing

The process plant can be upgraded to handle double the current design of 40 ktpm with a few upgrades of the individual circuits as seen in Table 60. The largest investment would be a new mill, followed by additional tanks for conditioning and leaching. The remainder of the treatment plant is capable of treating 80 ktpm of material.

Table 60: Summary of Processing CAPEX

Item	Main Items	Cost
		ZARm
Crushing	New RoM Silo	4.35
Milling	New Mill	25.05
Conditioning	Additional Tank	1.53
Leach	Additional Tanks	8.85
EPCM	12.5 % of Capital	6.00
First Fill	Grinding Media	0.39
Total		**54.39**

II. Other Capital

A renewals and replacement or stay in business ("SIB") capital cost was also included for the mining and the plant. The cost is based on a percentage of the operating cost. A 5% SIB based on the operating cost was applied. The mining SIB capital will be phased in from year 3 of operation. The plant SIB is based on 5% of the plant operating cost and will similarly be phased in starting in year 3 of operation. A 15% contingency was also applied to initial capital.

The capital schedule over the LoM is clearly illustrated in Figure 113. The total capital including the SIB and contingencies amounts to ZAR3,336 million over the LoM.

Figure 113: Capital Cash Flow Schedule (Constant Money Terms)

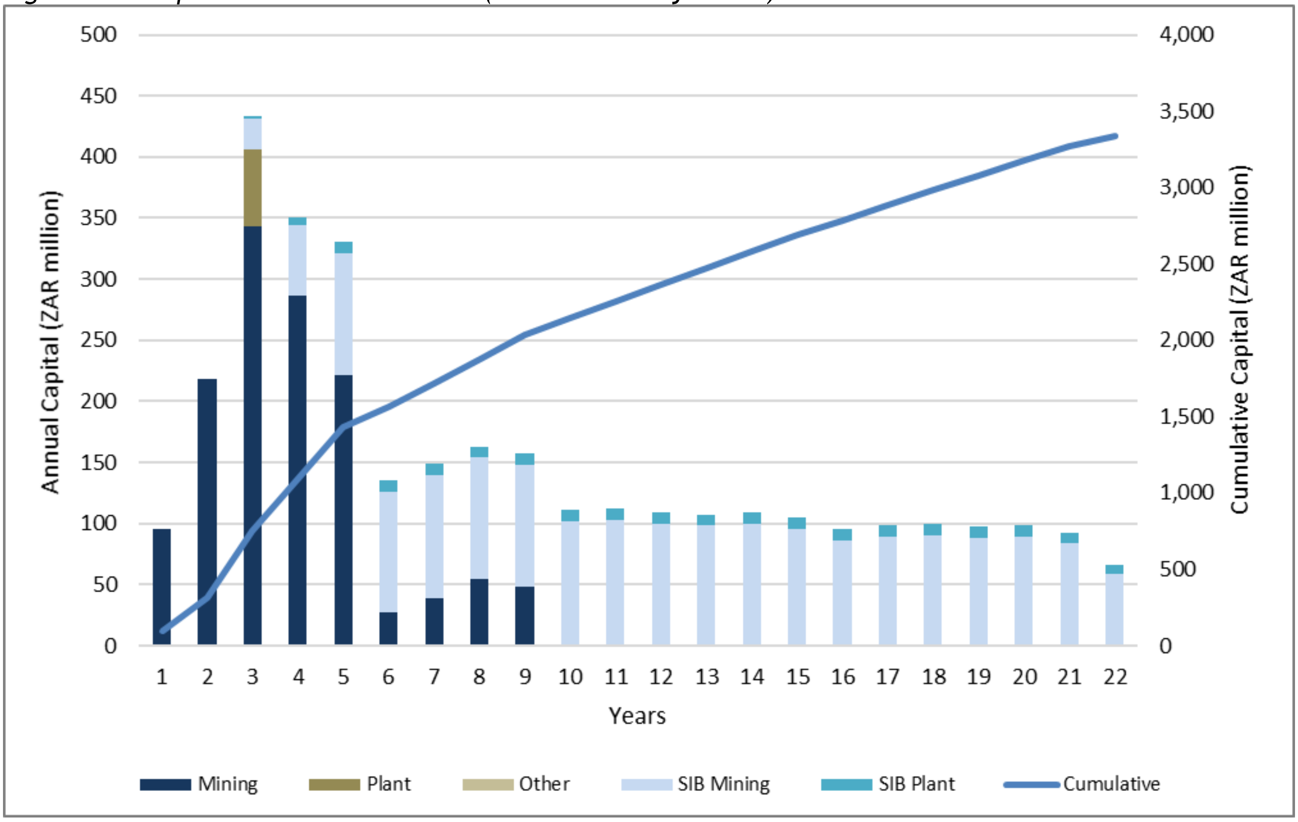


Table 61 details the capital summary over the LoM.

Table 61: Capital Summary over the Life of Mine

Capital Expenditure	Over LoM	Cost
Mining Capital	**Unit**	
UG Pump Stations	ZARm	98
Stopes	ZARm	250
Shafts	ZARm	125
UG Substations	ZARm	68
Surface Substations	ZARm	5
UG Power Reticulation	ZARm	25
Winders	ZARm	270
Fans	ZARm	47
Compressed Air	ZARm	3
Refrigeration Plant	ZARm	83
UG Material & Ore Transport	ZARm	106
Lamp room	ZARm	3
Loading Station	ZARm	17
EPCM	ZARm	60
Total Direct Mining Capital	**ZARm**	**1,161**
Stay in Business Mining Capital	**ZARm**	**1,763**
Mining Capital Contingency	**ZARm**	**174**
Total Mining Capital	**ZARm**	**3,098**
Plant Capital		
Plant CAPEX	ZARm	48
EPCM	ZARm	6
Total Direct Plant Capital	**ZARm**	**54**
Stay in Business Plant Capital	**ZARm**	**175**
Plant Capital Contingency	**ZARm**	**8**
Total Plant Capital	**ZARm**	**238**
Total Initial Capital	**ZARm**	**1,215**
Total SIB Capital	**ZARm**	**1,938**
Total Capital Contingencies	**ZARm**	**182**
Total Capital	**ZARm**	**3,336**

Item 21 (b) OPERATING COST

I. MINING

a. STOPING COST

The mining operating costs were compiled and finalised by Minxcon in February 2021. The operating cost in Table 62 details the cost associated with mining labour, consumables, explosives, and support. Take note that the operating cost shown below is for SBM on different production rates for the ramp-up.

Table 62: Mining Operating Stoping Cost Summary

Stoping	SBM 15Ktpm	SBM 30Ktpm	SBM 45Ktpm	SBM 60Ktpm	SBM 80Ktpm
	ZAR/t Hoisted	ZAR/t Hoisted	ZAR/t Hoisted	ZAR/t Hoisted	ZAR/t Hoisted
OPEX Labour	719	714	713	712	711
OPEX Consumables	114	114	114	114	114
OPEX Explosives	126	127	127	127	127
OPEX Support	200	201	201	201	201
Stoping Total	**1,159**	**1,156**	**1,155**	**1,154**	**1,153**

b. DEVELOPMENT COST

The development cost is detailed in Table 63 with the associated mining labour, consumables, explosives, and support. A factor of 80% was included in estimation of the re-equipping of underground development ends.

Table 63: Mining Operating Development Cost Summary

Development	Haulage	Crosscut	Raise	Travelling way	Re-equipping	Ore pass
	ZAR/m	ZAR/m	ZAR/m	ZAR/m	ZAR/m	ZAR/m
OPEX Labour	5,753	5,753	5,818	5,818	919	5,156
OPEX Consumables	8,868	4,489	2,672	2,461	7,027	964
OPEX Explosives	1,178	1,213	910	686	0	493
OPEX Support	313	313	299	214	459	0
Grand Total	**16,112**	**11,768**	**9,699**	**9,179**	**8,405**	**6,613**

c. Other Mining Cost - Variable

The total other mining costs were estimated into variable and fixed mining cost. The operating cost in Table 64 details the variable cost summary, which is associated with sections, shafts, stations, sampling, environment, horizontal transport, and survey. The major contributing items in Table 64 is sections and horizontal transport which are labour related.

Table 64: Other Mining Variable Cost Summary

Activity	SBM 15Ktpm	SBM 30Ktpm	SBM 45Ktpm	SBM 60Ktpm	SBM 80Ktpm
	ZAR/t Hoisted	ZAR/t Hoisted	ZAR/t Hoisted	ZAR/t Hoisted	ZAR/t Hoisted
Section (Eng Labour for Production Sections)	75.00	69.00	71.00	69.00	68.00
Shafts	2.00	1.00	1.00	1.00	1.00
Stations	0.00	0.00	0.00	0.00	0.00
Sampling	3.00	2.00	1.00	1.00	1.00
Environmental	2.00	1.00	1.00	1.00	1.00
Horizontal Transport	48.00	44.00	44.00	43.00	42.00
Survey	3.00	2.00	1.00	1.00	1.00
Grand Total	**130.00**	**115.00**	**117.00**	**113.00**	**111.00**

d. Other Mining Cost - Fixed

The total fixed component cost is detailed in Table 65 with the labour contributing most of the fixed cost.

Table 65: Other Mining Fixed Cost Summary

Activity	Unit	Sum of Reef 1 Total Cost
Management	ZAR/month	1,313,760
Services	ZAR/month	150,430
Surface	ZAR/month	362,110
Shafts	ZAR/month	1,465,797
Hoisting	ZAR/month	2,308,860
Sampling	ZAR/month	130,013
Geology	ZAR/month	48,000
Environmental	ZAR/month	139,047
Finance	ZAR/month	120,207
Planning	ZAR/month	1,177,979
Admin	ZAR/month	149,110
Industrial Relations	ZAR/month	37,200
Human Resource	ZAR/month	48,000
Training	ZAR/month	100,644
SHEQ	ZAR/month	244,013
Technical Services	ZAR/month	257,458
Surface Operations	ZAR/month	144,000
Shaft Operations	ZAR/month	191,669
HR	ZAR/month	525,391
Shared Services	ZAR/month	138,568
Survey	ZAR/month	113,372
Grand Total	**ZAR/month**	**9,165,623**

II. Mining Utilities, Services and Engineering

The utilities, services and engineering operating costs are summarised in Table 66. The operating costs were originally estimated by Minxcon in July 2017 and were reviewed and optimised during the course of the PFS conducted by Minxcon in October 2017. These costs have subsequently been updated with the new project requirements for February 2021.

The utilities and services costs were estimated from first principles. Power costs specifically were estimated taking into account the various load areas on the Mine with all its equipment, ratings and estimated operating times. These considerations were utilised to determine the total operation's kWh power consumption and the project's notified maximum demand. These two units of power consumption forms part of the Eskom tariff structure that was ultimately utilised to estimate the power cost for the project. The tariff structure utilised during the power cost estimation is the Eskom 2020/2021 Megaflex Non-Local Authority structure.

An all-in power cost of ZAR1.26 per kWh was assumed. This cost comprises of administration, network, and energy charges for the total operation.

Table 66: Utilities, Services and Engineering

Item	Period 1 (SBM. 30ktpm - Cage Hoist)	Period 2 (SBM 60ktpm - Dewatering)	Period 3 (SBM. Ramp up to 80ktpm)	Period 4 (SBM. 80ktpm)
	Cost per Hoisted Ore Tonne 15 ktpm	Cost per Hoisted Ore Tonne 40 ktpm	Cost per Hoisted Ore Tonne 60 ktpm	Cost per Hoisted Ore Tonne 80 ktpm
	(ZAR/t)	(ZAR/t)	(ZAR/t)	(ZAR/t)
Eskom Power	547.77	236.26	199.45	183.11
Water (Supply and Dewatering)	4.26	4.30	3.10	3.11
Engineering Stores and Consumables	110.67	48.70	59.76	44.82
Major Items	41.93	30.83	20.56	22.97
Outsourced services	124.35	46.63	50.70	38.03
Total	**828.98**	**366.73**	**333.57**	**292.03**

Referring to Table 66, the utilities and services costs are listed for the four main periods during the project which consist of a ramp up phase which includes a period of cage hoisting, production at 40 ktpm including a period of dewatering of the flooded workings, ramp up to 80 ktpm and steady state production at 40 ktpm. It should be noted that an increase in power consumption will be applicable during the first 12 months of the project when cage hoisting will be conducted while the mid-shaft loading station is being constructed and commissioned. The cage hoisting will imply that all men, material, and ore have to be hoisted by the man winders. This will have the effect of much longer hoisting times in comparison to the normal hoisting with man and rock winders combined.

III. PROCESSING

The plant and TSF operating costs are summarised in Table 67.

Table 67: Plant and TSF Operating Costs

	Item	Unit	40 ktpm	80 ktpm
Fixed	Admin, IT, HR, Training & Other	ZAR'000/month	194	194
	Laboratory	ZAR'000/month	403	403
	Labour	ZAR'000/month	1,476	1,812
	Power - Fixed	ZAR'000/month	95	95
	Security	ZAR'000/month	275	275
	Tailings Dam Management - Fixed	ZAR'000/month	204	328
	Fixed Total	**ZAR'000/month**	**2,646**	**3,106**
Variable	Reagents	ZAR/t	44.43	53.85
	Maintenance and Engineering	ZAR/t	9.14	17.75
	Power - Variable	ZAR/t	68.21	49.28
	Grinding Media	ZAR/t	14.96	15.71
	Tailings Dam Management - Variable	ZAR/t	1.28	1.61
	Water	ZAR/t	4.26	-
	Variable Total	**ZAR/t**	**142.29**	**138.19**
	Total Plant	**ZAR/t**	**208.43**	**177.01**

IV. OVERHEADS

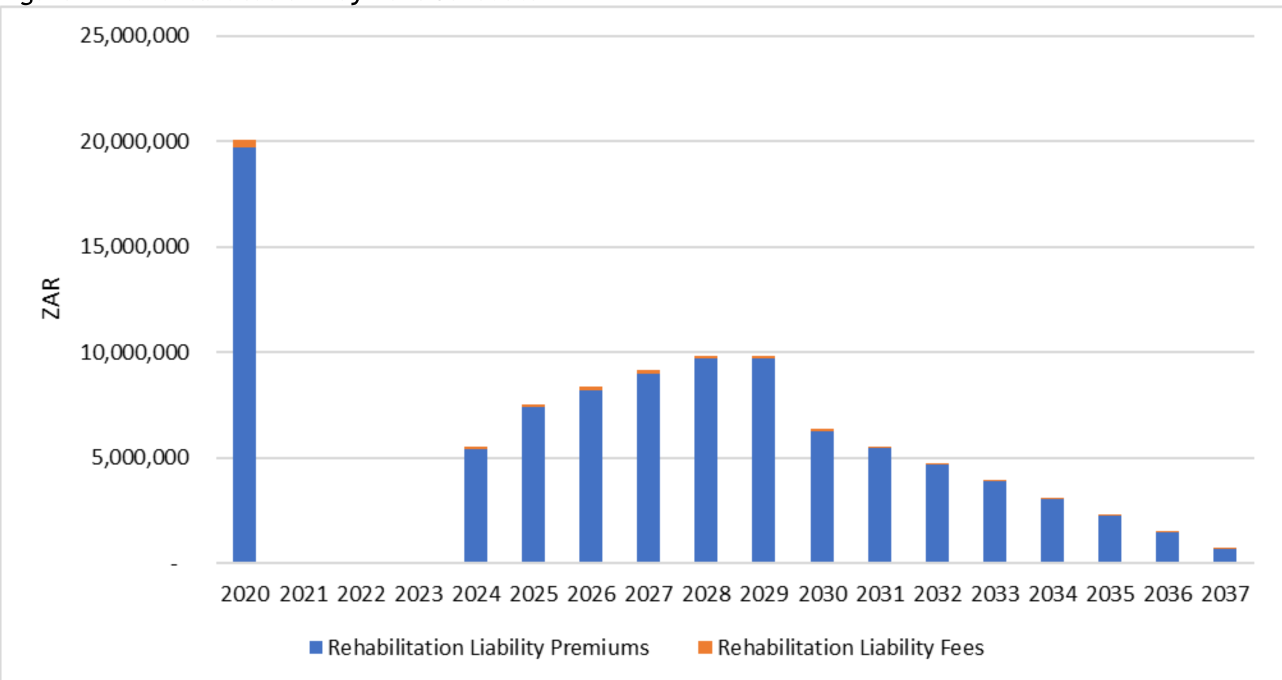
The overhead costs are summarised in Table 68, as provided by Blyvoor Gold in 2020, and inflated to 2021 terms.

Table 68: Overhead Costs

Item	Unit	Cost
Executive	ZAR'000/month	525
Electricity	ZAR'000/month	158
Water	ZAR'000/month	126
Consumables	ZAR'000/month	16
Staff welfare	ZAR'000/month	53
IT expenses	ZAR'000/month	26
Printing and stationary	ZAR'000/month	11
Telephone and fax	ZAR'000/month	11
Motor vehicle expenses	ZAR'000/month	21
Insurance	ZAR'000/month	3
Office staff	ZAR'000/month	452
Total on-site Overheads	**ZAR'000/month**	**1,399**
Rental	ZAR'000/month	126
Executive	ZAR'000/month	788
Consumables	ZAR'000/month	126
Bank charges	ZAR'000/month	1
IT expenses	ZAR'000/month	3
Printing and stationary	ZAR'000/month	5
Telephone and fax	ZAR'000/month	5
Travel and accommodation	ZAR'000/month	11
Motor vehicle expenses	ZAR'000/month	5
Office staff	ZAR'000/month	263
Total Head Office Overheads	**ZAR'000/month**	**1,331**
Audit fees	ZAR'000/annum	840
Legal	ZAR'000/annum	2,100
Legal Insurance	ZAR'000/annum	10,500
Total Other Overheads	**ZAR'000/annum**	**13,440**

The rehabilitation liability payment schedule is illustrated in Figure 114, with the 2020 costs already sunk and not forming part of the cash flow.

Figure 114: Rehabilitation Payment Schedule



V. Financial Cost Indicators

The operating costs in the financial model were subdivided into different categories as defined by the World Gold Council. Figure 115 illustrates a breakdown off all the costs included in each costing category:-

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

Figure 115: Financial Cost Indicators

All-in Costs (AIC)	All-in Sustainable Costs (AISC)	Adjusted Operating Costs	
			On-Site Mining Costs (on a sales basis)
			On-Site General & Administrative 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)
			Stock-piles / product inventory write down
			Operational Stripping Costs
			By-Product Credits
		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)	
	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)		
	Capital expenditure (non-sustaining)		

The general definitions of these costs are as follows:-

i. Adjusted Operating Cost ("Operating")

The Adjusted Operating Cost represents the cash cost incurred at each processing stage, from mining through to recoverable metal delivered to market, and, if any, less net by-product credits. In addition, royalty taxes are included in Direct Operating Costs. Costs are reported as "per oz" (gold). The Operating margin is defined as metal price received minus Direct Operating Costs.

Direct Operating Costs cover:-

- mining, ore freight and milling costs;
- ore purchase and freight costs from third parties in the case of custom smelters or mills;
- mine-site administration and general expenses;
- concentrate freight, smelting and smelter general and administrative costs;
- matte freight, refining and refinery general and administrative costs;
- marketing costs (freight and selling);
- community relations costs; and
- royalty taxes.

ii. All-in Sustainable Cost

AISC is the sum of net Adjusted Operating Costs (Operating), Sustaining Capital, Reclamation Costs, and other Non-direct Operating Costs. The AISC margin is defined as metal price received per ore tonne or gold ounce minus the AISC. Non-direct Operating Costs cover:-

- the portion of corporate and divisional overhead costs attributable to the operation; and
- research and exploration not attributable to the operation.

iii. All-in Cost

AIC is the sum of the AISC, all non-sustaining capital costs and non-current operational costs. The AIC margin is defined as metal price received per ore tonne or gold ounce minus the AIC.

Costs reported for the Blyvoor Mine on this basis are displayed per milled tonne as well as per recovered gold ounce in Table 69. It should be noted that a 10% contingency was applied to all operating costs and a 15% contingency was applied to capital costs.

Table 69: Production Costs Summary

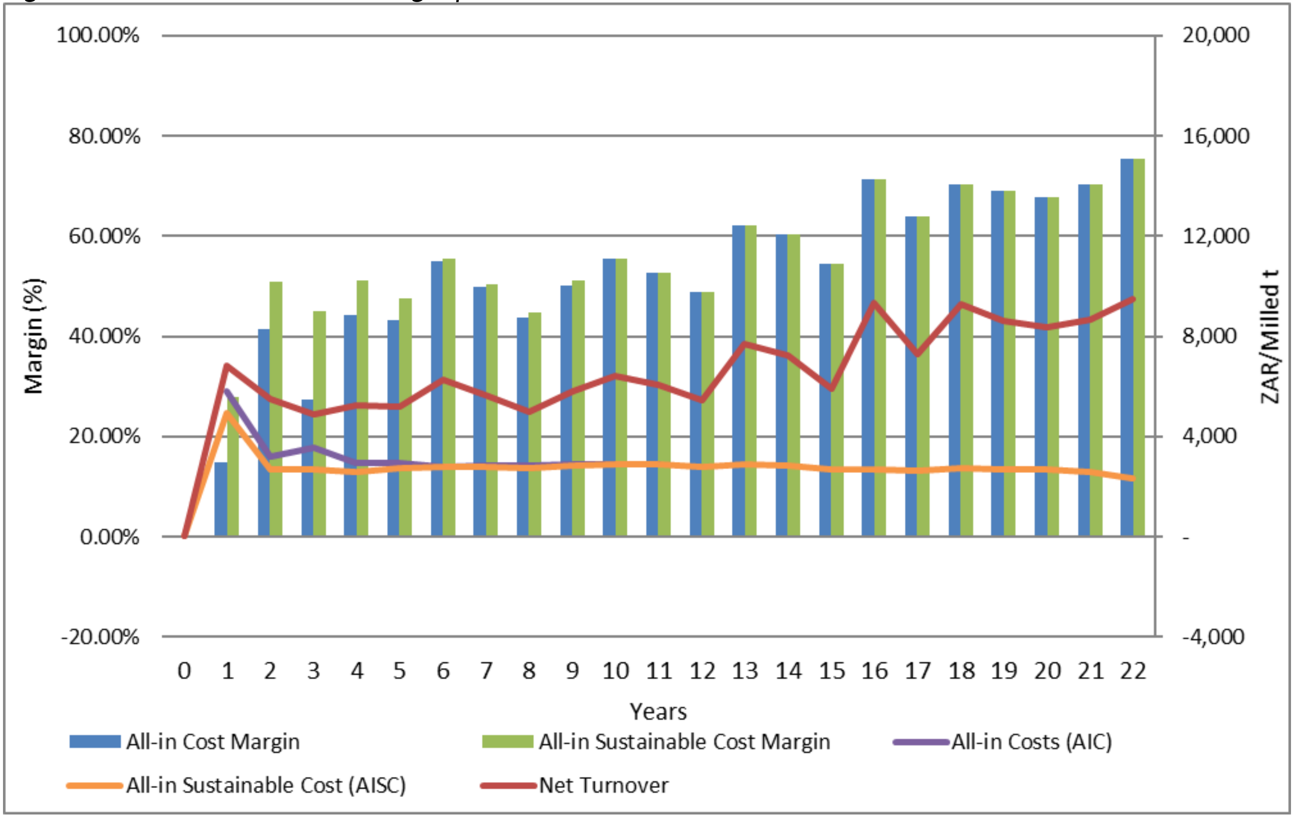
Item	Unit	Blyvoor Gold
Net Turnover	**ZAR/Milled tonne**	**6,899**
Mine Cost	ZAR/Milled tonne	1,988
Processing Costs	ZAR/Milled tonne	199
Other Costs	ZAR/Milled tonne	79
Royalties	ZAR/Milled tonne	330
Operating Costs	**ZAR/Milled tonne**	**2,596**
SIB CAPEX	ZAR/Milled tonne	103
Reclamation	ZAR/Milled tonne	4
Off-Mine Overheads	ZAR/Milled tonne	33
All-in Sustainable Costs (AISC)	**ZAR/Milled tonne**	**2,736**
Outstanding Initial Capital Expenditure	ZAR/Milled tonne	74
Other Cash Costs	ZAR/Milled tonne	-
All-in Costs (AIC)	**ZAR/Milled tonne**	**2,810**
All-in Cost Margin	**%**	**59%**
EBITDA*	ZAR/Milled tonne	4,265
EBITDA Margin	%	62%
Gold Recovered	oz	5,320,311
Net Turnover	**USD/Gold oz**	**1,437**
Mine Cost	USD/Gold oz	414
Processing Costs	USD/Gold oz	41
Other Costs	USD/Gold oz	16
Royalties	USD/Gold oz	69
Operating Costs	**USD/Gold oz**	**541**
SIB CAPEX	USD/Gold oz	21
Reclamation	USD/Gold oz	1
Off-Mine Overheads	USD/Gold oz	7
All-in Sustainable Costs (AISC)	**USD/Gold oz**	**570**
Outstanding Initial Capital Expenditure	USD/Gold oz	15
Other Cash Costs	USD/Gold oz	-
All-in Costs (AIC)	**USD/Gold oz**	**585**
EBITDA	USD/Gold oz	888

Notes:

1. * EBITDA excludes capital expenditure.
2. Costs Includes Contingencies

Blyvoor Mine has an AISC of ZAR2,736/milled tonne equating to USD570/oz. The AIC for Blyvoor Mine is ZAR2,810/milled tonne which equates to USD585/oz. The high cost per milled tonne can be attributed to the SBM method, which allows for hoisting the same amount of ore at higher grades. The AIC margin per year and AISC margin per year are displayed in Figure 116. The AIC margin is calculated by taking the difference between the revenue generated and the all-in costs and dividing by the revenue. The AISC margin is similarly calculated by taking the difference between the revenue generated and the all-in sustainable costs and dividing by the revenue. The average AIC margin and AISC margin over the LoM was calculated at 59% and 62% respectively, which are high when compared to similar mines. This is attributed to the high grades forecast at Blyvoor.

Figure 116: AIC and AISC Cost Margin per Year



The AISC is displayed in Figure 117 per recovered ounce together with the average gold price of USD1,535/oz that was used in the LoM.

Figure 117: All-in Sustainable Costs vs Gold Price

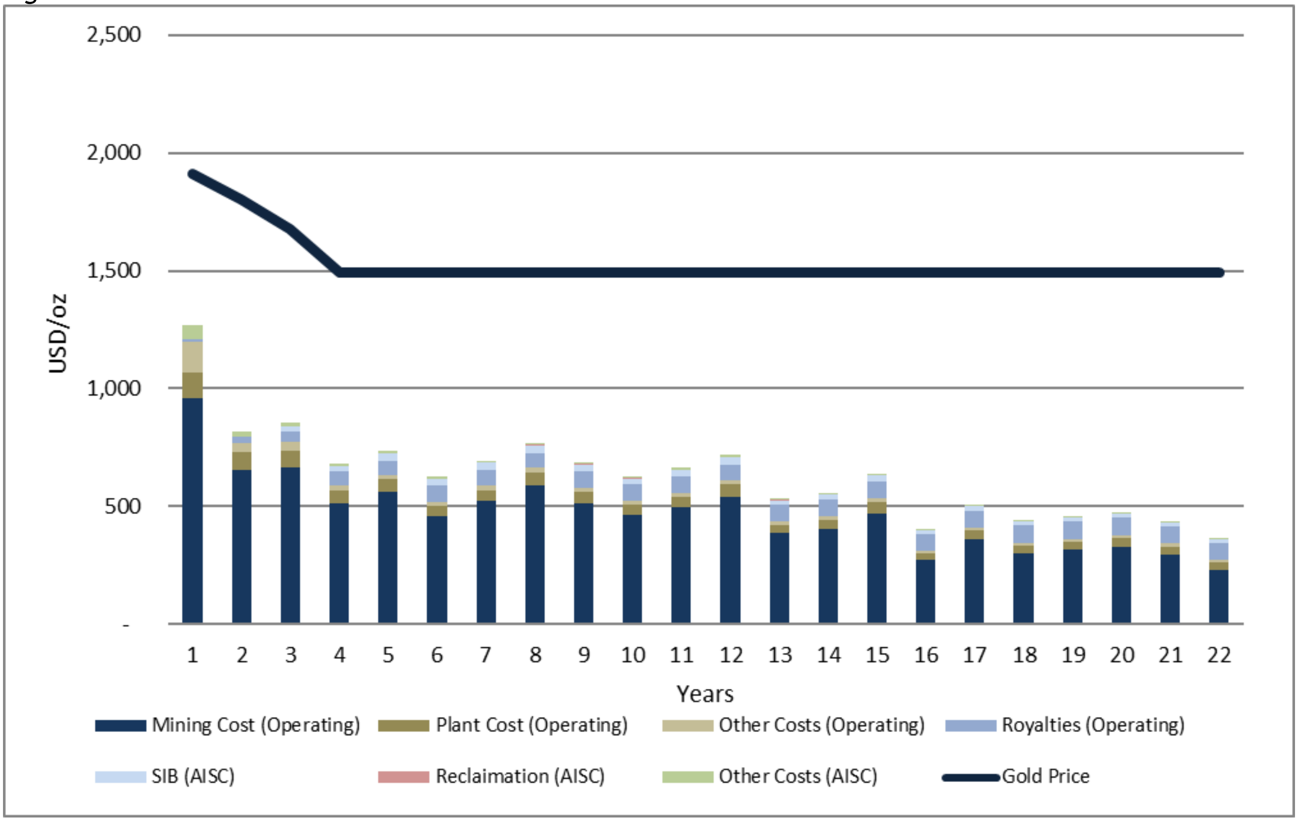
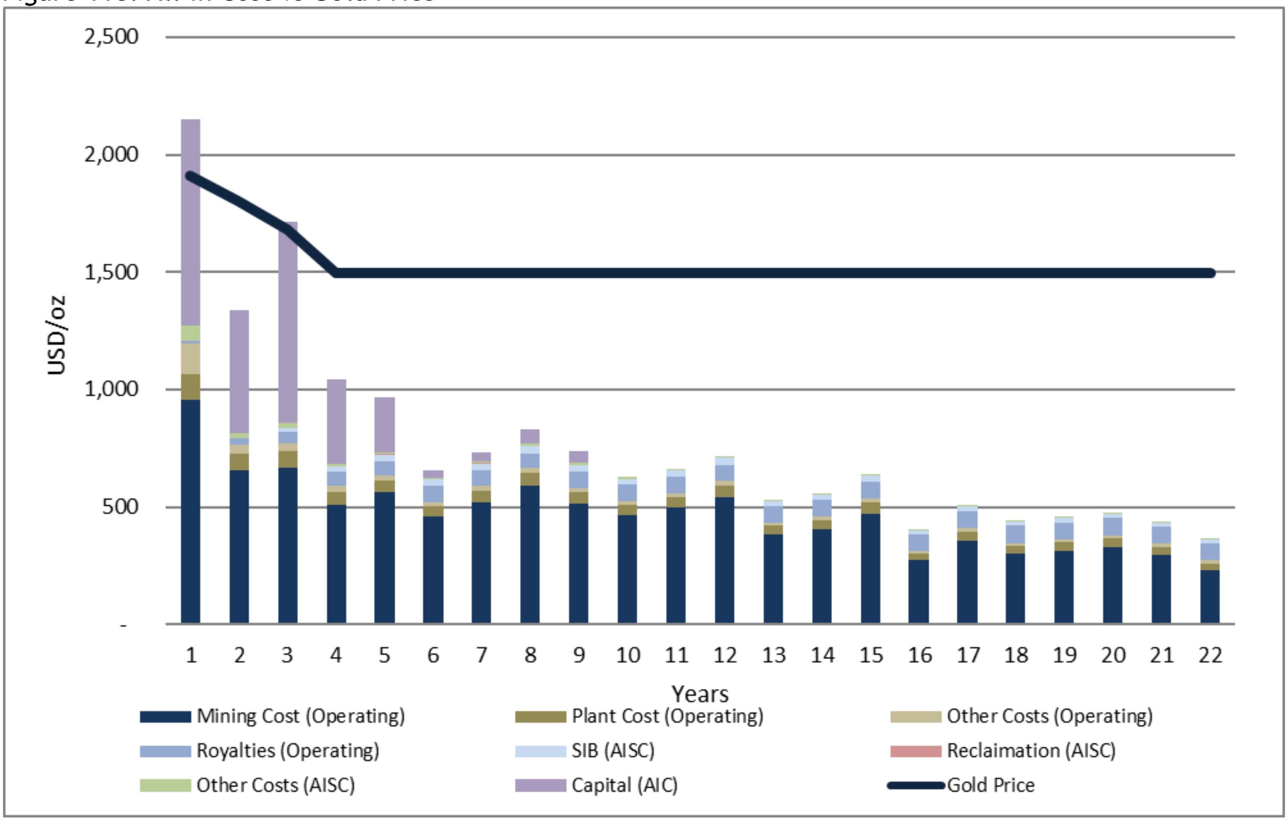


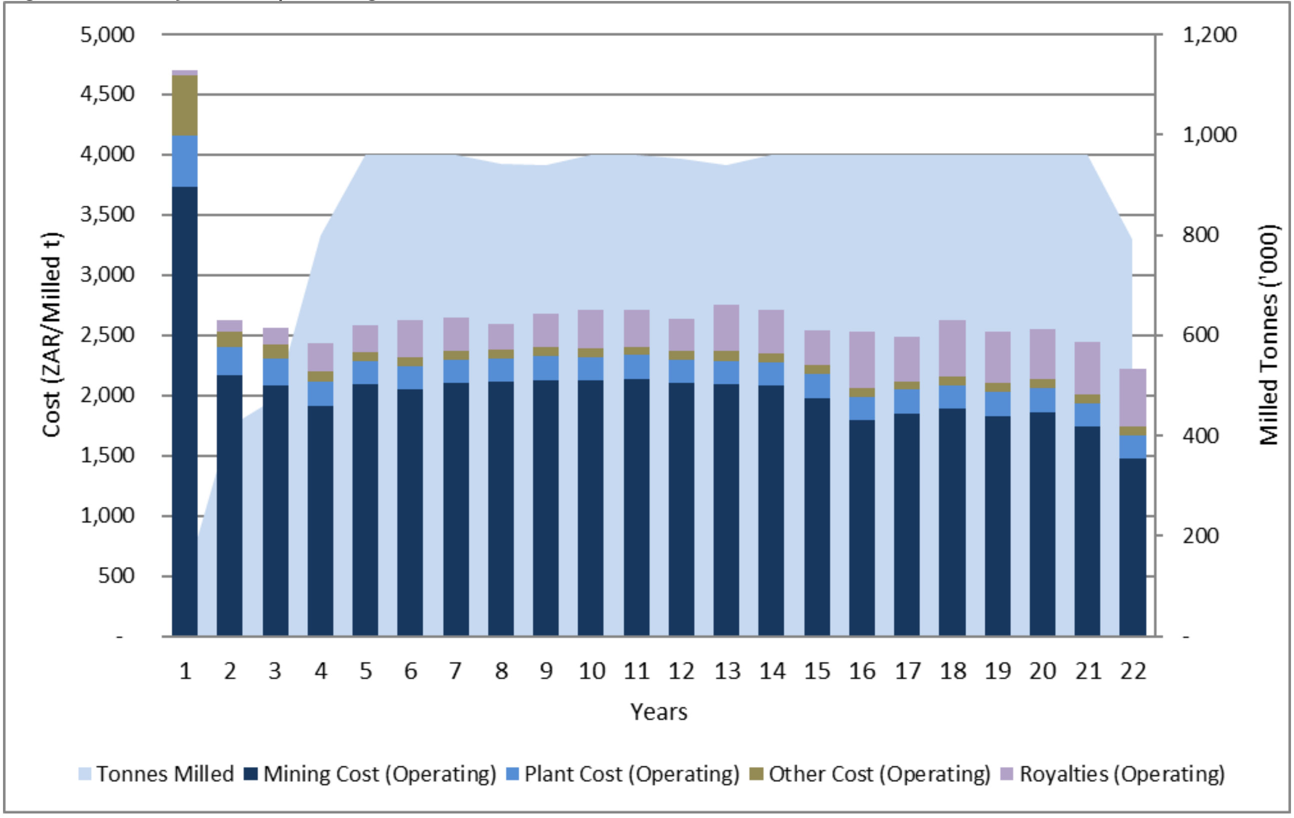
Figure 118 illustrates the AIC per recovered ounce together with the average gold price of USD1,535/oz that was used in the LoM.

Figure 118: All-in Cost vs Gold Price



The Adjusted Operating Costs over the LoM averaged ZAR2,596/milled tonne. Figure 119 displays the Adjusted Operating Costs per year against the milled tonnes.

Figure 119: Adjusted Operating Cost vs Milled Tonnes



ITEM 22 – ECONOMIC ANALYSIS

Minxcon was commissioned by Blyvoor Gold to complete an Independent Economic Analysis on their Blyvoor Mine. This section focuses on the value of the underground operations only. The economic analysis has been completed at Blyvoor Gold Capital (Pty) Ltd level (refer to Figure 4).

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

The scope of this economic analysis exercise was to determine the financial viability of the project to declare updated Mineral Reserves. This is illustrated by using the DCF method on a FCFF basis, to calculate the net present value ("NPV") and subsequently, the intrinsic value of the project in real terms.

The NPV is derived from post-royalties and tax, pre-debt real cash flows, after considering operating costs, capital expenditures for the mining operations and the processing plant and using forecast macro-economic parameters.

Item 22 (a) – Principal Assumptions

I. Economic Analysis Date

Value relates to a specific point in time. The effective date for the economic analysis is 1 March 2021.

II. Basis of Economic Analysis of the Mining Assets

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

- This Report details the optimised cash flow model with economic input parameters.
- The cash flow model is in constant money terms and completed in ZAR.
- The DCF economic analysis was set up in calendar years with the model staring in March 2021, hence the first year only includes 10 months.
- A hurdle rate of 10.90% (in real terms) was calculated for the discount factor.
- The impact of the Mineral Royalties Act using the formula for refined metals.
- The impact of existing streaming agreements was considered.
- Sensitivity analyses were performed to ascertain the impact of discount factors, commodity prices, exchange rate, grade, working costs and capital expenditures.
- Economic analysis of the tax entity was performed on a stand-alone basis.
- The full intrinsic value of the operation was reported for Blyvoor Mine.

III. Macro-economic Forecasts

All economic criteria that have been used for the study are described in the section below, together with the macro-economic and commodity price forecasts for the operations over the LoM. Forecast data is based on projections for the different commodity prices and the country-specific macro-economic parameters and is presented in calendar years.

Both the ZAR/USD exchange rate and USD commodity prices are in real money terms. Table 70 illustrates the forecasts for the first three years as well as the long-term forecast used in the financial model. Both the price forecast and the exchange rate forecast are taken as the median of various analyst and bank forecasts. The inflation rate forecasts were sourced from the International Monetary Fund ("IMF").

Table 70: Macro-Economic Forecasts and Commodity Prices over the Life of Mine

Basis	Item	Unit	2021	2022	2023	LT
Calendar Years (Nominal)	Gold Price	USD/oz	1,963	1,890	1,800	N/A
Calendar Years (Real)	**Gold Price**	**USD/oz**	**1,910**	**1,801**	**1,680**	**1,494**
Calendar Years (Nominal)	Exchange Rate	ZAR/USD	16.98	17.31	17.62	N/A
Calendar Years (Real)	**Exchange Rate**	**ZAR/USD**	**16.80**	**16.77**	**16.67**	**17.04**
Calendar Years	US Inflation	%	2.8%	2.1%	2.1%	2.2%
Calendar Years	SA Inflation	%	3.9%	4.3%	4.5%	4.5%

Source: Median of various Banks and Broker forecasts (Consensus, October 2020); Minxcon; IMF.

The creditors' days were assumed at 30 days and debtors' days (for payment of Gold delivered) were calculated at 7 days.

IV. RECOVERIES

For this Project, the ore will be treated at the Blyvoor Gold plant at No. 5 Shaft. The expected residue grade is 0.304 g/t, resulting in an average recovery over the LoM of 96.7%. The recovery is discussed in more detail under the processing section of this Report (Item 17).

V. DISCOUNT RATE

Beta is a measure of the volatility or systematic risk of a security or a portfolio in comparison to the market as a whole.

Minxcon calculated an operation Beta for Blyvoor Mine using an in-house model. The model considers a number of operational criteria and assigns weights to these factors. Operation-specific scores are allocated to each of the factors, and a Beta is calculated. A Beta of 1.04 was calculated for Blyvoor Mine.

The Beta was benchmarked against the South African gold mining companies listed on the Johannesburg Stock Exchange, or JSE, in order to determine if the calculated Beta for Blyvoor Mine can be deemed appropriate. The Unlevered Betas of South African gold mining companies were found to range between 0.25 (Pan African Resources) and 1.70 (Sibanye Stillwater, which is also a PGM producer). The calculated Beta of 1.04 for Blyvoor Mine falls within this range and is closest to Gold Fields, with a Beta of 0.98. The calculated Beta of 1.04 is therefore deemed appropriate. Table 71 shows the Betas of South African gold mining companies considered.

Table 71 Southern African Gold Mining Companies' Beta Values

Gold Company	Unlevered Betas	Levered Betas	Exchange
AngloGold Ashanti	0.96	0.95	JSE
Gold Fields	0.98	1.08	JSE
Harmony	0.78	0.82	JSE
Sibanye Stillwater	1.70	1.63	JSE
Pan African Resources	0.25	0.28	JSE
DRD Gold	0.64	0.70	JSE
Mean	**0.76**	**0.80**	
Median	**0.87**	**0.89**	

Source: *InfrontAnalytics (Nov 2020)*

Minxcon used the FCFF to calculate the value of the company on a 100% equity basis and hence used the Capital Asset Pricing Model ("CAPM") to calculate the discount rate.

The following were considered:-

- The South African risk-free rate (10 years and longer bond yield) of 9.62% was considered acceptable.
- A market risk premium of 6.00%, a rate generally considered as being the investor's expectation for investing in equity rather than a risk-free government bond, was used.
- The Beta of a stock is normally used to reflect the stock price's volatility over and above other general equity investments in the country of listing. A Beta of 1.04 was calculated for Blyvoor Mine. This specific risk was calculated using an average weighting on ranked criteria based on the most crucial elements in a mining project.
- This resulted in a nominal based cost of equity of 15.87% to value the Project which equals a real cost of equity of 10.90%.

The calculated discount rate is detailed in Table 72 below.

Table 72: Blyvoor Mine Cost of Equity

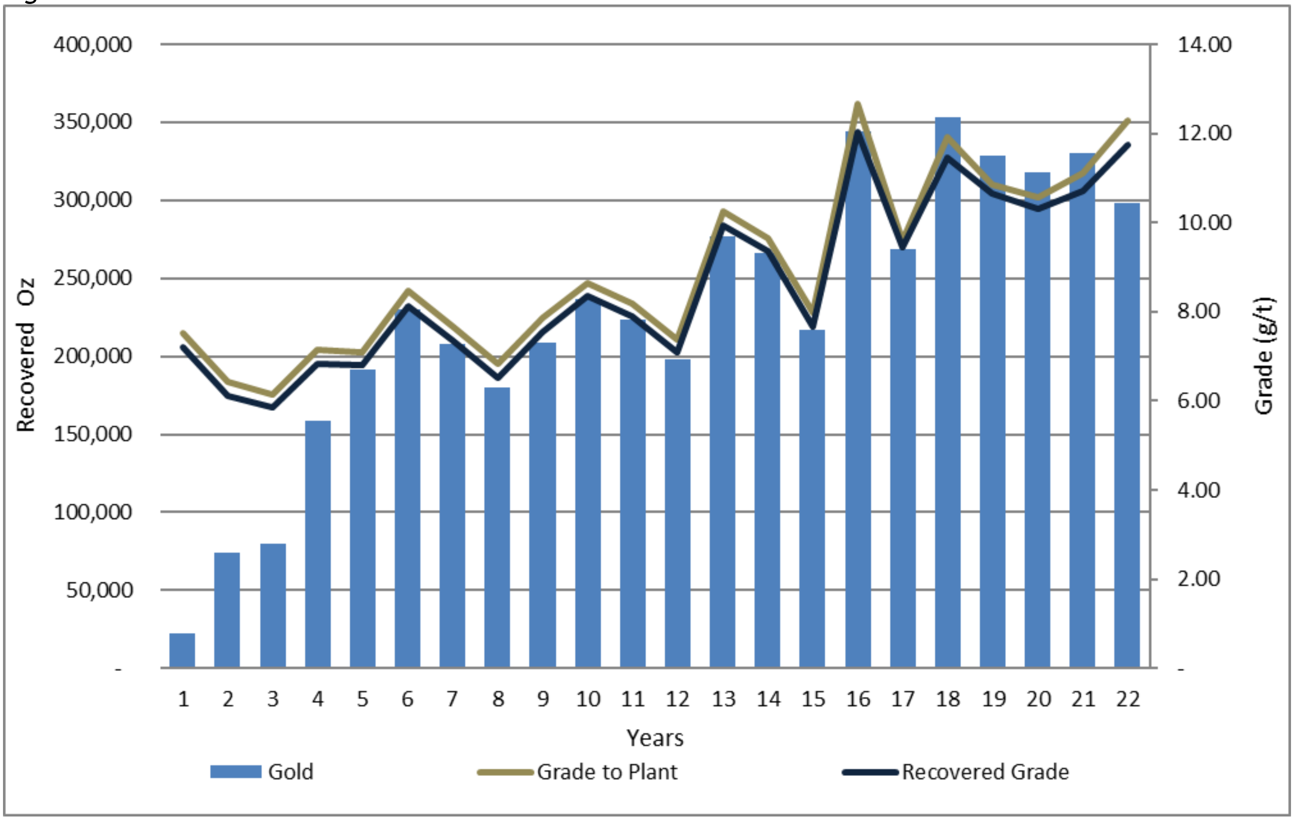
Items	Rate
Risk-Free Rate	9.62%
Risk Premium of Market	6.00%
Base Beta (Project Premium)	1.04
Nominal Cost of Equity (CAPM)	15.87%
Real Cost of Equity (CAPM)	10.90%

Item 22 (b) - Cash Flow Forecast

I. Production Forecast

The saleable product tonnes per year are illustrated in Figure 120. The average recovery over the LoM is 96.7% for an average recovered gold grade of 8.78 g/t.

Figure 120: Saleable Gold Ounces



A breakdown of the tonnes and ounces used in the LoM are displayed in Table 73. There is currently no Inferred Resources included for the purpose of the economic analysis.

Table 73: Production Breakdown in Life of Mine

Item	Project	Value
Ore Tonnes Mined	kt	18,840
Average Mined Grade	g/t	9.09
Total Oz in Mine Plan	koz	5,504
Grade Delivered to Plant	g/t	9.09
Recovered grade	g/t	8.78
Yield/Recovery	%	96.7%
Total Oz Recovered	koz	5,320
Ore Tonnes Mined	kt	18,840

II. Annual Cash Flow

Minxcon's in-house DCF model was employed to illustrate the NPV for the Project in real terms.

The NPV was derived from post Government royalties and 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 reserves to demonstrate if the extraction of the orebody is viable and justifiable under a defined set of realistically assumed modifying factors.

Figure 121 illustrates the annual undiscounted cash flow over the LoM along with the cumulative cash flow in ZAR terms. There is no funding requirement as illustrated on a cumulative annual basis in the figure. It should be noted that capital totalling ZAR96 million (inclusive of contingencies) is required in year 1, which is offset by revenue from month 1.

Figure 121: Undiscounted Cash Flow (ZAR)

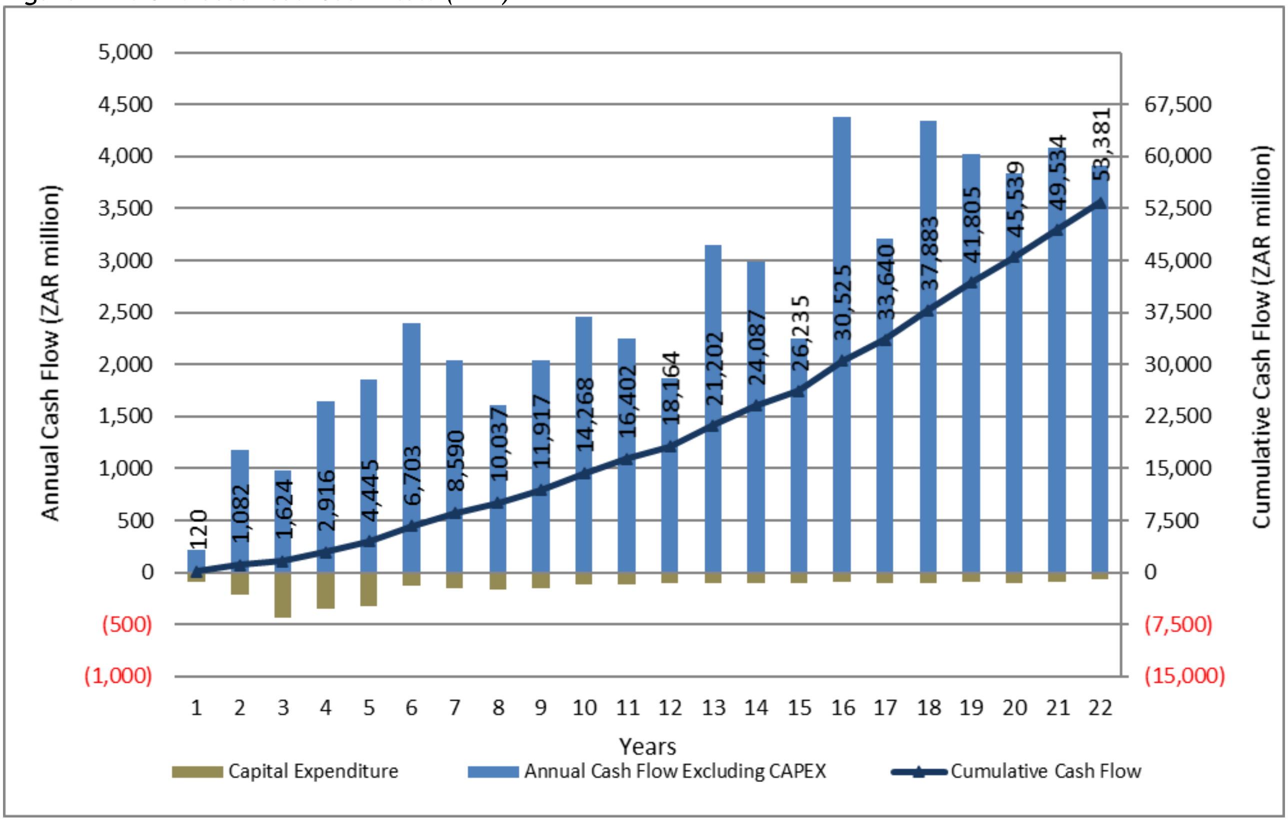


Table 74 and Table 75 to follow illustrate annual cash flow for the project in real terms.

Table 74: Annual Cash Flow – Techno-economic Inputs

Project Title: **Blyvoor Gold**
Client: Blyvoor Capital
Project Code: P20-029

Project Valuation Schedule	
Project Valuation Date (Base Date)	01-Mar-21
Financial Year End (month and year)	31-Dec-21
First Year	1
Days remaining	305

Commodity Price	100%	Mining Costs	100%
Exchange Rate	100%	Plant Cost	100%
Grade	100%	Mining Capex	100%
Other Costs	100%	Plant Capex	100%

Project Duration		Unit	Totals	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Calendar Years				2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Financial Years		years	22	1	2	3	4	5	6	7	8	9	10	11
Macro-Economic Factors (Real Terms)														
Currency		ZAR /USD	17.00	16.80	16.77	16.67	17.04	17.04	17.04	17.04	17.04	17.04	17.04	17.04
Inflation	ZAR Inflation Rate	%	4.46%	3.90%	4.30%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Inflation	US Inflation Rate	%	2.22%	2.80%	2.10%	2.10%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%
Commodities														
Commodity prices	Gold	USD/oz.	1,535	1,910	1,801	1,680	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494
Commodity prices	Fixed Price Streaming Arrangement	USD/oz.	572	572	572	572	572	572	572	572	572	572	572	572
Operating Statistics														
Tonnes Produced														
ROM		tonnes	18,840,454	108,516	418,927	473,777	797,858	1,000,385	928,414	956,386	936,001	938,311	963,870	968,482
ROM	(Max)	tonnes/mnth	85,480	10,674	34,911	39,481	66,488	83,365	77,368	79,699	78,000	78,193	80,322	80,707
Mill Head grade	Gold Grade	g/t	9.09	7.51	6.43	6.15	7.15	7.10	8.48	7.65	6.83	7.86	8.65	8.19
Tonnes to mill		tonnes	18,840,454	108,516	418,927	473,777	797,858	960,000	960,000	960,000	941,187	938,311	960,000	960,000
Recovered Grade														
Recovered grade	Precious Metals	g/t	8.78	7.21	6.13	5.84	6.85	6.80	8.12	7.36	6.53	7.56	8.35	7.89
Metal recovered														
Metal recovered	Gold	kg	165,480	782	2,567	2,768	5,461	6,524	7,791	7,063	6,142	7,091	8,012	7,572
Metal Recovered	Gold	oz	5,320,311	25,148	82,522	88,984	175,589	209,756	250,496	227,067	197,472	227,992	257,608	243,439
Sales Split														
Metal recovered	Gold - Open Market	oz	5,011,454	22,633	74,270	80,085	158,810	191,268	229,972	207,714	179,598	208,593	236,727	223,267
Metal recovered	Fixed Price Streaming Arrangement	oz	308,857	2,515	8,252	8,898	16,779	18,488	20,525	19,353	17,874	19,400	20,880	20,172

Project Duration		Unit	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Calendar Years			2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Financial Years		years	12	13	14	15	16	17	18	19	20	21	22
Macro-Economic Factors (Real Terms)													
Currency		ZAR /USD	17.04	17.04	17.04	17.04	17.040	17.040	17.040	17.040	17.040	17.040	17.040
Inflation	ZAR Inflation Rate	%	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	%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%
Commodities													
Commodity prices	Gold	USD/oz.	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494
Commodity prices	Fixed Price Streaming Arrangement	USD/oz.	572	572	572	572	572	572	572	572	572	572	572
Operating Statistics													
Tonnes Produced													
ROM		tonnes	939,333	938,276	965,032	1,025,760	945,212	989,119	1,011,689	978,929	995,647	925,051	635,480
ROM	(Max)	tonnes/mnth	78,278	78,190	80,419	85,480	78,768	82,427	84,307	81,577	82,971	77,088	52,957
Mill Head grade	Gold Grade	g/t	7.38	10.25	9.65	7.97	12.65	9.59	11.92	10.84	10.57	11.10	12.28
Tonnes to mill		tonnes	951,685	938,276	960,000	960,000	960,000	960,000	960,000	960,000	960,000	960,000	791,918
Recovered Grade													
Recovered grade	Precious Metals	g/t	7.09	9.94	9.35	7.67	12.02	9.44	11.45	10.65	10.31	10.72	11.73
Metal recovered													
Metal recovered	Gold	kg	6,743	9,330	8,974	7,367	11,541	9,059	10,990	10,224	9,902	10,287	9,289
Metal Recovered	Gold	oz	216,789	299,977	288,508	236,849	371,051	291,244	353,352	328,716	318,363	330,725	298,663
Sales Split													
Metal recovered	Gold - Open Market	oz	197,949	276,978	266,083	217,007	344,498	268,682	352,852	328,216	317,863	330,225	298,163
Metal recovered	Fixed Price Streaming Arrangement	oz	18,839	22,999	22,425	19,842	26,553	22,562	500	500	500	500	500

Table 75: Annual Real Cash Flow

Project Title: **Blyvoor Gold**
Client: Blyvoor Capital
Project Code: P20-029

Project Valuation Schedule	
Project Valuation Date (Base Date)	01-Mar-21
Financial Year End (month and year)	31-Dec-21
First Year	1
Days remaining	305

Commodity Price	100%	Mining Costs	100%
Exchange Rate	100%	Plant Cost	100%
Grade	100%	Mining Capex	100%
Other Costs	100%	Plant Capex	100%

Project Duration		Unit	Totals	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Calendar Years				2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Financial Years		years	22	1	2	3	4	5	6	7	8	9	10	11
Financial														
Revenue		ZAR	129,979,910,614	742,734,951	2,298,739,124	2,303,996,943	4,164,422,522	4,998,959,865	5,994,066,703	5,421,796,448	4,698,916,031	5,444,395,539	6,167,762,769	5,821,695,214
Revenue	Gold - Open Market	ZAR	127,003,087,208	718,810,565	2,220,371,581	2,219,997,185	4,002,510,617	4,820,563,556	5,796,014,302	5,235,047,957	4,526,446,412	5,257,200,653	5,966,279,395	5,627,047,624
Revenue	Fixed Price Streaming Arrangement	ZAR	2,976,823,405	23,924,386	78,367,543	83,999,758	161,911,905	178,396,308	198,052,400	186,748,492	172,469,619	187,194,886	201,483,374	194,647,590
Mining cost			(37,446,046,132)	(404,588,427)	(906,819,820)	(984,690,779)	(1,528,071,024)	(2,005,945,019)	(1,964,469,118)	(2,016,082,119)	(1,986,062,333)	(1,998,018,842)	(2,036,826,168)	(2,054,320,062)
Direct Cash Costs	Fixed Cost	ZAR	(2,383,061,831)	(91,656,224)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)
Direct Cash Costs	Variable Cost	ZAR	(31,658,798,289)	(276,151,437)	(714,394,185)	(785,185,966)	(1,279,168,007)	(1,713,598,911)	(1,675,893,547)	(1,722,814,457)	(1,695,523,742)	(1,706,393,296)	(1,741,672,684)	(1,757,576,224)
Direct Cash Costs	Contingency	ZAR	(3,404,186,012)	(36,780,766)	(82,438,165)	(89,517,344)	(138,915,548)	(182,358,638)	(178,588,102)	(183,280,193)	(180,551,121)	(181,638,077)	(185,166,015)	(186,756,369)
Plant cost			(3,742,251,980)	(46,193,767)	(100,621,880)	(109,207,204)	(162,405,279)	(187,052,832)	(187,052,832)	(187,052,832)	(184,192,981)	(183,755,866)	(187,052,832)	(187,052,832)
Direct Cash Costs	Fixed Cost	ZAR	(794,331,936)	(26,553,245)	(31,863,894)	(31,863,894)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)
Direct Cash Costs	Variable Cost	ZAR	(2,607,715,318)	(15,441,089)	(59,610,543)	(67,415,383)	(110,257,929)	(132,664,796)	(132,664,796)	(132,664,796)	(130,064,931)	(129,667,554)	(132,664,796)	(132,664,796)
Direct Cash Costs	Contingency	ZAR	(340,204,725)	(4,199,433)	(9,147,444)	(9,927,928)	(14,764,116)	(17,004,803)	(17,004,803)	(17,004,803)	(16,744,816)	(16,705,079)	(17,004,803)	(17,004,803)
Other Costs			(1,565,114,275)	(55,363,123)	(52,174,793)	(52,076,122)	(73,744,903)	(76,593,171)	(78,255,457)	(78,569,713)	(78,649,823)	(79,290,976)	(76,413,503)	(75,309,426)
Direct Cash Costs	Other Cost Fixed	ZAR	(1,351,812,583)	(53,761,451)	(49,919,942)	(49,154,942)	(63,476,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)
Direct Cash Costs	Other Costs Variable	ZAR	(134,897,712)	(1,601,671)	(2,254,851)	(2,921,180)	(4,766,860)	(5,484,607)	(6,340,453)	(5,848,270)	(5,226,553)	(5,867,706)	(6,489,841)	(6,192,204)
Direct Cash Costs	Rehabilitation	ZAR	(78,403,980)	0	0	0	(5,501,287)	(7,531,807)	(8,338,247)	(9,144,687)	(9,846,513)	(9,846,513)	(6,346,905)	(5,540,465)
Direct Cash Costs			(42,753,412,387)	(506,145,316)	(1,059,616,492)	(1,145,974,105)	(1,764,221,207)	(2,269,591,022)	(2,229,777,407)	(2,281,704,664)	(2,248,905,136)	(2,261,065,684)	(2,300,292,503)	(2,316,682,321)
Production Costs	Initial Capital expenditure	ZAR	(1,215,370,313)	(83,222,384)	(190,089,224)	(353,215,464)	(249,413,903)	(192,291,532)	(23,949,230)	(33,729,886)	(47,483,614)	(41,975,074)	0	0
Production Costs	Contingency	ZAR	(182,305,547)	(12,483,358)	(28,513,384)	(52,982,320)	(37,412,085)	(28,843,730)	(3,592,384)	(5,059,483)	(7,122,542)	(6,296,261)	0	0
Production Costs	SIB	ZAR	(1,938,025,308)	0	0	(27,347,450)	(63,392,861)	(109,649,893)	(107,576,098)	(110,156,748)	(108,512,766)	(109,088,735)	(111,193,950)	(112,068,645)
Production Costs		ZAR	(46,089,113,554)	(601,851,059)	(1,278,219,101)	(1,579,519,338)	(2,114,440,056)	(2,600,376,177)	(2,364,895,119)	(2,430,650,781)	(2,412,024,059)	(2,418,425,754)	(2,411,486,453)	(2,428,750,965)
Fully Allocated Costs	Royalty Act No 28 of 2008	ZAR	(6,226,639,787)	(3,713,675)	(39,489,612)	(67,125,051)	(182,467,567)	(214,528,352)	(299,703,335)	(264,047,493)	(204,092,796)	(266,946,418)	(308,388,138)	(291,084,761)
Fully Allocated Costs	Other Fixed Costs	ZAR	(641,789,400)	(26,751,900)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)
Fully Allocated Costs		ZAR	(52,957,542,741)	(632,316,633)	(1,347,122,993)	(1,676,058,669)	(2,326,321,904)	(2,844,318,809)	(2,694,012,734)	(2,724,112,554)	(2,645,531,134)	(2,714,786,452)	(2,749,288,872)	(2,749,250,006)
EBITDA		ZAR	80,358,069,040	206,124,059	1,170,218,739	1,061,483,508	2,188,319,468	2,485,426,211	3,435,171,681	2,846,630,011	2,216,503,819	2,886,969,157	3,529,667,848	3,184,513,852
EBIT		ZAR	77,022,367,873	110,418,317	951,616,131	627,938,274	1,838,100,618	2,154,641,056	3,300,053,969	2,697,683,894	2,053,384,897	2,729,609,087	3,418,473,898	3,072,445,208
Taxation		ZAR	(23,586,738,175)	0	0	(92,509,297)	(554,159,027)	(647,595,641)	(1,020,119,215)	(825,041,984)	(618,269,292)	(835,512,365)	(1,057,429,158)	(945,662,552)
Income after tax		ZAR	53,435,629,699	110,418,317	951,616,131	535,428,978	1,283,941,591	1,507,045,415	2,279,934,753	1,872,641,910	1,435,115,604	1,894,096,721	2,361,044,740	2,126,782,656
Working capital changes		ZAR	1	9,853,921	9,862,828	6,413,928	8,594,874	21,602,477	(22,112,968)	14,791,106	11,355,600	(13,383,443)	(10,675,637)	7,919,589
Cash Flow														
Net Cash Flow	Annual cash flow	ZAR	53,435,629,699	120,272,238	961,478,959	541,842,906	1,292,536,465	1,528,647,892	2,257,821,785	1,887,433,015	1,446,471,204	1,880,713,278	2,350,369,102	2,134,702,245

Project Duration		Unit	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Calendar Years			2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Financial Years		years	12	13	14	15	16	17	18	19	20	21	22
Financial													
Revenue		ZAR	5,170,745,346	7,202,659,493	6,922,523,818	5,660,734,530	8,938,667,304	6,989,358,686	8,897,812,888	8,276,908,637	8,015,988,028	8,327,540,434	7,519,485,341
Revenue	Gold - Open Market	ZAR	4,988,955,803	6,980,734,067	6,706,131,841	5,469,266,355	8,682,450,958	6,771,646,537	8,892,988,183	8,272,083,932	8,011,163,322	8,322,715,728	7,514,660,635
Revenue	Fixed Price Streaming Arrangement	ZAR	181,789,543	221,925,426	216,391,977	191,468,175	256,216,346	217,712,149	4,824,706	4,824,706	4,824,706	4,824,706	4,824,706
Mining cost			(2,002,022,297)	(1,965,233,306)	(1,996,189,321)	(1,902,598,075)	(1,719,946,174)	(1,777,259,250)	(1,814,285,506)	(1,759,763,266)	(1,787,658,111)	(1,669,225,358)	(1,165,971,758)
Direct Cash Costs	Fixed Cost	ZAR	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(109,987,469)	(91,656,224)
Direct Cash Costs	Variable Cost	ZAR	(1,710,032,801)	(1,676,588,264)	(1,704,730,095)	(1,619,647,145)	(1,453,599,962)	(1,505,702,758)	(1,539,362,991)	(1,489,797,318)	(1,515,156,268)	(1,407,490,129)	(968,318,102)
Direct Cash Costs	Contingency	ZAR	(182,002,027)	(178,657,573)	(181,471,756)	(172,963,461)	(156,358,743)	(161,569,023)	(164,935,046)	(159,978,479)	(162,514,374)	(151,747,760)	(105,997,433)
Plant cost			(185,788,783)	(183,750,566)	(187,052,832)	(187,052,832)	(187,052,832)	(187,052,832)	(187,052,832)	(187,052,832)	(187,052,832)	(187,052,832)	(154,648,832)
Direct Cash Costs	Fixed Cost	ZAR	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(37,383,234)	(31,152,695)
Direct Cash Costs	Variable Cost	ZAR	(131,515,660)	(129,662,735)	(132,664,796)	(132,664,796)	(132,664,796)	(132,664,796)	(132,664,796)	(132,664,796)	(132,664,796)	(132,664,796)	(109,437,152)
Direct Cash Costs	Contingency	ZAR	(16,889,889)	(16,704,597)	(17,004,803)	(17,004,803)	(17,004,803)	(17,004,803)	(17,004,803)	(17,004,803)	(17,004,803)	(17,004,803)	(14,058,985)
Other Costs			(73,943,134)	(74,884,251)	(73,836,879)	(71,945,232)	(73,957,993)	(71,475,041)	(72,077,920)	(71,560,387)	(71,342,905)	(71,602,589)	(62,046,936)
Direct Cash Costs	Other Cost Fixed	ZAR	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(63,576,757)	(54,694,630)
Direct Cash Costs	Other Costs Variable	ZAR	(5,632,352)	(7,379,909)	(7,138,977)	(6,053,769)	(8,872,970)	(7,196,458)	(8,501,164)	(7,983,630)	(7,766,149)	(8,025,833)	(7,352,306)
Direct Cash Costs	Rehabilitation	ZAR	(4,734,025)	(3,927,586)	(3,121,146)	(2,314,706)	(1,508,266)	(701,826)	0	0	0	0	0
Direct Cash Costs			(2,261,754,214)	(2,223,868,123)	(2,257,079,032)	(2,161,596,139)	(1,980,956,999)	(2,035,787,124)	(2,073,416,259)	(2,018,376,485)	(2,046,053,849)	(1,927,880,779)	(1,382,667,526)
Production Costs	Initial Capital expenditure	ZAR	0	0	0	0	0	0	0	0	0	0	0
Production Costs	Contingency	ZAR	0	0	0	0	0	0	0	0	0	0	0
Production Costs	SIB	ZAR	(109,390,554)	(107,449,194)	(109,162,108)	(104,482,545)	(95,349,950)	(98,215,604)	(100,066,917)	(97,340,805)	(98,735,547)	(92,813,910)	(66,031,030)
Production Costs		ZAR	(2,371,144,768)	(2,331,317,317)	(2,366,241,140)	(2,266,078,685)	(2,076,306,950)	(2,134,002,728)	(2,173,483,176)	(2,115,717,290)	(2,144,789,396)	(2,020,694,689)	(1,448,698,556)
Fully Allocated Costs	Royalty Act No 28 of 2008	ZAR	(247,468,631)	(360,132,975)	(346,126,191)	(283,036,727)	(446,933,365)	(349,467,934)	(444,890,644)	(413,845,432)	(400,799,401)	(416,377,022)	(375,974,267)
Fully Allocated Costs	Other Fixed Costs	ZAR	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(29,414,280)	(26,751,900)
Fully Allocated Costs		ZAR	(2,648,027,678)	(2,720,864,572)	(2,741,781,611)	(2,578,529,691)	(2,552,654,595)	(2,512,884,942)	(2,647,788,100)	(2,558,977,002)	(2,575,003,077)	(2,466,485,990)	(1,851,424,723)
EBITDA		ZAR	2,632,108,221	4,589,244,115	4,289,904,315	3,186,687,384	6,481,362,660	4,574,689,348	6,350,091,705	5,815,272,441	5,539,720,498	5,953,868,353	5,734,091,647
EBIT		ZAR	2,522,717,667	4,481,794,921	4,180,742,208	3,082,204,839	6,386,012,710	4,476,473,744	6,250,024,788	5,717,931,636	5,440,984,951	5,861,054,443	5,668,060,618
Taxation		ZAR	(769,821,336)	(1,401,365,062)	(1,303,769,446)	(951,717,158)	(2,019,286,977)	(1,403,181,975)	(1,973,745,609)	(1,803,389,309)	(1,713,663,087)	(1,851,190,323)	(1,799,309,359)
Income after tax		ZAR	1,752,896,331	3,080,429,859	2,876,972,762	2,130,487,681	4,366,725,733	3,073,291,769	4,276,279,179	3,914,542,326	3,727,321,864	4,009,864,120	3,868,751,259
Working capital changes		ZAR	8,435,827	(41,725,743)	7,912,434	17,116,384	(76,280,463)	41,528,627	(33,726,661)	7,791,325	7,070,379	(14,802,905)	(22,563,864)
Cash Flow													
Net Cash Flow	Annual cash flow	ZAR	1,761,332,158	3,038,704,117	2,884,885,196	2,147,604,065	4,290,445,270	3,114,820,396	4,242,552,518	3,922,333,651	3,734,392,243	3,995,061,214	3,846,187,395

Item 22 (c) – ECONOMIC ANALYSIS RESULTS

I. NET PRESENT VALUE

The highlights of the economic analysis conducted by Minxcon are discussed in the following sections. Table 76 illustrates the Project NPV at various discount rates with a best estimated value of ZAR15,159 million at a real calculated discount rate of 10.9%.

Table 76: Project NPV Summary – Real Terms

Item	Unit	Blyvoor Gold Capital Full Value
NPV @ 0%	ZARm	53,436
NPV @ 5%	ZARm	28,200
NPV @ 10%	ZARm	16,525
NPV @ 10.9%	**ZARm**	**15,159**
NPV @ 15%	ZARm	10,618
NPV @ 20%	ZARm	7,367

Note: Economic Analysis completed using forecast prices and exchange rates, with an average gold price of USD1,535/oz and an average exchange rate of ZAR/USD 17.00 over the LoM.

Table 77 illustrates the Project profitability ratios. The mine has a break-even gold price of USD585/oz. The Internal Rate of Return ("IRR") is not applicable since the majority of initial capital to develop the project has already been spent, and no funding requirement is applicable. There will hence be no payback period on remaining capital the remaining capital.

Table 77: Profitability Ratios

Item	Unit	Profitability Ratios
IRR	%	N/A
Total ounces in Mine plan	koz	5,504
$NPV_{10.9\%}$ per oz in Mine plan	ZAR/oz	2,754
$NPV_{10.9\%}$ per oz in Mine plan	USD/oz	162
LoM	Years	22
Present Value of Income flow*	ZARm	23,039
Present Value of Investment	ZARm	N/A
Benefit-Cost Ratio	Ratio	N/A
Average Payback Period	Years	N/A
Peak Funding Requirement	ZARm	N/A
Peak Funding Year	Year	N/A
Break-even Milled Grade (Excluding CAPEX)	g/t	3.47
Break-even Milled Grade (Including CAPEX)	g/t	3.70

Note: Present value of EBITDA at a 10.9% discount rate.

Item 22 (d) – REGULATORY ITEMS

I. CORPORATE TAXES

Gold mining companies in South Africa are taxed according to the gold mine formula. Owing to the nature of the orebodies in South Africa, *i.e.* deep orebodies that require significant capital coupled with a fluctuating gold price, the government identified the vulnerability of gold mining companies during periods when margins are squeezed. The tax rates based on the formula decline when the company shows lower profits thereby giving the company the necessary breathing space during a difficult operating environment.

The gold mining formula is provided as Equation 2.

Equation 2: Mining Tax Formula

$$y = 34 - \frac{170}{x}$$

Where x = the ratio, expressed as a percentage, calculated as follows:-

$$\frac{Taxable\ income\ from\ gold\ mining}{Total\ revenue\ (turnover)\ from\ gold\ mining}$$

and y = calculated percentage which represents the rate of tax to be levied.

The rate of normal tax on taxable income other than that derived from mining for gold is 28%.

For all mines, capital expenditure incurred may be redeemed immediately against mining profits. All qualifying mining capital expenditure is deducted from taxable mining income to the extent that it does not result in an assessed loss. Accounting depreciation is eliminated when calculating the South African mining income tax. Excess capital expenditure and tax losses are carried forward as unredeemed capital and assessed losses and are from future mining taxable income. As at 31 December 2020, Blyvoor Mine had unredeemed capital allowance in the amount of ZAR755,288,779 and assessed losses of ZAR547,397,930 which were considered.

II. ROYALTIES

The Mineral and Petroleum Resources Royalty Act came into effect on 1 March 2010. Under the legislation, passed in 2008, companies will have to pay extra taxes proportional to their profitability after CAPEX. The law requires all companies extracting minerals in South Africa to pay royalties at a rate of between 0.5% and 7% based on gross sales, less their allowable deductions, depending on the refined condition of the Mineral Resources. Therefore, companies are taxed on either the refined or unrefined formula:-

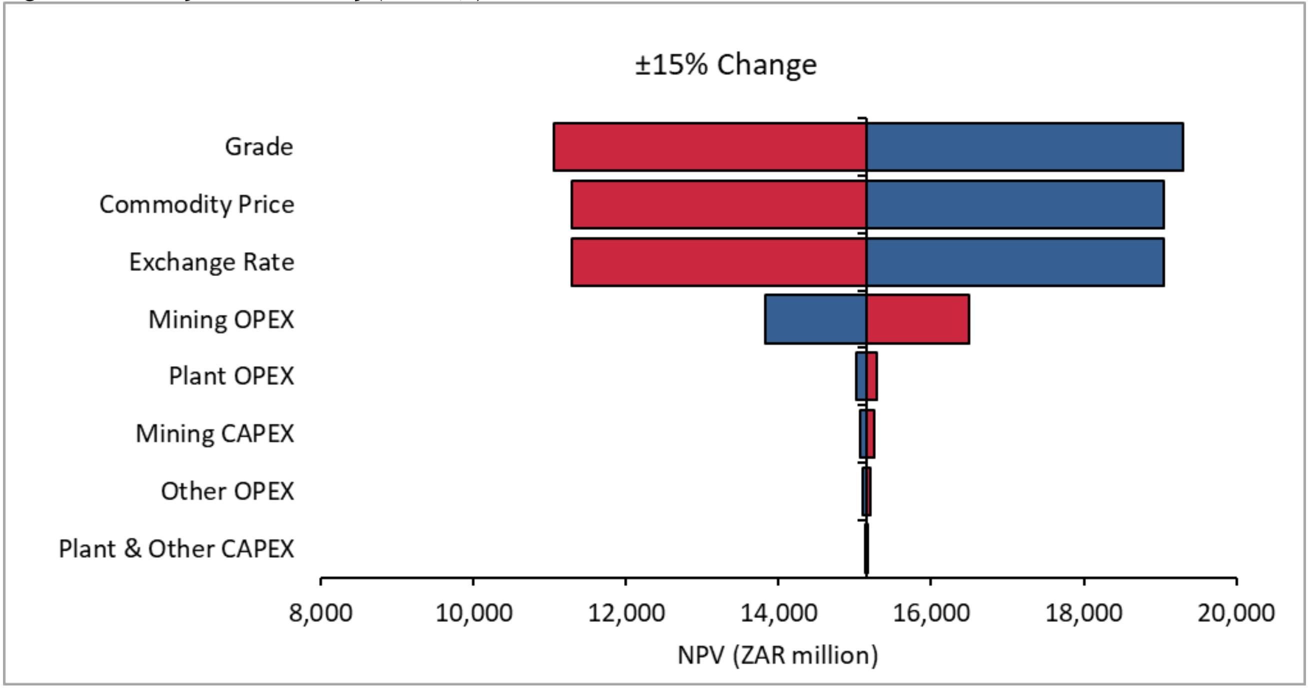
- Refined mineral formula = 0.5 + [EBIT/Gross sales x 12.5] x 100
- Unrefined mineral resource formula =0.5 + [EBIT/Gross sales x 9] x 100

The refined mineral formula was used for the Blyvoor Mine economic analysis.

Item 22 (e) – SENSITIVITY ANALYSIS

Based on the real cash flow calculated in the financial model, Minxcon performed single-parameter sensitivity analyses to ascertain the impact on the NPV, the results of which are graphically illustrated in Figure 122. 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 represents a positive 15% change in the input. A negative effect to the NPVs represented by a red bar and a positive effect represented by a blue bar. For the DCF the grade, commodity prices and exchange rate have the biggest impact on the sensitivity of the Project followed by the variable cost. The project is least sensitive to capital and plant and other operating costs.

Figure 122: Project Sensitivity ($NPV_{10.9\%}$)



A sensitivity analysis was also conducted on the exchange rate and the commodity prices to better indicate the effect that these two factors have on the NPV as well as the total operating costs and the grade. This is displayed in Table 78 and Table 79.

Table 78: Sensitivity Analysis of Commodity Prices and Exchange Rate to $NPV_{10.9\%}$ (ZARm)

	Exchange Rate (ZAR/USD)	11.90	12.75	13.60	14.45	15.30	16.15	**17.00**	17.85	18.70	19.55	20.40	21.25	22.10
Gold Price (USD/oz)	**Change %**	-30.0%	-25.0%	-20.0%	-15.0%	-10.0%	-5.0%		5.0%	10.0%	15.0%	20.0%	25.0%	30.0%
1,075	-30.0%	1,663	2,713	3,698	4,661	5,590	6,495	7,428	8,325	9,255	10,149	11,042	11,935	12,828
1,151	-25.0%	2,713	3,772	4,808	5,784	6,767	7,749	8,720	9,702	10,659	11,616	12,573	13,552	14,518
1,228	-20.0%	3,698	4,808	5,849	6,909	7,941	8,995	10,021	11,042	12,063	13,084	14,134	15,159	16,184
1,305	-15.0%	4,661	5,784	6,909	8,005	9,128	10,213	11,297	12,382	13,485	14,582	15,671	16,763	17,871
1,382	-10.0%	5,590	6,767	7,941	9,128	10,276	11,425	12,573	13,751	14,903	16,055	17,213	18,401	19,565
1,459	-5.0%	6,495	7,749	8,995	10,213	11,425	12,637	13,879	15,095	16,312	17,540	18,793	20,015	21,245
1,535		7,428	8,720	10,021	11,297	12,573	13,879	**15,159**	16,441	17,739	19,050	20,338	21,633	22,928
1,612	5.0%	8,325	9,702	11,042	12,382	13,751	15,095	16,441	17,805	19,179	20,532	21,892	23,252	24,612
1,689	10.0%	9,255	10,659	12,063	13,485	14,903	16,312	17,739	19,179	20,597	22,022	23,447	24,871	26,296
1,766	15.0%	10,149	11,616	13,084	14,582	16,055	17,540	19,050	20,532	22,022	23,511	25,001	26,490	27,980
1,842	20.0%	11,042	12,573	14,134	15,671	17,213	18,793	20,338	21,892	23,447	25,001	26,555	28,109	29,665
1,919	25.0%	11,935	13,552	15,159	16,763	18,401	20,015	21,633	23,252	24,871	26,490	28,109	29,730	31,355
1,996	30.0%	12,828	14,518	16,184	17,871	19,565	21,245	22,928	24,612	26,296	27,980	29,665	31,355	33,047
2,073	35.0%	13,751	15,479	17,213	18,986	20,727	22,475	24,224	25,972	27,721	29,470	31,225	32,982	34,739

Table 79: Sensitivity Analysis of Cash Operating Costs and Grade to $NPV_{10.9\%}$ (ZARm)

	Grade delivered to plant (g/t)	6.36	6.82	7.27	7.72	8.18	8.63	**9.09**	9.54	10.00	10.45	10.90	11.36	11.81
OPEX (ZAR/Milled t)		-30.0%	-25.0%	-20.0%	-15.0%	-10.0%	-5.0%		5.0%	10.0%	15.0%	20.0%	25.0%	30.0%
2,950	30.0%	3,767	5,247	6,630	8,042	9,414	10,805	12,154	13,527	14,915	16,255	17,642	19,026	20,420
2,837	25.0%	4,345	5,764	7,134	8,538	9,939	11,298	12,648	14,025	15,406	16,751	18,142	19,546	20,924
2,723	20.0%	4,866	6,267	7,674	9,037	10,432	11,792	13,143	14,545	15,900	17,250	18,657	20,054	21,431
2,610	15.0%	5,405	6,772	8,171	9,569	10,926	12,287	13,640	15,038	16,399	17,751	19,181	20,561	21,938
2,496	10.0%	5,909	7,310	8,668	10,063	11,421	12,782	14,160	15,536	16,900	18,269	19,691	21,068	22,449
2,383	5.0%	6,413	7,806	9,200	10,557	11,916	13,278	14,658	16,037	17,404	18,797	20,198	21,579	22,966
2,269		6,950	8,304	9,695	11,053	12,411	13,803	**15,159**	16,540	17,926	19,306	20,710	22,096	23,483
2,156	-5.0%	7,447	8,835	10,190	11,548	12,910	14,303	15,662	17,049	18,454	19,817	21,227	22,613	24,001
2,042	-10.0%	7,945	9,331	10,685	12,046	13,437	14,805	16,170	17,571	18,966	20,334	21,744	23,130	24,518
1,929	-15.0%	8,469	9,826	11,182	12,549	13,939	15,314	16,679	18,103	19,483	20,851	22,261	23,648	25,035
1,815	-20.0%	8,971	10,322	11,685	13,076	14,447	15,822	17,204	18,620	20,000	21,368	22,778	24,165	25,552
1,702	-25.0%	9,467	10,825	12,190	13,584	14,956	16,335	17,741	19,136	20,517	21,885	23,295	24,682	26,069
1,588	-30.0%	9,968	11,329	12,722	14,092	15,469	16,866	18,258	19,653	21,034	22,402	23,812	25,199	26,592

Note: OPEX excludes Royalties in Sensitivity Analysis as the Royalties are dependent on operating margins.

Item 22 (f) – ECONOMIC ANALYSIS CONCLUSIONS

The economic analysis was done at the Blyvoor Capital (Pty) Ltd level. The value derived for the income approach only reflects the Mineral Reserve in the LoM. It is noted that Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The Mineral Reserve is economically viable with a best estimated NPV of ZAR15,159 million. IRR is not applicable to the Project as most of the capital has already been spent and there is no funding requirement. Capital totalling ZAR96 million (inclusive of contingencies) is required in year 1, which is offset by revenue from month 1. Table 80 shows a summary of the economic analysis.

Table 80: Project Economic Analysis Summary – Real Terms

Item	Unit	Blyvoor Gold
NPV @ 0%	ZAR million	53,436
NPV @ 5%	ZAR million	28,200
NPV @ 10%	ZAR million	16,525
NPV @ 10.9%	**ZAR million**	**15,159**
NPV @ 15%	ZAR million	10,618
NPV @ 20%	ZAR million	7,367
IRR	%	N/A
All-in Cost Margin	%	59%
Peak Funding Requirement (Annualised)	ZAR million	N/A
Payback	Years	N/A
Break-even Gold Price	USD/oz.	585

Note: Economic Analysis completed using forecast prices and exchange rates, with an average gold price of USD1,535/oz and an average exchange rate of ZAR/USD 17.00 over the LoM.

ITEM 23 - FINANCIAL VALUATION

Item 23 (a) - Introduction and Terms of Reference

Minxcon was commissioned by the Client to complete a compliant NI 43-101 Report inclusive of a CIMVAL Code compliant mineral asset valuation utilising the income approach and market approach. The intended use of the valuation is to present the Project value based on current information and market conditions for investment purposes.

The Qualified Valuator relied upon the Mineral Resources and Mineral Reserves as presented in this Report and signed off by the Qualified Person. The Qualified Valuator is satisfied with the manner in which the Mineral Resources have been stated and supports the methodology followed.

The Qualified Valuator assisted the Qualified Person in the calculation of the modifying factors applied to the Mineral Resources and Mineral Reserves and confidently relies upon the information provided.

Item 23 (b) - Valuation Approaches and Methods

The following valuation approaches are three internationally accepted methods of valuing mineral projects, and are illustrated in Table 81:-

- **Income Approach**: used to value development and production properties in the production phase. This method relies on the "value-in-use" principle and requires determination of the present value of future cash flows over the useful life of the mineral asset.
- **Market Approach**: used to value exploration and development properties, based on the relative comparisons of similar properties for which a transaction is available, in the public domain. The market approach relies on the principle of "willing buyer, willing seller" and requires that the amount obtainable from the sale of the mineral asset is determined as if in an arm's-length transaction.
- **Cost Approach**: used to value early-stage exploration properties. The valuation is dependent on the historical and future exploration expenditure.

Table 81: Valuation Approaches for Different Types Of Mineral Properties

Valuation Approach	Exploration Properties	Mineral Resource Properties	Development Properties	Production Properties
Income	No	In some cases	Yes	Yes
Market	Yes	Yes	Yes	Yes
Cost	Yes	In some cases	No	No

Income Approach

The discounted cash flow ("DCF") valuation is based on future free cash flow discounted to present value. This analysis is widely used within investment banking and company valuation. The DCF is based on the production schedule and all costs associated to develop, mine and process the Reserve. Relevant taxation and other operating factors, such as recoveries, stay-in-business costs and contingencies are incorporated into the valuation to produce a cash flow over the life cycle of the project.

It is generally acceptable to use Mineral Resources in the cash flow (income) approach if Mineral Reserves are also present. These Mineral Resources and Mineral Reserves must be signed off by a Competent Person in accordance with CIM definition standards (or other required Reporting Code). Additionally, Mineral Reserves must be based on a Life of Mine Plan for an operating (going concern) mine, or at least a PFS for a mine project.

Market Approach
The market approach was considered for this Project, as per CIMVal Code requirements. The market approach requires the comparison of the project with relatively recent transactions of resource assets that have similar characteristics to those of the asset being valued. It is generally based upon a monetary value per unit of the resource (where available), or per unit of defined tonnes (Measured, Indicated and Inferred). Typically, the comparable method uses the transaction price of comparable assets to establish a basis for the specific asset to be valued. The difficulty of this approach within the mining industry is that there are no true comparables, as each asset is unique with respect to key factors such as geology, mineralisation, costs, stage of exploration, infrastructure, as well as peripheral issues such as social, political, and environmental aspects and the valuator needs to take that into consideration during the valuation.

When transactions of mineral assets do occur, they rarely involve strictly cash, leaving the valuator the task of converting blocks of shares, royalties, or option terms into present-day monetary equivalents. In the first cases, the defined value of the share (inclusive of whether it is transacted at a premium or discount), at the time of the transaction, is applied to convert the share volume into a cash value. The same principle is applied to royalties and option terms to convert these transaction preferences into a cash basis.

Cost Approach
The cost approach relies on historical and/or future expenditure on the property and involves estimation of the depreciated cost of reproducing or replacing the asset and improvements. Reproduction cost refers to the cost at a given point in time of reproducing a replica asset, whereas replacement cost refers to the cost of reproducing improvements of equal utility. In cases where insufficient confidence exists in the technical parameters of the mineral asset, valuation methods rely almost entirely on the principle of historical cost, implying that an asset's value is correlated to the money spent on its acquisition, plus a multiple of expenditures. A prospectivity enhancement multiplier ("PEM") is a factor applied to the total cost of exploration, the magnitude of which is determined by the level of sophistication of the exploration for which positive exploration results have been obtained.

I. Methodology Justification

The Valuator performed an independent valuation on the Project's Mineral Resources. Owing to the fact that the Project has a budget plan based on a compliant mine plan with stated Mineral Reserves, the income approach was applied on the total mineable reserve incorporated in a detailed mine plan as the primary valuation methodology in determining the value of the asset.

Based upon a review of technical data, the Market Approach using the comparable methodology was selected as a second valuation methodology. This reflects the fact that:-

- declared Mineral Resources are available on the Project; and
- similar mineral property transactions were available for review.

Item 23 (c) – Valuation Date

The effective date of this valuation is 1 March 2021. The Competent Valuator is not aware of any material changes that occurred between the valuation date and report date.

Item 23 (d) – Valuation Results

I. Income Approach

The Income Approach was considered for the valuation of the mineral assets. This is carried out by using the DCF method on a Free cash flow to the firm ("FCFF") basis, to calculate the nett present value ("NPV") and subsequently, the intrinsic value of the Project in real terms. Minxcon utilised the DCF analysis as per Item 22 – Economic Analysis as the basis of the income approach valuation.

DCF Results

Table 82 details the DCF valuation summary. The DCF analysis yielded a best-estimated value of ZAR15,159 million at a real discount rate of 10.9%. There is no funding requirement as the majority of capital has already been spent and any additional capital is offset by revenue from month 1. Total capital in year one totals ZAR96 million.

Table 82: Project Valuation Summary – Real Terms

Item	Unit	Blyvoor Gold
NPV @ 0%	ZAR million	53,436
NPV @ 5%	ZAR million	28,200
NPV @ 10%	ZAR million	16,525
NPV @ 10.9%	**ZAR million**	**15,159**
NPV @ 15%	ZAR million	10,618
NPV @ 20%	ZAR million	7,367
IRR	%	N/A
All-in Cost Margin	%	59%
Peak Funding Requirement (Annualised)	ZAR million	N/A
Payback	Years	N/A
Break-even Gold Price	USD/oz.	585

Note: Income Approach Valuation completed using forecast prices and exchange rates, with an average gold price of USD1,535/oz and an average exchange rate of ZAR/USD 17.00 over the LoM.

II. MARKET APPROACH USING COMPARABLE METHODOLOGY

i. Methodology

The following methodology was employed:-

- Industry arm's-length transactions were sourced and expressed as a unit value (USD/oz).
- The Mineral Resource category ratios for the population in the database must be calculated to assign unit values for each transaction per resource category. These are calculated by first taking all transactions in the database within a specific Mineral Resource category and plotting a distribution curve of the unit values (total transaction value divided by total attributable Resources) against the proportion for a specific Mineral Resource category of total Mineral Resources. The resultant outcome is a curve which illustrates the values of a specific category given a specific proportion of the Mineral Resource category to total Mineral Resources. The ratio between Measured, Indicated and Inferred could therefore be determined and applied to each transaction based on its distribution of Inferred, Indicated and Measured tonnes.
- Each of the unit values was then adjusted for the specific economic price environment to construct a database in today's money terms for the gold industry and subsequently a value curve and unit values for the different Mineral Resource categories.
- Project-specific risk was allocated for the areas in which Mineral Resources exist. The Project principal risk criteria were measured against these industry valuation standards in the decision-making process to determine a project valuation index.
- Subsequently, an adjusted valuation curve was defined for the Project, whereby the transaction values were increased or lowered, based on the Project risk index.
- Considering the deviation of the Project valuation indices below or above the industry mean, the industry value was adjusted to obtain a risk-adjusted value for the Project.
- A range for minimum and maximum values was provided for the Mineral Resources.

ii. Historic Transaction Price Adjustment for Current Day Terms

The transactions used to construct the valuation curve for this Report occurred at a specific point in time and, therefore, at a specific USD-denominated gold price. The value a buyer is prepared to pay and the seller is prepared to sell depends largely on the commodity price cycle. In order to report historic transactions in current terms and compare all transactions on the same economic level, the gold price was determined for each historic transaction at the time it took place. Historic transaction values were then adjusted to current terms, by determining the difference in gold price from the time of these historic transactions to the current USD/oz gold price.

The current USD/oz gold price was determined by using the gold price for the three months preceding the effective date of this Report, together with the twelve-month forecast for the gold price, to calculate an appropriate price level as at the effective date of the Project valuation (see Table 83).

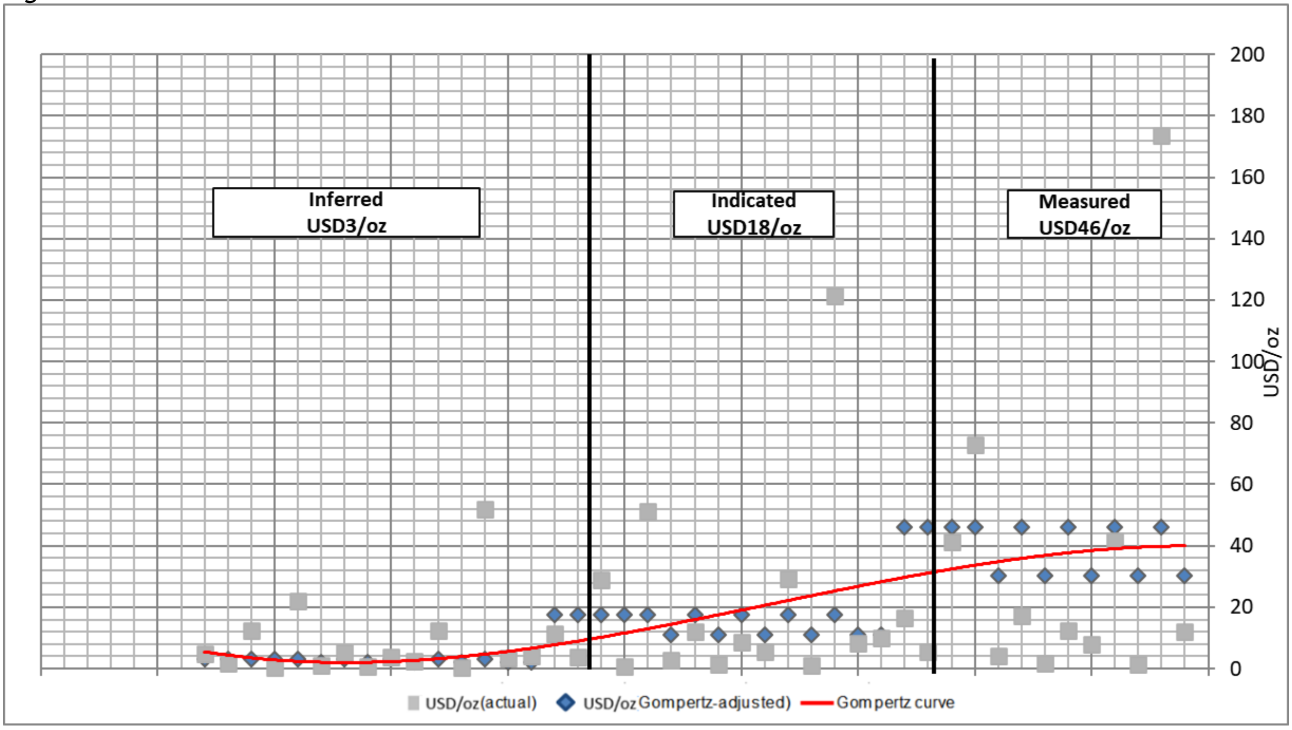
Table 83: Price Used for Current Day Adjustment

Date	Gold	Exchange Rate
	USD/oz	ZAR/USD
Oct-20	1,900	16.47
Nov-20	1,863	15.56
Dec-20	1,857	14.90
3 Month Historic	**1,873**	**15.64**
2021	1,892	15.39
Average	**1,883**	**15.51**

iii. Value Determination

Subsequent to the normalisation of each transaction to current transaction values, the Qualified Valuator plotted the values of these arm's-length historical transactions in relation to their specific Mineral Resource classification. This methodology, when applied to exploration and resource transactions, provides guidance in terms of a range of transaction values for the property, asset or project being analysed and evaluated. This principle is used to reflect the current market expectation that is likely to drive the calculated market value. Figure 123 demonstrates the valuation curve for Mineral Resources according to Mineral Resource categories.

Figure 123: Valuation Curve



iv. *Modifying Factors and Material Issues*

A statement of modifying factors has been included, separately summarising material issues relating to each applicable modifying factor which include but may not be limited to premises, assumptions, restrictions, mining, metallurgical, economic, marketing, legal, environmental, social, and governmental considerations. These modifying factors are normally applied when converting Mineral Resources to Mineral Reserves.

The Canadian Institute of Mining ("CIM") derived a list of principal project risks, which Minxcon utilised to create a valuation parameter matrix for determining mining project risk, weighing different criteria such as depth, geology, mining process and legal tenure. Minxcon adopted this matrix and modified classification and ratings to suit parameters that are sensitive to this commodity. Minxcon also incorporated an additional category, namely the Socio-economic and Environmental factor. Various ranges for each of these criteria applicable to the southern African gold industry were determined and used to construct a project risk index that relates this Project to that of the gold industry from a valuation perspective (Figure 107).

Figure 124: Weighting of Valuation Risk Associated Parameter Matrix

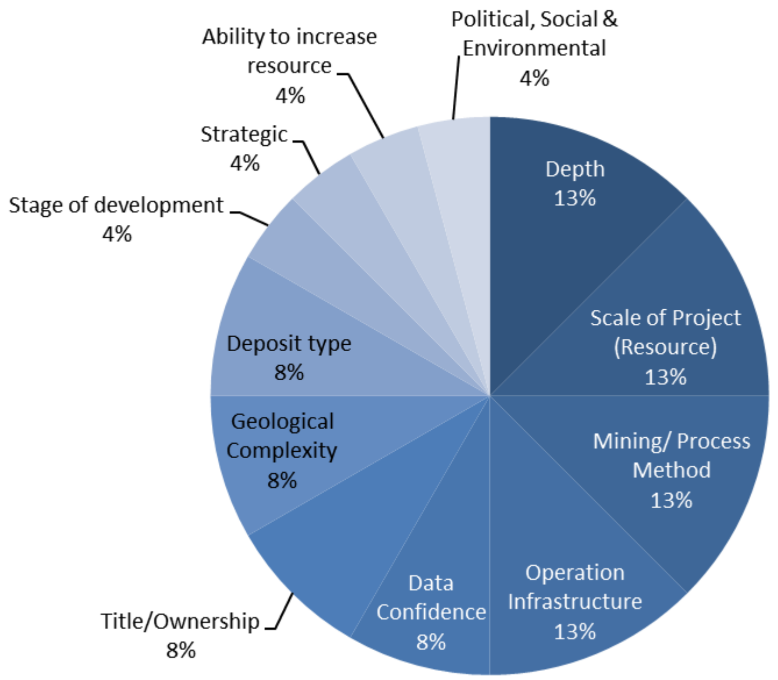
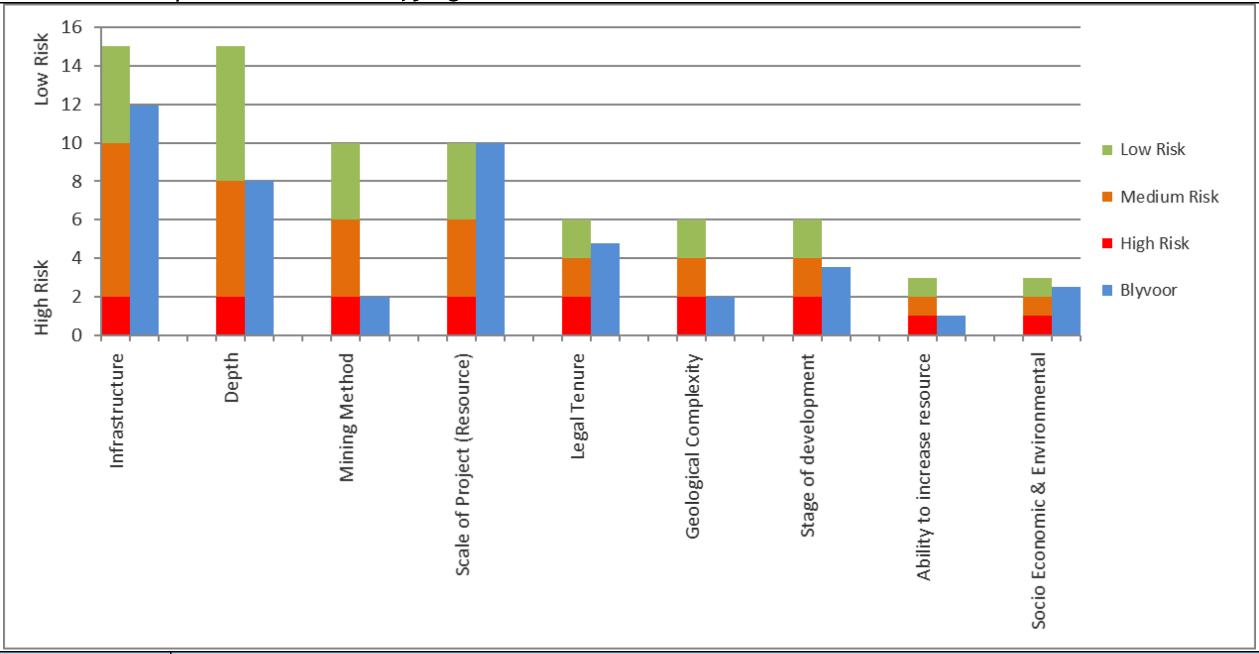


Table 84 summarises the Project modifying factors used in the valuation for the Mineral Resources. The numbers are indicative of the risk of each item compared to that of the industry. The higher the number the lower the risk. The higher the number the lower the risk and therefore the willingness of a buyer to place a premium on the project or operation.

Table 84: Principal Valuation Modifying Factors



Characteristics	Description
Infrastructure	The Blyvooruitzicht Gold Mine was liquidated in 2013 and as a result all operations on the mine were ceased. Illegal miners subsequently occupied the site and stripped the majority of the electrical infrastructure on the surface. The underground workings at No. 5 Shaft below 29 Level are assumed to have subsequently been flooded and are currently inaccessible. The No. 5 Shaft Complex has been reopened and has been returned to operational readiness together with a new treatment plant having been constructed. Production activities have recommenced.
Depth	The two main reefs considered for economic extraction are the Carbon Leader Reef and Middelvlei Reef located between 1,800 to 2,700 m below surface. Both reefs are narrow vein reefs.
Mining Method	Gold is typically mined open pit or surface, and by mechanised or conventional mining methods. Over 95% of primary gold production in South Africa comes from underground mines. The orebodies in these mines are narrow and further characterized by geological discontinuities, inhibiting the application of mechanization and automation. South African productivity typically ranges from 1.5oz/TEC for deep level conventional mining to 5-6 oz/TEC for mechanised operations and 6-7 oz/TEC for open pit operations. Productivity for surface operations is around 9 oz/TEC. The mining method that will be employed for the Blyvoor Mine is SBM.
Scale of Project (Resource)	Gold mines often have large resources with the top 10 biggest gold resources all containing >25 Moz. A gold mine having a resource of > 5 Moz is regarded as a significant resource whilst <1 Moz is regarded as a small-scale operation. Mineral Resources in the Blyvoor Mine are stated at 11.37 Moz in the Measured and Indicated categories and 11.29 Moz in the Inferred category which is a significant orebody in terms of size.
Legal Tenure	Security in terms of legal tenure increases from acceptance of application for a prospecting right to a prospecting right being granted and then finally registered. This also applies for mining rights. Underground gold mining at Blyvoor is permitted through a granted mining right, Environmental Authorisation and water use licence are in place
Geological Complexity	Blyvoor is mining a typical Wits orebody. The majority of the Blyvoor ore body is structurally relatively undisturbed. In the western section, however, the area is structurally complex due to the presence of the Master Bedding Fault. Major structures in close proximity to recent mining activities are the Boulder and Alpha Dykes. The Boulder Dyke has a downthrow of 40 m to 95 m to the north and strikes east-west. Initial mining will be extracting a large unmined pillar in close proximity to the shaft
Stage of development	Stage of development is categorised according to whether the mine is operating, is in feasibility stage or only has a compliant Mineral Resource. This Project is at an operational level.
Ability to increase Mineral Resource	Potential for an increase will depend on a higher gold price which will lower the paylimit. Some remnant pillars have also been excluded. The total potential additional ounces are however limited.
Political, Socio Economic and Environmental	There are no inhibiting social or environmental issues that Minxcon is aware of.

Note: As the valuation parameter increases, the Project value will increase, and the risk profile will decrease.

The analysis above rates the project at medium to low in comparison to industry criteria and the value was therefore adjusted accordingly.

v. *Value Based on Comparable Methodology*

The value for the Mineral Resources as calculated in the valuation curve (Figure 106) is adjusted for the risk inherent to the Project operations as calculated by applying the modifying factors described above.

The values based on the Comparable Method are displayed in Table 85 and Table 86. The values indicated are for the Mineral Resource and are on a 100% attributable basis. Based on the current Measured and Indicated Mineral Resources, the best estimated full value of ZAR10,378 million was calculated at USD60.76/oz Au. Based on the current Inferred Mineral Resources, the best estimated full value of ZAR491 million was calculated at USD2.89/oz Au, as shown below.

Table 85: Market Approach Valuation based on Measured and Indicated Mineral Resources

Area	Resource Area	Mineral Resource Category	Tonnage	Grade	Gold Value	Value
			'000 t	g/t	USD/oz	ZARm
Blyvoor	CL + MR	Measured	41.95	7.30	66.28	9,810
Blyvoor	CL + MR	Indicated	8.13	5.84	25.14	577
Total			**50.08**	**7.06**	**60.76**	**10,387**

Table 86: Market Approach Valuation based on Inferred Mineral Resources

Area	Resource Area	Mineral Resource Category	Tonnage	Grade	Gold Value	Value
			'000 t	g/t	USD/oz	ZARm
Blyvoor	CL + MR	Inferred	79.77	4.40	2.89	491
Total			**79.77**	**4.40**	**2.89**	**491**

Blyvoor is located in the Witwatersrand Basin and is targeting to mine typical gold mineralisation for the area. A comparison of gold transactions for Projects with similar spread of Mineral Resources and USD/oz from within the Witwatersrand Basin was undertaken, as shown in Table 87.

Table 87: Witwatersrand Gold Transactions of Similar Nature

Project	Type	Acquirer	Seller	Date	Purchase Price	Value	Time Adjusted Value
					ZARm	USD/oz	USD/oz
Evander	Wits	Pan African + Wits Gold	Harmony	Jan 2012	1,700	6.74	7.3
Moab Khotsong	Wits	Harmony	AngloGold Ashanti	Feb 2018	3,548	18.36	26.0
Golden Reefs	Wits	Bema Gold	EAGC Ventures	May 2005	634	8.32	49.5

III. Range Of Values

i. Discounted Cash Flow

A range of values was calculated for the DCF valuation by determining an upper and lower range. The upper and lower ranges were determined by applying a maximum and minimum standard deviation on the input parameters listed below. The variance on the commodity price and exchange rate is consistent with the high (75th percentile) and low (25th percentile) variance to the median based on consensus forecasts. The grade is not expected to vary significantly as it is based on the mineable Reserve with a high level of confidence, however there is a risk of grade varying with mining cut thickness due to drilling inaccuracy while stoping. The variance in costs is consistent with the confidence in a PFS study cost estimation of 15% to 25%; Minxcon applied a 20% variance. The input parameters are as follows:-

- Gold Price (USD/oz);
- Exchange Rate (ZAR/USD);
- Grade (g/t);
- Mining OPEX;
- Plant OPEX;

- Other OPEX;
- Mining CAPEX; and
- Plant and other CAPEX.

In order to evaluate risk, a simulation was developed using a population of 5,000 simulations. This allows the simulation of random scenarios to determine the effect thereof. Minxcon simulated various input parameters using a range in which a parameter is expected to vary. This is detailed in Table 79.

Table 88: Input Ranges (Income Approach)

Item	Min	Max	Current	Current Basis Over LoM	Min	Max
Commodity Price (USD/oz)	97%	108%	1,535	Average	1,483	1,652
Exchange Rate (ZAR/USD)	95%	102%	17.0	Average	16.17	17.42
Grade (g/t)	90%	110%	9.1	Weighted Average	8.2	10.0
Mining OPEX (ZAR/t)	90%	110%	1,988	Weighted Average	1,789	2,186
Plant OPEX (ZAR/t)	90%	110%	199	Weighted Average	179	218
Other OPEX (ZAR/t)	90%	110%	83	Weighted Average	75	91
Mining CAPEX (ZARm)	90%	110%	1,335	Total including contingencies	1,202	1,469
Plant CAPEX (ZARm)	90%	110%	63	Total including contingencies	56	69

Note: CAPEX excludes SIB since this is driven by operating costs.

ii. Market Approach

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

- Measured, Indicated and Inferred Determined Average (USD/oz).

This is detailed in Table 80 with the inputs of the Mineral Resource classification displayed in USD/oz. The general industry variance that can be expected for Inferred Mineral Resources is 50%, 25% for Indicated Mineral Resources and 10% for Measured Resources. This has been applied as minimum and maximum industry ranges.

Table 89: Input Ranges (Market Approach)

	Min	Max	Current	Min	Max
Inferred (USD/oz)	75%	125%	3.28	2.46	4.10
Indicated (USD /oz)	90%	110%	17.51	15.76	19.26
Measured (USD/oz)	95%	105%	46.15	43.84	48.46

iii. Outcome

By applying these ranges, a lower and upper value were determined for the DCF and comparable valuation as displayed in Table 90, Table 91 and Table 92. The first valuation includes the income approach for the total Mineral Reserves. After applying the risk factors described above, a range of values was calculated for the income approach of between ZAR13,944 million and ZAR16,768 million with a median DCF value of ZAR15,159 million. For the market approach, the Project value based on Measured and Indicated Mineral Resources was calculated at between ZAR10,142 million and ZAR10,639 million with a best estimated market value of ZAR10,387 million. Based on Inferred Mineral Resources, the value was calculated at between ZAR430 million and ZAR552 million with a best estimated market value of ZAR491 million.

Table 90: Project Income Approach Range of Values Derived

Valuation Approach	Minimum Value	Median Value	Maximum Value
	ZARm		
Full Value			
Income Approach	13,944	15,159	16,768

Table 91: Project Range of Market Values Derived based on Measured and Indicated Mineral Resources

Mineral Resource Category	Total Au Content	Lower Price	Risk-Adjusted Price	Upper Price	Lower Value	Median Market Value	Upper Value
	Moz	USD/oz			ZARm		
Full Value							
Measured	9.85	64.80	66.28	67.77	9,591	9,810	10,031
Indicated	1.53	24.58	25.14	25.71	564	577	590
Combined	**50.08**	**59.32**	**60.76**	**62.23**	**10,142**	**10,387**	**10,639**

Table 92: Project Range of Market Values Derived based on Inferred Mineral Resources

Mineral Resource Category	Total Au Content	Lower Price	Risk-Adjusted Price	Upper Price	Lower Value	Median Market Value	Upper Value
	Moz	USD/oz			ZARm		
Full Value							
Inferred	11.28	2.54	2.89	3.25	430	491	552
Combined	**11.28**	**2.54**	**2.89**	**3.25**	**430**	**491**	**552**

Minxcon has higher confidence in the income approach as the value is derived from a PFS and is based on a mine plan derived from Mineral Reserves. A final fair value of ZAR15,159 million is therefore recommended for the Project.

Item 23 (e) - Previous Valuation

No code-compliant valuations for the Blyvoor Mine have been undertaken in the past two years.

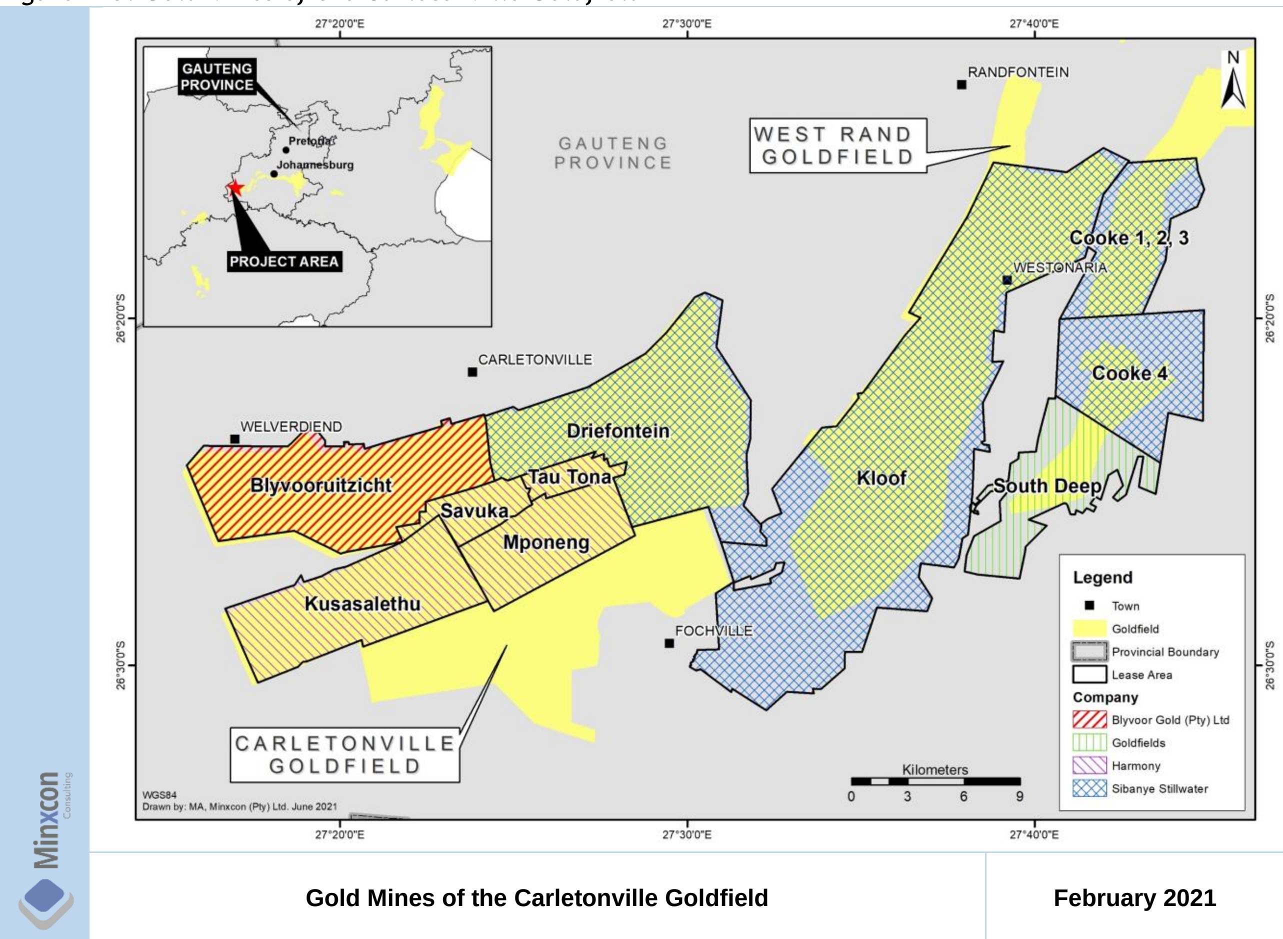
ITEM 24 – ADJACENT PROPERTIES

Item 24 (a) – Public Domain Information

The Carletonville Goldfield contains some of the largest and deepest underground mines in the world. In 2015, the five deepest operating mines in the world were located in this goldfield. The goldfield is the most significant gold deposit in the history of mining, and by 1986 had produced some 20,000 t of gold with a further 2,000 t sourced from the Deelkraal and Elandsrand (Kusasalethu) mines (Engelbrecht *et al*, 1986). Some 3,614 t of gold were sourced from the Carbon Leader Reef, at an average grade of 20.9 g/t Au.

A number of gold mines occur in close proximity to each other, including Blyvoor, Tau Tona, Savuka, Mponeng, Driefontein and Kusasalethu. The relative location of these is illustrated in Figure 125.

Figure 125: Gold Mines of the Carletonville Goldfield



The prolific Mponeng Mine, formerly known as the Western Deep Levels South Shaft, is the deepest mine in the world at mining depths of between 2,800 m and 3,400 m via a twin-shaft system (AGA, 2019a). The mine, inclusive of all assets and liabilities, was held by AGA and sold to Harmony in February 2020 (AGA, 2020), with the sale concluded in September 2020. Both the VCR and Carbon Leader Reef are targeted. Ore is treated and smelted at the Mponeng Plant where it initially undergoes semi-autogenous milling after which a conventional gold leach process incorporating liquid oxygen injection is applied. Gold is extracted by carbon-in-pulp ("CIP") technology. Mponeng Gold Mine is undergoing expansion to extend the life of mine beyond 2040. Mponeng delivered an 11% year-on-year improvement in production in 2019. Some 243,000 oz of gold were recovered in 2019 (AGA, 2019a).

Tau Tona Mine, or Western Deep 3 Shaft, of AGA is the second deepest mine in the world and commenced operations in 1962. Savuka, which lies immediately south of the Blyvoor mining right area, was included in the Tau Tona operation in 2013. Tau Tona and Savuka exploited mainly the Carbon Leader Reef and to a lesser extent the VCR. Tau Tona employed a longwall mining method via a three-shaft system, supported by secondary and tertiary shafts at depths of between 1,850 m and 3,450 m. The mining depth was extended to 3,900 mbs with the addition of a secondary shaft. Owing to poor ground conditions, seismicity and Savuka being exhausted, Tau Tona was placed on orderly closure in late 2017. The operations formed part of the 2020 sale transaction to Harmony (AGA, 2020).

The Driefontein Mine of Sibanye Stillwater was formed from the amalgamation of the East Driefontein and West Driefontein mines in 1999 and is the fourth deepest mine in the world at 3,400 m. Driefontein operates under new order mining rights covering a total of 8,561 ha, exploiting the Carbon Leader Reef, VCR and Middelvlei Reef. It is an underground mine with a LoM until 2028, with surface reserves represented by rock dumps and TSFs that have accumulated throughout the operating history of the mine. Driefontein uses a scattered-conventional breast mining and pillar extraction and has six operating shaft systems (of a total of nine shaft complexes) at depths of between 700 m and 3,420 m, as well as three metallurgical plants. In 2019, the mines produced 164,640 oz of gold (Sibanye Stillwater, 2019, 2021).

Kusasalethu Mine (formerly Elandskraal, an amalgamation of Elandsrand and Deelkraal mines) was purchased by Harmony from AGA in 2001. It is the fifth deepest mine in the world at 3,388 m. The mine comprises twin vertical and twin sub-vertical shaft systems. The sub-vertical shafts, which access the deeper parts of the VCR, have been extended to a depth of 3,600 m by the Kusasalethu deepening project. Conventional mining methods are employed, and ore is treated at the Kusasalethu Plant (Harmony, 2020). In financial year 2020, the mine produced 96,934 oz of gold (Harmony, 2020).

Item 24 (b) – SOURCES OF INFORMATION

In compiling this Item of the Report, Minxcon relied on information that has been made available to the general public and has not substituted information gaps with insider-knowledge for any of the operations that have been made mention. To this end, the following sources of information have been utilised:-

- AngloGold Ashanti (2019a). Operational Profile 2019 – Mponeng, South Africa. 4pp.
- AngloGold Ashanti (2019b). Mineral Resource and Ore Reserve Report 2019. 123pp.
- AngloGold Ashanti (2020). Annual Report Pursuant to Section 13 or 15(D) of the Securities Exchange Act of 1934. United States Securities and Exchange Commission. As filed on 27 March 2020.
- Harmony (2020). Mineral Resources and Mineral Reserves Report 2020. 142pp.
- Sibanye Stillwater (2019). Mineral Resource and Mineral Reserve Report 2019. 169pp.
- Sibanye Stillwater (2021). Driefontein http://www.sibanyestillwater.com/our-business/southern-africa/gold/driefontein/overview. Accessed on 10 February 2021.

Item 24 (c) – VERIFICATION OF INFORMATION

Minxcon has exclusively utilised information for this Item 24 from sources that are publicly available. The information has not been independently verified by Minxcon.

Item 24 (d) – APPLICABILITY OF ADJACENT PROPERTY'S MINERAL DEPOSIT TO PROJECT

The mines as described are all located in the Carletonville Goldfield and typically target mineralisation of the same style. Blyvoor Mine targets the Carbon Leader and Middelvlei Reef, which are not targeted by all mines as described in this Section. Neighbouring property mineralisation is not necessarily indicative of mineralisation at Blyvoor.

Item 24 (e) – Historical Estimates of Mineral Resources or Mineral Reserves

Mineral Resources and Mineral Reserves presented here in Table 93 and Table 94, respectively, are extracted from the applicable company Mineral Resources and Mineral Reserves reports and press releases (Item 24 (b)).

Table 93: Adjacent Properties Mineral Resource Estimates

Operation	Effective Date	Mineral Resource Category	Tonnes	Grade	Gold	Compliance
			Mt	g/t	Moz	
Kusasalethu	30-Jun-20	Total	23.4	9.31	6.99	SAMREC Code (2016)
Driefontein	31-Dec-19	Total	80.9	9.50	24.73	SAMREC Code (2016)
Mponeng	31-Dec-19	Total	59.1	16.91	32.14	SAMREC Code (2016)

Table 94: Adjacent Properties Mineral Reserve Estimates

Operation	Effective Date	Mineral Reserve Category	Tonnes	Grade	Gold	Compliance
			Mt	g/t	Moz	
Kusasalethu	30-Jun-20	Total	3.1	7.24	0.73	SAMREC Code (2016)
Driefontein	31-Dec-19	Total	11.6	7.1	2.62	SAMREC Code (2016)
Mponeng	31-Dec-19	Total	36.2	9.54	11.10	SAMREC Code (2016)

ITEM 25 – OTHER RELEVANT DATA AND INFORMATION

There is no further data or information relevant to the Project or operations.

ITEM 26 – INTERPRETATION AND CONCLUSIONS

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

Mineral Resources:-

- The geology and structure of the mine is well understood.
- The operation is a typical mature Witwatersrand Gold Mine with years of historical data.
- Due to the correction of errors in the database, the Mineral Resource Estimate was rerun by Minxcon
- There has been no significant change in the Mineral Resource Classification, however due to data changes, there are local changes in the grade estimate.
- The Resources reported saw the most notable decreases because of data changes and the inclusion of geological losses where there was previously no geological loss applied.
- The Resources saw the most notable increases as a result of the inclusion of "Not in Resource", "Below 2g/t" and internal pillars (previous rock mechanic pillars), which will all form part of the mine plan. In addition, the methodology of reporting improved the grade along with the resolution of the grade reported.

Mining:-

- SBM has been selected as the mining method.
- Although SBM has been proven as a mining method, the viability of the method on a large-scale operation is yet to be confirmed.
- The mining sequence is logical. Mining commences in areas in which require minimal opening-up and re-development, in close proximity to the shaft area.
- The availability and accessibility of the initially planned mining areas on 15 Level and 27 Level has been confirmed by reconnaissance. Continuous reconnaissance has been planned to confirm the availability of all planned mining areas.
- The mine plan is subject to opening up of the existing mining infrastructure. Opening up activities have been planned for.
- Initially, cage hoisting in the No. 5A Sub-vertical Shaft from 27 Level to 15 Level (approximately 548 m) is planned until the mid-shaft hoisting arrangement has been completed.
- The mine plan targets Measured Mineral Resources and Indicated Mineral Resources only, with no economic benefit being derived from Inferred Mineral Resources.

Engineering and Infrastructure:-

- The No. 5 Shaft operation is well-established and equipped. Repairs have been conducted on equipment and infrastructure that had been damaged and/or vandalised since the operation's closure and this infrastructure has been restored to service. The established equipment and infrastructure includes offices, change houses, lamp room, Eskom and Blyvoor electrical sub-stations, winding plants, main ventilation fans, shafts, pumping infrastructure, as well as a sewage plant.
- Power supply and electrical distribution infrastructure had been extensively damaged and vandalised. Refurbishment and re-equipping of the power supply and electrical distribution infrastructure has been completed and recommissioned.
- Potable water is sourced from Rand Water. A supply line has been installed and connected to the existing supply line leading onto the Blyvoor Mine lease area.
- Service water will mainly be sourced from underground and the estimated available 25 Ml/day of fissure water ingress is deemed sufficient for the planned production rates.
- Owing to No. 5A Sub-vertical Shaft being flooded from 10 m above 29 Level, ore cannot be hoisted from the installed loading station located on 43 Level. Construction of a mid-shaft loading station on

27.5 Level will be required to facilitate rock hoisting in No. 5A Sub-vertical Shaft with the rock winder. During the development and construction of this mid-shaft loading station, cage hoisting will be utilised to transport ore and, where necessary, the waste from 27 Level to 15 Level.

- Ventilation of the underground workings is a critical part of the mining operation. A review of the initial mining plan has been conducted by a ventilation specialist and it has been deemed that utilisation of only one ventilation fan and no refrigeration will be required during production above 31 Level. When mining at a production rate of 80 ktpm below 31 Level refrigeration will be required together with the utilisation of the second installed main ventilation fan.
- Once mining moves further away from the No. 5 Shaft Complex, establishment of ventilation fans at the historic Doornfontein No. 2 Shaft and the Blyvooruitzicht No. 3 Ventilation Shaft will be required.
- Dewatering of the underground workings will commence one year prior to mining proceeding below 2 Level. Initial dewatering will be conducted with submersible pumps via No. 5A Sub-vertical Shaft and No. 5 Shaft. Once the permanent pump stations and associated infrastructure below 31 Level have been replaced and recommissioned, this infrastructure and equipment will be utilised to dewater the underground workings. The selected pumping equipment and infrastructure will have sufficient capacity for the required dewatering and sufficient capital has been allowed for the acquisition thereof.
- Re-equipping and recommissioning of Incline shafts in the old Blyvooruitzicht section will be required to sustain the targeted production rates. This will include rails, sleepers, winders, ore tipping arrangements and all services required for mining and re-equipping of the old workings. Sufficient capital has been allowed for this purpose.

Processing:-

- Recent metallurgical testwork has not been conducted. However, the mine was in production for over 75 years and the metallurgical properties are well understood. A recovery of over 95% was achieved historically and therefore the planned recovery of 94.5% is deemed appropriate.
- The process plant can be upgraded from the current 40 ktpm to 80 ktpm at a cost of ZAR54 million. Increased buffer capacity and increasing the hours of operation of the crushing circuit will be required. An additional grinding mill and more tanks for conditioning and leaching will be required.
- OPEX was estimated at ZAR208/t and ZAR177/t when operating the process plant at 40 ktpm and 80 ktpm, respectively.
- The current capacity of TSF No. 6 where the tailings will be deposited does have sufficient space for the entire Mineral Reserve of 20.7 Mt.

Economic Analysis:-

- The Blyvoor Mine plan analysed is financially feasible at a 10.9% real discount rate.
- The DCF value of ZAR15,159 million (full value) for the Blyvoor Mine was calculated at a real discount rate of 10.9%.
- IRR was not deemed applicable since most of the pre-production capital has been spent.
- Blyvoor Mine has an all-in cost margin of 59%, which is high compared to similar mines.
- No funding is required as majority of initial capital has been spent. Capital planned in first year totals ZAR96 million, offset by revenue.
- The Project is most sensitive to grade, commodity prices and exchange rate.
- The Project has a break-even gold price of USD585/oz including capital.
- All-in sustainable costs for the Blyvoor Mine amount to ZAR2,736/milled t, which equates to USD570/oz.
- All-in costs for the Blyvoor Mine amount to ZAR2,810/milled t, which equates to USD585/oz.

- The relatively high cost per milled tonne can be attributed to the SBM method, which allows for hoisting ore at a higher grade.
- The low cost per recovered ounce is a function of the high grades (averaging 9.1 g/t) being processed.

Financial Valuation:-

- A range of values was calculated for the income approach of between ZAR13,944 million and ZAR16,768 million with a median DCF value of ZAR15,159 million (100% attributable).
- A range of values was calculated for the comparable methodology of the market approach. The Project value based on Measured and Indicated Mineral Resources was calculated at between ZAR10,142 million and ZAR10,639 million with a best estimated market value of ZAR10,387 million. Based on Inferred Mineral Resources, the value was calculated at between ZAR430 million and ZAR552 million with a best estimated market value of ZAR491 million (100% attributable).
- Minxcon has higher confidence in the income approach as the value is derived from a PFS and is based on a mine plan derived from Mineral Reserves. A final fair value of ZAR15,159 million is therefore recommended for the Project.

ITEM 27 – RECOMMENDATIONS

Minxcon recommends the following for the Project:-

Mineral Resources:-

- It is recommended that when mining starts, the channel widths be reviewed in the areas where the current estimate of these widths is in question. The channel width data can then be remodelled for more reliable channel width modelling.

Mining:-

- Reconnaissance should be conducted on an ongoing basis to assess the availability and condition of underground access and workings that are planned after year 5. Re-planning may need to be undertaken where required if the reconnaissance identifies inaccessible areas.
- The capital estimate of the shaft refurbishment, dewatering, pump stations, sub-stations, mining equipment and rail-bound equipment needs to be updated with the knowledge gained from the reconnaissance.
- A detailed ventilation plan inclusive of refrigeration should be developed for the later years of operation. Ventilation simulations should be conducted to determine the ventilation requirements beyond the first five years of mining.
- Ongoing rock engineering investigations and re-modelling are required to optimise the extraction and support methodologies.
- It is recommended that a risk register and seismic monitoring plan is implemented considering the Rock Engineering Codes of Practice for SBM.

Engineering and Infrastructure:-

- Cage hoisting is a difficult and time-consuming process and although it has been estimated that sufficient cage hoisting capacity (22.5 ktpm) exists and this arrangement will be temporary. Postponement of the establishment of the mid-shaft loading arrangement may constitute a risk and fast tracking the establishment is being considered. Proper controls and management of the cage hoisting process will however be required during the cage hoisting phase, as congestion on shaft stations can easily cause delays and production constraints.
- Detailed designs for the mid-shaft loading stations are required.
- Investigations need to be conducted to fully understand the requirements for re-equipping the old Blyvooruitzicht section Incline shafts.
- A ventilation study and simulation need to be conducted to fully understand the ventilation and cooling requirements once mining in the extremities of the project areas as well as when mining proceeds below 31 Level.

ITEM 28 – REFERENCES

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GLOSSARY OF TERMS

Table 95: Glossary of Terms

Term	Definition
Alluvial	The product of sedimentary processes in rivers, resulting in the deposition of alluvium (soil deposited by a river).
Argillite	A sedimentary rock composed mainly of clay minerals.
Assay laboratory	A facility in which the proportions of metal in ores or concentrates are determined using analytical techniques.
Auriferous	A synonym for gold-bearing.
Capital Asset Pricing Model (CAPM)	A model that describes the relationship between risk and expected return.
Carbon-In-Leach (CIL)	A process similar to CIP (described below) except that the ore slurries are not leached with cyanide prior to carbon loading. Instead, the leaching and carbon loading occur simultaneously.
Carbon-In-Pulp (CIP)	A common process used to extract gold from cyanide leach slurries. The process consists of carbon granules suspended in the slurry and flowing counter-current to the process slurry in multiple-staged agitated tanks. The process slurry, which has been leached with cyanide prior to the CIP process, contains solubilised gold. The solubilised gold is absorbed onto the carbon granules, which are subsequently separated from the slurry by screening. The gold is then recovered from the carbon by electrowinning onto steel wool cathodes or by a similar process.
Conglomerate	A sedimentary rock containing rounded fragments (clasts) derived from the erosion and abrasion of older rocks. Conglomerates are usually formed through the action of water in rivers and beaches. The interstitial spaces between the clasts are filled with finer grained sediment.
Cut-off grade	Cut-off grade is any grade that, for any specific reason, is used to separate two courses of action, e.g. to mine or to leave, to mill or to dump.
Development	Activities related to preparation for mining activities to take place and reach the required level of production.
Diamond drilling	An exploration drilling method, where the rock is cut with a diamond drilling bit, usually to extract core samples.
Dilution	Waste which is mixed with ore in the mining process.
Dip	The angle that a structural surface, *i.e.* a bedding or fault plane, makes with the horizontal. It is measured perpendicular to the strike of the structure.
Discount rate	The interest rate used in discounted cash flow analysis to determine the present value of future cash flows. The discount rate considers the time value of money (the idea that money available now is worth more than the same amount of money available in the future because it could be earning interest) and the risk or uncertainty of the anticipated future cash flows (which might be less than expected).
Discounted Cash Flow (DCF)	In finance, discounted cash flow analysis is a method of valuing a project, company, or asset using the concepts of the time value of money. All future cash flows are estimated and discounted to give their present values (PVs) – the sum of all future cash flows, both incoming and outgoing, is the net present value (NPV), which is taken as the value or price of the cash flows in question.
Electrowinning	The process of removing gold from solution by the action of electric currents.
Exploration	Prospecting, sampling, mapping, diamond drilling and other work involved in the search for mineralisation.
Facies	The features that characterise rock as having been emplaced, metamorphosed, or deposited in a sedimentary fashion, under specific condition. In the case of sediment host deposits, this infers deposition within a particular depositional environment.
Fair Value	The estimated price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between knowledgeable and willing parties at the measurement date (an exit price) [IFRS], other than in a liquidation sale [US GAAP, FAS 157].
Faulting	The process of fracturing that produces a displacement within, or across lithologies.
Feasibility study	A definitive engineering estimate of all costs, revenues, equipment requirements and production levels likely to be achieved if a mine is developed. The study is used to define the economic viability of a project and to support the search for project financing.
Fluvial	River environments.
Footwall	The underlying side of a fault, Mineral Deposit, or stope.

Term	Definition
Grade	The quantity of metal per unit mass of ore expressed as a percentage or, for gold, as grams per tonne of ore.
Hanging wall	The overlying side of a fault, Mineral Deposit, or stope.
In situ	In place, *i.e.* within unbroken rock.
Indicated Mineral Resource	An "Indicated Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough for geological and grade continuity to be reasonably assumed (NI 43-101 definition).
Inferred Mineral Resource	An "Inferred Mineral Resource" is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes.
Internal Rate of return (IRR)	The internal rate of return on an investment or project is the "annualised effective compounded return rate" or "rate of return" that makes the net present value of all cash flows (both positive and negative) from a particular investment equal to zero. It can also be defined as the discount rate at which the present value of all future cash flow is equal to the initial investment or in other words the rate at which an investment breaks even.
Intrinsic Value	The amount considered, on the basis of an evaluation of available facts, to be the "true", "real" or "underlying" worth of an item. Thus, it is a long-term, Non-Market Value concept that smooths short term price fluctuations. In the case of real estate, this would be the value of the property considering the structure, size, location etc., as opposed to taking into account the current state of the market. In mining, the intrinsic value refers to the fundamental value based on the technical inputs, and a cash flow projection that creates a Net Present Value. Few of these inputs are market related, except possibly for metal price, benchmarked costs and the discount rate applied.
Kriging	An estimation method that minimises the estimation error between data points in determining mineral resources. Kriging is the best linear unbiased estimator of a mineral resource.
Level	The workings or tunnels of an underground mine which are on the same horizontal plane.
Lithology	The general compositional characteristics of rocks.
Market Value	The estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion [IVSC, IFRS].
Measured Mineral Resource	"Measured Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well-established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough to confirm both geological and grade continuity.
Metallurgical plant	Process plant erected to treat ore and extract the contained gold.
Metallurgical recovery	Proportion of metal in mill feed which is recovered by a metallurgical process or processes.
Metallurgy	The science of extracting metals from ores and preparing them for sale.
Milling/Crush	The comminution of the ore, although the term has come to cover the broad range of machinery inside the treatment plant where the gold is separated from the ore prior to leaching or flotation processes.
Mine call factor (MCF)	The ratio of the grade of material recovered at the mill (plus residue) to the grade of ore calculated by sampling in stopes.
Mine recovery factor (MRF)	The MRF is equal to the mine call factor multiplied by the plant recovery factor.
Mineable	That portion of a mineral resource for which extraction is technically and economically feasible.
Mineral Deposit	A continuous well-defined mass of material of sufficient ore content to make extraction economically feasible.

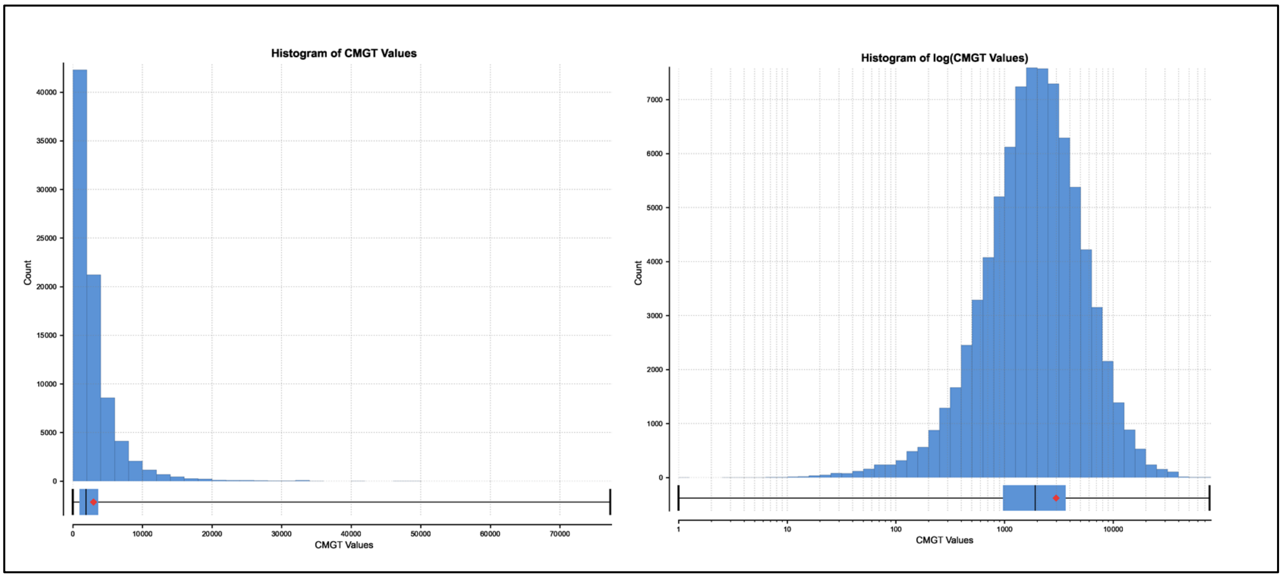
Term	Definition
Mineral Reserve	A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. Adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined (NI 43-101 definition). Mineral reserves are reported as general indicators of the life of mineral deposits. Changes in reserves generally reflect: i. development of additional reserves; ii. depletion of existing reserves through production; iii. actual mining experience; and iv. price forecasts. Grades of mineral reserve actually processed from time to time may be different from stated reserve grades because of geologic variation in different areas mined, mining dilution, losses in processing and other factors. Neither reserves nor projections of future operations should be interpreted as assurances of the economic life of mineral deposits or of the profitability of future operations.
Mineral Resource	A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilised organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics, and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.
Mineralisation	The presence of a target mineral in a mass of host rock.
Mineralised area	Any mass of host rock in which minerals of potential commercial value occur.
Net Present Value (NPV)	The difference between the present value of cash inflows and the present value of cash outflows. NPV is used in capital budgeting to analyse the profitability of an investment or project.
Ore	A mixture of valuable and worthless minerals from which at least one of the minerals can be mined and processed at an economic profit.
Outcrop	The exposure of rock on surface.
Pay limit	The break-even grade at which the Mineral Deposit can be mined without profit or loss and is calculated using the gold price, the working cost and recovery factors.
Placer	A sedimentary deposit containing economic quantities of valuable minerals mainly formed in alluvial and eluvial environments.
Plant recovery factor	The gold recovered after treatment processes in a metallurgical plant. It is expressed as a percentage of gold produced (in mass) over the mass of gold fed into the front of the plant (*i.e.* into the milling circuit).
Probable Mineral Reserve	"Probable Mineral Reserve" is the economically mineable part of an Indicated and, in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified (NI 43-101 definition).
Proved Mineral Reserve	A "Proved Mineral Reserve" is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified (NI 43-101 definition).
Recovered grade	The actual grade of ore realised or produced after the mining and treatment processes.
Reef	A narrow gold-bearing lithology, normally a conglomerate in the Witwatersrand Basin that may contain economic concentrates of gold and uranium.
Refining	The final stage of metal production in which final impurities are removed from the molten metal by introducing air and fluxes. The impurities are removed as gases or slag.
Rehabilitation	The process of restoring mined land to a condition approximating to a greater or lesser degree its original state. Reclamation standards are determined by the South African Department of Mineral and Energy Affairs and address ground and surface water, topsoil, final slope gradients, waste handling and re-vegetation issues.
Reserve LoM Plan	The Life of Mine that are based only on Measured and Indicated Mineral Resources and only for the area "Above 750 m Level". The Reserve LoM plan will be used to state Mineral Reserves.
Sampling	Taking small pieces of rock at intervals along exposed mineralisation for assay (to determine the mineral content).

Term	Definition
Scats	Pebble oversize material within the mill.
Sedimentary	Formed by the deposition of solid fragmental material that originates from weathering of rocks and is transported from a source to a site of deposition.
Slimes	The finer fraction of tailings discharged from a processing plant after the valuable minerals have been recovered.
Slurry	A fluid comprising fine solids suspended in a solution (generally water containing additives).
Smelting	Thermal processing whereby molten metal is liberated from beneficiated ore or concentrate with impurities separating as lighter slag.
Stockpile	A store of unprocessed ore or marginal grade material.
Stope	Excavation within the Mineral Deposit where the main production takes place.
Stratigraphic	A term describing the chronological sequence in which bedded rocks occur that can usually be correlated between different localities.
Strike length	Horizontal distance along the direction that a structural surface takes as it intersects the horizontal.
Stripping	The process of removing overburden to expose ore.
Sulphide	A mineral characterised by the linkages of sulphur with a metal or semi-metal, such as pyrite (iron sulphide). Also, a zone in which sulphide minerals occur.
Sweepings	The clean-up of residual broken ore in stopes.
Syncline	A basin shaped fold.
Tailings	Finely ground rock from which valuable minerals have been extracted by milling.
Tailings dam	Dams or dumps created to store waste material (tailings) from processed ore after the economically recoverable gold has been extracted.
Tonnage	Quantities where the tonne is an appropriate unit of measure. Typically used to measure reserves of gold-bearing material *in situ* or quantities of ore and waste material mined, transported, or milled.
Total cost per ounce	A measure of the average cost of producing an ounce of gold, calculated by dividing the total operating costs in a period by the total gold production over the same period.
Unconformity	A surface within a package of sedimentary rocks which may be parallel to or at an angle with overlying or underlying rocks, and which represents a period of erosion or non-deposition, or both.
Waste rock	Rock with an insufficient gold content to justify processing.
Working costs	Working costs represent production costs directly associated with the processing of gold and selling, administration and general charges related to the operation.

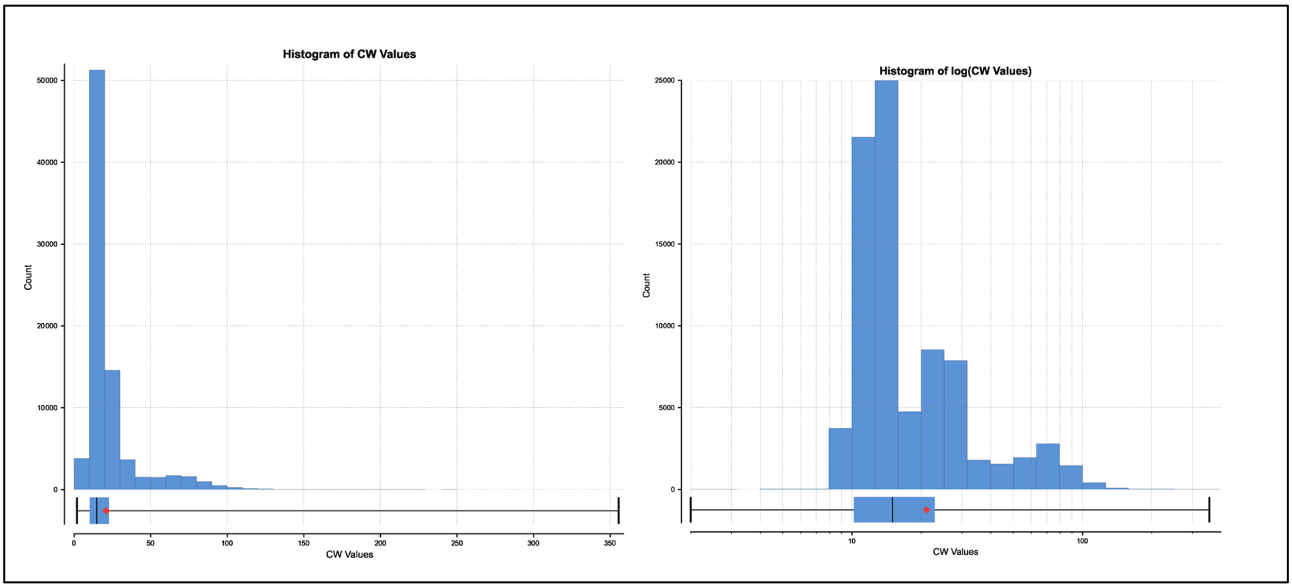
APPENDIX

Appendix 1: Histograms

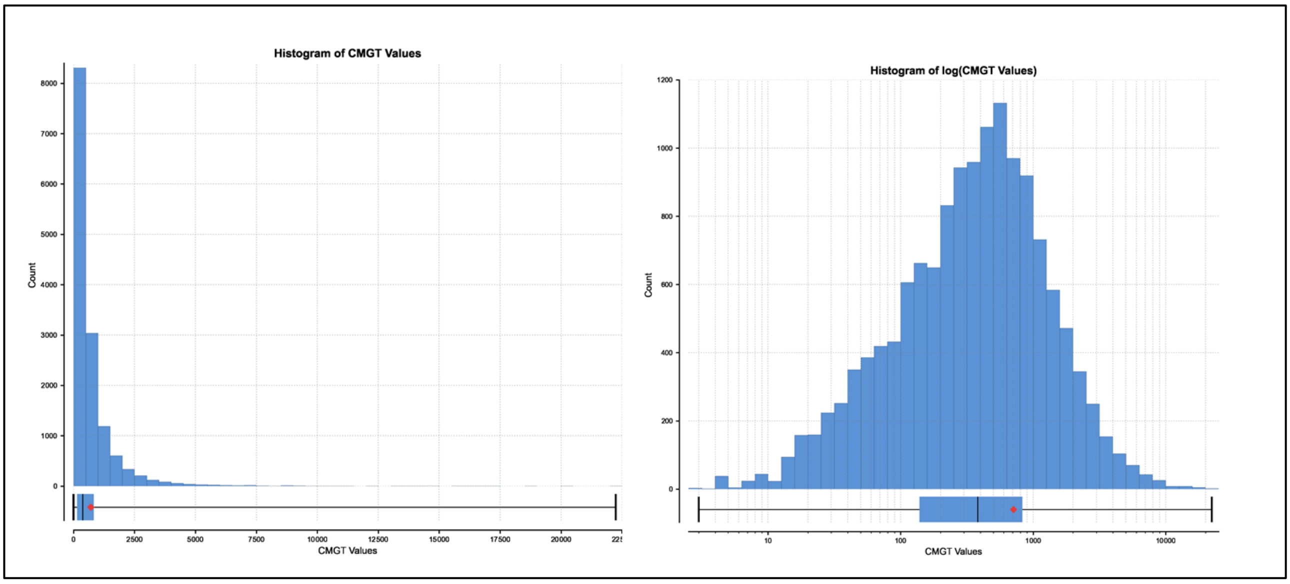
Carbon Leader Reef Facies 1 CMGT



Carbon Leader Reef Facies 1 CW



Carbon Leader Reef Facies 2a CMGT



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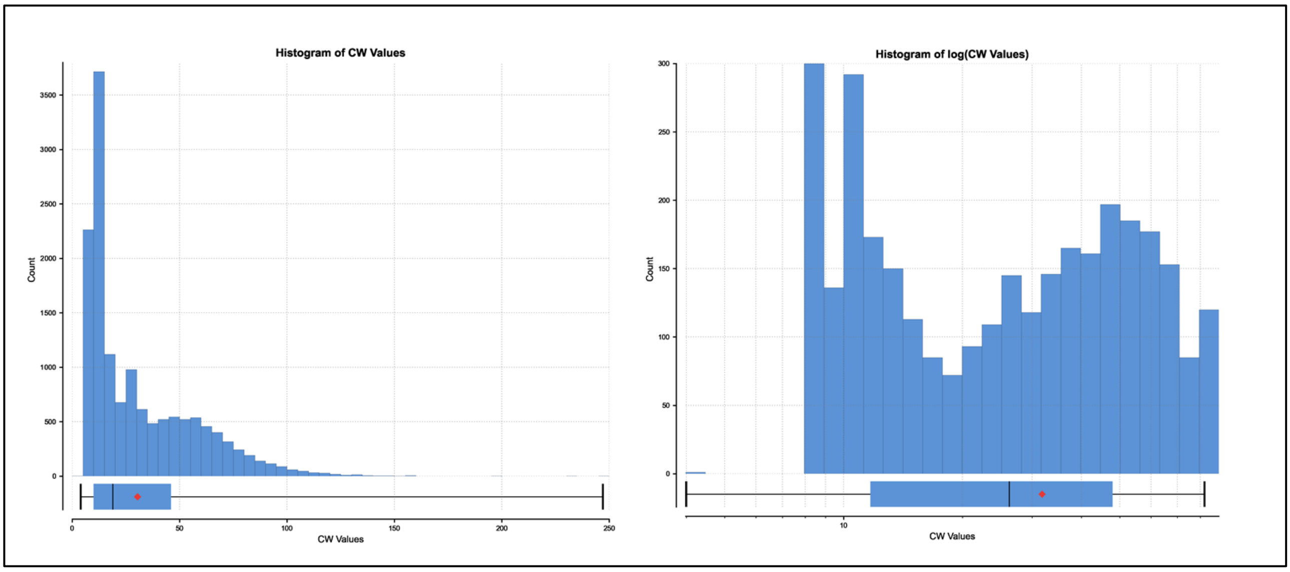

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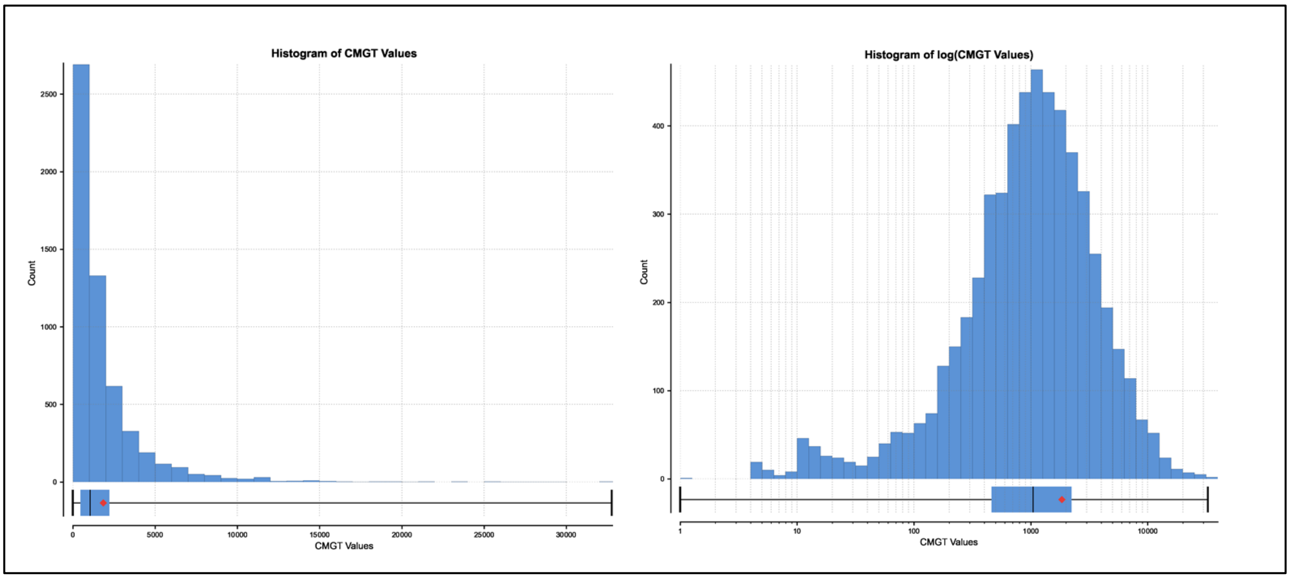

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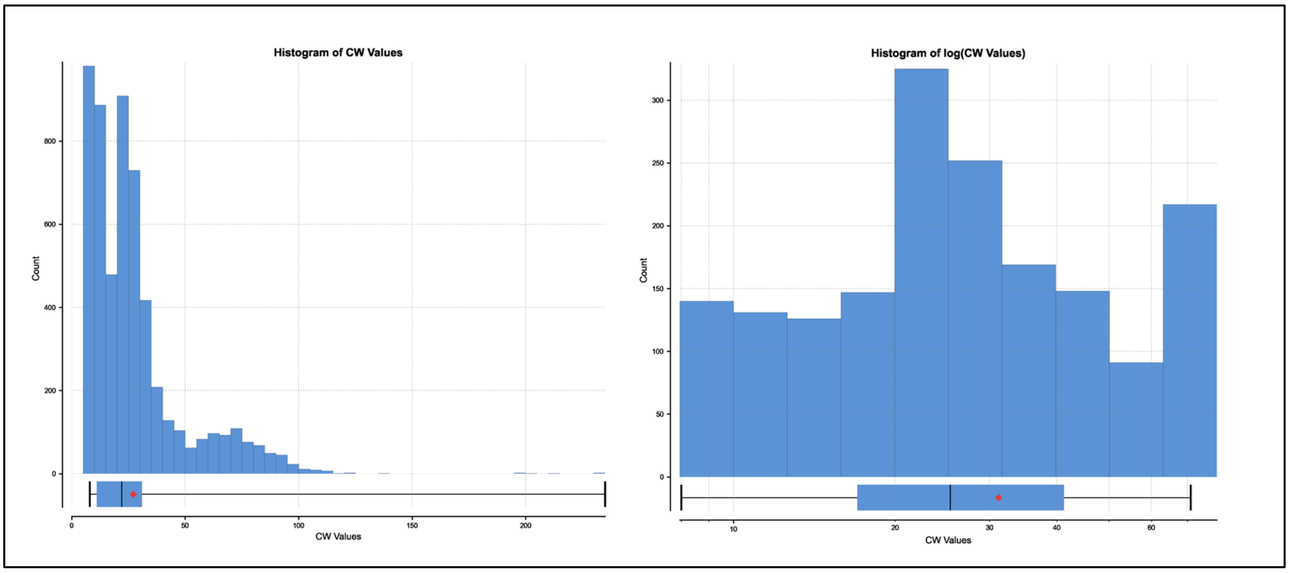
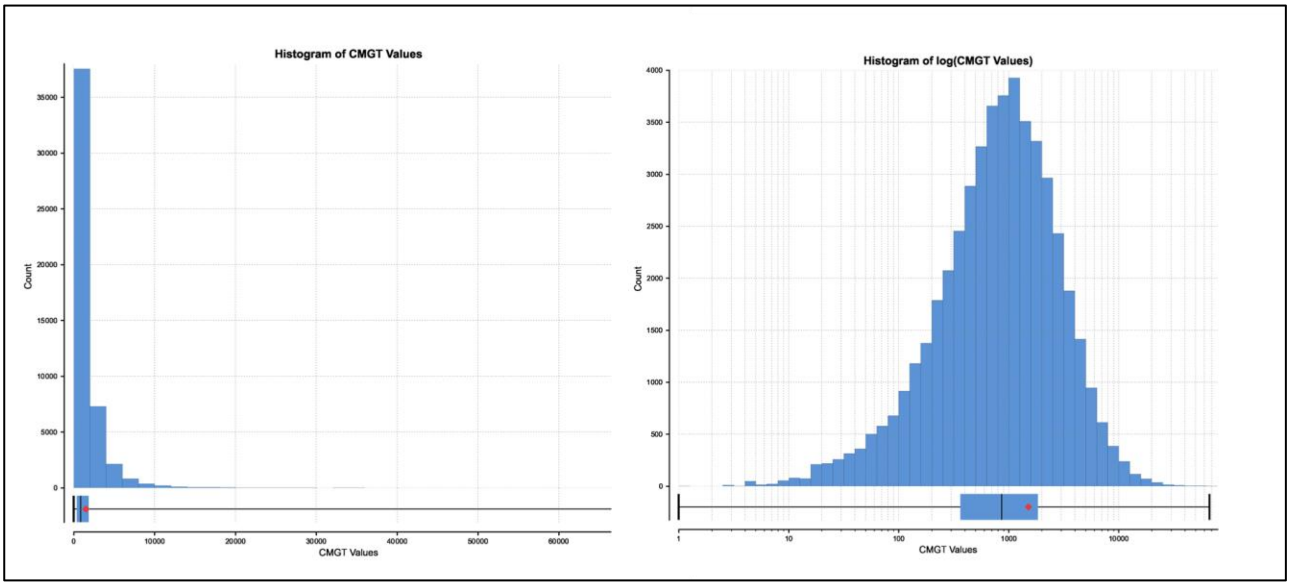
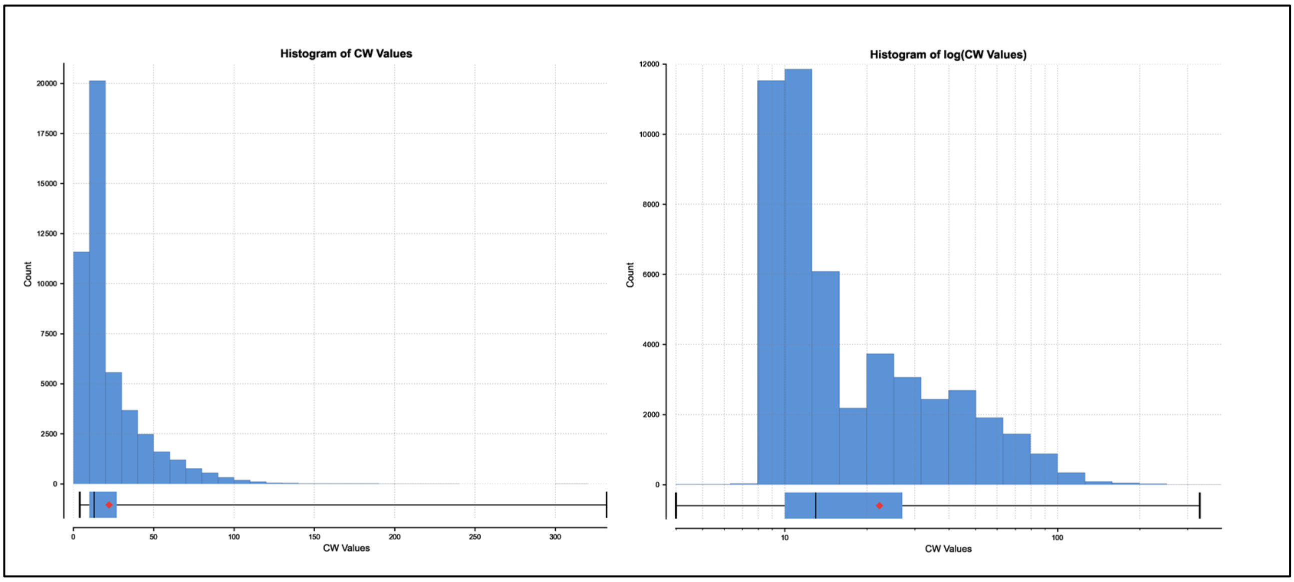


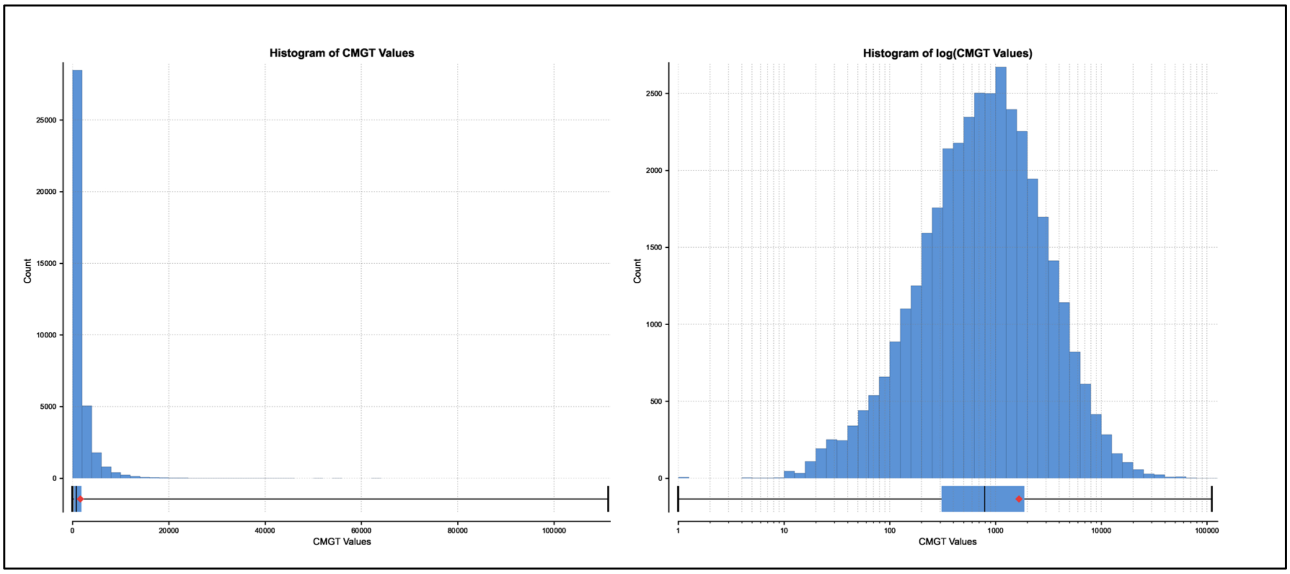
Carbon Leader Reef Facies 3 CMGT



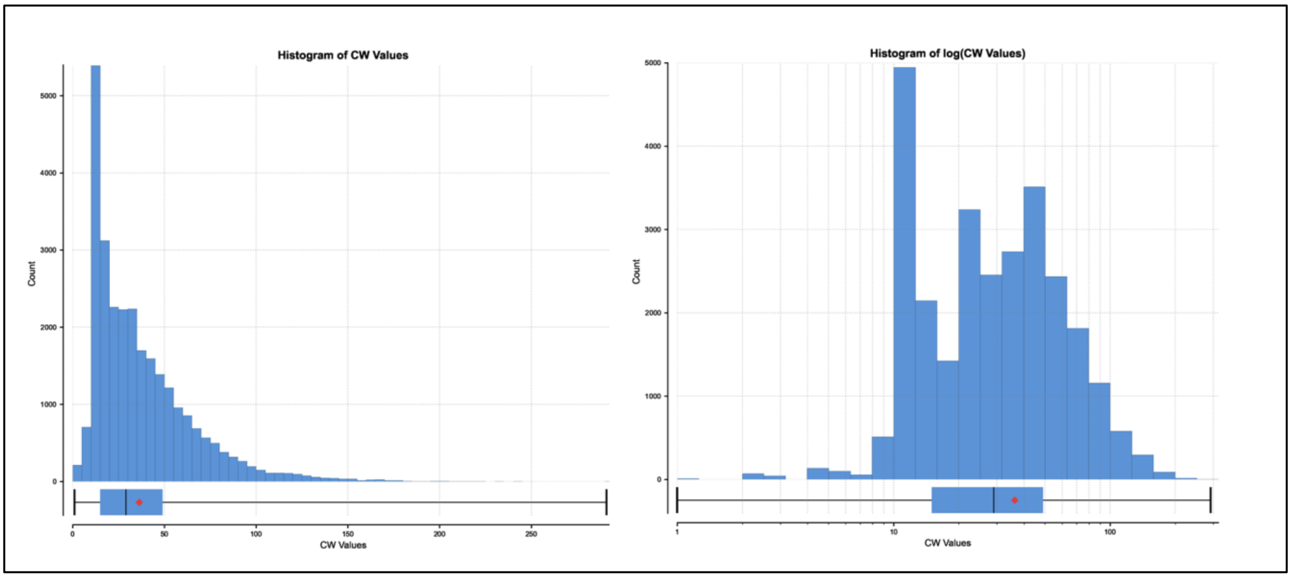
Carbon Leader Reef Facies 3 CW



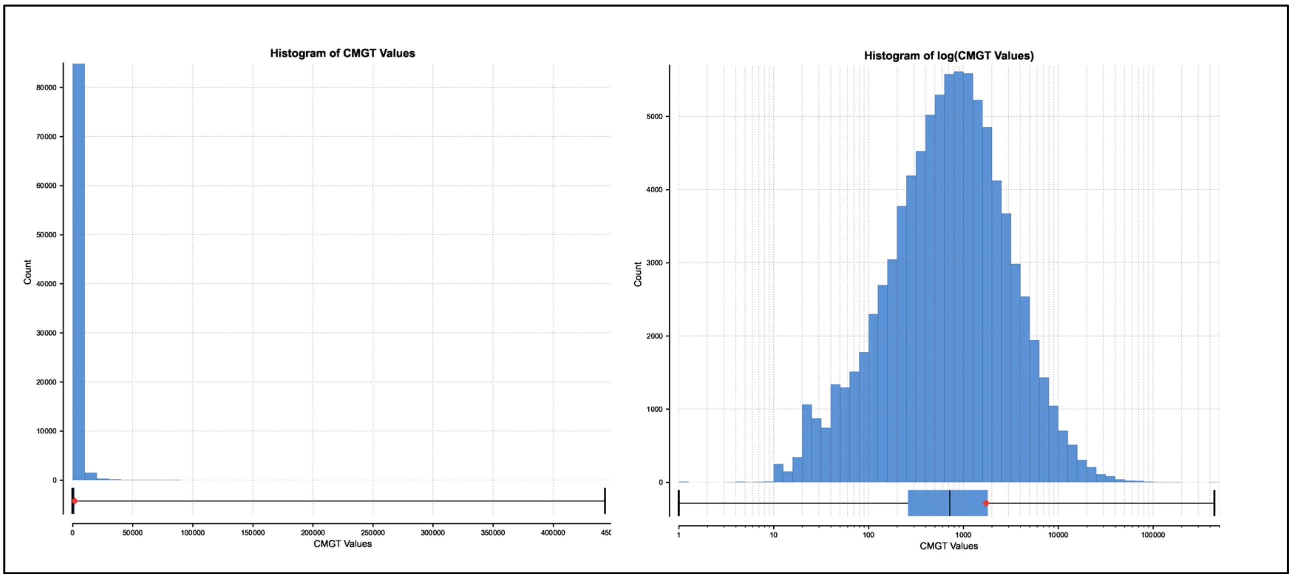
Carbon Leader Reef Facies 4 CMGT



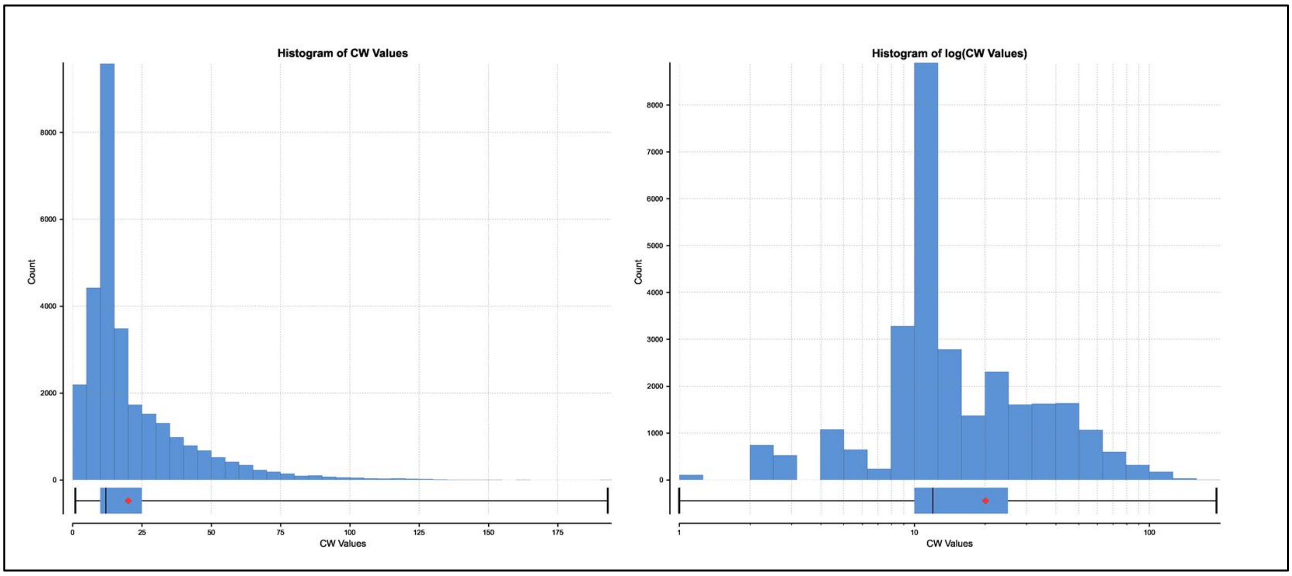
Carbon Leader Reef Facies 4 CW



Carbon Leader Reef Facies 5 CMGT



Carbon Leader Reef Facies 5 CW



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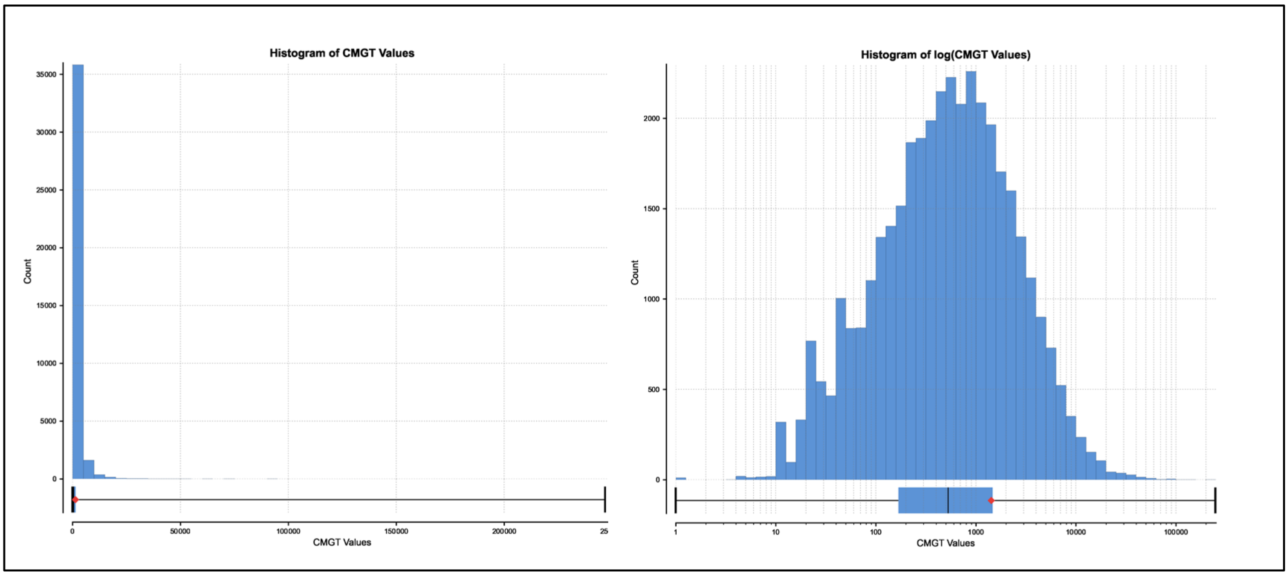

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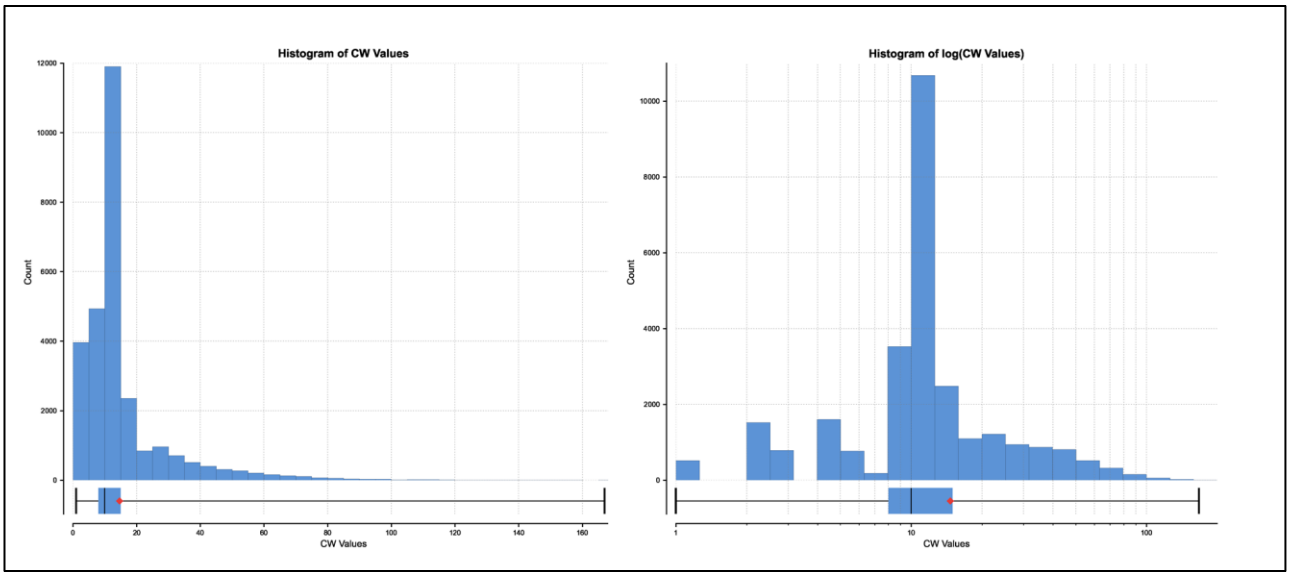
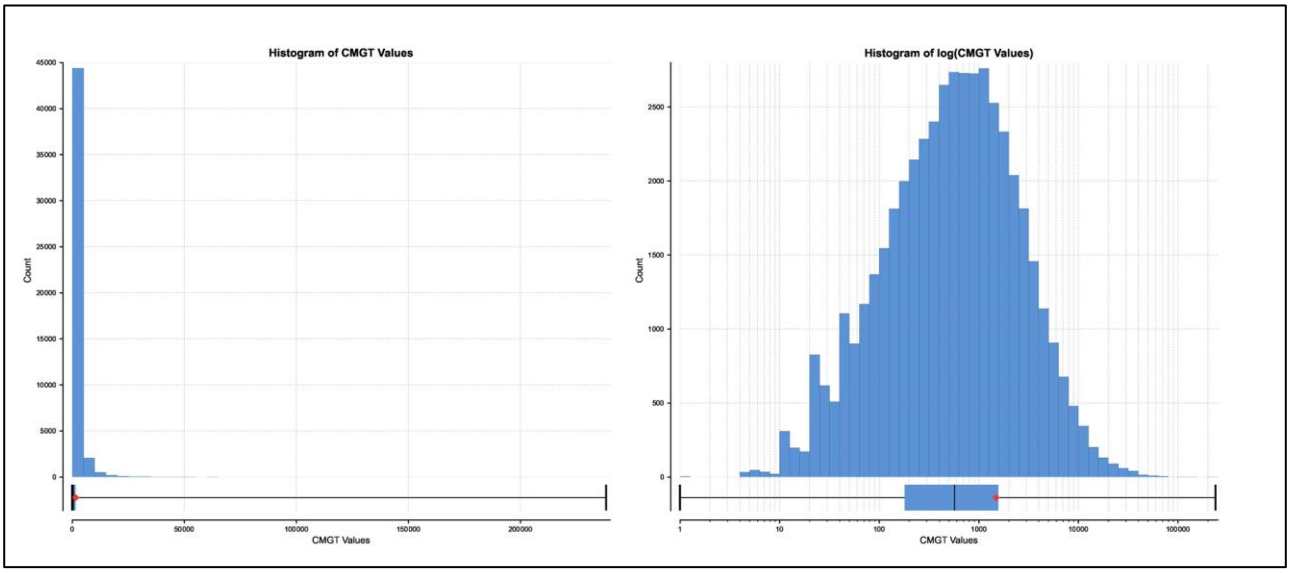


Carbon Leader Reef Facies 7 CMGT



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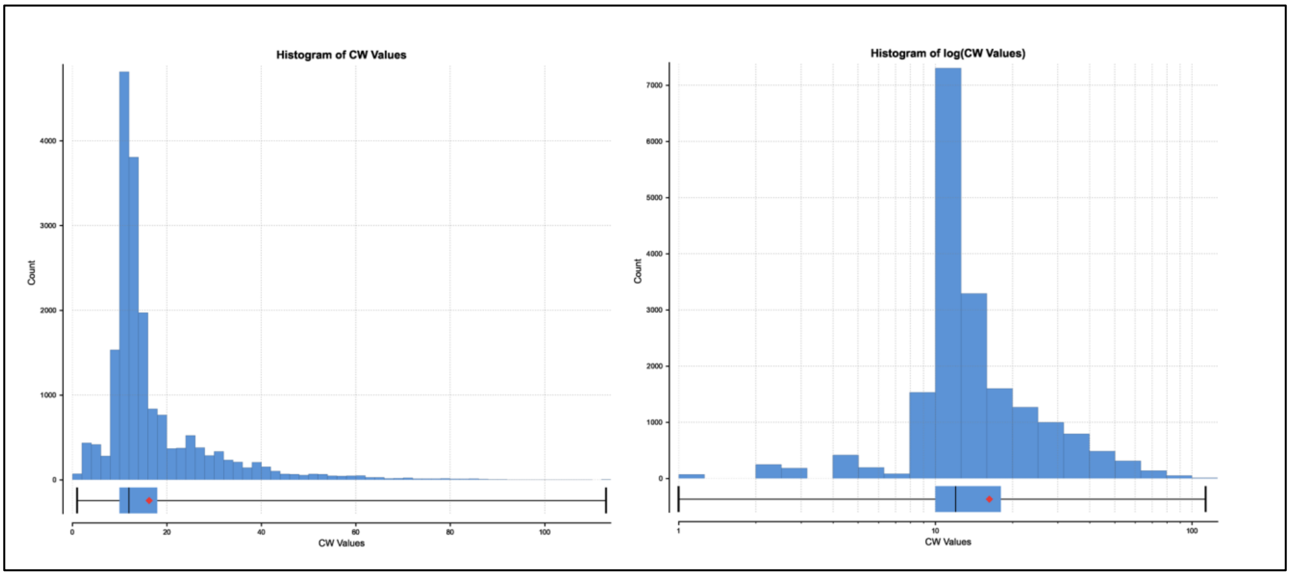
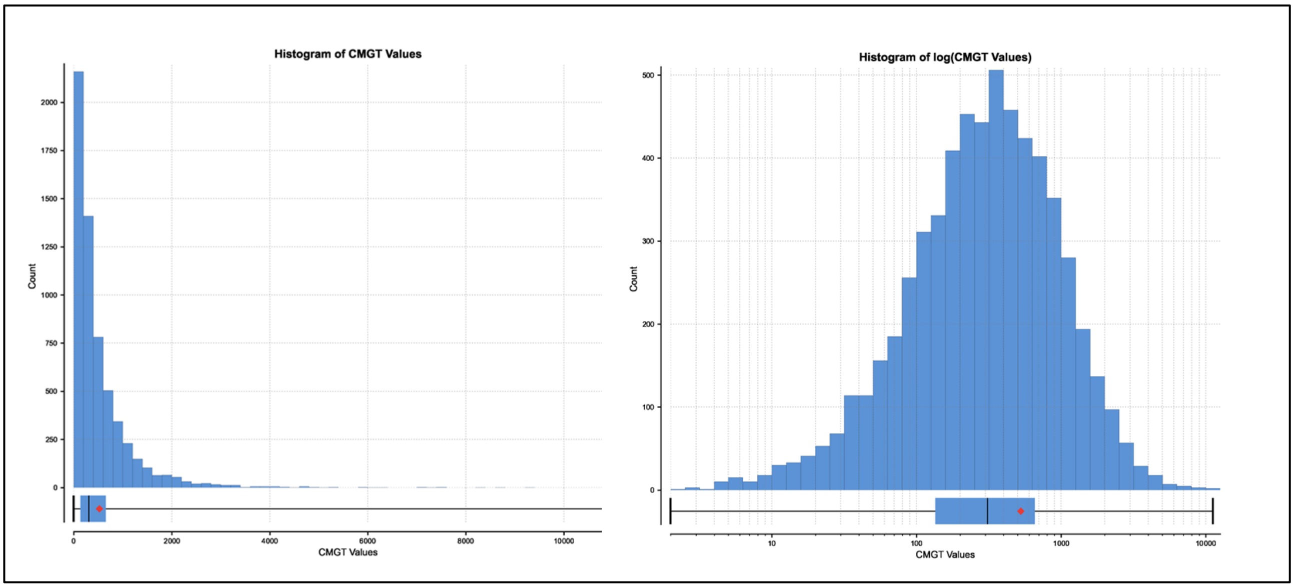
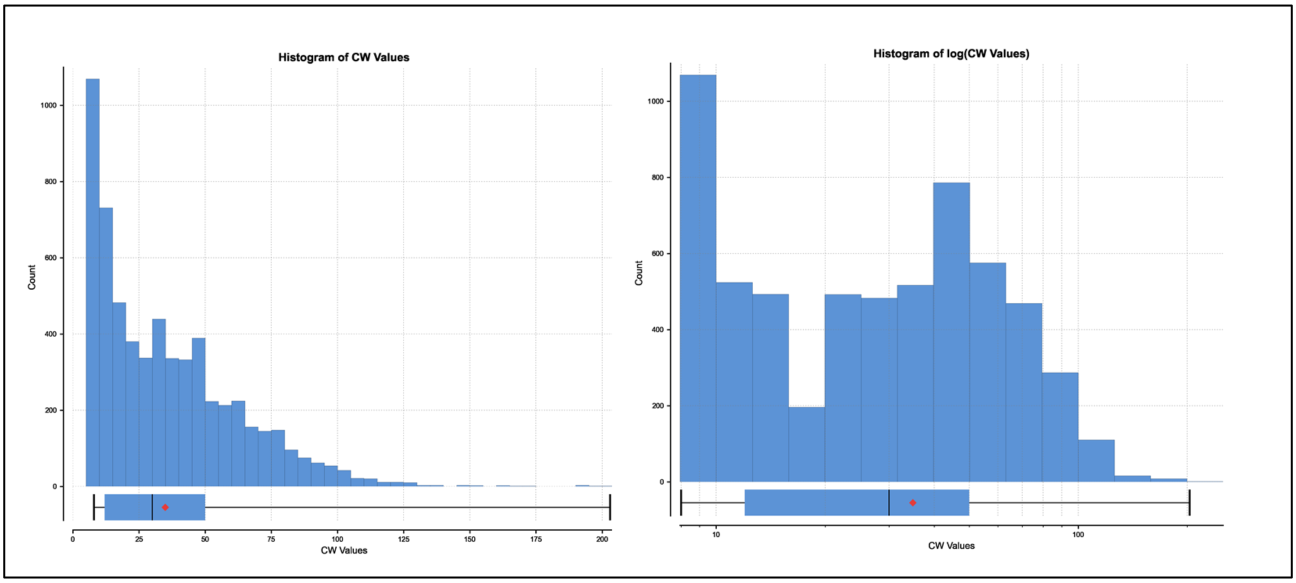


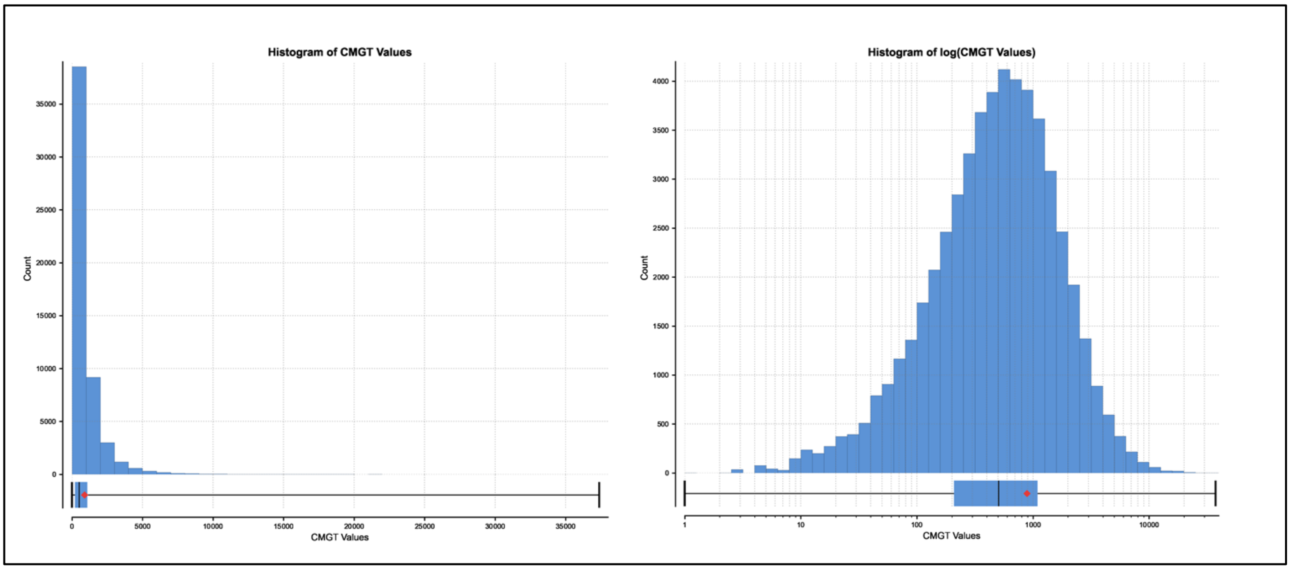
Middelvlei Reef Facies 1 CMGT



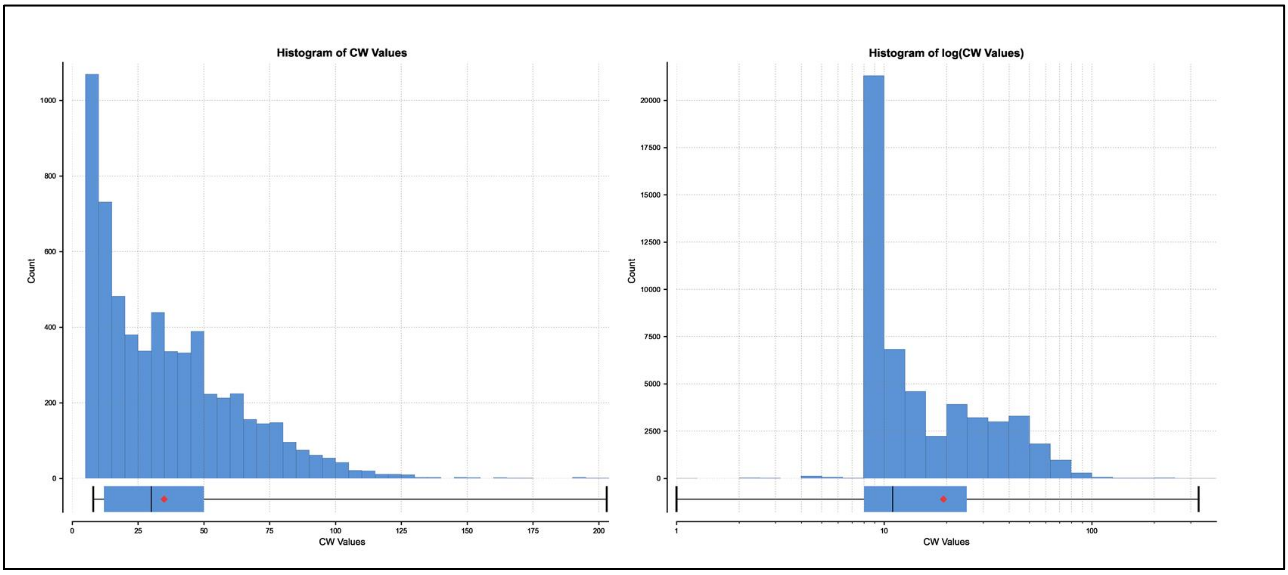
Middelvlei Reef Facies 1 CW



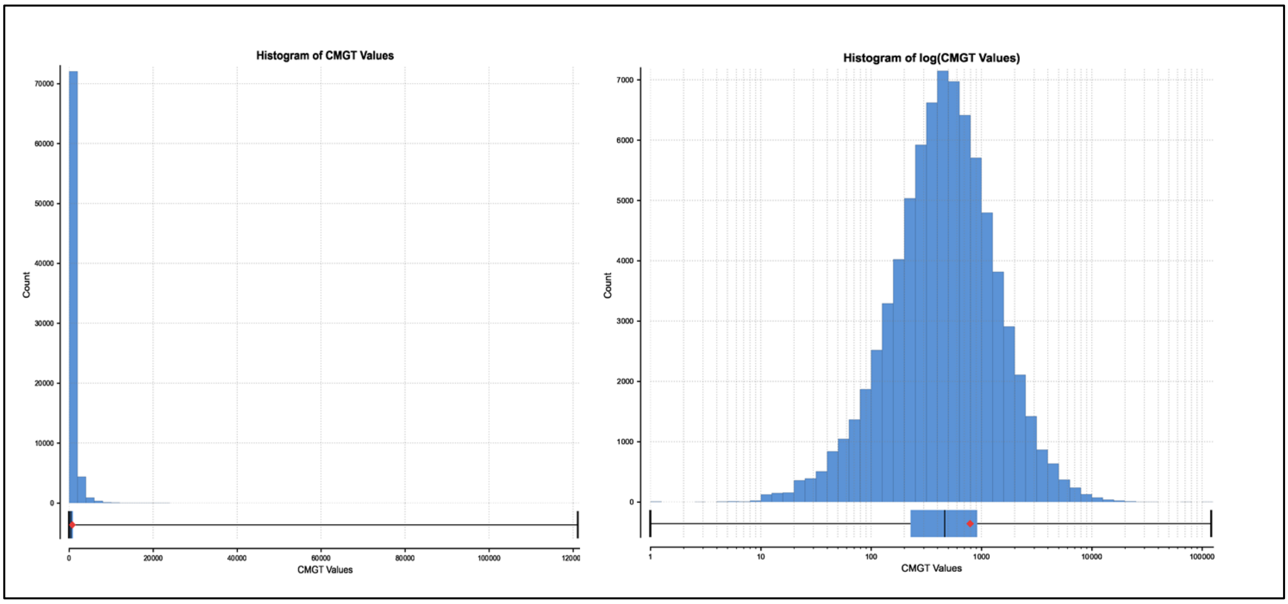
Middelvlei Reef Facies 2 CMGT



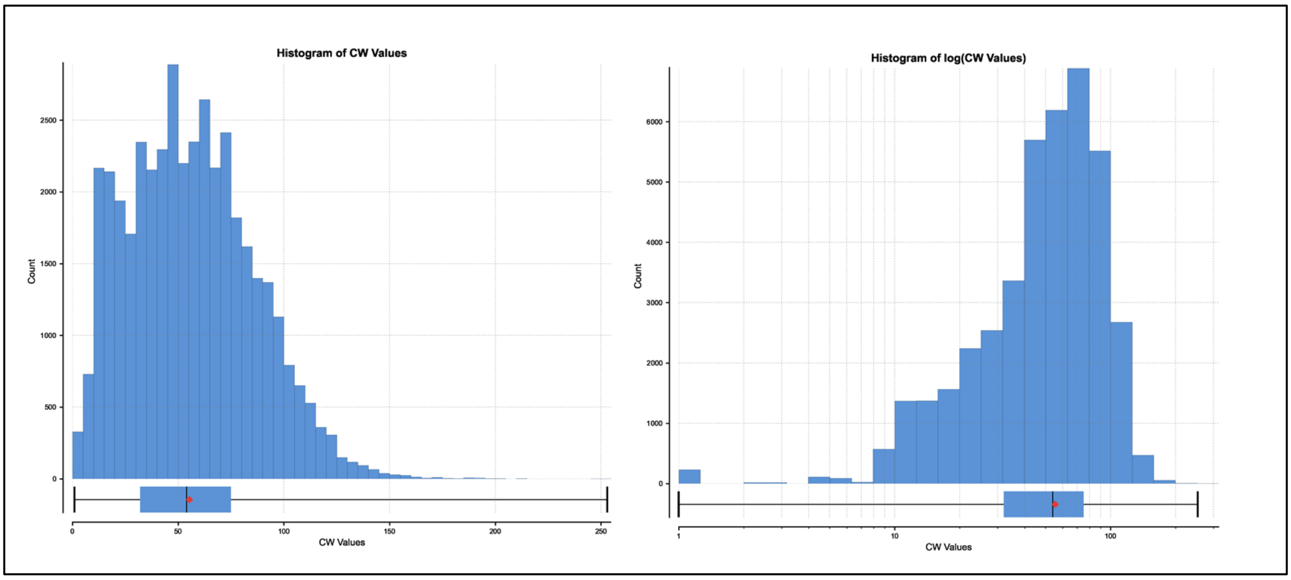
Middelvlei Reef Facies 2 CW



Middelvlei Reef Facies 3 CMGT

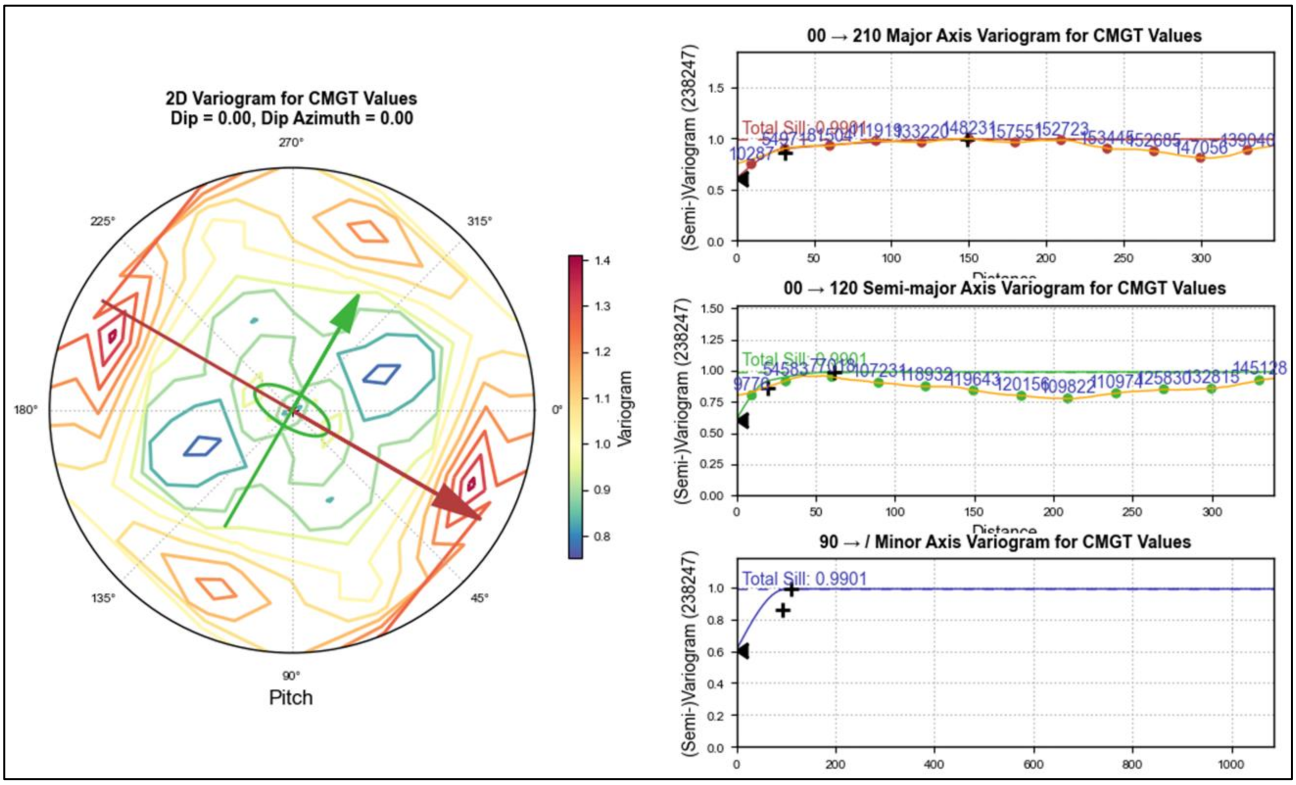


Middelvlei Reef Facies3 CW

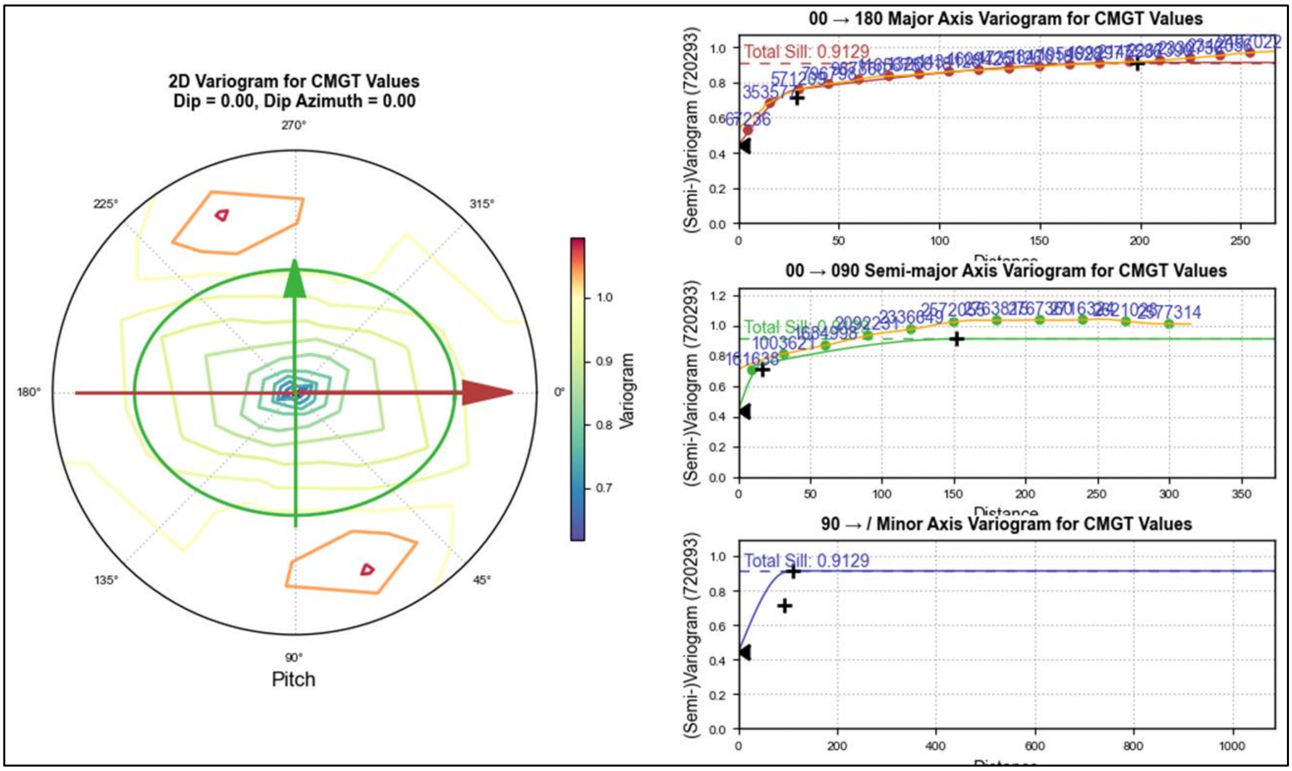


Appendix 2: Variograms

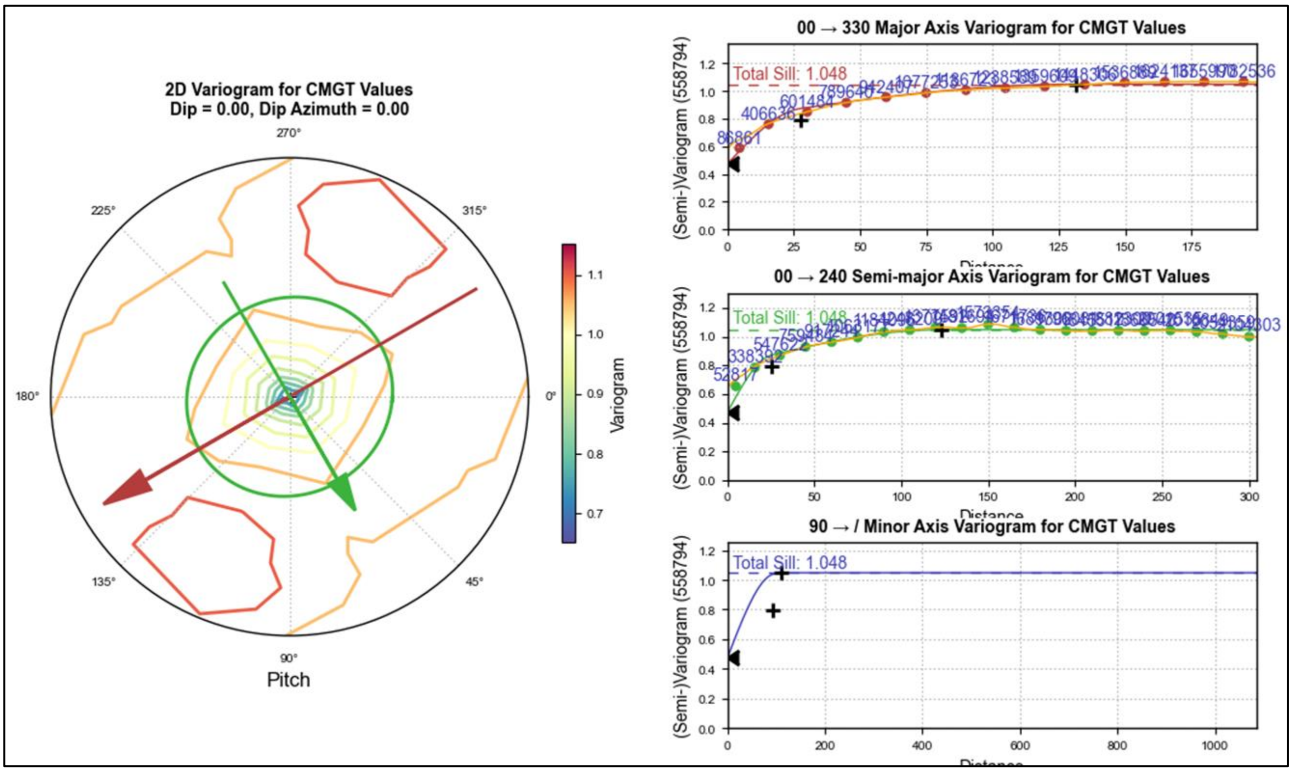
Middelvlei Reef Facies 1 CMGT Raw Data



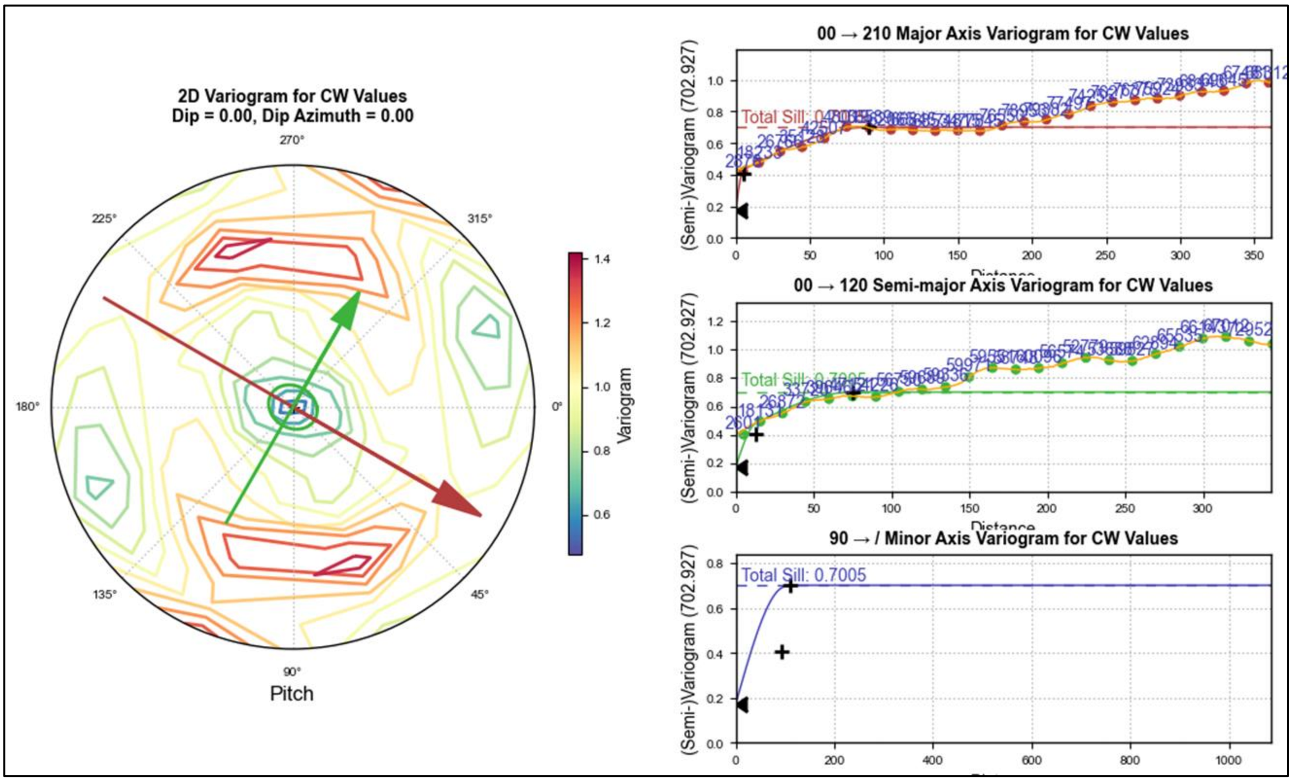
Middelvlei Reef Facies 2 CMGT Raw Data



Middelvlei Reef Facies 3 CMGT Raw Data



Middelvlei Reef Facies 1 CW Raw Data



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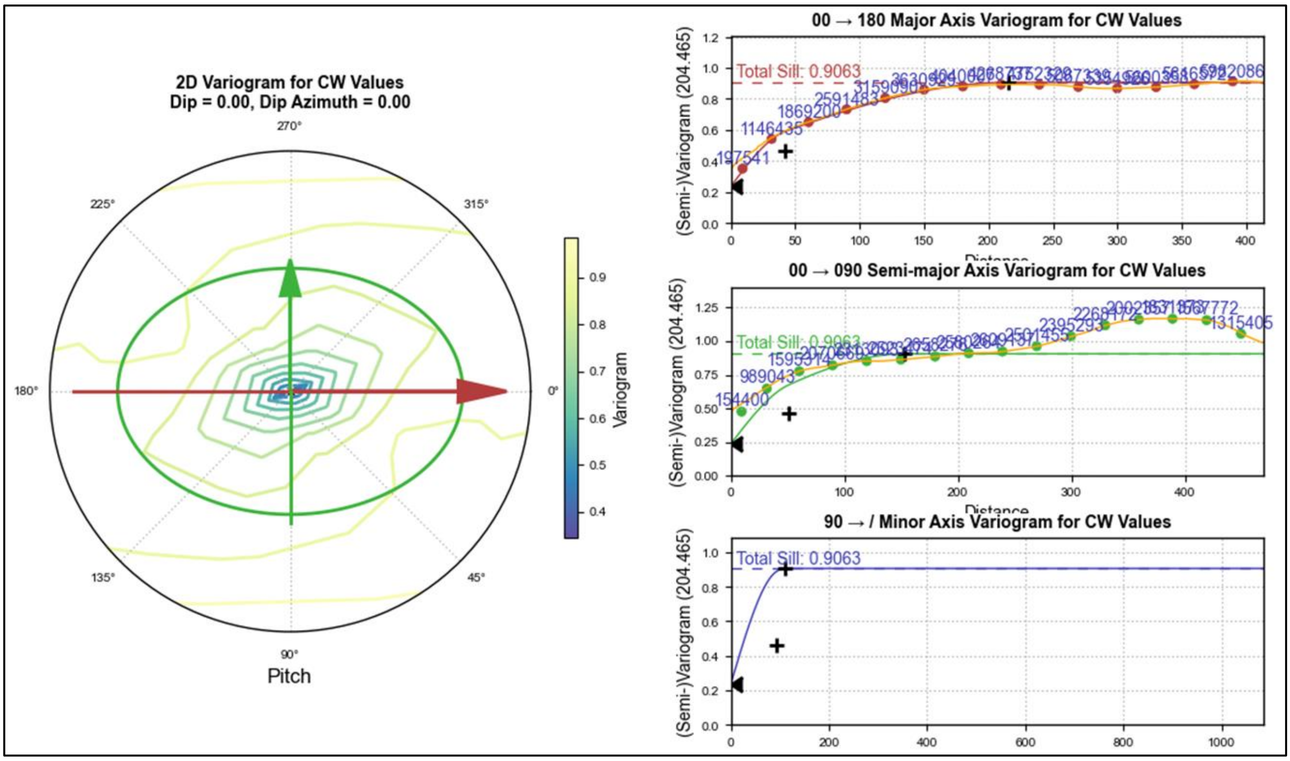
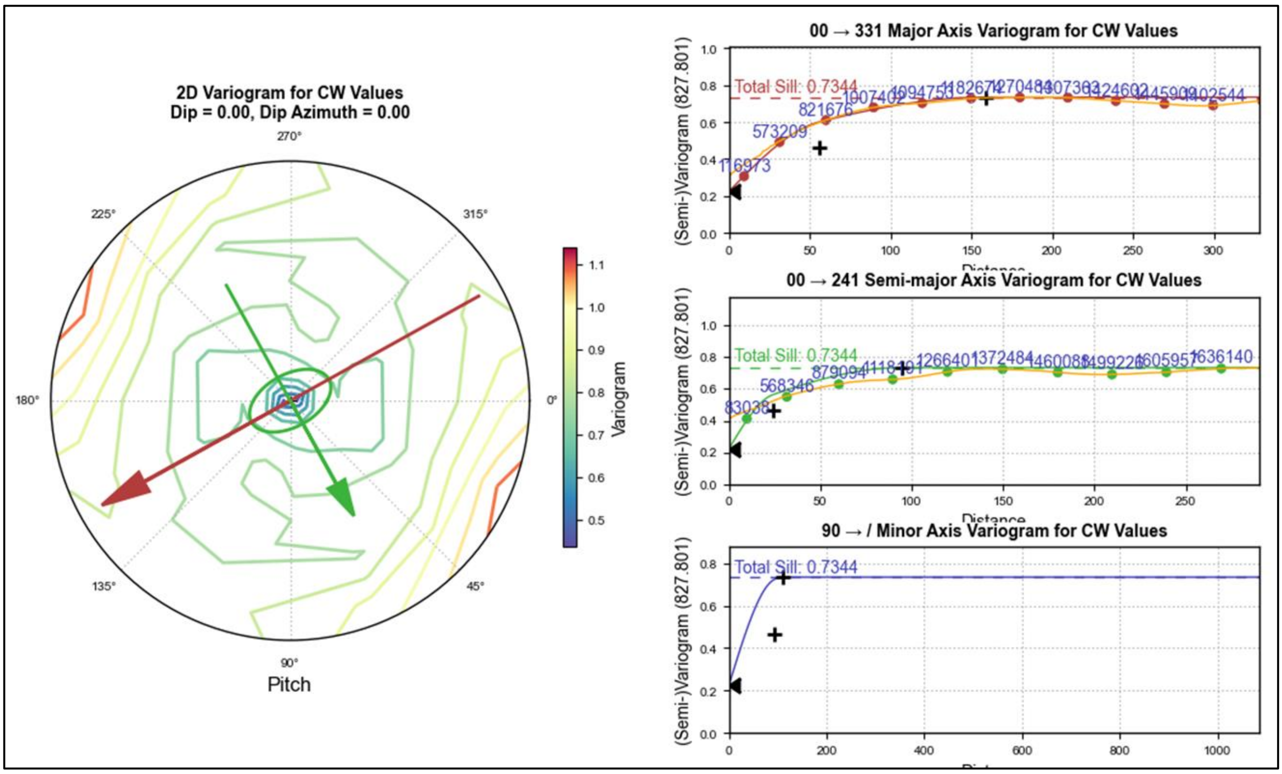
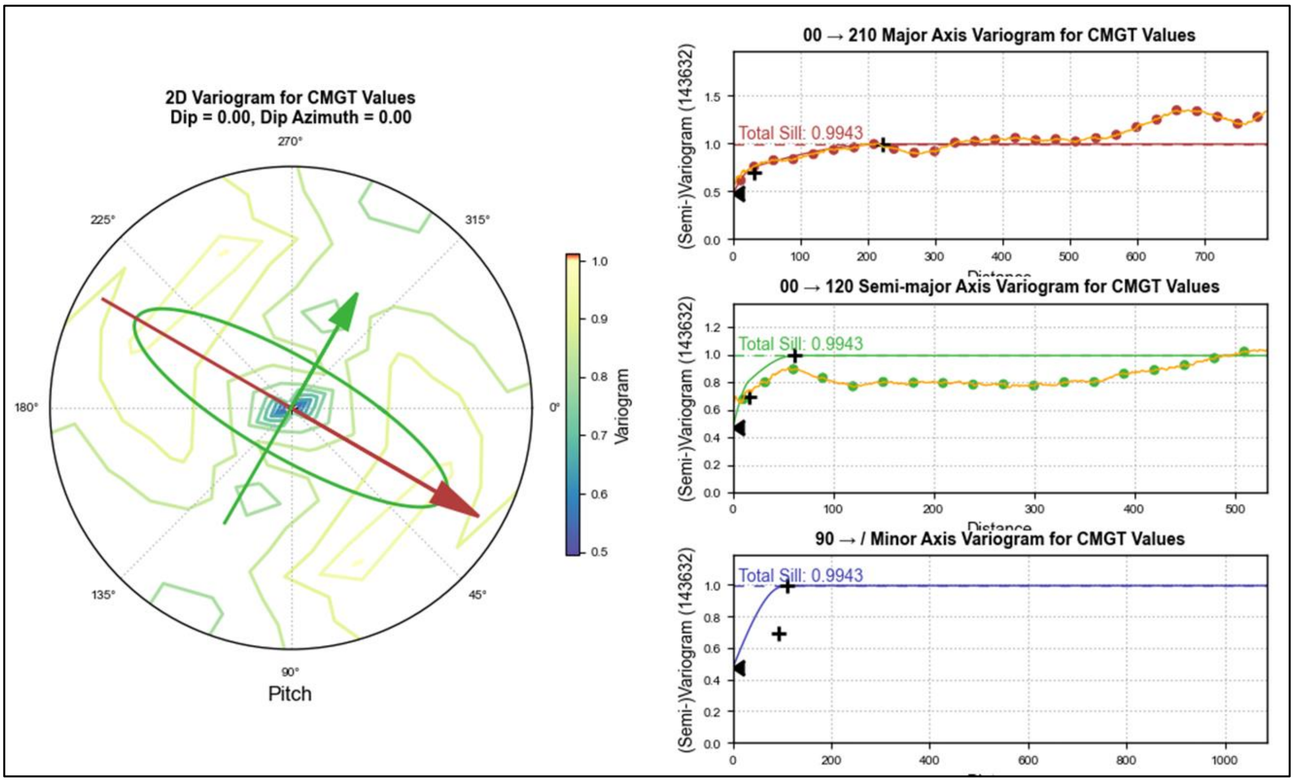


Middelvlei Reef Facies 3 CW Raw Data

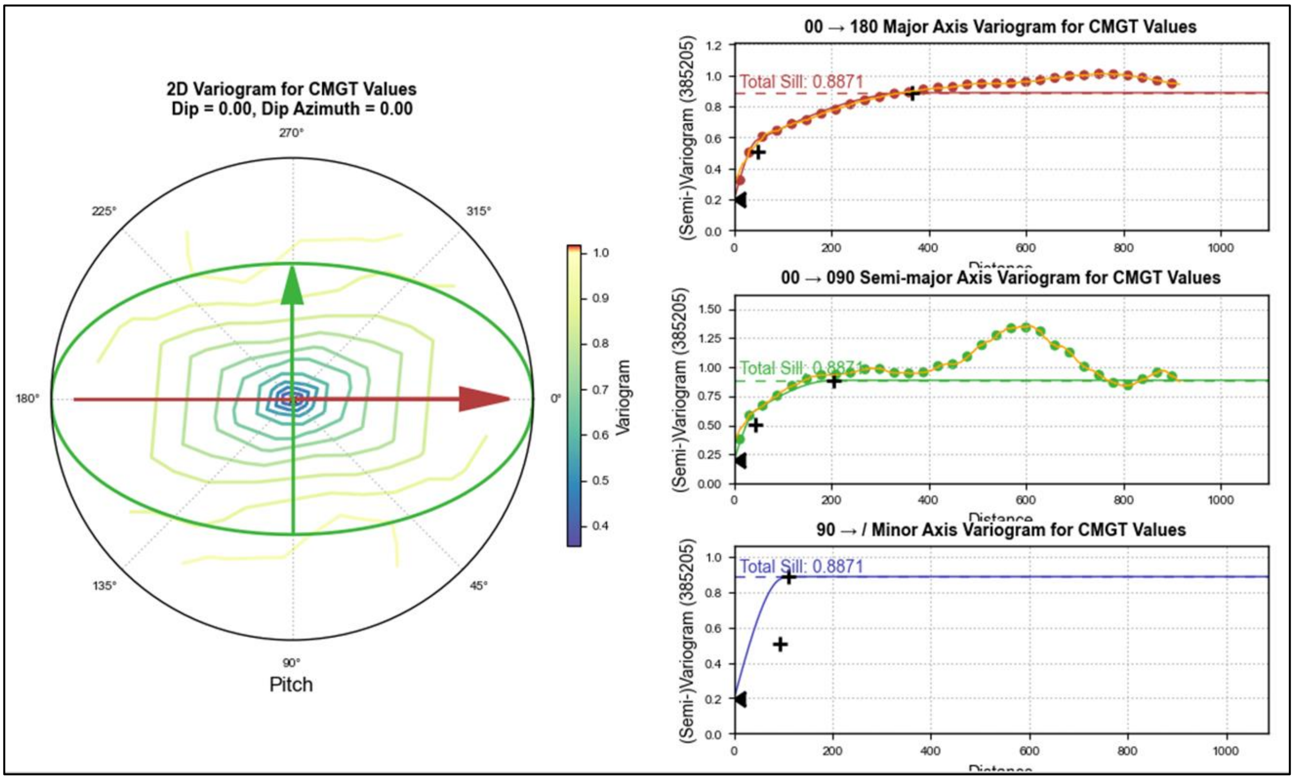


Middelvlei Reef Regularised Variograms

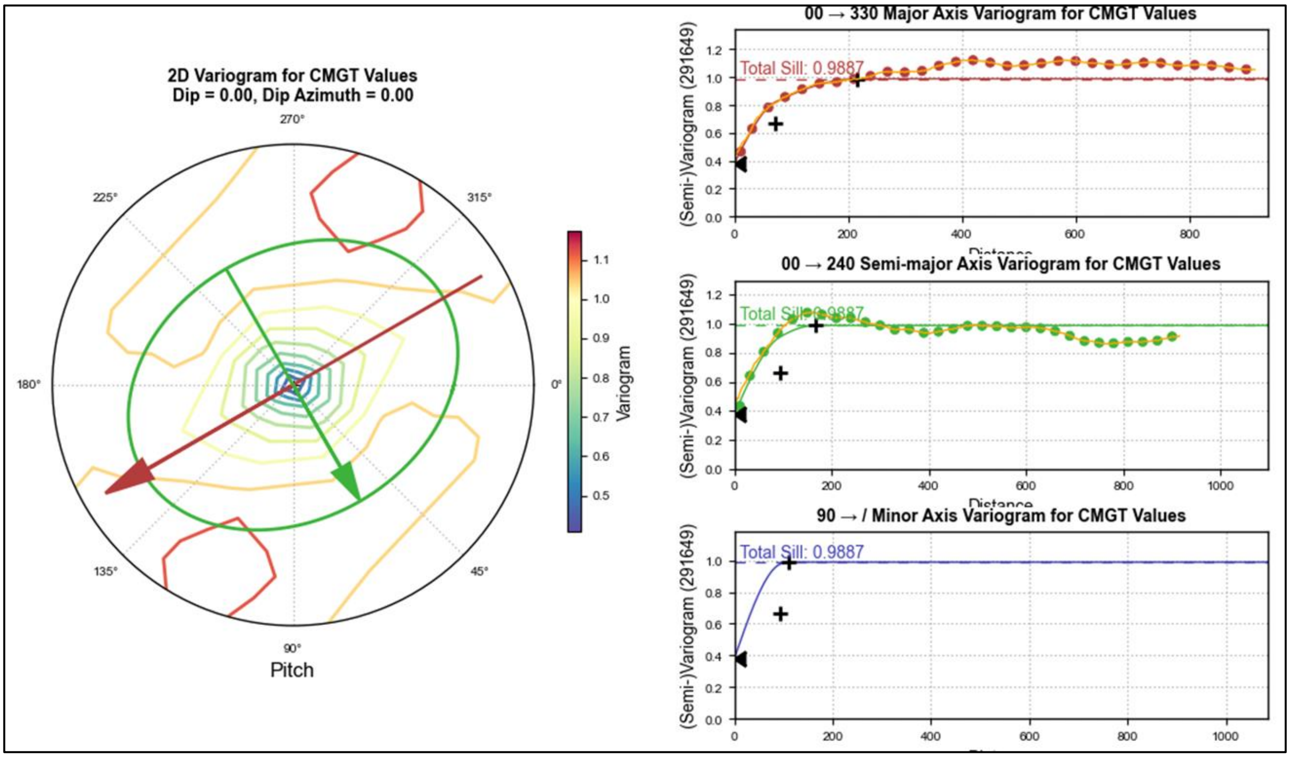
Middelvlei Reef Facies 1 CMGT Regularised Data



Middelvlei Reef Facies 2 CMGT Regularised Data



Middelvlei Reef Facies 3 CMGT Regularised Data



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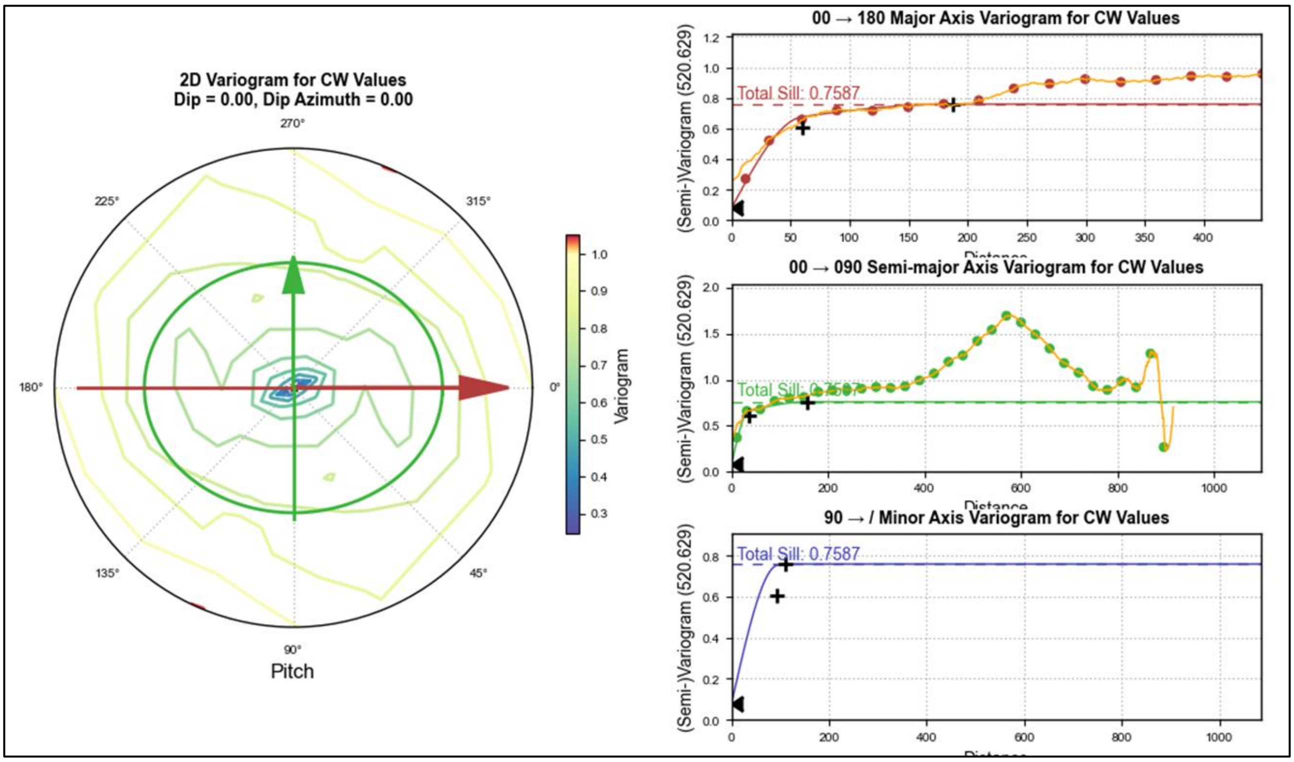

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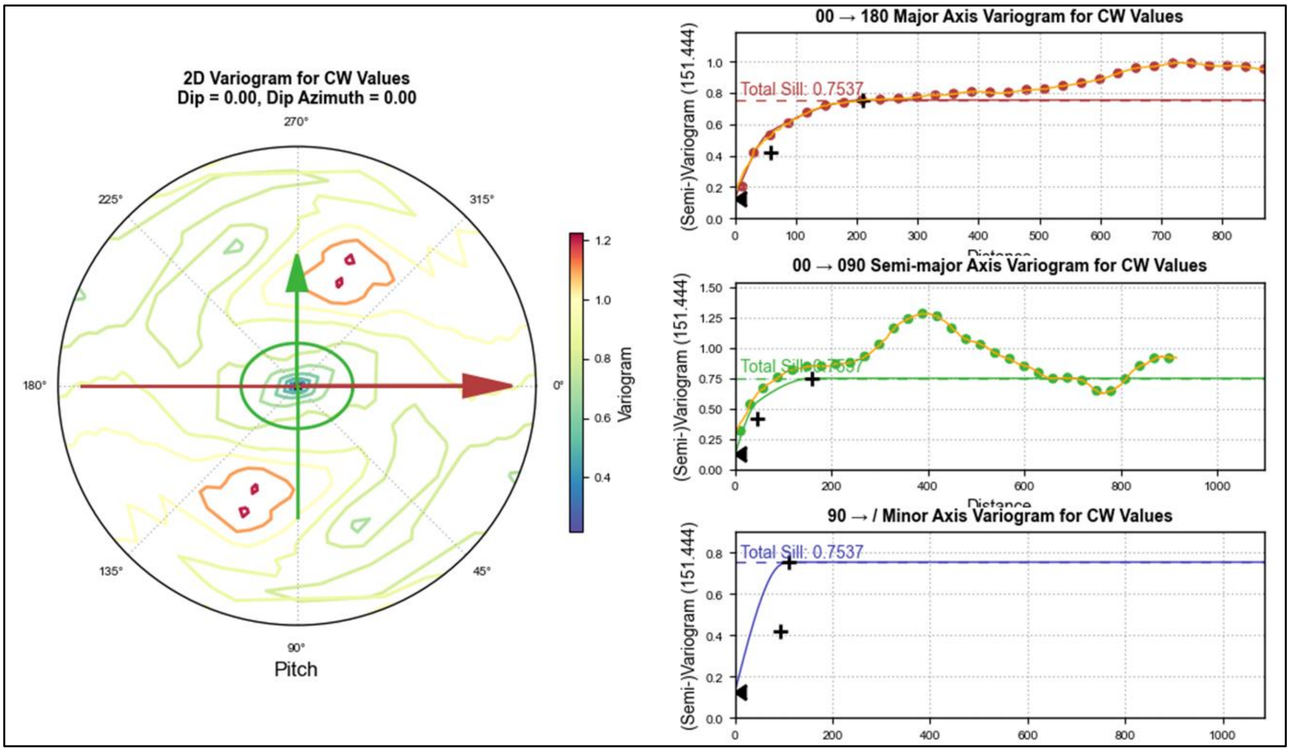
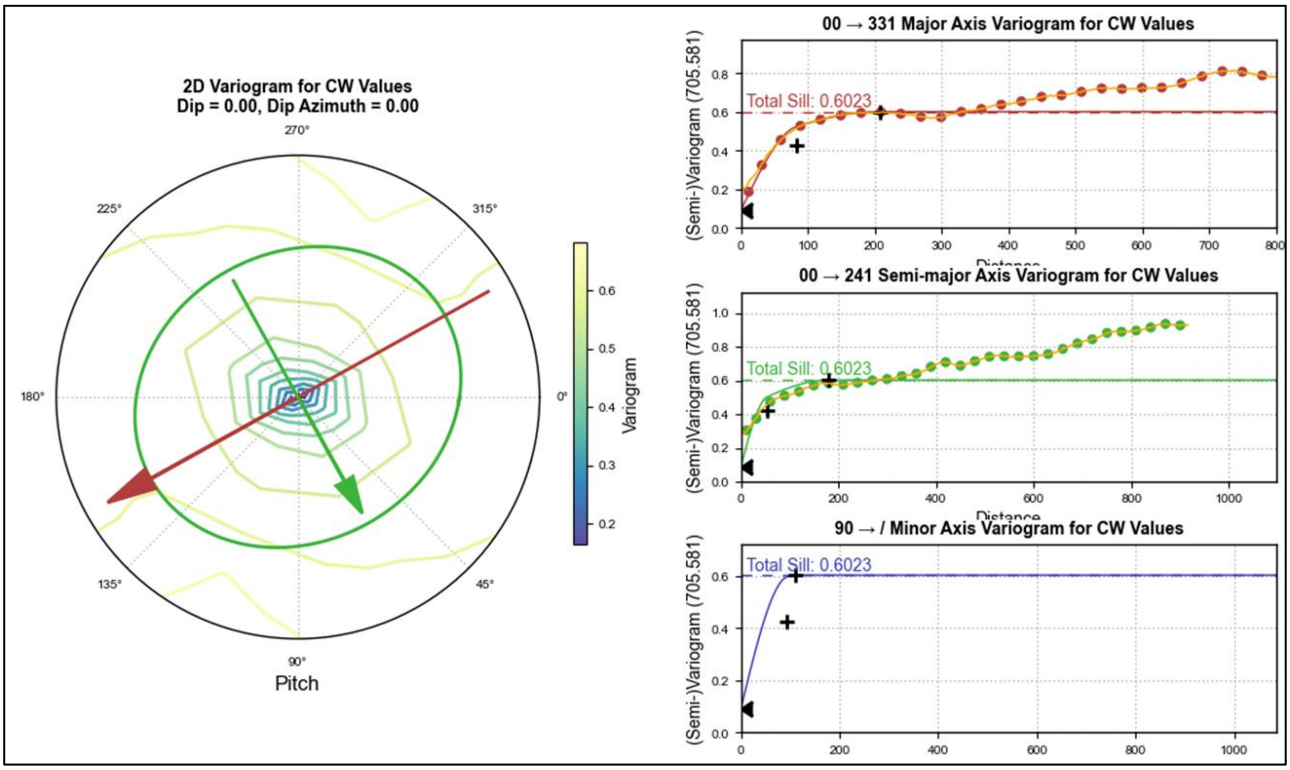
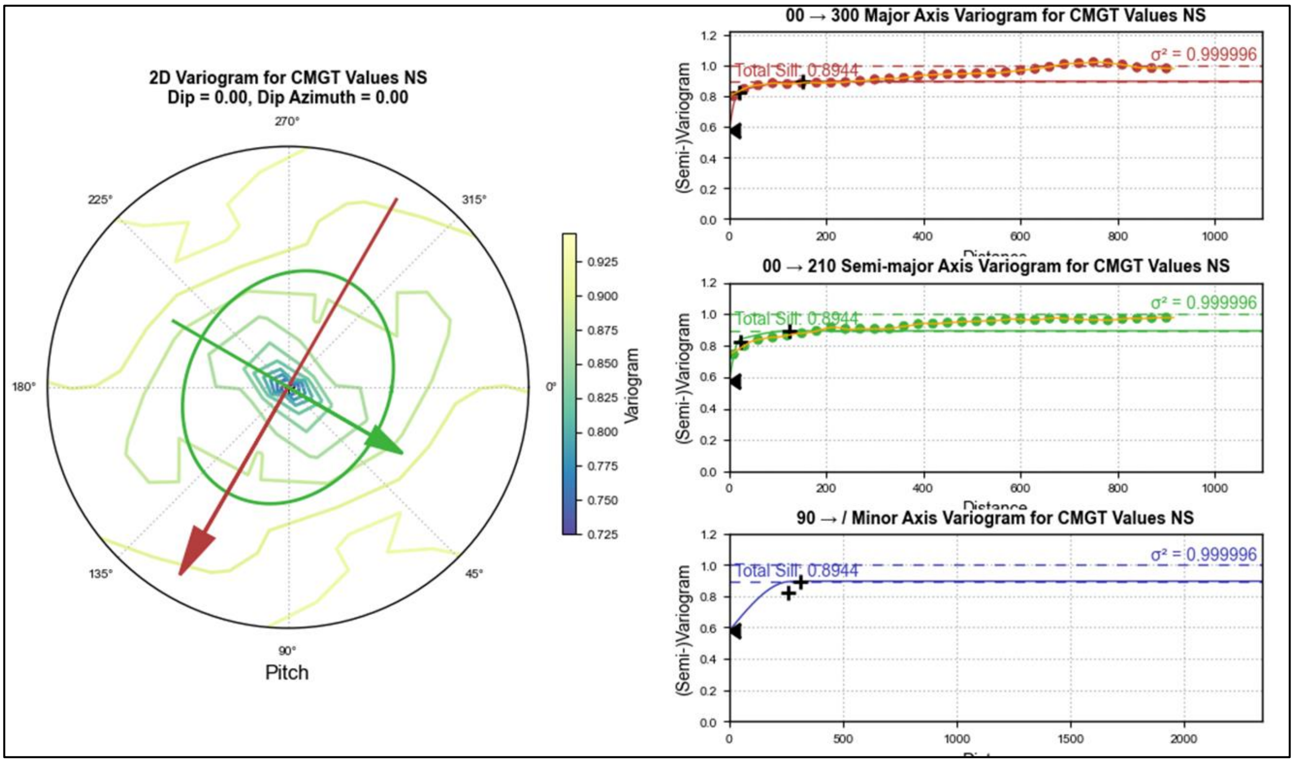


Middelvlei Reef Facies 3 CW Regularised Data

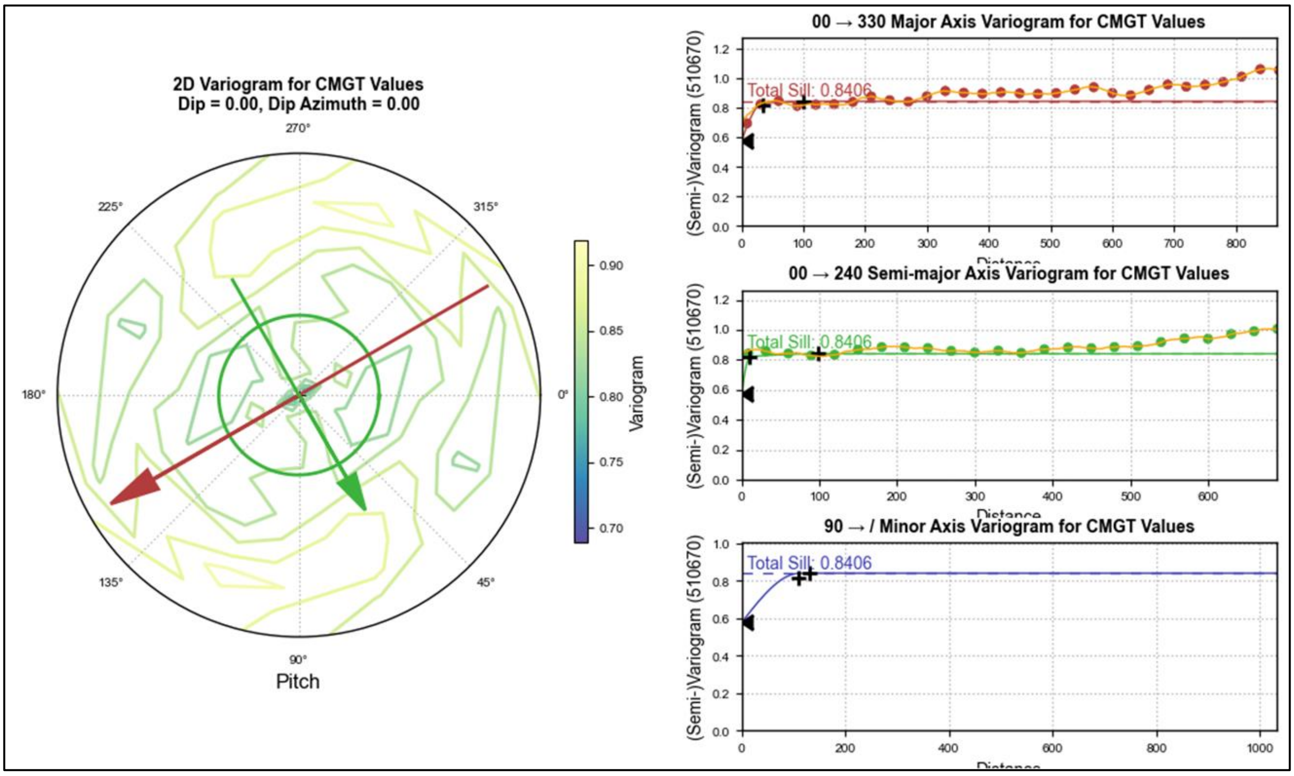


Carbon Leader Reef Variograms

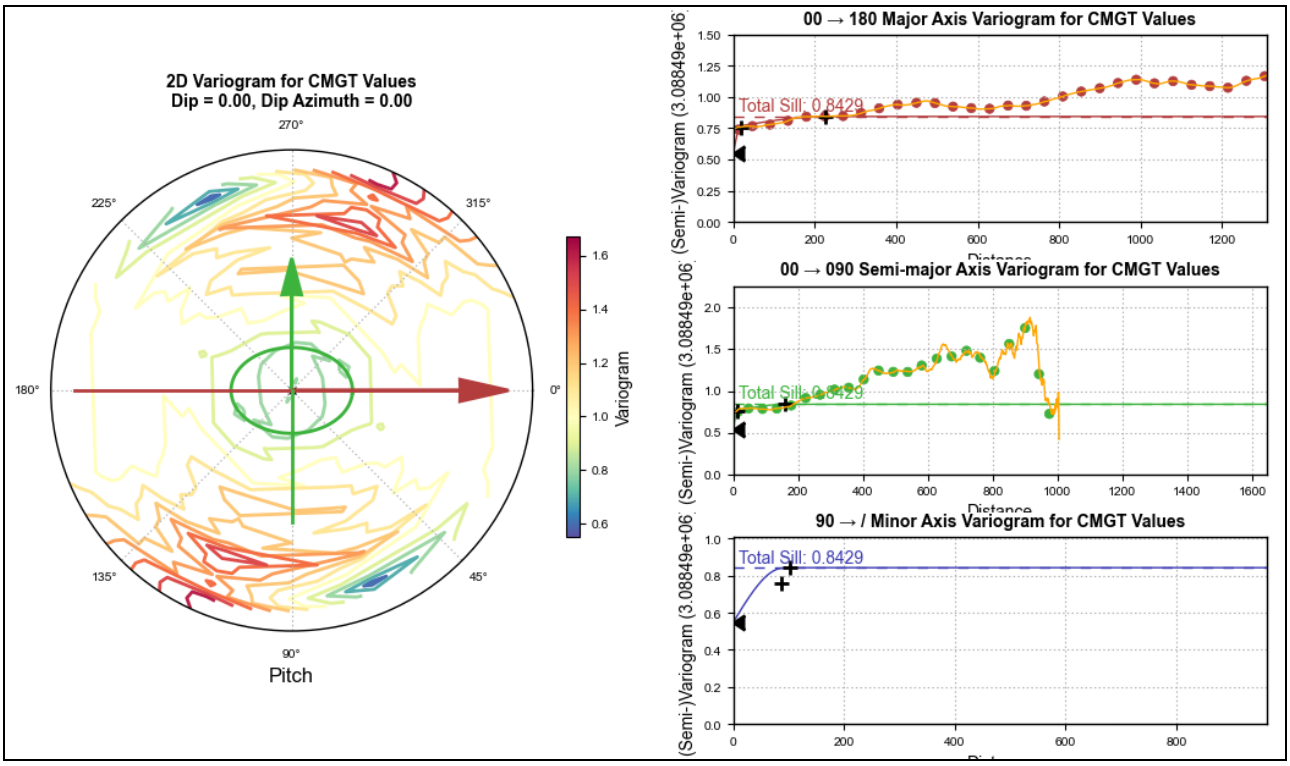
Carbon Leader Reef Facies 1 CMGT Raw Data



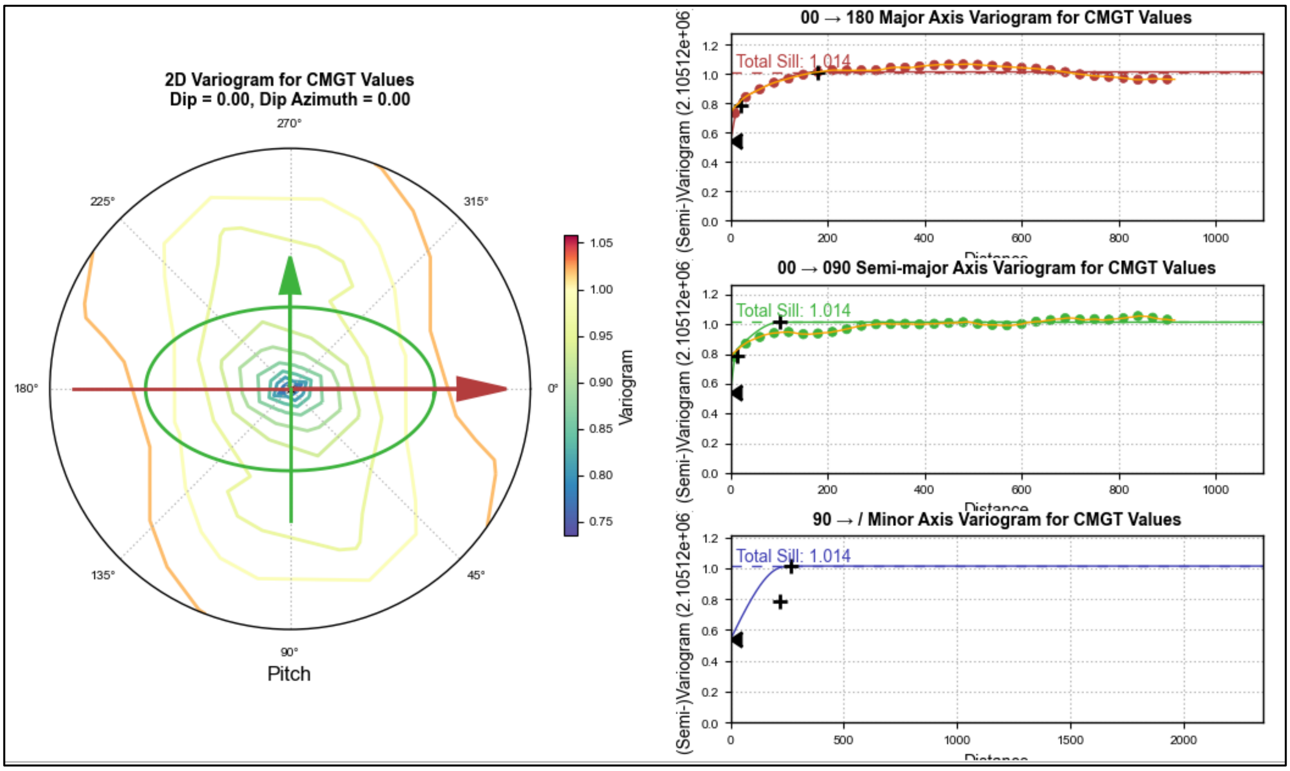
Carbon Leader Reef Facies 2a CMGT Raw Data



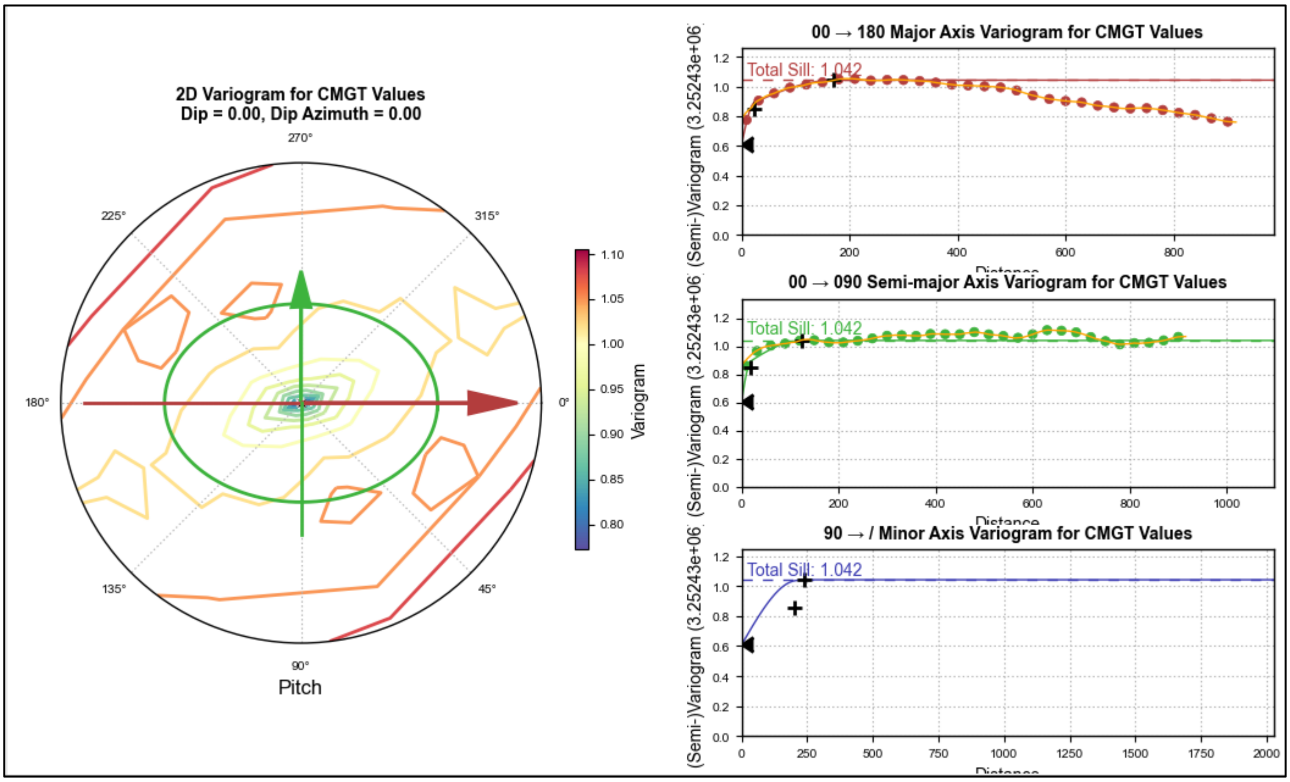
Carbon Leader Reef Facies 2b CMGT Raw Data



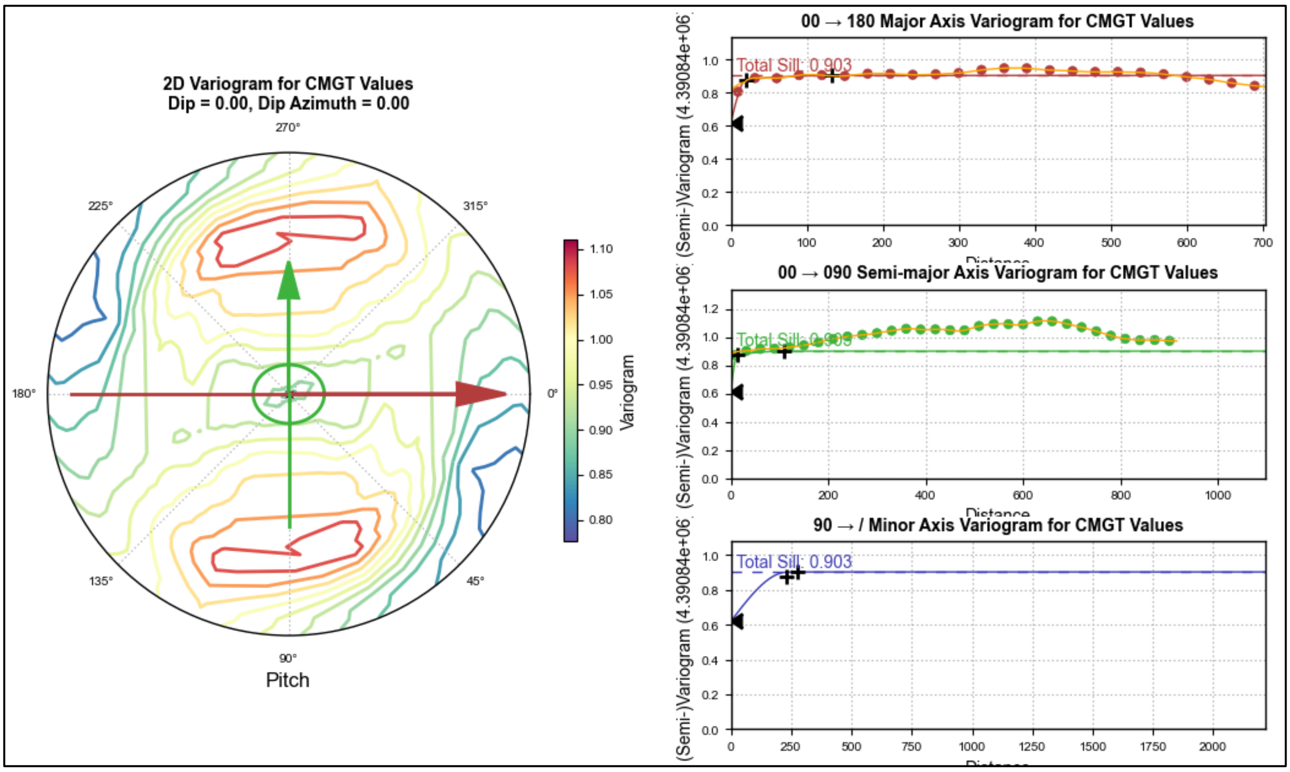
Carbon Leader Reef Facies 3 CMGT Raw Data



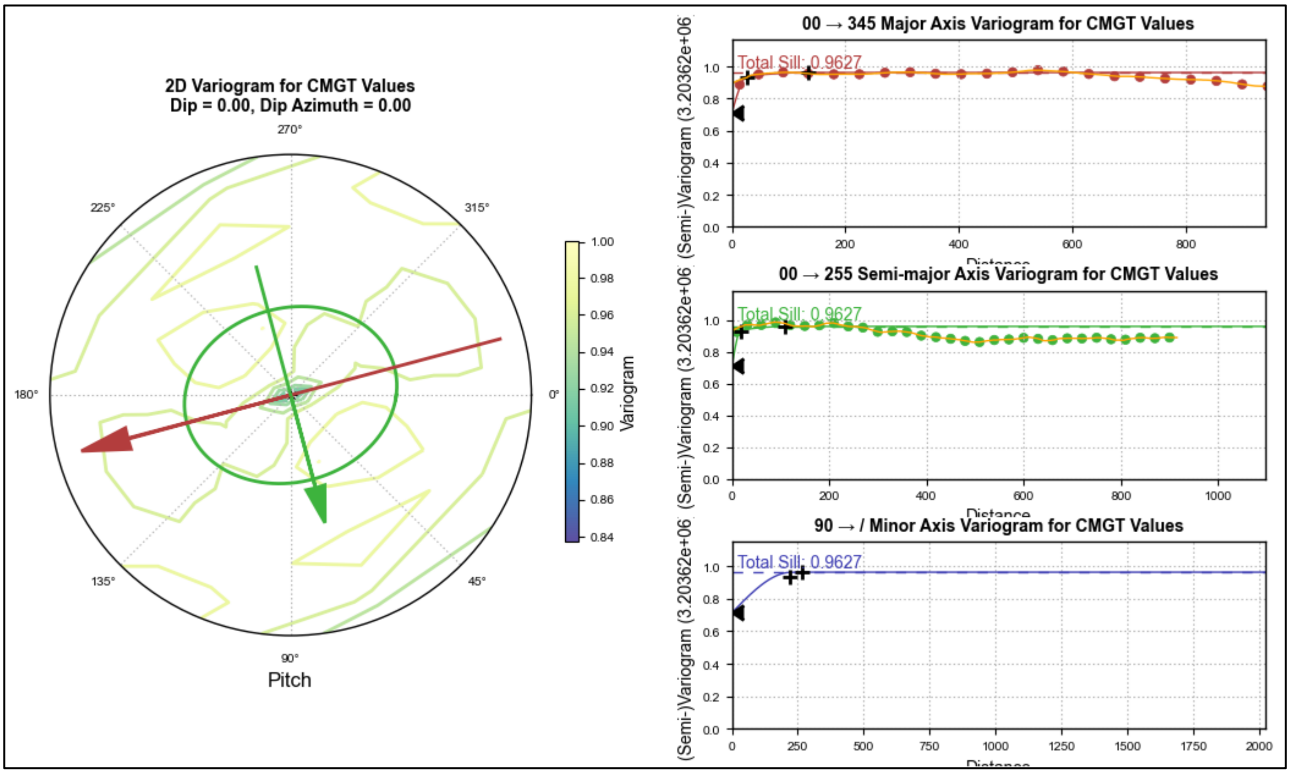
Carbon Leader Reef Facies 4 CMGT Raw Data



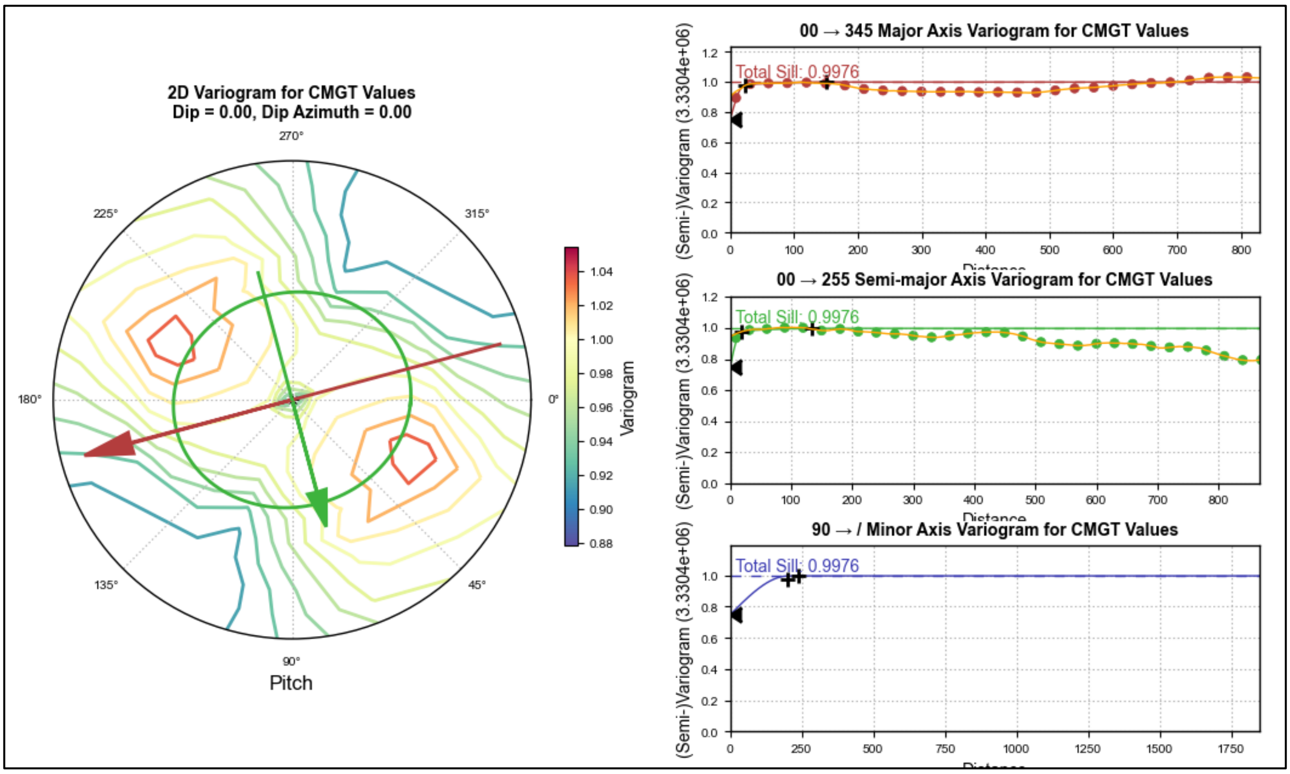
Carbon Leader Reef Facies 5 CMGT Raw Data



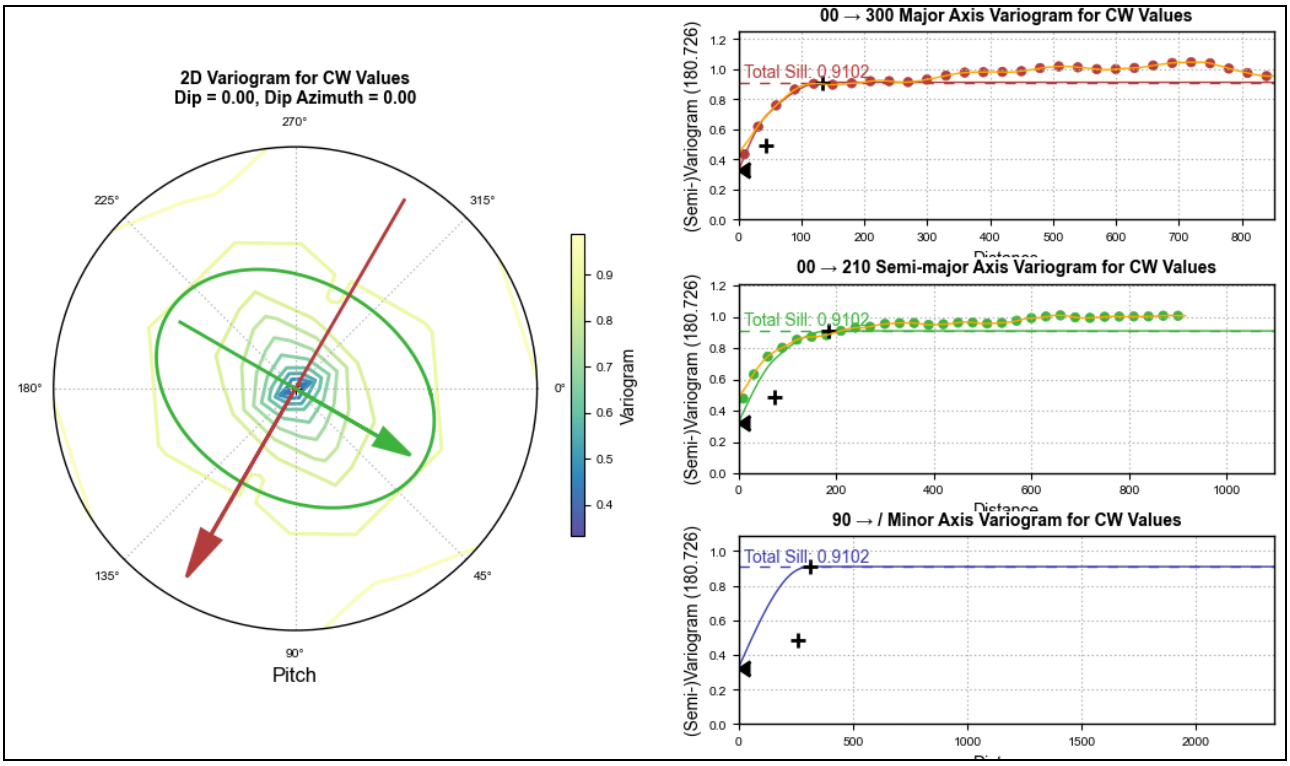
Carbon Leader Reef Facies 6 CMGT Raw Data



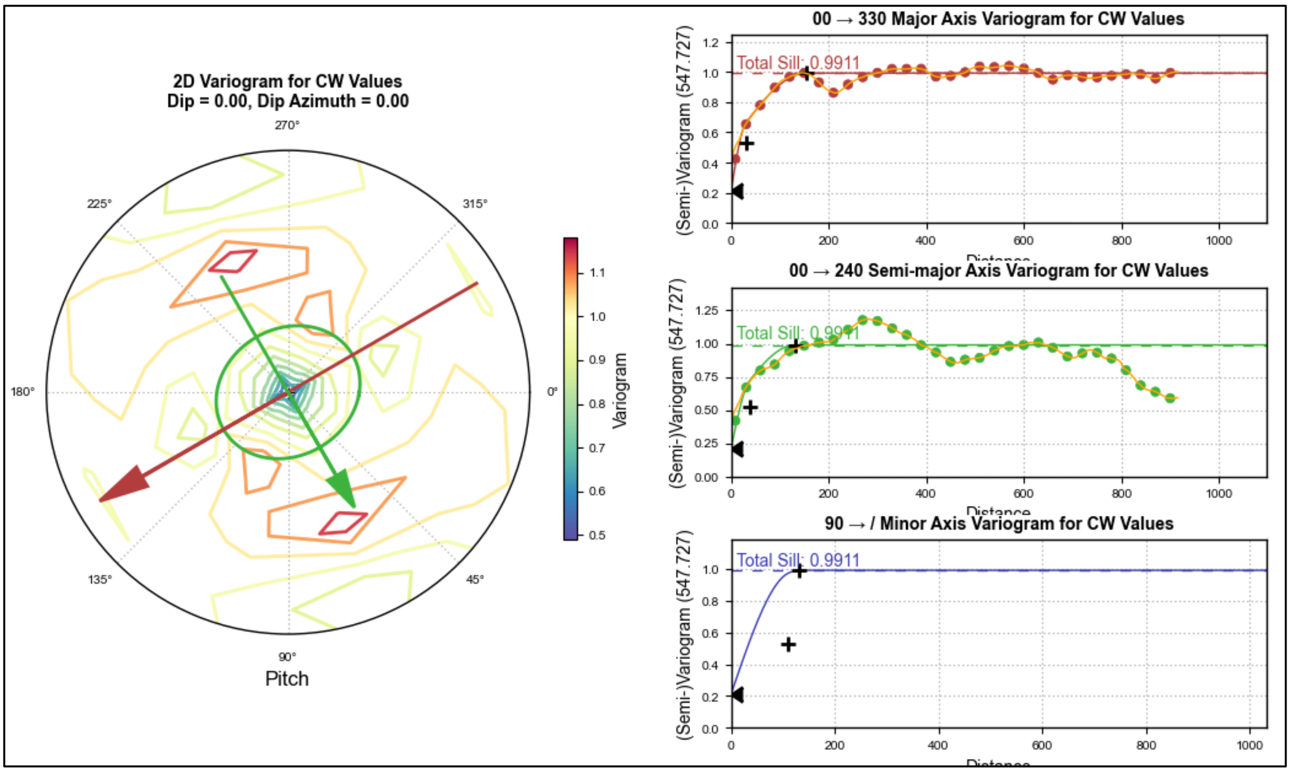
Carbon Leader Reef Facies 7 CMGT Raw Data



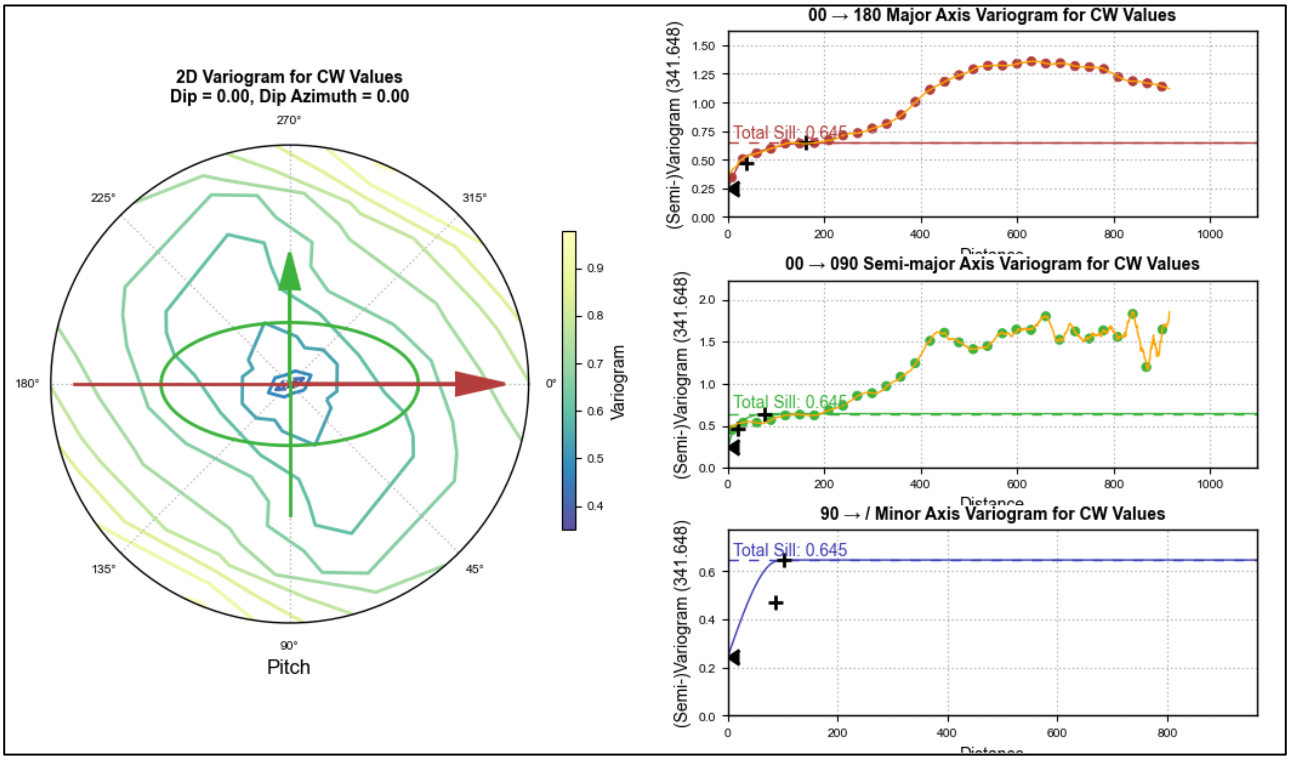
Carbon Leader Reef Facies 1 CW Raw Data



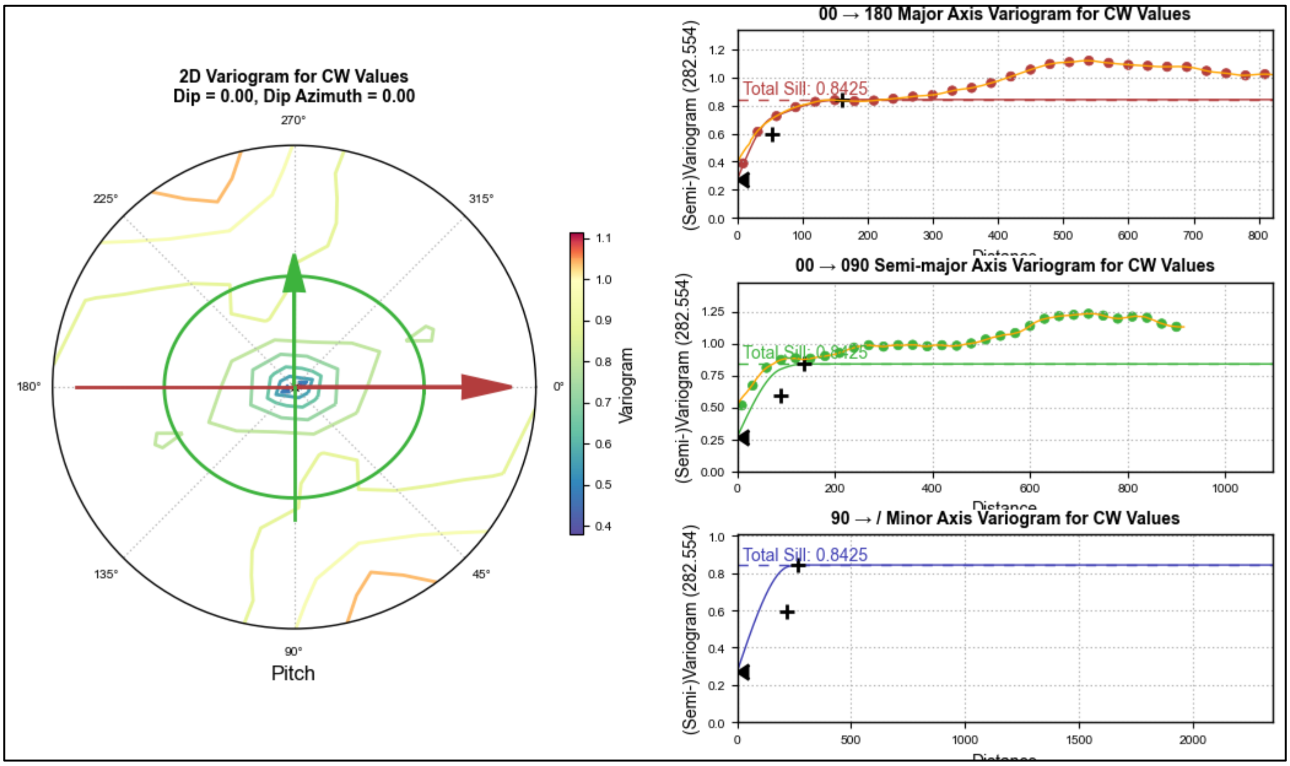
Carbon Leader Reef Facies 2a CW Raw Data



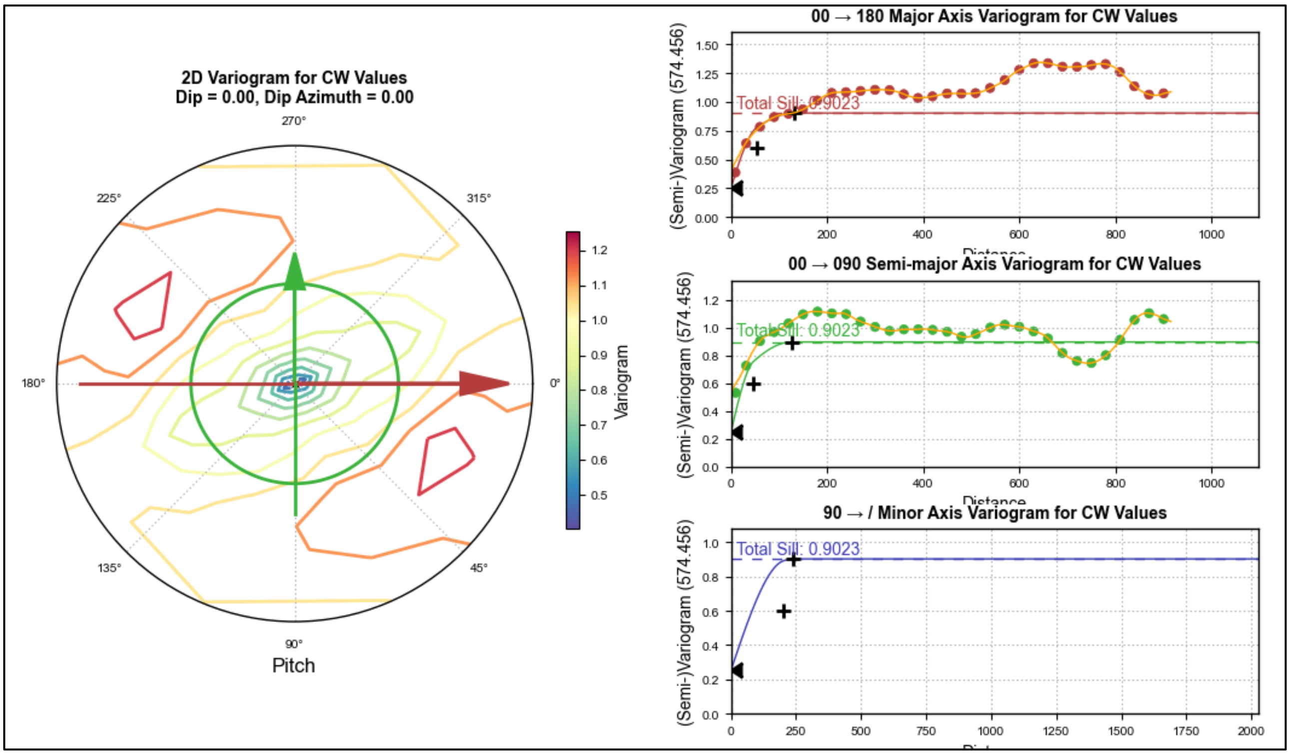
Carbon Leader Reef Facies 2b CW Raw Data



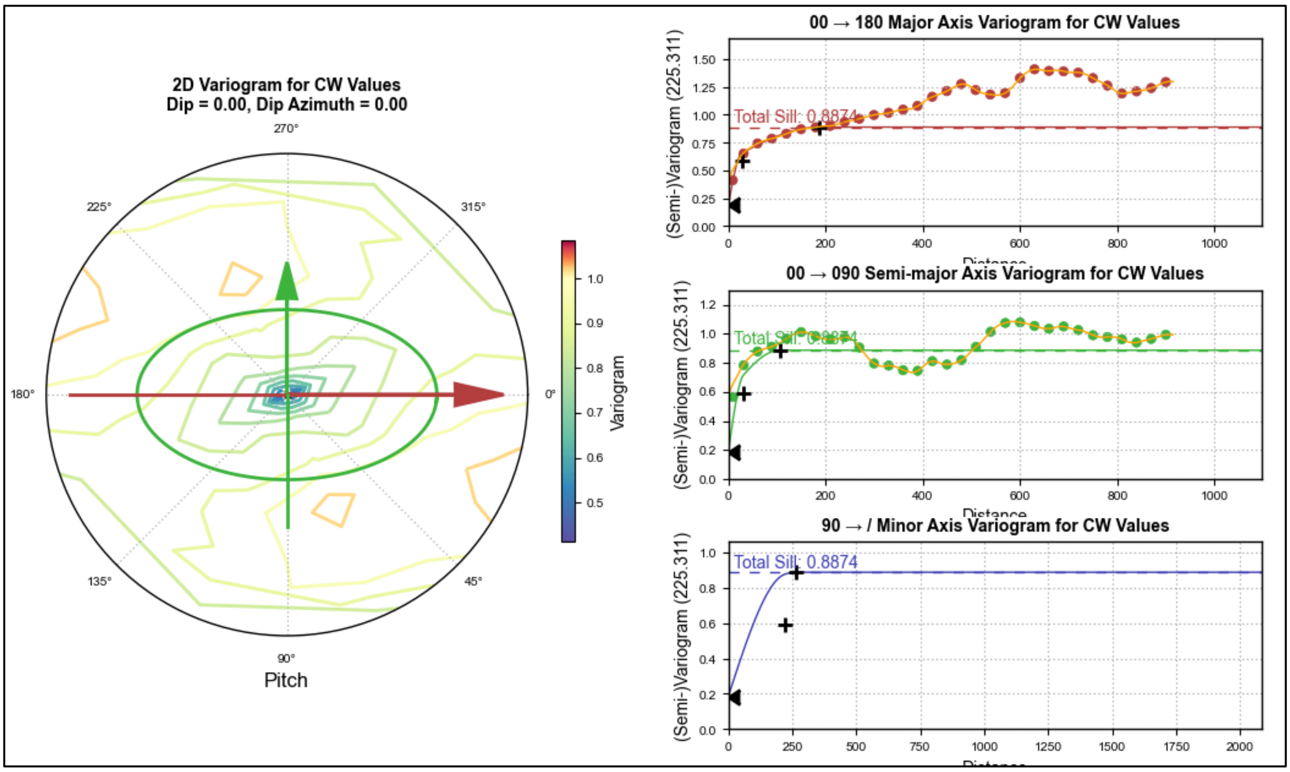
Carbon Leader Reef Facies 3 CW Raw Data



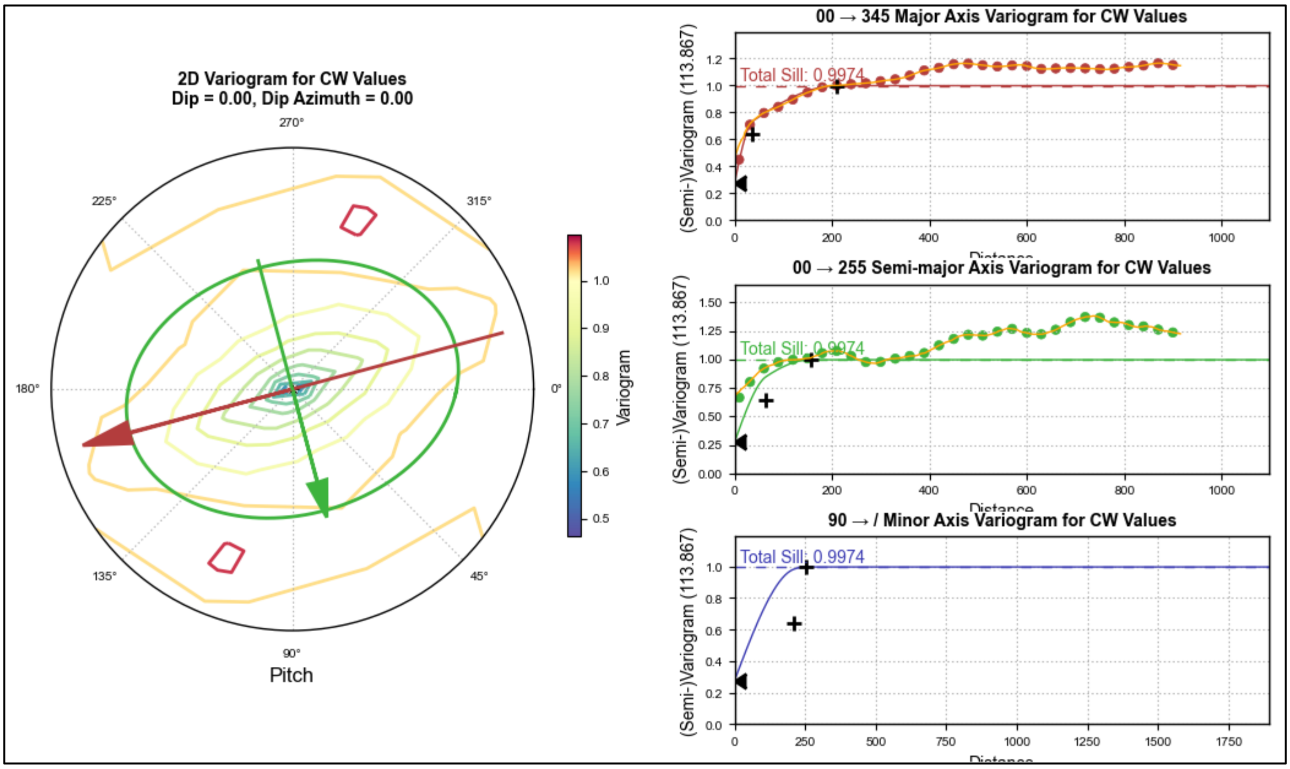
Carbon Leader Reef Facies 4 CW Raw Data



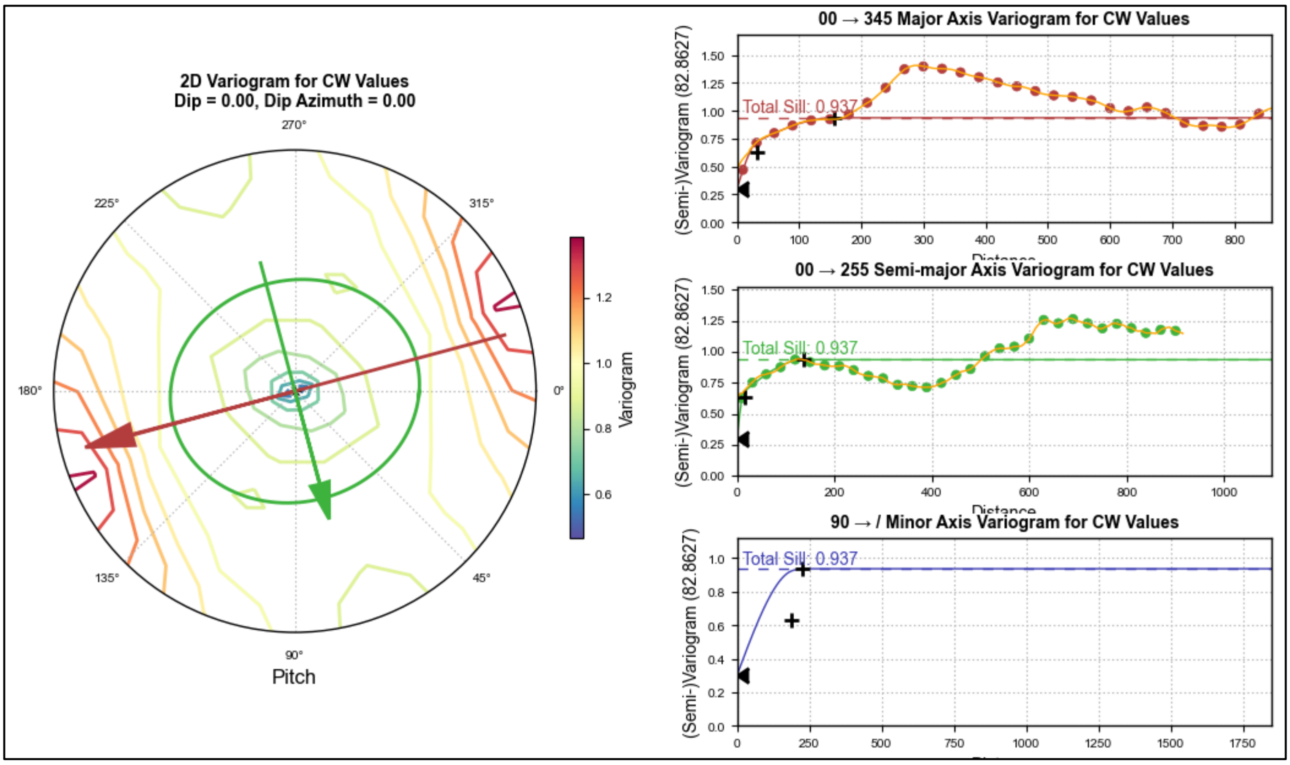
Carbon Leader Reef Facies 5 CW Raw Data



Carbon Leader Reef Facies 6 CW Raw Data

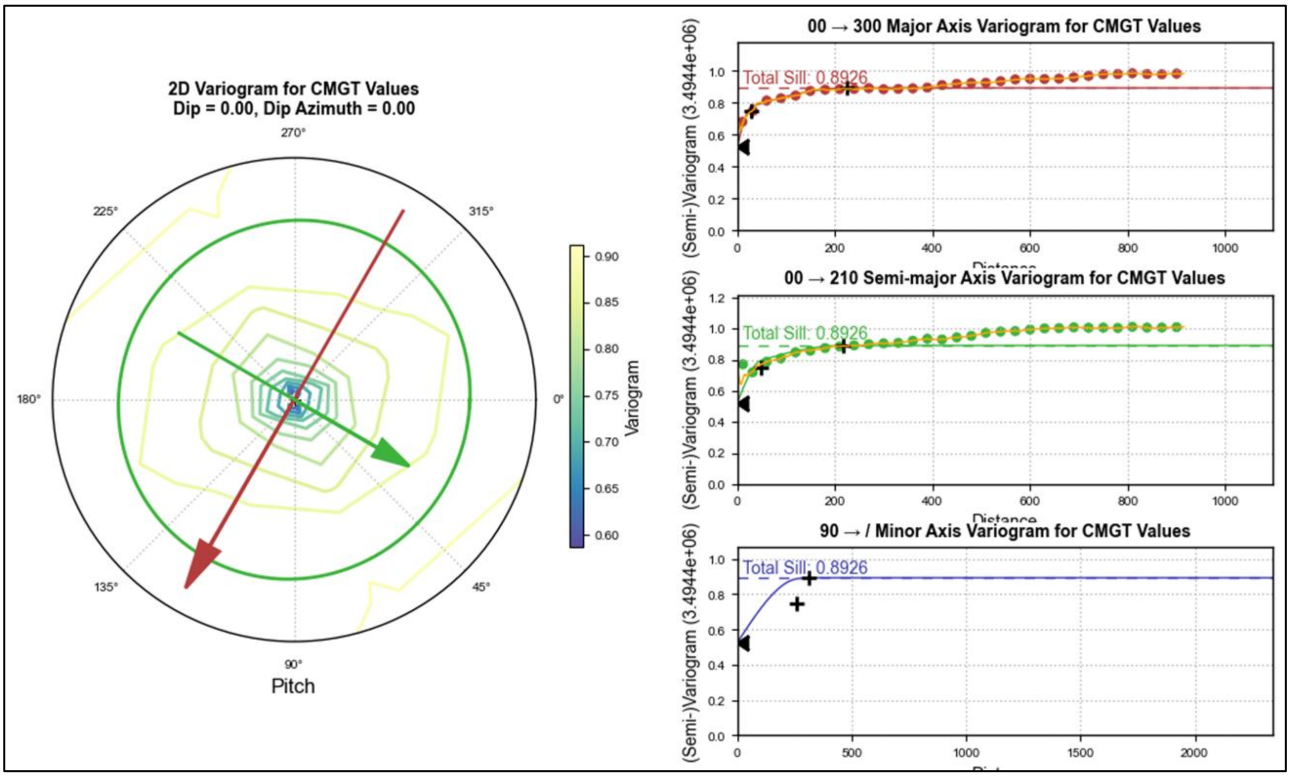


Carbon Leader Reef Facies 7 CW Raw Data

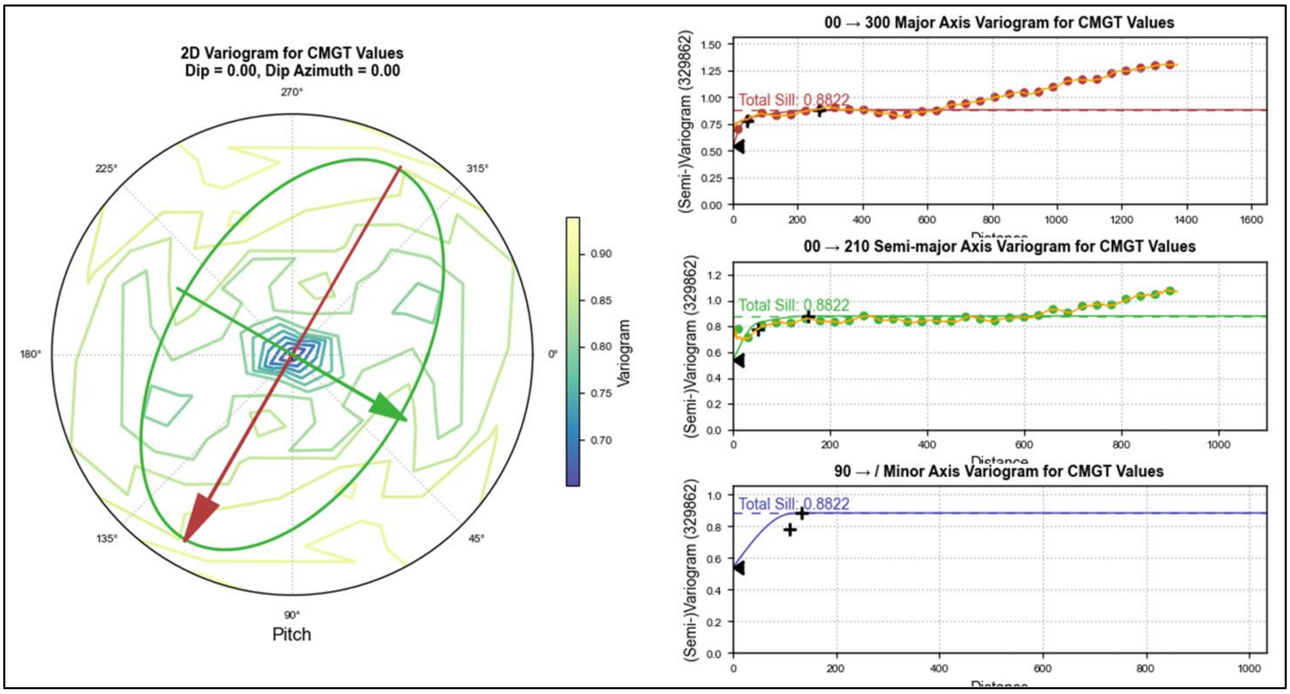


Carbon Leader Regularised Variograms

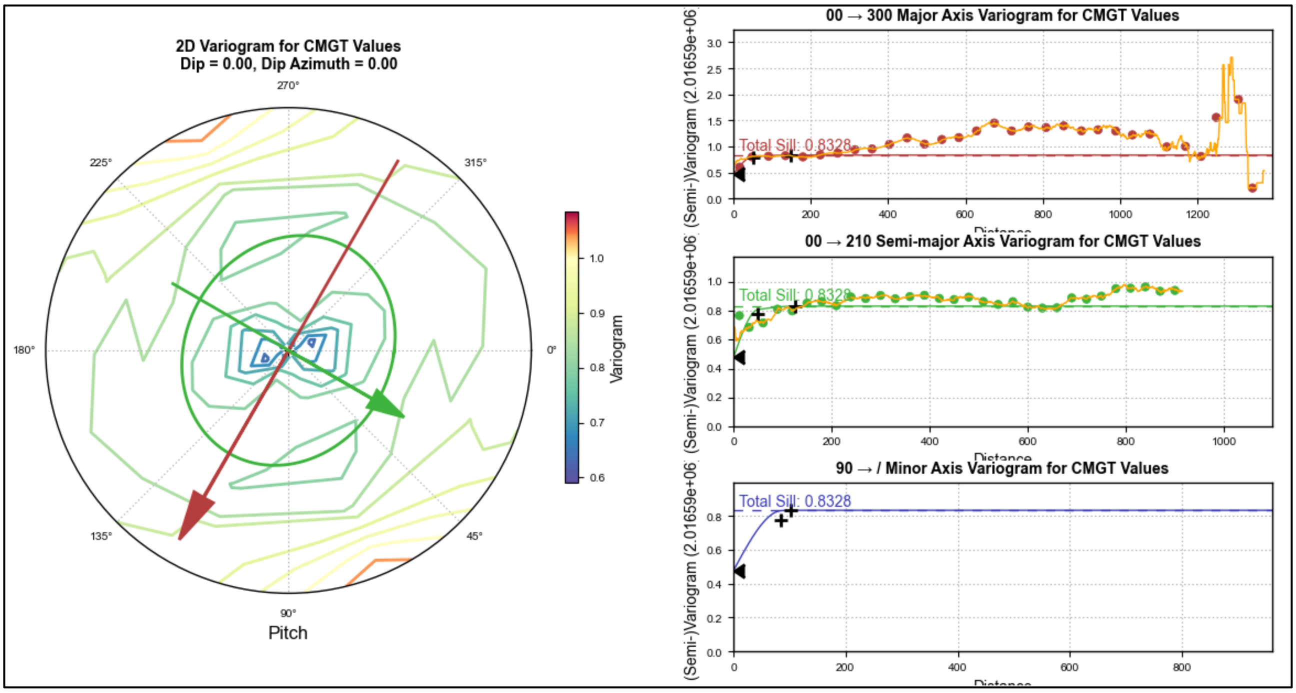
Carbon Leader Reef Facies 1 CMGT Regularised Data



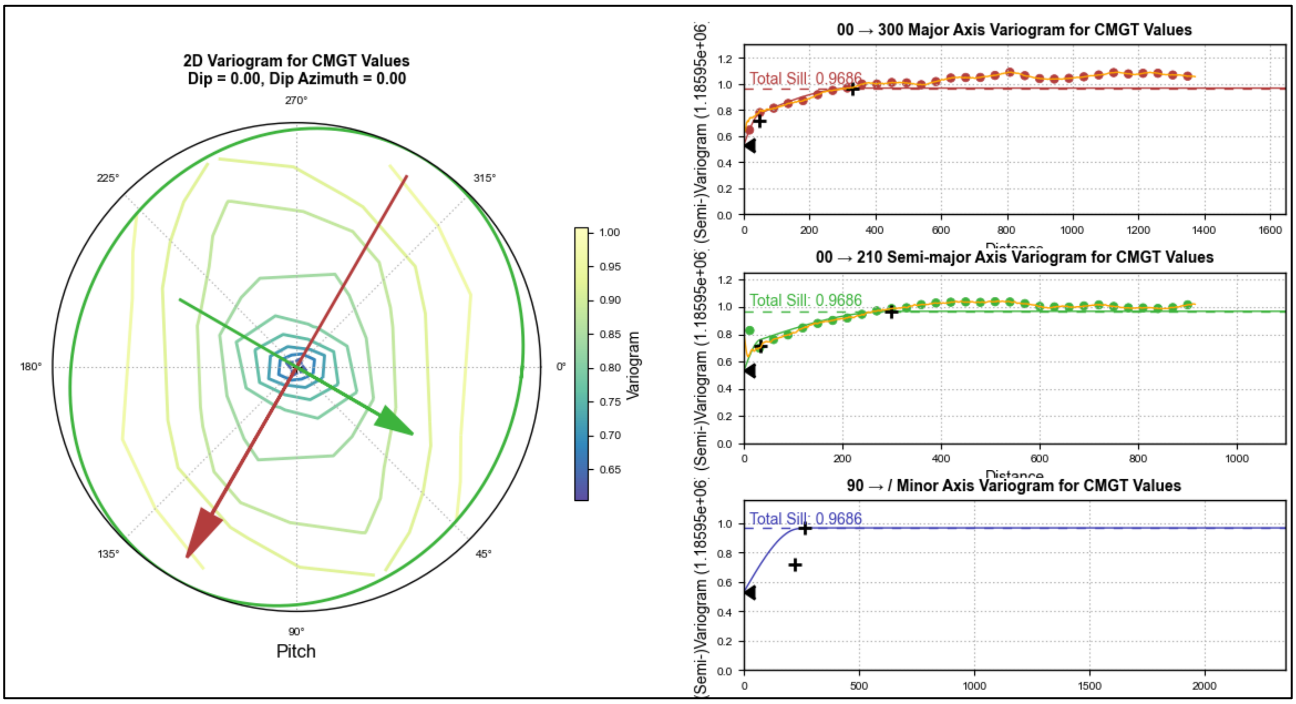
Carbon Leader Reef Facies 2a CMGT Regularised Data



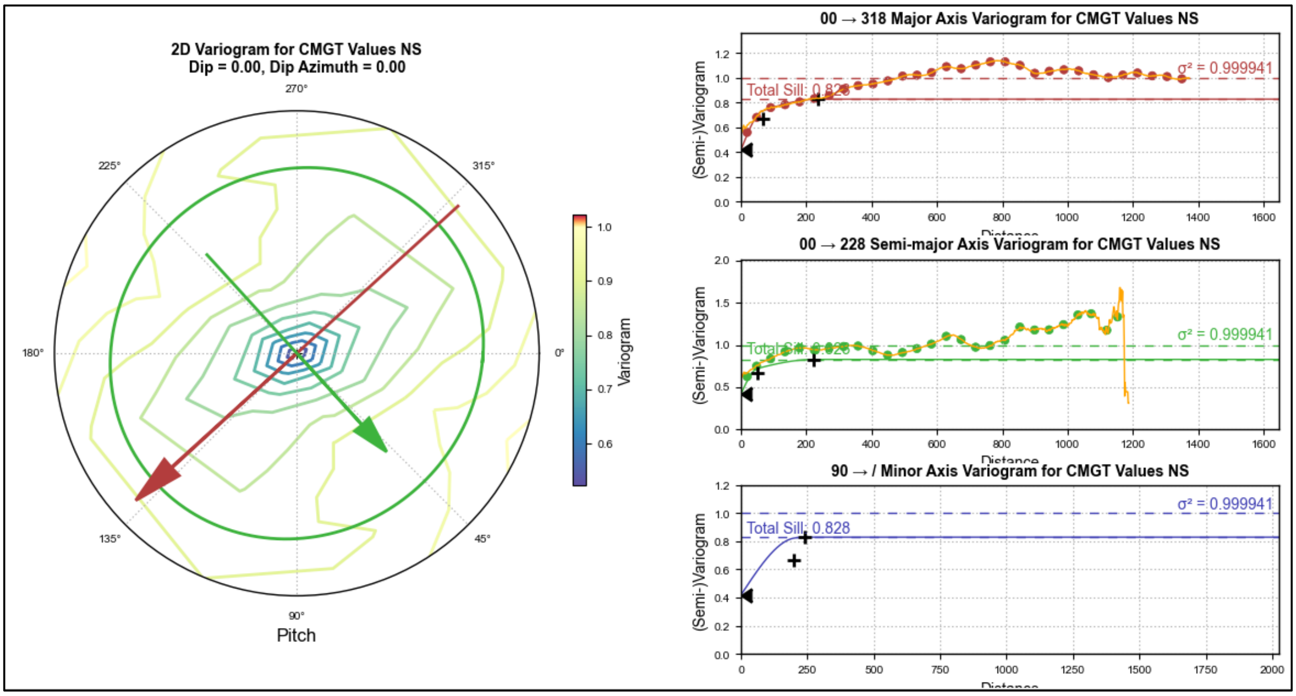
Carbon Leader Reef Facies 2b CMGT Regularised Data



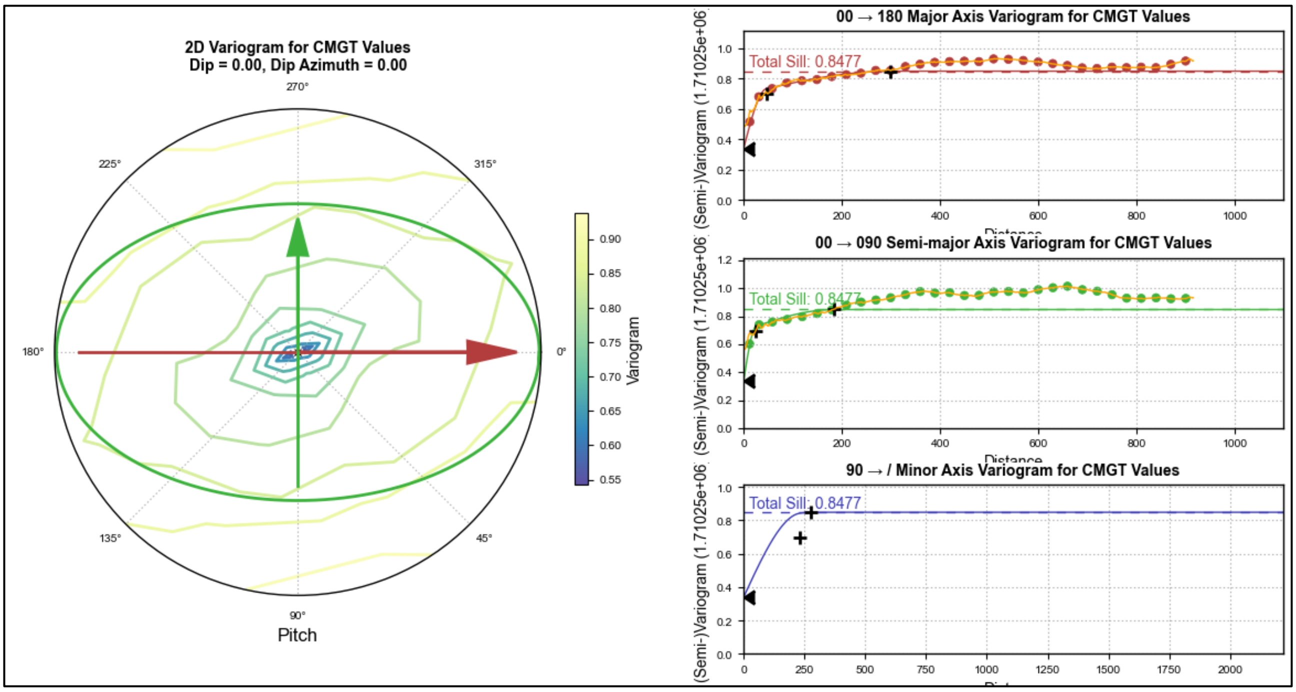
Carbon Leader Reef Facies 3 CMGT Regularised Data



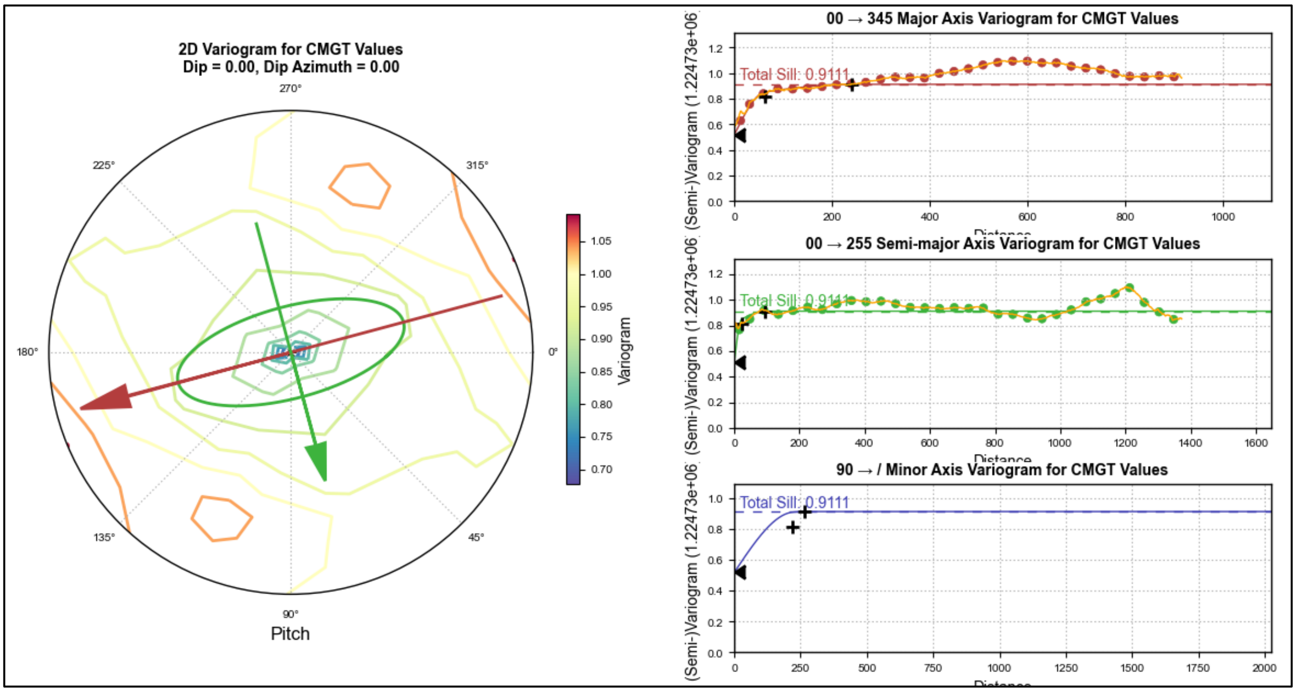
Carbon Leader Reef Facies 4 CMGT Regularised Data



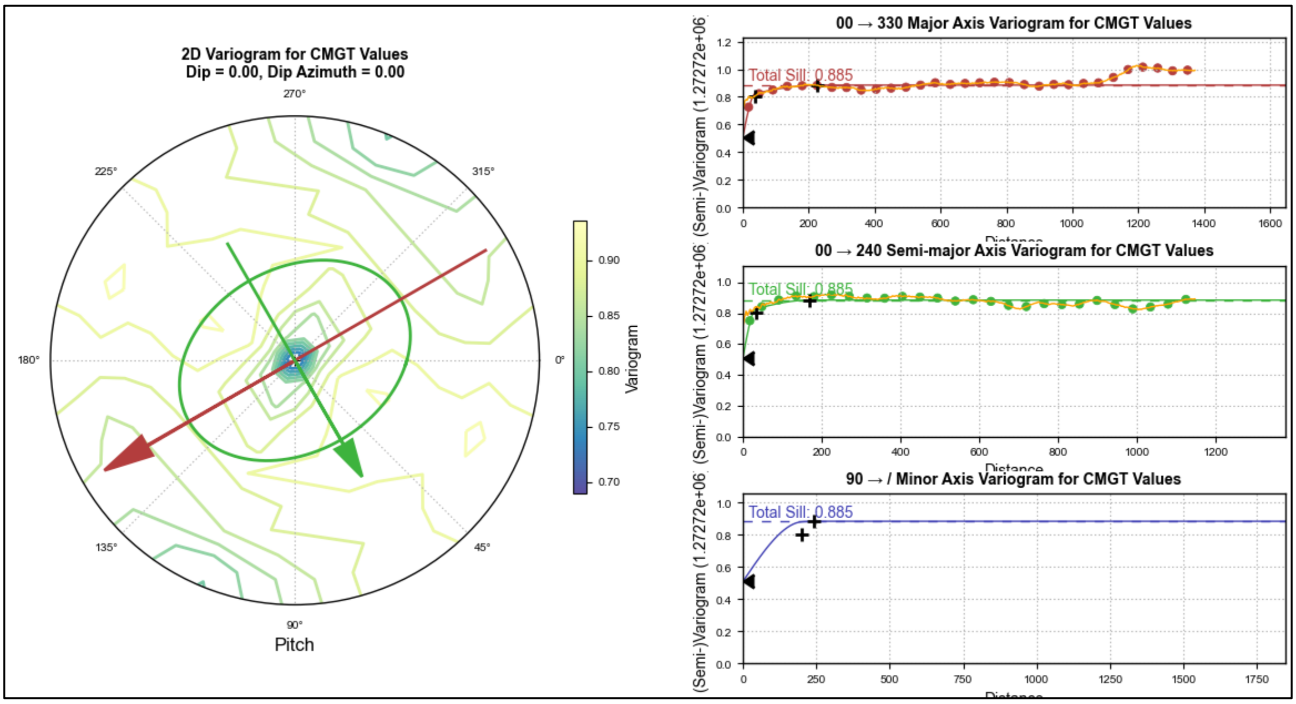
Carbon Leader Reef Facies 5 CMGT Regularised Data



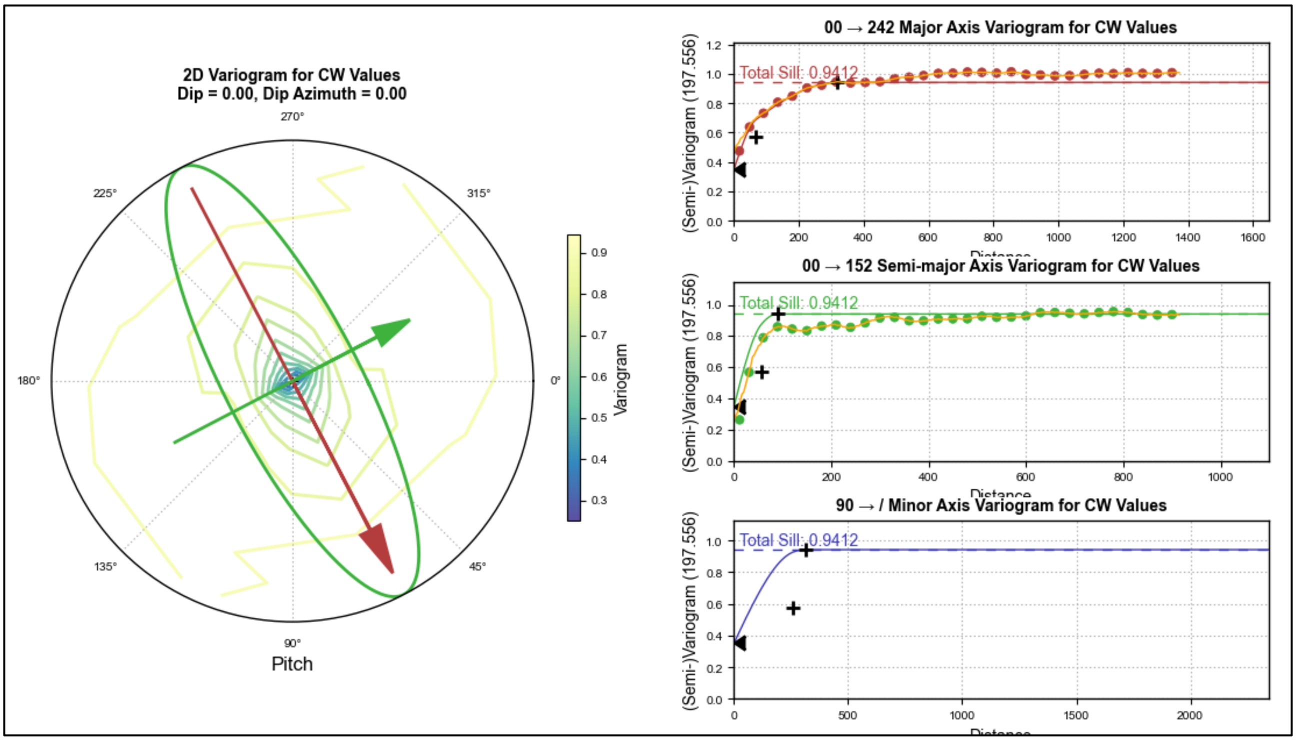
Carbon Leader Reef Facies 6 CMGT Regularised Data



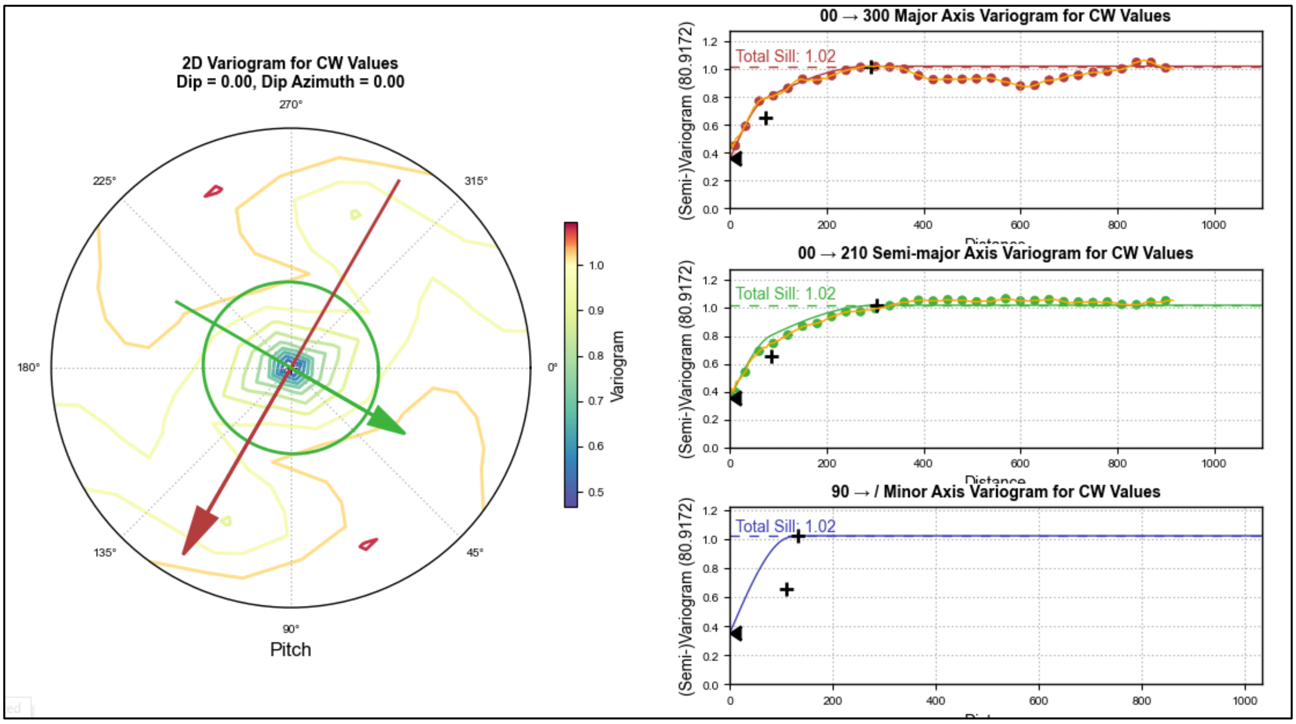
Carbon Leader Reef Facies 7 CMGT Regularised Data



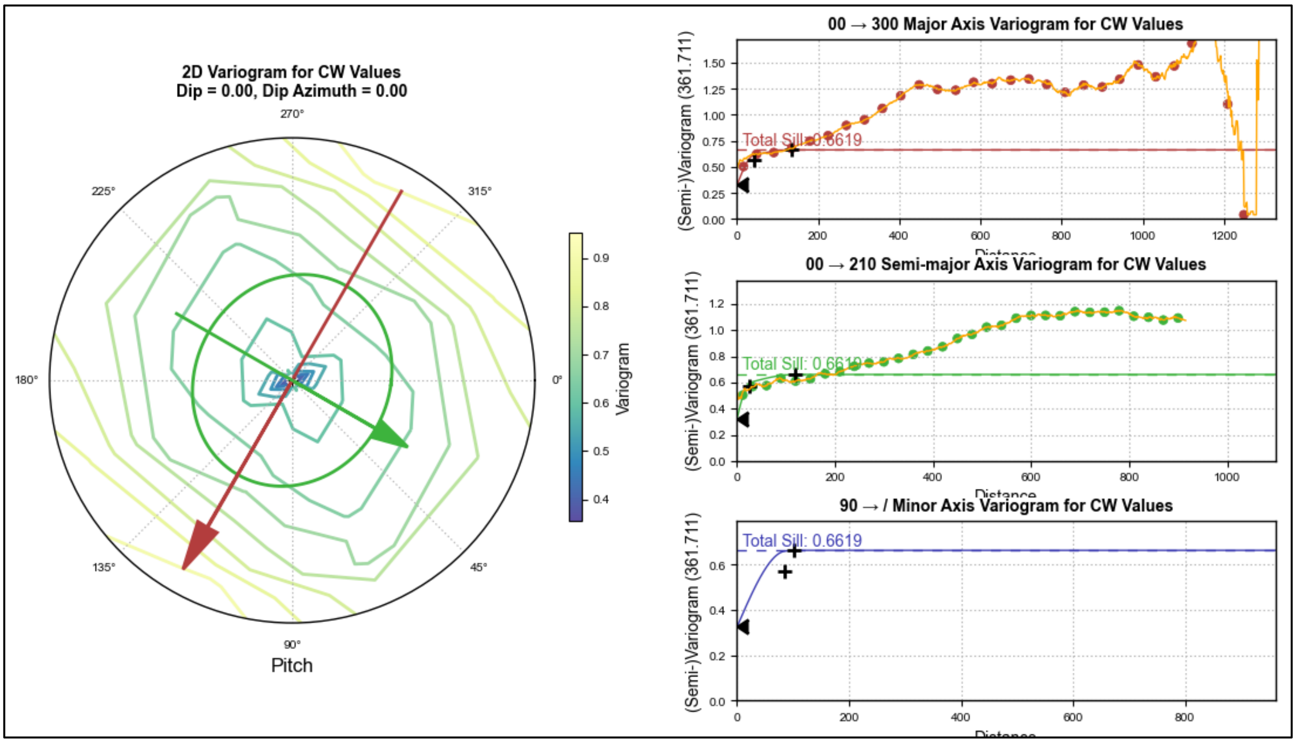
Carbon Leader Reef Facies 1 CW Regularised Data



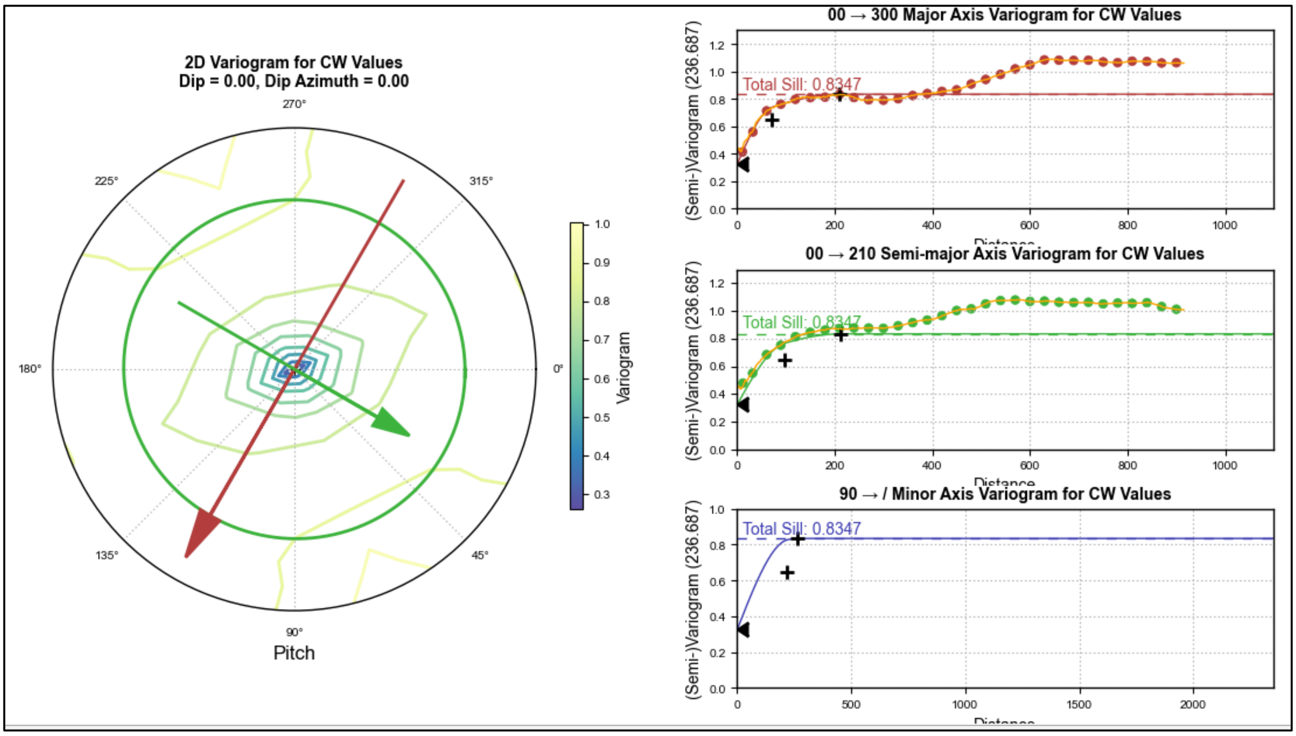
Carbon Leader Reef Facies 2a CW Regularised Data



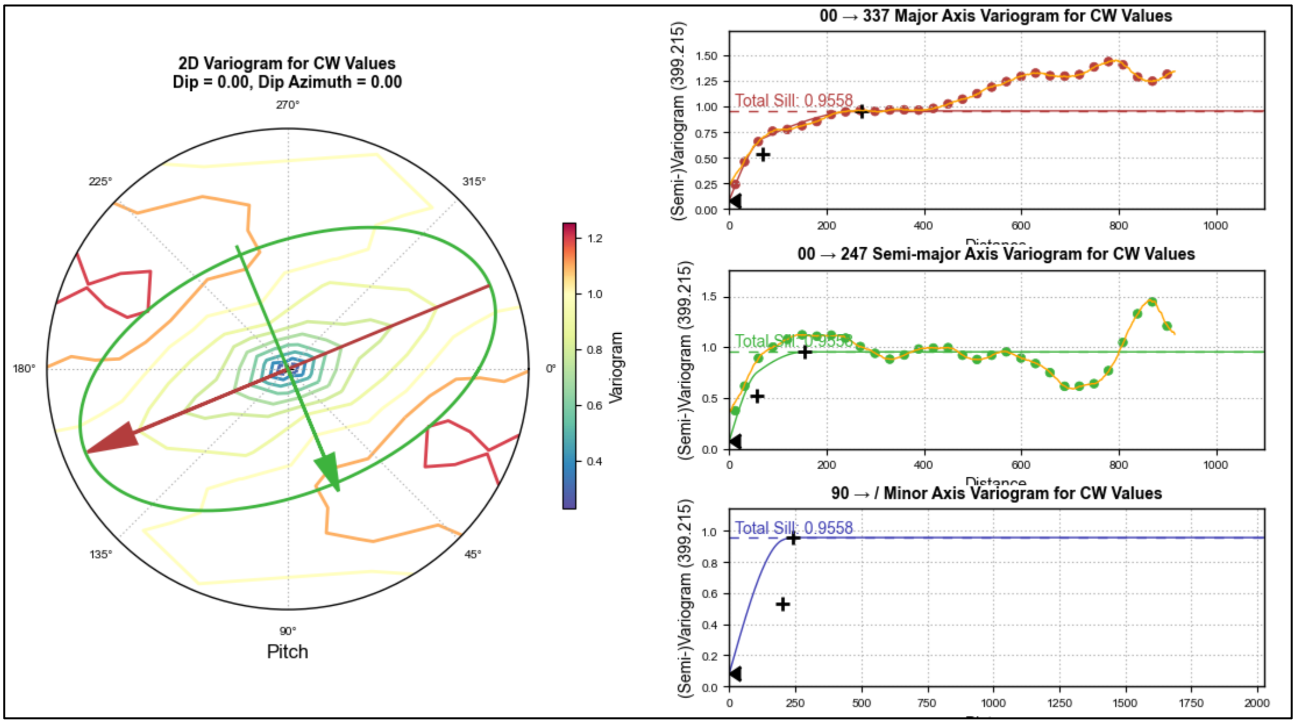
Carbon Leader Reef Facies 2b CW Regularised Data



Carbon Leader Reef Facies 3 CW Regularised Data



Carbon Leader Reef Facies 4 CW Regularised Data



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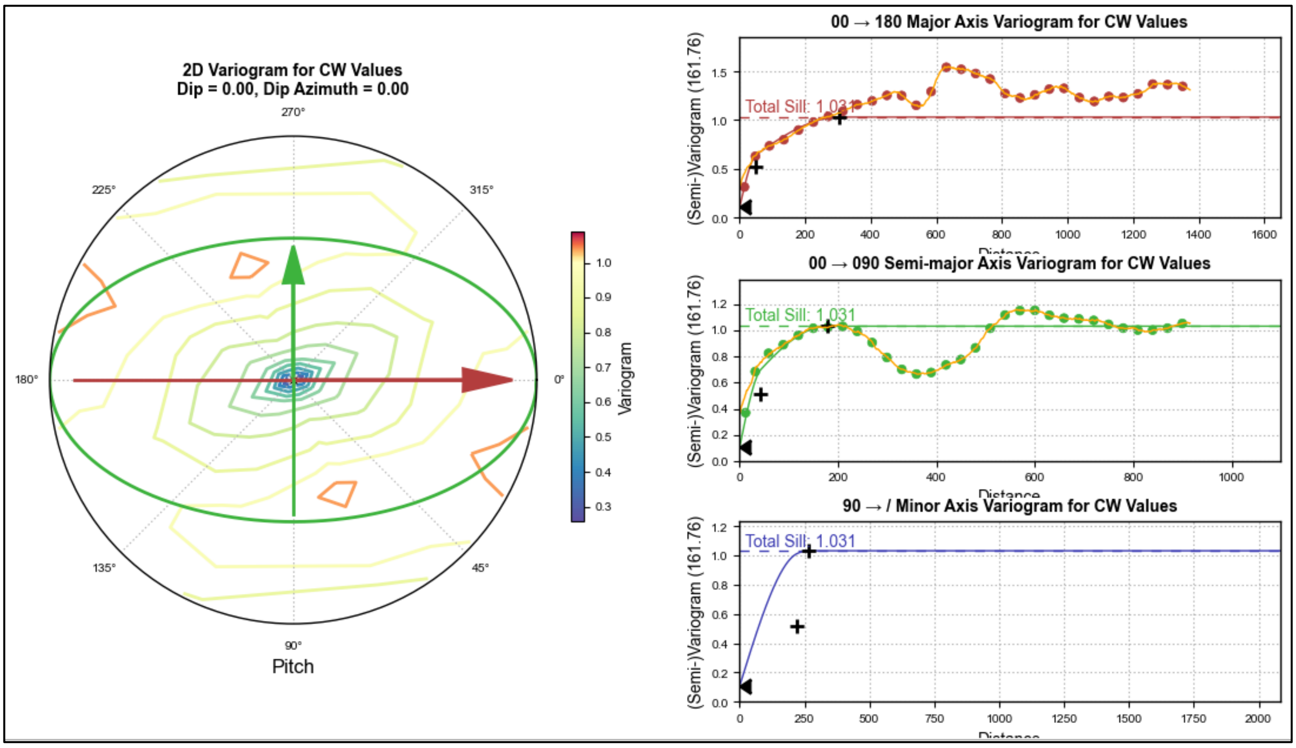
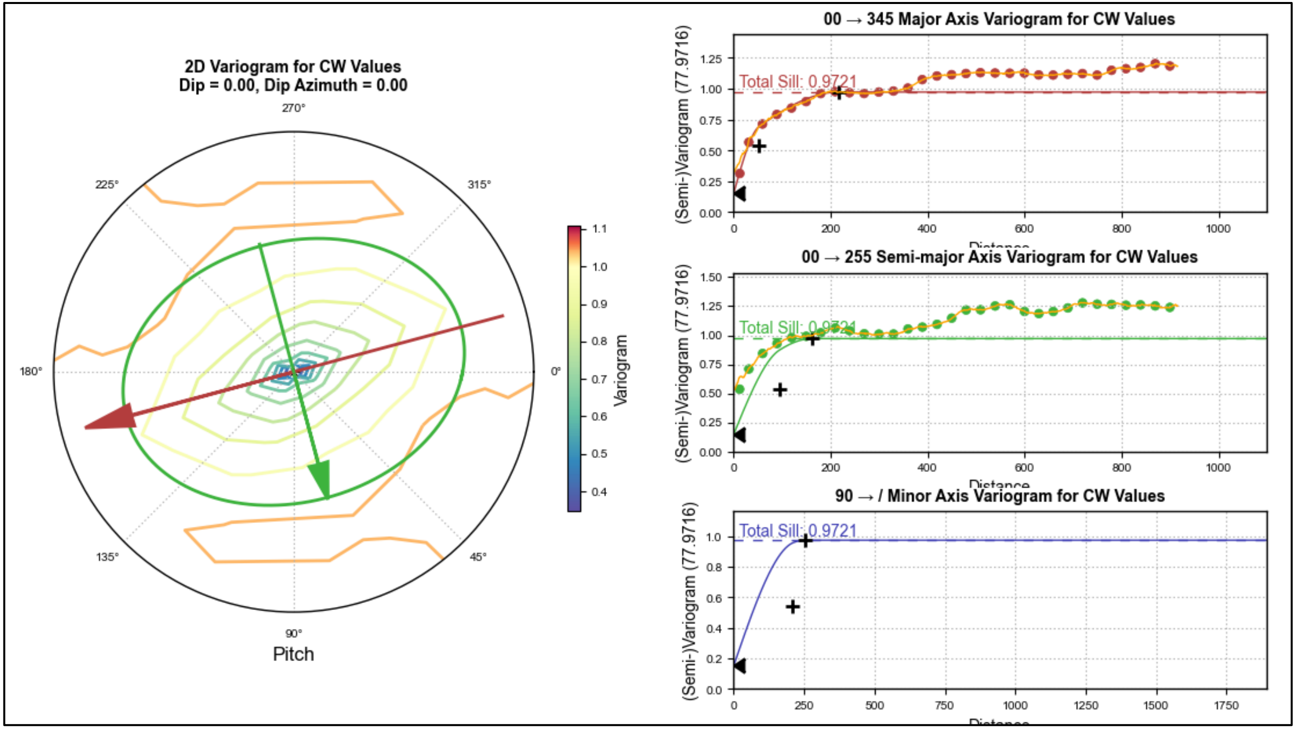


Carbon Leader Reef Facies 6 CW Regularised Data



Carbon Leader Reef Facies 7 CW Regularised Data