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Galaxy Gold Reefs (Pty) Ltd

NI 43-101 Technical Report on the Galaxy Gold Mine, South Africa

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DATE AND SIGNATURE PAGE

This Report titled "NI 43-101 Technical Report on the Galaxy Gold Mine, South Africa" was prepared on behalf of Galaxy Gold Reefs (Pty) Ltd. The Report is compliant with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* and Form 43-101 F1 – *Technical Report*. The effective date of this Report is 29 June 2020.

The Qualified Persons responsible for this Report are Mr. Uwe Engelmann (Geology and Mineral Resources) and Mr. Daniel (Daan) van Heerden (Mineral Processing, Mineral Extraction and Mineral Reserves).

"Original signed and sealed"

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

5. I am responsible for Items 1-14 and 23, 25-27 of the technical report titled "NI 43-101 Technical Report on the Galaxy Gold Mine, South Africa" prepared for Galaxy Gold Reefs (Pty) Ltd with an effective date of 29 June 2020 ("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 Galaxy Gold Reefs (Pty) Ltd as such term is defined in Section 1.5 of NI 43-101. 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 involves overseeing of the Mineral Resources as stated in the report titled "A Technical Report on the Galaxy Gold Mine, Mpumalanga Province, South Africa", prepared for Galaxy Gold Reefs (Pty) Ltd with an effective date of 1 September 2015.
11. I undertook a personal inspection of the subject property on 4 March 2020.

Signed at Little Falls, Roodepoort on 3 July 2020.

"Original signed and sealed"

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
Member	Association of Mine Managers of SA	1989
Fellow	South African Institute of Mining and Metallurgy (FSAIMM Reg. No. 37309)	1985

5. I am responsible Item 1, 15-22 and 24-26 of the technical report titled "NI 43-101 Technical Report on the Galaxy Gold Mine, South Africa" prepared for Galaxy Gold Reefs (Pty) Ltd with an effective date of 29 June 2020 ("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 Galaxy Gold Reefs (Pty) Ltd as such term is defined in Section 1.5 of NI 43-101. 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 for the complete sign-off of the report titled "A Technical Report on the Galaxy Gold Mine, Mpumalanga Province, South Africa", prepared for Galaxy Gold Reefs (Pty) Ltd with an effective date of 1 September 2015.
11. I undertook a personal inspection of the property on 4 March 2020.

Signed at Little Falls, Roodepoort on 3 July 2020.

"Original signed and sealed"

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

INFORMATION RISK

This technical report entitled "NI 43-101 Technical Report on the Galaxy Gold Mine, South Africa" (the "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 National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*, Form 43-101 F1 - *Technical Report* and the Companion Policy 43-101CP (collectively "NI 43-101"). 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
cm	Centimetre
dmt	Dry metric tonne
g	Grammes
g/t	Grammes per tonne
Ga	Billion years (1,000,000,000 years)
ha	Hectares
kg	Kilogram (1,000 g)
kL	Kilolitres (1,000 l)
km	Kilometre (1,000 m)
km^2	Square kilometres
koz	Kilo ounces (1,000 oz)
ktpm	Kilo tonnes per month
kV	Kilovolt (1,000 volts)
kW	Kilowatt (1,000 W)
kWh	Kilowatt hour
m	Metre
m^3	Cubic metres
Ma	Million years (1,000,000 years)
mm	Millimetre
Moz	Million ounces (1,000,000 oz)
Mt	Million tonnes (1,000,000 t)
MVA	Megavolt ampere
oz	Troy Ounces
ppm	Parts per million
t	Tonne
tpd	Tonnes per day
tph	Tonnes per hour
tpm	Tonnes per month
wmt	Wet metric tonne
x	By / Multiplied by
µm	Micrometre

The following is noted throughout this Report:-

- tables may not compute due to rounding; and
- 1 kg = 32.15075 oz.

The following abbreviations were used in this Report:-

Abbreviation	Description
2011 CPR	Deswik Mining Consultants (Pty) Ltd: Galaxy Combined Report for All Estimated Resources. Project Number: DMC20767. Prepared for Galaxy Gold Mining. June 2011.
2015 Report	Minxcon (Pty) Ltd: A Technical Report on the Galaxy Gold Mine, Mpumalanga Province, South Africa. Project Number: M2015-027a. Prepared for Galaxy Gold Mine. January 2016.
413 MR	Mining Right MP 30/5/1/2/2/413(MRC)
AEL	Air Emissions Licence
AIC	All-in Cost
Air Quality Act	National Environmental Management: Air Quality Act, No. 39 of 2004
AISC	All-in Sustainable Cost
amsl	Above Mean Sea Level
APM	African Pioneer Mining (Pty) Ltd
BEE	Black Economic Empowerment
BGB	Barberton Greenstone Belt
BIF	Banded Iron Formation
BIOX®	Biological Oxidation
Camden Geoserve	Camden Geoserve cc
CAPM	Capital Asset Pricing Model
Carbon Tax Act	Carbon Tax Act, No. 15 of 2019
CIL	Carbon-in-Leach
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CMF	Crusher Mill Flotation
CPI	Consumer Price Indices
CPR	Competent Persons' Report
DCF	Discounted Cash Flow
DD	Diamond Drilling
DEA	Department of Environmental Affairs
Deswik	Deswik Mining Consultants (Pty) Ltd
Digby Wells	Digby Wells Environmental
DMRE	Department of Mineral Resources and Energy
DWA	Department of Water Affairs
EA	Environmental Authorisation
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
EIA	Environmental Impact Assessment
EMP	Environmental Management Programme
ETC	Eastern Transvaal Consolidated
FCFE	Free Cash Flow to Equity
FCFF	Free Cash Flow to the Firm
FOB	Free-on-Board
G&A	General and Administrative
Galane	Galane Gold Limited
Galaxy Gold Mine or the Mine	Galaxy Gold Mine
GGR or the Client or the Company	Galaxy Gold Reefs (Pty) Ltd
GHG	Greenhouse Gas
ID2	Inverse Distance Squared
IRR	Internal Rate of Return
IWULA	Integrated Water Use Licence Application
IWWMP	Integrated Water and Waste Management Plan
JSE	Johannesburg Stock Exchange
KNA	Kriging Neighbourhood Analysis
LoM	Life of Mine
MCF	Mine Call Factor
Minxcon	Minxcon (Pty) Ltd
MPRDA	Mineral and Petroleum Resources Development Act, No 28 of 2002
MSO	Mine Stope Optimiser
NEMA	National Environmental Management Act, No. 107 of 1998
NI 43-101	National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*, Form 43-101 F1 – *Technical Report* and the Companion Policy 43-101CP
NMD	Notified Maximum Demand
NPV	Net Present Value

Abbreviation	Description
NWA	National Water Act, No. 36 of 1998
OES	One Environmental System
Offtake Agreement	Concentrate off-take agreement between GGR and a UK-based company executed in September 2018
OK	Ordinary Kriging
PCD	Pollution Control Dam
PEA	Preliminary Economic Assessment
Performance	Performance Laboratories (Pty) Ltd
Project Areas	The underground, open pit, shaft pillar and historic TSF targets that comprise the Galaxy Gold Mine
PS5_HG	Princeton PS5 High Grade
PS5_LG	Princeton PS5 Low Grade
Ptn	Portion
QAQC	Quality Assurance and Quality Control
QP	Qualified Person
RC	Reverse Circulation (drilling)
RE	Remaining Extent
Report	NI 43-101 Technical Report on the Galaxy Gold Mine, South Africa. Galaxy Gold Reefs (Pty) Ltd, prepared by Minxcon (Pty) Ltd. Effective date 29 June 2020
RoM	Run of Mine
Royalty Act	Mineral and Petroleum Resources Royalty Act, No. 28 of 2008
RWD	Return Water Dam
SG	Specific Gravity
SK	Simple Kriging
SLP	Social and Labour Plan
SLS	Super Laboratory Services (Pty) Ltd
SOR	Slope of Regression
SRK	SRK Consulting South Africa (Pty) Ltd
STC	Secondary Tax on Dividends
TSF	Tailings Storage Facility
USD	United States Dollar (currency)
USDm	Million United States Dollars
WRD	Waste Rock Dump
WUL	Water Use Licence
ZAR	South African Rand (currency)
ZARm	Million South African Rands

ITEM 1 - SUMMARY

Minxcon (Pty) Ltd ("Minxcon") was commissioned by Galaxy Gold Reefs (Pty) Ltd ("GGR", the "Client", or the "Company") to complete an updated Technical Report and a preliminary economic assessment ("PEA") on the Galaxy mineral assets (collectively termed "Galaxy Gold Mine", "Galaxy" or the "Mine") and present the results in this Report.

The strategy for the Mine has undergone significant changes, rendering previously-declared Mineral Reserves irrelevant and moving the project back to a PEA stage.

This Report has been prepared in accordance with the prescribed guidelines of the National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*, Form 43-101 F1 – *Technical Report* and the Companion Policy 43-101CP (collectively "NI 43-101").

Item 1 (a) - Property Description

The historically-established Galaxy Gold Mine is located approximately 8 km west of the town of Barberton and 45 km west of the provincial capital of Nelspruit (Mbombela), in the Mpumalanga Province of South Africa. The Mine comprises several east-west trending gold orebodies and tailings storage facilities ("TSFs") from historical workings. The Agnes Mine and Princeton Mine are the primary mining areas. The Alpine Mine and the Pioneer Mine are historical underground workings and constitute future mining targets. Current site activities include low volume development and TSF retreatment.

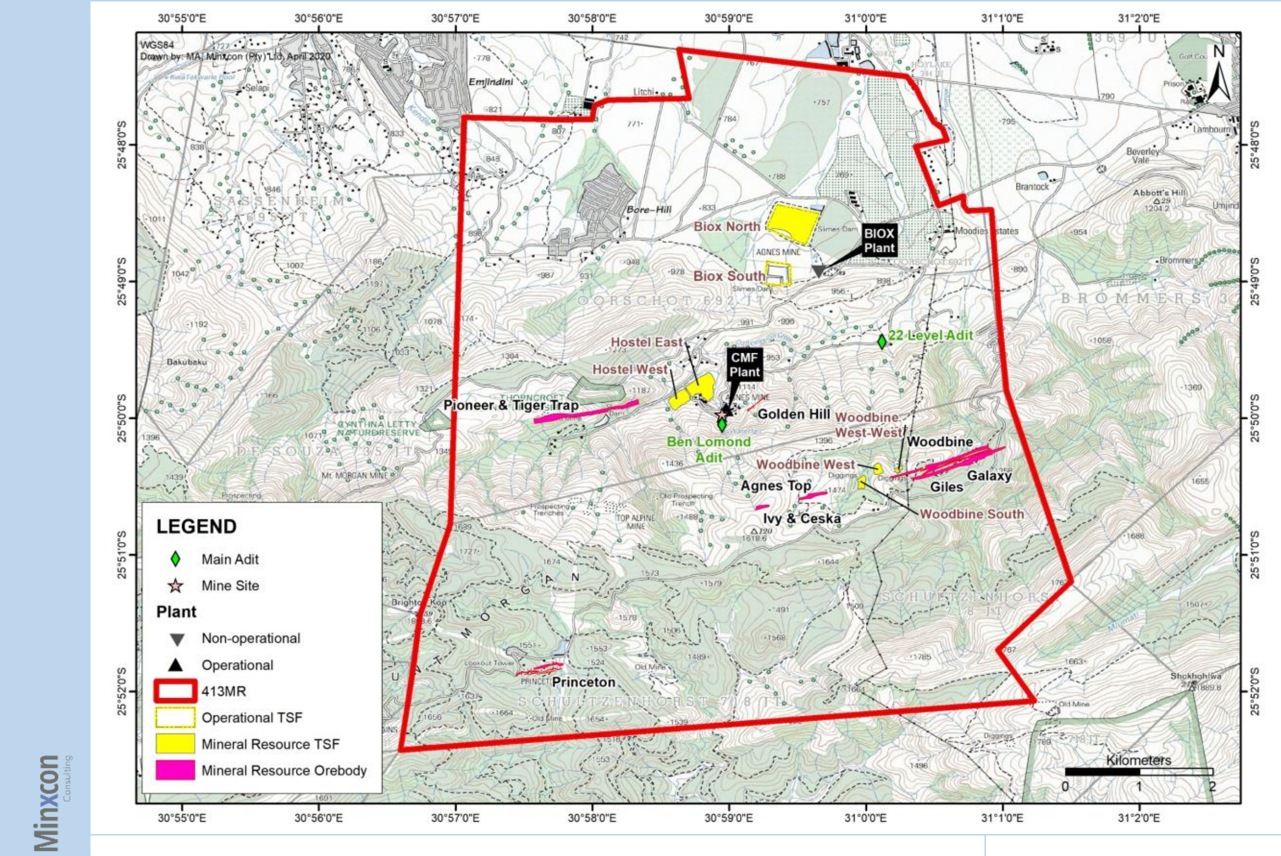
Modification of the on-site processing plant to produce and sell a high grade concentrate rather than producing bullion from a biological oxidation ("BIOX®") plant as before has warranted a significant restrategising of the operations.

The project areas that form the subject of this Report (the "Project Areas") are listed below and illustrated overleaf.

Galaxy Gold Mine Project Areas

Deposit Type	Name
Underground	Princeton
	Galaxy
	Woodbine
	Giles
	Golden Hill
	Pioneer & Tiger Trap
Open Pit	Agnes Top
Shaft Pillar	Ivy
	Ceska
TSF	Woodbine (East, North and South)
	Hostel (East and West)
	Biox North
	Alpine Pioneer

Mining Right 413 MR Boundary



Mining Right 413 MR Boundary	June 2020

GGR is planning to recommence mining operations as a combination of underground primary hard rock mining and TSF reclamation. Access to the underground workings is through adits including Ben Lomond, 22 Level, Golden Hill and Tiger Trap. In addition to mining infrastructure, the project site includes a BIOX® plant which has been mothballed, and a and carbon-in-leach ("CIL") plant that has been replaced by a crusher, milling and flotation ("CMF") circuit.

Current site activities include low volume development and TSF retreatment. The operation is operating in Phase 1 currently, processing 15 ktpm, and is being used to support the development and opening of the underground operations at Princeton and Galaxy. A second phase is planned whereby production will be expanded to 30 ktpm with Princeton and Galaxy material, and expansion of the plant CMF circuit as well as the commissioning of the new ball mill. A third phase aims to expand production to 50 ktpm with expansion of the flotation circuit.

Item 1 (b) - Ownership of the Property

The main area of the Galaxy Gold Mine is encompassed within mining right 413 MR, which is valid for gold mining until 4 September 2032. The 413 MR, issued to GGR, encompasses portions of the farm Oorschot 692 JT and the remaining extent of the farm Ameide 717 JT over an area of 5,862.8 ha. Applications for all required environmental permits have been submitted in support of an Environmental Authorisation ("EA") application and are pending decision from authorities.

GGR is currently 90% owned by Galaxy Gold Mining (Pty) Ltd. The remaining 10% shareholding is held equally by Galaxy Gold Empowerment Participation Scheme Trust and Trustees of the Galaxy Gold Community Development Trust. The Broad-Based Socio-Economic Empowerment Charter for the Mining and Minerals

Industry of 2010 outlined the requirement for a 26% Black Economic Empowerment ("BEE") shareholding for the holder of a mining or prospecting right. The effective total BEE shareholding in GGR is currently 25.3%.

Section 5(3) of the Mineral and Petroleum Resources Development Act, No 28 of 2002 ("MPRDA") allows GGR, as holders of the current mining right, extensive surface use regarding mining operations.

Item 1 (c) – Geology and Mineral Deposit

The Project Area is located within the Archaean Barberton Greenstone Belt (the "BGB"), which comprises metasedimentary and mafic to ultramafic units with later granitoid intrusions throughout. It is host to a number of economic gold deposits typical of global Archaean lode gold mineralisation.

The volcanic and sedimentary units have been complexly folded, forming a broad synclinal structure with three litho-stratigraphic units comprising the Barberton Supergroup. The oldest unit is the largely volcanic Onverwacht Group. The Onverwacht Group is overlain by banded iron formation ("BIF") representing metamorphosed sandstone, siltstone and mudstone sediments of the Fig Tree Group. This in turn is overlain by the younger arenaceous sediments of the Moodies Group.

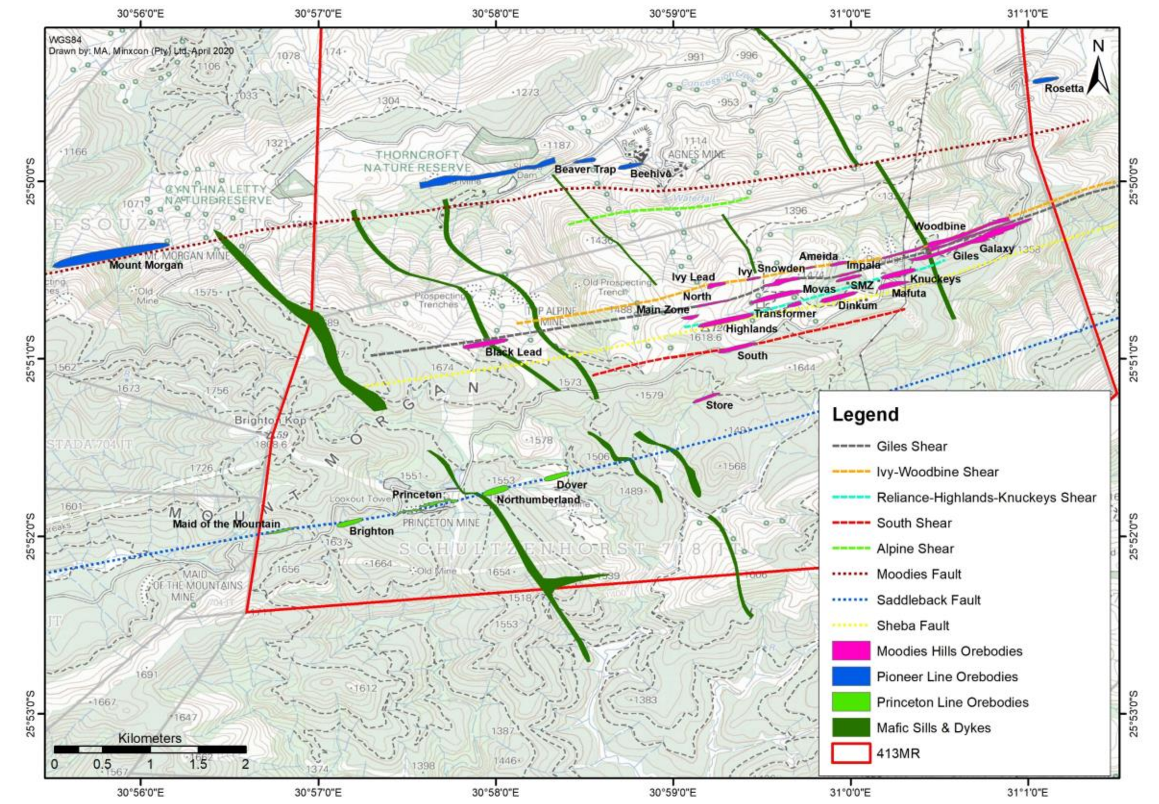
Mineralisation is structurally controlled and associated with all three the above lithological groups along shear zones, thrusts and fractures, but is predominantly associated with the base of the Fig Tree sediments and specifically with the BIF, cherts, greywackes, shales and quartzites. It may also often be found in contact with the altered ultramafic schists.

Item 1 (d) – Overview of the Project Geology

The Galaxy Gold Mine overlaps a number of structurally separate stratigraphic units of the BGB. The regional strike of the lithologies in the Project Area is generally in an east to northeast direction, with dips varying between 60°S and 85°S. The area is traversed by a number of pre-Transvaal age diabase dykes trending in a north-westerly direction, which have not as yet been shown to have any major effect on the auriferous structures in the area.

The orebodies at Galaxy Gold Mine are orientated along structural lines that are namely, from north to south, the Pioneer Line (Pioneer, Tiger Trap, Beaver Trap, Beehive, the BIF-type Golden Hill, Mount Morgan, Rosetta orebodies), Moodies Hills (or Agnes) Line (Galaxy, Woodbine, Giles, SMZ type and Alpine), Princeton Line (New Brighton, Princeton, Cumberland, Northumberland, Dover) and Alpine Line. The plan orientation of the orebodies is illustrated in the figure overleaf.

Galaxy Gold Mine Property Structure and Orebodies



Galaxy Gold Mine Property Structure and Orebodies	June 2020

Item 1 (e) – Status of Exploration

Galaxy Gold Mine is a historical mine. Historical exploration of the orebodies has included diamond drilling ("DD"), reverse circulation ("RC") drilling and auger drilling, as well as trenching and underground sampling. No further exploration work has been carried out since 2011.

In 2011, a structural analysis identified the structural controls of mineralisation in the area. Exploration targets were generated based on the vergence of D2 and D3 structures, and it is these targets that should become the main focus for future exploration. Planned future exploration activities by Galaxy include geophysical surveys focussed on these structural targets.

Item 1 (f) – Mineral Resource and Mineral Reserve Estimates

Mineral Resources

Mineral Resources for the Mine were previously declared as at 31 August 2015, and have been reviewed and updated for the purposes of this Report.

The Princeton Orebody has been remodelled due to newly captured historical data that was made available. This enabled the delineation of lenses PS5, PS19 and a new middling PS12. In addition, the previous upper and lower orebodies have been linked to constitute one continuous model. Thickness and grade continuity can be correlated from the upper to the lower models. An Indicated Mineral Resource and Inferred Mineral Resource can be declared at Princeton, with a significant increase in reported tonnage with a slight decrease in grade. This is due to the new interpretation of the geological models, and significant addition of tonnage linking the upper and lower orebodies at Princeton.

The Galaxy Orebody has been re-estimated to populate the existing manually estimated gap area. As a result of improved variogram ranges and improved sub-celling, additional areas have also been estimated for the 24 Level and 17 Level domains.

The Giles and Woodbine orebodies have been reviewed in detail. All estimation performed in 2015 is of sufficient quality to enable reporting of Measured Mineral Resources, Indicated Mineral Resources and Inferred Mineral Resources. The input parameters and resulting estimate compare well with the data and can be reproduced. Mineral Resource categories have been optimised to increase connectivity between them. In addition, the classification has been adjusted where less than two drillholes were utilised to define a Measured Mineral Resource.

The Hostel West, Woodbine West and Woodbine South TSFs have been updated to account for mining activity that occurred since the 2015 Report. It is noted that for the Mineral Resource tabulations, the TSFs are referred to as “dumps”.

The revised Mineral Resources reported are shown in the table to follow.

Mineral Resources for Galaxy Gold Mine as at 29 June 2020

Orebody	SG	Mineral Resource Category											
		Measured			Indicated			M & I Sub-total			Inferred		
		Tonnes	Gold Grade	Gold Content	Tonnes	Gold Grade	Gold Content	Tonnes	Gold Grade	Gold Content	Tonnes	Gold Grade	Gold Content
	t/m3	t	g/t	oz	t	g/t	oz	t	g/t	oz	t	g/t	oz
Galaxy Surface to Dyke**	2.73	-	-	-	-	-	-	-	-	-	291,000	3.19	29,845
Galaxy 17 Level Up	2.73	302,233	3.01	29,248	79,825	2.86	7,335	382,058	2.98	36,583	258,111	2.78	23,045
Galaxy Gap 17-24 Level	2.73	-	-	-	-	-	-	-	-	-	1,311,320	2.84	119,825
Galaxy 24 Level Down	2.73	1,867,951	2.67	160,413	750,215	2.37	57,245	2,618,166	2.59	217,657	522,609	2.61	43,908
Total Galaxy	2.73	**2,170,183**	**2.72**	**189,661**	**830,040**	**2.42**	**64,580**	**3,000,224**	**2.64**	**254,241**	**2,383,040**	**2.83**	**216,623**
Woodbine W & E Surface - 22 Level*	2.73	-	-	-	110,501	4.61	16,392	110,501	4.61	16,392	306,432	2.95	29,025
Woodbine 24 Level Down	2.73	344,856	3.57	39,580	277,372	3.04	27,099	622,228	3.33	66,679	768,832	3.34	82,660
Total Woodbine	2.73	344,856	3.57	39,580	**387,873**	**3.49**	**43,491**	**732,729**	**3.53**	**83,070**	**1,075,264**	**3.23**	**111,686**
Giles Surface - 23 Level*	2.73	-	-	-	263,558	4.15	35,149	263,558	4.15	35,149	271,260	3.65	31,820
Giles 23 Level Down	2.73	283,142	4.59	41,827	369,151	3.30	39,213	652,293	3.86	81,040	840,979	3.80	102,676
Total Giles	2.73	283,142	4.59	41,827	**632,708**	**3.66**	**74,363**	**915,850**	**3.95**	**116,189**	**1,112,239**	**3.76**	**134,496**
Princeton PS5	3.08	-	-	-	1,927,049	3.67	227,143	1,927,049	3.67	227,143	3,141,476	3.25	328,444
Princeton PS12	3.08	-	-	-	56,781	3.30	6,027	56,781	3.30	6,027	135,747	2.50	10,922
Princeton PS19	3.08	-	-	-	1,689,283	2.82	153,218	1,689,283	2.82	153,218	1,187,869	4.29	163,709
Total Princeton	3.08	-	-	-	**3,673,113**	**3.27**	**386,388**	**3,673,113**	**3.27**	**386,388**	**4,465,092**	**3.50**	**503,074**
Golden Hill	3.03	410,393	2.66	35,054	564,454	2.71	49,181	974,847	2.69	84,235	217,179	3.36	23,429
Agnes Top	2.80	-	-	-	561	2.07	37	561	2.07	37	870,632	1.75	49,016
Pioneer & Tiger-Trap	2.73	-	-	-	-	-	-	-	-	-	5,949,307	1.55	296,823
Ivy Shaft Pillar*	2.78	-	-	-	-	-	-	-	-	-	47,125	10.18	15,427
Ivy to Agnes 3-11 Level*	2.78	-	-	-	-	-	-	-	-	-	45,498	5.71	8,349
Ceska Shaft Pillar*	2.78	-	-	-	-	-	-	-	-	-	113,534	9.58	34,987
Woodbine South Dump	1.12	-	-	-	13,129	1.55	656	13,129	1.55	656	19,217	1.47	906
Woodbine West Dump	1.17	-	-	-	714	0.72	16	714	0.72	16	5,749	0.69	127
Woodbine W.West Dump	1.17	-	-	-	13,136	0.50	209	13,136	0.50	209	25,057	0.51	410
Hostel East Dump	1.41	-	-	-	958,401	0.76	23,562	958,401	0.76	23,562	164,506	0.68	3,581
Hostel West Dump	1.41	-	-	-	430,880	0.88	12,220	430,880	0.88	12,220	98,985	0.87	2,763
Biox North Dump	1.38	-	-	-	189,340	1.66	10,080	189,340	1.66	10,080	141,993	1.77	8,069
Grand Total		**3,208,575**	**2.97**	**306,122**	**7,694,349**	**2.69**	**664,783**	**10,902,925**	**2.77**	**970,904**	**16,734,418**	**2.62**	**1,409,764**

Notes:

1. * Manual Mineral Resource estimate from block plans.
2. ** Mineral Resources estimated from adjacent modelled areas for grade distribution; Orebody volume estimated from digital wireframe.
3. Cut-off applied for Surface TSFs: 0.3 g/t.
4. Cut-off applied for Underground Operations: 1.4 g/t.
5. Cut-off applied for Open Pit (Agnes Top): 1.0 g/t.
6. No geological losses have been applied.
7. Commodity price utilised: USD1,600/oz.
8. Mineral Resources are stated inclusive of Mineral Reserves.
9. Mineral Resources are reported as total Mineral Resources and are not attributed.
10. All orebodies are depleted for current mining.

Mineral Reserves

The project strategy has been revised by modifying the processing plant to produce a high grade concentrate instead of utilising a BIOX® plant process as planned before. As such, management has decided to take a “step backwards”, rendering the previously declared Mineral Reserves no longer relevant. This has had a material impact on the mine plan in order to produce the correct blend of ore from the various orebodies to meet the concentrate specifications. Th revised mine plan includes a significant amount of Inferred Mineral Resources and as a result the entire project moves back to a PEA stage, and no Mineral Reserves are declared.

Item 1 (g) - DEVELOPMENT AND OPERATIONS

Mining

The Galaxy Gold Mine will make use of two different mining methods. The Galaxy and Princeton orebodies will be mined using a fully mechanised cut-and-fill mining method, while the Woodbine and Giles orebodies will be mined using a conventional underhand mining method.

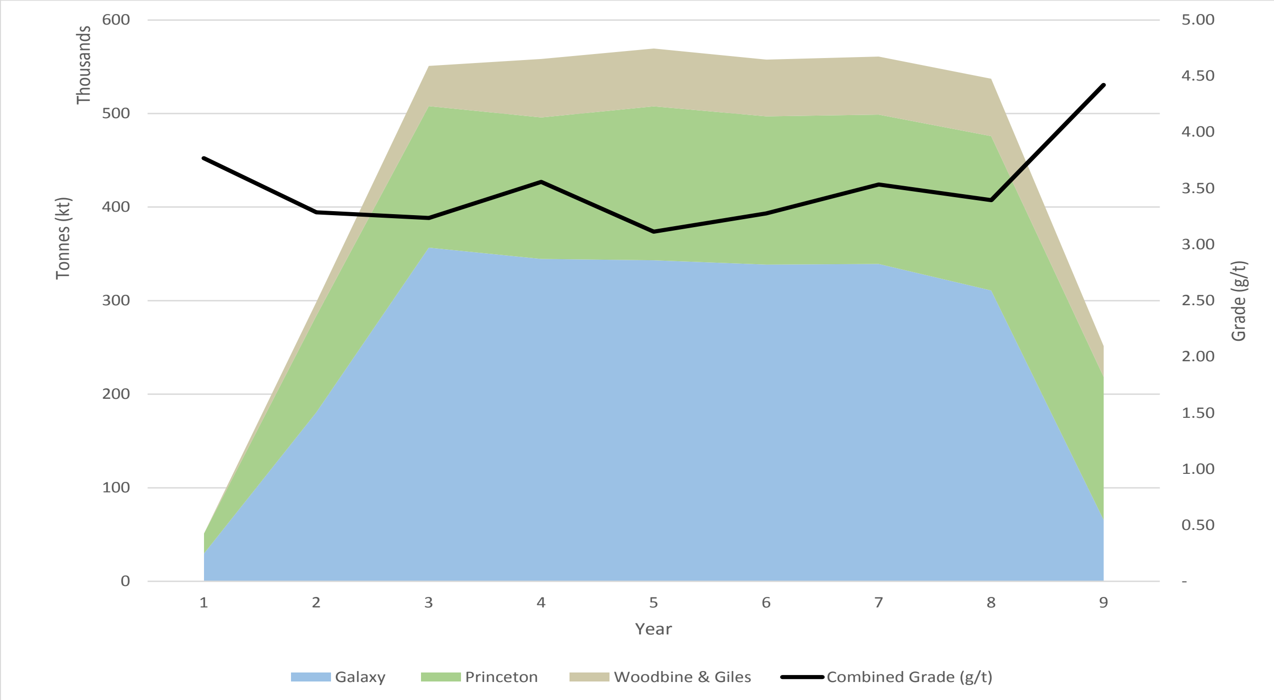
The existing development forms part of the mine plan to provide access to the underground workings and some targeted mining areas. Existing underground development within the Galaxy, Princeton, Woodbine and Giles sections is not sufficient to provide access to all the planned mining areas. Additional development is required for opening up sufficient ground to sustain the planned 50 ktpm production rate which is required for producing a concentrate grade of higher than 25 g/t. The planned ore production mix and cut-off grades are detailed in the table below.

Planned Production Rates and Cut-off Grades

Orebody	Production Rate	Cut-off Grade
	ktpm	g/t
Galaxy	30	1.8
Princeton	15	4.0
Woodbine and Giles	5	4.0

The Galaxy Gold Mine life of mine (“LoM”) illustrating delivered tonnes and grade to the plant is illustrated in the figure below. The production profile includes the planned ramp up to steady state production.

Planned Life of Mine Production



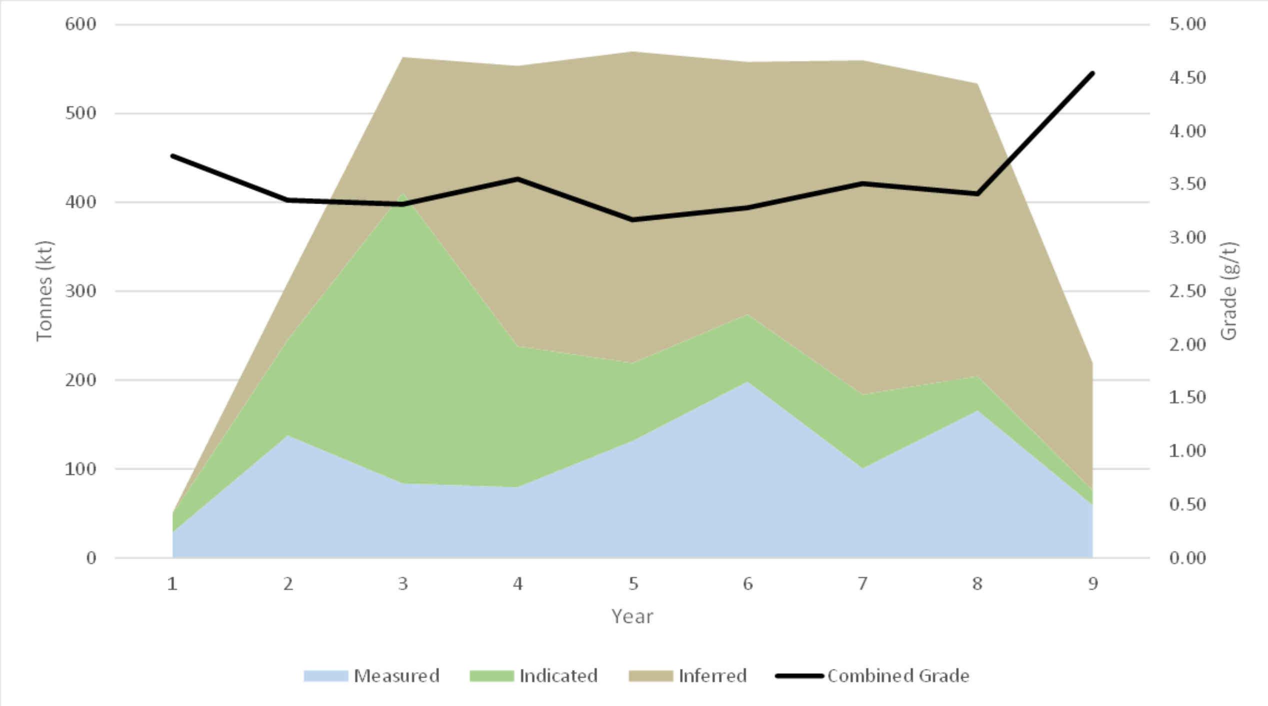
Note: The LoM production excludes reclaimed TSF material.

The diluted tonnes mined by Mineral Resource category are illustrated in the figure to follow. Measured Mineral Resources and Indicated Mineral Resources amount to 1.90 Mt while Inferred Mineral Resources account for 2.24 Mt (diluted). The mining inventory contained in the LoM plan is detailed in the table below. The LoM plan consists of a total of 4.14 Mt diluted tonnes at a diluted grade of 3.46 g/t containing 461 koz of gold. The mining inventory contains Inferred Mineral Resources, and is not intended to represent a Mineral Reserve.

Mining Inventory Contained in Life of Mine Plan

Mining Inventory Category	Diluted Tonnes	Grade	Content	Content
	kt	g/t	kg	koz
Measured	985.50	2.82	2,775	89
Indicated	917.58	3.78	3,465	111
Inferred	2,238.76	3.62	8,100	260
Total	**4,141.84**	**3.46**	**14,339**	**461**

Life of Mine Production by Mineral Resource Category



Note: The LoM production excludes reclaimed TSF material.

The mine plan currently includes Inferred Mineral Resources that amount to 51% of the total Mineral Resources.

Processing

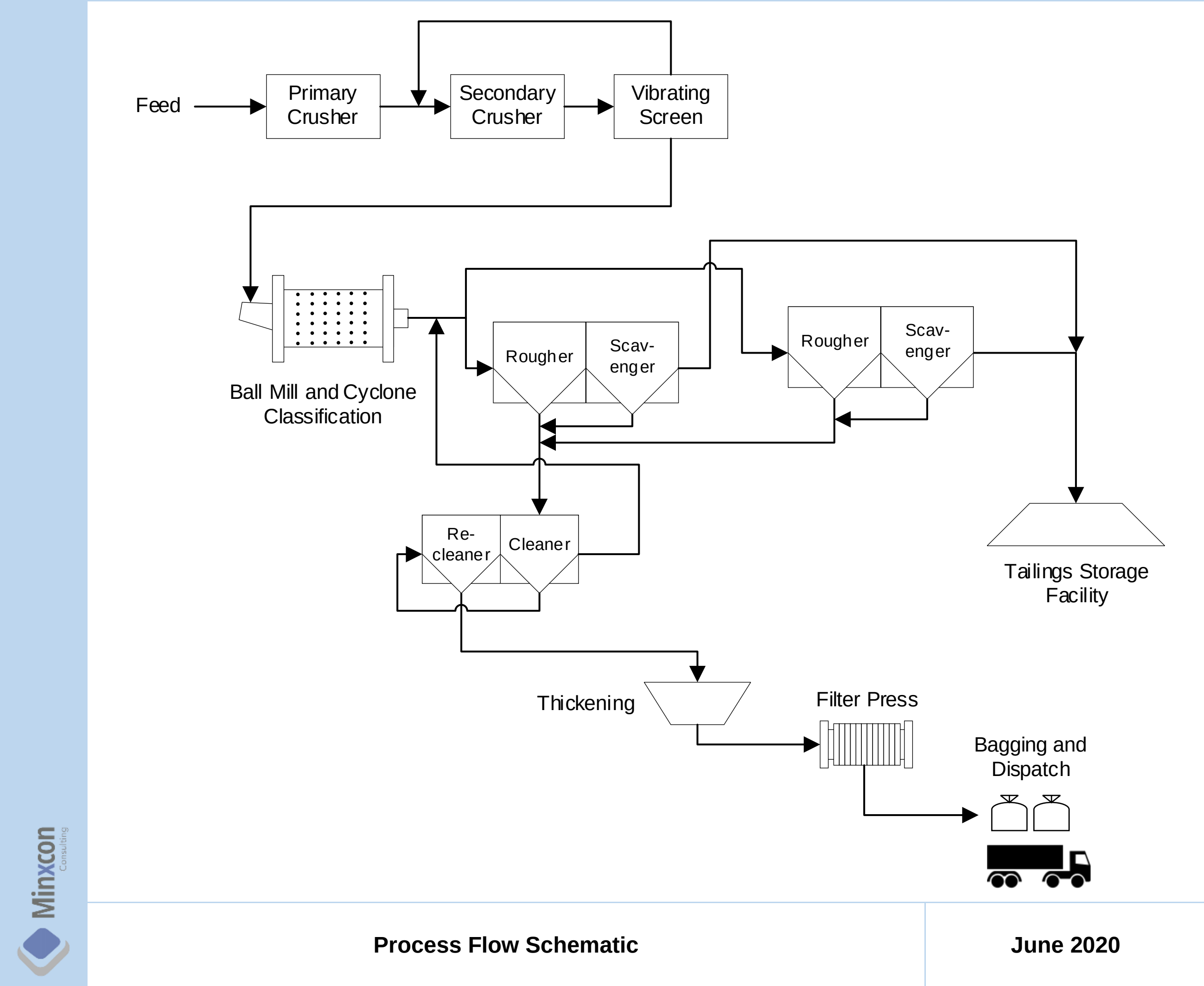
The existing on-site processing plant was recommissioned in April 2019 and produces and sells a gold flotation concentrate. Referring to the process flow schematic overleaf, the plant consists of crushing, milling, flotation and concentrate filtration circuits. Currently, historic TSF materials are being processed, in addition to underground ore (Princeton development) by making use of existing equipment and infrastructure as far as possible. Plant tailings material is pumped to and deposited onto the Biox North TSF.

The plant currently has a capacity of 15 ktpm with the current constraint to production being the old ball mill. The plant has been upgraded with a new apron feeder, crushing circuit, concentrate circuit and filtration plant already installed. A new 50 ktpm mill is being installed on site which will remove the old ball mill constraint. On completion of the new mill, the new constraint will be the flotation circuit which currently has a capacity of 30 ktpm.

Since its limited restart, the Mine has produced a gold concentrate with average grades of about 32 g/t at recoveries of around 67% from Hostel West, Woodbine West and Woodbine South TSF material, and Princeton development ore.

The process flow is illustrated in the figure below.

Process Flow Schematic



Engineering and Infrastructure

The Galaxy Gold Mine is well established in terms of infrastructure as the Mine was historically operational. Currently, activities are limited to sands mining (tailings reclamation) and restricted development at Princeton. Adits allowing access to the underground workings remain accessible and are guarded by security guards stationed on site.

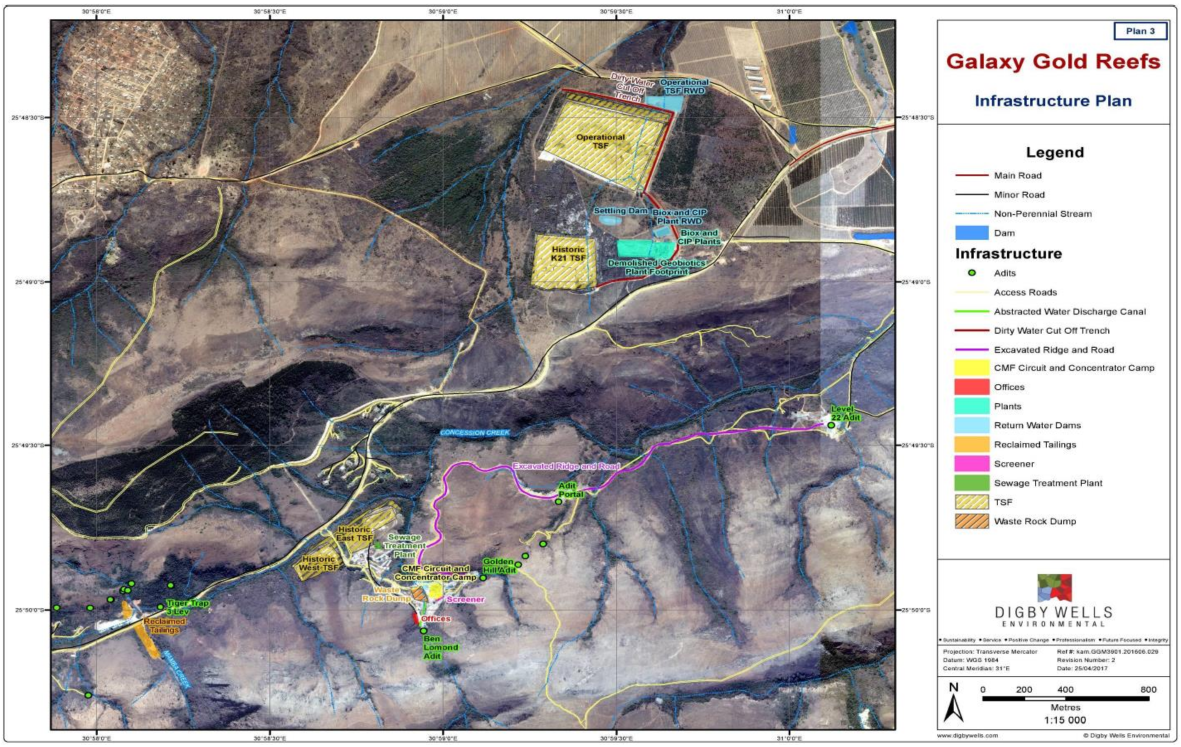
Infrastructure available at the Mine operations include:-

- access and haul roads;
- security and access control infrastructure and facilities;
- access to underground workings through various exiting adits;
- CMF process facility;
- BIOX® process facility (non-operational);
- mining support infrastructure:-
  - offices;
  - workshops;
  - changing facilities (200 employees);
  - stores;
  - salvage yard;

    - explosives magazine;
- mine ventilation infrastructure;
- water distribution infrastructure;
- power supply and distribution infrastructure;
- water and waste management infrastructure including a sewage plant;
- compressed air infrastructure;
- TSFs; and
- mining villages.

The general arrangement of the Mine infrastructure is illustrated in the figure below.

Surface Infrastructure General Arrangement



Surface Infrastructure General Arrangement	June 2020

Item 1 (h) – Economic Analysis

The economic analysis illustrates the GGR change in project strategy and modification of the on-site processing plant to produce and sell a high-grade concentrate rather than producing bullion from the BIOX® plant as before.

The PEA includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorised as Mineral Reserves. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that the PEA will be realised.

The evaluator performed an independent mineral asset PEA on the Mine and its Mineral Resources after applying the necessary modifying factors. The Discounted Cash Flow ("DCF") is based on the production schedule and all associated costs and capital to develop, mine and process the orebodies. Relevant taxation and other operating factors, such as recoveries and stay-in-business costs, were incorporated into the PEA to produce a cash flow in real terms over the life cycle of the project.

Macro-Economic Forecasts

Both the ZAR/USD exchange rate and USD commodity prices for the period 2020-2024 have been converted from nominal to real terms. The table below illustrates the forecasts for the first five years as well as the long-term forecast used in the financial model. The price forecasts and exchange rate forecasts are based on the median of various banks, brokers and analyst forecasts and are in real-terms throughout the LoM.

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

Item	Unit	2020	2021	2022	2023	2024	Long-term
Gold Price (Nominal terms)	USD/oz.	1,690	1,704	1,622	1,581	1,534	
Gold Price (Real terms)	USD/oz.	1,690	1,664	1,548	1,475	1,399	1,400
Exchange Rate (Nominal terms)	ZAR/USD	16.94	16.12	16.85	16.08	16.46	
Exchange Rate (Real terms)	ZAR/USD	16.74	15.80	15.90	15.00	15.00	15.00

Source: Various Bank and Broker Forecasts (June 2020), Minxcon.

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).

Costs reported for the Mine, including mining, plant and other operating costs, as well as government royalty payments, are displayed in the table to follow. Other costs in the Adjusted Operating Cost category include the Social and Labour Plan ("SLP"), general and administration ("G&A"), transport, security and other services costs. Other costs for the AISC category include the corporate general and administrative costs. The costs are displayed per plant feed tonne as well as per recovered gold ounce. No contingencies have been included for either operating costs or capital costs as these costs are based on contracts or actual costs.

Project Cost Indicators

Item	Unit	Galaxy Gold Mine
Net Turnover	**ZAR/Feed tonne**	**1,576**
Mine Cost	ZAR/Feed tonne	306
Plant Costs	ZAR/Feed tonne	123
Other Costs	ZAR/Feed tonne	317
Royalties	ZAR/Feed tonne	64
Operating Costs	**ZAR/Feed tonne**	**810**
SIB	ZAR/Feed tonne	267
Reclamation	ZAR/Feed tonne	15
Other Costs	ZAR/Feed tonne	0
All-in Sustainable Costs (AISC)	**ZAR/Feed tonne**	**1,092**
Capital	ZAR/Feed tonne	31
Other Cash Costs	ZAR/Feed tonne	12
All-in Costs (AIC)	**ZAR/Feed tonne**	**1,134**
All-in Cost Margin	**%**	**28%**
EBITDA[1]	ZAR/Feed tonne	740
EBITDA Margin	%	47%
Gold Recovered	oz	413,421
Average Gold Price	**USD/Gold oz**	**1,439**
Payability - Off-take Agreement	%	75%
Net Turnover[2]	**USD/Gold oz**	**1,079**
Mine Cost	USD/Gold oz	209
Plant Costs	USD/Gold oz	84
Other Costs	USD/Gold oz	217
Royalties	USD/Gold oz	44
Operating Costs	**USD/Gold oz**	**555**
SIB Capex	USD/Gold oz	183
Reclamation	USD/Gold oz	10
Other Costs	USD/Gold oz	0
All-in Sustainable Costs (AISC)	**USD/Gold oz**	**747**
Capital	USD/Gold oz	21
Other Cash Costs	USD/Gold oz	8
All-in Costs (AIC)	**USD/Gold oz**	**777**
EBITDA	USD/Gold oz	506

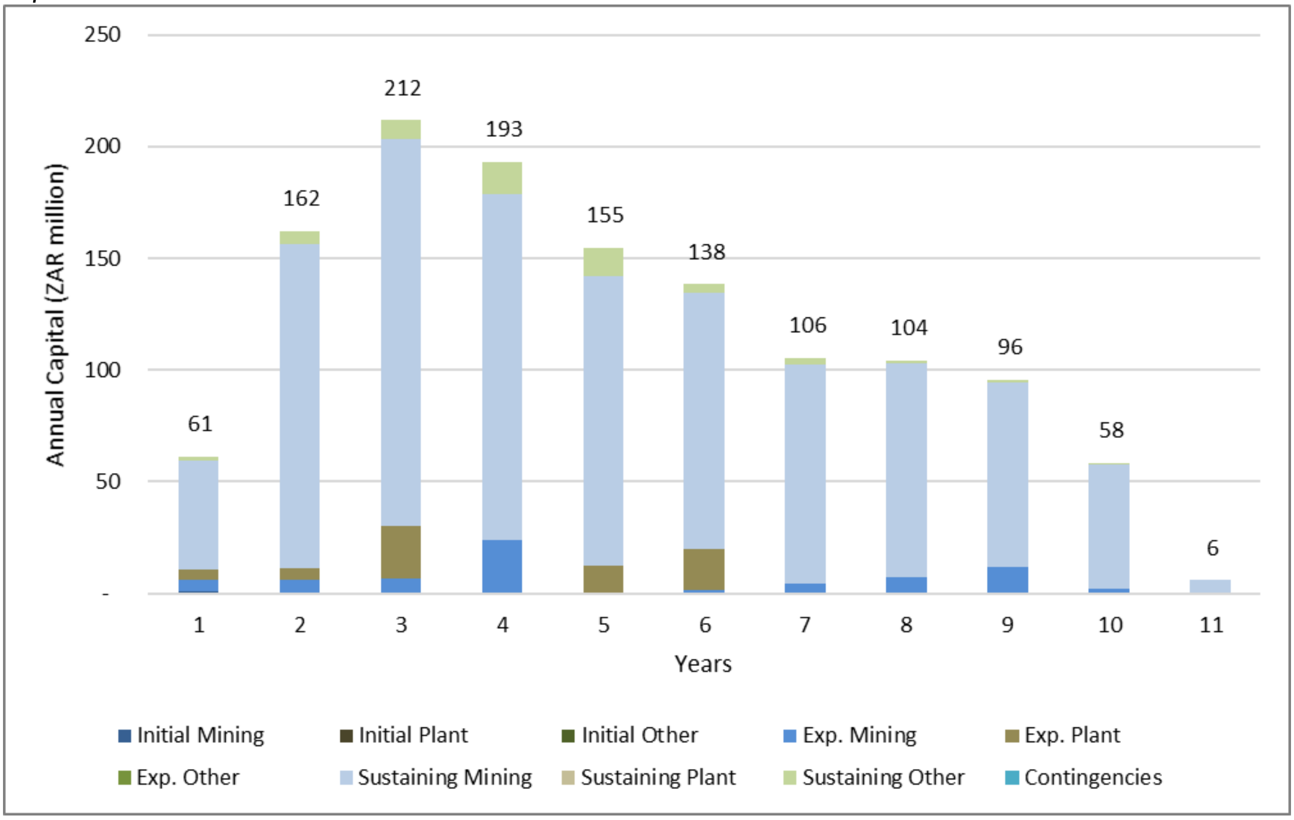
Notes:

1. Earnings before interest, tax, depreciation and amortisation (excludes CAPEX)
2. Net turnover will be the realised income per produced gold oz after 75% payability has been applied.

The net turnover in the table above indicates the net realised income received per produced gold oz after applying the 75% payability as per the off-take agreement.

The figure to follow illustrates the LoM capital schedule for the PEA. It is noted that all off-reef development, with the exception of raises, has been capitalised under sustaining capital. In addition, the majority of equipment purchases have also been captured under sustaining capital as they are budgeted for under lease payments and not upfront payments.

Capital Schedule

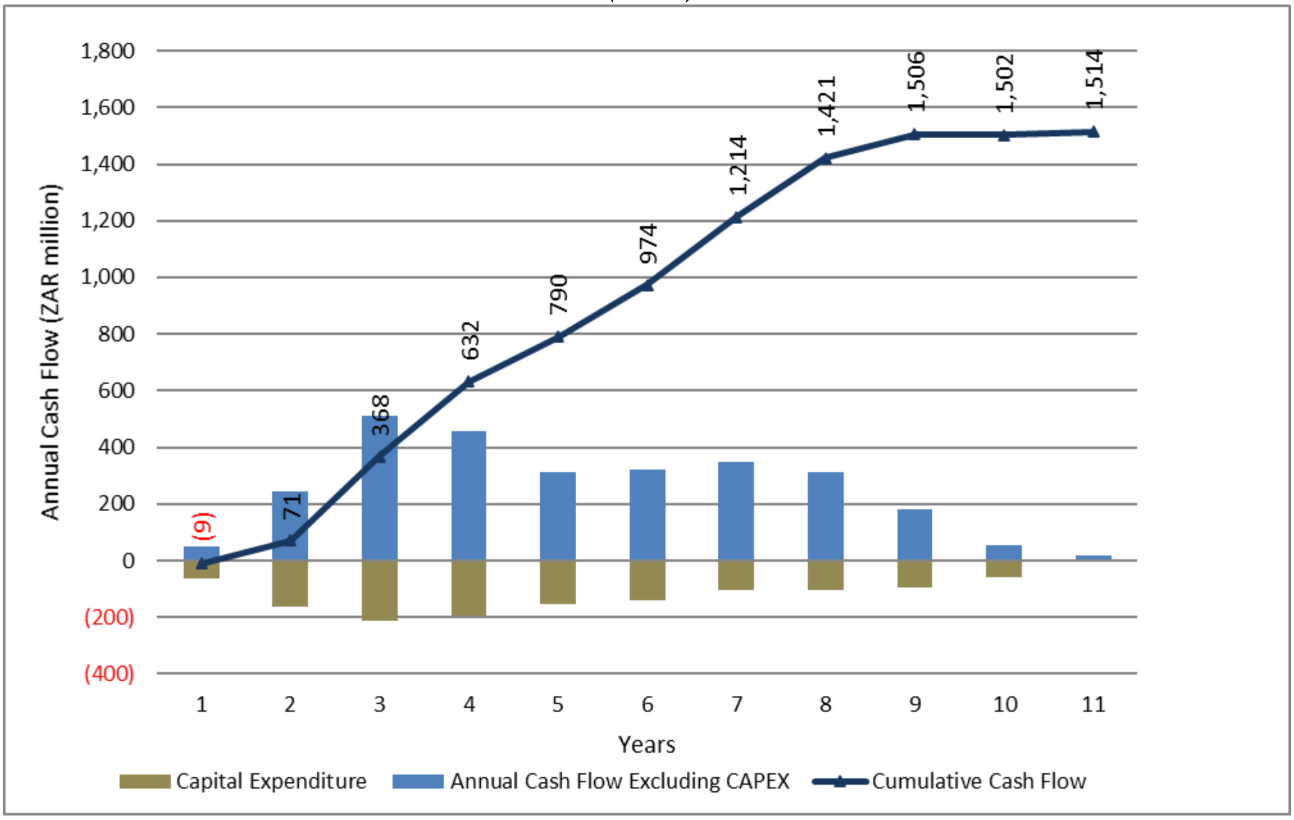


Note: Exp. = Expansion

Economic Analysis Summary

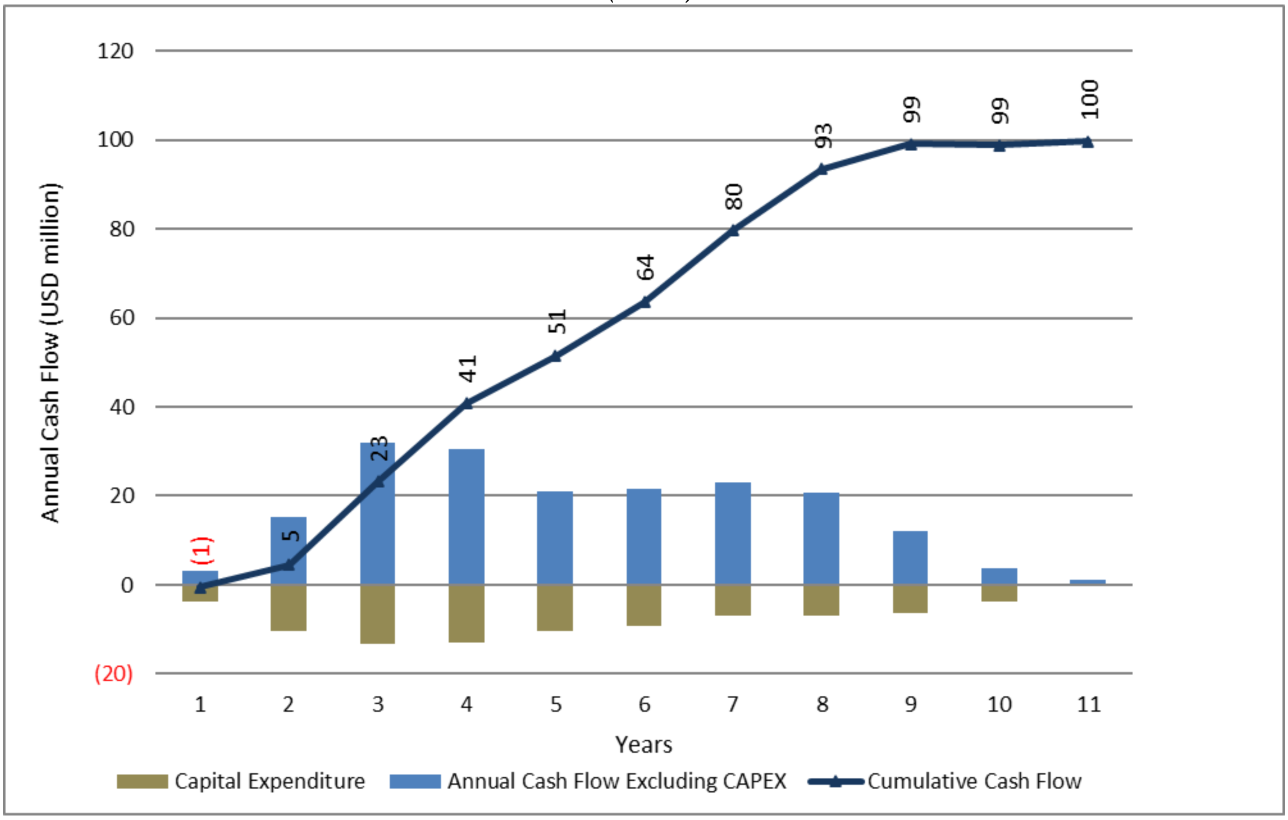
The annual cash flow before capital expenditure, total capital expenditure and cumulative cash flow forecast for the combined project over the LoM are displayed in the figures overleaf. The peak funding requirement of the combined project is ZAR9 million; however, it is noted that the peak funding requirement is offset by revenue in year one (2020) and the planned capital expenditure is ZAR61 million for this period.

Annual and Cumulative Cash Flow - Undiscounted (ZARm)



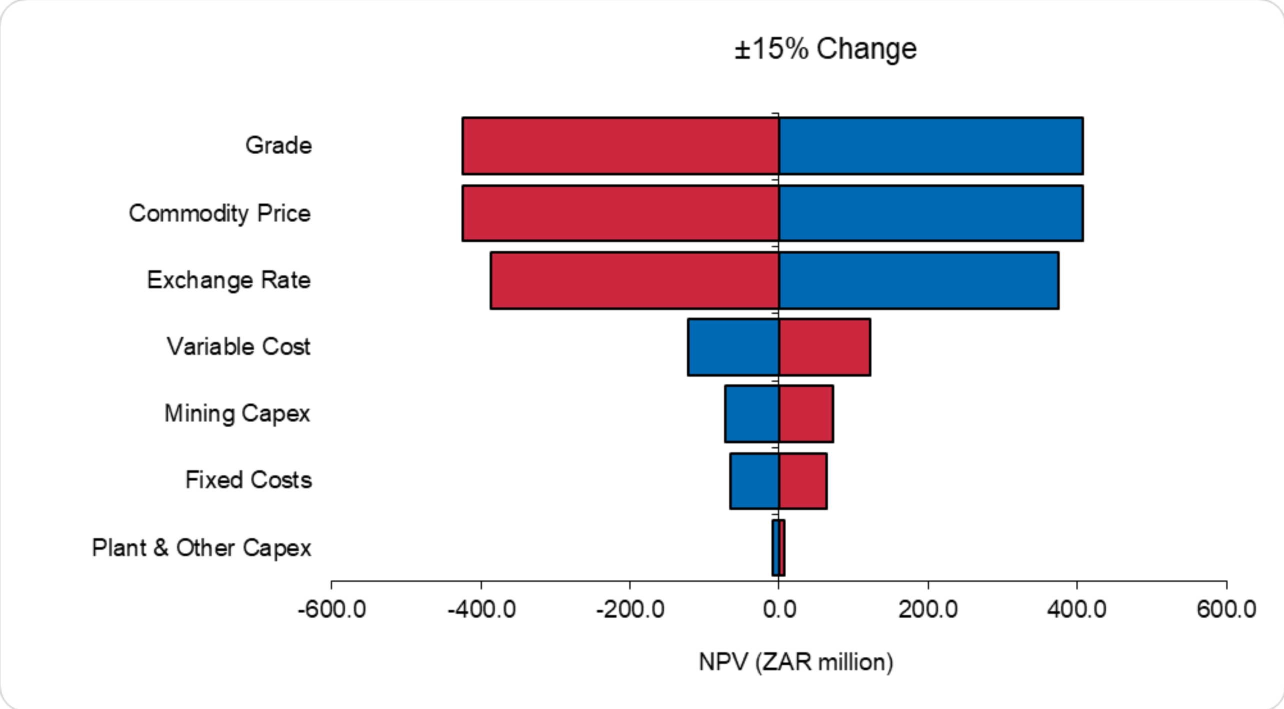
The figure below illustrates the annual and cumulative cash flow in USD terms.

Annual and Cumulative Cash Flow – Undiscounted (USDm)



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

Project Sensitivity (NPV$_{9.46\ \%}$)



The PEA results are detailed in the table below at various discount rates with a best-estimated value of ZAR975 million or USD64 million at a real discount rate of 9.8% and a high IRR of 1,051%. The high IRR is due to the investment requirement being low on a free cash flow basis because of the use of existing infrastructure. The operation is currently in production which off-sets the investment requirement, and the additional capital requirements are spread over the LoM.

PEA Valuation Summary

Real Discount Rate	ZARm	USDm
NPV @ 0%	1,513	100
NPV @ 2.5%	1,342	88
NPV @ 5%	1,197	79
NPV @ 7.5%	1,073	70
NPV @ 9.8%	**975**	**64**
NPV @ 10%	967	63
NPV @ 12.5%	874	57
NPV @ 15%	794	52
Item	**Unit**	**Value**
IRR	%	1051.0%
All-in Cost Margin	%	28%
Peak Funding Requirement	ZARm	9
Payback	Years	1
Break-even Gold Price	USD/oz.	777

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

CONCLUSIONS

Permitting

All applications for all required permits have been submitted and are pending decision from authorities. GGR has been transparent with the authorities that the Galaxy Gold Mine does not have all environmental permits as required in place, and as such the limited active operations are not officially sanctioned, and are pending fulfilment of obligations from the authorities.

Mineral Resources

Prior to this Report, Minxcon completed an independent Competent Person Report ("CPR") in 2015 ("2015 Report") on this Galaxy Gold Mine, compliant with the reporting requirements of the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2007), as well as the South African Code for the Reporting of Mineral Asset Valuation. The 2020 Mineral Resource is a review and update of the 2015 estimates and are of a sufficient quality for the declaration of Mineral Resources.

The 2020 Mineral Resource estimate of Princeton Orebody has defined an Indicated Mineral Resource and Inferred Mineral Resource, with a significant change from what is reported in the 2015 Report due to large changes in the extents of the geological model and data utilised in the previous estimation. In addition to the Princeton Orebody changes, the Galaxy Orebody was also re-estimated for use in the PEA. The re-estimation has also resulted in an increase in the Mineral Resource (including Inferred Mineral Resources) and appropriate cut-off grades, of approximately 407 koz and 118 koz, respectively for Princeton and Galaxy. The Mineral Resources for remainder of the orebodies have not changed apart from minor category reclassification, depletions and application of a lower cut-off grade.

Recent depletions have been applied to the Giles Orebody and the Hostel West, Woodbine South and Woodbine West TSFs.

The overall increase in Mineral Resources from 2015 to 2020, based on a 1.85 g/t cut-off grade for 2015 and 1.4 g/t cut-off grade for 2020, is from 602 koz to 971 koz for the Measured Mineral Resources and Indicated Mineral Resources, and from 886 koz to 1.4 Moz for the Inferred Mineral Resources. At a cut-off grade of 1.85 g/t, the Measured Mineral Resources and Indicated Mineral Resources grade remained virtually unchanged at 3.00 g/t, and decreased for the Inferred Mineral Resources by 3% to 3.31 g/t. The lower grade for the 2020 Mineral Resources is therefore due to the lower cut-off grade because of a higher gold price.

Mining

The mining strategy is achievable and mining sequence is logical. Mining commences in areas in which active mining was taking place when the mine closed, *i.e.* Galaxy, Princeton, Woodbine and Giles.

The availability and accessibility of the mining areas where initial mining is planned to commence have not been confirmed; however, experience suggests that the risk associated with this is low as there are mined out areas documented. The mine plan is subject to opening up of the existing mining infrastructure.

The mine plan targets all Mineral Resources categories, with economic benefit from Inferred Mineral Resources.

Engineering and Infrastructure

Infrastructure for the operations is well established and suitable for planned production. Maintenance will be required on some infrastructure and equipment before placing the operation back into full production.

While water supply to the Mine is deemed to be sufficient, power supply capacity needs to be increased. An application has been submitted to Eskom for this purpose and an Eskom cost estimate has been received.

Sufficient capital has been provided to allow for the required maintenance, upgrades and acquisition of new machinery and equipment.

Processing

Historic flotation performance from 2011 as well as recent Mintek and CM Solutions test results are deemed to be a good indication of the expected plant performance for when production is ramped up to 30 ktpm. Recoveries of 85% to 90% can be expected.

Forecasted operating costs for processing are in line with benchmarking.

Economic Analysis

The project relating to GGR is financially feasible at a 9.79% real discount rate with a DCF value of ZAR975 million (full value). The IRR was calculated as 1,051%, but it should be noted this is due to the investment requirement being low on a free cash flow basis. The operation is currently producing off-setting the investment requirement, and the additional capital requirements are spread over the LoM.

The all-in cost margin for the Project is 28%.

A peak capital investment of ZAR9 million is required to fund the operation in the first year, offset by revenue. Capital planned in first year totals ZAR61 million.

The Project is most sensitive to commodity prices, exchange rates and grade.

The Project has a break-even gold price of USD777/oz including capital. AISC for the Project amount to ZAR1,092/milled t, which equates to USD747/oz. AIC amount to ZAR1,134/milled t, which equates to USD777/oz.

RECOMMENDATIONS

Permitting

It is recommended that GGR remain compliant with all legislative requirements and proceed with operations accordingly.

Mineral Resources

To date, GGR has not applied geological losses to the Mineral Resources and it is recommended that future Mineral Resource declarations include geological losses for the various Mineral Resource categories to account for the relative confidence.

The process of capturing additional historical sampling data for utilisation in the geological modelling and estimation process for the Princeton Orebody lenses has resulted in a significant increase in Mineral Resources and improved confidence. It is recommended that similar exercises be completed on the other orebodies, such as the Galaxy dyke to surface portion, to potentially unlock additional Mineral Resources and upside potential.

For future Mineral Resource compliance purposes, it is recommended that GGR implement industry standard quality assurance and quality control ("QAQC") procedures in future exploration and underground sampling programmes as the operations start up again.

Mining

No Mineral Reserves have been declared in this Report. It is recommended to convert Inferred Mineral Resources to Indicated Mineral Resources to improve the level of accuracy of the LoM plan.

The mine design has been completed in detail, but due to the inclusion of Inferred Mineral Resources is considered at scoping study level of accuracy and should be improved to a higher level of accuracy. The level of detail of the technical aspects of the LoM plan, including ventilation, rock engineering and equipment, should be increased to a pre-feasibility study level.

Processing

Additional metallurgical testwork should be completed on blends that include Woodbine and Giles as well as the lower levels of the Galaxy Orebody to confirm forecasted recoveries and reagent requirements.

Further detailed engineering work is required to improve the accuracy of and confirm the TSF expansion capital estimation.

ITEM 2 - INTRODUCTION

Item 2 (a) - Issuer Receiving the Report

Minxcon was commissioned by GGR to complete this Report on the Galaxy Gold Mine, situated in Mpumalanga Province, South Africa.

GGR is an indirect, majority-owned subsidiary of Galane Gold Limited ("Galane"), which is listed on the Toronto Stock Exchange Venture Exchange (TSX-V: GG), and the OTCQB® Venture Market (OTCQB: GGGOF).

Item 2 (b) - Terms of Reference and Purpose of the Report

Minxcon was mandated to compile this Report in accordance with NI 43-101. Only terms as defined by The Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") have been utilised in this Report.

GGR has decided to move the project back to a PEA stage as the project strategy has changed significantly. This change is attributed to modification of the on-site processing plant to produce and sell a high grade concentrate rather than producing bullion from a BIOX® plant as before.

In 2015, Minxcon was commissioned by Galaxy Gold Mining Limited to compile an independent NI 43-101 Technical Report on the Galaxy Gold Mine. This commission produced a document entitled *A Technical Report on the Galaxy Gold Mine, Mpumalanga Province, South Africa*, with an effective date of 1 September 2015 and was issued as a final report on 4 January 2016 (the "2015 Report"). The 2015 Report included Mineral Reserves. As a result of the "step-back", the Mineral Reserves disclosed in the 2015 Report are no longer relevant. Since the issuing of the 2015 Report, only low volume development and tailings retreatment have occurred.

As such, this Report includes a Mineral Resource update, a description of the mining and processing infrastructure as well as a summary of the results of a PEA undertaken for the revised strategy, with the purpose to determine the economic viability of the planned expansion for GGR (to 50 ktpm), and to be published as the latest technical report for GGR.

The scope of work includes:-

- Mineral Resource update;
- mine plan and design;
- mining engineering;
- review of all operating cost;
- review of all capital cost; and
- financial valuation.

This Report pertains to underground orebodies, shaft pillars and historic TSFs that are collectively termed the Galaxy Gold Mine. Table 1 displays the mandated work per Project Area.

Table 1: Scope of Work per Project Area

Project Area	Mineral Resources	PEA
Princeton	New Geological Model, Estimation and Update	New Mine Plan
Galaxy 17 Level Up	Re-estimation and Update	Mine Plan Review
Galaxy Gap 17-24 Level	Re-estimation and Update	New Mine Plan
Galaxy 24 Level Down	Re-estimation and Update	New Mine Plan
Woodbine 24 Level Down	Review Model and Update	New Mine Plan and Trade-off study
Giles 23 Level Down	Review Model and Update	New Mine Plan and Trade-off study

The Mineral Resources for remainder of orebodies have been adjusted for revised cut-off grades as applicable.

The effective date of this Report is 29 June 2020.

Item 2 (c) – Sources of Information and Data Contained in the Report

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

- Deswik Mining Consultants (Pty) Ltd ("Deswik") (2011). Galaxy Combined Report for All Estimated Resources. Project Number: DMC20767. Prepared for Galaxy Gold Mining. June 2015. 102pp.
- Minxcon (Pty) Ltd (2015). A Technical Report on the Galaxy Gold Mine, Mpumalanga Province, South Africa. Project Number: M2015-027a. Prepared for Galaxy Gold Mine. January 2016. 223pp.

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

Item 2 (d) – Qualified Persons' Personal Inspection of the Property

The Qualified Persons ("QPs") for this Report are Mr U. Engelmann and Mr D. van Heerden. Both QPs, as well as Mr Julian Knight (Senior Process Engineer) of Minxcon, undertook a site visit on 4 March 2020 accompanied by GGR personnel. During the site visit, surface and plant infrastructure were inspected, and the data capturing process for Princeton reviewed.

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

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 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, change management required post the event, feasibility studies, LoM plans, technical reviews and writing of technical reports for various commodities.

ITEM 3 – RELIANCE ON OTHER EXPERTS

In May 2010 Camden Geoserve cc ("Camden Geoserve") completed a CPR for the Mine based on an audit of the Mineral Resource estimation carried out by SRK Consulting South Africa (Pty) Ltd ("SRK").

The SRK audit included a review of the QAQC processes followed with respect to samples and analyses. Limited work has occurred at the Mine since then, and the QPs of this Report have relied on the results of the SRK audit as they appear in Item 10 (b) and Item 11 (d). Similarly, the QPs have relied on the exploration survey procedures and sampling presented by Camden Geoserve as presented in Item 9 (a), Item 9 (b) and Item 11 (d).

The source documents for the information utilised are as follows:-

- Camden-Smith, P.M., Camden Geoserve cc. Competent Persons Report for Agnes Gold Mining (Pty) Ltd Barberton, South Africa, 25 May 2010.
- SRK Consulting South Africa (Pty) Ltd. Mineral Resource Estimates, Agnes Gold Mine, Barberton, Mpumalanga, South Africa. Prepared for Agnes Gold Mine Pty Limited. SRK Report No. 411925. January 2010.

The QPs relied on the environmental studies completed by Digby Wells Environmental ("Digby Wells") in 2017, who compiled applications and supporting documentation for EA for the Mine. Such information relied upon is presented in Item 20 (a) and Item 20 (b). The information is sourced from the following document:-

- Digby Wells and Associates (South Africa) (Pty) Ltd. Environmental Authorisation required for the Galaxy Gold Mine, Barberton. Environmental Risk Report. Project Number: GGM3901. Prepared for: Galaxy Gold Reefs (Pty) Ltd. March 2017.

ITEM 4 - PROPERTY DESCRIPTION AND LOCATION

Item 4 (a) - AREA OF THE PROPERTY

The Galaxy Gold Mine (previously known as the Agnes Gold Mine) occurs within the BGB - a geological region associated historically and currently with its high grade gold mineralisation and as such, is characterised by numerous historic mine workings and prospects.

The Mine comprises several east-west trending gold orebodies and TSFs from historical workings. The Agnes Mine and Princeton Mine are the primary mining areas and include the following orebodies:-

- Agnes Mine:-
  - Woodbine;
  - Giles;
  - Galaxy;
  - Ivy;
  - Ivy Lead;
  - Agnes;
  - Ameide;
  - Watts;
  - South;
  - Knuckeys;
  - South Lead;
  - SMZ; and
  - Gemini;
- Princeton Mine:-
  - PS5; and
  - PS19.

The Alpine (Alpine, Back Lead, Black Lead and Lydlich orebodies) and Pioneer (Tiger Trap, Beaver Trap and Pioneer orebodies) Mines are historical underground workings and are future mining targets.

The current workings are concentrated in a 5,862.8-hectare mineral right area.

The Project Areas that form the subject of this Report are listed in Table 2.

Table 2: Galaxy Gold Mine Project Areas

Deposit Type	Name
Underground	Princeton
	Galaxy
	Woodbine
	Giles
	Golden Hill
	Pioneer & Tiger Trap
Open Pit	Agnes Top
Shaft Pillar	Ivy
	Ceska
TSF	Woodbine (East, North and South)
	Hostel (East and West)
	Biox North
	Alpine Pioneer

It is planned to recommence mining operations as a combination of underground primary hard rock mining and TSF reclamation. Access to the underground workings is through adits including Ben Lomond, 22 Level, Golden Hill and Tiger Trap. The Ben Lomond and 22 Level adits only are utilised for the mine plan. In addition to mining infrastructure, the project site includes a BIOX® plant which has been mothballed, and a CIL plant that has been replaced with a CMF plant.

The recommissioning and ramp up of the operations are scheduled over three phases:-

- Phase 1 (completed): refurbish plant and infrastructure to process 15 ktpm of historic TSF material, as well as preliminary underground development ore. The operation is operating in Phase 1 currently and is being used to support the development and opening of the underground operations.
- Phase 2: Expand production to 30 ktpm by September 2020 processing material from Princeton and Galaxy with the expansion of the plant flotation circuit as well as the commissioning of the new ball mill.
- Phase 3: Expand production to 50 ktpm by January 2023 with the expansion of the flotation circuit. The new ball mill would then be ramped up to nameplate capacity.

The current site activities include low volume development and TSF retreatment:-

- Princeton underground decline and reef drive development below 17 Level;
- Galaxy underground development in waste at 22 Level to access Galaxy Orebody;
- existing plant upgrade to 30 ktpm capacity; and
- processing since April 2019 of Princeton development ore and reclaimed material from Hostel West, Woodbine West and Woodbine South TSFs.

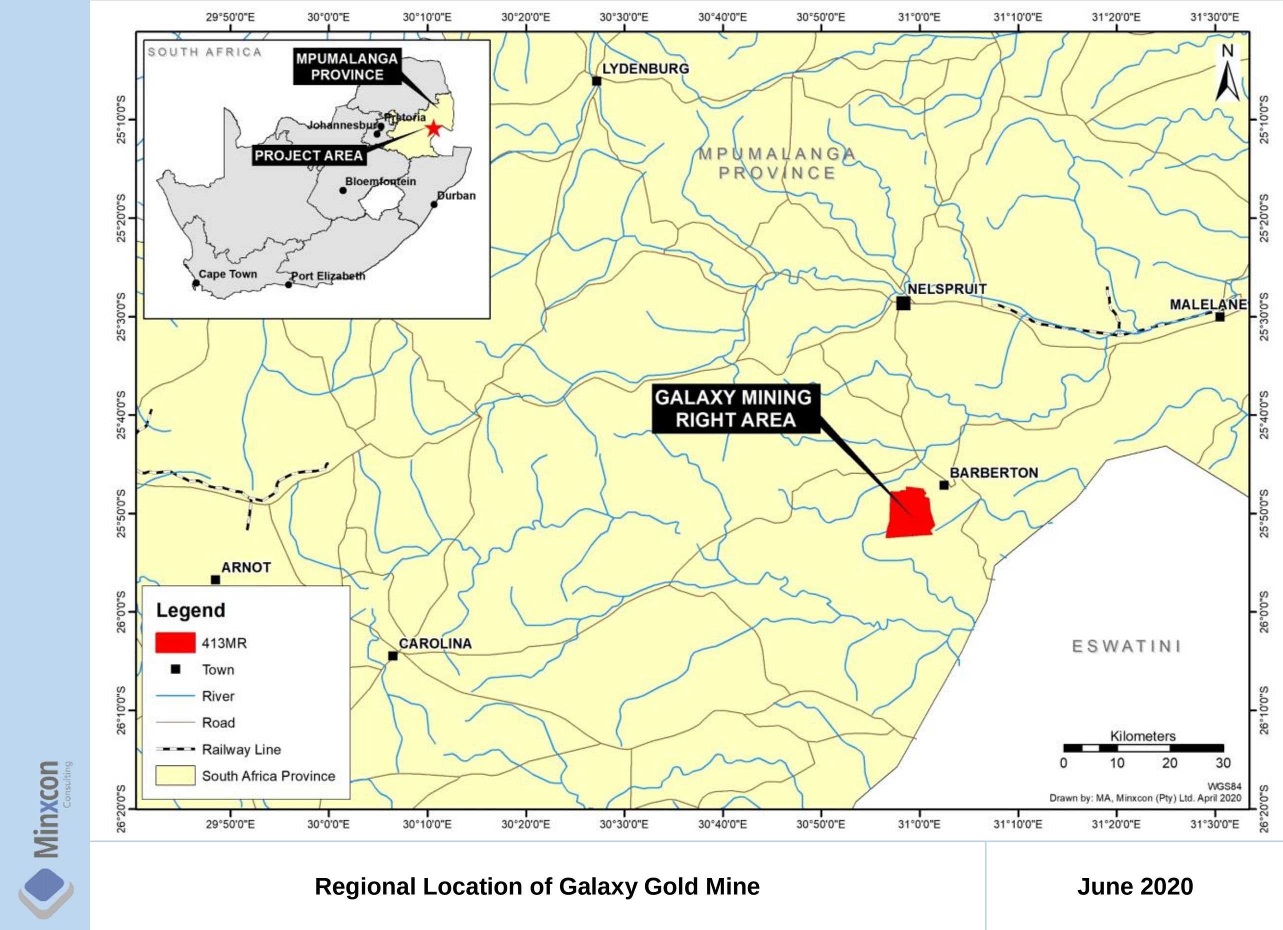
Item 4 (b) - Location of the Property

The Galaxy Gold Mine is located approximately 8 km southwest of the town of Barberton and 45 km west of the provincial capital of Mbombela (previously Nelspruit), in the Mpumalanga Province of South Africa, as shown in Figure 1.

The Mine is centred on the following geographic co-ordinates:-

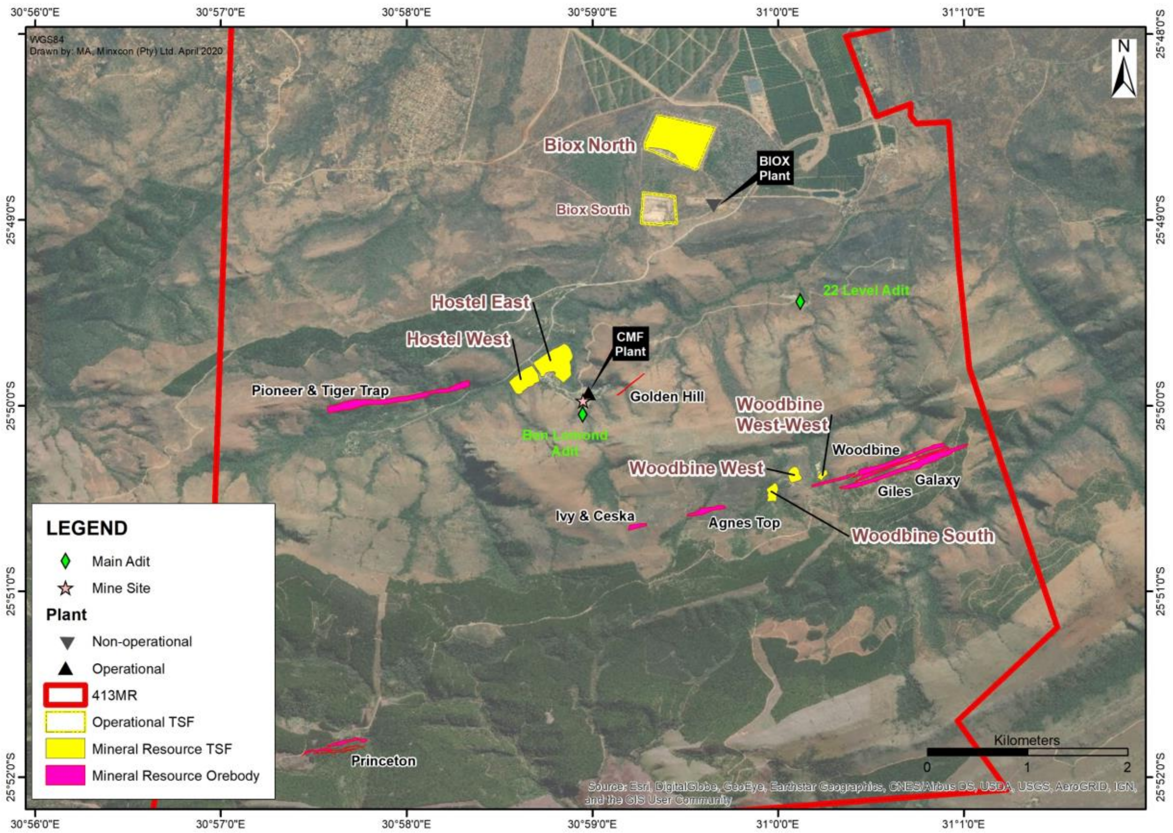
- Latitude 25°49’ 50.61” S; and
- Longitude 30°58’ 55.00” E.

Figure 1: Regional Location of Galaxy Gold Mine



The location of the Project Areas and general surface infrastructure areas are illustrated in Figure 2.

Figure 2: Location of Galaxy Gold Mine Orebodies and General Surface Infrastructure Areas



Location of Galaxy Gold Mine Orebodies and General Surface Infrastructure Areas	June 2020

Item 4 (c) - MINERAL DEPOSIT TENURE

Mining rights are issued by the South African Department of Mineral Resources and Energy ("DMRE") in accordance with the MPRDA.

I. MINING RIGHT

The main area of the Galaxy Gold Mine – which is the subject of this Report - is encompassed within mining right MP 30/5/1/2/2/413(MRC) ("413 MR"), which is valid for a period of 20 years until 4 September 2032. This licence represents the new order conversion of an old order mining licence (ML 16/2000) which was granted to African Pioneer Mining (Pty) Ltd ("APM"). The 413 MR is granted over portion ("Ptn") 9 and Ptn 12 (now Ptns 10, 13, 14 15, 21, 22, RE of Ptn 9, a Ptn of RE of Ptn 12) of the farm Oorschot 692 JT and the remaining extent ("RE") of the farm Ameide 717 JT. The converted mining right was transferred into the name of GGR in terms of Section 11 of the MPRDA by notarial cession on 8 November 2013.

Table 3 provides the details pertaining to the current mining right encompassing the Galaxy Gold Mine.

Table 3: Galaxy Mining Right

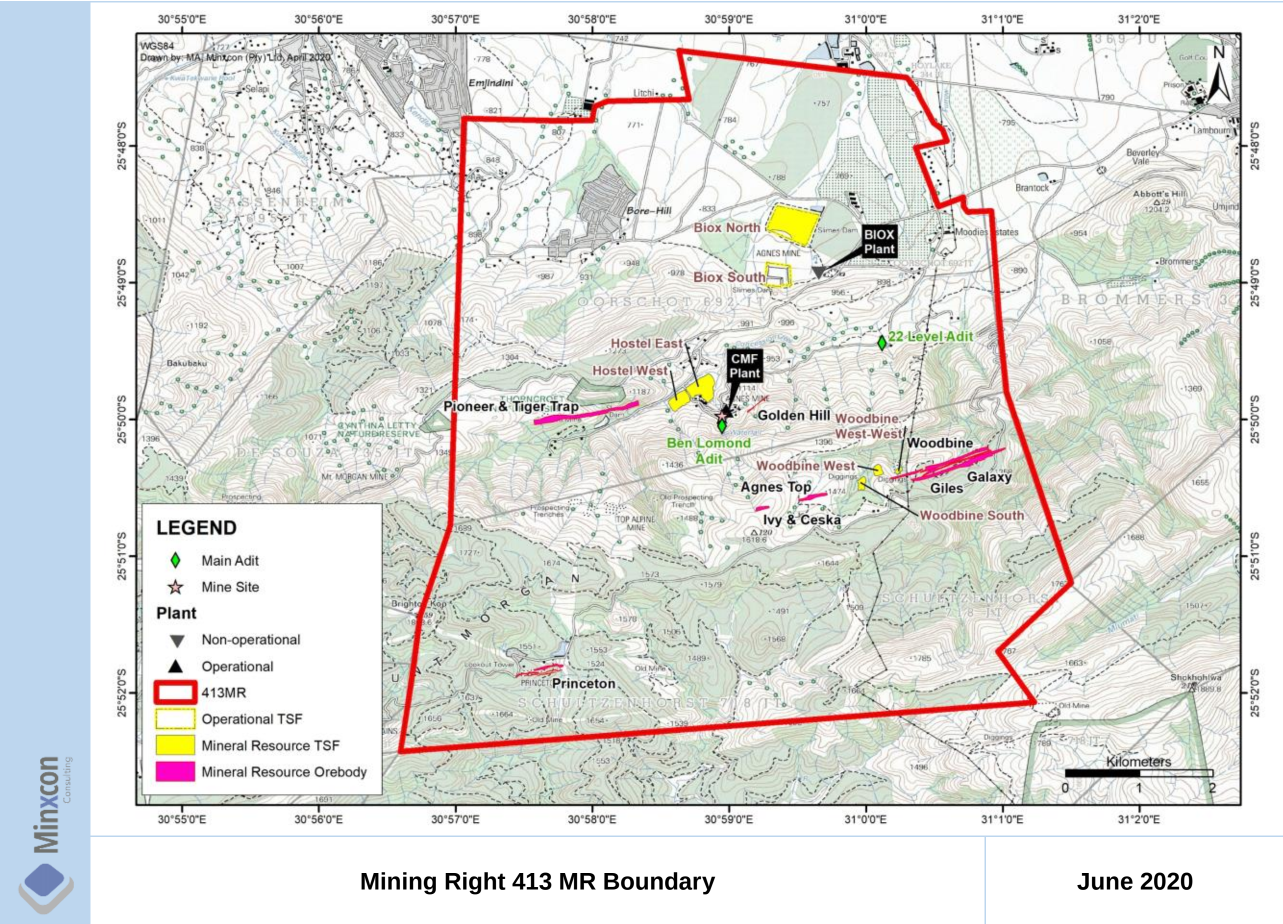
Farm Name	Farm Portions*	Mining Right No.	Company	Mineral	Area ha	Valid From	Valid To
Oorschot 692 JT	Ptns 10, 13, 14**, 15, 21**, 22, RE of Ptn 9, a Ptn of RE of Ptn 12	413 MR	Galaxy Gold Reefs (Pty) Ltd	Gold	5,862.8	5 September 2012	4 September 2032
Ameide 717 JT	RE						

Notes:

1. *Previously Ptn 9 and Ptn 12, handwritten and signed as amended on the 413 MR.
2. **Portions do not appear to exist as checked through Windeed search. It is noted that the 413 MR area is defined by the registered Regulation 42 plan boundary, and as such, no threat to the aerial extent of the 413 MR area is noted by the QP.

The extent of 413 MR is illustrated in Figure 3.

Figure 3: Mining Right 413 MR Boundary



Minxcon notes that the latest topocadastral map generated by and sourced from the Department of Rural Development & Land Reform, as well as the latest (2015) farm parcel spatial files (GIS shapefiles), do not contain the farm Ameide 717 JT. The portion of land (southern extent of 413 MR) previously covered by Ameide 717 JT is now reflected as the farm Schultenzenhorst 718 JT. This indicates that Ameide 717 JT has been renamed or assimilated into the farm Schultenzenhorst 718 JT. The 413 MR boundary is defined by the Regulation 42 plan registered at the Mineral and Petroleum Titles Registration Office and thus the farm name discrepancy does not impact on the right to mine. For accurate record keeping and planning, the QPs recommend that GGR obtain clarity on the farm names from the appropriate authorities.

II. Surface Rights

Table 4 lists the land owners over the 413 MR farm areas. The majority of mining infrastructure occurs and is operated within the confines of Oorschot 692 JT Ptn 22 which land is registered to GGR.

Table 4: Land Owners of the Mine Area

Farm Name	Farm Portions	Owner	Mining Infrastructure/Activities
Oorschot 692 JT	RE of Ptn 9	Sappi Manufacturing (Pty) Ltd	-
	Ptn 10	Republic of South Africa	-
	RE of Ptn 12	Upper Moodies Estate CC	• 22 Level adit • TSF • explosives depot
	Ptn 13	Eskom	-
	Ptn 14*	-	-
	Ptn 15	Madikwe Communal Property Association	-
	Ptn 21*	-	-
	Ptn 22	Galaxy Gold Reefs (Pty) Ltd	• mine footprint • various smaller mines • Alpine, Agnes and Ben Lomond residential villages • office buildings at Ben Lomond Adit • milling, flotation and elution plant • mine workshops • tailings facilities and CIL plant • Eskom powerline servitude 408/1971S
	Ptn 26	Danroc (Pty) Ltd	-
Ameide 717 JT	RE	Galaxy Gold Reefs (Pty) Ltd	-

Note: *Portions as recorded as handwritten and signed amendment on the 413 MR do not appear to exist, as checked through Windeed search. It is noted that the 413 MR area is defined by the registered Regulation 42 plan boundary, and as such, no threat to the aerial extent of the 413 MR area is noted by the QPs.

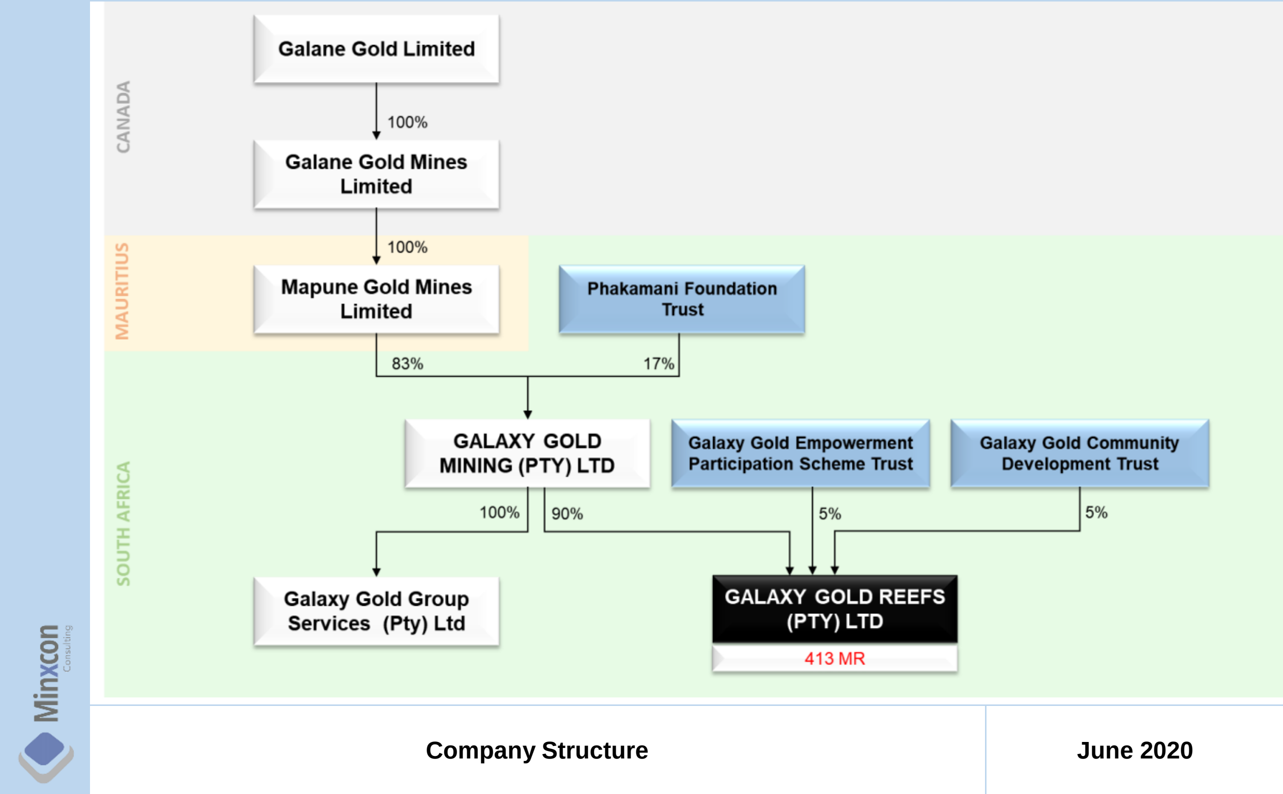
Section 5(3) of the MPRDA allows GGR, as holders of the current mining right, extensive surface use regarding mining operations.

Item 4 (d) - Issuer's Title to/Interest in the Property

GGR is a South African gold mining and exploration company, established in 2008 and focused on exploitation of gold mineralisation in the BGB. GGR purchased the Galaxy Gold Mine and associated infrastructure from APM in December 2008. All movable and immovable assets were transferred to GGR in 2009.

GGR is currently 90% owned by Galaxy Gold Mining (Pty) Ltd, an indirect subsidiary of Galane. The remaining 10% shareholding is held equally by Galaxy Gold Empowerment Participation Scheme Trust and Trustees of the Galaxy Gold Community Development Trust. The company structure relating to GGR and the Mine is illustrated in Figure 4.

Figure 4: Company Structure



The Broad-Based Socio-Economic Empowerment Charter for the Mining and Minerals Industry of 2010 outlined the requirement for a 26% BEE shareholding for the holder of a mining or prospecting right. A revised Mining Charter was gazetted on 27 September 2018, through which an existing mining right holder who has achieved a minimum of 26% BEE as at 1 March 2019 is recognised as compliant for the duration of the right. This includes a right holder whose BEE shareholder has since exited. This recognition, however, is not applicable upon renewal, and is not transferrable to a new owner in the case of a transfer or sale.

The effective total BEE shareholding in GGR is 25.3%, having never achieved the 26% due to miscalculations in trust deeds. Independent law firm Tabacks, who specialises in commercial, corporate and mining law, has opined that a rightsholder that has substantial compliance (25.3%) would be entitled in law to a reasonable period in which to rectify the matter before being subjected to any sanction, particularly if the non-compliance is the result of a bona fide error. GGR has further indicated that concerns regarding BEE shareholding have not been raised by the DMRE. The shortfall in the BEE percentage is in the process of being rectified by way of formal amendment of the (relevant) trust deeds.

Item 4 (e) - Royalties and Payments

I. Royalty Act

Following implementation of the MPRDA, the Minister of Finance promulgated the Mineral and Petroleum Resources Royalty Act, No. 28 of 2008 (the "Royalty Act") as well as the Mineral and Petroleum Resources Royalty (Administration) Act, No. 29 of 2008, both of which are administered by the South African Revenue Service. The Royalty Act came into effect on 1 March 2010. The royalty is triggered on the transfer of a mineral extracted and the royalty collected is paid to the National Revenue Fund.

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

II. Carbon Tax Act

The Carbon Tax Act, No. 15 of 2019 ("Carbon Tax Act") was gazetted on 23 May 2019, and came into effect on 1 June 2019. A taxpayer is liable to pay carbon tax where it conducts any activities set out in Schedule 2 of the Carbon Tax Act and emits greenhouse gas ("GHG") emissions above the listed thresholds in respect of a tax period. The tax is levied based on the sum of the GHG emissions expressed as the CO_2 equivalent of those GHG emissions resulting from fuel combustion, industrial processes and fugitive emissions. The liability may be reduced through using the various allowances available and in some instances the tax is only payable where allowances are exceeded.

The Mine is currently not liable to pay carbon tax. Future operations that exceed emissions thresholds and allowances as described in the Carbon Tax Act will be taxable.

Item 4 (f) - Environmental Liabilities

In terms of Regulation 54(2) of the MPRDA, GGR 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.

As part of the EA application for the Mine, Digby Wells calculated the financial provision estimate to align with the Financial Provision Regulations, 2015 (GN R1147). The financial provision for rehabilitation and closure for the LoM and 10 Year forecast required were estimated as per Table 5, with a combined value of ZAR65.2 million.

Table 5: Financial Provision Estimate as per Digby Wells

Item	Estimate (ex. VAT) ZAR
Year 10 of Operation	32,956,916
End of Life	32,251,031

GGR currently does not have financial products in place. The above calculations as part of the EA are pending approval from the DMR. Once approval has been received, GGR will approach the requisite entities to obtain the required guarantees.

Item 4 (g) - Permits to Conduct Work

Post-release of the 2015 Report, GGR held verbal consultation with the regional DMRE and Department of Environmental Affairs ("DEA") regarding permitting for the Mine and operations. It was recommended that GGR submit applications to align existing permits. Later, GGR was instructed to instead submit new applications rather than focus on alignment. Digby Wells was appointed in 2016 to oversee and compile these applications.

I. Environmental Authorisation

As part of the 413 MR and previous ML 16/2000, Environmental Impact Assessment ("EIA") and Environmental Management Programme ("EMP") reports, dating back to 2001, in terms of the National Environmental Management Act, No. 107 of 1998 ("NEMA") were approved by the DMR Regional Manager Mpumalanga. Subsequent EMP amendments were submitted in 2005. An updated EMP to include a proposed TSF expansion was compiled and submitted to the DMR in 2013 following the 2009 purchase of the Mine by GGR. This was not approved following failure of GGR to respond to directives issued by the DMR for the report.

The One Environmental System ("OES") came into force on 08 December 2014 and acts as a synchronised system for environmental authorisation between the MPRDA, NEMA, National Environmental Management: Air Quality Act, No. 39 of 2004 ("Air Quality Act"), National Water Act, No. 36 of 1998 ("NWA"), and National Environmental Management: Waste Act, No. 59 of 2008. The OES, essentially an agreement between the DMR, DEA and Department of Water Affairs ("DWA"), is aimed at streamlining environmental approvals, monitoring and enforcement for South African mines.

In terms of the OES, companies are required to submit application for an EA. A mineral project requires a Water Use Licence ("WUL") for identified water uses which is issued by the DWA in terms of the NWA. A project may also require an Air Emissions Licence ("AEL") in terms of the Air Quality Act. The WUL and AEL forms part of the EA process and as such, the EA can only be granted once the WUL has been awarded. The EA process integrates public opinion, and decisions by the authorities on granting of the required licences and permits take cognisance of the incorporated technical information, socio-economic and environmental strategies, and public sentiment.

An application for an EA for the Mine was submitted to the Mpumalanga DMR Regional Office on 27 July 2016, triggering a 300-day period of processes including an EIA update. The revised EIA was submitted to the DMR on 26 April 2017. A Scoping Report detailing the biophysical and social environments which have and will be affected, was compiled and submitted to the DMR on 16 September 2016. At the time of writing of this Report, the EA approval is still under consideration by the DMR following delays from items such as updates on submitted information.

II. Water Use Licence

A water registration certificate, No. 24004694, was issued to APM in terms of NEMA on 9 January 2003 by the ex-Department of Water Affairs and Forestry (now the DWA). No duration is provided. The certificate gives authorisation for the following five activities on the farm Oorschot 692 JT Ptn 9 in terms of the NWA, all effective from 1 February 2000:-

- Section 21 (a) - taking water from a water resource (Agnes Mine Underground Water, 957,030 m^3 per annum);
- Section 21 (f) - discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit (10-100% industrial wastewater, 511,00 m^3 per annum);
- Section 21 (g) - disposing of waste in a manner which may detrimentally impact on a water resource (Mine residue deposit, 168,000 tpa);
- Section 21 (i) - altering the bed, banks, course or characteristics of a watercourse (Agnes Stream to divert water to the flotation plant and Mine infrastructure); and
- Section 21 (j) - removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people (957,030 m^3 per annum, 2,570 m^3 per day).

A WUL (No. 24060427) dated 20 December 2002 was issued to Cluff Mining SA. The IWULA (as defined herein) pertains to the RE of Ptn 12 of the farm Oorschot 69 JT, and is valid for a period of 20 years expiring 19 December 2022. The licence authorises the licensee to:-

- establish and operate a Geobiotics reactor process plant in order to heap leach an annual throughput of 100,000 tpa (an average of 466 tpd) of low-grade ore;
- construct a solution pond with a capacity of 4,160 m^3 to accommodate the elution from the heap leach as well as any run-off from the plant area; and
- dispose of 144.5 tpd of tailings from the CIL process onto the existing flotation dam.

However, in 2017 Digby Wells identified that water uses on the Mine site are not authorised in terms of a WUL. The processes in terms of NEMA for the applicable applications for the extension of the TSF and the construction of the two pipelines from the Woodbine TSFs to the processing plant have been initiated. An integrated WUL application ("IWULA") was prepared by Digby Wells and submitted in May 2017 to authorise the existing and proposed water uses in terms of Section 21 for the following water uses:-

- Section 21 (a) - taking water from a water resource:-
    - abstraction of water from underground mine at Ben Lomond Portal sourced from the Princeton Adit and Ben Lomond Adit, for use as processing water, and tailings sluicing water and sent to Concession Creek. Abstraction from Princeton Water Fissure to provide Ben Lomond offices, 13 houses, Hostel, Single and Married Quarters, Kitchen and Security with potable water as well as the Ben Lomond Recreational club etc. (3,500 m^3 per day);
    - abstraction from Alpine Mine to provide the Alpine Village of nine houses with potable water (10 m^3 per day);
- Section 21 (c) and (i) - impeding or diverting the flow of water, Altering the bed, banks, course or characteristics of a watercourse:-
    - road crossing to the offices;
    - historic West TSF - this is being reworked. The footprint of the TSF is located on the banks of the Concession Creek;
    - historic East TSF - this will be reworked in the near future. The footprint of the TSF is located on the banks of the Concession Creek;
    - waste rock dump ("WRD") situated in the tributary of the Concession Creek;
    - plant situated within 100 m from the tributary of the Concession Creek;
    - rehabilitation of area at Mamba Creek where old tailings were disposed of;
    - pipelines to and from the Woodbine TSF to the Processing Plant (two river crossings);
- Section 21 (f) - Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit:-
    - water discharged from the Tiger Trap Adit (5.0 m^3);
    - water discharged from Ben Lomond Adit (3,500 m^3 per day);
    - water discharged from 22 Level (1,200 m^3 per day);
    - treated effluent from the sewerage treatment plant;
- Section 21 (g) - Disposing waste or water containing waste in a manner which may detrimentally impact on a water resource for pollution control dams, discard dump, dust suppression, water associated with overburden and stockpiles:-
    - WRD at Ben Lomond Adit;
    - pollution control dam ("PCD") at the CMF circuit (317.9 m^3);
    - BIOX® and Plants return water dam ("RWD") (7,128 m^3);
    - drying beds at the BIOX® plant;
    - operational TSF & Expansion of TSF (40 ktpm);
    - operational TSF RWD (23,400 m^3);
    - treated effluent discharged from the sewerage treatment plant into a maturation pond;
- Section 21 (j) – Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity for the safety of the people:-
    - Water removed from 22 Level which will allow for the safe continuation of the mine workings (1,200 m^3).

Digby Wells (2017) further identified that Galaxy Gold Mine needs to apply for exemption from the General Notice 704 Regulations for the following:-

- Schedule 4 (a): locate or place any residue deposit dam, dam, reservoir, together with any associated structure or any other facility within the 1:100 year floodline or within a horizontal distance of 100 m from any watercourse or estuary, borehole or well, excluding boreholes or wells drilled specifically to monitor the pollution of groundwater, or on water logged ground, or on ground likely to become water logged undermined, unstable or cracked:-
  - the WRD, the old East and West TSFs are located within a 100 m from the Concession Creek or a tributary to the Concession Creek; and
  - the PCD at the Metallurgical Plant.
- Schedule 4 (b): except in relation to a matter contemplated in regulation 10, carry on any underground or opencast mining, prospecting or any other operation or activity under or within the 1:50 year floodline or within a horizontal distance of 100 meters from any watercourse or estuary, whichever is the greatest:-
  - the mining at Mamba Creek and the processing of the gold a few years ago and now the rehabilitation of the area to be undertaken; and
  - the reclamation of the old TSFs including the East, West and the Woodbine TSF.
- Schedule 7 (a) prevent water containing waste or any substance which causes or is likely to cause pollution of a water resource from entering any water resource, either by natural flow or by seepage, and must retain or collect such substance or water containing waste for use, re-use, evaporation or for purification and disposal in terms of the Act:-
  - the old TSFs have been in existence for the past 100 years. No stormwater control measures are in place around the TSF and due to the locality and proximity to the receiving water environment all runoff enters the Concession Creek or its tributaries.
- Schedule 7 (e): prevent the erosion or leaching of materials from any residue deposit or stockpile from any area and contain material or substances so eroded or leached in such area by providing suitable barrier dams, evaporation dams or any other effective measures to prevent this material or substance from entering and polluting any water resources:-
  - the old TSFs have been in existence for the past 100 years. No stormwater control measures are in place around the TSF and due to the locality and proximity to the receiving water environment all runoff enters the Concession Creek or its tributaries.

At the time of writing this Report, the IWULA is still pending and current development and processing activities are not sanctioned by a WUL. The Client has indicated that in the interest of being transparent, in the year to date, three separate site visits have been conducted by DWA officials, none of whom raised concerns regarding the activities.

III. ADDITIONAL PERMITS

An EIA/EMP was approved in 2001, but does not include the current site activities. A new EIA was submitted to the DMR on 26 April 2017 and is under consideration.

Application for a Waste Management Licence in terms of the National Environmental Management: Waste Act, No. 59 of 2008 forms part of the EA process. The EA application including a Waste Management Licence was submitted on 4 August 2016. The Scoping Report was submitted to the DMR on 16 September 2016.

An AEL is not required for the Mine as no roasting, smelting and/or any other activity that releases any emissions into the atmosphere is undertaken or planned to be undertaken.

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

Item 4 (h) – Other Significant Factors and Risks

Illegal miners target the Galaxy Gold Mine orebodies. These persons trespass and pose a security risk to operations and infrastructure, and are arrested where possible.

The QPs of this Report are not aware of any additional significant factors or risks that may pose hindrance to the development or continuation of the operations at the Mine. Although GGR endeavours to remain open and transparent about all site activities and no penalties or operational stoppages have been imposed to date following site visits from various department officials, it is cautioned that current site activities are not authorised by the required permits. Applications for the required permits have been submitted and are pending decision from the DMR and DWA.

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

Item 5 (a) – Topography, Elevation and Vegetation

The Project Area is located within the Barberton Mountains. As such, elevations rise and fall within the landscape to create steeply hilly mountains and valleys with a number of incised catchments. In the south, the Project Area is mountainous while in the north, topography is relatively flat, creating a general down-slope profile towards the north. The Agnes Adit itself extends into a mountain scarp and a waterfall flows down the mountain to directly over the site of the adit, as seen in Figure 5. In the northeast, the Project Area lies at about 726 m above mean sea level ("amsl") and rises to about 1,800 m amsl in the southwest. The elevation of the servitude area where the possible TSF expansion will take place, increases from 770 m amsl in the northeast to 885 m amsl in the southwest with slopes of 0% to 9.5% over the majority of the TSF servitude area (Koch, 2013).

Figure 5: View of the Agnes (Ben Lomond) Adit with Agnes Waterfall

View of the Agnes (Ben Lomond) Adit with Agnes Waterfall | **June 2020**

The majority of the Mine area falls within the catchment of Concession Creek, which flows eventually into the Crocodile River. The Princeton Section falls within the Mtsoli River catchment as part of the greater

Komati River catchment, also perpetuating into the Crocodile River. The stream flows past the Mine, down-slope surface of infrastructure, below the old grassed slimes dam and into the valley to the east (Walmsley, 2001).

Forestry occupies a large regional surface area with several sawmills operating near Barberton. More locally, vegetation is characterised by lush subtropical flora. An abundance of floral species occurs representing a variety of habitats from riverine indigenous bush due to the great variation in elevation across the Project Area. These include lowveld sour bushveld, to grassy mountain sourveld on the hills, escarpment fynbos relics and small pockets of afromontane forest at higher altitudes (Walmsley, 2001). Alien vegetation along Concession Creek has been cleared since 2002 by the "Working for Water" project. Mining activities, exotic tree plantations and agricultural features have altered the landscape such that divisions are obviously noticeable. In the neighbouring areas, agricultural activities include sugar cane farming, sub-tropical fruit, nuts and vegetable farming, with some cattle and game farms.

As per Walmsley (2001), the majority of the land is classified as Wilderness. Vulnerable or rare species were identified on farm Oorschot 692 JT, including *Aloe albida, Aloe thorncroftii, Encephalartos paudidentatus* and *Protea comptonii*. Alien vegetation species were found abundant along roads, rivers and villages. Sappi regularly clears riverine areas of these. The endemic and threatened Yellowstriped Reed Frog, *Hyperolius semidiscus*, may be found in marginal stream vegetation.

Item 5 (b) – Access to the Property

Road access to the property is via a 7 km dual-lane tar road from Barberton to within 3 km of the site. Thereafter, the road becomes a well-maintained wide gravel road that provides access directly into the Project Area. The road also services the timber and local agricultural industries. Dirt roads at the Mine run along the mountain side, linking the access gate to the mine offices, staff complexes and residential and recreational areas.

Underground operations are mainly accessed via the Ben Lomond Adit (17 Level) to a sub-vertical shaft and a trackless spiral ramp. Access is also provided via the Tiger Trap and 22 Level adits. An escape way is maintained from the underground workings to the surface via abandoned workings in the Woodbine Section, Tiger Trap Adit and a raised borehole in the Princeton Section.

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

The town of Barberton lies approximately 45 km south of Mbombela, the regional capital hosting a population of some 110,160 people (2020). Suppliers of all mining commodities are well represented in Barberton and readily deliver stock to site. Major plant items can be railed to within 7 km of the mine site in Barberton.

There are sufficient services in the area such as health and social welfare facilities, schools, hotels and recreation facilities.

Skilled labour is available within the region, specifically from Mbombela. The city hosts multiple services and skills to support the minerals industry, including heavy equipment contractors, trucking companies, specialised machinery manufacturers and land surveyors, amongst others.

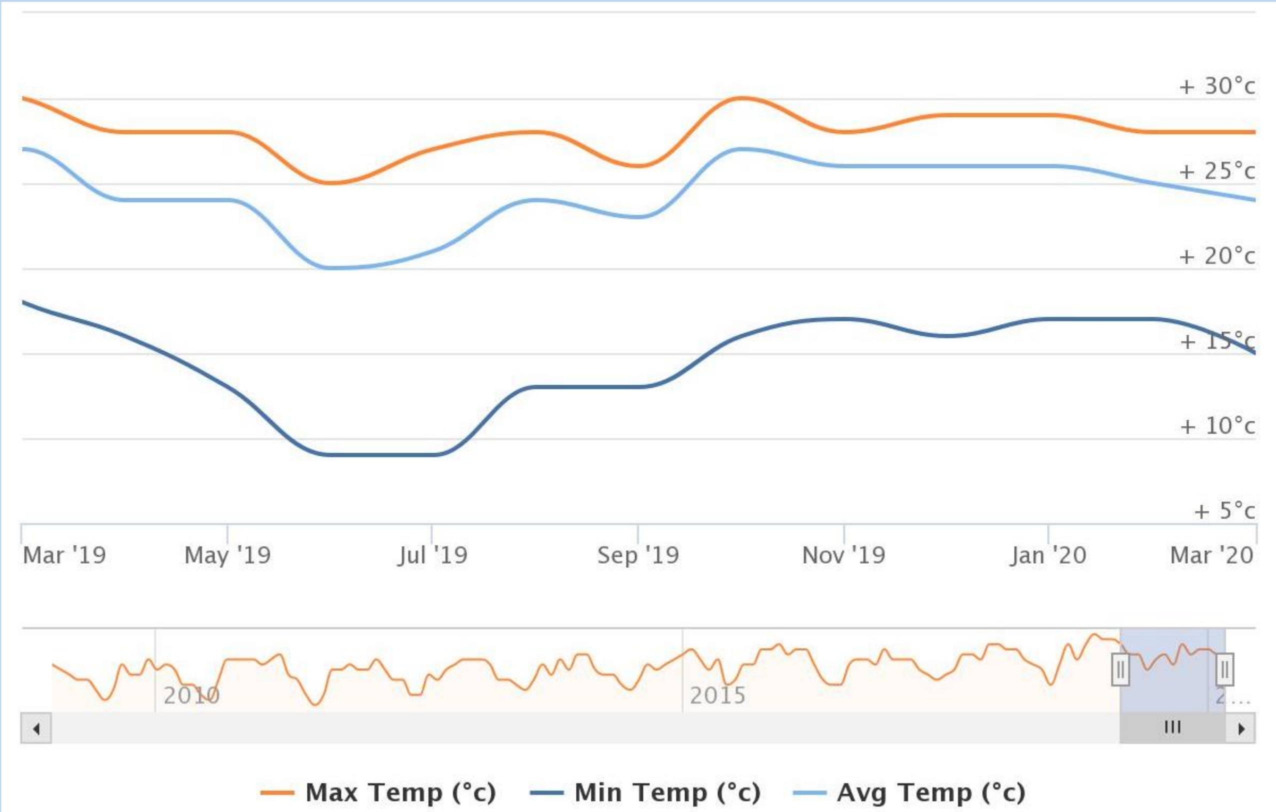
Item 5 (d) – Climate and Length of Operating Season

The climate in Barberton is warm and temperate and classified as Cwa by Köppen and Geiger (climate-data.org). Cwa is characterised by a temperate climate with dry winters, where the 'C' refers to mild temperature, the 'w' refers to dry winter and the 'a' refers to hot summers.

In the area, the average summer temperature is 30°C, but can reach up to 43°C. Winter temperatures are generally mild (average of 8°C), but can be as low as -2°C. Sunshine is plentiful, varying from 7.5 to 9.5 hours daily. Annual rainfall, mainly during the summer months of November to March, ranges from 500 to 700 mm in the low-lying areas to 2,000 mm in the higher altitudes of the Mine area.

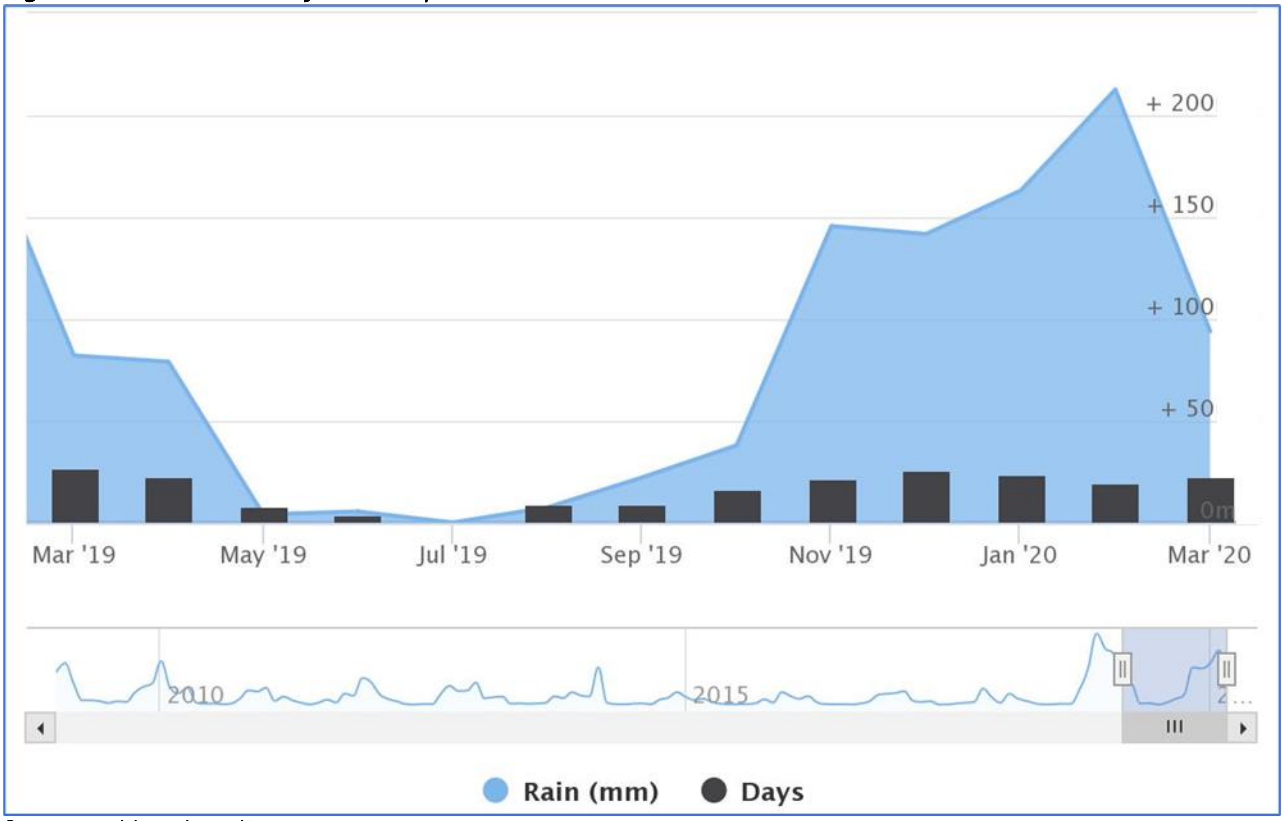
Charts depicting the average temperatures and precipitation for Barberton over a period of one year are provided in Figure 6 and Figure 7, respectively.

Figure 6: Barberton One-year Temperature Chart



Source: worldweatheronline.com

Figure 7: Barberton One-year Precipitation Chart



Source: worldweatheronline.com

The climate does not significantly affect the length of the operating season, and mining operational seasonality is not observed in area. No appreciable mine production downtime is expected owing to unfavourable climatic conditions. In the event of exceptionally heavy downpours, operations may be halted for a few hours, although such events are very uncommon in the region.

Item 5 (e) - INFRASTRUCTURE

I. REGIONAL POWER SUPPLY

Grid power is supplied by Eskom to the general project region. Power is supplied to a consumer substation located northeast of the 22 Level adit next to the Moodies Estate. Power is currently supplied from this consumer substation to the Mine operations via 11 kV overhead lines and feeds the Eskom 22 Level Adit substation.

II. REGIONAL WATER SUPPLY

Potable and service water in the Project Area is mainly sourced from groundwater and abstracted from existing or historical underground workings. Water from this source is also supplied to the surrounding villages. The Mine operations supply water to the local municipality through a purification plant located next to Tiger Trap, where after it is piped to a reservoir for distribution to end users. Water supply in the area is deemed to be sufficient.

III. GALAXY GOLD SURFACE INFRASTRUCTURE

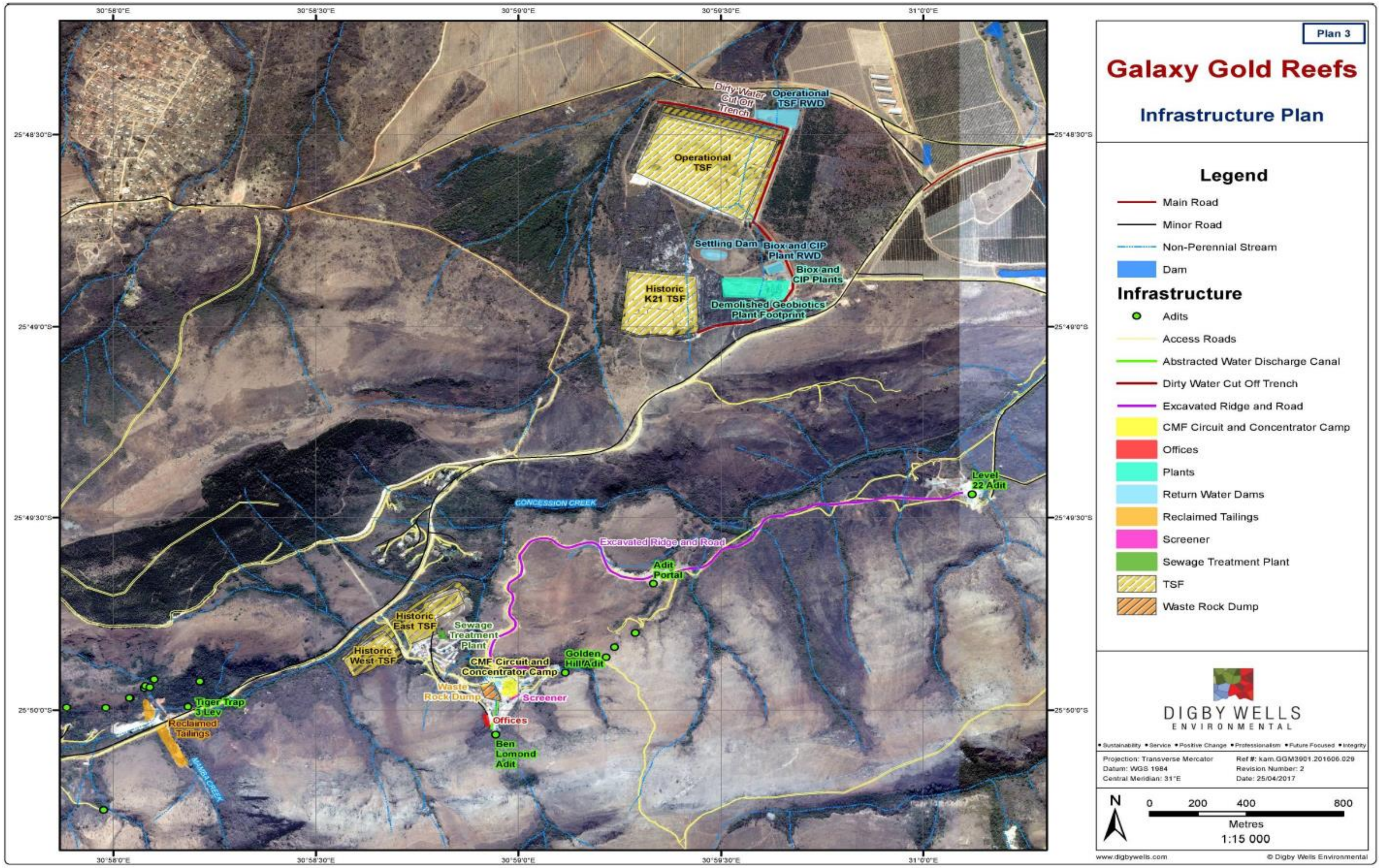
As the Galaxy Gold Mine has been operated historically, infrastructure is established to a large degree. Surface infrastructure includes, but is not limited to, the following:-

- access to underground workings through:-

  - Ben Lomond Adit;
  - Princeton Adit;
  - 22 Level Adit;
  - Tiger Trap Adit; and
  - Golden Hill Adit.
- process facilities consisting of:-
  - CMF plant (to the south of the project operations near the Ben Lomond adit);
  - BIOX® plant (to the north of the Ben Lomond Adit and currently not in use); and
  - an assay laboratory.
- tailings storage facilities;
- buildings consisting of:-
  - offices;
  - workshops;
  - lamp room; and
  - change houses.
- surface ventilation infrastructure;
- access, service and haul roads;
- surface headgears and winding systems;
- a recreation club;
- the Alpine, Agnes and Ben Lomond residential villages;
- a hostel;
- mine houses;
- WRDs;
- RWDs;
- PCDs;
- diesel storage facilities;
- clean and dirty water management facilities; and
- tailings reclamation areas.

The infrastructure is largely confined to portion 22 of the farm Oorschot 692 JT, which land is owned by GGR. The infrastructure general arrangement in the Project Area is illustrated in Figure 8. It is not anticipated that additional TSF area, waste disposal areas, heap leach pad areas or plant sites will be required in the near future. However, should such be required, land in the immediate site area is available, subject to relevant studies.

Figure 8: Galaxy Gold Mine – Surface Infrastructure General Arrangement



Galaxy Gold Mine – Surface Infrastructure General Arrangement | June 2020

IV. LABOUR AVAILABILITY

The Mine currently comprises skeleton staff conducting sands processing and limited mining activities (development) at Princeton. Once operations re-start, mining will be undertaken by contractors who will be responsible for their own employment. Mining is prevalent in the Barberton and surrounding areas, and skilled labour is available in the region.

ITEM 6 – HISTORY

Item 6 (a) – Prior Ownership and Ownership Changes

The first traces of alluvial gold in the Barberton Mountainland was discovered in the 1880s. Following the discovery of gold at Concession Creek, the town of Barberton was proclaimed in 1885. Since then, the area has been explored by numerous prospectors for the precious metal. A vast number of operations were started between 1890 and 1920. As is normal with a new goldfield, consolidation of operations took place and smaller non-viable operations were closed. Up to 130 different mines have operated at various times in the area.

The majority of mineral rights were consolidated by Anglovaal's Eastern Transvaal Consolidated ("ETC"), in the 1950s and 1960s. The majority of mining rights in this area are currently owned by three companies: GGR, Pan African Resources PLC and Vantage Goldfields Limited.

The Agnes Mine was previously owned by Anglovaal Mining and sold to Cluff Mining (SA) (Pty) Ltd in 1999, and again later sold to Metallon Corporation under their subsidiary APM (renamed from Cluff Mining (SA) (Pty) Ltd). The Mine was acquired by Tyax Trading Nelspruit (Pty) Ltd in 2008, which was renamed to Agnes Gold Mining (Pty) Ltd in 2009 and later to GGR in 2010, when it was acquired by Galaxy Gold Mining Limited (previously Wesco Investments Limited). In November 2015, Galaxy Gold Mining Limited, along with GGR, was acquired by Galane as the controlling shareholder (Galane, 2015). Galaxy Gold Mining Limited registered as a (Pty) Ltd in 2018.

Item 6 (b) – Historical Exploration and Development

The Agnes deposits were discovered by Auguste Robert in 1882 in the Moodies, Saddleback and Sheba faults (www.miningweekly.com) and the Agnes Mine was established in 1908 initially as surface prospects. The Mine since developed as an underground operation down to 28 Level at 852 m depth. Currently, over 75 historical adits exist within the mining area (Koch, 2013). Owing largely to poor metallurgical recovery processes, the Mine became unprofitable and was placed on care and maintenance in 2007. Underground mining recommenced in September 2009.

The following table summarises the prior ownership, historical exploration and development of the Galaxy Gold Mine.

Table 6: Summarised History of the Galaxy Gold Mine

Year	Event
1882	Discovery of the Pioneer Reef in the Barberton Greenstone Belt.
1882-1884	Gold rush in the Moodies Hills leading to a number of prospects opened up, including Woodbine, Giles, Ivy, Snowden, Highlands and Lester.
1884	The Moodies Gold Mining Syndicate formed a number of larger companies to operate various workings.
1889	Gold mining commences at Princeton and Alpine sections.
1908	Agnes Mine was started by Mr A.J. Knuckey.
1908-1915	Consolidation of prospects into the Agnes Gold Mining Company.
1951	The Agnes Mine was taken over by Anglovaal's ETC subsequent to the extension of the Ben Lomond Adit.
1999	ETC declared final closure of the Agnes Mine.
1999	Agnes Mine and surrounding mineral rights were acquired by Cluff Mining (UK) (Pty) Ltd, where after all assets were transferred over to Cluff Mining (SA) (Pty) Ltd.
2002	Metallon Gold (Pty) Ltd purchased Cluff Mining (SA) (Pty) Ltd. Cluff Mining (SA) (Pty) Ltd renamed to APM.
	An expansion and redevelopment programme was implemented.
2007	Agnes Mine ceased operations and was placed on care and maintenance. APM was placed into liquidation.
2008	Agnes Mine was acquired by Tyax Trading Nelspruit (Pty) Ltd.
2009	Tyax Trading Nelspruit (Pty) Ltd was renamed Agnes Gold Mining (Pty) Ltd.
	Agnes Mine de-watered and refurbished with the Concentrator Plant commissioned in September 2009. Construction of a crushing circuit upgrade that included a new mill commenced in September 2009.
	New mining plan circumventing current access and production bottlenecks and phased introduction of BIOX®.
	Agnes turnaround strategy included the full commissioning of the BIOX® process together with mechanised decline and haulage development designed to alleviate the access and production throughput constraints and bottlenecks.
	Underground production resumed September 2009.
2010	Agnes Gold Mining (Pty) Ltd was acquired by Galaxy Gold Mining Limited and renamed Galaxy Gold Reefs (Pty) Ltd.
2011-2012	Tailings retreated through offtake agreement with Mine2Market.
2012-2015	An agreement was signed for Mine2Market to purchase the Mine. A deposit was made and Mine2Market took control as the major shareholder, ultimately defaulting on the agreement by failing to pay the balance of the money.
	The mine was sold again to an Australian entity, who started mining around the shaft pillar area on 17 Level using long hole stoping. The transaction ultimately fell through.
2015	GGR acquired by Galane through acquisition of Galaxy Gold Mining Limited
2015-2017	Low volume development taking place on Giles 17 Level and tailings retreatment.
2017-2019	Mine on care and maintenance.
	Concentrate testwork conducted, plant construction planning, mine planning for 30 ktpm concentrate plan.
2018	Galaxy Gold Mining Limited becomes Galaxy Gold Mining (Pty) Ltd.
April 2019 onwards	Princeton underground decline and reef drive development below 17 Level.
	Galaxy underground development in waste at 22 Level to access Galaxy Orebody.
	Existing CMF plant upgrade to 30 ktpm capacity.
	Processing of TSFs and low volume Princeton development ore.

Item 6 (c) – HISTORICAL MINERAL RESOURCE ESTIMATES

In 2011, Deswik independently estimated the Mineral Resources for the Galaxy Gold Mine. Later in 2011, Minxcon completed an independent CPR in 2011 for the Mine in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2007) ("2011 CPR"). The 2011 CPR Mineral Resources were based on the Deswik estimations. In 2015, GGR commissioned an update of the 2011 CPR from Minxcon by way of the 2015 Report, for which the Mineral Resources were reviewed and depleted for mining.

The 2015 Mineral Resources under the 2015 Report were signed off by QP Mr Uwe Engelmann. The estimate was declared in accordance with NI 43-101 and the Mineral Resource categories are stated in line with sections 1.2 and 1.3 of NI 43-101. The Mineral Resources as at 31 August 2015 are presented in Table 7.

Key assumptions, parameters and methods used to prepare the historical estimates are disclosed in the 2015 Report which has been publicly filed. The cut-off grade for the underground orebodies was 1.85 g/t, while the cut-off for the TSFs was 0.30 g/t and open pit (Agnes Top) was 1.00 g/t.

Table 7: Historical Galaxy Gold Mine Mineral Resources as at 31 August 2015

Orebody	Cut-off Au	SG	Measured Mineral Resource			Indicated Mineral Resource			Measured & Indicated Sub-total			Inferred Mineral Resource		
			Tonnes	Grade Au	Content	Tonnes	Grade Au	Content	Tonnes	Grade Au	Content	Tonnes	Grade Au	Content
	g/t	t/m³	t	g/t	Oz	t	g/t	Oz	t	g/t	Oz	t	g/t	Oz
Underground														
Galaxy Surface to Dyke**	1.85	2.73	-	-	-	-	-	-	**-**	**-**	**-**	291,000	3.19	29,845
Galaxy 17 Level Up	1.85	2.73	85,268	3.03	8,307	63,105	4.35	8,822	**148,373**	**3.59**	**17,128**	47,326	2.02	3,067
Galaxy Gap 17-24 Level**	1.85	2.73	-	-	-	-	-	-	**-**	**-**	**-**	1,047,000	3.09	104,015
Galaxy 24 Level Down	1.85	2.73	797,728	3.02	7,511	27,711	3.10	29,694	**1,095,439**	**3.04**	**107,205**	165,373	2.17	11,529
Total Galaxy	**1.85**	**2.73**	**882,995**	**3.02**	**85,818**	**360,816**	**3.32**	**38,516**	**1,243,812**	**3.11**	**124,334**	**1,550,699**	**2.98**	**148,456**
Woodbine W & E Surface - 22 Level*	1.85	2.73	-	-	-	110,501	4.61	16,392	**110,501**	**4.61**	**16,392**	306,432	2.95	29,025
Woodbine 24 Level Down	1.85	2.73	312,978	3.81	38,345	191,334	3.37	20,734	**504,312**	**3.64**	**59,079**	715,203	3.54	81,296
Total Woodbine	**1.85**	**2.73**	**312,978**	**3.81**	**38,345**	**301,836**	**3.83**	**37,126**	**614,813**	**3.82**	**75,471**	**1,021,635**	**3.36**	**110,321**
Giles Surface - 23 Level*	1.85	2.73	-	-	-	263,614	4.15	35,155	**263,614**	**4.15**	**35,155**	232,274	3.98	29,712
Giles 23 Level Down	1.85	2.73	378,844	4.11	50,050	255,811	3.48	28,651	**634,655**	**3.86**	**78,701**	1,035,631	3.83	127,562
Total Giles	**1.85**	**2.73**	**378,844**	**4.11**	**50,050**	**519,425**	**3.82**	**63,806**	**898,268**	**3.94**	**113,856**	**1,267,906**	**3.86**	**157,273**
Golden Hill	**1.85**	**3.03**	**301,309**	**3.02**	**29,223**	**372,277**	**3.25**	**38,852**	**673,586**	**3.14**	**68,075**	**99,381**	**5.42**	**17,313**
Agnes Top	**1.00**	**2.80**	**-**	**-**	**-**	**561**	**2.07**	**37**	**561**	**2.07**	**37**	**870,632**	**1.75**	**49,016**
Princeton 6/PS7	1.85	3.08	-	-	**-**	678,578	4.09	89,238	**678,578**	**4.09**	**89,238**	332,834	4.26	45,612
Princeton PS5	1.85	3.08	-	-	**-**	328,440	6.53	68,961	**328,440**	**6.53**	**68,961**	765,259	7.25	178,300
Princeton PS19	1.85	3.08	-	-	**-**	87,844	4.72	13,324	**87,844**	**4.72**	**13,324**	151,396	4.64	22,572
Total Princeton	**1.85**	**3.08**	-	-	**-**	**1,094,862**	**4.87**	**171,522**	**1,094,862**	**4.87**	**171,522**	**1,249,489**	**6.14**	**246,484**
Pioneer & Tiger-Trap	1.85	2.73	-	-	**-**	-	-	**-**	**-**	**-**	**-**	1,234,540	1.96	77,647
Ivy Shaft Pillar*	1.85	2.78	-	-	**-**	-	-	-	**-**	**-**	**-**	47,125	10.18	15,427
Ivy to Agnes 3-11 Level*	1.85	2.78	-	-	**-**	-	-	-	**-**	**-**	**-**	45,498	5.71	8,349
Ceska Shaft Pillar*	1.85	2.78	-	-	**-**	-	-	-	**-**	**-**	**-**	113,534	9.59	34,987
Surface														
Woodbine South Dump	0.30	1.12	-	-	**-**	35,754	1.57	1,803	**35,754**	**1.57**	**1,803**	83,024	1.66	4,425
Woodbine West Dump	0.30	1.17	-	-	**-**	19,377	0.61	381	**19,377**	**0.61**	**381**	72,540	0.64	1,495
Woodbine W.West Dump	0.30	1.17	-	-	**-**	13,136	0.50	209	**13,136**	**0.50**	**209**	25,057	0.51	410
Hostel East Dump	0.30	1.41	-	-	**-**	958,401	0.76	23,562	**958,401**	**0.76**	**23,562**	164,506	0.68	3,581
Hostel West Dump	0.30	1.41			**-**	484,996	0.86	13,367	**484,996**	**0.86**	**13,367**	107,961	0.85	2,947
Biox North Dump	0.30	1.38			**-**	189,340	1.66	10,080	**189,340**	**1.66**	**10,080**	141,993	1.77	8,069
Grand Total			**1,876,126**	**3.37**	**203,435**	**4,350,781**	**2.85**	**399,261**	**6,226,907**	**3.01**	**602,696**	**8,095,521**	**3.40**	**886,199**

Notes:

1. * Manual Mineral Resource estimate from block plans.
2. ** Mineral Resources estimated from adjacent modelled areas for grade distribution; Orebody volume estimated from digital wireframe.
3. 2015 Mineral Resource estimation were carried out by Mr P Obermeyer of Minxcon (BSc Hons (Geol.), Pr.Sci.Nat.) under supervision of and verified by Mr U Engelmann, as QP of the Report.
4. The Inferred Mineral Resources have a large degree of uncertainty as to their existence and whether they can be mined economically or legally.
5. Only Mineral Resources lying within the legal boundaries are reported.
6. Mineral Resources are inclusive of Mineral Reserves.
7. Mineral Resources are declared at cut-offs shown in the table above.
8. All figures are in metric tonnes.
9. 1 kg = 32.15076 oz.

The historical Mineral Resources are presented for complete understanding to the reader of the current work undertaken. Table 8 provides on overview of the reliance on the 2015 estimates in the current Mineral Resource work undertaken and presented in Item 14. For the 2020 Mineral Resources, the Princeton Orebody lenses have been remodelled and re-estimated based on a new geological model due to additional historical information being captured by GGR geologists, which sees the definition of the Princeton PS12. For the Galaxy Orebody, Mineral Resources have been re-estimated. 2015 Mineral Resources for a number of the TSFs have been depleted, while others have been treated as current Mineral Resources, including Agnes Top. The majority of remaining orebodies have been restated directly from the 2015 Mineral Resource estimates by adjusting the cut-off grades.

Table 8: Utilisation of Historical Mineral Resources in Current Mineral Resource Estimation

Orebody	2020 Mineral Resource Utilisation
Galaxy Surface to Dyke*	2015 Mineral Resources no change
Galaxy 17 Level Up	Mineral Resources re-estimated
Galaxy Gap 17-24 Level	
Galaxy 24 Level Down	
Woodbine W & E Surface - 22 Level*	2015 Mineral Resources adjusted to 1.4 g/t cut-off
Woodbine 24 Level Down	2015 Mineral Resources reviewed and classification revised
Giles Surface - 23 Level*	2015 Mineral Resources adjusted to 1.4 g/t cut-off
Giles 23 Level Down	2015 Mineral Resources reviewed and classification revised
Princeton PS5	Mineral Resources remodelled based on capture of additional historical data and Mineral Resources re-estimated
Princeton PS12	
Princeton PS19	
Golden Hill	2015 Mineral Resources adjusted to 1.4 g/t cut-off
Agnes Top	2015 Mineral Resources no change
Pioneer & Tiger-Trap	2015 Mineral Resources adjusted to 1.4 g/t cut-off
Ivy Shaft Pillar*	
Ivy to Agnes 3-11 Level*	
Ceska Shaft Pillar*	
Woodbine South Dump	2015 Mineral Resources depleted
Woodbine West Dump	
Woodbine W.West Dump	2015 Mineral Resources no change
Hostel East Dump	
Hostel West Dump	2015 Mineral Resources depleted
Biox North Dump	2015 Mineral Resources no change

Note: *Manual Mineral Resource (block listing)

Item 6 (d) – Historical Mineral Reserve Estimates

Mineral Reserves for Galaxy, Princeton, Woodbine and Giles, and Hostel West TSF were estimated independently by Minxcon in 2015 and signed off by Qualified Person Mr Daan van Heerden. The estimate was declared in accordance with NI 43-101 and the Mineral Reserve categories were stated in line with sections 1.2 and 1.3. The combined total Mineral Reserves as at 31 August 2015 are presented in Table 9. of NI 43-101. Key assumptions, parameters and methods used to prepare the historical estimates are disclosed in the 2015 Report.

Table 9: Historical Galaxy Gold Mine Mineral Reserves as at 31 August 2015

Orebody	Pay Limit Au	SG	Probable Mineral Reserves		
			Tonnes	Grade Au	Content Au
	g/t	t/m³	t	g/t	Oz
Underground					
Galaxy	2.43	2.73	117,887	3.29	12,470
Princeton	2.50	2.73	627,875	4.59	92,567
Woodbine and Giles Manual	2.82	2.73	248,803	3.80	30,400
Woodbine and Giles CAD	2.82	2.73	343,856	2.78	30,701
Surface					
Hostel West Dump	0.86	1.41	118,902	0.90	3,447
Total Mineral Reserve			**1,457,322**	**3.62**	**169,586**

Notes:
1. Tonnages refer to tonnes delivered to the metallurgical plant.
2. All figures are in metric tonnes.
3. 1 kg = 32.15076 oz.
4. Different Dilution, Recovery and Mine call factor applied to each orebody and TSF.
5. Pay Limits calculated: USD/oz. = 1,130 and Exchange rate of ZAR:USD 11.70.

The 2015 Mineral Reserves are provided here for completeness. The mining strategy for the Mine has been revised; as such, these historic estimates are no longer relevant and should not be viewed as a representation of the current potential Mineral Reserves.

Item 6 (e) - HISTORICAL PRODUCTION

Historical gold production for the Mine is reported at 1.2 Moz (24hgold.com). For the period 1983 to 2001, production totalled about 351,590 oz gold for the sections Woodbine/Giles, Princeton, Pioneer and Golden Hill (Table 10).

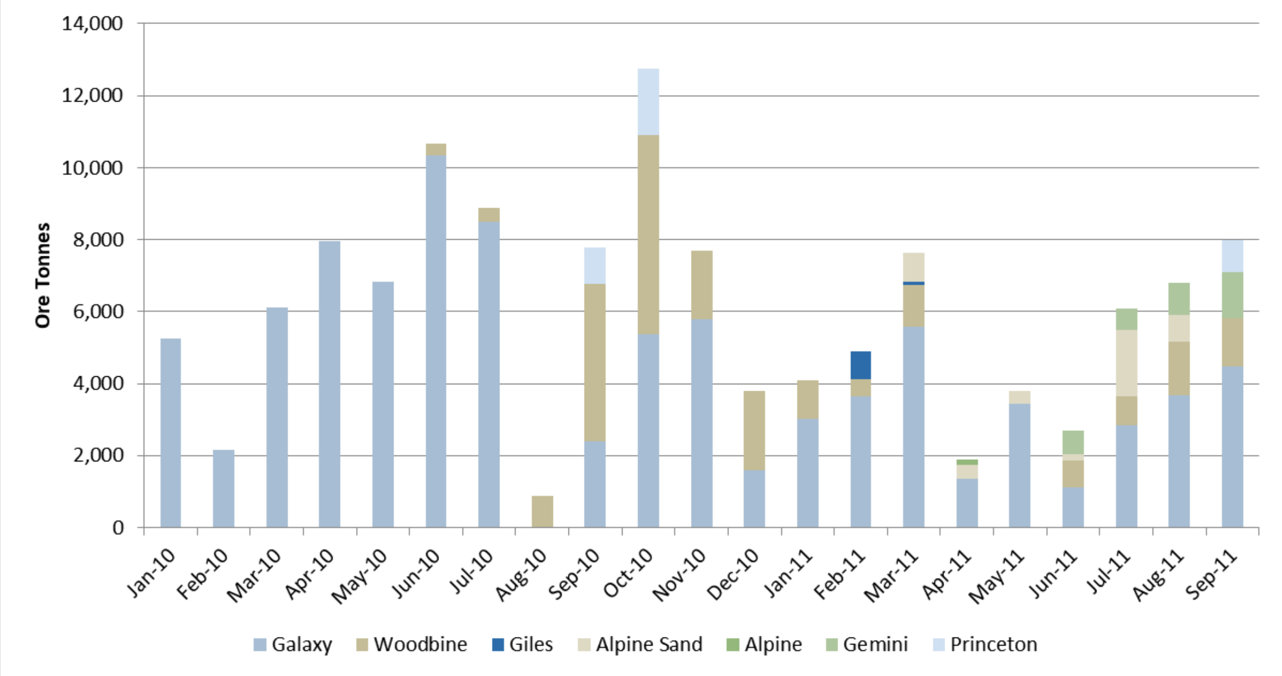
Table 10: Historical Production for the Period 1983 to 2001

Section	Tonnes	Grade	Contained Gold	
	t	g/t	Au g	Au oz
Woodbine/Giles	1,379,156	4.13	5,698,287	201,001
Princeton	925,644	4.35	4,022,451	141,888
Pioneer	27,801	7.32	203,434	7176
Golden Hill	15,282	2.83	43,216	1524
TOTAL	**2,347,883**		**9,967,388**	**351,590**

Source: Cluff Mining (2001)

The historical production figures for the Galaxy Gold Mine over the period January 2010 to September 2011 are detailed in Figure 9. This production history only dates back to January 2010 when Galaxy Gold Mine started production.

Figure 9: Historical Production of Galaxy Gold Mine for the Period January 2010 to September 2011



Historically, the Mine produced gold from a south plant utilising crushing, milling, flotation, elution and smelting, and a BIOX® north plant, the latter which was commissioned in 2012. From 2015 to 2017, doré was produced from the CIL plant only and only low volume development of Giles 17 Level and TSF retreatment took place. Mining strategy was focused on the Giles 17 Level and Agnes sections and sluicing of Hostel West and the three Woodbine TSFs to ramp up production to 25 ktpm.

The Mine was placed on care and maintenance from 2017 to 2019 during which time metallurgical testwork, plant construction planning and mine planning was completed for a 30 ktpm concentrate producing operation.

ITEM 7 – GEOLOGICAL SETTING AND MINERALISATION

Item 7 (a) - Regional Geology

The Project Area is located within the 3.5-3.2 Ga BGB. Situated on the eastern edge of the Kaapvaal Craton, the BGB comprises metasedimentary and mafic to ultramafic units with later granitoid intrusions throughout. It is host to a number of economic gold deposits typical of global Archaean lode gold mineralisation.

The volcanic and sedimentary units in the BGB have been complexly folded, forming a broad synclinal structure with three litho-stratigraphic units collectively comprising the Barberton Supergroup. The oldest unit is the largely volcanic 7-km thick Onverwacht Group. The Onverwacht Group is overlain by metamorphosed sandstone, siltstone and mudstone sediments of the 2.5-km thick Fig Tree Group. This in turn is overlain by the youngest Moodies Group, a unit consisting of 2.5 km thick arenaceous sediments that lie in the centre of the synclinal fold structure.

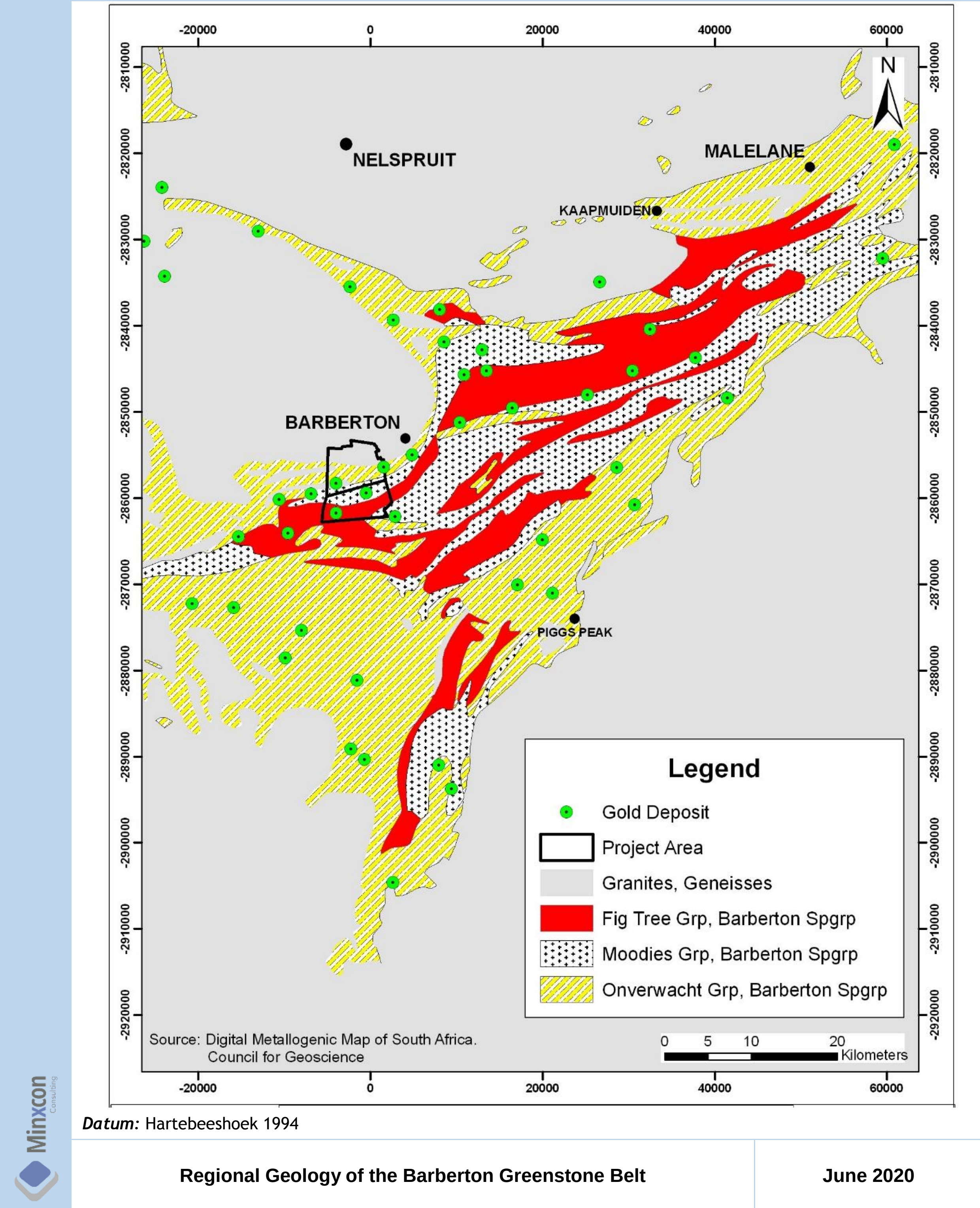
The lithologies of these groups are described as follows:-

- Onverwacht Group – comprises two main units separated by a layer of chemical sediments consisting of iron oxide and silica:-
    - Upper unit of mafic and felsic rocks which comprise talc carbonate schists, chlorite schists, dolomites, dolomitic serpentinites, banded cherts and talc-chlorite phyllites; and
    - Lower unit of ultramafic and mafic volcanic rocks which consist largely of basalts of tholeiitic composition and komatiites.
- Fig Tree Group - banded cherts, shales, greywackes, green schists, grey schists and BIF.
- Moodies Group - conglomerates, quartzites, shales, magnetic shales and jaspilites.

Mineralisation is associated with all three these lithological groups along shear zones, thrusts and fractures, but is predominantly associated with the base of the Fig Tree sediments and specifically with the BIF, cherts, greywackes, shales and quartzites. It may also often be found in contact with the altered ultramafic schists.

The regional geological map with major gold deposits is illustrated in Figure 10.

Figure 10: Regional Geology of the Barberton Greenstone Belt

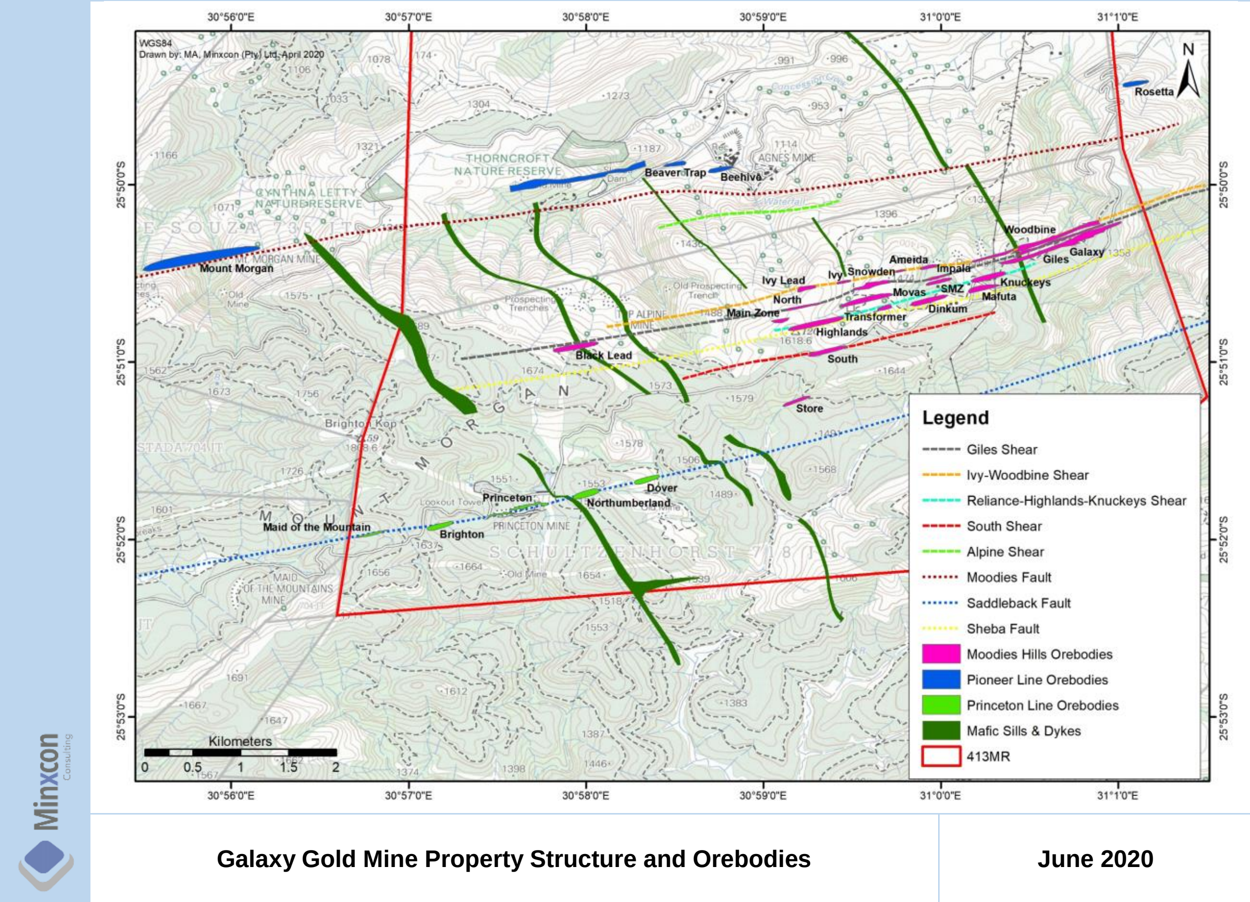


Item 7 (b) - Local and Property Geology

The Galaxy Gold Mine overlaps a number of structurally separate stratigraphic units of the BGB. The regional strike of the lithologies in the Project Area is generally in an east to northeast direction, with dips varying between about 60° and 85° south. The area is traversed by a number of pre-2000 Ma (*i.e.* pre-Transvaal age) diabase dykes trending in a north-westerly direction (Figure 11), which have not as yet been shown to have any major effect on the auriferous structures in the area.

The orebodies at Galaxy Gold Mine are orientated along structural lines that are namely, from north to south, the Pioneer Line (Pioneer, Tiger Trap, Beaver Trap, Beehive, the BIF type Golden Hill, Mount Morgan, Rosetta orebodies), Moodies Hills (or Agnes) Line (Galaxy, Woodbine, Giles, SMZ type and Alpine), Princeton Line (New Brighton, Princeton, Cumberland, Northumberland, Dover) and Alpine Line. These are described in more detail to follow and are illustrated in Figure 11.

Figure 11: Galaxy Gold Mine Property Structure and Orebodies



I. Pioneer Line

The ultramafic-hosted reefs Pioneer, Tiger Trap, Beaver Trap Hill and Rosetta orebodies lie on the farm Oorschot 692 JT in close proximity to the Moodies Fault, as does the Mount Morgan Mine, but which occurs in Fig Tree sediments on the farm Sassenheim 695 JT. Narrow shears of up to 300 m in length are either parallel to the regional strike or are slightly transgressive to bedding. Also occurring on the Pioneer Line are the Cuadro, Beehive and Homestake workings.

The Pioneer lode was the first discovery of gold in the Barberton district and the prospect was extensively worked. In the Pioneer Group, free-milling gold has been recovered from quartz veinlets hosted within sheared fuchsitic carbonated schists. The main Pioneer Reef has been worked along a strike length of 500 m down to 6 Level.

Golden Hill represents an eastern extension of the Pioneer shear zone, although a BIF provides a lithological control for the mineralising shear over a 225 m strike. The ore is mainly refractory, but thin quartz veins are also developed throughout the orebody and host a minor free gold component.

Mount Morgan is situated approximately 14 km southwest of the town of Barberton and has exploited auriferous shear zones located on the contacts of chert and banded chert-shale units in the Fig Tree Group, immediately adjacent to the faulted contact with Moodies Group quartzites.

The Rosetta orebody is located about 3 km east of Golden Hill and hosts impregnations of gold and sulphides within brecciated chert units hosted within ultramafic schists.

II. MOODIES HILLS (AGNES LINE)

The locality of the Agnes Line is often referred to as the Moodies Hills. The area is dominated by sub-vertically dipping east-west to northeast-southwest striking siltstones and shales of the Moodies Group comprising (from oldest to youngest) the Clutha, Joe's Luck and Baviaanskop formations on the southern limb of the Moodies Syncline. The main concentration of the mineralisation in the Agnes Line is confined to a zone roughly 400 m wide, located in the Clutha Formation of the Moodies Group. Gold mineralisation is localised predominantly within sub-parallel shear-fault zones that cross-cut the steeply dipping lithologies at angles that vary between 2° and 10°. In this broad zone, there are a large number of individual horizons, or reefs, which are occasionally interconnected, but more commonly separated by barren country rocks.

The majority of these reefs have been worked only sporadically, and have never been followed to any great depth. At present, the major part of the mining activity in the Agnes Line is confined to three main horizons. These are - from north to south - the Woodbine, Giles and Galaxy reefs.

The Woodbine and Giles reefs consist of zones in which narrow quartz-carbonate-pyrite veins are developed within chloritised and silicified zones of shearing within the siltstones.

Like the extensively mined Ivy and Agnes reefs, the payable mineralisation on the Woodbine and Giles reefs is not continuously present along strike, but is confined to definite shoots, all of which pitch to the east at angles varying between 45° and 60°. The Galaxy Reef dips sub-vertically with a plunge of 35° to the east and is adjacent to the Giles Reef.

The Moodies Hills include the following reefs and deposits (east to west): Nottingham Claims, Great De Kaap Tunnel, Galaxy Orebody, Woodbine Reef, Giles Reef, Knuckey's Pit, South Mineralised Zone, Mafuta Zone, Impala Reef, Dinkum Zone, Ameida Reef, Agnes Reef, Highlands Reef, Movas Reef, Transformer Reef, Snowden Reef, South Reef, Store Reef, Main Zone, Ivy Reef and Ivy Pioneer Reef.

III. PRINCETON LINE

The Princeton Orebody is located approximately 4 km southwest of the Agnes Line on the farm Ameide 717 JT and comprises at least three discreet lenses. The Princeton Line refers to a series of cherty BIF bounded to the north by shales and greywackes of the Fig Tree Group, and to the south by fuchsitic-quartz carbonate schists of the Onverwacht Group.

The most important host for the gold mineralisation at Princeton is the BIF at the base of the Fig Tree sediments, while there is sporadic gold mineralisation developed in the surrounding rocks. The Princeton BIF is a banded, sideritic carbonate facies situated between fuchsitic schist hanging wall and shale-greywacke footwall lithologies which all dip steeply at about 80° south.

The Princeton Line is an east-west striking anastomosing zone of shearing that links discontinuous fragments or boudins of BIF and includes all the mines associated with the Princeton mineralisation, namely, from west to east: Dover, Cumberland, Northumberland, Princess and New Brighton. The Princess Mine is the surface expression of the Princeton Orebody.

The BIF units vary in thickness from 0 m to 60 m. Typical Fig Tree greywackes and shales lie in contact with the BIF to the north. The sheared southern contact of the BIF juxtaposes a 20 m thick package of Onverwacht fuchsitic schist. All strata in the mine area dip steeply to the south at 80°.

Historical mining on Princeton was mainly to provide sulphur to the roaster.

IV. ALPINE LINE

The Alpine Line is not as distinct, and comprises the following reefs and mines from east to west: Shebang, Reliance, Durham Allans, Alpine Mine including Black Lead, Lydlinch, Poverty and Union Reefs.

The reefs on the Alpine Line tend to be narrow, nuggety and of dark quartz.

Item 7 (c) - MINERALISATION

Mineralisation in the area is structurally controlled, with gold mineralisation appearing to be controlled by subtle secondary structures associated with the Giles Shear. Gold and pyrite are generally dispersed throughout the laminated siltstones, with higher grades being found in quartz carbonate veins cutting the laminated siltstones at a high angle. Mineralisation is also found within an Archaean BIF of the BGB, which forms the non-continuous base of the Fig Tree Group. BIF boudinages are separated by fuchsitically altered ultramafic rocks in the south and in the north by younging interbedded greywackes and shales of the Fig Tree Group (Meadon, 2010).

Over 20 separate reefs and zones of mineralisation form part of a widespread and complex gold mineralised system. On surface, the system extends over 6 km in length and 600 m in width. The Mine comprises several gold orebodies of the BGB located on four main structural lines, as described in Item 7 (b). The Woodbine, Giles, Galaxy, Golden Hill, Agnes Top, Pioneer & Tiger Trap, Ivy and Princeton orebodies form the high-priority focus of this Report. GGR is also targeting the Ivy and Ceska Shaft Pillars, as well as gold contained in the historical TSFs of the area, including Biox North TSF, Alpine Pioneer TSF, Woodbine East TSF, Woodbine North TSF, Woodbine South TSF, Hostel East TSF and Hostel West TSF.

The narrow tabular orebodies (Giles, Woodbine, Agnes, Alpine) show good geological continuity along strike length. Mineralisation occurs throughout the orebodies with variable grades. The orebodies are continuous along strike. Distinct pay shoots are encountered, such as at Princeton. The BIF style orebodies tends to pinch and swell. The ultramafic hosted orebodies show similar structural controls.

The orebodies occur from surface; however, some have been mined and are accessible lower down. The orebody strike lengths, widths and depths vary, as shown in Table 11.

Table 11: Orebody Dimensions

Orebody	Strike	Width	Depth
	m	m	m
Agnes Top	400	35.0	90
Golden Hill	325	3.5	530
Princeton Lev6/PS7	595	3.5	330
Princeton PS5	380	1.5	360
Princeton PS19	330	1.0	300
Galaxy Surface to Dyke	150	20.0	165
Galaxy 17-Level-Up	140	20.0	140
Galaxy Gap 17-24 Level	520	25.0	400
Galaxy 24-Level-Down	390	30.0	290
Woodbine W & E Surface - 22 Level	1,250	1.2	620
Woodbine 24-Level-Down	1,250	1.5	520
Giles Surface - 23 Level	850	1.2	620
Giles 25 Level Down	850	1.0	490
Pioneer & Tiger Trap	1300	14.0	500
Ivy Shaft Pillar	240	0.4	450
Ivy to Agnes 3-11 Level	180	0.4	450
Ceska Shaft Pillar	180	0.4	480

The TSFs represent a product of previous benefaction of gold-bearing material. The TSFs comprise fine grained material containing gold that was not able to be extracted through historical metallurgical processes. The dimensions of the TSFs are provided in Table 12.

Table 12: TSF Dimensions

TSF	Volume	Maximum Length	Maximum Width	Average Height
	m^3	m	m	m
Woodbine South Dump	28,880	145	80	12
Woodbine West Dump	5,524	112	100	18
Woodbine W.West Dump	10,491	90	46	10
Hostel East Dump	803,989	357	317	60
Hostel West Dump	375,820	267	172	17
Biox North Dump	253,070	393	155	10

ITEM 8 – DEPOSIT TYPES

Item 8 (a) – Mineral Deposits being Investigated

The Galaxy Gold Mine targets gold mineralisation of the Archaean BGB, which is world-renowned for its gold content. Gold mineralisation generally occurs as shear-hosted, mesothermal deposits hosted within various lithologies of the Barberton Supergroup, with mines largely located in close proximity to major regional faults, such as the Sheba, Lily and Barbrook faults (Anhaeusser, 2012).

As per Anhaeusser (2012), the gold deposits of the BGB can be subdivided into three main types:-

1. Sulphide ore that is unoxidized and complex. This ore accounts for the majority of production in the area to date;
2. Gold-bearing quartz veins and shears. These ores contain negligible amounts of sulphides minerals, but are common throughout the area; and
3. Weathered ore that occurs in oxidized zones. This ore historically represented the main gold source.

The deposits are associated with multi-episodic structural influences amplified by granite emplacement, causing greenschist to amphibolite grade metamorphism. Auriferous fluids migrated into brittle-ductile fractures and shear zones, pronounced in deformed Fig Tree and Moodies sediments along the north-western flank of the BGB associated with the Ulundi and Eureka synclines (Anhaeusser, 2012).

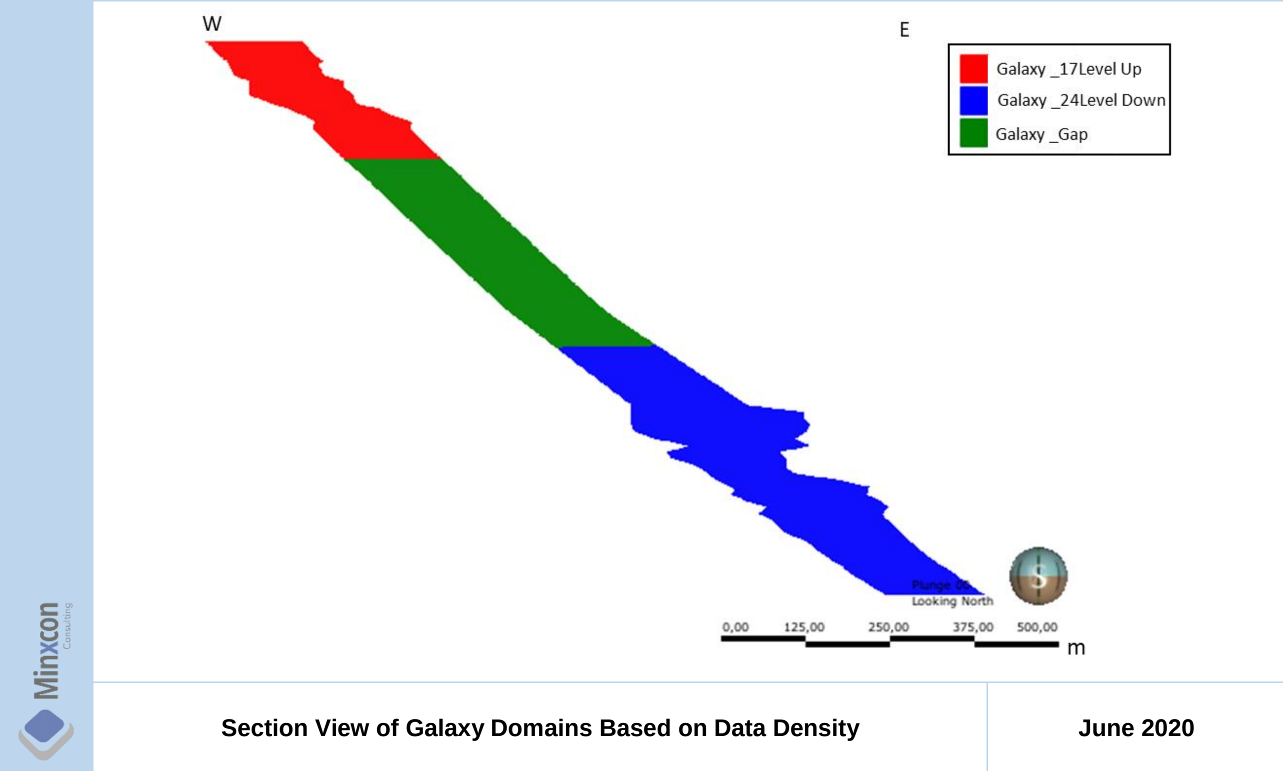
Item 8 (b) – Geological Model

Geological Models are available for all orebodies being considered. Including the TSFs which constitute the volume of the dump being considered. Each geological model for each area is discussed and shown in the preceding sections. The Princeton geological model was recreated by Minxcon as part of this study. While the remaining geological models were all created by Deswik in 2011. Deswik made use of drillholes and physical survey data as well as mining strings where available to construct the geological wireframes which were used to constrain the Mineral Resource block models utilised in the Mineral Resource declaration of 27 June 2011 and 31 August 2015. The Galaxy, Woodbine and Giles orebodies were reviewed in detail as part of this study. The remaining orebodies were reviewed as part of the 2015 Report.

I. Galaxy

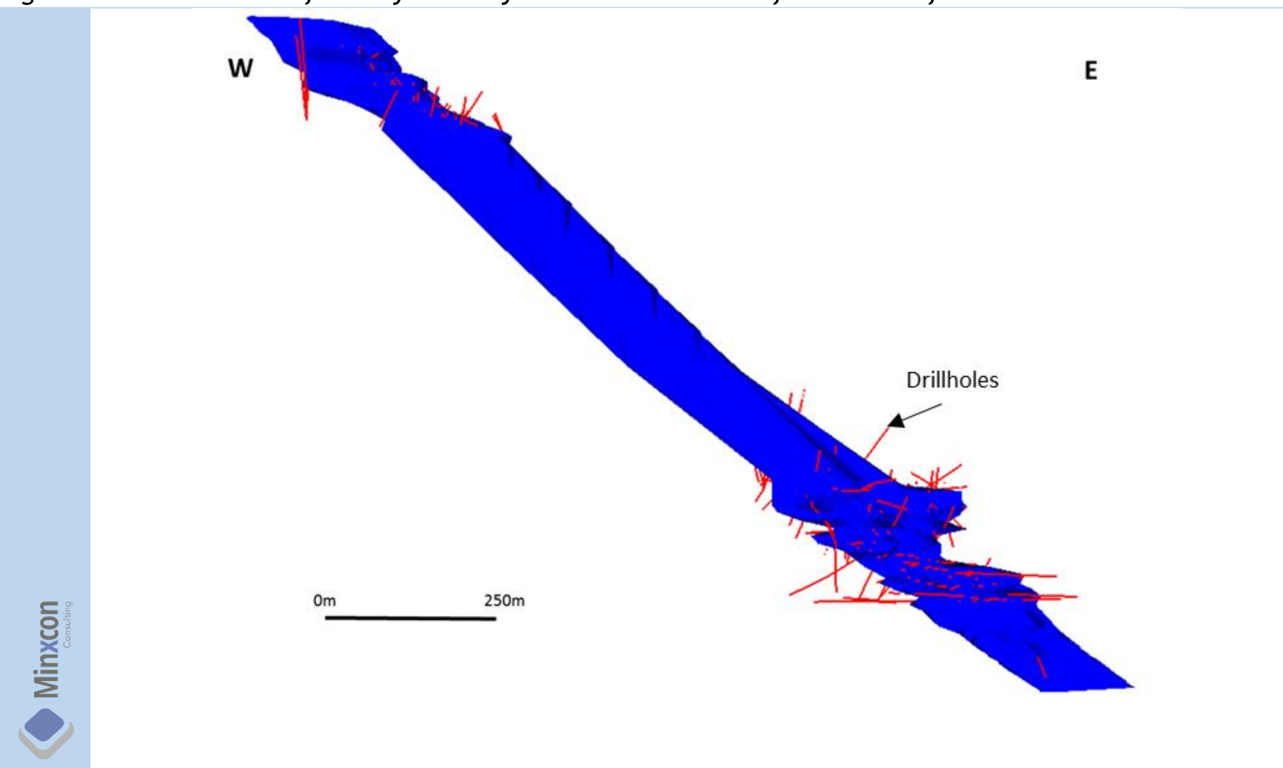
The Galaxy Orebody was subdivided into four domains (Figure 12). The two domains in historical mining areas (17 Level to 13 Level, and 24 Level down to 32 Level), used a combination of lithological data and drillhole and sampling data to constrain the wireframes. For the areas without any data, the orebody was extrapolated from the known areas.

Figure 12: Section View of Galaxy Domains Based on Data Density



The data density for Galaxy is shown in Figure 13, with samples confined to only two domains. In addition to these three domains, an additional domain above the upper domain is defined (surface to dyke): the contact between the 17 Level and above domain and the surface domain is separated by a dyke. As part of this work, the position and orientation of the dyke or this domain could not be confirmed or defined.

Figure 13: Section View of Galaxy Orebody with Drillholes Used for Model Definition

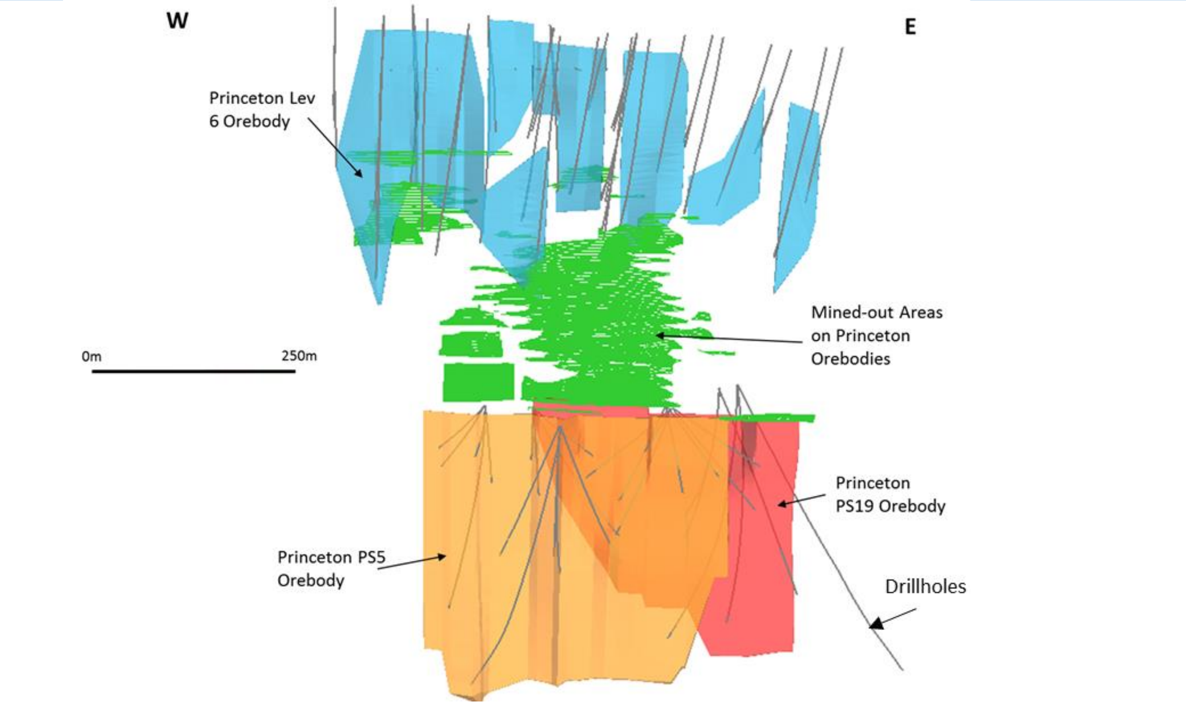


Section View of Galaxy Orebody with Drillholes Used for Model Definition	June 2020

II. Princeton

The Princeton geological model was recreated due to new data that had been captured and was now available to inform the estimate. Previously, the Princeton estimate was divided into an upper portion (Level 6 orebody) and the lower portion (PS5 and PS19) (Figure 14). All wireframes shown here are from the 2011 model.

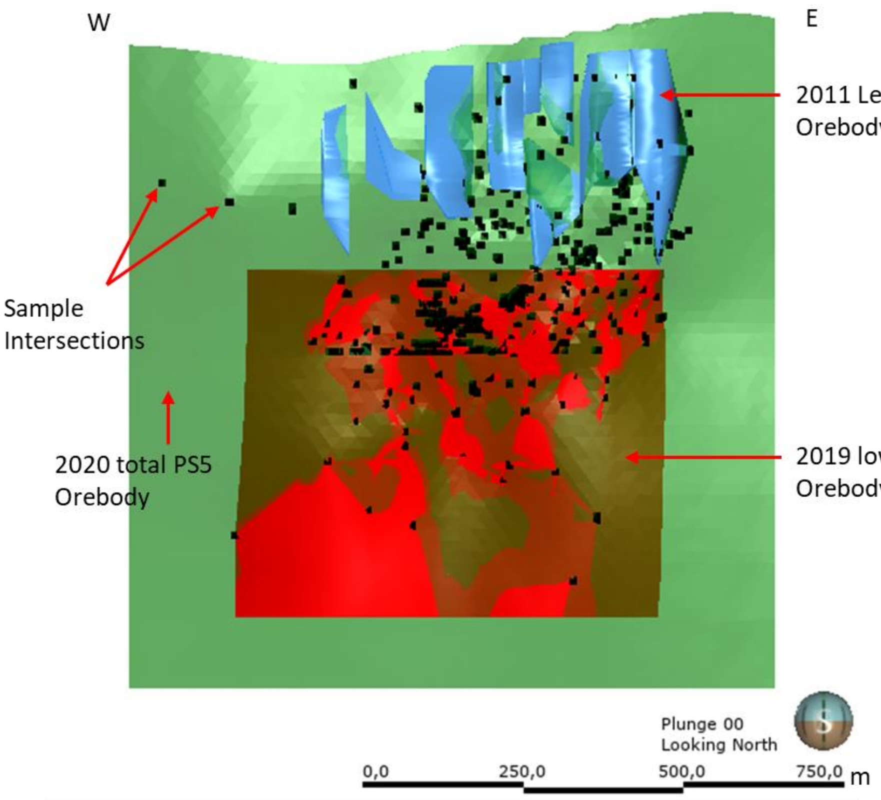
Figure 14: Section View of Princeton Orebody Created in 2011



Section View of Princeton Orebody Created in 2011	June 2020

Mining has occurred in the central area; however, this data was previously not available to model and thus the central area remained unmodelled. In 2019, an updated geological model by the Mine extended the lower PS5 and PS19 up into the central area (Figure 15 and Figure 16)). The new data with the existing 2011 geological model for the upper levels and 2019 model for the lower levels is shown in Figure 15. Another aspect of the Minxcon remodelling process was to consolidate the knowledge for PS5 and PS19 from the lower into the lower levels, as the existing upper model did not speak to the lower model in terms of thickness and inferred faults that were previously informed by very few data points. The new model considers new holes and chip samples, and links the upper and lower areas together, ensuring a common thickness and continuity throughout (Figure 15).

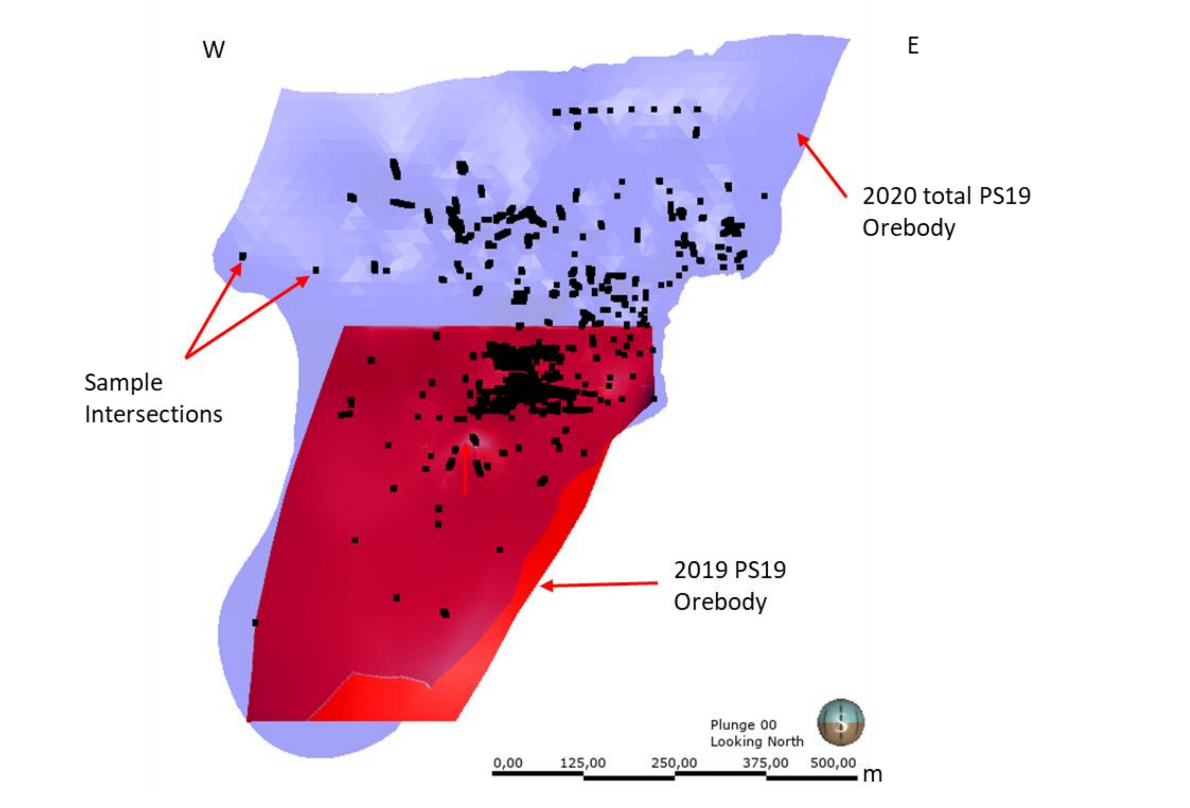
Figure 15: Section View of Princeton 2011 and 2019 Orebody vs. 2020 Orebody with Drillholes used for Model Definition



Section View of Princeton 2015 and 2019 Orebody vs. 2020 Orebody with Drillholes used for Model Definition	June 2020

Similarly, for PS19 an updated model was generated by the Mine to account for the updated database in the central area. With the 2020 model, the PS19 was extended into the upper levels. In places the new PS19 replaces the previous Level 6 wireframes, as often the historical Level 6 orebody was created including PS5 and PS19 intersections. A similar thickness and middling between orebodies as seen in lower levels could be distinguished in the upper levels.

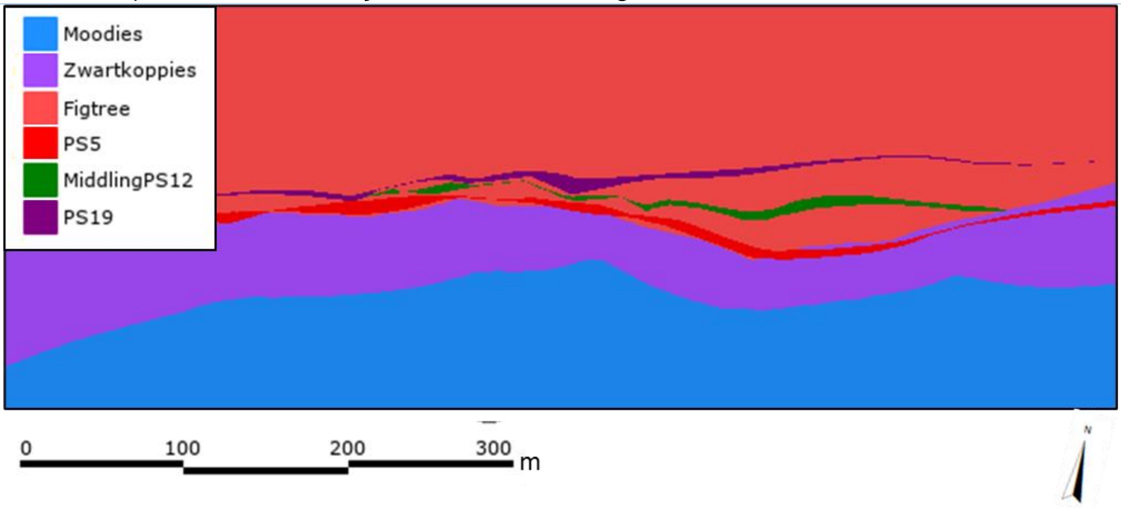
Figure 16: Section View of Princeton Orebody Comparing 2019 and 2020 Wireframes



Section View of Princeton Orebody Comparing 2019 and 2020 Wireframes	June 2020

As part of this study, host lithologies were also modelled: the Moodies, Fig Tree and Zwartkoppies groups were all described in lithological logs and modelled as part of this work. It appears that the PS12 and PS19 occur within the Fig Tree Group, while the PS5 is modelled at the interface between the Zwartkoppies and Fig Tree groups (Figure 18).

Figure 17: Plan View of Princeton Orebody within Host Lithologies



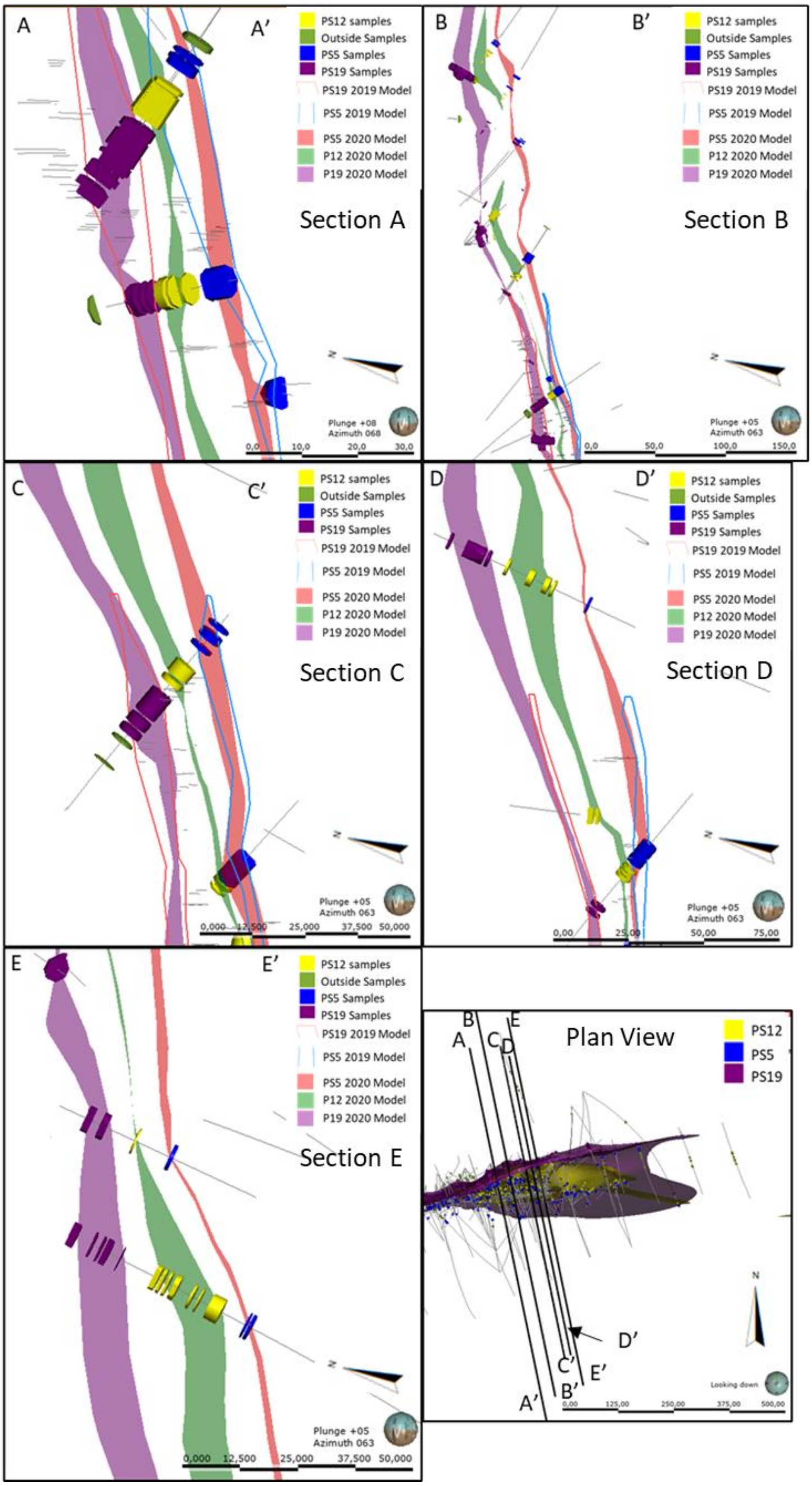
Plan View of Princeton Orebody within Host Lithologies	June 2020

Previously only PS5 and PS19 were modelled. It was observed during the modelling that a middling unit between these two main units was observed. Often a clean break in grade was observed between the PS5, middling and PS19. In addition, thickening the PS5 or PS19 to include these high grade intersections would overthicken these units very locally. A middling that locally pinched and swelled was thus created and often corresponded with the occurrence of thicker PS5 and PS19. This new unit was named PS12. A grade of ≥1 g/t was used to construct the units in Leapfrog software. All intersections ≥1 g/t were filtered out and individually tagged to form part of PS5, PS12 or PS19. These tagged lithologies were then used to generate an intrusive lithology. Sections through the three orebodies showing the old and new wireframes are shown in Figure 18. The new wireframes were created using the drillhole data available as well as mining perimeters and historical sections and plans to guide the extents of each of the orebodies.

Figure 18 shows sections through the new orebodies along with the 2011 wireframes. The area covered by the old wireframes matches the new surfaces very closely and were often used to guide the thickness and location of the new wireframes. Beyond the extents of the historical wireframes, the same thickness was inferred and it was often easy to trace the three surfaces higher up with similar thicknesses and orientation.

In 2011 the Level 6 orebody was modelled as one unit, as part of the 2020 remodelling, this was reinterpreted, and could be split into the PS5, PS19 and in places PS12, with similar sample widths as seen in the lower orebody. The previous PS5 and PS19 orebodies were very closely honoured with only local changes. In particular, where there was a lot of data, the existing 2019 wireframes could be confirmed and retained locally. The 2019 wireframes were thus used as a guide when tagging the new PS5 and PS19 units.

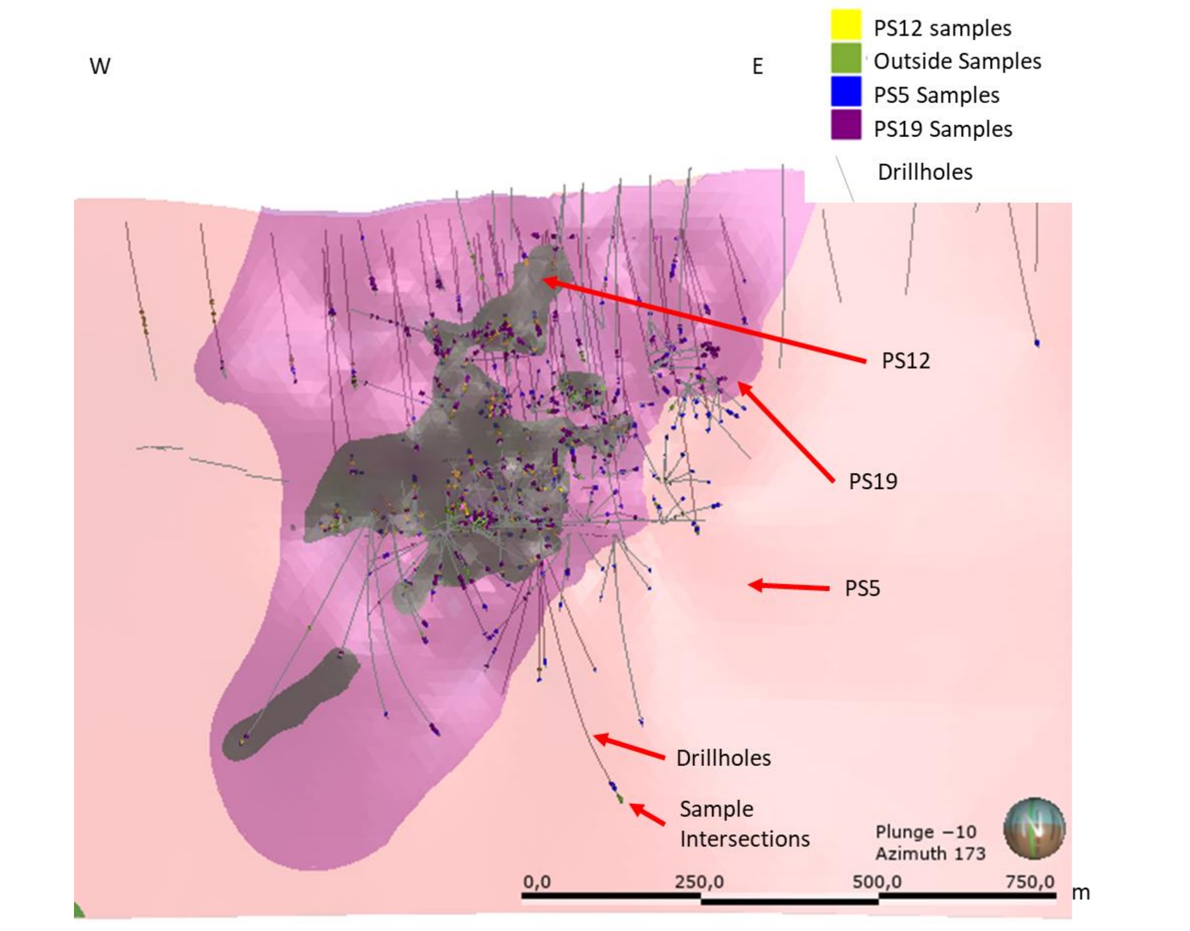
Figure 18: Galaxy Orebody Comparing 2019 and 2020 Wireframes



Galaxy Orebody Comparing 2011 and 2020 Wireframes	June 2020

PS5 covers the whole area under consideration, while PS19 is restricted to only the area where intersections are located; this orientation and limitation are also confirmed by site. The dip azimuth is 344 with a dip of 75° and plunge of 75°. PS12 is more irregular and is focussed where thicker intersections of both PS5 and PS19 occur together (Figure 19).

Figure 19: Section View of Newly Updated Princeton Orebody



Section View of Newly Updated Princeton Orebody	June 2020

The volumes of the 2019 wireframes versus the 2020 wireframes are detailed in Table 13. The 2020 geological model constitutes a significant change in the area and volume of the orebodies. However, the new models link the previous upper and lower orebodies that were previously modelled separately with little correlation between the two.

Table 13: Comparison of Change in the Volume of Geological Models

Orebody	2019		2020		Difference	
	Area	Volume	Area	Volume	Area	Volume
PS5	997,910	1,174,020	2,131,400	3,645,400	114%	211%
PS12			224,610	254,400	100%	100%
PS19	449,090	592,150	1,023,700	1,538,800	128%	160%
Total	**1,447,000**	**1,766,170**	**3,379,710**	**5,438,600**	**342%**	**470%**

III. Woodbine

The geological model was created by Deswik in 2011 and utilised lithology from drillholes and strings of the mined-out areas. Sampling data was used to define the width of the wireframe. Where the drilling information was available, it was used, and where mining strings were available, these were given preference. The geological model and data used can be seen in Figure 20.

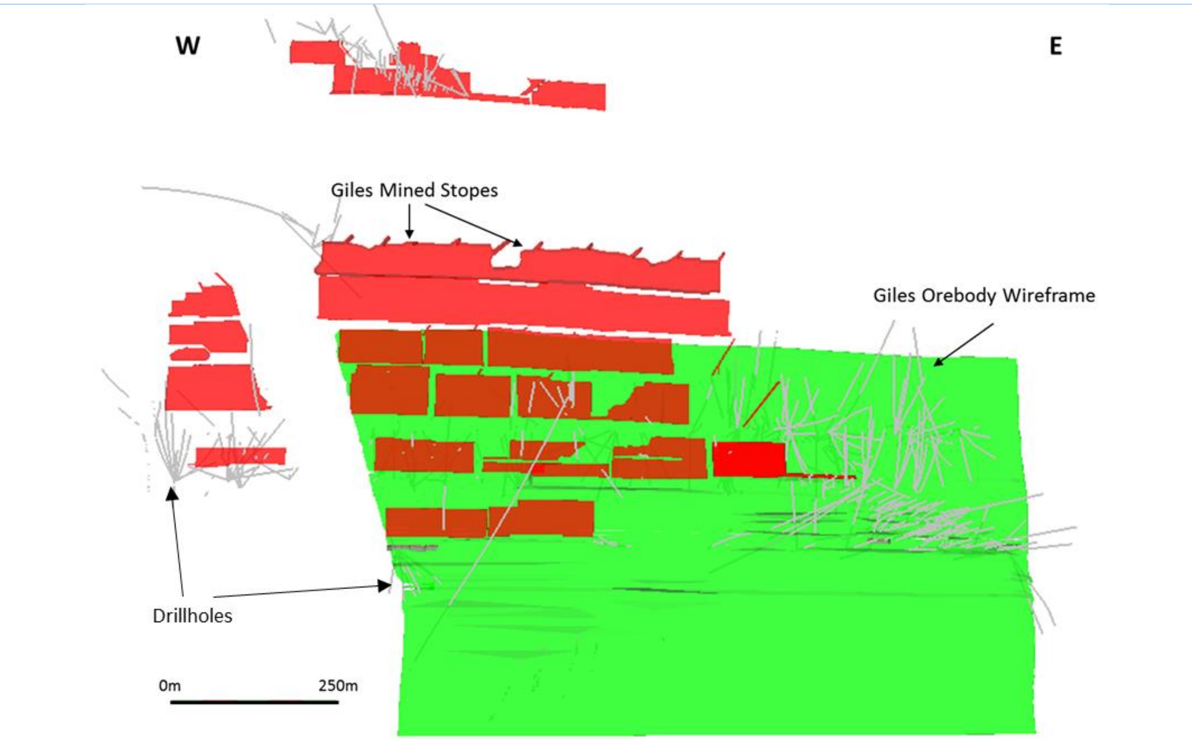
Figure 20: Section View of Modelled Woodbine Orebody Looking North with Modelled Mined Stopes and Defining Drillholes

Section View of Modelled Woodbine Orebody Looking North with Modelled Mined Stopes and Defining Drillholes	June 2020

IV. Giles

The same methodology as employed at Woodbine was used at Giles by Deswik in 2011, *i.e.* where mining strings were available, these were used instead of the drillholes. The drillholes and wireframe can be seen in Figure 21.

Figure 21: Section View of Modelled Giles Orebody Looking North with Modelled Mined Stopes and Defining Drillholes



Section View of Modelled Giles Orebody Looking North with Modelled Mined Stopes and Defining Drillholes	June 2020

V. Hostel Dumps

Two TSFs exist at the Hostel site. The surveys used were from 2011, and in 2015 some depletion was applied to these volumes to account for mining. Updated surfaces were made available for Hostel West and these were utilised to update the remaining volume for the TSFs. Images of the TSFs and depletions are shown in Item 14 (a).

VI. Woodbine Dumps

Woodbine West and Woodbine South were updated in the same manner as the Hostel TSFs, while Woodbine East remained unchanged. Images of the TSFs and depletions are shown in Item 14 (a).

ITEM 9 – EXPLORATION

No further exploration work has been carried out subsequent to 2011. The data below is thus provided as presented in the 2015 Report.

In 2011, exploration work was carried out on the Mine properties in the form of structural analysis carried out by consulting geologist Dr RW Harris to identify the structural controls of mineralisation in the area. Harris generated exploration targets based on the vergence of D2 and D3 structures, and it is these targets that should become the main focus for future exploration.

Planned future exploration activities include geophysical surveys focussed on the structural targets generated during the structural analysis carried out by Dr Harris.

Item 9 (a) – Survey Procedures and Parameters

Camden Geoserve generated a CPR in 2010 wherein it states that the Mine at that time had functioning Survey and Geology departments.

The Agnes Mine underground mine survey and sampling systems were inherited from ETC. On surface, survey beacons were erected in various positions on the property. Underground at the time, a standard peg system was in use and was regularly updated. Exploration activity other than drilling, historically took the form of underground chip sampling or surface trenching.

Underground sampling procedures are detailed in Item 11 (a).

I. Trenching

It is evident that a number of trenches were historically dug and sampled at Agnes Top. Eleven trenches with start co-ordinates and a surveyed direction were captured.

Item 9 (b) – Sampling Methods and Sample Quality

According to Camden Geoserve, survey and sampling data was transferred into digital format using Stope CAD software. Despite a long period of closure, the paper-based storage of information indicated that due diligence was practiced in the collation of data. The long history of the Agnes Mine resulted in numerous sampling exercises with changes in the methods and styles of sampling. Underground chip sampling is described in Item 10.

Based on the previous audits conducted by Camden Geoserve and the fact that the historical operations were managed by a reputable mining company, Anglovaal (ETC), who would have implemented industry standards with respect to sampling methodologies, it is the opinion of the QP that the samples are representative and no bias is expected.

I. Trench Sampling

Trench sampling along the full length of the trench. This is apparent when reviewing the sampling file. Evidence of the trenching is available on workings plans and the remnants thereof may also be viewed on aerial photographs. The actual trenching procedures were, however, never reviewed by any auditor nor has any documentation been found which outlines the actual trenching procedure as historically employed at Agnes Top.

Owing to the subsequent closure of the Mine operations, Minxcon was not able to audit the trench sampling or trenching procedures utilised on the operations. The quality of the trenching was assumed to be acceptable for the purposes of Mineral Resource estimation due to the proven integrity of other sampling information conducted by historical operators. Minxcon concurs with this decision as sufficient evidence exists in the form of surface plans and aerial photography with respect to the actual existence of the trenches. The samples are assumed to be representative and without bias.

Item 9 (c) – Sample Data

Details of the sampling procedure for the trenching was not made available. A total of 11 trenches for dug at Agnes Top, of which eight are in the Mineral Resources database. Sampling was conducted at 2 m intervals and a total of 174 samples were taken over the eight trenches (Table 14).

Table 14: Summary of Trench Sample Data Used for Estimation

Orebody	Trenches	No. of Trench Samples
Agnes Top	8	174

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

The Galaxy Gold Mine orebodies no longer constitute pure exploration properties as they have undergone recent mining to various degrees, thus this point is of no pertinence to this Report.

ITEM 10 – DRILLING

During the historical exploration of the Galaxy Gold Mine orebodies, DD and RC drilling, trenching, underground sampling and auger drilling were undertaken. Other than drilling, the only data utilised for Mineral Resource estimation consisted of underground chip sampling and surface trenches. In both cases, these were treated as drillholes for the purposes of Mineral Resource estimation.

Drilling is currently on hold and all data is historical in nature. All available and verifiable data was utilised for the purposes of Mineral Resource estimation. The dataset as compiled by Deswik in 2011 has been updated with additional historical drilling and chip sampling data at Princeton. Previously, the data for the mined-out area between the upper and lower Princeton Orebody lenses was not available; the addition of this to the Princeton database adds significantly to the geological information in defining the wireframes and the estimation database.

As part of the Mineral Resource update, Minxcon has reviewed the dataset and is satisfied that it can be utilised for Mineral Resource estimation.

Item 10 (a) – Type and Extent of Drilling

All drilling has occurred historically prior to 2011, the majority of which was likely undertaken by Anglovaal's ETC and Cluff. Minxcon has not been provided with the drilling procedures utilised. Both ETC and Cluff were reputable and would have implemented industry best practices when undertaking drilling.

Although a database with the historical information is available, such information does not include detail of when the drilling campaigns were undertaken and by whom. It is assumed that drilling data predates 2010, after which drilling and logging procedures and protocols were updated and implemented by GGR.

Table 15 summarises the available volume and type of drilling data that was used for the geological modelling and gold estimation for the various orebodies listed in the Mineral Resource statement. In addition to the chip samples over Princeton, additional drilling information was captured and including in the estimation database.

Table 15: Summary of Drilling Data Used for Estimation

Orebody	DD Drillholes	RC Drillholes	Auger Drillholes	Ave. Data Spacing
	No.	No.	No.	m
Underground				
Agnes Top	2	25	-	20
Golden Hill	61	-	-	25 - 50
Princeton	463	-	-	30 - 100
Galaxy	217	-	-	10 - 150
Woodbine	83	-	-	30 - 150
Giles	82	-	-	30 - 150
Pioneer-Tiger Trap	30	-	-	100 - 250
Surface				
Hostel East Dump	-	-	27	40
Hostel West Dump	-	-	12	40
Biox North Dump	-	-	44	25
Woodbine Dumps	-	-	30	15 - 50

Auger drilling was utilised for the evaluation of the surface dump material only.

I. Underground Sampling

Early sampling within the Giles and Woodbine sections would have been underground channel sampling using hammer and chisel to cut grooves perpendicular to the mineralised lodes. In September 2009, underground sampling was undertaken. The underground sampling processes were audited in 2010 by industry-recognised consultant geologist P. Camden-Smith of Camden Geoserve and deemed to be acceptable in terms of marking off from a survey peg, having the correct equipment (*i.e.* hammer-sharpened chisel-good sample pan, tape, notebook, etc.), chipping a representative sample in half meter sections and the recording, logging and tagging of the samples across the Giles and Woodbine orebodies.

Camden Geoserve noted that samples were taken perpendicular to the dip of the orebody within the footwall – reef – hanging wall of the mineralised zones. It is evident from the Camden Geoserve CPR that underground diamond saws were used in the past. Minxcon was unable to review the underground sampling procedures.

Table 16 summarises the available volume and type of data (other than drilling) that was used for the geological modelling and gold estimation for the various orebodies.

Table 16: Summary of Sample Data Used for Estimation

Orebody	No. of Underground Samples
Golden Hill	0
Princeton	1,577
Galaxy	12
Woodbine*	2,339
Giles*	2,982
Pioneer-Tiger Trap	0
Alpine Pioneer Dump	0
Hostel East Dump	0
Hostel West Dump	0
Biox North Dump	0
Woodbine Dumps	0

Note: Only electronically captured underground sampling. Additional samples have informed the block listing but are not presented here.

The chip sampling was generally undertaken on 4 m x 4 m grid at 0.5 m sample intervals. Further details are provided in Item 11 (a). It is assumed that industry best practices were employed.

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

Most of the drillholes drilled by both Cluff and ETC were located in surveyed excavations, resulting in good collar accuracy. It has been reported by Robertson (2001) that most of the drillholes drilled by ETC and the longer holes drilled by Cluff have been surveyed using the downhole survey instrument. Most survey logs, drillhole logs and assay recordings are available for inspection at the Agnes Mine.

Owing to the inherent historical nature of most of the assays, no standards or blanks were inserted into the sample stream. However, the samples were taken to Super Laboratory Services (Pty) Ltd ("SLS") in Barberton, based on Agnes Gold Mine Premises (Barberton facility not SANAS accredited) for a 100 g fire assay. SLS utilised standard laboratory QAQC methods with internal laboratory standards and blanks being inserted into the assay stream.

The Mine's sample collection, preparation, analysis and capture techniques were viewed in 2011 to be in line with industry standards. In 2010, SRK audited the QAQC process run by the then Agnes Mine through SLS and noted the non-use of blanks and the non-availability of standards reference material by the operation. Other than that, their findings on the round robins carried out between SLS which is utilised for the projects, and Performance Laboratories (Pty) Ltd ("Performance") in Barberton which is SANAS accredited (SANAS Number: T0565), showed good correlation. Performance was utilised for umpire testing by SRK in order to assess the repeatability of the assay results received from SLS.

Minxcon thus relies upon these previous findings as no subsequent drilling activity has taken place. SRK (2010) compared original and repeat assays of 266 duplicate samples that were re-assayed at Performance and concluded that the analyses differed by approximately 2% with a high correlation coefficient of 0,998. This showed the datasets having very similar statistics and indicating good repeatability. Likewise, a total of 1,213 samples were sent to both Performance and SLS by SRK. The mean of the analysis differed by only 3% and a high correlation coefficient of 0,933 exhibited good repeatability.

Owing to the lack of historical QAQC data over the Princeton model it was decided that the model would be classified as Indicated Mineral Resources and not Measured Mineral Resources. As the bulk of the Measured is over chips samples for which no QAQC is available or recorded. The Indicated Mineral Resource classification accurately reflects the relative confidence in the results due to the good repeatability of results.

Item 10 (c) – Exploration Properties – Drillhole Details

The Galaxy Gold Mine orebodies no longer constitute pure exploration properties as they have undergone recent mining to various degrees, thus this point is of no pertinence to this Report.

ITEM 11 – SAMPLE PREPARATION, ANALYSES AND SECURITY

The preparation, analyses and security of sampling was investigated for the purposes of the 2011 CPR. The details are given in the subsections to follow.

Item 11 (a) – Sample Handling Prior to Dispatch

APM's standard practice with 40 mm core (ETC employed 42 mm core) was to mark the core and then split it using a diamond saw core splitter along a line, ensuring that no potential to bias either half of the core is present. The core was sampled at 50 cm intervals down its entire length. Tickets were allocated to each sample from a ticket book to avoid any confusion. The samples were then taken to SLS for a 100 g fire assay.

Underground Sampling

Underground samples were in the form of chip samples, which were collected using hammer-sharpened chisels (APM and ETC utilised pneumatic diamond saws). The chip sample positions were measured from recorded survey pegs underground and co-ordinates, then re-calculated accordingly by applying offsets and sampling direction. All chip samples were taken over 0.5 m intervals between two parallel continuous lines and cut by a pneumatic diamond saw 4 m apart. The samples were immediately tagged and the sample details of location, sample number and logging were recorded in an underground notebook. All ticket books and assay sheets were filed and stored. Copies were made of the sampler's notebook; these were filed so that any sample number could be readily identified. Samples were taken perpendicular to the dip of the orebody.

Item 11 (b) – Sample Preparation and Analysis Procedures

Samples arrived in batches at the on-site laboratory in plastic bags weighing between 1.5 kg and 3 kg each. Each sample was then crushed to -1 mm in a disc pulveriser that was "cleaned" with clean quartz and compressed air before starting each batch. The resulting fines were split twice through a riffle splitter to quarter the sample (±500 g). The excess for underground chip samples was sent to the mill feed, while the reverse circulation chip and diamond core discards were re-bagged and sent back to the samplers for back-up storage in case check assaying was required. The pulverised samples were further milled in a swing mill to minus 200 mesh (25 µm). From this fraction, a 50 g aliquot was taken for analysis by conventional fire assay. The remaining powder was retained for six weeks at the laboratory, before being discarded.

Samples were assayed at the on-site mine laboratory using a lead-collector fire assay technique with a gravimetric finish. This laboratory was a satellite of SLS, an independent commercial laboratory based in the town of Springs. SLS was at the time not ISO certified. Drillhole samples were assayed using a 100 g aliquot, while underground channel samples were analysed using a 50 g aliquot.

Item 11 (c) – Quality Assurance and Quality Control

Over the years, the laboratory employed standard controls and checks. All samples carried duplicate ticket numbers. On average, every fifteenth sample was repeated as an inline duplicate, which also checked for errors and gaps in the sample sequence. The layout of pots and cupels in the furnace was marked with a copper pattern key to avoid errors in orientation. Should an error arise in this procedure, the entire batch was re-assayed.

Item 11 (d) – Adequacy of Sample Preparation

The Mine's sample collection, preparation, analysis and capture techniques were found to be in line with industry standards. In 2010, SRK audited the QAQC process run by the then Agnes Mine and noted the non-use of blanks and the non-availability of standards reference material. Apart from this, their findings on the round robins carried out between SLS which was utilised for the projects, and Performance which is ISO certified, showed good correlation. Minxcon thus relied upon these previous findings. In addition to confidence sampling, analysis and QAQC, the Mineral Resource classification will reflect the confidence in the estimates.

The underground survey and sampling systems were inherited from ETC. On surface, survey beacons were erected in various positions on the property. A standard peg system was in use underground and was regularly updated.

The Galaxy Gold Mine was historically run by mining operators with good sampling practices. APM, which ran mining operations between 2002 and 2007, had applied stringent control on both sampling and analytical practices, as did ETC, as evidenced in mine communications, reports and previous audit reports.

The underground sampling processes were audited in 2010 by industry-recognised consultant geologist P. Camden-Smith of Camden Geoserve cc, who deemed the processes to be acceptable.

The sample preparation, security and analytical procedures as per the audits and reviews described have been deemed adequate. Minxcon thus relies on the opinions of these auditors/reviewers regarding sample preparation, security and analytical procedures and deems these to have been in line with industry standards and adequate for the purposes of Mineral Resource estimation and declaration.

ITEM 12 – DATA VERIFICATION

Item 12 (a) – Data Verification Procedures

The Mineral Resources were reviewed by Minxcon in 2015, and as part of the 2020 update all assumptions and key items were checked, and reassessed to ensure compliance.

For the purposes of the 2020 Mineral Resource update, Minxcon reviewed and verified the following data

- newly acquired drillhole and sampling data for Princeton;
- volumes of mining void wireframes, where they had been updated from since 2015;
- Mineral Resource model reconciliation relative to the 2015 Mineral Resource declaration;
- visual drillhole versus model correlation; and
- reconciliation of the block model estimates to the data for the Galaxy, Giles and Woodbine orebodies.

As Part of the 2015 Mineral Resources update, Minxcon reviewed and verified the following data types relative to historical files and records (digital and manual):-

- drillhole collars, surveys and assays;
- volumes of orebody wireframes;
- volumes of mining void wireframes;
- historical depletion of the orebodies due to pre-2011 mining;
- visual drillhole versus model correlation; and
- review of the manual block listings.

I. Drillhole Collars, Surveys and Assays

In 2011, Minxcon reviewed the captured data. In 2015 Minxcon conducted random checks of collar locations, checked the desurveyed 2011 Datamine™ drillholes versus the MS Excel downhole surveys to check for consistency. Minxcon also checked the assay for all the hole for gaps and overlaps. In 2020 Minxcon performed spot checks on the data. The new data for Princeton was assessed in detail and a summary of the data is listed in Table 17 and Table 18. The errors are entries that could be corrected, like capturing errors/typos. While the entries that were not usable are entries where there were missing entries.

Table 17: Princeton Drillhole Data Summary

Item	BHID	Entries	Parent Holes	Deflections	Errors	Not Usable
Collar	480	480	375	105	7	14
Survey	475	4,363	367	108	102	14
Assay	439	17,456	334	105	13	0
Lithology	335	2,358	318	17	1	0

Table 18: Princeton Chip Sample Data Summary

Item	BHID	Entries	Parent Holes	Deflections	Errors	Not Usable
Collar	1,904	1,904	1,834	70	0	327
Survey	1,963	1,943	1,870	73	0	344
Assay	1,908	7,497	1,833	75	86	0

The estimation for Galaxy was also considered during this estimation. As a result, the existing database was reviewed in detail and the following errors were observed for the drillhole samples only (Table 19). The bulk of the errors for the drillhole survey and assay samples were duplicate or overlapping samples with no associated grade value, these were removed where identified. The remainder of the errors could be manually corrected (transcription errors). No errors were observed for the chip samples for Galaxy. This database constitutes the total database covering Giles, Woodbine and Galaxy and constitutes the final database for these three orebodies. These errors exist in the original total database, and it is more correct to rectify the original database than the data just clipped to the Galaxy volume, as the actual data to create a desurveyed file may be incorrect and thus the desurveying of the drillhole and clipping applied could be incorrect.

Table 19: Galaxy Drillhole Data Summary

Item	BHID	Entries	Parent Holes	Deflections	Errors	Not Usable
Collar	1218	1,218	1,077	141	0	0
Survey	1218	82,075	1,077	141	447	447
Assay	1136	70,778	995	141	7,584	7,578

II. Orebody Volumes

During the 2011 verification process Minxcon filled the orebody wireframes with blank cells to check the volume. Check cell volume was selected based upon orebody width and dip to ensure an optimum fill. In addition, Minxcon also queried the volume directly in CAE Datamine™ to check how the calculated volume compared to the small cell size block model. Then the volume and tonnage were cross validated against the Mineral Resource stated volumes and tonnages in order to check for unacceptable wireframe fills at a 0.0 g/t cut-off. This was confirmed to be valid by Minxcon in 2020.The same process was performed by Minxcon in 2020 for Princeton volumes.

During the 2011 verification process, Minxcon filled the existing as well as the new mining void wireframes with blank cells to check the volume. Check cell volume was selected based upon mining width and height dimension as well as development and stope dip to ensure an optimum fill. In addition, also queried the volume directly in CAE Datamine™ to check how the calculated volume compared to the small cell size block model. Then the volume and tonnage were cross validated against the Mineral Resource original 2011 pre-depletion block models stated volumes and tonnages in order check for unacceptable wireframe fills. This was confirmed to be valid by Minxcon in 2020.The same process was performed by Minxcon in 2020 for Princeton, as well as the TSFs where new depletion volumes were applied. As part of these depletions, an additional minor volume of historical mining was depleted from the Giles manual estimates. No new mining has occurred since 2011 for any of the other orebodies.

III. Mineral Resource Models Reconciliation Relative to the 2015 Mineral Resource Declaration

During the current Mineral Resource update process, Minxcon utilised CAE Datamine Studio™ and Leapfrog Edge to evaluate the existing block models in order to ensure Mineral Resources were originally reported correctly from the 2015 Mineral Resource Statement.

IV. Visual Drillhole versus Model Correlation

Minxcon also conducted visual checks on block models versus drilled grades by means of stepping through block models along with the existent drillholes or sampling for used in the grade estimation in order to ensure that the estimated block models honoured the grade distribution as exhibited by the intersected drillholes.

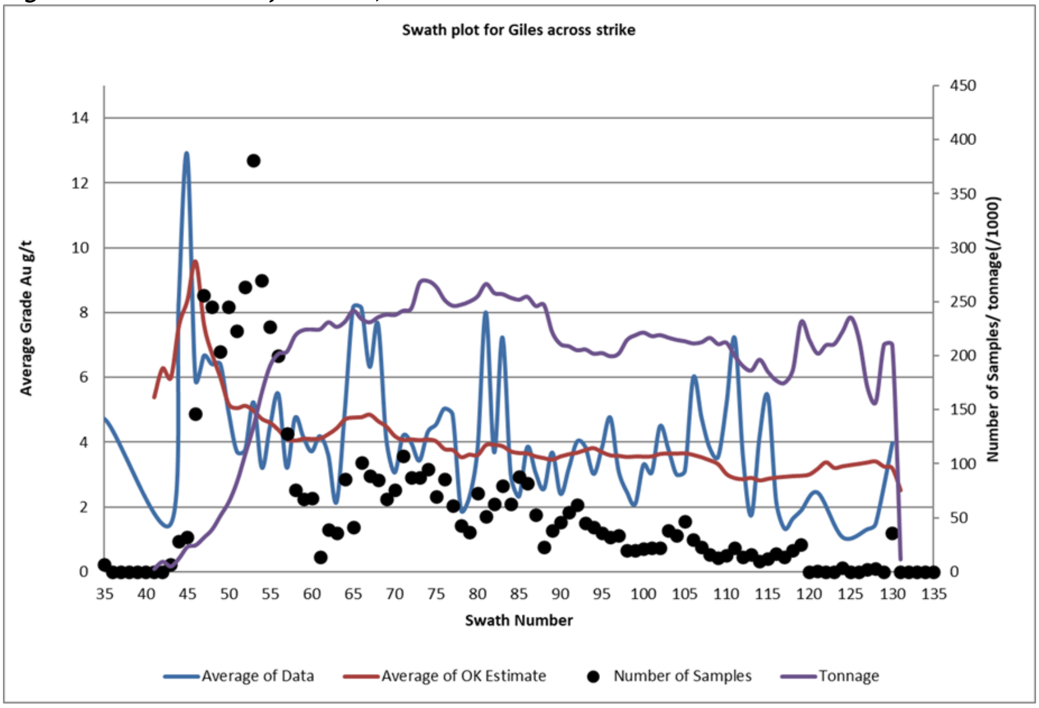
Minxcon also conducted checks on the block listings for the manual Mineral Resources by doing spot checks on the available section block plans to check the correlation with the actual block listing values and backing data.

V. Reconciliation of Block Model Estimates to Data

As part of the 2020 Minxcon review of the existing Resources, swath plots were generated for Galaxy, Woodbine and Giles. The swaths take a series of perimeters in X, Y or Z across the block mode, and data falling within the same perimeter or swath. These are then plotted to visualise how well the data is honoured by the estimate.

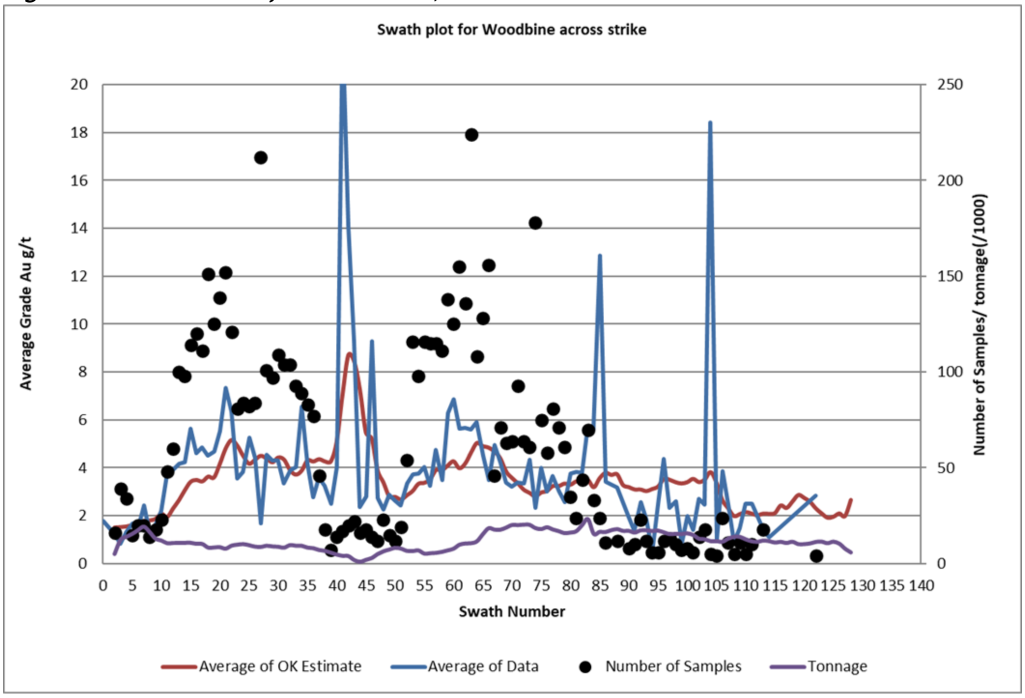
The swath plot for Giles across strike is shown in Figure 22, the estimate is smooth compared to the data, however the data is very limited, and where more data is available the estimate closer resembles the data.

Figure 22: Swath Plot for Giles, Across Strike



The swath plot for Woodbine across strike shows a good correlation with data, particularly where more samples are available (Figure 23).

Figure 23: Swath Plot for Woodbine, Across Strike



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

Minxcon was not able to review the sampling, drilling, core sampling or QAQC practices utilised on the Mine by the sampling and geology crews. Minxcon utilised the findings of historical Mineral Resource estimations, reviews or due diligences in order to achieve a well-rounded view of the quality of historical data collection methods.

Item 12 (c) – Adequacy of Data

Minxcon reviewed the data in conjunction with the block model estimation, versus the Mineral Resource classification. Minxcon also reviewed the kriging efficiencies and the Slopes of regression and variogram ranges or estimation volumes utilised in 2011 and is of the opinion that the Mineral Resource classification presented in the block models and therefore the 2011 CPR Mineral Resource statement is a fair reflection of, and is appropriate for the declaration of relevant Mineral Resources as originally stated in 2011, and is still relevant to current accepted technical practice. However, Minxcon did state in 2015, that the actual classification could be smoothed, which would exclude small blocks of inferred that occur within Measured Mineral Resource or Indicated Mineral Resource areas. Likewise, small blocks of Measured have been included within Inferred Mineral Resource areas. This should be smoothed to make the classification more continuous. The overall effect on the Mineral Resources reported will be minimal. This was considered as part of the current 2020 work by Minxcon.

ITEM 13 – MINERAL PROCESSING AND METALLURGICAL TESTING

Item 13 (a) – Nature and Extent of Testing and Analytical Procedures

A processing facility that employs a grinding and flotation circuit to produce a gold concentrate is currently in operation. The flotation concentrate used to be treated further on site with a biological leaching and a cyanide leaching process, but these were decommissioned in 2011. The current plant infrastructure is now used to treat a higher feed via flotation only, and the concentrate is sold.

Table 20: Summary of Historic Production and Metallurgical Test Results

Data Source	Feed	Head Grade	Conc. Grade	Recovery
		g/t	g/t	%
Jan 2011 to Jul 2011	Galaxy	2.5	46	86
Aug 2019 to Feb 2020	Galaxy and OMS Sands		32	67
Axis House	Princeton	2.9	15 – 32	42 - 95
Mintek	Galaxy: Princeton (2:1)		27 - 52	58 - 89
CM Solutions	Galaxy: Princeton (1:1)	2.4	25	78

The latest production data from August 2019 to February 2020 shows a lower recovery than that of 2011, as the most recent feed to the plant includes tailings that would give a lower recovery than fresh ore. The production performance of the flotation plant from January to July 2011 would be a better indication of the expected performance when treating the Galaxy Gold Mine orebodies (Table 20).

Metallurgical testing was done by Axis House, Mintek and CM Solutions on the Galaxy and Princeton ores (Table 20). The lab testing shows that a theoretical recovery up 95%, although with a lower concentrate grade.

Table 21: Mintek Results for Concentrate, Highlighted are Out of Range for Concentrate

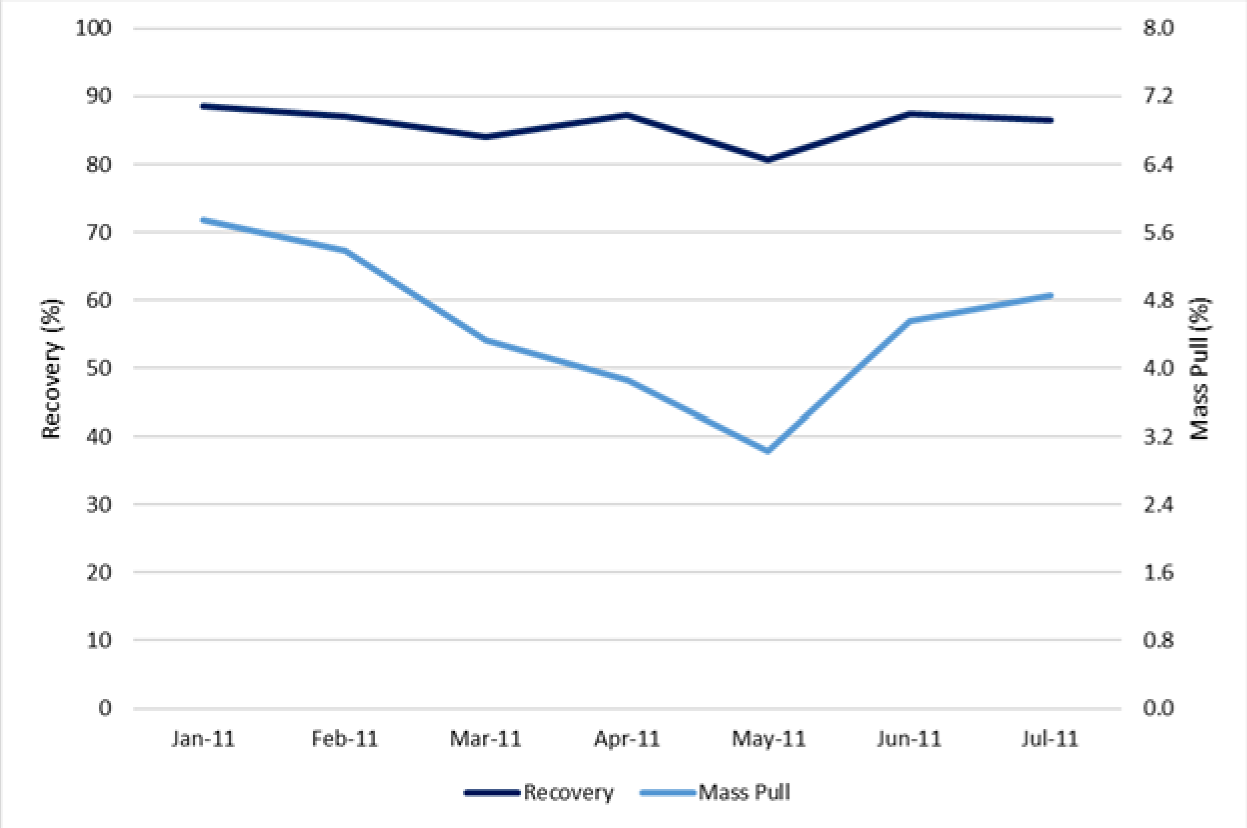
Element	Range		Unit	Cleaner
Au	30	40	g/t	49.63
Ag	2,3	4,2	g/t	0.0
$S_{(t)}$	13,6	40,3	%	33.6
S^{2-}	10,5	39,2	%	32.9
S^0	0,55	0,60	%	**0.3**
SO_4^{2-}	0,7	2,4	%	**0.2**
As	0,3	1,2	%	1.0
$Fe_{(t)}$	15,3	41,4	%	30.2
$C_{(gr)}$	0,04	0,05	%	**1.2**
$C_{(t)}$	2,31	3,10	%	**3.4**
$C_{(org)}$	1,69	2,70	%	**1.5**
CO_3^{2-}	2,0	7,9	%	**1.9**
Tl		<2	ppm	0.00

The analysis of the concentrate produced by Mintek is listed in Table 21 with their desired range in a saleable concentrate.

Item 13 (b) – Basis of Assumptions Regarding Recovery Estimates

The plant performance in 2011 gives the most reliable data for the expected recovery from the Galaxy Gold Mine orebodies, as the conditions were similar in terms of the recovery technology used as well as the type of ore feed (Figure 24). The weaker recovery results being reported currently should improve as the tailings material is exhausted.

Figure 24: Recovery Data for 2011



Metallurgical tests established a maximum theoretical recovery of 95%, although with a lower concentrate grade. The current grade specified for the concentrate is 25 g/t, which is lower than the 46 g/t produced in 2011. It can be assumed with a high level of confidence that the production of this lower grade of concentrate can be achieved at the same or better recovery in the range of 85% to 90%.

Item 13 (c) - Representativeness of Samples

The ore will be mined from the same orebodies that were mined prior to 2012. Therefore, the historic production results are considered representative of the Galaxy Gold Mine orebodies. As a result, both historic tests and production results can be used to estimate future performance.

Item 13 (d) - Deleterious Elements for Extraction

Free sulphur, sulphate and carbonate are lower than their expected ranges, and should not incur any charges, but the higher carbon may attract a penalty due to its tendency to lower recovery in plants that use CIP technology (Table 21).

ITEM 14 – MINERAL RESOURCE ESTIMATES

Item 14 (a) – Assumptions, Parameters and Methods Used for Resource Estimates

This section describes the Mineral Resource estimation process utilised by Minxcon and summarises the key assumptions considered in the estimation. The Mineral Resource has been estimated in accordance with the accepted CIM "Estimation of Mineral Resources and Mineral Reserves Best Practices Guidelines" (2019) and are reported in accordance with NI 43-101. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources may be converted into Mineral Reserves.

I. Domaining

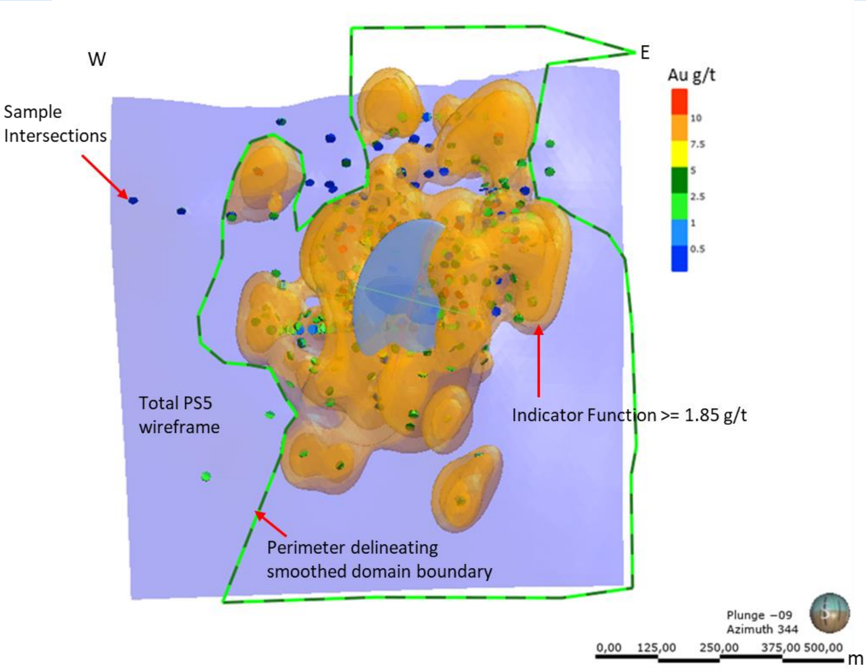
All orebodies considered were subdivided as described in Item 8 (b), based on areas as subdivided by mining, such as Galaxy 17 Level and Galaxy 24 Level. No further geostatistical domaining was performed on these orebodies.

Princeton and Galaxy were re-estimated and are thus documented in detail. Giles and Woodbine were also reviewed in detail. The remaining orebodies were not reviewed in detail during this study and are documented in the 2015 Report. No changes have occurred to these orebodies since to the 2015 Report.

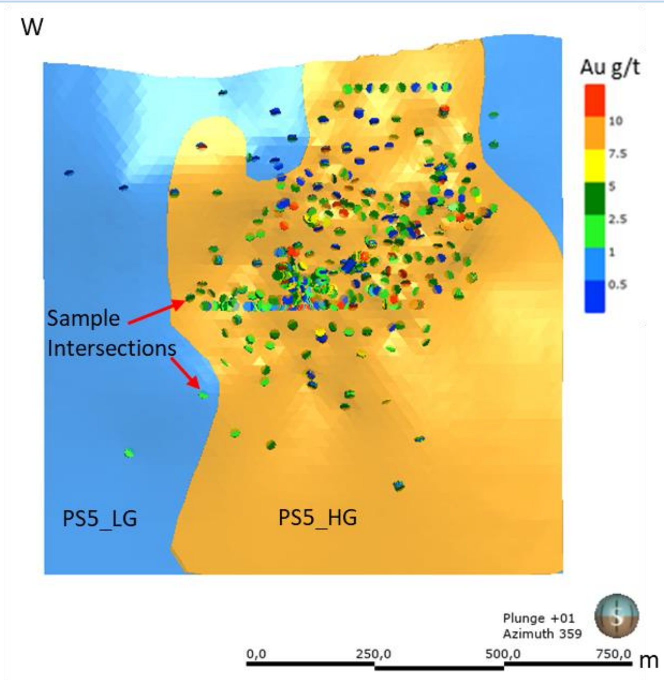
Princeton is subdivided into PS5, PS19 and the newly defined PS12. The PS12 is characterised as the middling between PS5 and PS19, where assigning the additional samples to either would overthicken the width of these orebodies. In addition to these three divisions, PS5 was further subdivided into a High grade ("PS5_HG") and low grade ("PS5_LG") domain. The PS5_LG is a minor domain that occurs outside the main pay shoot, but it was observed that the lower grade samples within the outer low grade domain decreased the grade estimates that were expected form the inner high grade pay shoot. To delineate the high-grade pay shoot, a multiple domain indicator numeric function in Leapfrog was utilised to differentiate between high and low grade samples. At cut-off of 1.85 g/t was utilised. The underlying numeric function and final domain is detailed in Figure 25.

Figure 25: Creation of the PS5 Domains

Section View of Indicator Function used to Define PS5 Domains



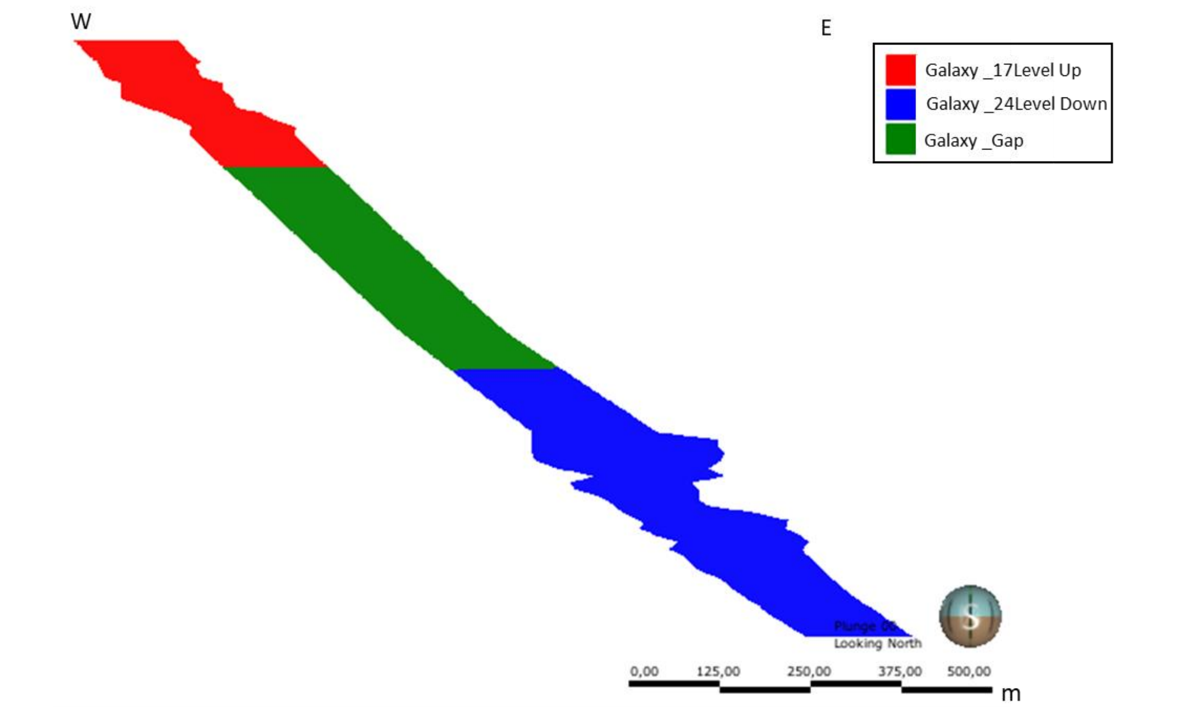
Section View of Final Smoothed PS5 Domains



Creation of the PS5 Domains	June 2020

For Galaxy, the existing subdivisions were utilised, *i.e.* the surface to dyke, 17 Level to dyke, gap area, 24 Level down. Previously only the 17 Level upwards and 24 Level downwards were estimated. As part of this work, the gap area was estimated from data within the two neighbouring domains (Figure 26). The position of the dyke could not be constrained with confidence during this study. Thus, the existing manual estimate for surface to dyke has been used. However, it is recommended for future work and in order to increase the confidence of this area, that the geological data is captured and the extents of this domain confirmed.

Figure 26: Section View of Galaxy Domains Estimated during the 2020 Estimate



Section View of Galaxy Domains Estimated during the 2020 Estimate	June 2020

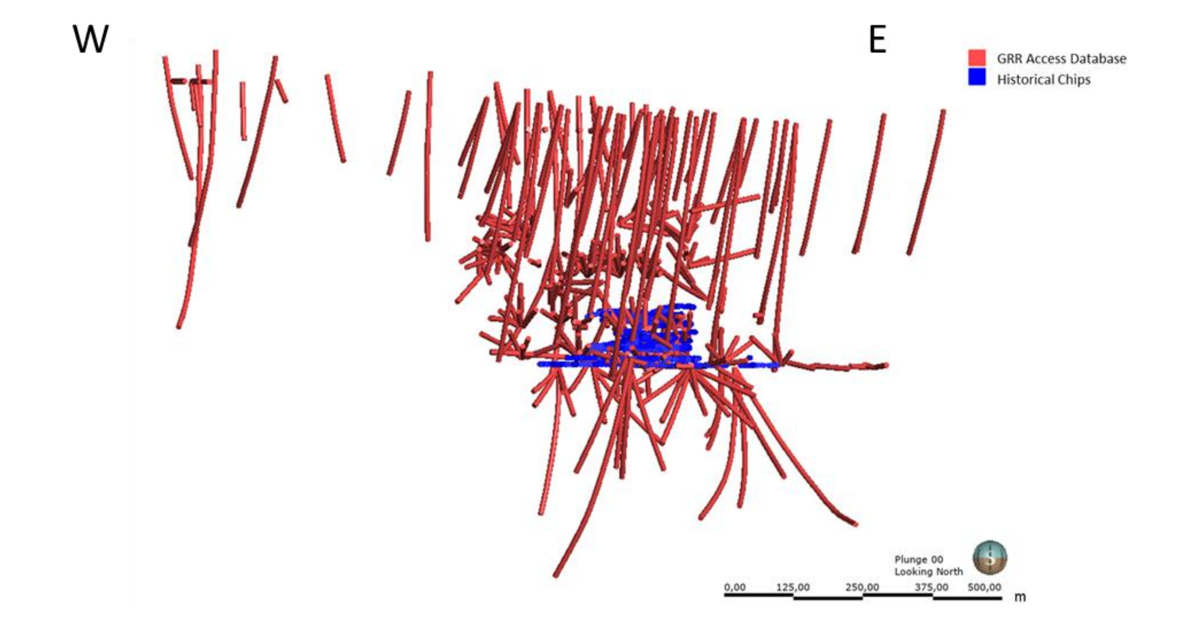
Despite listing these as separate domains, during estimation, the total dataset and one single dataset was utilised for one total domain (to enable the estimate into the gap area).

II. Data Used

Princeton

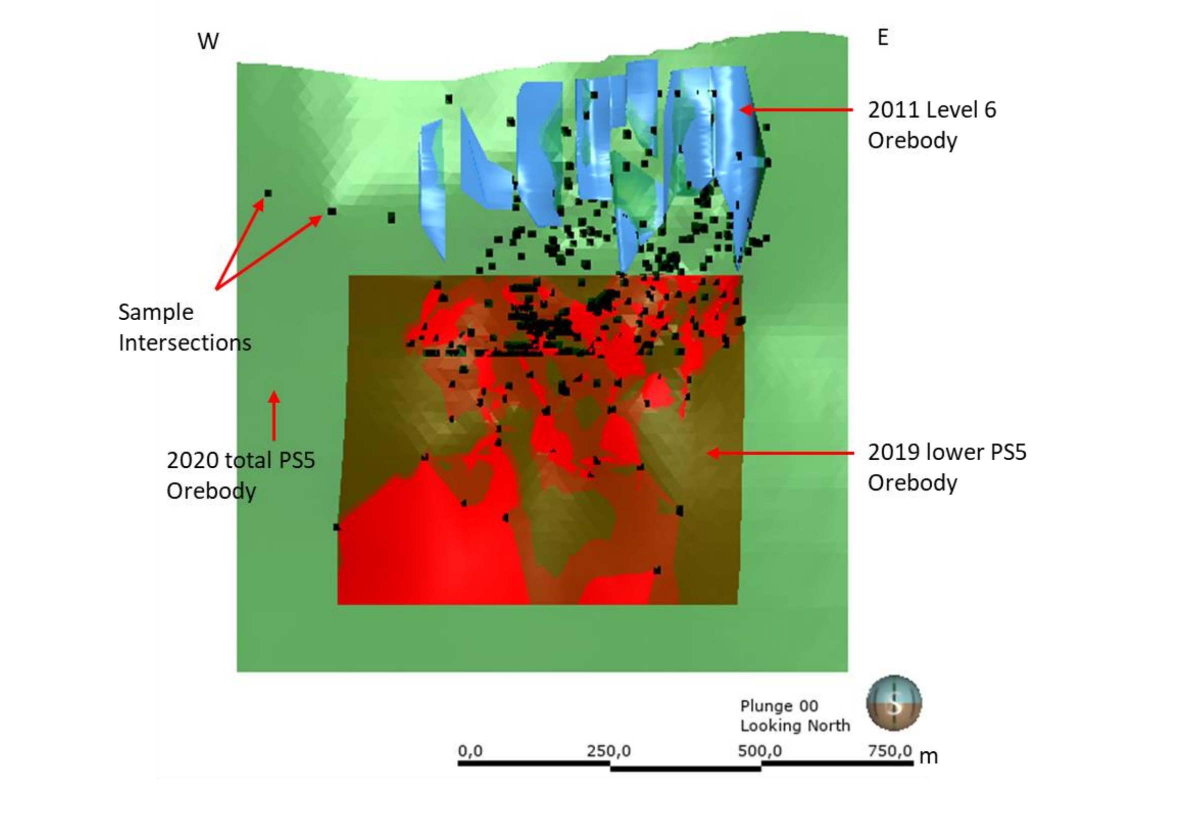
Additional data was captured and sourced for use in the Princeton estimation (Figure 27). This comprised historical chips in mined-out areas, and drillholes covering a larger area, which allowed for the interpretation of PS5, PS12 and PS19 to be extended over a larger area. In particular the historical chips and drillholes in the central portion of the orebody allowed the previous upper and lower bodies to be linked and generate a continuous orebody covering the upper and lower extents. The old and new orebodies are shown in Figure 27 for PS5.

Figure 27: Section View of Orebody Data Sources Available for the Princeton Estimation



Section View of Orebody Data Sources Available for the Princeton Estimation	**June 2020**

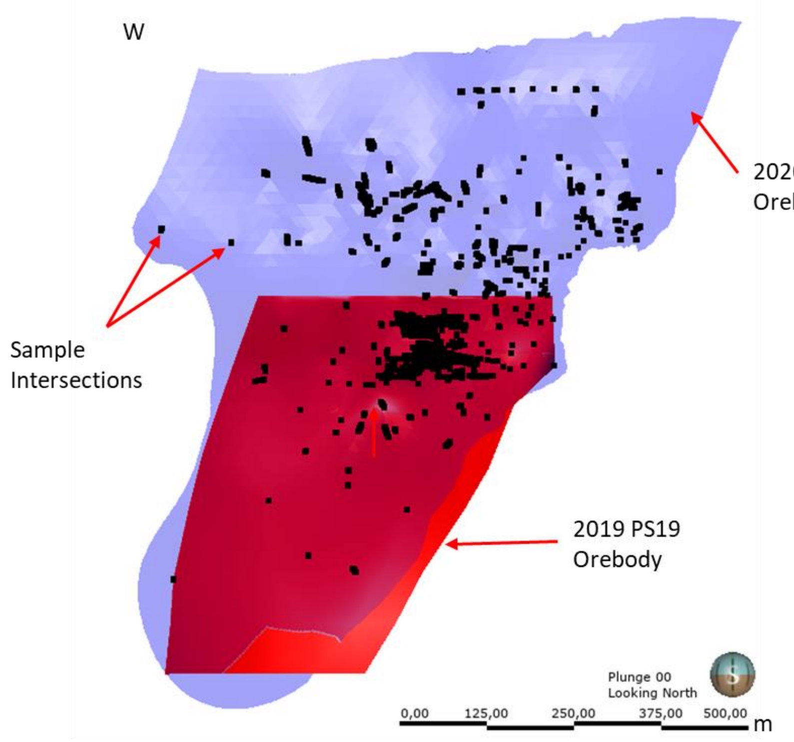
Figure 28: Section View of Data Sources Available for the Princeton PS5 Estimation



Section View of Data Sources Available for the Princeton PS5 Estimation	**June 2020**

The data available for PS19 is shown in Figure 29.

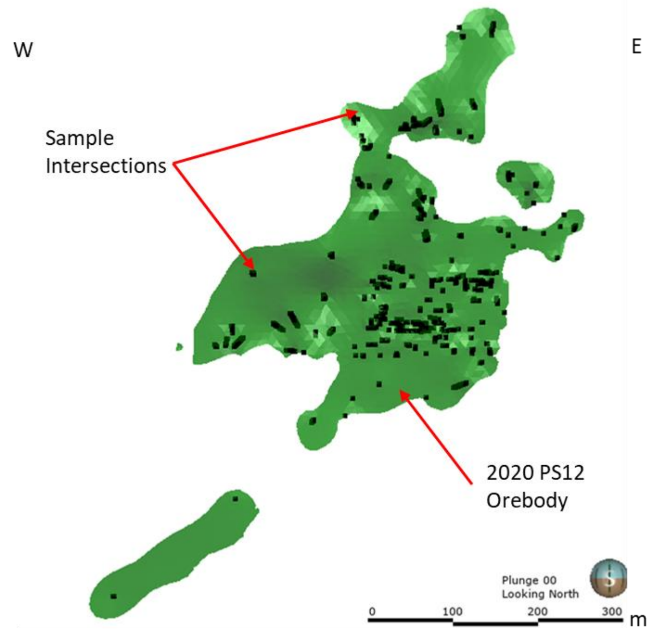
Figure 29: Section View of Data Sources Available for the Princeton PS19 Estimation



Section View of Data Sources Available for the Princeton PS19 Estimation	June 2020

The data used in the PS12 2020 estimation is shown in Figure 30.

Figure 30: Section View of Data Sources Available for the Princeton PS12 Estimation

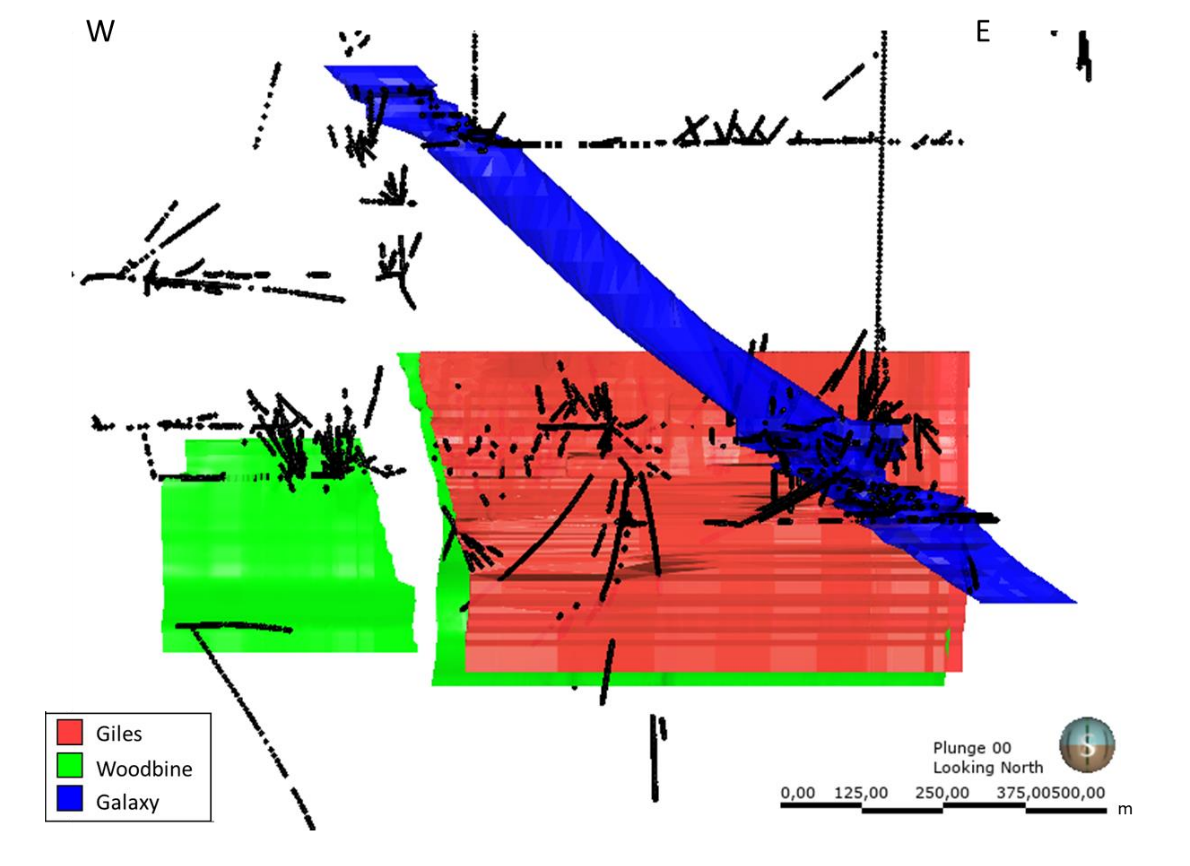


Section View of Data Sources Available for the Princeton PS12 Estimation	June 2020

Galaxy, Woodbine and Giles

Owing to Galaxy, Woodbine and Giles occurring in close proximity to one another, all three domains are shown together (Figure 31).

Figure 31: Section View of Galaxy, Woodbine and Giles Orebodies in Relation to Data in 3D



Section View of Galaxy, Woodbine and Giles Orebodies in Relation to Data in 3D | **June 2020**

The data used for estimation for each orebody is summarised below in Table 22.

Table 22: Summary of Data Used for Estimation

Orebody	DD Drillholes	Underground Samples
Galaxy	217	12
Woodbine	83	2,339
Giles	82	2,982

No declustering was performed on the data by Deswik's estimation, this is an acceptable approach as minimal clustering is seen in the data that would skew the estimation.

III. Compositing

Compositing is performed for all orebodies based on the most common sample length. Minxcon agrees with the composting strategy employed for the resource estimation dataset. The composited values employed are listed below. The composite length employed by Minxcon's re-estimate for Princeton and Galaxy is the same as employed by Deswik, based on the average sample length (Table 23).

Table 23: Composite Sample Lengths used for the Estimation Dataset

Orebody	Composite Length m
Princeton Orebody	0.5
Galaxy, Woodbine and Giles	0.5

Descriptive Statistics

Descriptive statistics for Princeton, Galaxy, Woodbine and Giles are summarised in Table 24 . These are the composited samples that were used in estimation.

Table 24: Statistics of the Composited Database used in Estimation

Orebody	Valid Samples	Minimum g/t	Maximum g/t	Average g/t	Std. Dev
Princeton PS5 HG	4,115	0.001	146	3.96	6.13
Princeton PS5 LG	149	0.01	3.55	0.32	0.62
Princeton PS12	1,915	0.01	70.35	2.31	4.44
Princeton PS19	6,944	0.001	148	4.03	6.18
Galaxy	12,081	0.005	243.1	2.18	4.47
Woodbine	6,904	0.010	50	4.27	3.68
Giles	8,147	0	80	4.64	5.67

IV. Outlier Analysis

Capping is carried out during the kriging stage to limit the influence that the ultra-high grades may have on the estimation of the surrounding areas. Top cuts were applied during the variography stage to prevent the excessive variances of the anomalously high grade from skewing the distribution away from the representative variance of the data distribution. For Deswik's estimates the capping values for kriging and variography were the same. Deswik made use of the 99th percentile to remove anomalous grade values. The method applied is an industry accepted methodology. These values applied are shown in Table 25. For the 2020 estimate of Princeton and Galaxy, probability plots were utilised to identify anomalous grade values, these are shown in Figure 32, Figure 33, Figure 34 and Figure 35, with the results in Table 25. Leapfrog Edge software applied a top cut to estimation and a top cap for variography, for this estimation the same value was utilised for both. In addition, cutting curves are utilised as a test for the value applied for capping/cutting to check the effect the applied sample would have on the total metal within the dataset. If a large percentage of the value is applied to 1-2 samples it will help guide the definition of the limit applied.

Table 25: Galaxy Gold Mine Variogram Top Cuts and Kriging Caps Applied

Orebody	Variography and Kriging Top Cap g/t
Princeton PS5 Orebody	45
Princeton PS12 Orebody	30
Princeton PS19 Orebody	48
Galaxy Reef Orebody	145
Woodbine Reef Orebody	50
Giles Reef Orebody	80

Figure 32: Probability Plot for PS5

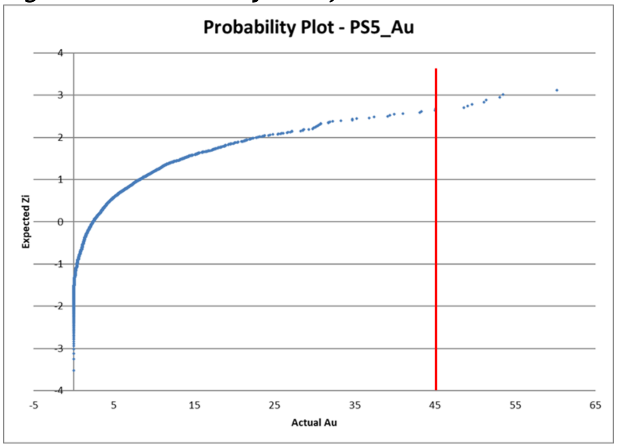


Figure 33: Probability Plot for PS19

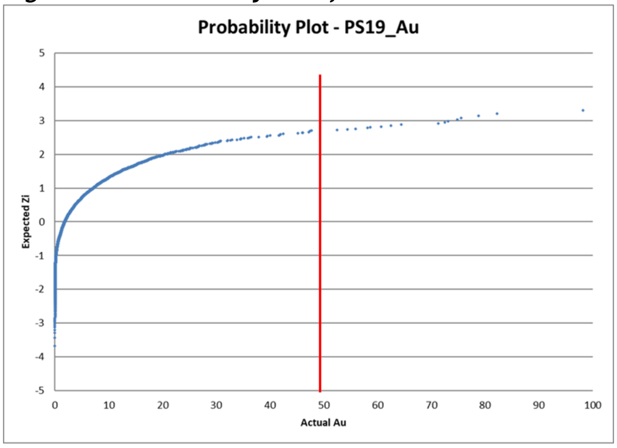


Figure 34: Probability Plot for PS12

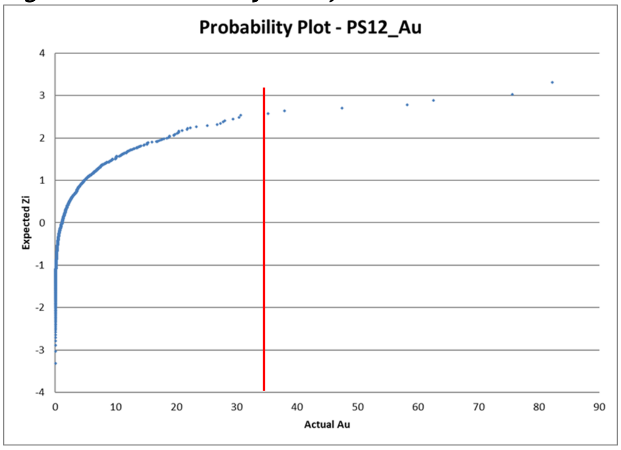
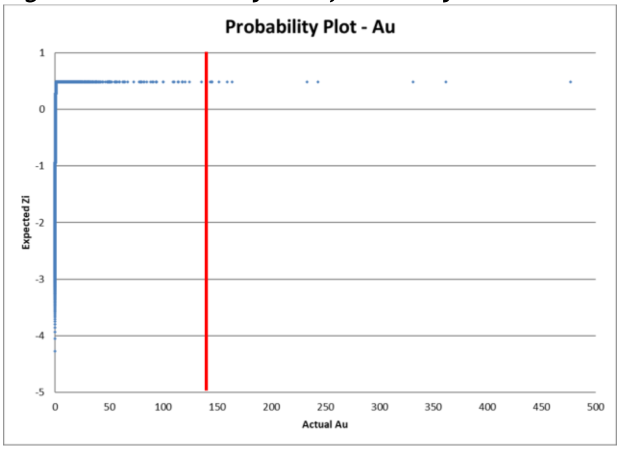


Figure 35: Probability Plot for Galaxy



V. Estimation Methodology

Domained estimation with hard boundaries was used for estimation, where only samples falling within the wireframe's extents were utilised in estimation.

Deswik conducted the Mineral Resource Modelling using Datamine Studio™ software. Ordinary Kriging ("OK") and Simple Kriging ("SK") were used for the estimation of the grades for the orebodies on the Project Area, with the OK being utilised in more informed areas, while SK was utilised in lesser informed areas. Inverse Distance Squared ("ID2") was utilised by Deswik for estimating the Galaxy Gold Mine TSFs.

Minxcon audited the Mineral Resource estimation process and its results in 2011 concurrent with the Deswik Mineral Resource estimation. As part of the 2015 Mineral Resource update, Minxcon conducted a due diligence on the models and data again. It is the opinion of Minxcon that kriging renders more accurate and reliable estimates than other methods. In 2020, Minxcon reviewed the estimates of Giles and Woodbine in detail and is satisfied with the estimation technique and parameters applied to reach the final estimation. Modelling was conducted on gold grade in g/t. Minxcon also recommends the utilisation of ID2 in the case of the estimation of the dumps, due to the data volume and distribution.

For the re-estimation of Princeton and Galaxy in 2020, Minxcon made use of OK for all estimates in Leapfrog Edge, due to the availability of samples that yielded good variography.

VI. Variography

The variography was reviewed as part of the 2015 Minxcon report and again checked as part of this work in 2020. The methodology to generate variograms and the variograms modelled are good and no issues are identified. The variogram parameters are summarised in Table 26 for the 2011 estimate and Table 27 for the 2020 estimate

For the 2011 estimate in Datamine, all the rotations were carried out in the rotation axis order Rotation axis 1=Z, Rotation axis 2=Y and Rotation axis 3=X (Table 26). For the Leapfrog estimation the first rotation refers to the Dip, second to the dip azimuth, and the third to the pitch (Table 27).

Table 26: Galaxy, Giles and Woodbine Variogram Parameters

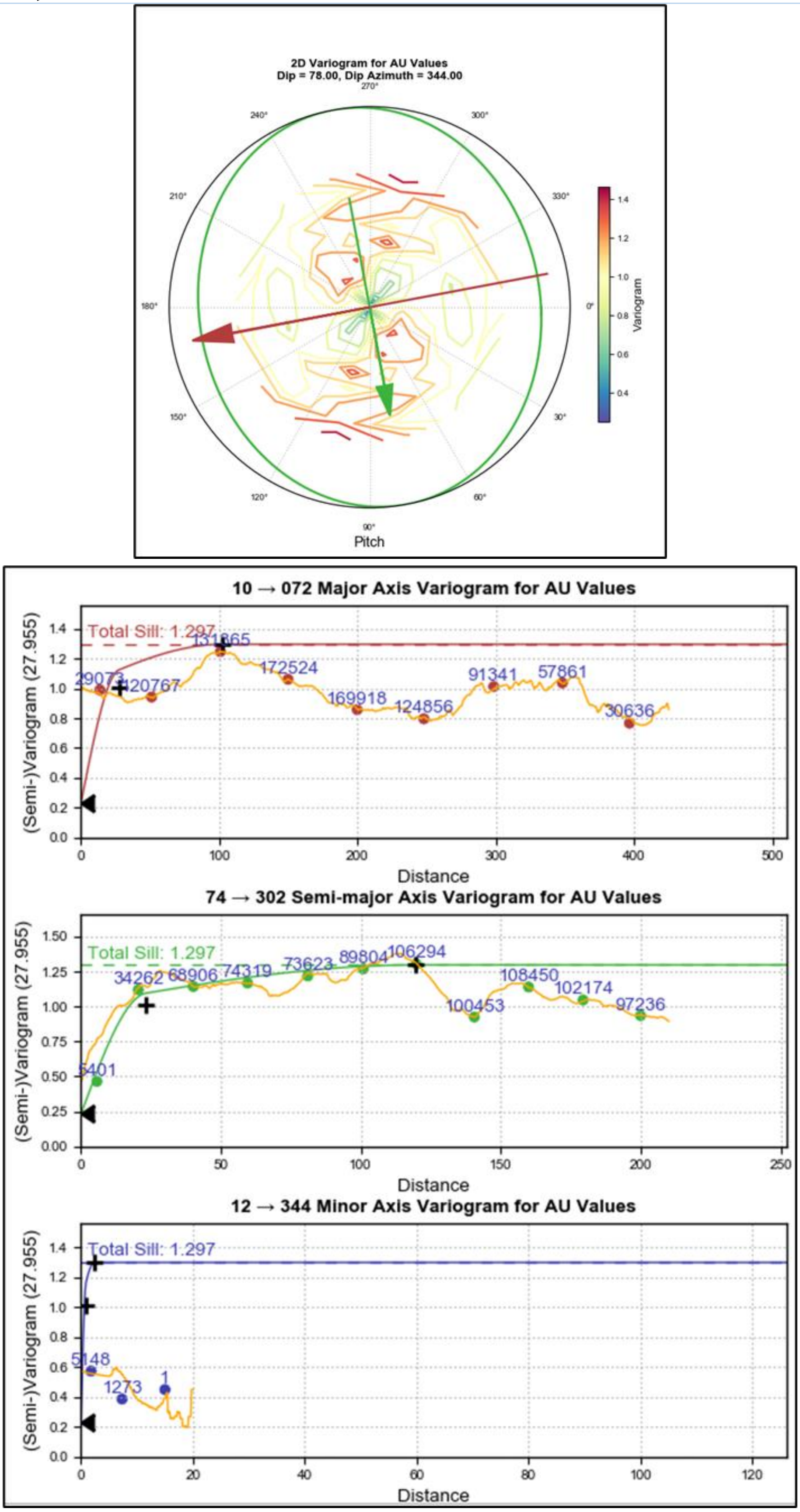
Orebody	First Rotation (deg.)	Second Rotation (deg.)	Third Rotation (deg.)	Nugget: Sill %	Range X (1st Structure)	Range Y (1st Structure)	Range Z (1st Structure)	C 1	Range X (2nd Structure)	Range Y (2nd Structure)	Range Z (2nd Structure)	C 2	Range X (3rd Structure)	Range Y (3rd Structure)	Range Z (3rd Structure)	C 3
Woodbine 24-L Down	156	60	-86	9	11	5		4.8	49	17		1.9	105	48		1.8
Giles 24-L Down	0	0	0	10	4	4		14.2	66	66		2.6	80	80		9.8

Table 27: Princeton and Galaxy Variogram Parameters

Orebody	Dip	Dip Azimuth	Pitch	Nugget: Sill %	Major Direction (1st Structure)	Semi_major direction (1st Structure)	Minor (1st Structure)	C 1	Major (2nd Structure)	Semi_MAjor (2nd Structure)	Minor (2nd Structure)	C 2
Princeton PS5_HG	78.17	344	169	18	27.32	23.2	0.90	0.7814	101.8	119.7	2.39	0.284
Princeton PS5_LG	78.17	344	75	9	43.19	18.5	0.9	0.9266	57.68	51.63	0.9	1.11
Princeton PS12	75	347	58	38	16.61	20.5	1.01	0.4084	91.22	66.03	1.56	0.52
Princeton PS19	75	344	75	26	98.43	5.16	4.45	0.5199	168.1	115.9	5.75	0.665
Galaxy	38.38	66	89.9	63	21.97	47.7	1.89	0.4335	107.1	60.7	2.87	0.052

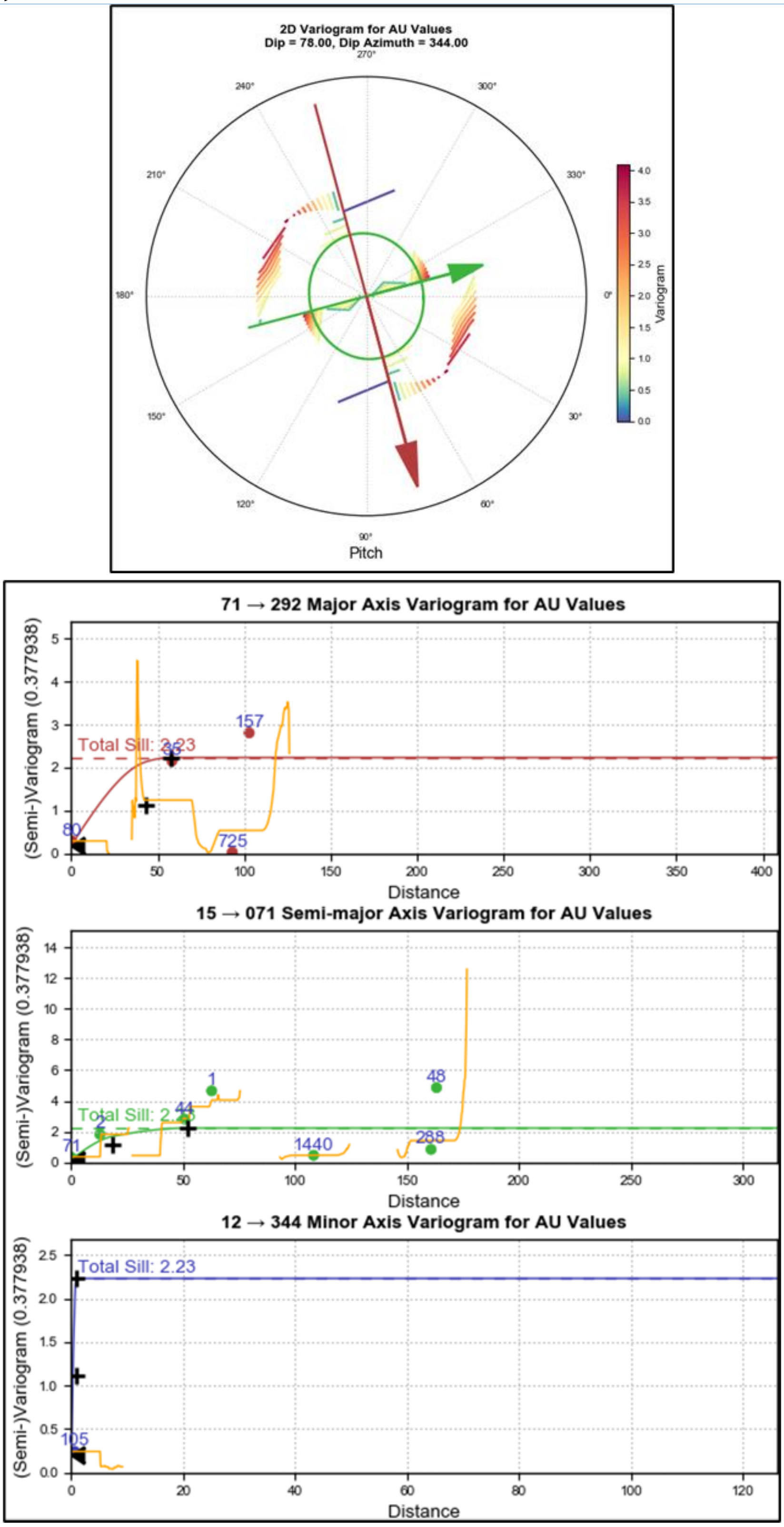
The variogram for PS5_HG is shown in Figure 36, also included is the variogram setup parameters and images of each direction. PS5_LG, PS12 and PS19 are shown in Figure 37, Figure 38 and Figure 39 respectively. The variogram for Galaxy is shown in Figure 40.

Figure 36: Variograms for PS5_HG



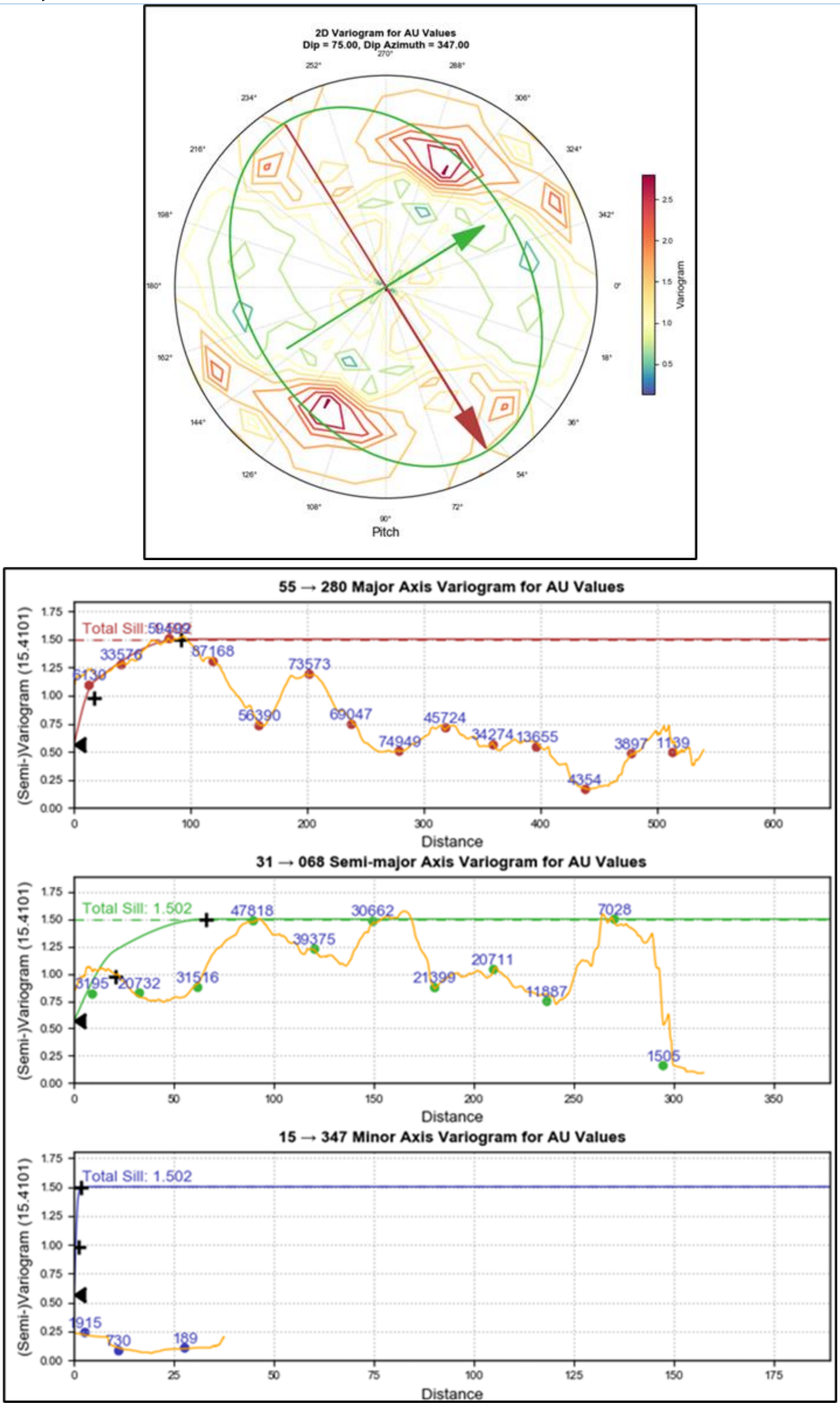
Variograms for PS5_HG	June 2020

Figure 37: Variograms for PS5_LG



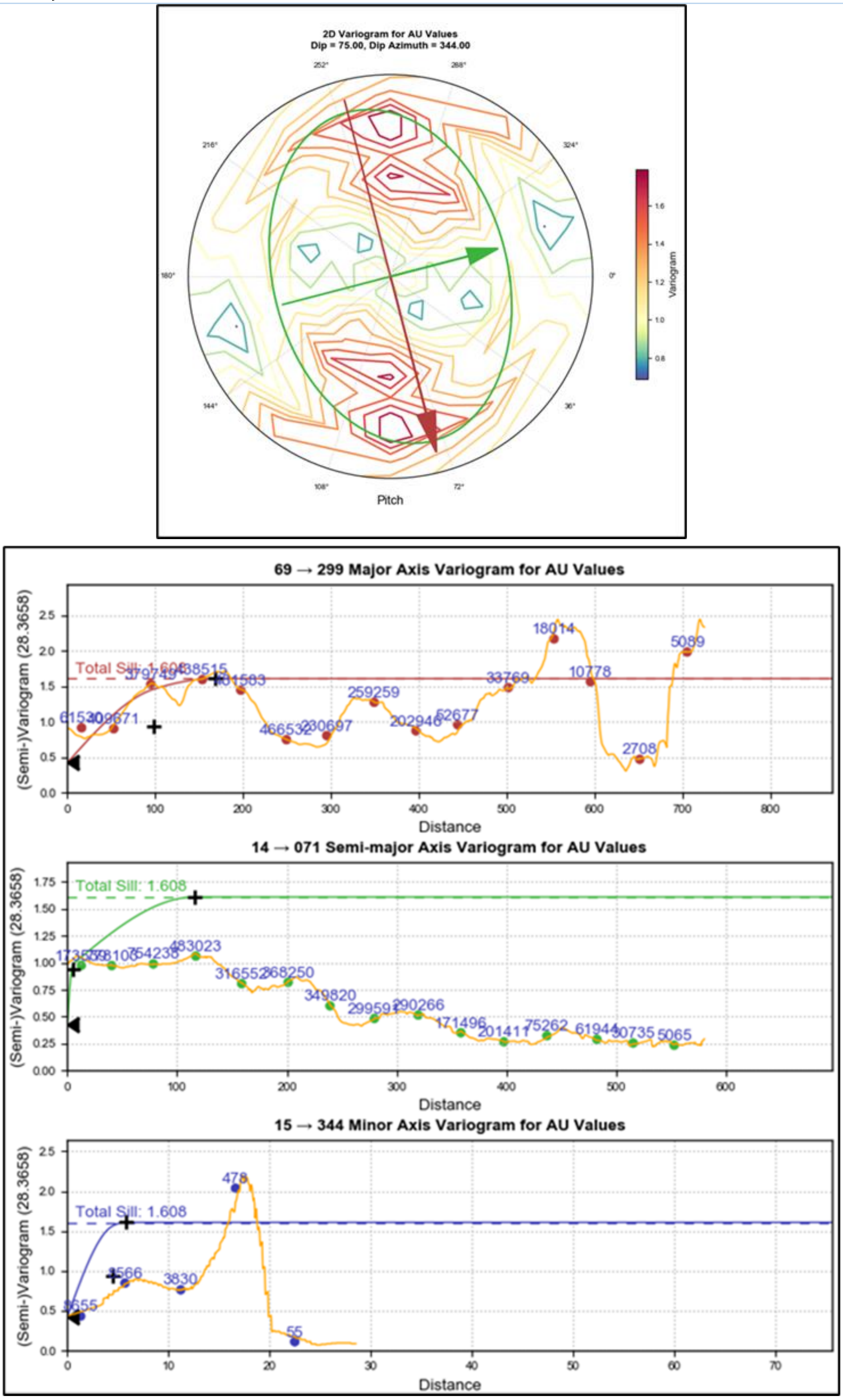
Variograms for PS5_LG	June 2020

Figure 38: Variograms for PS12



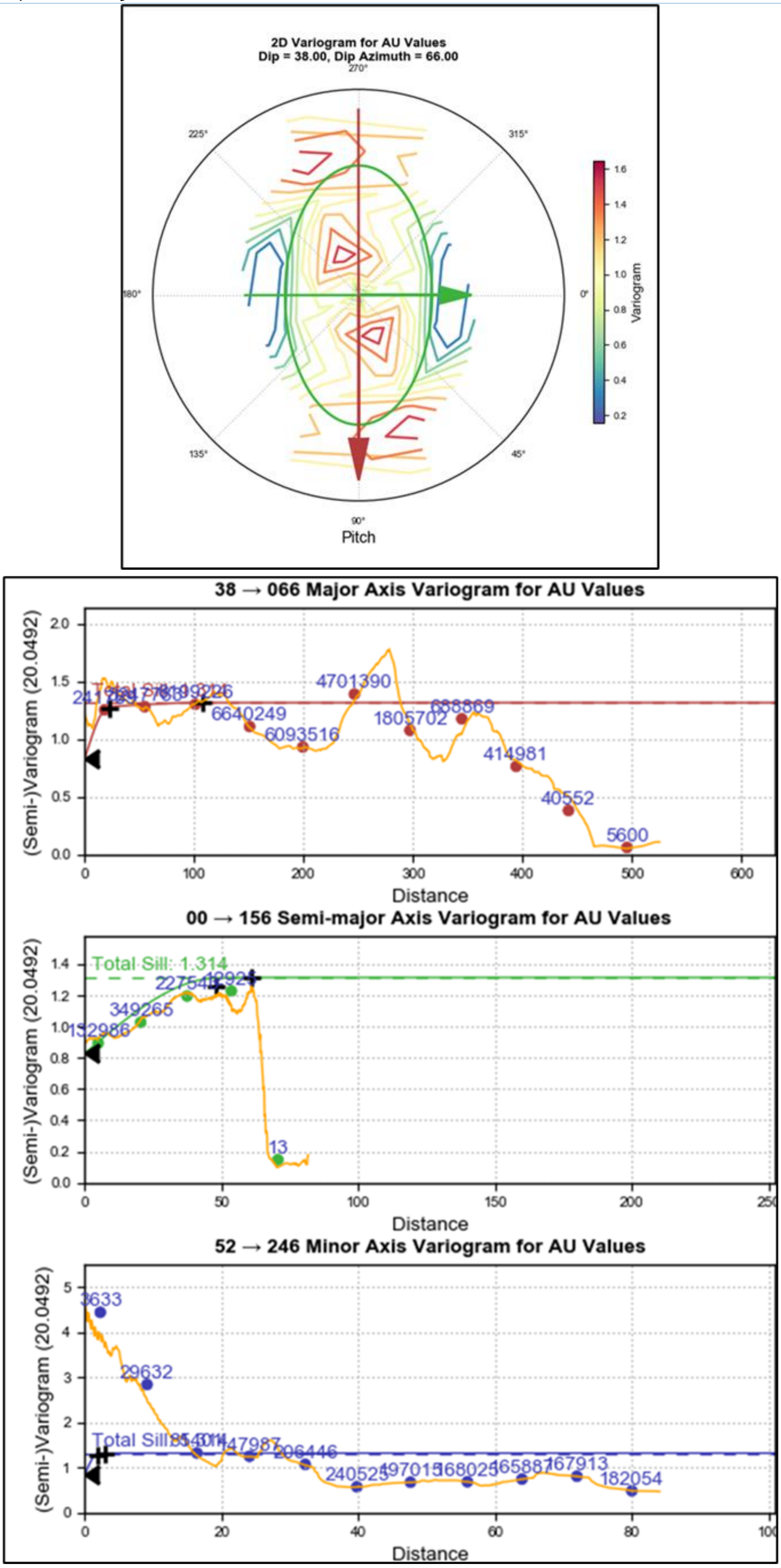
Variograms for PS12	June 2020

Figure 39: Variograms for PS19



Variograms for PS19	June 2020

Figure 40: Variograms for Galaxy

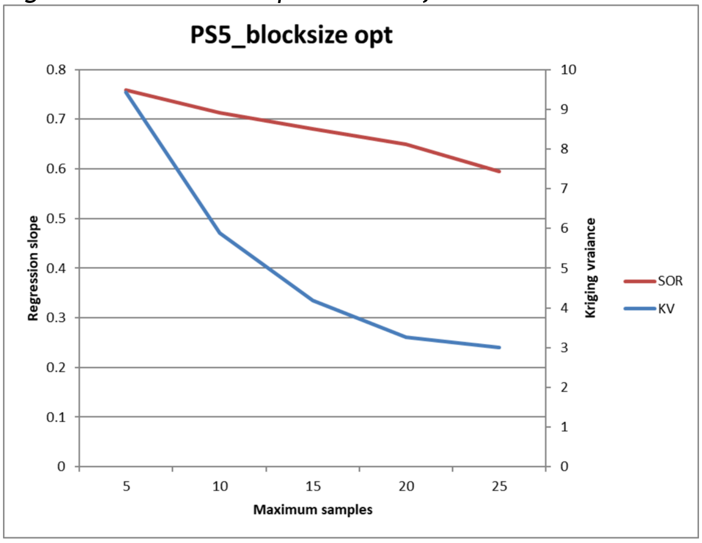


	Variograms for Galaxy	June 2020

VII. Kriging Neighbourhood Analysis

Kriging Neighbourhood Analysis ("KNA") was performed on Princeton for the 2020 estimation. This assessed the optimal block size, minimum number of samples and maximum number of samples that would be used in the estimation setup. KNA attempts to produce the estimation parameters for which the highest quality result can be kriged, this quality is measured by Slope of Regression ("SOR"), and kriging variance. The block size optimisation yielded similar result for all orebodies, only PS5 is shown for reference Figure 41. The smaller block size gives the best SOR, however the kriging variance is highest, it was decided to use a block size of 10 for all estimates as this will also better represent the sample density.

Figure 41: Block Size Optimisation for PS5



The results of the minimum and maximum samples for PS5 are shown in Figure 42 and Figure 43. KNA was performed for all orebodies in a similar manner. Due to the small number of samples in PS5_LG, the PS5_HG KNA result was utilised for both domains. No mention is made of KNA being performed for the 2011 estimates.

Figure 42: KNA Results for PS5 – Minimum Samples

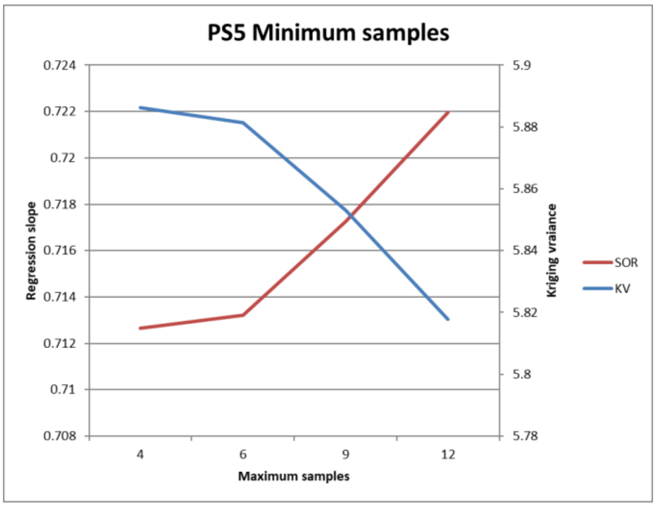
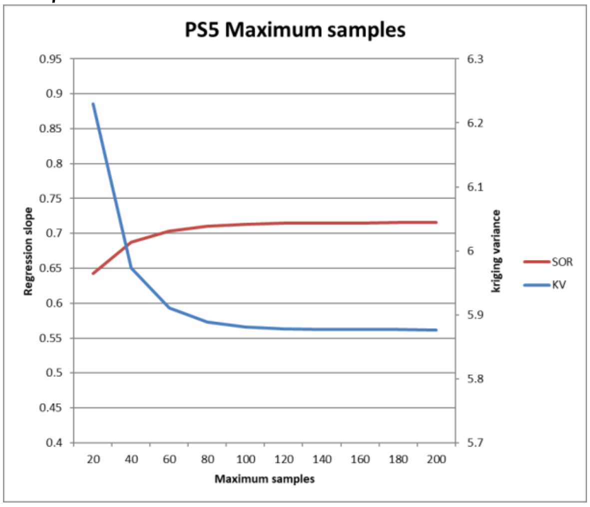


Figure 43: KNA Results for PS5 – Maximum Samples



The estimation parameters utilised for the Princeton and Galaxy estimations are shown in Table 28.

Table 28: Estimation Parameters for Princeton and Galaxy

Search Volume	Parameter	PS5_HG	PS5_LG	PS12	PS19	Galaxy
Svol1	Lower Capped Value	0.001	0.001	0.001	0.001	0.001
Svol1	Top Capped Value	45	45	30	48	145
Svol1	Search Orientation Dip	78.17	78.17	75	75	38
Svol1	Search Orientation Dip=Azimuth	344.44	344.44	347.22	344.44	66.1
Svol1	Search Orientation Pitch	169.34	75	58.17	75.385	89.96
Svol1	Search Range Max	101.8	57.68	91	168	107.1
Svol1	Search Range Int	119.7	51.63	66	116	60.7
Svol1	Search Range Min	10	10	10	10	2.87
Svol1	Minimum Samples	9	6	6	12	15
Svol1	Maximum Samples	80	80	80	60	30
Svol1	Minimum Drillholes Required	3	3	3	3	3
Svol1	Estimation Method	OK	OK	OK	OK	OK
Svol1	Block Discretisation	5x5x2	5x5x2	5x5x2	5x5x2	5x5x2
Svol2	Extent	1.5X variogram range	1.5X variogram range	1.5X variogram range	1.5X variogram range	1.5X variogram range
Svol2	Minimum Samples	9	6	6	9	10
Svol2	Maximum Samples	80	80	80	60	30
Svol2	Minimum Drillholes	3	3	3	3	2
Svol2	Estimation Method	OK	OK	OK	OK	OK
Svol3	Extent	2X variogram range	2X variogram range	2X variogram range	2X variogram range	2X variogram range
Svol3	Estimation Method	OK	OK	OK	OK	OK
Svol3	Minimum Samples	9	3	6	3	2
Svol3	Maximum Samples	80	80	40	120	30
Svol3	Minimum Drillholes	3	3	1	1	2
Svol3	General	all other parameters unchanged	all other parameters unchanged	all other parameters unchanged	all other parameters unchanged	all other parameters unchanged
Svol4	Extent	to extents of domain	to extents of domain	to extents of domain	to extents of domain	to extents of domain
Svol4	Estimation Method	OK	OK	OK	OK	OK
Svol4	Minimum Samples	3	2	3	3	2
Svol4	Maximum Samples	20	20	20	20	30
Svol4	Minimum Drillholes	1	1	1	1	2
Svol4	General	all other parameters unchanged	all other parameters unchanged	all other parameters unchanged	all other parameters unchanged	all other parameters unchanged

VIII. ESTIMATION

Estimation in 3D using Datamine™ and manual estimation was utilised to estimate at the Mine in 2011. The 3D modelling approach was employed for all areas except those where the data was not yet captured or validated, in which case, the historical block listings were used after being verified with the stope sampling taken off the plans. The grades and thicknesses of the block listings were verified for each block as part of Minxcon's 2015 review. For the 2020 estimation of the Princeton and Galaxy orebodies, estimation was carried out in Leapfrog Edge. The estimate type employed for each orebody is detailed in Table 29.

Table 29: Orebody and Estimation Type Utilised

Orebody	Strike	Width	Depth	Estimation Type
	m	m	m	
Agnes Top	400	35.0	90	3D
Golden Hill	325	3.5	530	3D
Princeton Lev6/PS7	595	3.5	330	3D
Princeton PS5	380	1.5	360	3D
Princeton PS19	330	1.0	300	3D
Galaxy Surface to Dyke	150	20.0	165	Manual
Galaxy 17-Level-Up	140	20.0	140	3D
Galaxy Gap 17-24 Level	520	25.0	400	3D
Galaxy 24-Level-Down	390	30.0	290	3D
Woodbine W & E Surface - 22 Level	1,250	1.2	620	Manual
Woodbine 24-Level-Down	1,250	1.5	520	3D
Giles Surface - 23 Level	850	1.2	620	Manual
Giles 25 Level Down	850	1.0	490	3D
Pioneer & Tiger Trap	1300	14.0	500	3D
Ivy Shaft Pillar	240	0.4	450	Manual
Ivy to Agnes 3-11 Level	180	0.4	450	Manual
Ceska Shaft Pillar	180	0.4	480	Manual

In addition, all dumps were estimated in 3D.

Manual estimation of Mineral Resources was carried out using historical plans, sections and block listings. This methodology is utilised at Woodbine W & E Surface to 22 Level, Giles Surface to 23 Level, Ivy Shaft Pillar, Ivy to Agnes 3-11 Level and Ceska Shaft Pillar.

The block listings were used to identify the blocks and to have an idea of the grade and tonnes. Utilising the assays plans, the grade of each block was then calculated by averaging the grades of all the samples in the bottom and top drives of the block. Raise samples were not used as it was not certain if the development was on-reef for all the raises.

The thicknesses of the reef in each block were averaged as well to give the average block thickness. The area of the block was then measured off the sections and, subsequently, the tonnes were derived by multiplying the average channel width by the SG by the area of the block.

IX. DENSITY

The tonnage calculations were based on the specific density figures for the different orebodies as shown in Table 30.

Table 30: Specific Density Factors Utilised in the 2011 Mineral Resource Estimate

Orebody	SG t/m³
Underground	
Agnes Top	2.80
Golden Hill	3.03
Princeton	3.08
Galaxy	2.73
Woodbine Reef	2.73
Giles Reef	2.73
Pioneer Tiger Trap	2.73
Alpine Pioneer	1.26
Ivy Shaft Pillar, Ivy to Agnes & Ceska Shaft Pillar	2.78
Surface	
Hostel East Dump	1.41
Hostel West Dump	1.41
Biox North Dump	1.38
Woodbine West and WW Dumps	1.17
Woodbine South Dump	1.12

X. Estimation Results

The estimation results were compared visually to the data to confirm continuity between the data and model. For PS5_HG, Figure 44 shows the samples within the domain to be estimated versus the samples falling outside the domain. This serves to confirm high grade samples are correctly confined to orebodies being estimated with minimal low grade samples effecting the estimation within the domain. Likewise PS5_LG is expected to be a low grade domain, and it shows the samples captured as part of this low grade domain exhibit similar grades to the surrounding samples outside the domain (Figure 45). The samples and the resulting estimate are shown in Figure 46.

Figure 44: Samples Relative to the PS5_HG Domain

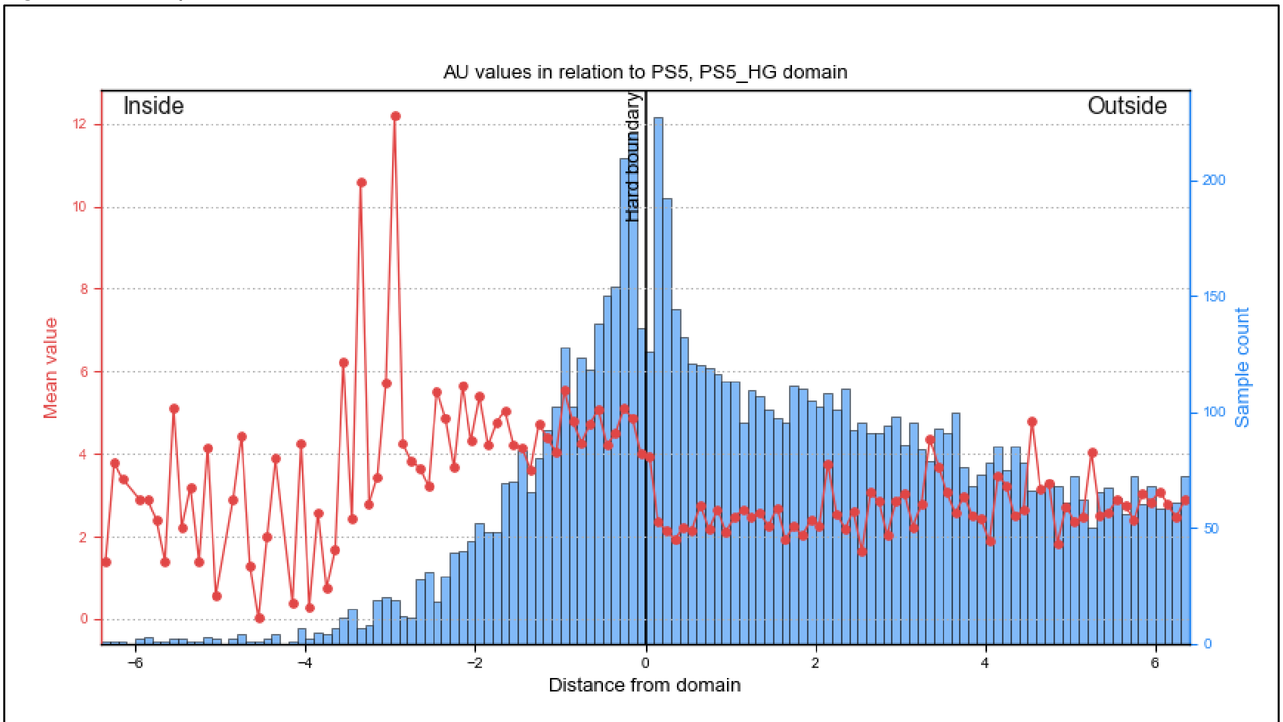


Figure 45: Samples Relative to the PS5_LG Domain

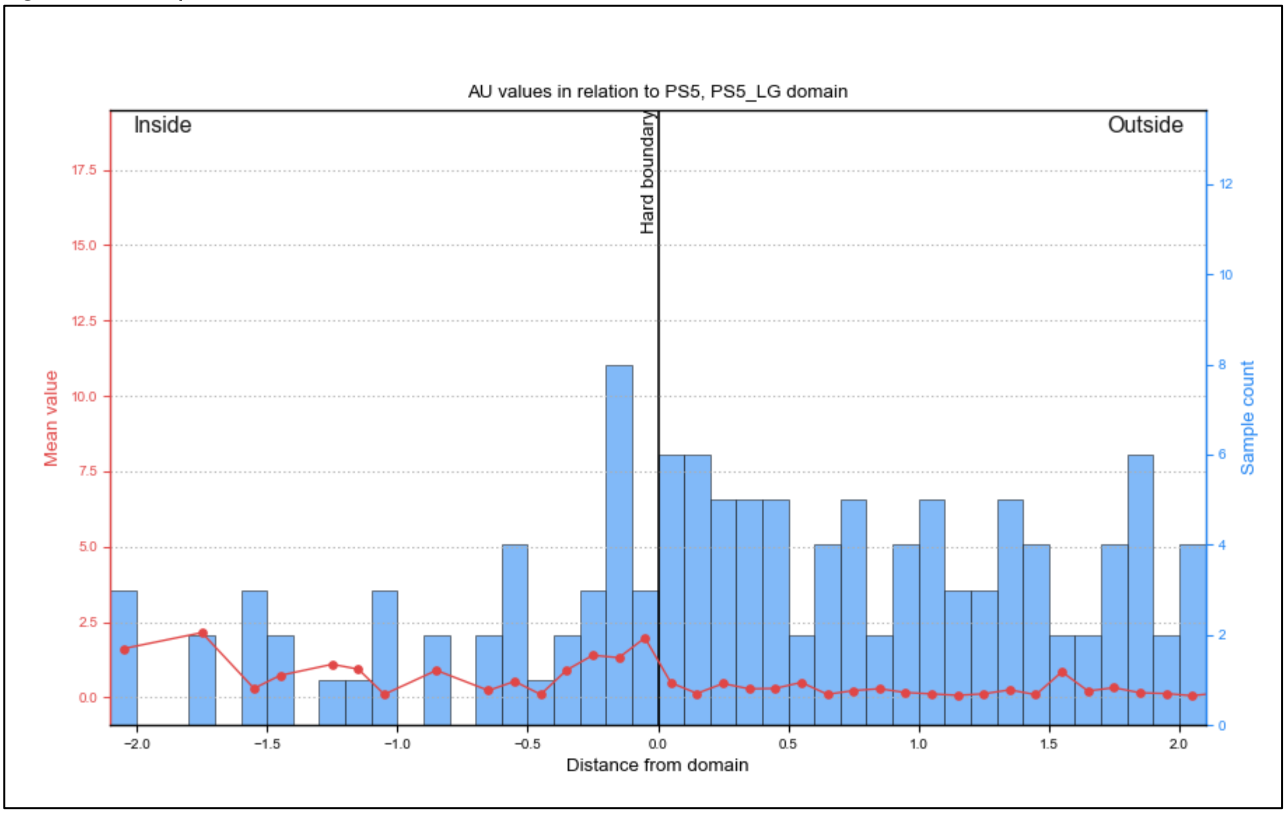
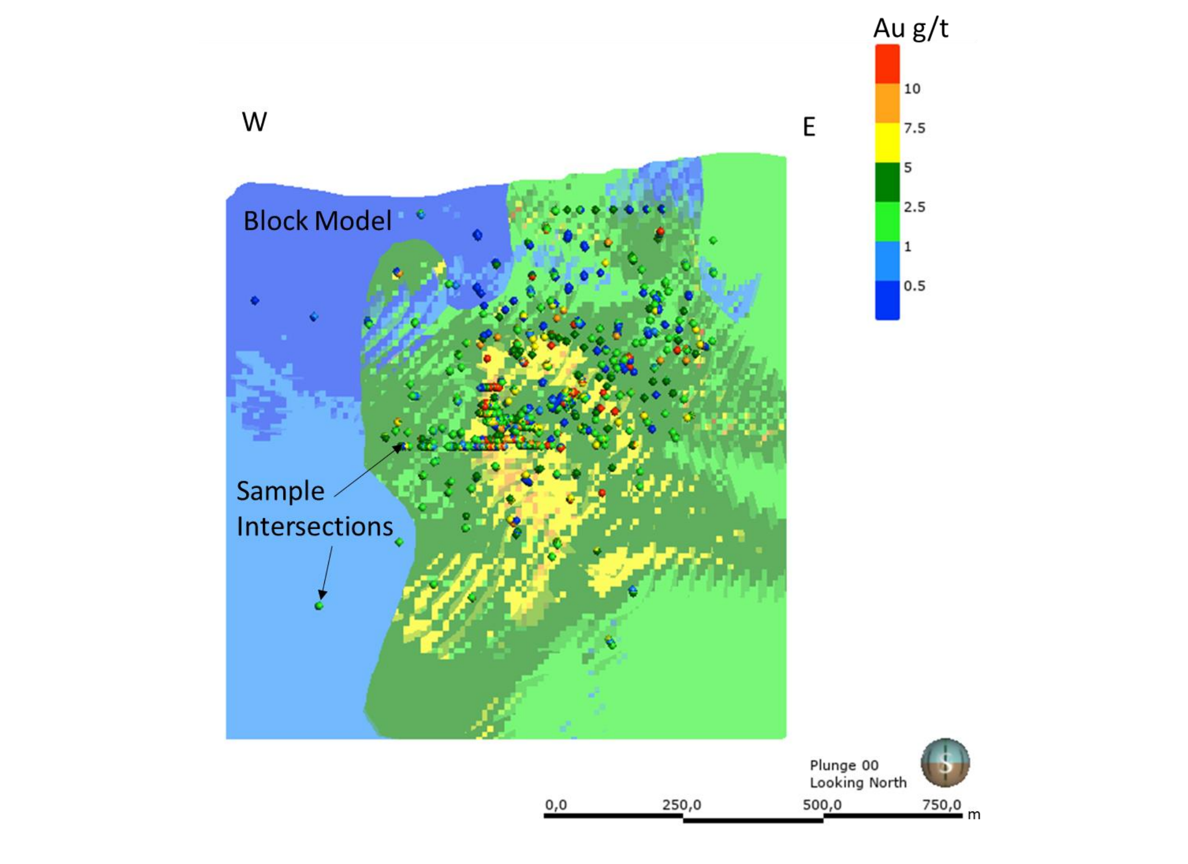


Figure 46: Section View of PS5 Samples vs. the PS5 Estimate, both Coloured on Grade



Section View of PS5 Samples vs. the PS5 Estimate, , both Coloured on Grade	June 2020

The PS12 domain relative to the informing samples are shown in Figure 47. The samples appear higher grade outside the domain, as PS12 is sandwiched between PS5, and PS19 and this shows the samples falling into these other two orebodies. The estimate versus data is shown in Figure 48.

Figure 47: Samples Relative to the PS12 Domain

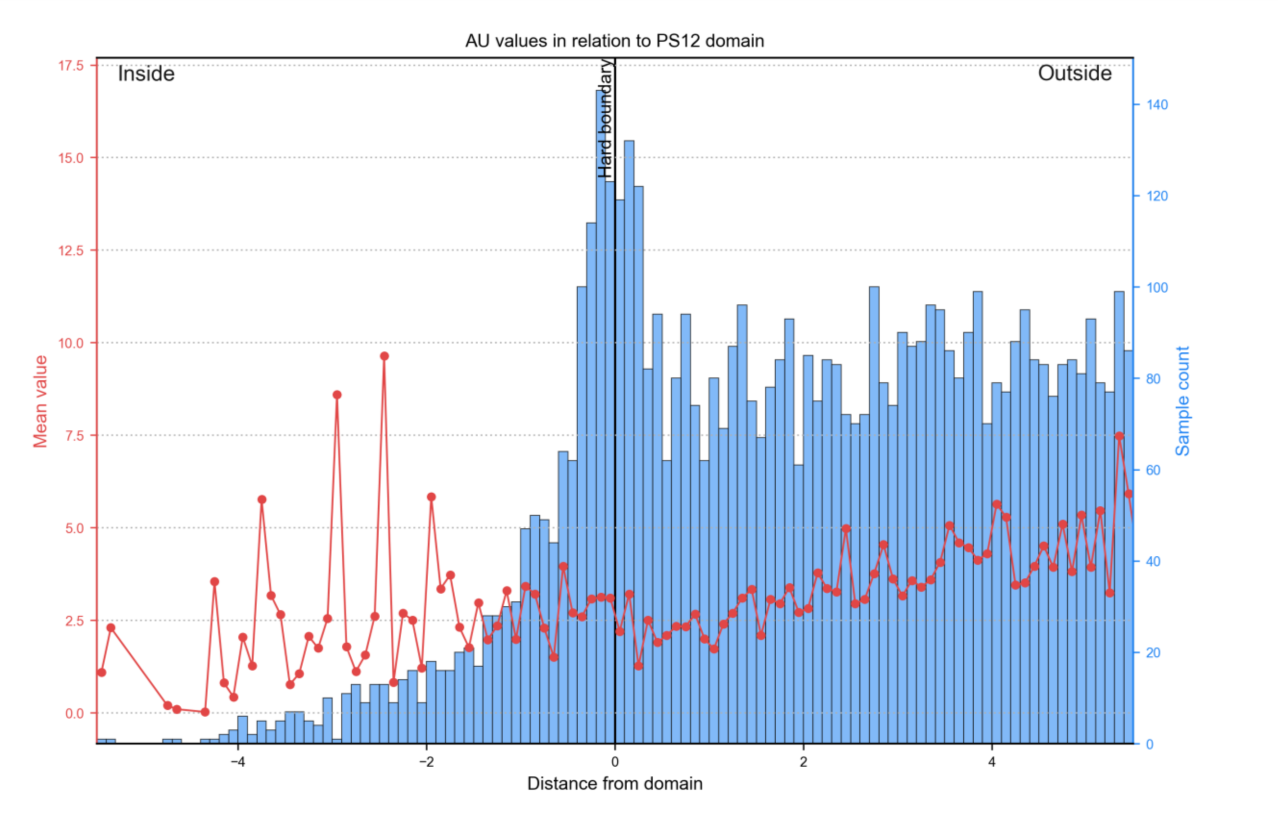
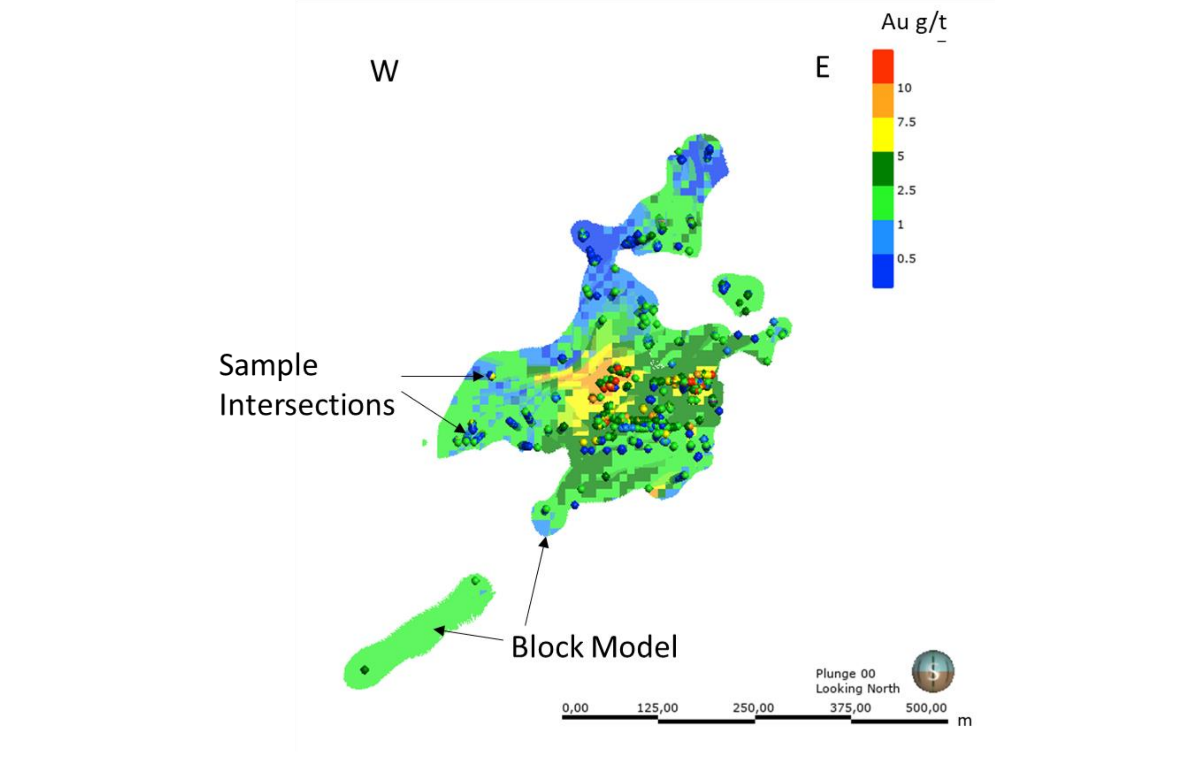


Figure 48: Section View of the PS12 Samples vs. the PS12 Estimate, both Coloured on Grade



Section View of the PS12 Samples vs. the PS12 Estimate, both Coloured on Grade | **June 2020**

For the PS19 estimate a distinct decrease in grade is shown from within the domain to outside the domain (Figure 49). The samples versus the estimate are shown in Figure 50.

Figure 49: Samples Relative to the PS19 Domain

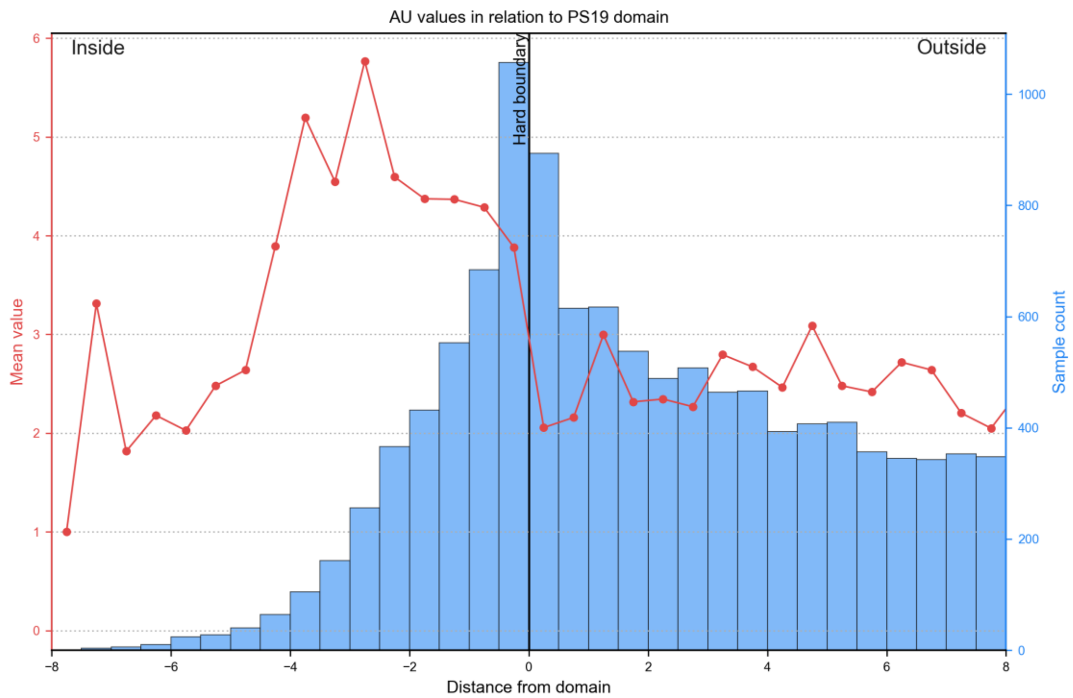
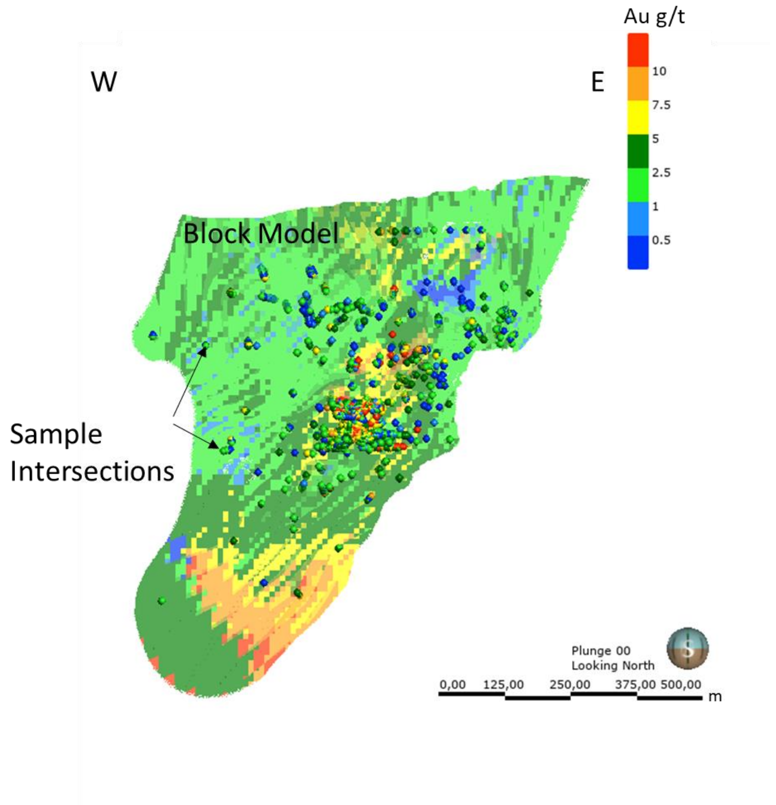


Figure 50: Section View of the PS19 Samples vs. the PS19 Estimate, both Coloured on Grade



Section View of the PS19 Samples vs. the PS19 Estimate, both Coloured on Grade	June 2020

For the Galaxy estimation the samples relative to the domain boundaries are shown in Figure 51. The high-grade samples are successfully captured by the domains, showing a steep drop off in grades moving out of the domain. The Galaxy estimate and samples utilised are shown in Figure 52.

Figure 51: Samples Relative to the Total Galaxy Orebody

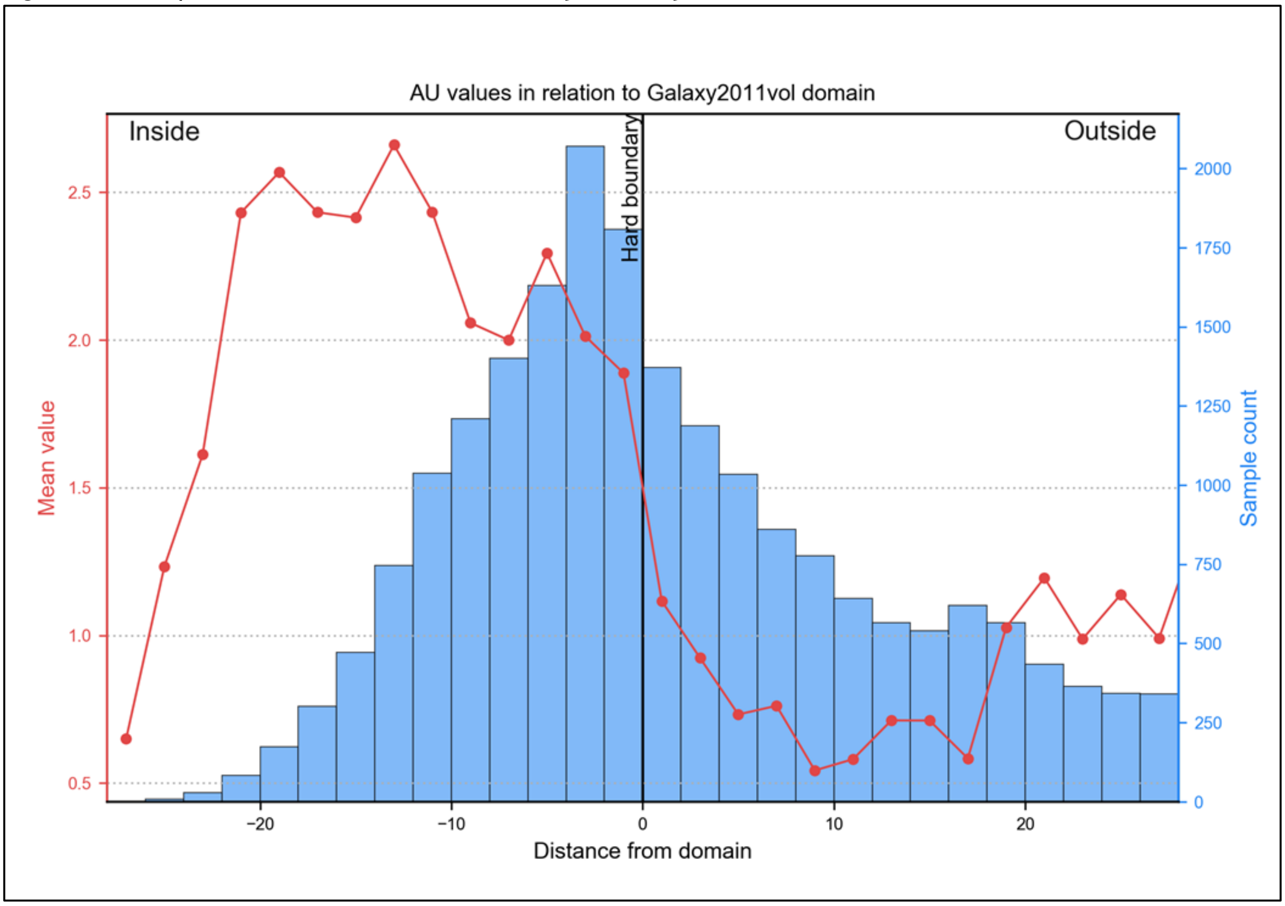
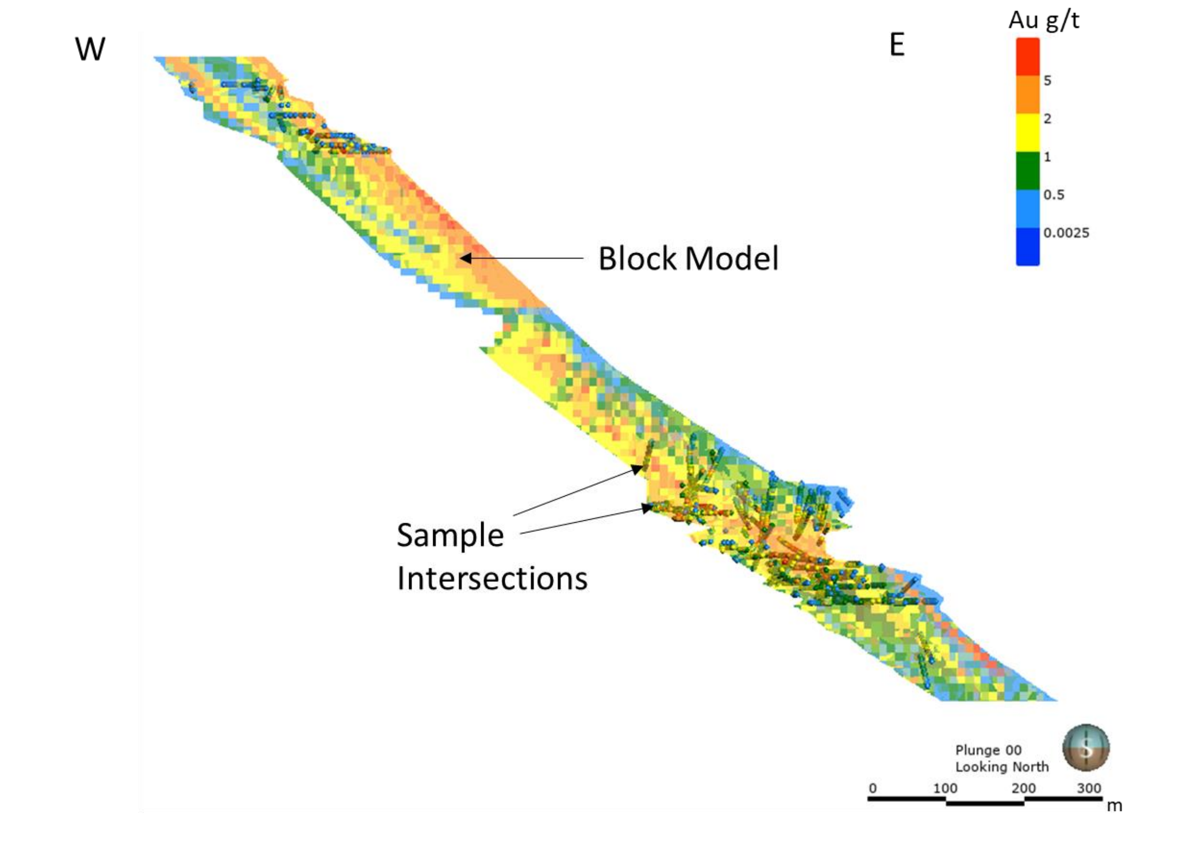


Figure 52: Section View of Galaxy Samples vs. the Galaxy Estimate, both Coloured on Grade



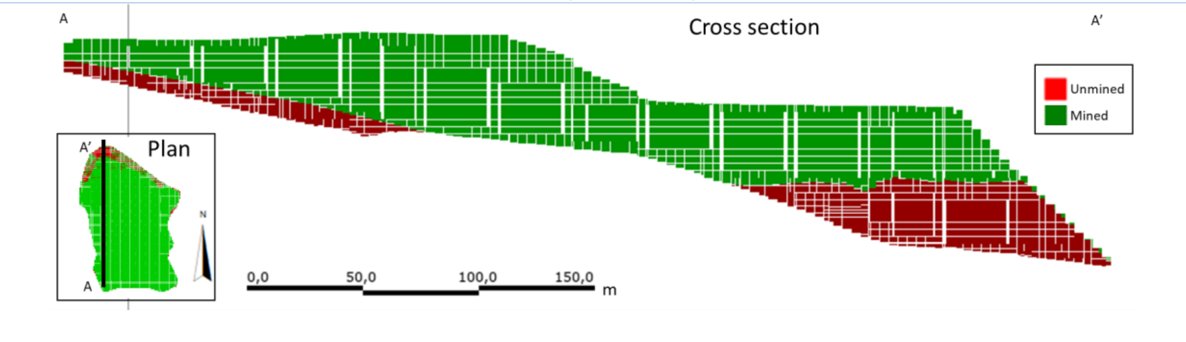
Section View of Galaxy Samples vs. the Galaxy Estimate, both Coloured on Grade | **June 2020**

XI. Digital Model Depletions

As part of the 2015 Report, the various depletions applied to underground and surface block model was reassessed. In some instances, it was found that the depletions were not correctly sub-celled to the required resolution, thus as part of the work in 2015 the sub-celling was optimised to obtain sufficient detail.

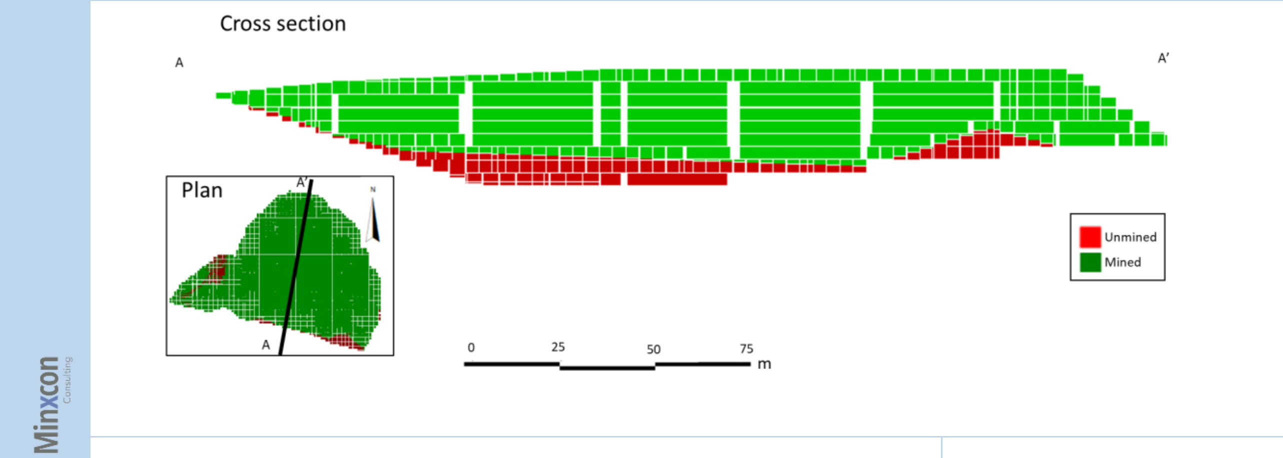
In 2020, due to recent surface mining of the TSFs, updated depletions of these TSFs were supplied. These were for Woodbine South (Figure 53), Woodbine West (Figure 54) and Hostel West (Figure 55). All other orebodies and TSFs remain unchanged from 2015.

Figure 53: Cross Section of Woodbine South TSF with Updated Depletions as of 8 June 2020



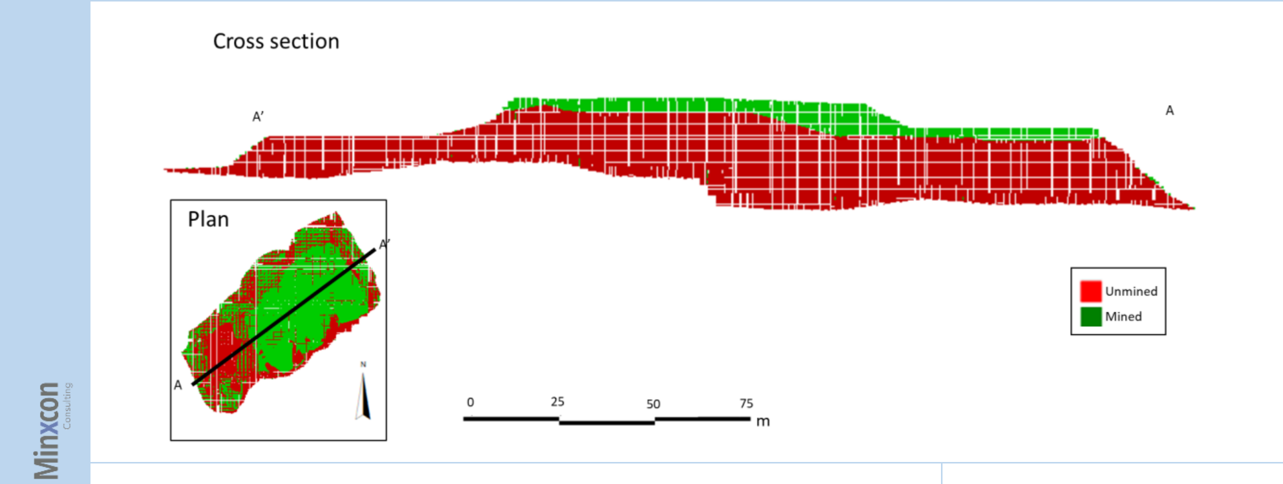
Cross Section of Woodbine South with Updated Depletions as of 8 June 2020 | **June 2020**

Figure 54: Cross Section of Woodbine West TSF with Updated Depletions as of 8 June 2020



Cross Section of Woodbine West with Updated Depletions as of 8 June 2020	**June 2020**

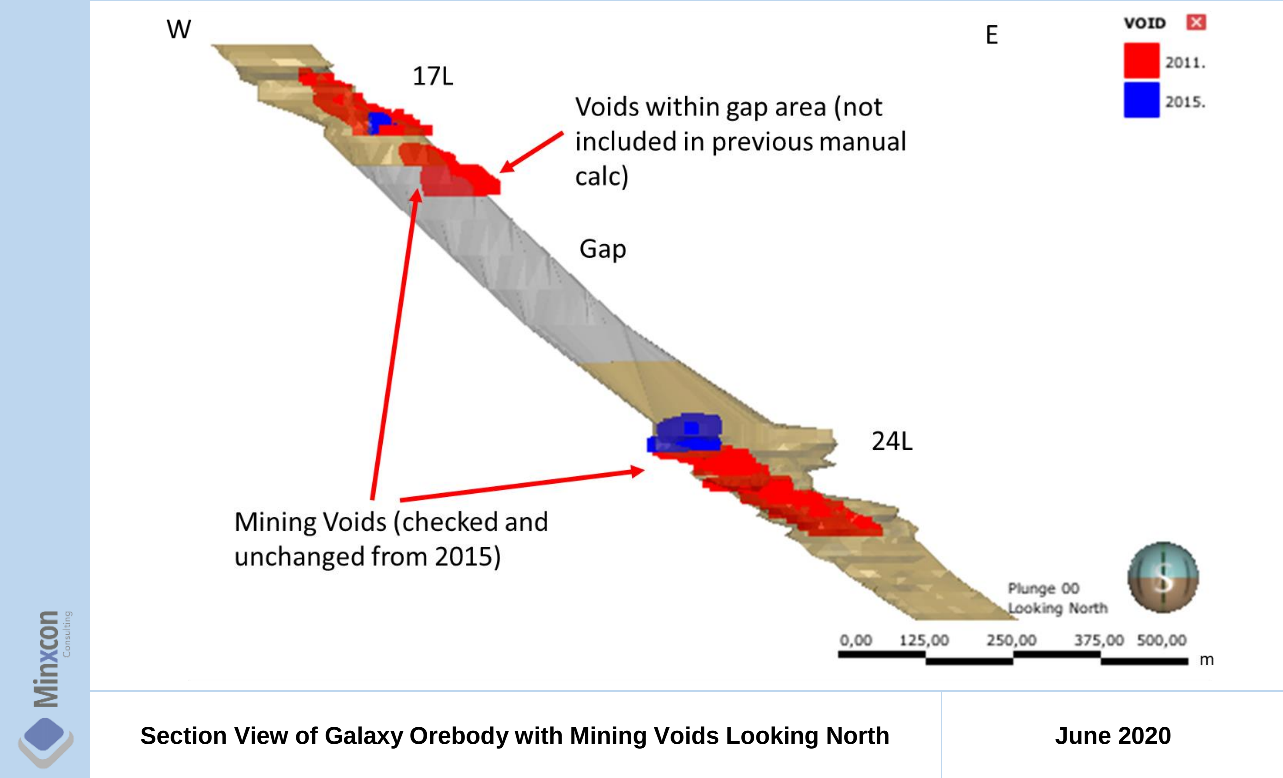
Figure 55: Cross Section of Hostel West TSF with Updated Depletions as of 8 June 2020



Cross Section of Hostel West with Updated Depletions as of 8 June 2020	**June 2020**

The available 3D mining voids for Galaxy and Princeton were applied. The depletions applied for Galaxy is shown in Figure 56. It must be noted that some deletions extend into the Galaxy gap area, due to this being a manual estimate only in 2011 and 2015, it is likely that the depletions in this reporting area were previously not considered.

Figure 56: Section View of Galaxy Orebody with Mining Voids Looking North



XII. Estimation Verification and Plots

Swath plots were generated for Princeton and Galaxy that show the average of the samples versus the average of the estimate within the same perimeter. This is repeated in X, Y and Z to get a representative view of the correlation in all orientation of the orebody. An IDW estimate was also compared to show the effect kriging and spatial variability may have had. In all instances, the IDW and OK estimates compare very well. The swath plots are presented in Appendix 1.

The PS5_HG estimate adequately reflects the data available, the correlation between data and estimates are improved by separating HG and LG domains. There are minimal samples for PS5_LG, however the estimate adequately reflects the data available. The greater variance is towards the edges of the estimate where one sample accounts for a larger area, to depth a different sample informing a different area will result in some variance in the correlation. The PS5_LG domain is predominantly inferred due to the large distance between samples, so these areas with poor correlation would typically be classified as Inferred or Exploration Target.

The swath plots for PS12 show a slight over estimation to west, however this is in the lower tonnage range with few samples. Y swaths are along strike and are very smoothed. Swaths in Z are more representative of the actual result where there is denser sample density, the estimate is more smoothed where there is sparse data.

For the PS19 estimate, in X and Y, there is smoothing to the edges of the estimate where there are few samples and greater variability between the block model average in a swath that is informed by very few samples. The swath orientation can capture great variability (from surface to downdip in one swath). In Z, the variability can be captured a lot better, with smoothed results from using kriging.

The swaths plots for Galaxy show the best correlation with data in the Z orientation, as is expected due to the variability with depth. The swaths in X and Y does appear to show some under estimation relative to the data, with overestimation to the edges of the block model where less data is available. However, the Z does confirm this estimation shows a good correlation with data with depth. The two different populations show 17 Level on the left and 24 Level on the right.

XIII. MINERAL RESOURCE CLASSIFICATION CRITERIA

For the Mine, classification of Mineral Resources, variogram ranges and kriging efficiency were used to define Mineral Resource Classification.

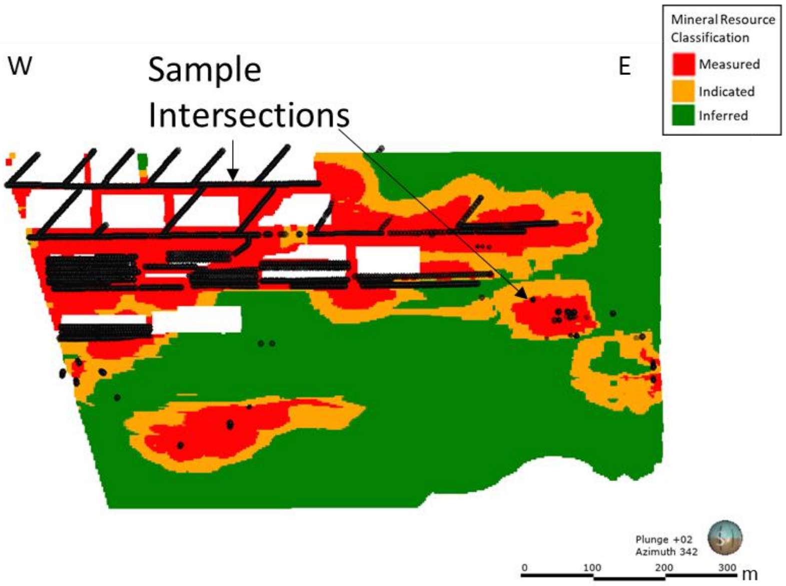
For all Mineral Resources declared by Deswik in 2011, Mineral Resources can be classified as Measured where it is within variogram range and a kriging efficiency greater than 75%. It can be classified as Indicated if it is within 1.5 variogram ranges and with kriging efficiency greater than 50%. It can be classified as Inferred where it is less than 50% kriging efficiency and within three variogram ranges.

Minxcon agrees with the classification criteria applied and that it is appropriate for the data that is currently available. Minxcon recommended in the 2015 document that Resource classification should be readdressed to improve the connectivity of the categories. Part of this improvement would be manual smoothing to exclude outliers of Inferred that may occur within a Measured area and vice versa.

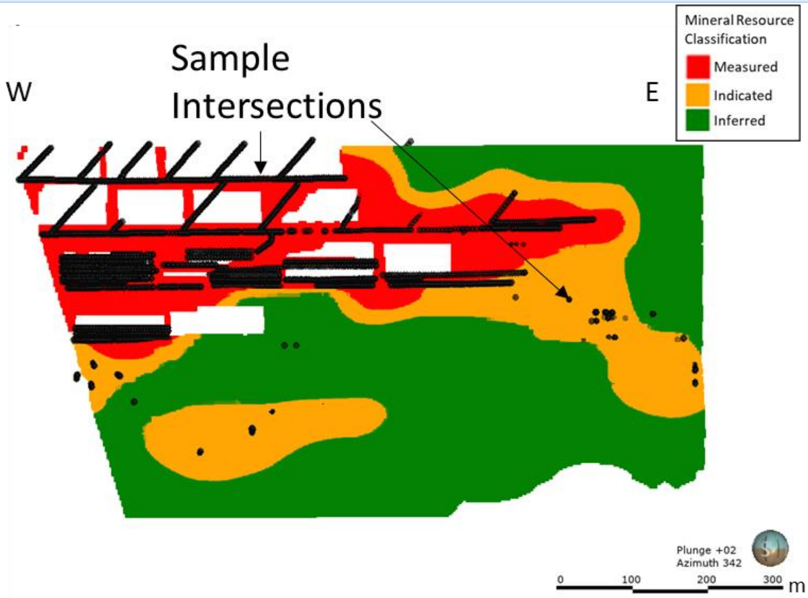
As part of the detailed review of Giles (Figure 57) and Woodbine (Figure 58), this optimisation of resource categorisation was performed. While at Princeton and Galaxy the same methodology was applied upfront in the Mineral Resource classification process.

Figure 57: Section View of Giles Mineral Resource Classification Update

2011 Classification



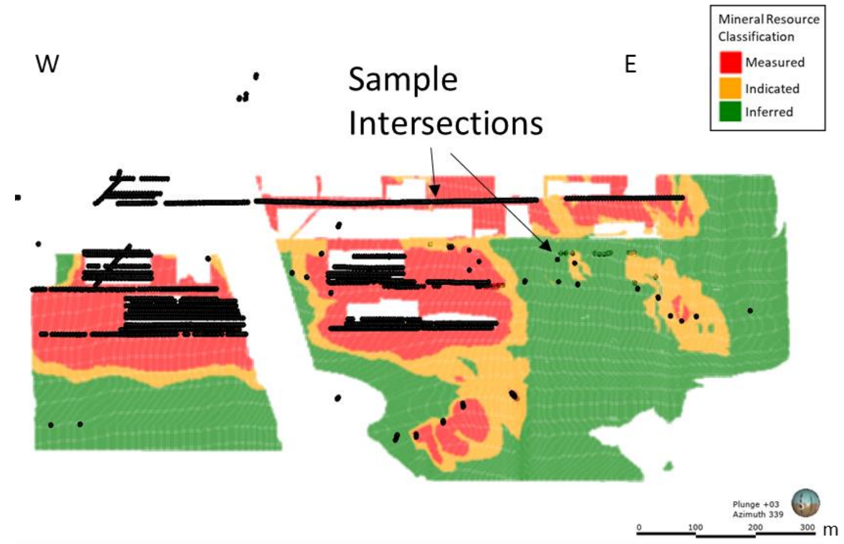
2020 Classification



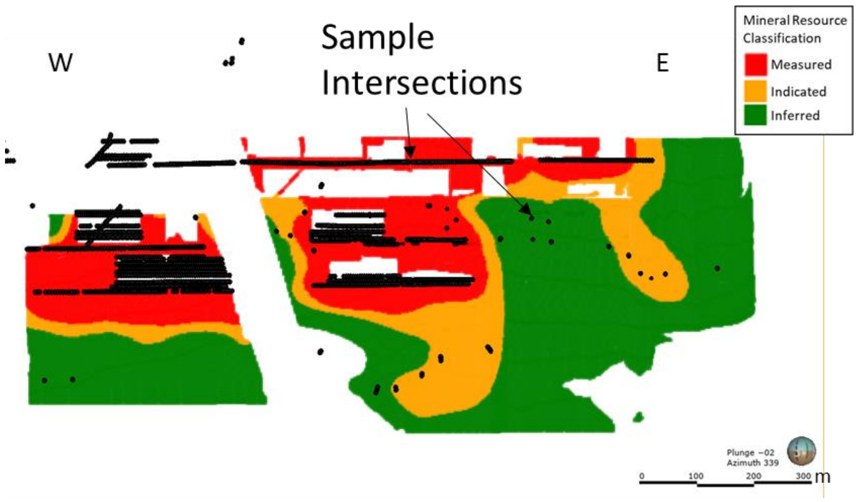
Section View of Giles Mineral Resource Classification Update	June 2020

Figure 58: Section View of Woodbine Mineral Resource Classification Update

2011 Classification



2020 Classification



Section View of Woodbine Mineral Resource Classification Update | **June 2020**

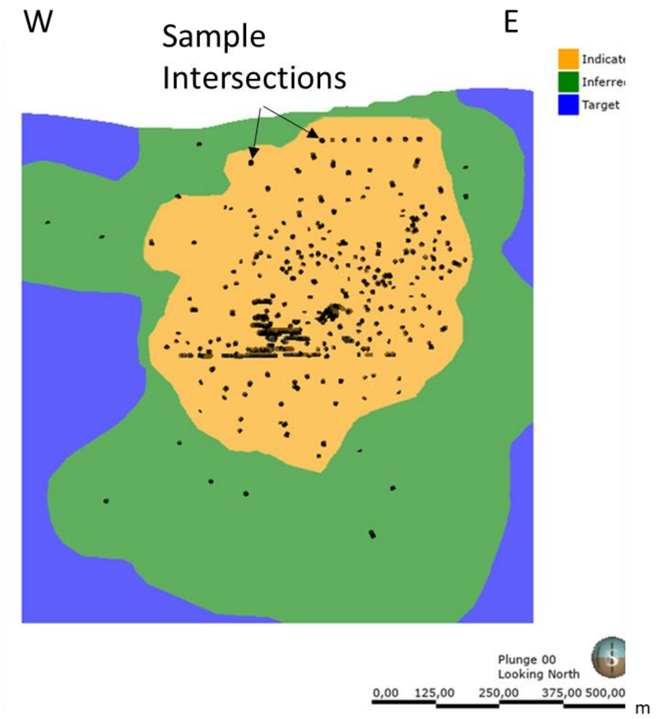
For Princeton and Galaxy, a comparable classification criterion was employed, with the addition of minimum number of drillholes (Table 31), which was not included in the previous classification criterion. This is typically what allowed the isolated Measured blocks that were informed by only one drillhole. This was part of what was addressed in the optimization of the previous classification. As part of the 2020 Princeton and Galaxy classification, minimum number of samples was included, to ensure only well-informed areas were included. An additional output, the MinDist output from Leapfrog (minimum distance) was included. This indicates the Minimum distance to the nearest sample for a block, which is an omnidirectional indication of the sample spacing and helps delineate better informed areas. Due to the lack of QAQC detail for the Princeton orebody, the Princeton Mineral Resources are classified as Indicated Mineral Resources and Inferred Mineral Resources only.

Table 31: Mineral Resource Classification Criterion Utilised at Princeton

Mineral Resource Classification	Variogram Range	Minimum number of Drillholes	Minimum Samples (PS5, PS12, PS19)	MinDist (PS5, PS12, PS19)
Indicated	≤1.5	2	≥40; ≥40; ≥20	≤45; ≤30; ≤40
Inferred	≤2	1	≥6	

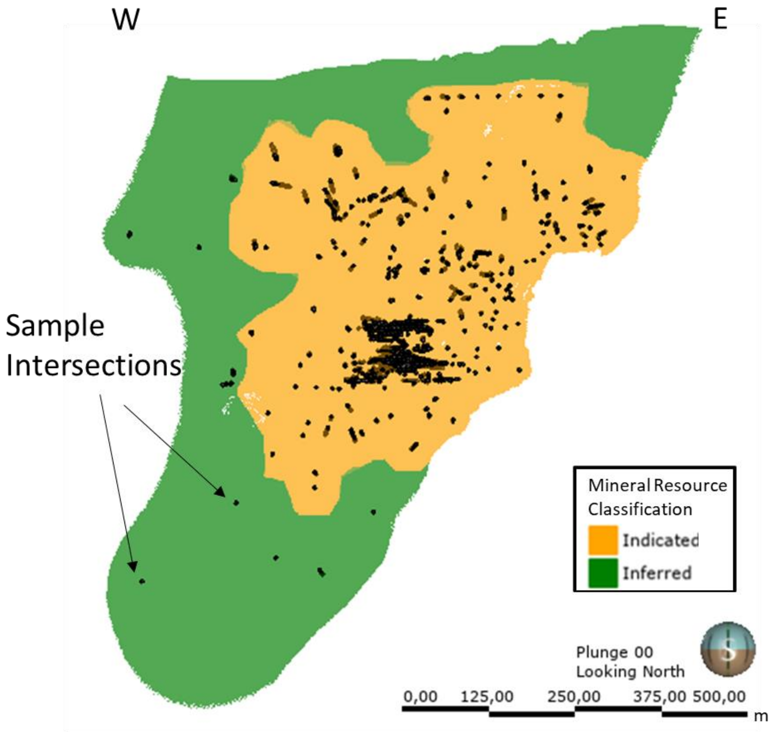
The classification for PS5 is shown in Figure 59, PS12 in Figure 60 and PS19 in Figure 61.

Figure 59: Section View of Princeton PS5 Mineral Resource Classification



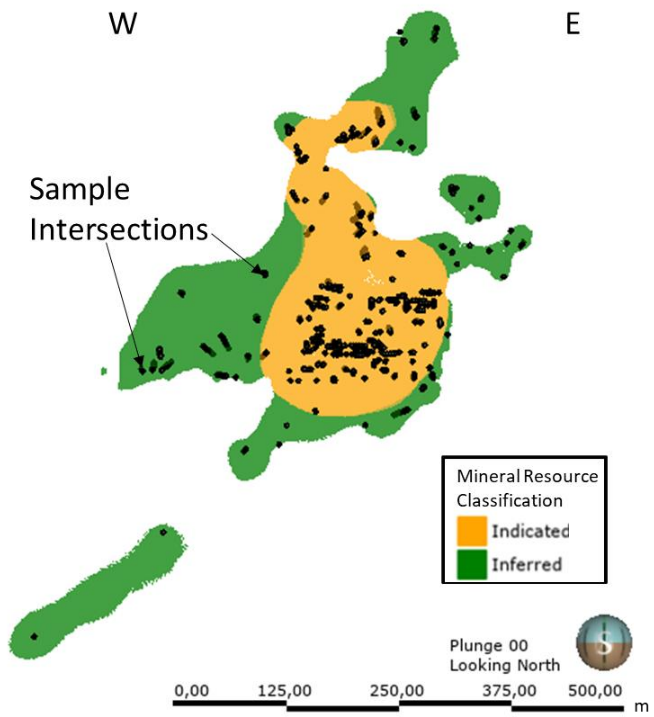
Section View of Princeton PS5 Mineral Resource Classification | **June 2020**

Figure 60: Section View of Princeton PS19 Mineral Resource Classification



Section View of Princeton PS19 Mineral Resource Classification	June 2020

Figure 61: Section View of Princeton PS12 Mineral Resource Classification



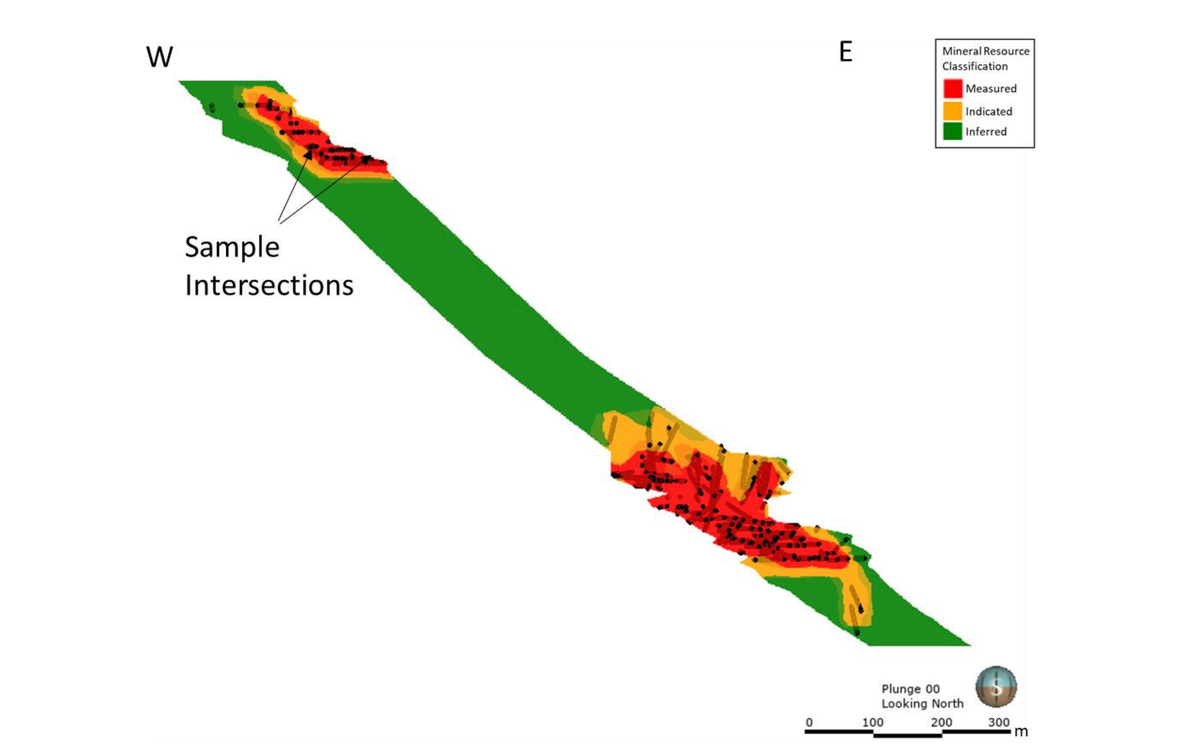
Section View of Princeton PS12 Mineral Resource Classification	June 2020

For the Galaxy Orebody, the classification criteria employed is shown in Table 32. Minimum distance to samples as well as average distance to samples were employed as a representative way of showing sample density and distance to samples. The average distance criterion is an omnidirectional measurement of the average distance to samples to assist in delineating areas of high data density. The applied classification is shown in Figure 62. As with Princeton, this was smoothed to show more realistic boundaries.

Table 32: Mineral Resource Classification Criteria Employed at the Galaxy Orebody

Mineral Resource Classification	Variogram Range	Minimum Number of Drillholes	Minimum Samples	MinDist	Average Distance
Measured	≤1	2	≥30		≤30
Indicated	≤1.5	2	≥30	≤30	
Inferred	≤2	2			

Figure 62: Section View of Mineral Resource Classification for Galaxy



Section View of Mineral Resource Classification for Galaxy	June 2020

Item 14 (b) – Disclosure Requirements for Resources

All Mineral Resources have been categorised and reported in accordance with the definitions embodied in compliance with the definitions embodied in the "CIM Definition Standards for Mineral Resources and Mineral Reserves" (10 May 2014) (incorporated into NI 43-101). As per CIM standards, Mineral Resources have been reported separately in the Measured Mineral Resource, Indicated Mineral Resource and Inferred Mineral Resource categories. Inferred Mineral Resources have been reported separately and have not been incorporated with the Measured Mineral Resources and Indicated Mineral Resources.

Item 14 (c) – Individual Grade of Metals

Mineral Resources for gold have been estimated for the Galaxy Gold Mine. 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 the Galaxy Gold Mine. 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 Resource estimates.

All underground Mineral Resources were stated at a cut-off grade 1.4 g/t. The open pit Mineral Resources (Agnes Top) were stated at a cut-off grade of 1.0 g/t, while the dumps were all stated at a cut-off grade of 0.3 g/t.

I. Derivation of Mineral Resource Cut-off Grades

The cut-offs are tabulated in Table 33 below.

Table 33: Mining Cut-offs

	Galaxy, Woodbine, Giles, Golden Hill, Pioneer-Tiger Trap, Ivy and Ceska Shaft Pillar and Princeton Orebodies	Agnes Top	All Dumps
Cut-off (g/t)	1.4	1.0	0.3

Economic, metallurgical and mining parameters were used to derive the cut-offs. The parameters are tabulated in Table 34. The gold price used is the 90th percentile of the real term gold price since 1980, while the total operating cost is the cost utilised in the PEA, reduced by 10%, for potential realistic operational improvements. One cut-off grade has been applied to the Mineral Resource which utilises the average costs (mining and processing) and dilution of the planned operations in the PEA of Woodbine, Giles, Galaxy and Princeton.

Table 34: Cut-off Derivation Factors

Parameter	Unit	Quantity
Exchange rate	ZAR/USD	15.00
Metal price	ZAR/kg	771,618
Metal price	USD/oz	1,600
Total operating cost	ZAR/t	717.1
Dilution	%	12.1
Plant recovery factor	%	81
Mine call factor	%	92

II. Detailed Mineral Resource Tabulation

The Mineral Resources declared for the Mine are shown in Table 35.

Table 35: Mineral Resources for Galaxy Gold Mine Operations as at 29 June 2020

Orebody	SG	Mineral Resource Category											
		Measured			Indicated			Measured & Indicated Sub-total			Inferred		
		Tonnes	Gold Grade	Gold Content	Tonnes	Gold Grade	Gold Content	Tonnes	Gold Grade	Gold Content	Tonnes	Gold Grade	Gold Content
	t/m3	t	g/t	oz	t	g/t	oz	t	g/t	oz	t	g/t	oz
Galaxy Surface to Dyke**	2.73	-	-	-	-	-	-	-	-	-	291,000	3.19	29,845
Galaxy 17 Level Up	2.73	302,233	3.01	29,248	79,825	2.86	7,335	382,058	2.98	36,583	258,111	2.78	23,045
Galaxy Gap 17-24 Level	2.73	-	-	-	-	-	-	-	-	-	1,311,320	2.84	119,825
Galaxy 24 Level Down	2.73	1,867,951	2.67	160,413	750,215	2.37	57,245	2,618,166	2.59	217,657	522,609	2.61	43,908
Total Galaxy	2.73	**2,170,183**	**2.72**	**189,661**	**830,040**	**2.42**	**64,580**	**3,000,224**	**2.64**	**254,241**	**2,383,040**	**2.83**	**216,623**
Woodbine W & E Surface - 22 Level*	2.73	-	-	-	110,501	4.61	16,392	110,501	4.61	16,392	306,432	2.95	29,025
Woodbine 24 Level Down	2.73	344,856	3.57	39,580	277,372	3.04	27,099	622,228	3.33	66,679	768,832	3.34	82,660
Total Woodbine	2.73	344,856	3.57	39,580	**387,873**	**3.49**	**43,491**	**732,729**	**3.53**	**83,070**	**1,075,264**	**3.23**	**111,686**
Giles Surface - 23 Level*	2.73	-	-	-	263,558	4.15	35,149	263,558	4.15	35,149	271,260	3.65	31,820
Giles 23 Level Down	2.73	283,142	4.59	41,827	369,151	3.30	39,213	652,293	3.86	81,040	840,979	3.80	102,676
Total Giles	2.73	283,142	4.59	41,827	**632,708**	**3.66**	**74,363**	**915,850**	**3.95**	**116,189**	**1,112,239**	**3.76**	**134,496**
Princeton PS5	3.08	-	-	-	1,927,049	3.67	227,143	1,927,049	3.67	227,143	3,141,476	3.25	328,444
Princeton PS12	3.08	-	-	-	56,781	3.30	6,027	56,781	3.30	6,027	135,747	2.50	10,922
Princeton PS19	3.08	-	-	-	1,689,283	2.82	153,218	1,689,283	2.82	153,218	1,187,869	4.29	163,709
Total Princeton	3.08	-	-	-	**3,673,113**	**3.27**	**386,388**	**3,673,113**	**3.27**	**386,388**	**4,465,092**	**3.50**	**503,074**
Golden Hill	3.03	410,393	2.66	35,054	564,454	2.71	49,181	974,847	2.69	84,235	217,179	3.36	23,429
Agnes Top	2.80	-	-	-	561	2.07	37	561	2.07	37	870,632	1.75	49,016
Pioneer & Tiger-Trap	2.73	-	-	-	-	-	-	-	-	-	5,949,307	1.55	296,823
Ivy Shaft Pillar*	2.78	-	-	-	-	-	-	-	-	-	47,125	10.18	15,427
Ivy to Agnes 3-11 Level*	2.78	-	-	-	-	-	-	-	-	-	45,498	5.71	8,349
Ceska Shaft Pillar*	2.78	-	-	-	-	-	-	-	-	-	113,534	9.58	34,987
Woodbine South Dump	1.12	-	-	-	13,129	1.55	656	13,129	1.55	656	19,217	1.47	906
Woodbine West Dump	1.17	-	-	-	714	0.72	16	714	0.72	16	5,749	0.69	127
Woodbine W.West Dump	1.17	-	-	-	13,136	0.50	209	13,136	0.50	209	25,057	0.51	410
Hostel East Dump	1.41	-	-	-	958,401	0.76	23,562	958,401	0.76	23,562	164,506	0.68	3,581
Hostel West Dump	1.41	-	-	-	430,880	0.88	12,220	430,880	0.88	12,220	98,985	0.87	2,763
Biox North Dump	1.38	-	-	-	189,340	1.66	10,080	189,340	1.66	10,080	141,993	1.77	8,069
Grand Total		**3,208,575**	**2.97**	**306,122**	**7,694,349**	**2.69**	**664,783**	**10,902,925**	**2.77**	**970,904**	**16,734,418**	**2.62**	**1,409,764**

Notes:

1. * Manual Mineral Resource estimate from block plans.
2. ** Mineral Resources estimated from adjacent modelled areas for grade distribution; Orebody volume estimated from digital wireframe.
3. Cut-off applied for Surface TSFs: 0.3 g/t.
4. Cut-off applied for Underground Operations: 1.4 g/t.
5. Cut-off applied for Open Pit (Agnes Top): 1.0 g/t.
6. No geological losses have been applied.
7. Commodity price utilised: USD1,600/oz.
8. Mineral Resources are stated inclusive of Mineral Reserves.
9. Mineral Resources are reported as total Mineral Resources and are not attributed.
10. All orebodies are depleted for current mining.

As part of this Mineral Resource reporting, no geological loss was applied. This is done to be in line with the current reporting procedures performed by the Mine. However, Minxcon does recommend as part of continuous improvement, a geological loss is applied per Mineral Resource Category to reflect the relative confidence in each category.

III. Reconciliation to 2015 Mineral Resource

The largest changes from 2015 to 2020 are seen in the Princeton and Galaxy estimates. While the remainder of the orebodies have changes to classification only, and for some TSFs, a change in tonnages reported due to depletion from mining activities.

The changes to the Princeton geological model from the previous versions are significant as detailed in Table 13. The change in volume also results in new samples being included in the estimate, which the previous smaller volumes did not include. In addition, many new samples were captured to include in the 2020 estimate, which would result in a significant change the resulting estimation. From this change in samples alone, it is expected that there will be a significant change in the 2020 estimate compared to the previously reported estimation for Princeton in 2015.

A reconciliation was done comparing the 2011 samples within the 2011 geological model to the 2020 samples that occur within the same 2011 geological model (Table 36). This clipping was also performed on the block model to see the change over a comparable area (Table 37).

Table 36: Samples from the 2011 Estimate Compared to Samples from the 2020 Estimate

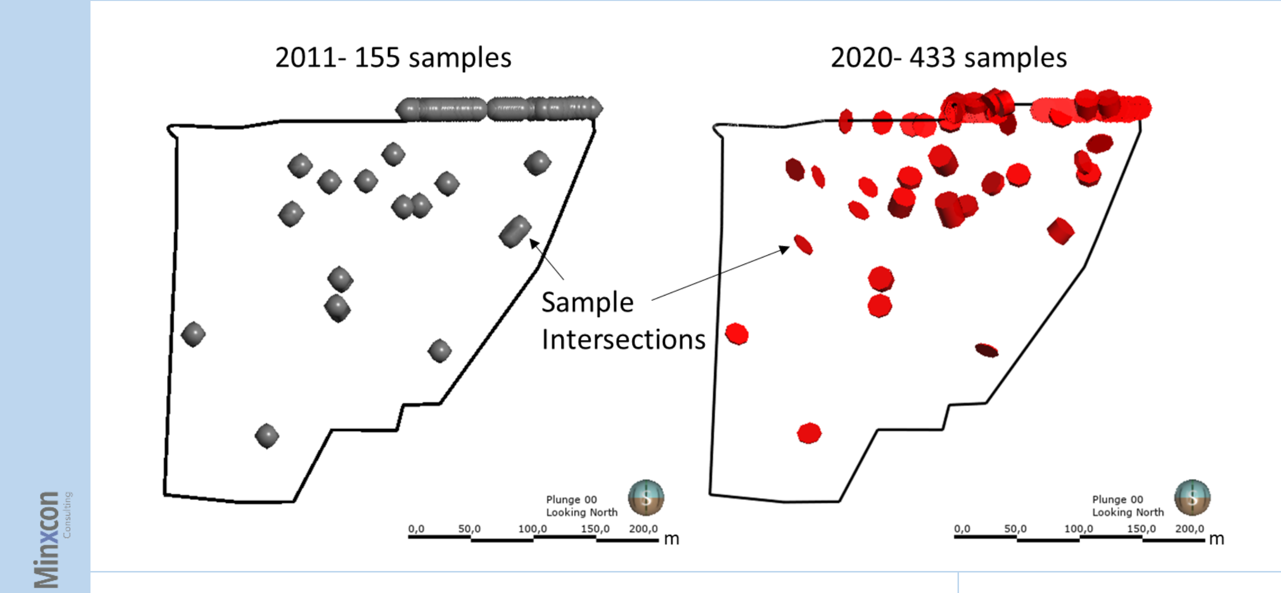
Orebody	Samples 2011		Samples Clipped 2020		Samples Total 2020		Sample Difference Total 2020 vs 2011	
	Count	Average	Count	Average	Count	Average	Count	Average
PS5	1,228	3.62	1,148	3.68	2,913	3.89	1,685	7%
PS19	155	3.16	433	3.63	4,115	4.06	3,960	22%

Notes:

1. Samples 2020 refers to the total estimation database for 2020.
2. Samples clipped 2020 refers to the 2020 samples clipped to the 2011 geological model extents.

A significant change in samples is seen PS19 just in the samples used in the estimate clipped to the 2011 volume, this is displayed visually in Figure 63. This change is due to additional samples that were added to the estimation database as well as new samples excluded or included because of remodelling the geological model.

Figure 63: Section View of 2011 Samples used in the PS19 Estimate and 2020 Samples Clipped to the 2011 Volume



Section View of 2011 Samples used in the PS19 Estimate and 2020 Samples Clipped to the 2011 Volume | **June 2020**

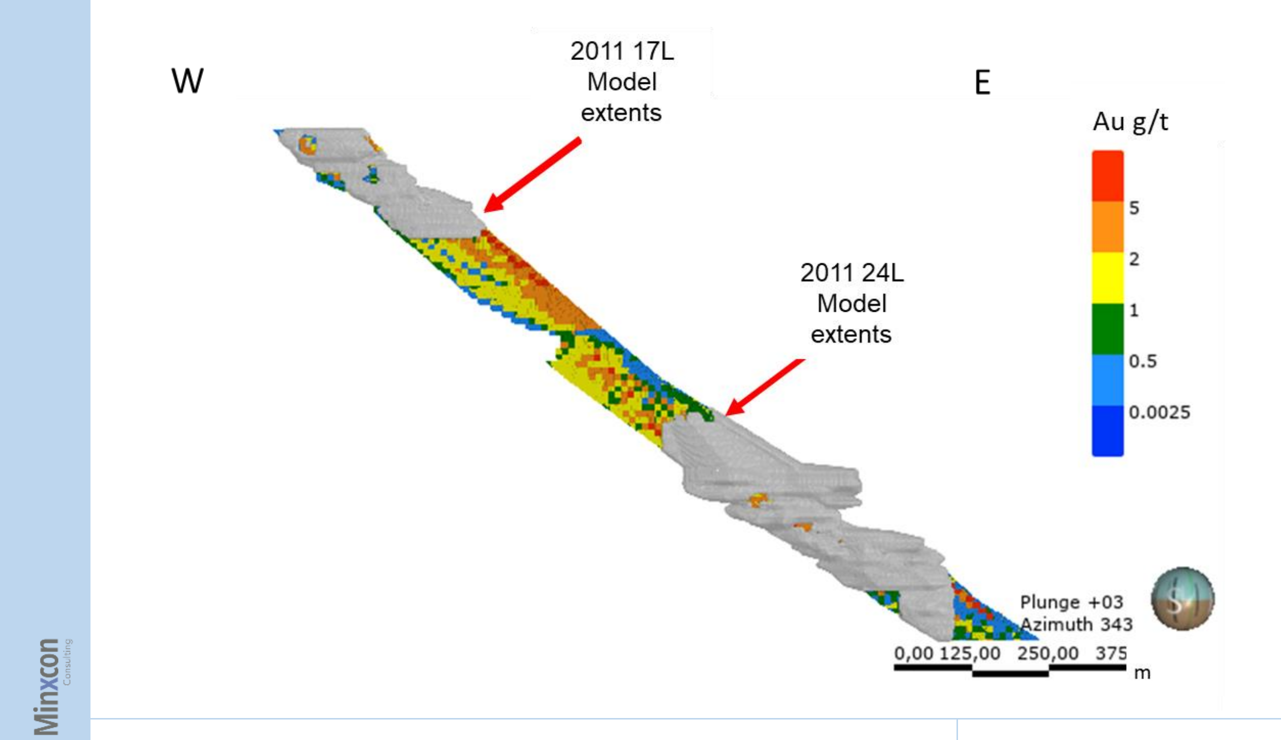
Table 37: Block Models from the 2011 Estimate Compared to the 2020 Block Model

Orebody	Block Model 2011	Block Model Clipped 2020	Block Model Total 2020	Block Model Difference Total 2020 vs 2011
	Average	Average	Average	Average
PS5	5.64	3.97	3.62	-56%
PS19	4.67	4.29	3.86	-21%

When comparing the samples from 2020 to the resulting block model from 2020 within the 2011 volume, the sample and estimate compares very well. Likewise, the total block model versus total sample database compares very well. Although averages do not represent the spatial variability of estimates accurately, it does appear that the 2011 estimates for PS5 and PS19 are overestimating relative to the available dataset. The significant change in number of samples used in each estimate must be noted (almost 4,000 more samples for PS19, and 1,700 for PS5). This significant change in samples would result in a large difference in what is estimated, even when comparing the same area (Table 37).

The comparison of the 2011 estimate is shown compared to the 2020 estimate in Figure 64. The major change in the estimate is the increase in variogram ranges and the introduction of a minimum of two drillholes in estimation. This allowed estimation into the previously un-estimated gap area. In addition, numerous smaller areas within the 17 Level and 24 Level models were filled in by the improved search ranges (Figure 65 and Figure 66). An additional approach to allow estimation into the gap area, was making use of 3X the variogram range for an Inferred estimate. Only the furthest extents of the gap area are estimated by this. During the course of the re-estimation, a smaller sub-cell size was also utilised in filling the block models (1 m x 1 m x 1 m), this had the additional effect of adding volume to the 24 Level and 17 Level areas.

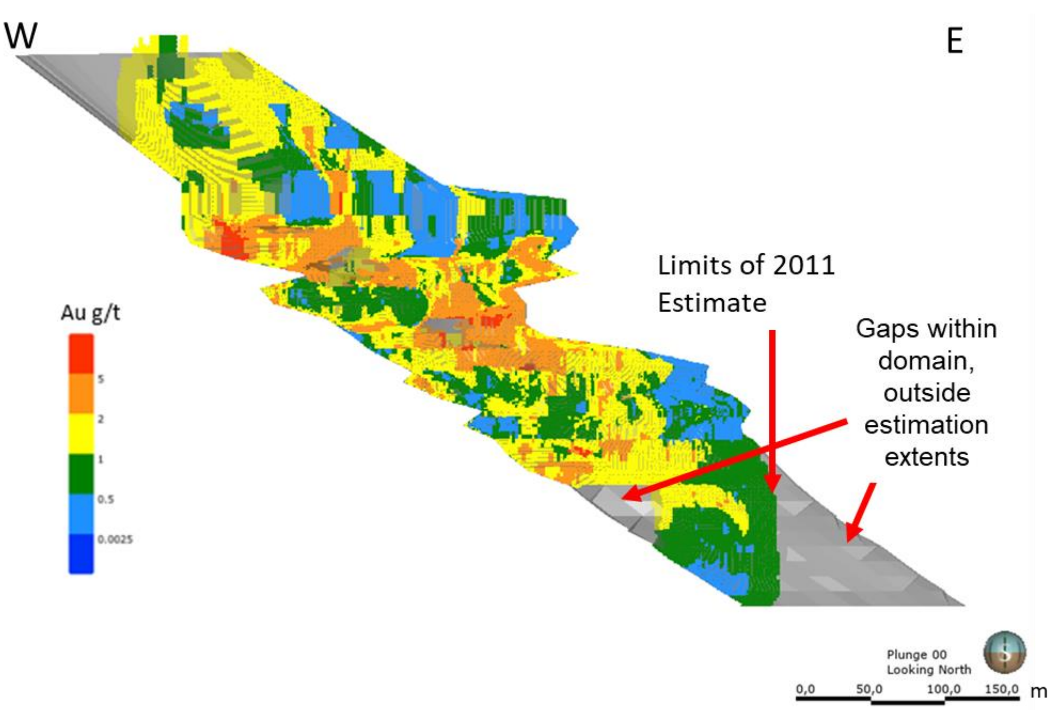
Figure 64: Section View of 2011 Estimation Extents Shown in Grey vs. the 2020 Estimate Displayed with Gold Grade



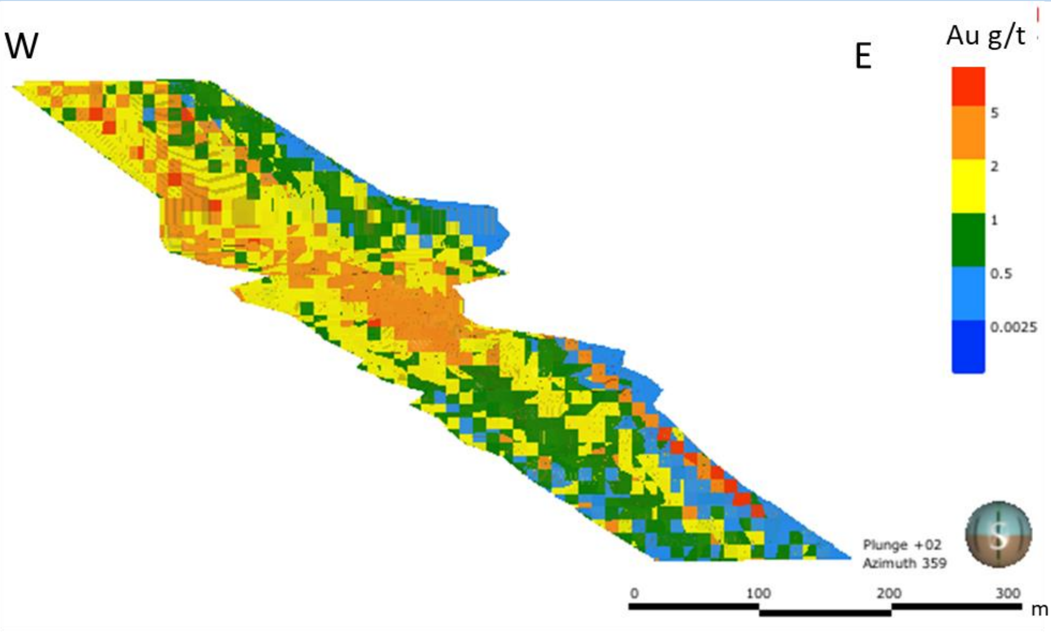
Section View of 2011 Estimation Extents Shown in Grey versus the 2020 Estimate Displayed with Gold Grade	June 2020

Figure 65: Section View of the Comparison of the 2011 24 Level Estimate with the 2020 24 Level Estimate, Extent of the Domain is Indicated in Grey

2011 Estimate



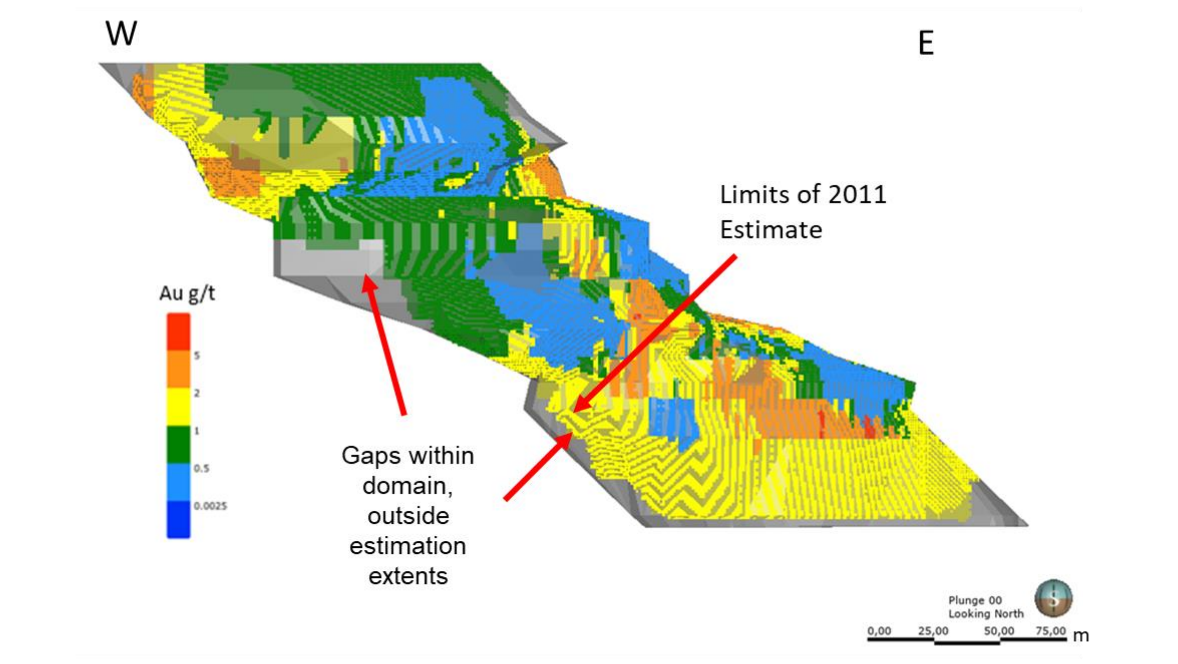
2020 Estimate



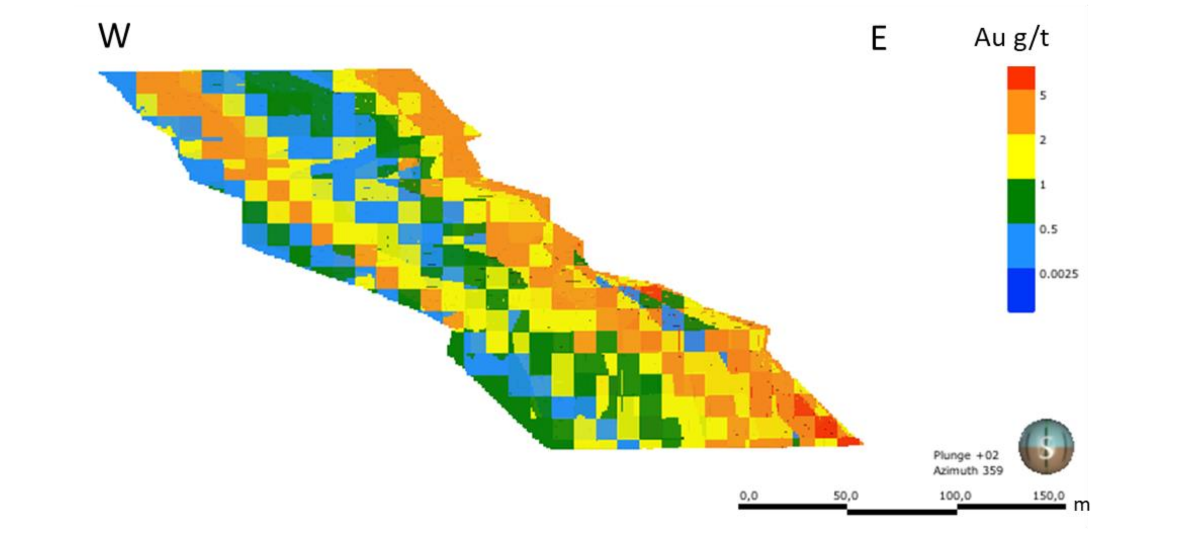
Section View of the Comparison of the 2011 24 Level Estimate with the 2020 24 Level Estimate, Extent of the Domain is Indicated in Grey	June 2020

Figure 66: Section View of the Comparison of the 2011 17 Level Estimate with the 2020 17 Level Estimate, Extent of the Domain is Indicated in Grey

2011 Estimate



2020 Estimate



Section View of the Comparison of the 2011 17 Level Estimate with the 2020 17 Level Estimate, Extent of the Domain is Indicated in Grey — **June 2020**

The reconciliation for Measured Mineral Resources and Indicated Mineral Resources is shown in Table 38, the largest changes are seen in Princeton as discussed above. Other changes include the re-estimation of Galaxy, and particularly Galaxy gap which was previously a manual estimate only. Other smaller changes have occurred within TSFs that have been depleted, namely Woodbine South, Woodbine West and Hostel West. The minor changes seen in other orebodies are as a result of improving connectivity of Mineral Resource categories (with no change to the estimates), in most cases it has resulted in a slight increase in Measured Mineral Resources and Indicated Mineral Resources.

The reconciliation for Inferred Mineral Resources only is shown in Table 39. The largest changes again are at Princeton and Galaxy due to remodelling and re-estimation, while other changes are due to depletion. The minor changes are attributed to the optimisation of Mineral Resource categories.

Table 38: Reconciliation of 2020 Measured Mineral Resources and Indicated Mineral Resources to the 2015 Report, both at a 1.85 g/t Cut-off

Orebody	Tonnes 2020	Au 2020	Content 2020	Tonnes 2015	Au 2015	Content 2015	Tonnes Change	Au change	Content Change
	t	g/t	Oz	t	g/t	Oz	t %	g/t %	Oz %
Galaxy 17 Level Up	309,560	3.29	32,783	148,373	3.59	17,128	109%	-8%	91%
Galaxy 24 Level Down	1,857,375	2.98	178,014	1,095,439	3.04	107,205	70%	-2%	66%
Total Galaxy	**2,166,935**	**3.03**	**210,797**	**1,243,812**	**3.11**	**124,334**	**74%**	**-3%**	**70%**
Woodbine W & E Surface - 22 Level*	110,501	4.61	16,392	110,501	4.61	16,392	0%	0%	0%
Woodbine 24 Level Down	521,272	3.67	61,468	504,312	3.64	59,079	3%	1%	4%
Total Woodbine	**631,773**	**3.83**	**77,859**	**614,813**	**3.82**	**75,471**	**3%**	**0%**	**3%**
Giles Surface - 23 Level*	263,558	4.15	35,149	263,614	4.15	35,155	0%	0%	0%
Giles 23 Level Down	716,130	3.86	88,796	634,655	3.86	78,701	13%	0%	13%
Total Giles	**979,689**	**3.94**	**123,946**	**898,268**	**3.94**	**113,856**	**9%**	**0%**	**9%**
Princeton PS5	1,840,209	3.76	222,550	1,007,018	4.89	158,199	83%	-23%	41%
Princeton PS12	39,657	4.04	5,156						
Princeton PS19	1,247,737	3.24	130,097	87,844	4.72	13,324	1320%	-31%	876%
Total Princeton	**3,127,603**	**3.56**	**357,803**	**1,094,862**	**4.87**	**171,522**	**186%**	**-27%**	**109%**
Golden Hill	673,586	3.14	68,075	673,586	3.14	68,075	0%	0%	0%
Agnes Top	561	2.07	37	561	2.07	37	0%	0%	0%
Woodbine South Dump	13,129	1.55	656	35,754	1.57	1,803	-63%	-1%	-64%
Woodbine West Dump	714	0.72	16	19,377	0.61	381	-96%	17%	-96%
Woodbine W.West Dump	13,136	0.50	209	13,136	0.50	209	0%	0%	0%
Hostel East Dump	958,401	0.76	23,562	958,401	0.76	23,562	0%	0%	0%
Hostel West Dump	430,880	0.88	12,220	484,996	0.86	13,367	-11%	3%	-9%
Biox North Dump	189,340	1.66	10,080	189,340	1.66	10,080	0%	0%	0%
Measured and Indicated Total	**9,185,746**	**3.00**	**885,261**	**6,226,907**	**3.01**	**602,696**	**48%**	**-0.4%**	**47%**

Table 39: Reconciliation of 2020 Inferred Mineral Resources to the 2015 Report, both at 1.85 g/t Cut-off

Orebody	Tonnes 2020	Au 2020	Content 2020	Tonnes 2015	Au 2015	Content 2015	Tonnes change	Au change	Content change
	t	g/t	Oz	t	g/t	Oz	t %	g/t %	Oz %
Galaxy Surface to Dyke**	291,000	3.19	29,845	291,000	3.19	29,845	0%	0%	0%
Galaxy 17 Level Up	181,338	3.28	19,108	47,326	2.02	3,067	283%	63%	523%
Galaxy Gap 17-24 Level	880,676	3.45	97,775	1,047,000	3.09	104,015	-16%	12%	-6%
Galaxy 24 Level Down	331,801	3.19	34,040	165,373	2.17	11,529	101%	47%	195%
Total Galaxy	**1,684,815**	**3.34**	**180,768**	**1,550,699**	**2.98**	**148,456**	**9%**	**12%**	**22%**
Woodbine W & E Surface - 22 Level*	306,432	2.95	29,025	306,432	2.95	29,025	0%	0%	0%
Woodbine 24 Level Down	698,243	3.52	78,913	715,203	3.54	81,296	-2%	-1%	-3%
Total Woodbine	**1,004,675**	**3.34**	**107,939**	**1,021,635**	**3.36**	**110,321**	**-2%**	**-1%**	**-2%**
Giles Surface - 23 Level*	232,274	3.98	29,712	232,274	3.98	29,712	0%	0%	0%
Giles 23 Level Down	954,156	3.83	117,476	1,035,631	3.83	127,562	-8%	0%	-8%
Total Giles	**1,186,431**	**3.86**	**147,188**	**1,267,906**	**3.86**	**157,273**	**-6%**	**0%**	**-6%**
Princeton PS5	2,681,916	3.52	303,272	151,396	6.343726	22,572	1671%	-45%	1244%
Princeton PS12	68,530	3.39	7,470						
Princeton PS19	1,061,690	4.59	156,799	151,396	4.64	22,572	601%	-1%	595%
Total Princeton	**3,812,137**	**3.81**	**467,542**	**1,249,489**	**6.14**	**246,484**	**205%**	**-38%**	**90%**
Golden Hill	99,381	5.42	17,313	99,381	5.42	17,313	0%	0%	0%
Agnes Top	870,632	1.75	49,016	870,632	1.75	49,016	0%	0%	0%
Pioneer & Tiger-Trap	1,234,540	1.96	77,647	1,234,540	1.96	77,647	0%	0%	0%
Ivy Shaft Pillar*	47,125	10.18	15,427	47,125	10.18	15,427	0%	0%	0%
Ivy to Agnes 3-11 Level*	45,498	5.71	8,349	45,498	5.71	8,349	0%	0%	0%
Ceska Shaft Pillar*	113,534	9.58	34,987	113,534	9.59	34,987	0%	0%	0%
Woodbine South Dump	19,217	1.47	906	83,024	1.66	4,425	-77%	-12%	-80%
Woodbine West Dump	5,749	0.69	127	72,540	0.64	1,495	-92%	7%	-91%
Woodbine W.West Dump	25,057	0.51	410	25,057	0.51	410	0%	0%	0%
Hostel East Dump	164,506	0.68	3,581	164,506	0.68	3,581	0%	0%	0%
Hostel West Dump	98,985	0.87	2,763	107,961	0.85	2,947	-8%	2%	-6%
Biox North Dump	141,993	1.77	8,069	141,993	1.77	8,069	0%	0%	0%
Grand Total	**10,554,276**	**3.31**	**1,122,029**	**8,095,521**	**3.40**	**886,199**	**30%**	**-3%**	**27%**

ITEM 15 – MINERAL RESERVE ESTIMATES

The project strategy has been revised by modifying the processing plant to produce a high grade concentrate instead of a utilising a BIOX® plant circuit as before. As such, GGR management has decided to take a “step backwards”, rendering the previously declared Mineral Reserves no longer relevant. This has had a material impact on the mine plan in order to produce the correct blend of ore from the various orebodies to meet the concentrate specifications. The revised mine plan includes a significant amount of Inferred Mineral Resources and as a result in turn also moves the entire project moves back to a PEA stage, and no Mineral Reserves are declared.

Gold was previously produced from two plants, namely the south plant where crushing, milling, flotation, elution and smelting took place, and the north plant where BIOX® and leaching of flotation concentrate took place.

The flotation plant had a processing capacity of 15 ktpm. The BIOX® plant ceased operation in early 2012 and a concentrate from the flotation plant was instead produced and sold. Feed to the plant was provided by mining a combination of the orebodies as well as re-mining of the TSFs. The available production history from January 2010 to September 2011 is summarised in Table 40.

Table 40: Production Split for January 2010 to September 2011

Orebody	Total Ore Produced	Average Ore Produced
	t	tpm
Galaxy	91,483	4,356
Princeton	3,742	178
Woodbine	22,653	1,079
Giles	846	40
Gemini	3,410	162
Alpine	129	6
Alpine Sands	4,324	206
Total	**126,587**	**6,028**

Galane acquired the Galaxy Gold Mine in November 2015. For the period 2015 to 2017, the Mine produced dorè from the CIL plant only. During this period, mining activities were focused on the 17 Level Giles and Agnes sections and sluicing of the Hostel West and the three Woodbine TSFs. The planned production split for the period 2015 to 2017 is summarised in Table 41.

Table 41: Planned Production Split 2015 to 2017

Orebody	Average Ore Production Planned	Average RoM Grade
	tpm	g/t
Princeton	9,000	3.85
Giles	1,500	2.96
Tailings	4,500	0.98
All Projects	15,000	2.93

The Mine was placed under care and maintenance from March 2017 to April 2019. During this period, metallurgical testwork, plant refurbishment and repurposing, expansion planning, and mine planning was completed for the existing 15 ktpm plant as a first phase, followed by upgrades to increase plant capacity to 30 ktpm in a second phase.

The first phase plant refurbishments commenced in July 2016, and included the installation of a new crusher, remedial work to the float section, installation of a new gravity separation section, re-establishment of the elution plant, and the construction of a new 25 ktpm CIL tailings retreatment plant within the current footprint of the existing processing plant.

In April 2019, mining operations commenced, focusing on remining the three Woodbine surface dumps, low volume development from the Princeton decline and reef drive development below 17 Level, and 22 Level Galaxy waste development and use of the existing refurbished 15 ktpm plant.

The production split from the targeted areas for 2019 is detailed in Table 42.

Table 42: Production Split for May 2019 to December 2019

Orebody	Average Ore Production	Average RoM Grade
	t	g/t
Princeton Ore Development	1,205	4.08
Princeton Stope Ore	85	3.87
Tailings	11,510	1.21
All Projects	12,800	1.62

A monthly average concentrate of 346 t at a grade of 32.57 g/t was produced from the existing repurposed 15 ktpm plant from the mix as detailed in Table 42.

In May 2019, expansion of the existing processing plant to 30 ktpm commenced. The old CIL tanks have been repurposed and are now being used as flotation conditioning/feed tanks, float concentrate holding tanks and process water tanks. The building that housed the elution, electrowinning, carbon regeneration circuits and smelt house was converted to a concentrate filtration house. The CMF circuit was expanded to a capacity of 30 ktpm by adding roughers and scavengers. However, the old ball mill capacity of 15 ktpm still limited plant throughput. A new ball mill with a capacity of 50 ktpm was commissioned in May 2020. This will allow the Mine to ramp up production to 30 ktpm as a second phase, processing underground material from the Princeton and Galaxy orebodies and tailings material from the three Woodbine dumps.

The third phase is to ramp up to 50 ktpm plant capacity, processing underground material from the Galaxy, Princeton, Woodbine and Giles orebodies.

The current mining strategy of the Galaxy Gold Mine is to deliver 50 ktpm ore from the Galaxy, Princeton, Woodbine and Giles orebodies to the plant, to allow production and sale of a gold flotation concentrate of 25 g/t or higher. The new mining strategy is detailed in Table 43.

Table 43: Mining Strategy

Orebody	Production Rate	Cut-Off Grade	RoM Grade	Mass Pull	Float Recovery	Concentrate Grade	Concentrate Produced	Concentrate Contained
	t	g/t	g/t	%	%	g/t	t	oz
Galaxy	30,000	1.5	2.53	8	91	28.8	69,102	1,825
Princeton	15,000	4.0	4.35	15	87	25.2	56,768	2,222
WB and Giles	5,000	4.5	4.58	8	91	52.1	20,839	670
All Projects	**50,000**		**3.28**			**29.0**	**146,708**	**4717**

Notes:

1. Production Rate, Concentrate Produced and Concentrate Contained values are tabulated as per month values.
2. Concentrate Produced values tabulated as dry tonnes.
3. Conversion from grams to oz: 1 oz = 31.103 g.

The new mine plans are designed and scheduled according to the production rate mix as detailed in Table 43, which are targeted at providing the most rapid ramp up to the planned 50 ktpm steady state production.

The Mine has undergone significant re-scoping in the sense that there has been a significant change to the project strategy. Management has decided to take a “step backwards” which renders the previously declared Mineral Reserves no longer relevant. The “step backwards” also means that the entire project moves back to a PEA stage.

For the reasons described above, no Mineral Reserves are included in this Report. The reader is referred to Item 6 of this Report for historical Mineral Reserves and production rates from the Galaxy Gold Mine.

The new mine plan includes Inferred Mineral Resources and the results are summarised in Item 16 of this Report.

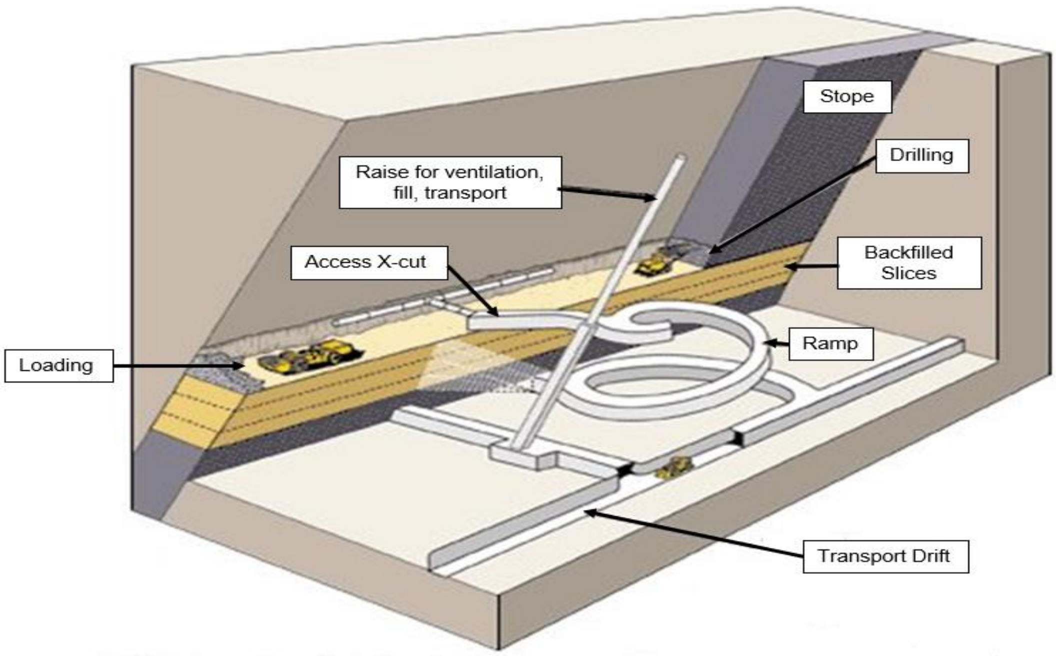
ITEM 16 – MINING METHODS

The Galaxy Gold Mine will make use of two different mining methods. The Galaxy and Princeton orebodies will be mined using a fully mechanised cut-and-fill mining method while the Woodbine and Giles orebodies will be mined using a conventional underhand mining method. The mining methods described below aim to minimise dilution and optimise concentrate grade for the run of mine mix at the specified production rates.

I. MECHANISED CUT-AND-FILL MINING

Mechanised cut-and-fill mining is a mining method commonly used in mining steeply dipping, irregular orebodies. To access the stope, a decline (spiral) is developed on the side of the orebody. Access crosscuts are developed from the spiral at specific intervals. A cut is made at the intersection of the access crosscut and the orebody. Stopes are mined in consecutive cuts, from the bottom up. Mining commences with creating a first horizontal slice along a specified strike length of the orebody in both directions. Upon completion of the first cut, the access crosscut is slyped, and the mined-out area is backfilled to provide access to the next slice. This sequence is followed until the vertical limit of the stope is reached. Figure 67 illustrates a typical cut-and-fill mining method.

Figure 67: Illustration of a Mechanised Cut-and-fill Mining Method



Source: *Encyclopaedia Britannica*

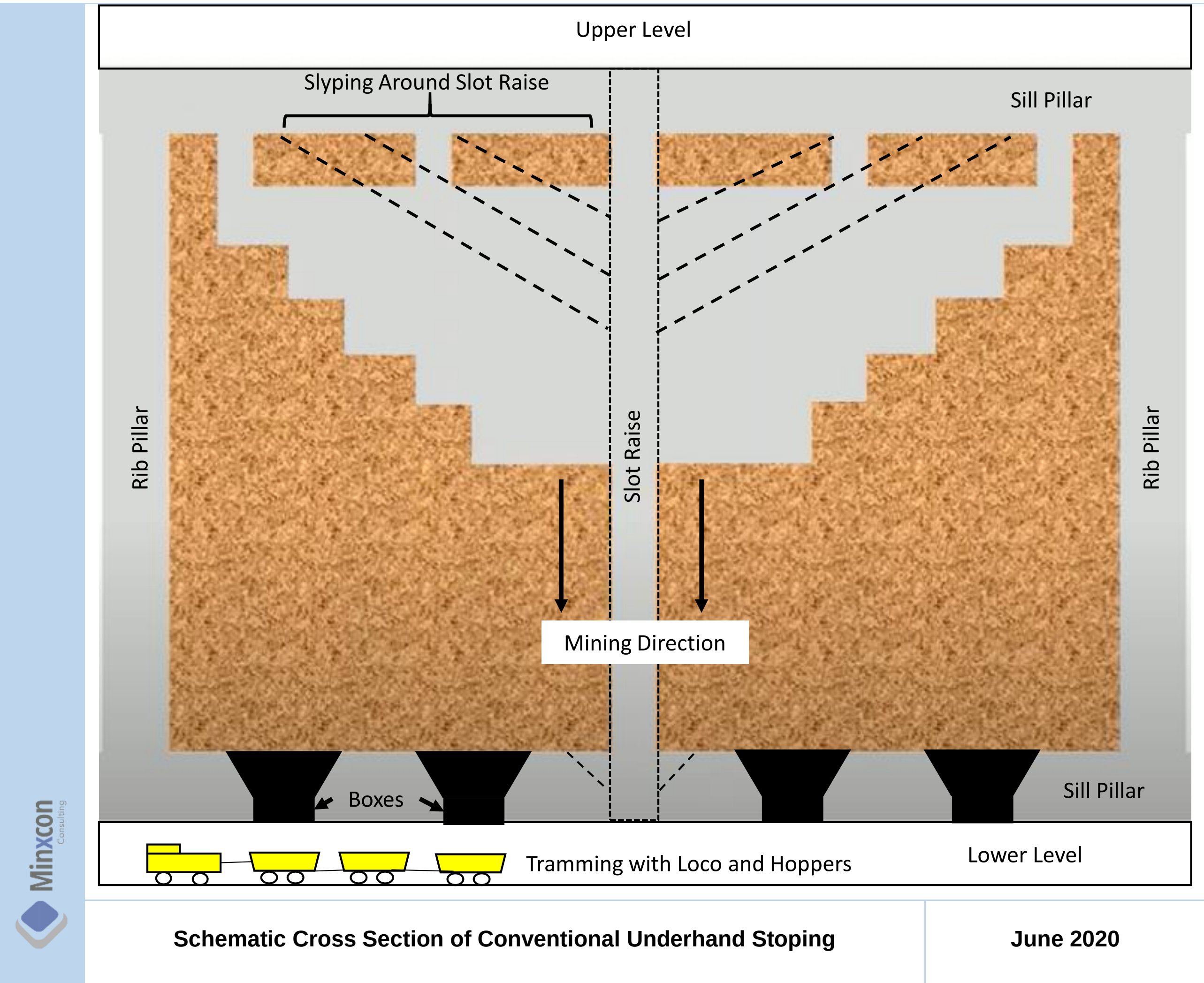
Illustration of a Mechanised Cut-and-fill Mining Method **June 2020**

II. CONVENTIONAL UNDERHAND MINING

This mining method implies that the block of ore is mined from an upper level to the level below (see Figure 68). Underhand stoping is particularly suitable for steeply dipping, narrow orebodies. Crosscuts are developed from drives at set intervals to access the orebody. Levels are developed in the orebody and connected by raises. Mining commences with the development of a slot raise in a stoping block which is then slyped and worked in both directions from the slot raise. Extreme end raises are equipped to serve as access raises for men and material. The lower level is equipped with boxes at set intervals from which ore will be drawn.

The sequence is repeated and as the stope grows horizontally and progresses downwards, additional raises are developed, and new stopes established to maintain the required production rates. The stope is mined up to the limits of the rib and sill pillars.

Figure 68: Schematic Cross Section of Conventional Underhand Stoping



Item 16 (a) - Geotechnical, Hydrological and Other Parameters Relevant to Mine Design

I. Geotechnical and Hydrological Parameters

Galaxy Gold Mine makes use of a rock engineering consultant for the required monthly inspections of the underground workings. All legal appointments pertaining to rock engineering requirements are in place. Support standards and rock mechanics recommendations for the current mining operations in Princeton and Galaxy are in place.

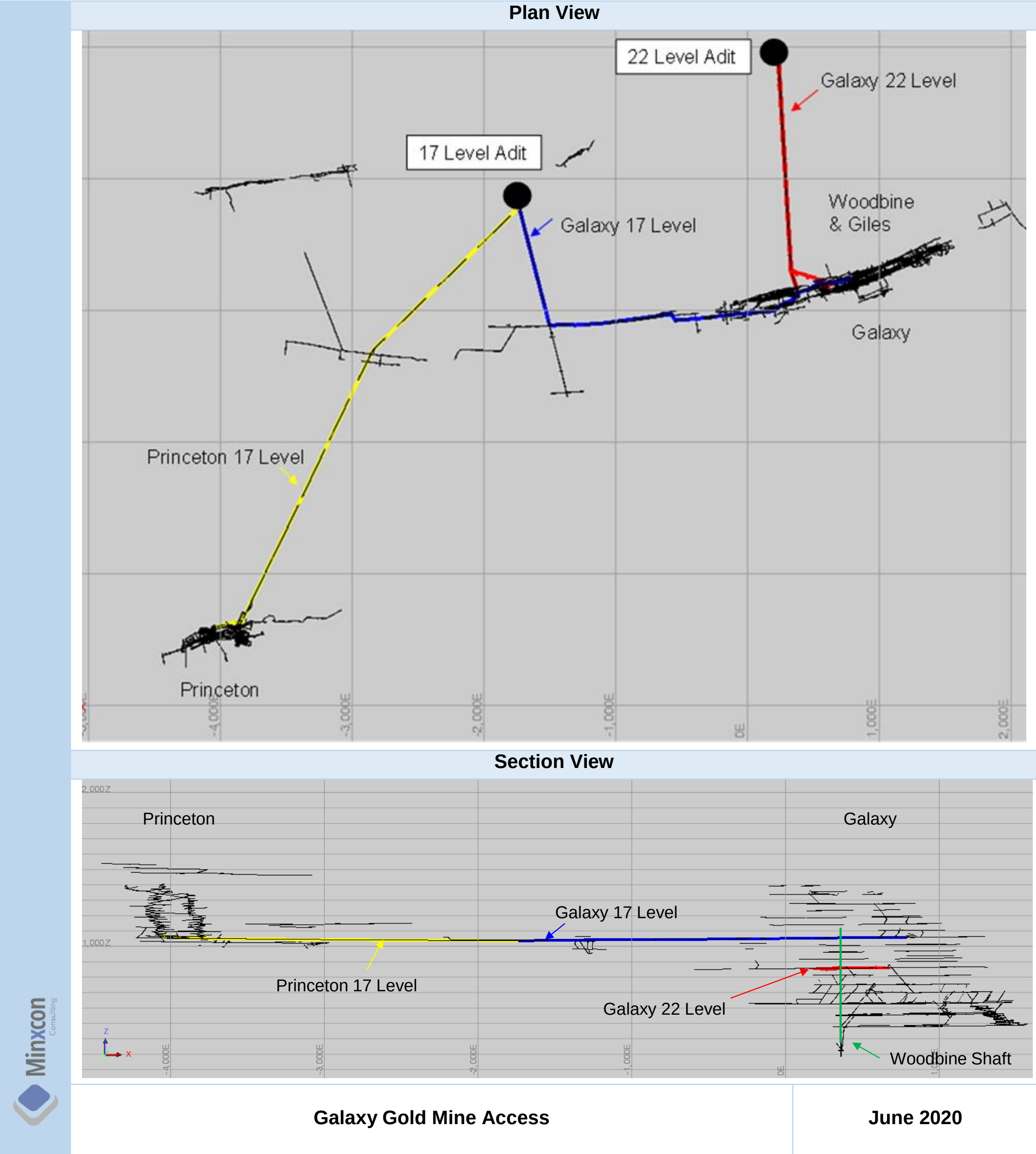
No geotechnical, hydrological or rock engineering work has been conducted for the targeted mining areas in the PEA LoM plan study. The studies and work associated with these parameters have been included in the CAPEX budget for the project.

Further work is required to determine the rock mechanics requirements for the areas included in the LoM plan.

II. Underground Access and Shaft Capacities

The underground workings of the Galaxy Gold Mine will be accessed using mainly the 17 Level Princeton Adit, 22 Level Galaxy Adit and the Woodbine Shaft. These access ways will also be used for ore transportation to surface.

Figure 69: Galaxy Gold Mine Access



The individual capacities of the shaft and adits are detailed in Table 44.

Table 44: Shaft and Adit Tonnage Capacity

Access	Capacity ktpm	Status
Princeton 17 Level Adit	15	Operational
Galaxy 22 Level Adit	30	Operational
Woodbine Shaft	15	Care and Maintenance

The shaft and adit capacities are determined from previous production values and no new cycle time studies have been conducted to determine current actual capacities.

The Woodbine Shaft has been placed on care and maintenance and requires shaft refurbishment work below 28 Level. The shaft bottom is currently at 30 Level, however deepening of the shaft may be required to support the planned mining activities. All Woodbine and Giles ore below 22 Level will be hoisted to 17 Level where it will be railed out via the 17 Level Ben Lomond Adit to the plant.

The Princeton 17 Level Adit is in good condition and operational. Potentially, it can handle more than 15 ktpm, depending on the equipment that will be used for ore transportation such as locomotives and hoppers. Ore is loaded onto dump trucks and then tipped into the plant tip located approximately 10 m above 17 Level. The plant tip consists of an apron feeder and six vibrating screens. From here, ore is transported by means of a locomotive and hoppers through the 17 Level Ben Lomond Adit.

The Galaxy 22 Level Adit provides trackless access to the underground workings and the capacity is highly dependent on the number of trucks that will be required to move ore from underground to surface. The 22 Level Adit will be used for the transportation of ore mined from the Galaxy 22 Level and above, and Galaxy 22 Level to 26 Level areas via dump truck. Galaxy 28 Level down ore will be transported to the station ore pass and hoisted from the Woodbine Shaft.

At the plant, ore can be either side tipped directly from the hoppers into the plant feed bin or tipped into a stockpile area where re-handling into the plant feed bin will take place with a front end loader.

III. SURPAC DESIGNS AND DESCRIPTIONS

Galaxy Design

The mined-out areas in the Galaxy section are illustrated in Figure 70. Mined-out areas in the Galaxy Orebody exist predominately in the 17 Level and above, 17 to 22 Level and 26 to 28 Level areas. Figure 70 also illustrates the existing development within the Galaxy section which provides access to the orebody from 17 Level and above up to 28 Level.

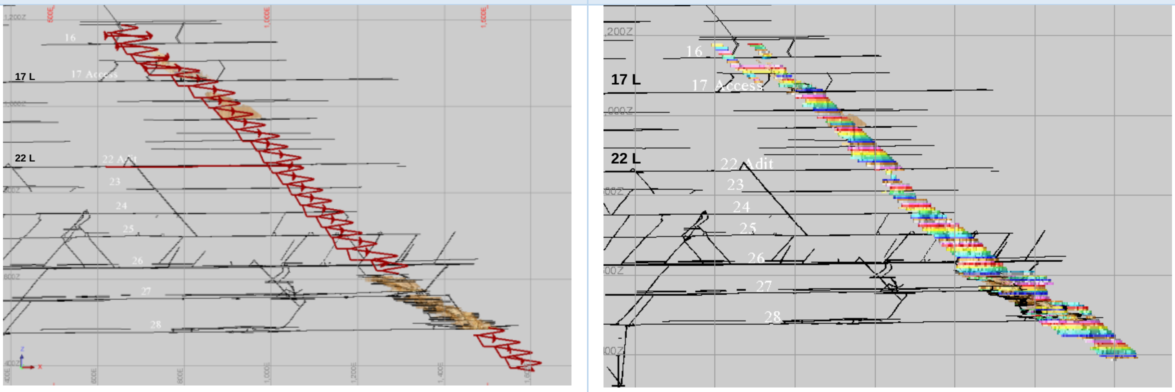
Figure 70: Section View of Galaxy Mined-out Areas

Section View of Galaxy Mined-out Areas	June 2020

The new mine plan includes mining different areas of the Galaxy Orebody simultaneously to obtain the required production rate of 30 ktpm. The planned development and stopes extend from above 17 Level up to below 28 Level.

Figure 71: Section View of Galaxy Planned Development and Stopes

Planned Development	Planned Stopes



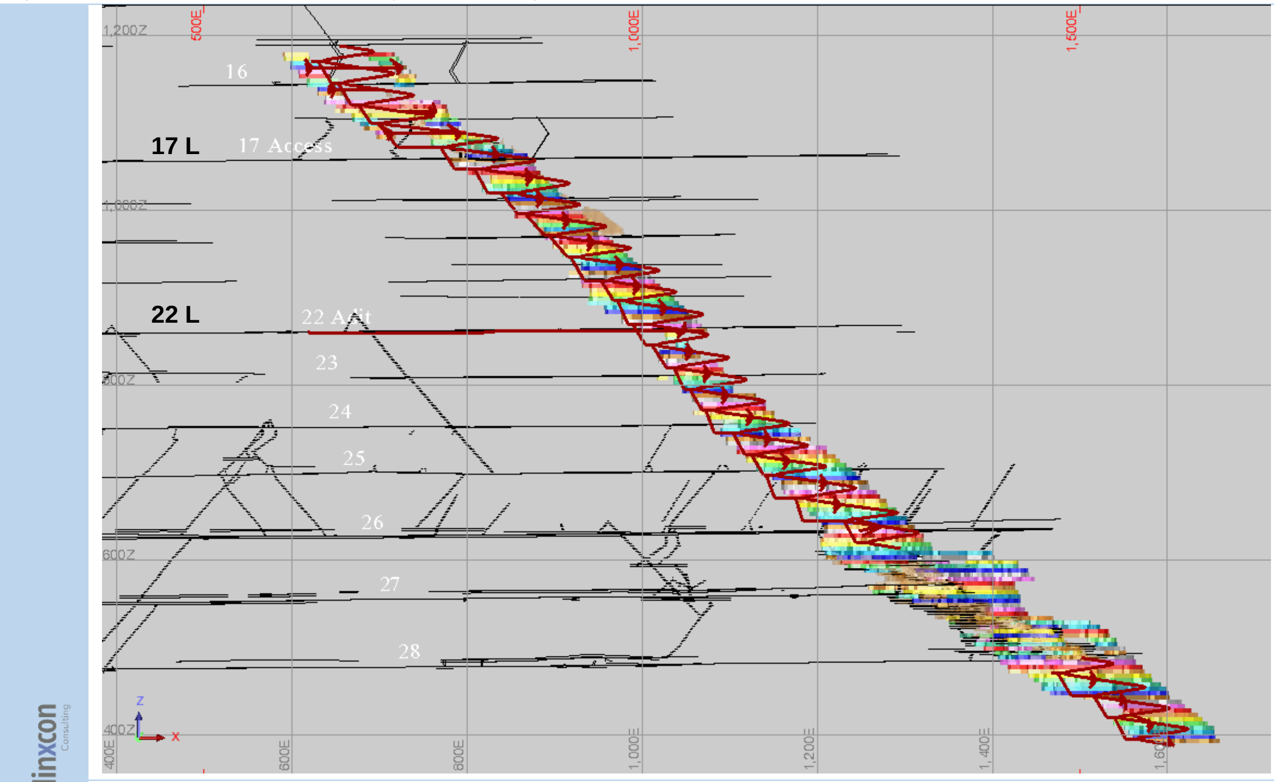
Note: The different stope colours represent different cuts in levels.

Section View of Galaxy Planned Development and Stopes	June 2020

Figure 71 illustrates the planned Galaxy development and stopes for the LoM plan.

The final mine design for the Galaxy Orebody is illustrated in Figure 72. The final mine design includes the stopes and development for the Galaxy Orebody. The level access intersects the centre of the orebody to allow mining in both directions along the strike of the orebody. The first "fan" is created from the access crosscut to intersect the orebody. Once a stope has been mined out, it is backfilled and successive "fans" are developed from the bottom upwards to facilitate mining of the orebody in successive cuts. The process is repeated until the entire stope has been mined out. In this design, multiple areas will be mined simultaneously on different levels to provide the required 30 ktpm production output from Galaxy.

Figure 72: Section View of Galaxy Final Design



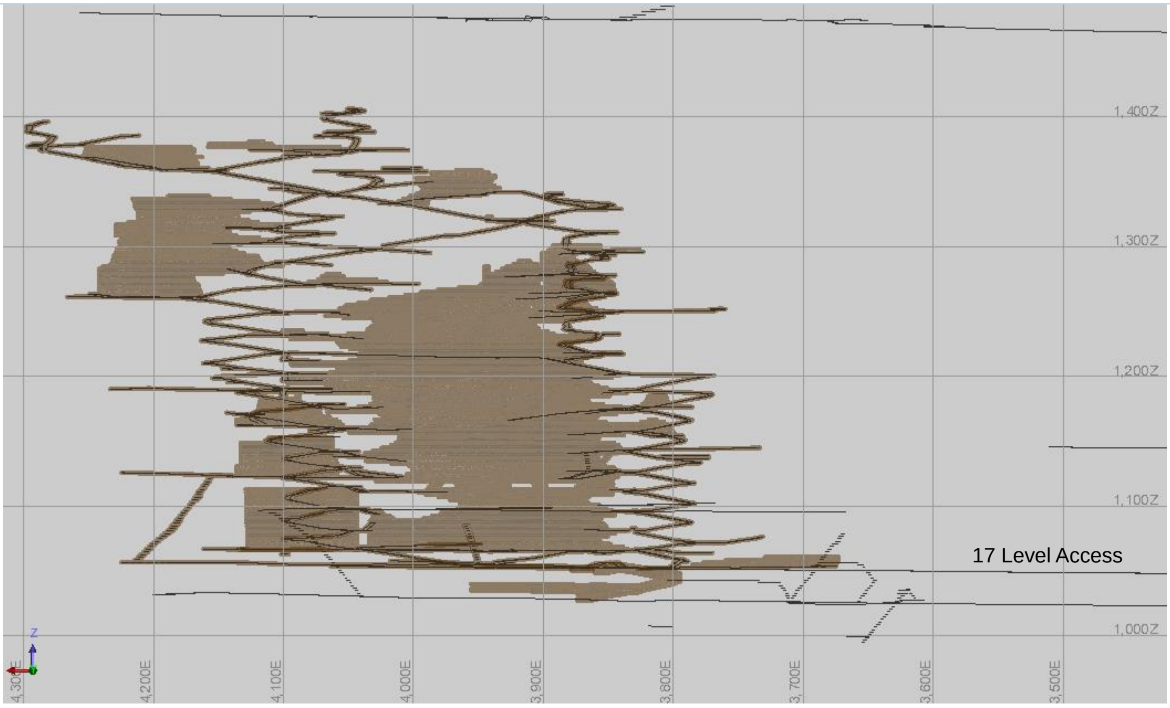
Note: The different stope colours represent different cuts in levels

Section View of Galaxy Final Design	June 2020

Princeton Design

The Princeton section consists of three orebodies namely Princeton 05, Princeton 12 and Princeton 19. The Princeton mined-out areas exist mainly above 17 Level. The mined-out areas are illustrated in Figure 73. Access to the mined-out areas are obtained via the 17 Level Ben Lomond Adit.

Figure 73: Section View of Princeton Mined-out Areas

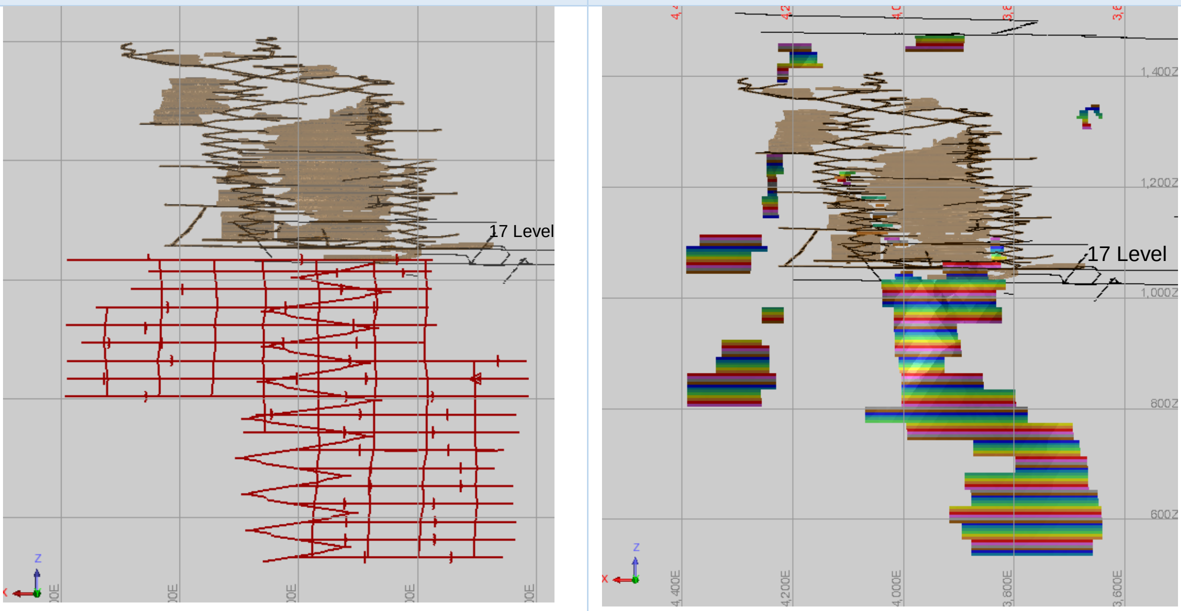


Section View of Princeton Mined-out Areas	June 2020

The Princeton design is focused on mining mainly below 17 Level and some smaller areas above 17 Level. The Princeton planned development and stopes are illustrated in Figure 74.

Figure 74: Section View of Princeton Planned Development and Stopes

Planned Development	Planned Stopes



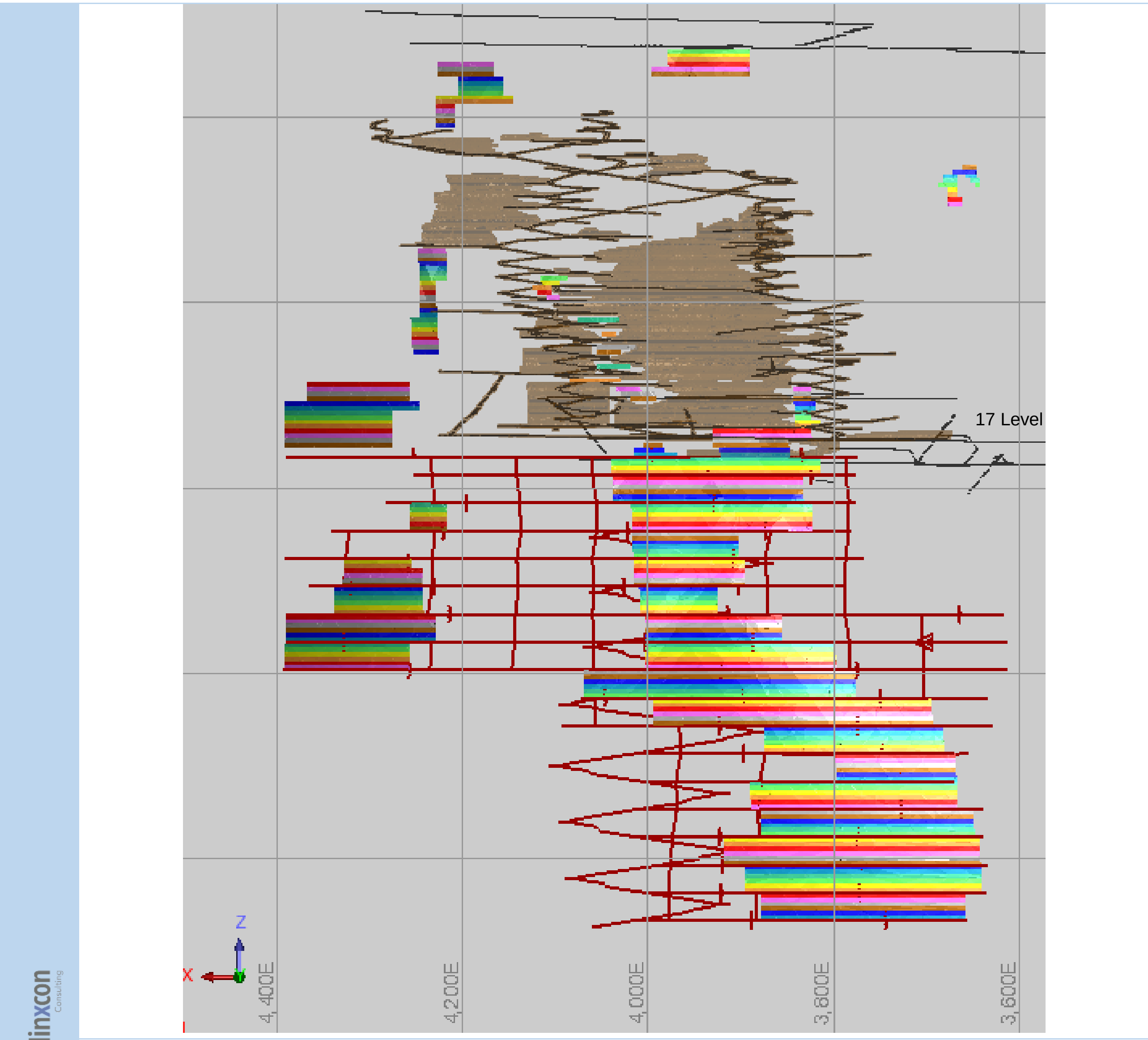
Note: The different stope colours represent different cuts in levels

Section View of Princeton Planned Development and Stopes	June 2020

The Princeton final design is illustrated in Figure 75. The Princeton Orebody lenses are intersected by access crosscuts that are developed from the spiral. Several "fans" are developed from access crosscuts that connect to the off-reef drive. The Princeton design includes mining multiple cut-and-fill sections per level, due to the extent of the orebodies.

A significant amount of waste is produced from the Princeton section which is largely attributed to the off-reef drives in the design and higher dilution as a result of more waste being mined with the thin orebodies.

Figure 75: Section View of Princeton Final Design



Note: The different stope colours represent different cuts in levels

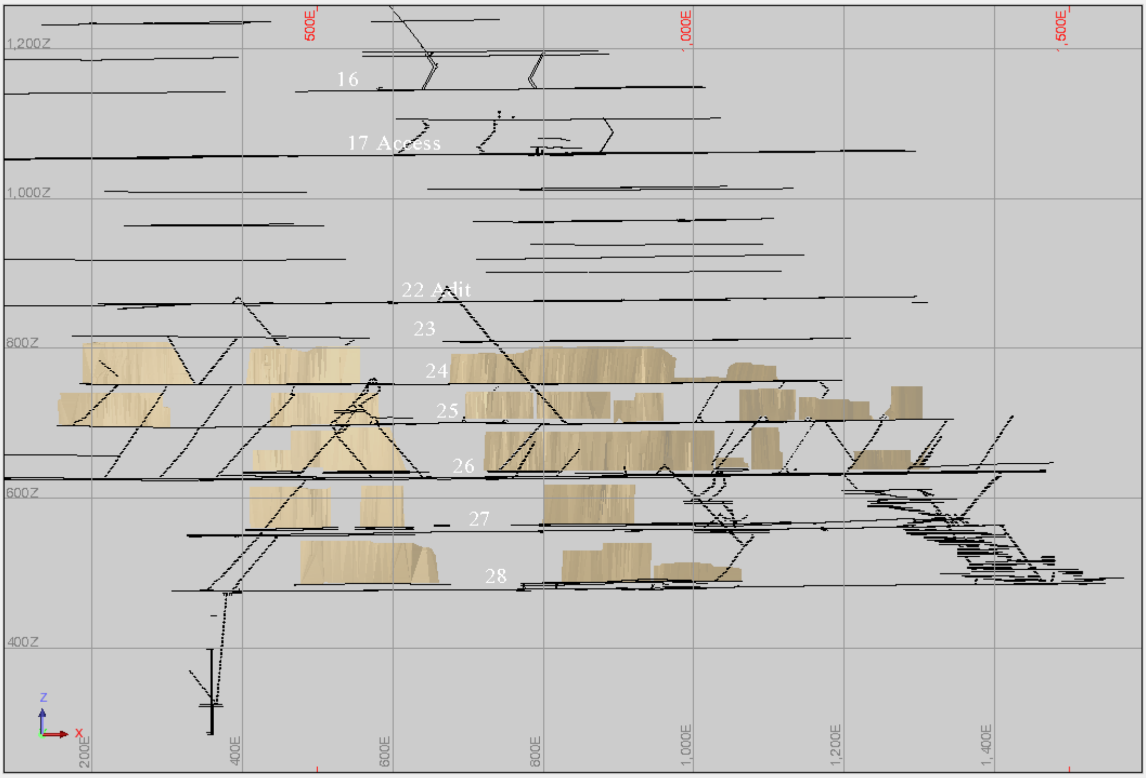
Section View of Princeton Final Design | **June 2020**

Woodbine and Giles Designs

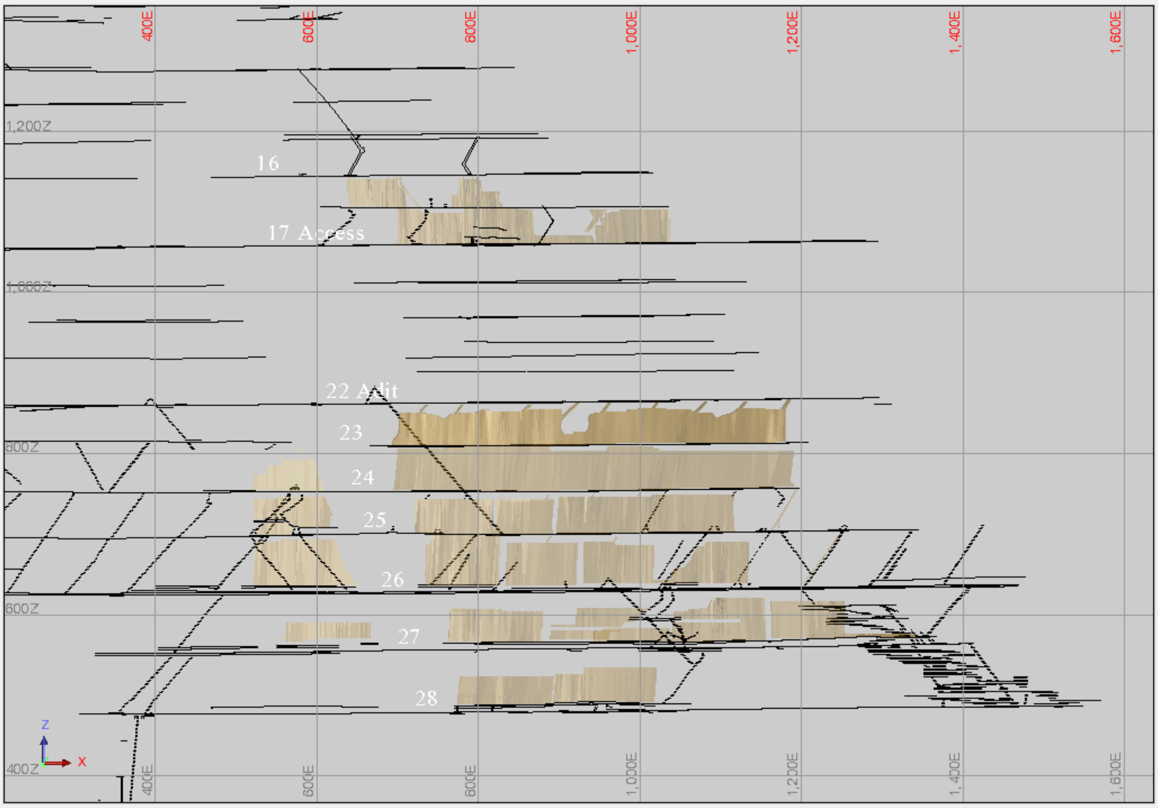
The Woodbine and Giles design is a conventional underhand mining design. Mined out areas in the Woodbine section are mainly below 22 Level up to 28 Level. Mined out areas in the Giles section are mainly present from 22 Level down to 28 Level and also include a smaller mined out portion below 16 Level and 17 Level. The Woodbine and Giles mined out areas are illustrated in Figure 76.

Figure 76: Section View of Woodbine and Giles Mined Out Areas

Woodbine



Giles

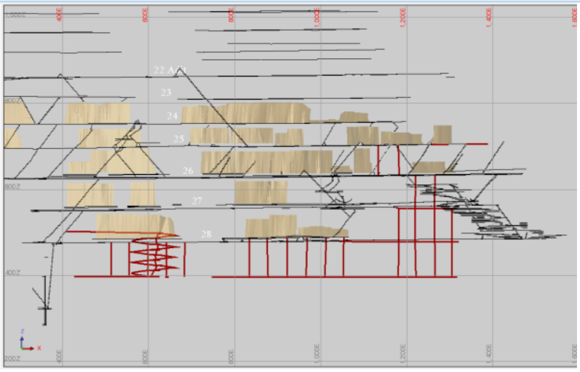


Section View of Woodbine and Giles Mined Out Areas	June 2020

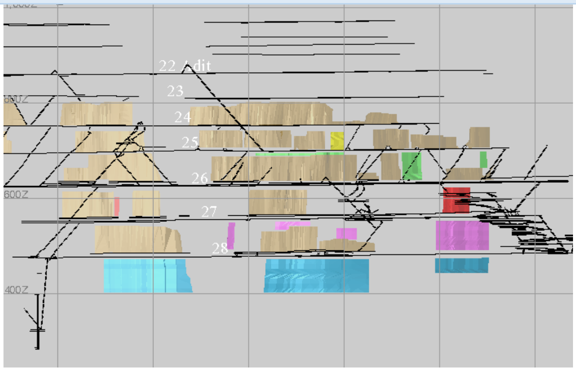
The Woodbine and Giles plan targets the area from 25 Level to below 28 Level. The Woodbine and Giles planned development and stopes are illustrated in Figure 77.

Figure 77: Section View of Woodbine and Giles Planned Development and Stopes

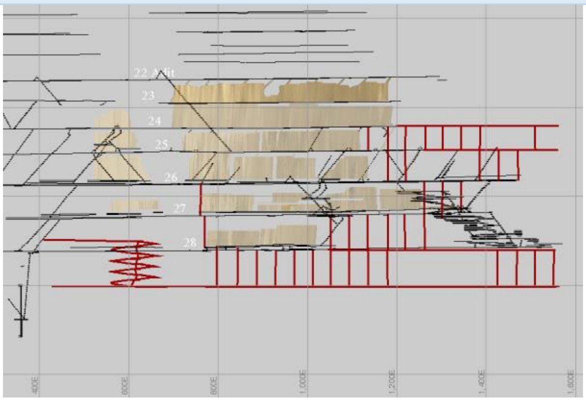
Woodbine Development



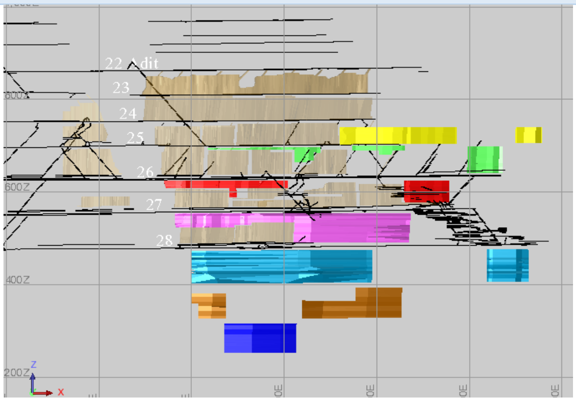
Woodbine Stopes



Giles Development



Giles Stopes



Note: The different stope colours represent different cuts in levels

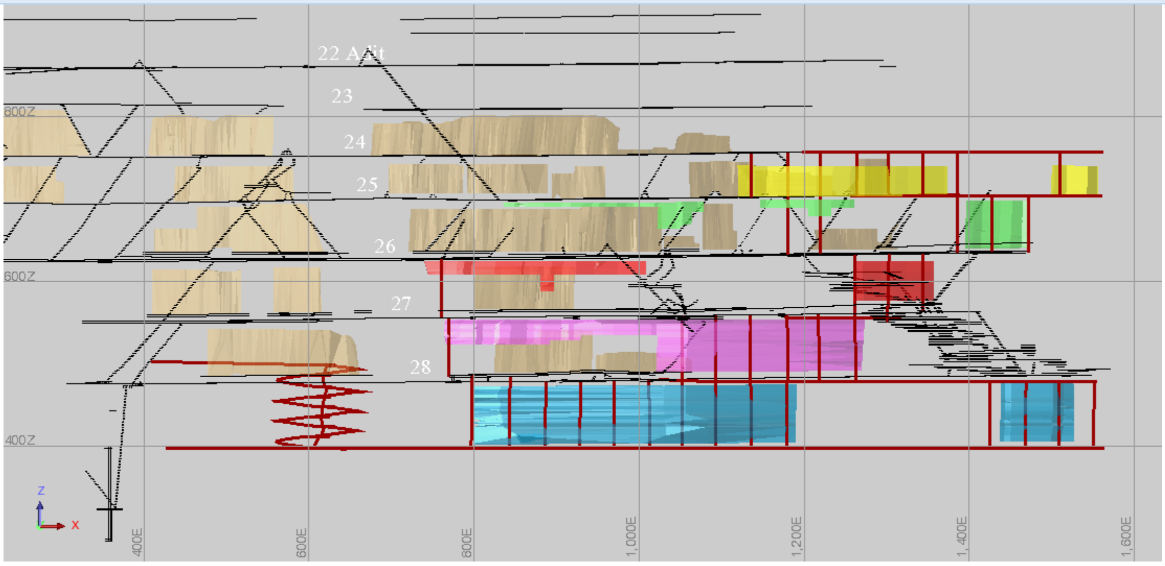
Section View of Woodbine and Giles Planned Development and Stopes	June 2020

The final design for the Woodbine and Giles orebodies is illustrated in Figure 78. An off-reef drive between the Woodbine and Giles orebodies creates flexibility in mining both the Woodbine and Giles orebodies. Level to level access raises provide a starting point for stoping operations. Once a raise has holed, the excavation is slyped to establish stope faces. The length of the stope faces on both sides of the raise is increased sequentially, and as the block of ground is worked from the top downwards, new raises are intersected which become more passes to remove broken material from the stopes.

Figure 78: Section View of Woodbine and Giles Final Designs

Woodbine

Giles



Note: The different stope colours represent different cuts in levels

Section View of Woodbine and Giles Final Designs	June 2020

IV. Ventilation

The Woodbine, Giles and Galaxy section is ventilated by drawing in air from the Ben Lomond Adit, the Ivy Shaft, the 22 Level Adit and the Woodbine Shaft. The primary extraction fans (one 75-kW and two 45-kW fans) have been removed from 26 Level and relocated on 22 Level. On 22 Level, the air is pushed out through the old Woodbine and Giles stopes to surface. Ventilation for the Woodbine, Giles and Galaxy section is provided by air that is directed down the Woodbine Shaft to 28 Level (Crossling *pers comm*, 2020).

Ventilation for the Princeton section is provided by air that is drawn in from the 17 Level Ben Lomond Adit. A 132 kW primary fan was removed from surface and relocated to 17 Level. The fan pushes air out through the old West Raise Borehole. All ventilation seals along the raise borehole have been put back in place (Crossling *pers comm*, 2020).

Monthly ventilation surveys and reports are completed by a consultant and the necessary appointments are in place. Recent ventilation reports have shown that adequate air is currently available to develop the Princeton resource. The Galaxy 22 Level development section does not have adequate air available to ventilate the end and recirculation is taking place. The fans ventilating the end were sent for re-winding and must be replaced to deliver adequate air for removing blasting fumes and dilution of diesel fumes.

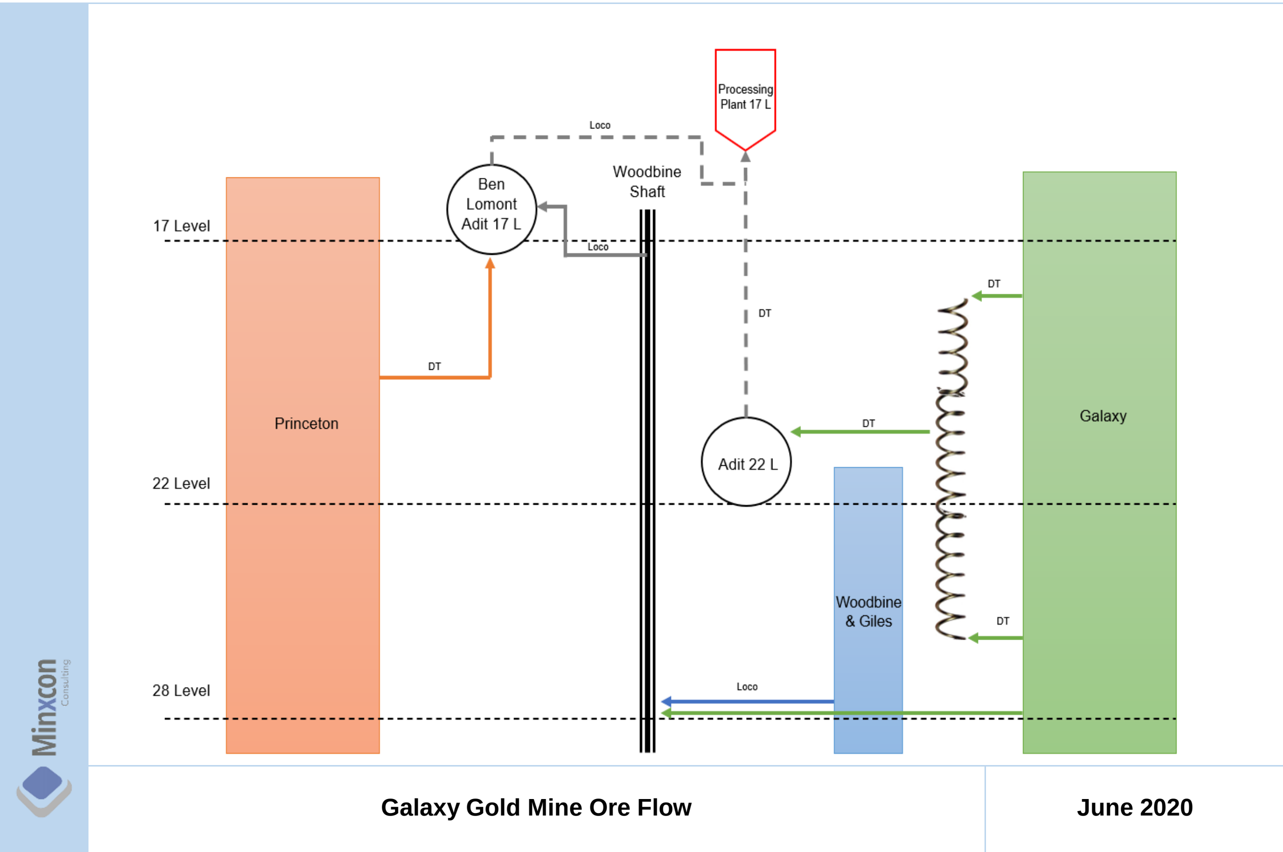
To dilute diesel fumes produced by mining equipment and remove blasting fumes, 60 m^3/s of ventilation is required for current mining activities.

Further work is required to determine ventilation requirements for the planned production increase in the Galaxy, Princeton, Woodbine and Giles orebodies. Detailed ventilation studies should be included in the CAPEX budget.

V. Ore Flow

The ore flow for the Galaxy Gold Mine is illustrated in Figure 79. The Woodbine Shaft currently provides access up to 28 Level and has a hoisting capacity of 15 ktpm. 28 Level is equipped with tipping arrangements for ore from the Woodbine, Giles and Galaxy orebodies.

Figure 79: Galaxy Gold Mine Ore Flow



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

I. Production Rates

The LoM planning for the Galaxy Gold Mine is determined from a combination of production rates from the Galaxy, Princeton and Woodbine orebodies as detailed in Table 45. The specified production rates were selected to provide sufficient LoM for the requirements of the PEA. The combination of production rates ensures that a concentrate grade of greater than or equal to 25 g/t is achievable.

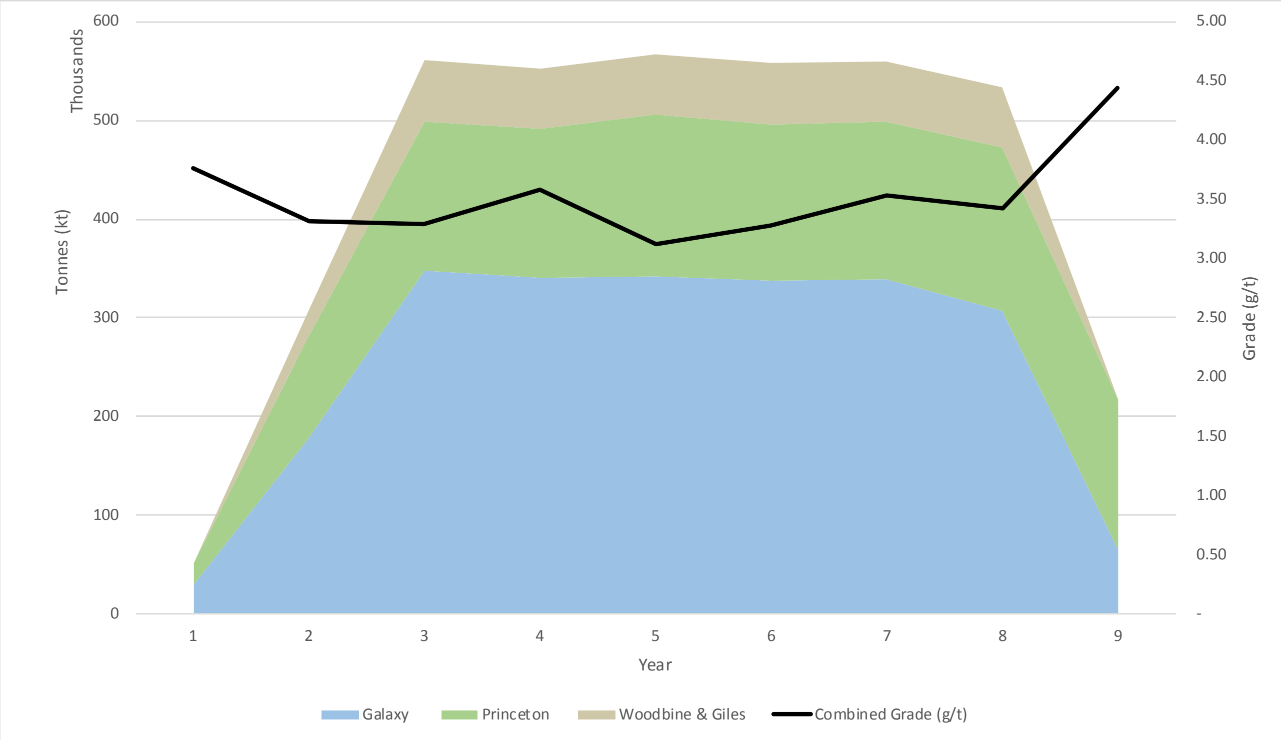
Table 45: Overall Production Rates

Orebody	Mining Method	Production Rate ktpm
Galaxy	Mechanised Cut-and-fill	30
Princeton	Mechanised Cut-and-fill	15
Woodbine and Giles	Conventional Underhand Stoping	5

II. Life of Mine Plan

The diluted production schedule for the Galaxy Gold Mine in years is illustrated in Figure 80. The diluted tonnes include all the material within the stopes and on-reef development. The total project extends for nine years of production.

Figure 80: Life of Mine Production



Note: The LoM production excludes reclaimed TSF material.

The mine plan production build-up for Galaxy was designed at 7 ktpm for the first six months, ramping up to 15 ktpm after six months, for a period of a year and reaching steady state production of 30 ktpm after one year and six months.

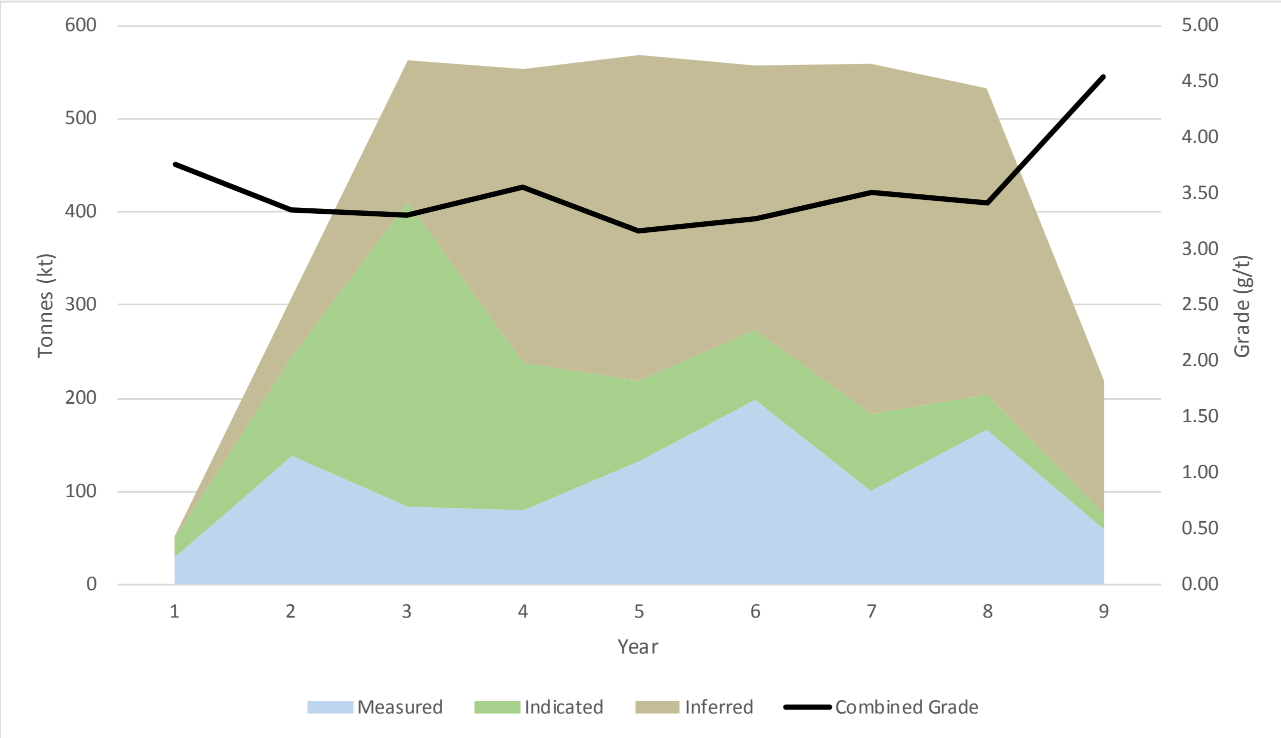
Princeton produces 4 ktpm for the first six months, ramping up to 10 ktpm after six months, maintaining this production rate for a year and ramping up to steady state production of 15 ktpm after a year and six months.

The Woodbine and Giles sections only start producing a year after production has started at the Galaxy and Princeton sections. Initial production starts at 2 ktpm for a period of a year after which production ramps up to a steady state of 5 ktpm.

The LoM plan consists of a total of 4.14 Mt diluted tonnes at a diluted grade of 3.46 g/t containing 461.01 koz of gold.

The diluted tonnes mined by Mineral Resource category are illustrated in Figure 81. Measured Mineral Resources and Indicated Mineral Resources amount to 1.90 Mt while Inferred Mineral Resources account for 2.24 Mt.

Figure 81: Life of Mine Production by Mineral Resource Category

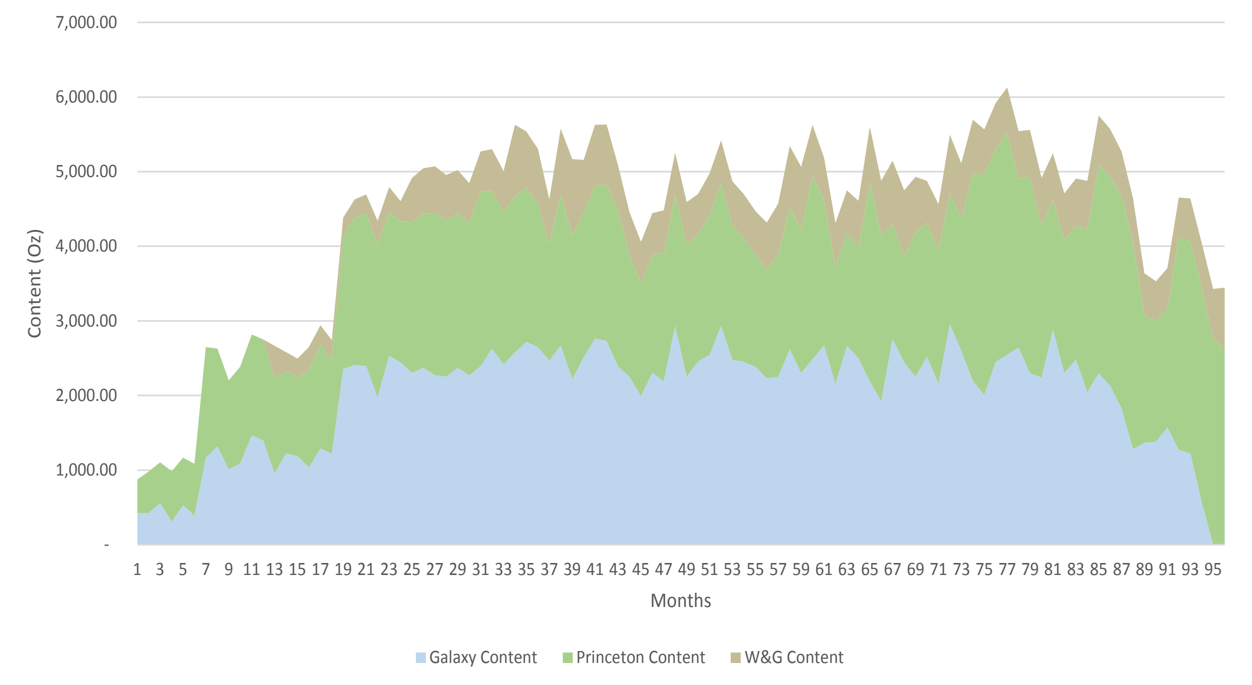


Note: The LoM production excludes reclaimed TSF material.

A total of 2.24 Mt Inferred Mineral Resources at a grade of 3.62 g/t is included in the LoM plan. Indicated Mineral Resources make up 0.92 Mt of the total diluted tonnes mined at a grade of 3.78 g/t. Measured Mineral Resources comprise 0.99 Mt of the total diluted tonnes at a grade of 2.82 g/t.

The monthly content delivered to the plant from the Galaxy Gold Mine is illustrated in Figure 82. A total of 192 koz is produced from Galaxy, 218 koz from Princeton and 51 koz from the Woodbine and Giles sections.

Figure 82: Monthly Content Delivered to Plant



Note: This graph excludes reclaimed TSF material.

III. Mining Unit Dimensions

The mining unit dimensions used in the designs of the different mining methods are detailed in this section.

The sizes used for the Galaxy and Princeton mechanised cut-and-fill mining method are detailed in Table 46.

Table 46: Design Dimensions for Mechanised Cut-and-fill Mining

Development	Unit	Galaxy	Princeton
Main Decline (Spiral)	m	5.0 (w) x 5.0 (h)	5.0 (w) x 5.0 (h)
Main Decline Angle	Degrees	9	9
Adit	m	5.0 (w) x 5.0 (h)	-
Crosscuts	m	5.0 (w) x 5.0 (h)	5.0 (w) x 5.0 (h)
Cut Fans	m	4.5 (w) x 5.0 (h)	4.5 (w) x 5.0 (h)
Ventilation Crosscut	m	4.5 (w) x 5.0 (h)	4.5 (w) x 5.0 (h)
Ventilation Raise	m	3.0 (w) x 3.0 (h)	3.0 (w) x 3.0 (h)

For the conventional underhand mining method, the sizes used for the Woodbine and Giles design, are detailed in Table 47. The dimensions specified are similar to the previous development within these orebodies when Shrinkage Stoping was used.

Table 47: Design Dimensions for Conventional Underhand Mining

Development	Unit	Woodbine and Giles
Main Decline (Spiral)	m	4.5 (w) x 4.5 (h)
Main Decline Angle	Degrees	9
Off Reef Drives	m	3.0 (w) x 3.0 (h)
Crosscuts	m	3.0 (w) x 3.0 (h)
Ventilation Crosscut	m	3.0 (w) x 3.0 (h)
Reef Drives	m	3.0 (w) x 3.0 (h)
Raises	m	2.0 (w) x 2.0 (h)

The mine design criteria for mechanised cut-and-fill mining of Galaxy and Princeton, and conventional underhand mining of Woodbine and Giles is detailed in this section.

The mine design criteria for Galaxy and Princeton is detailed in Table 48.

Table 48: Mine Design Criteria for Galaxy and Princeton

	Unit	Galaxy	Princeton
Level Parameters			
Main Level Spacing (Including 5 m Sill Pillar)	m	30	30
Cuts per Level	m	5	5
Cut Height	m	5	5
Pillars			
Crown Pillar Thickness (Below 17 Level)	m	-	10
Sill Pillar Thickness	m	5	5
Sill Pillar Spacing	m	25	25
Rib Pillar Thickness	m	4	4
Rib Pillar Spacing	m	120	120

The mine design criteria for Woodbine and Giles using a conventional underhand mining method is detailed in Table 49.

Table 49: Mine Design Criteria for Woodbine and Giles

	Unit	Woodbine and Giles
Level Parameters		
Level Spacing	m	75
Crosscut Spacing	m	90
Box Spacing on Lower Level	m	15
Pillars		
Sill Pillar Thickness	m	6
Sill Pillar Spacing	m	75
Pillars		
Rib Pillar Thickness	m	6
Rib Pillar Spacing	m	90

IV. Mining Dilution Factors

Mining dilution factors are applied to convert the Mineral Resources to potential Mineral Reserves. The applied mining dilution factors are detailed in this section.

Geological Losses

Geological loss is applied to account for geological uncertainty associated with different Mineral Resource categories. The mine plan includes Inferred Mineral Resources, Indicated Mineral Resources and Measured Mineral Resources. Existing mine practise is to exclude geological losses.

Mining Extraction

Mining extraction represents mining areas that were planned, but not mined. Pillars are excluded from the mining extraction factor. A mining extraction factor of 100% was applied to this project. The Mine Stope Optimiser (“MSO”) software that was used, optimises the model for block extraction and takes into account which portions of a block is uneconomical to mine. The mine design follows the wireframes produced by MSO, which accounts for mining extraction.

Pillar Loss

Pillar loss is applied to the different orebodies as a percentage factor of material that is left *in situ* as pillars for support purposes. The pillar losses applied to the Galaxy, Princeton, Woodbine and Giles orebodies were calculated from the specific pillar sizes as required for support purposes suited to the mining method.

Ore Losses

Ore losses occur when mined material containing grade, is mixed with waste material, and can be attributed to several different causes. Different ore losses have been applied to account for ore to waste losses during mining of the various orebodies. Ore losses for the Woodbine and Giles orebodies were not applied, due to the thin nature of the orebodies. It was assumed that the entire thickness of the reef is taken out, with a neglectable small amount of ore lost to waste.

Dilution

Dilution is defined as a percentage value representing a certain amount of waste material that is mixed with the ore during the mining process. This results in increased ore tonnages, but due to waste material containing no or very little grade, the overall grade delivered to the plant is decreased. Dilution in Woodbine and Giles

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. The MCF was calculated from historic data.

Mining Dilution Factors Summary

The mining dilution factors applied to this project, is detailed in Table 50.

Table 50: Mining Dilution Factors Summary

Description	Unit	Woodbine	Giles	Galaxy	Princeton
Geological Losses	%	-	-	-	-
Mining Extraction	%	100	100	100	100
Pillar Loss	%	12.9	12.9	18.1	18.1
Ore Losses	%	-	-	0.1	0.4
Dilution	%	18.6	18.6	5.4	6.8
Mine Call Factor	%	92	92	92	92

VI. Pay Limit

The pay limit for the orebodies included in the scope of the project is detailed in Table 51. The pay limit calculation was completed using a gold price of USD 1,450/oz and an exchange rate of ZAR 15.00/USD.

Table 51: Pay Limit Calculation

Description	Unit	Woodbine	Giles	Galaxy	Princeton
Dilution	%	18.6%	18.6%	5.4%	6.8%
Mine Call Factor	%	92%	92%	92%	92%
Recovery	%	100%	100%	100%	100%
Metal price	ZAR/g	699.3	699.3	699.3	699.3
Total Operating Cost	ZAR/t	818.0	818.0	713.0	838.0
Starting Point Pay Limit	g/t	1.17	1.17	1.02	1.20
Dilution	g/t	1.39	1.39	1.07	1.28
MCF	g/t	1.51	1.51	1.17	1.39
Recovery	g/t	1.51	1.51	1.17	1.39
Pay-Limit	g/t	**1.51**	**1.51**	**1.17**	**1.39**

Notes:

1. Gold Price was sourced from the Energy and Metals Consensus five-year average forecast.

2. Exchange Rate was calculated as the median of the Nedbank and Investec long term forecasts.

The Galaxy Gold Mine strategy is to produce a concentrate with a grade of greater than 25 g/t from a mix of ore from the Galaxy, Princeton, Woodbine and Giles orebodies.

For the PEA study the cut-off grades were used instead of pay-limits. MSO was used to generate optimal stope configurations for mining the Galaxy, Princeton, Woodbine and Giles orebodies. The stope optimiser uses a block model of the resource and applies a set of user defined criteria including minimum stope dimensions and economic parameters to identify the most profitable regions within the resource. The optimisation generates stope wireframes which were used for the mine designs.

The stope optimiser results were analysed at a range of cut-off grades for each orebody to determine at what cut-offs the correct mix of tonnes and grade is obtained to satisfy the mining strategy and provide sufficient LoM.

The cut-off grades used in the mine design are detailed in Table 52.

Table 52: Galaxy Gold Mine Design Cut-off Grades

Parameters	Unit	Galaxy	Princeton	Woodbine and Giles
Design Cut-off Grade	g/t	1.8	4.0	4.0

V. MINING INVENTORY

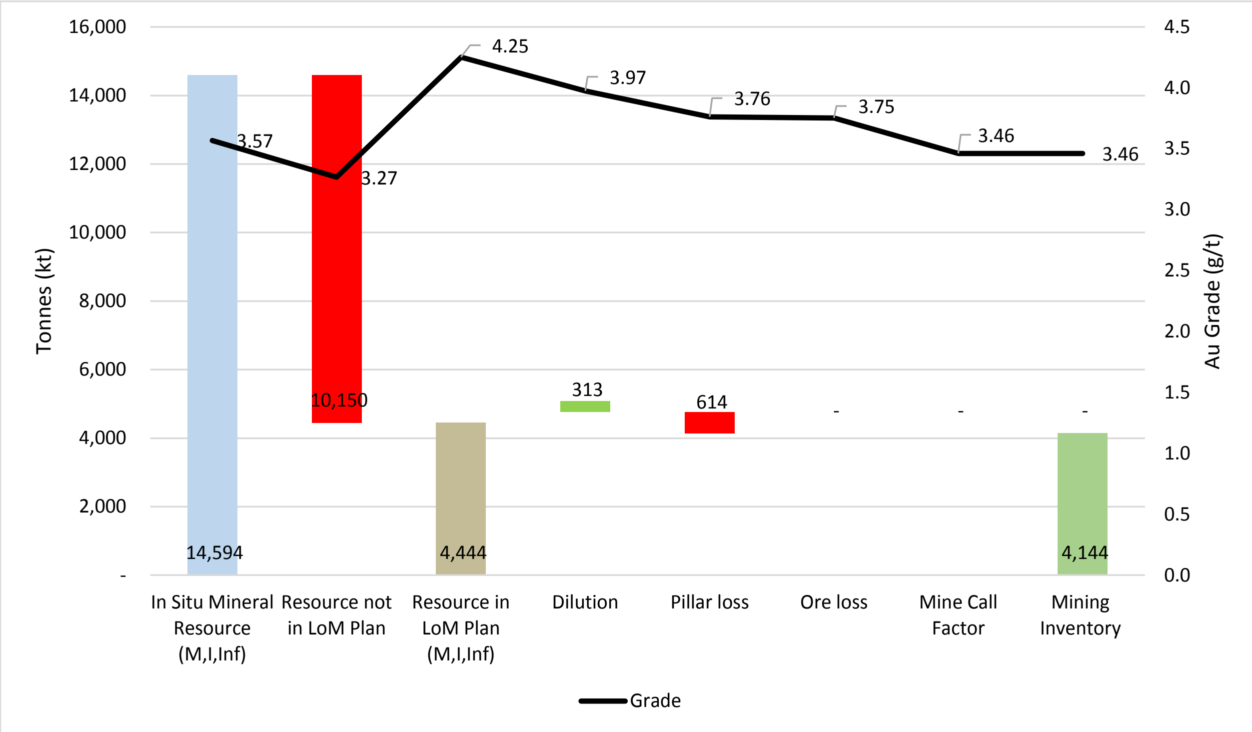
The Mining Inventory contained in the LoM plan is detailed in Table 53.

Table 53: Mining Inventory Contained in LoM Plan

Mining Inventory Category	Diluted Tonnes (kt)	Grade (g/t)	Content (kg)	Content (koz)
Measured	985.50	2.82	2,774.55	89.20
Indicated	917.58	3.78	3,464.58	111.39
Inferred	2,238.76	3.62	8,099.95	260.42
Total	**4,141.84**	**3.46**	**14,339.08**	**461.01**

The *in situ* Mineral Resource is as per the Mineral Resource statement estimated for the orebodies included in the project. The Mineral Resources in the LoM plan exclude the majority of the available *in situ* Mineral Resources below the applied cut-off grades. The Mineral Resources within the LoM plan are adjusted with mining dilution factors, increasing the tonnage. The MCF influences only the content. The Mineral Resource to mining inventory is illustrated in Figure 83. The mining inventory contains Inferred Mineral Resources, and is not intended to represent a Mineral Reserve.

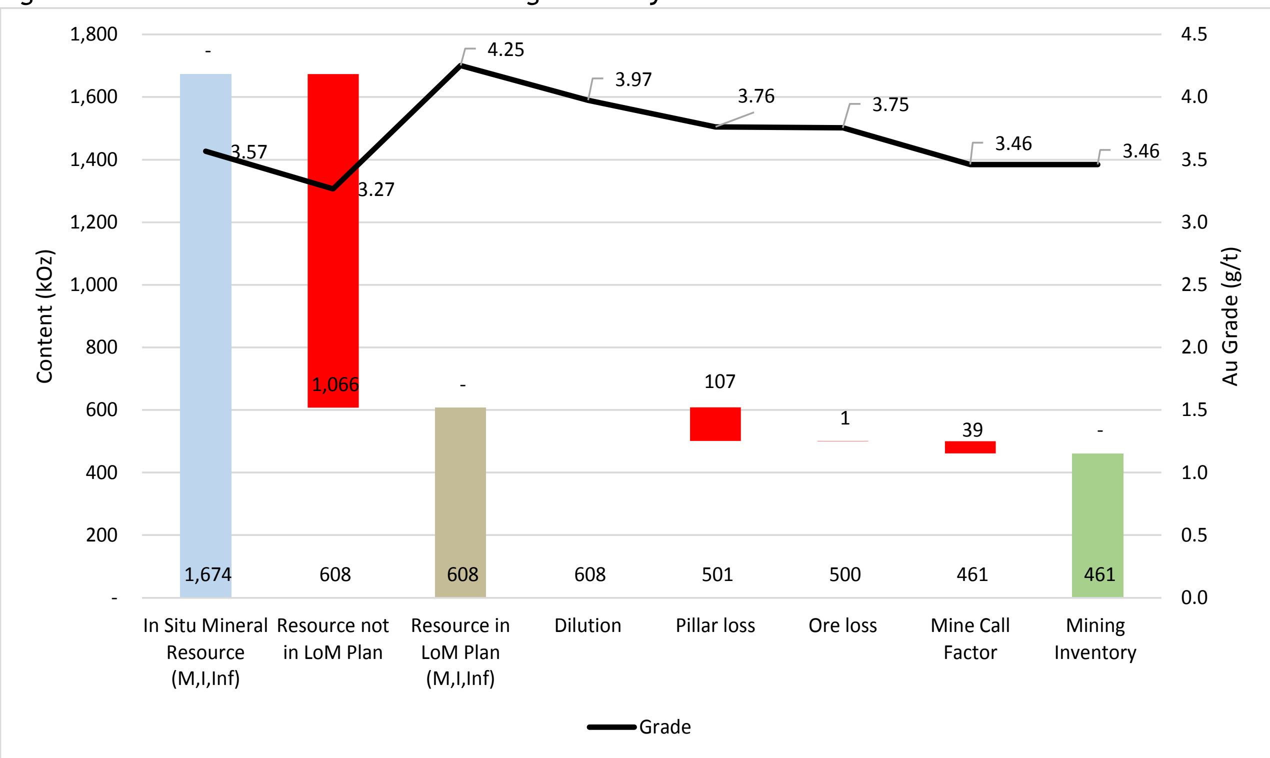
Figure 83: In-Situ Mineral Resource to Mining Inventory



Note: This graph excludes reclaimed TSF material.

The Mineral Resource to Mining Inventory product is illustrated in Figure 84. The *in-situ* content is reduced by excluding areas that are below the specified cut-off grades. Dilution does not influence the gold content but affects the mined tonnes. The MCF reduces the product recovery.

Figure 84: In-situ Mineral Resource to Mining Inventory Product



Note: This graph excludes reclaimed TSF material.

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

I. Underground Development

The existing development forms part of the mine plan to provide access to the underground workings and some targeted mining areas. Existing underground development within the Galaxy, Princeton, Woodbine and Giles sections is not sufficient to provide access to all the planned mining areas.

Additional development is required for opening up sufficient ground to sustain the planned 50 ktpm production rate. Different development requirements exist for the orebodies included in this study. The development designs related to each orebody are described in this section.

The naming convention used in the development designs are detailed in Table 54.

Table 54: Development Designs Naming Convention

Design Naming Convention	Definition
ACC	Access crosscut. Refers to the crosscuts developed from the ramp in the Galaxy and Princeton designs which provide access to the cut-and-fill slices. In the Woodbine and Giles design it refers to the crosscuts that connect the spiral to the haulages.
ADT	Adit. Refers to the extension of the 22 Level Adit of the Galaxy Orebody.
CUB	Cubby. Refers to the pass bays that are developed off the spiral to allow TMM to move past each other. Applicable to the Princeton design.
DEC	Decline. Refers to the development of the spiral ramps. Applicable to the Galaxy, Princeton and Woodbine and Giles designs.
FAN	Fans. Refers to the inclined lift development in the Galaxy and Princeton designs to provide access to consecutive stope slices.
HLG	Haulage. Refers to horizontal off-reef development along the strike of the orebody. Applicable to the Princeton and Woodbine and Giles designs.
RDV	Reef drive. Refers to horizontal on-reef development along the strike of the orebody. Applicable to the Woodbine and Giles design.
RSE	Raise. Refers to raises in the Woodbine and Giles design that are developed between levels for ventilation purposes. The raises also serve as a starting point for stoping.
VRS	Ventilation raises. Refers to the raises that are developed between levels for ventilation purposes. Applicable to the Galaxy, Princeton and Woodbine and Giles designs.
VXC	Ventilation crosscut. Refers to the small crosscut that is developed off the spiral ramp from where the ventilation raise is established. Applicable to the Galaxy, Princeton and Woodbine and Giles designs.
XCT	Crosscut. Horizontal development that is broken away from a ramp, drive or haulage to provide access to the orebody. Usually developed at near right angles to the strike of the orebody. Applicable to the Galaxy, Princeton and Woodbine and Giles designs.

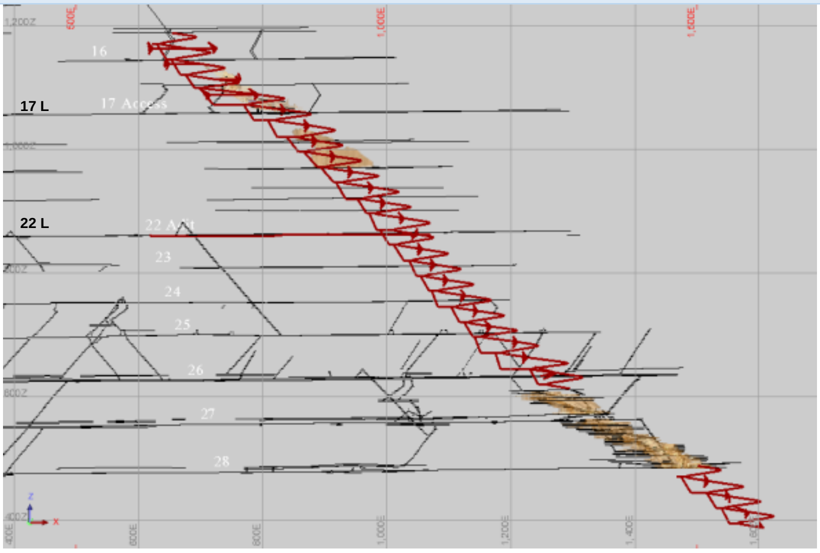
Galaxy Development

The Galaxy planned development is illustrated in Figure 85. Development of a spiral ramp extending from above 16 Level to below 28 Level, adjacent to the Galaxy Orebody is required. Access crosscuts are developed from the spiral ramp on each level to intersect the centre of the Galaxy Orebody. Inclined “fans” are developed from the access crosscut on top of each other to access the successive cuts to mined.

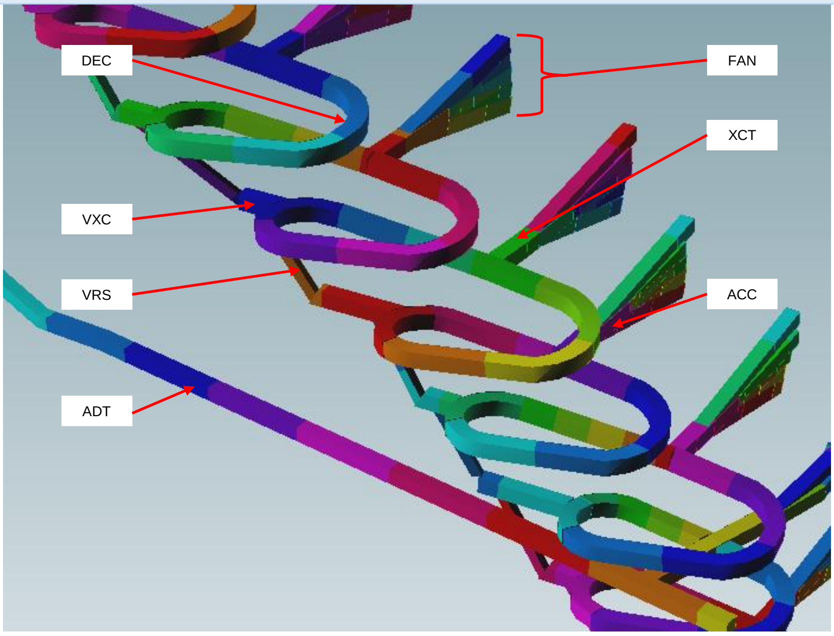
On each level, a ventilation crosscut is developed on the curve of the spiral ramp that serves as the starting point for the development of level to level ventilation raises. On 22 Level, an adit is developed that connects to the existing 22 Level, providing a means for ore transportation from underground to the 22 Level adit on surface.

Figure 85: Galaxy Planned Development

Planned Development



Development Design

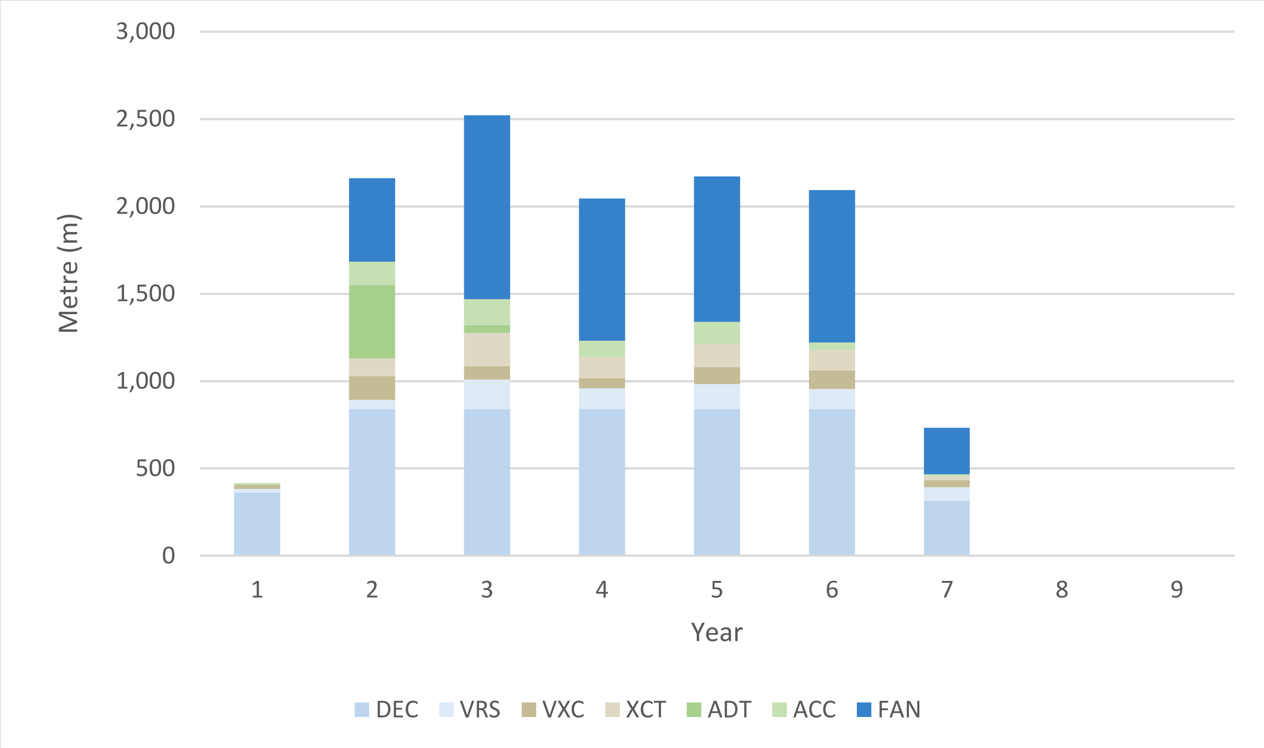


Note: The different colours represent different period in months

Galaxy Planned Development	**June 2020**

The development profile for Galaxy is illustrated in Figure 86.

Figure 86: Galaxy Development Profile



Princeton Development

The development design for Princeton is significantly different to the Galaxy design due to the thin, sheet like nature of the Princeton Orebody lenses. A large amount of off-reef development is required to open up sufficient ground for the planned production rate of 15 ktpm. The Princeton planned development is illustrated in Figure 87.

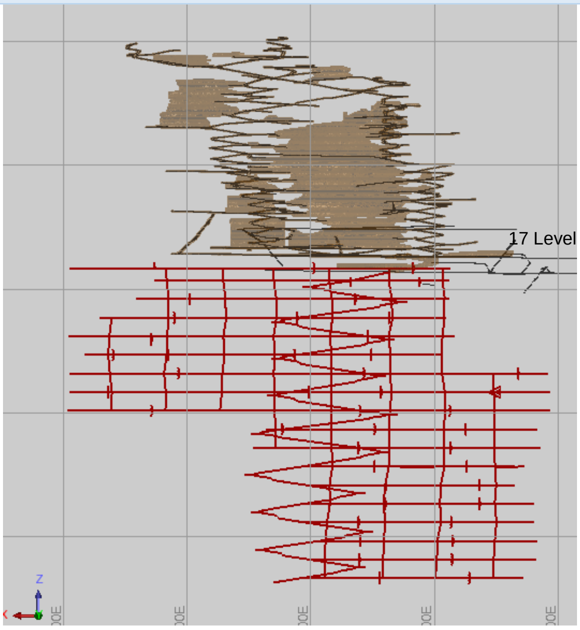
The most significant difference between the Galaxy and Princeton design, is the inclusion of off-reef drives (HLG) in the Princeton design. A spiral is developed adjacent to the Princeton Orebody lenses. Access crosscuts connect the off-reef drives to the spiral on each level. The off-reef drives are developed along the strike of the orebody in both directions, making it possible to develop several “fans” on a level, as opposed to a single “fan” per level as per the Galaxy design.

Ventilation crosscuts are developed from the off-reef drives on each level at set intervals. Ventilation raises are developed from the ventilation crosscuts between a lower and an upper level. Pass bays are developed on the loops of the spiral ramp to accommodate machinery moving past each other.

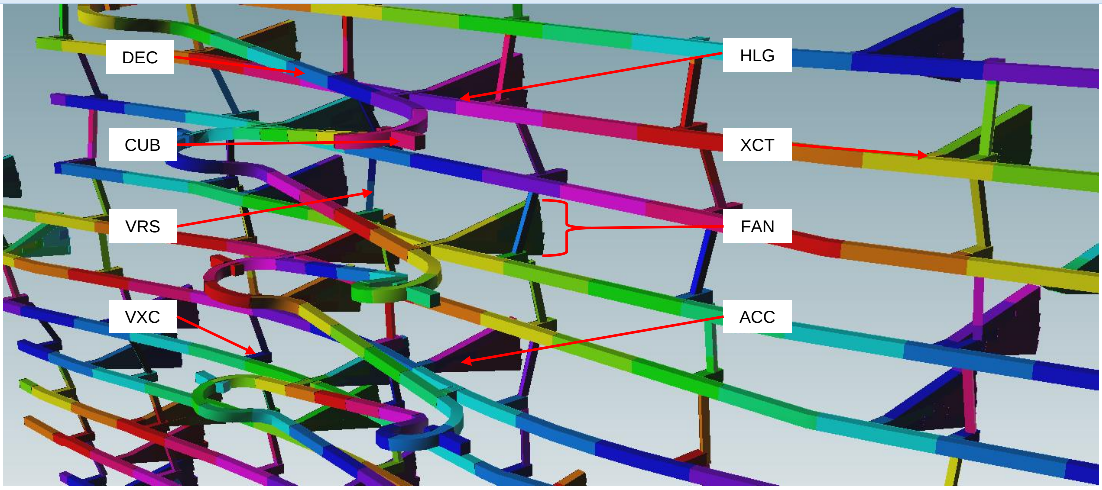
The crosscuts are broken away from the off-reef drives, to access the orebody. “Fans” are developed sequentially from the crosscut, starting with the bottom “fan” and progressing upwards as each cut-and-fill slice is mined.

Figure 87: Princeton Planned Development

Planned Development



Development Design

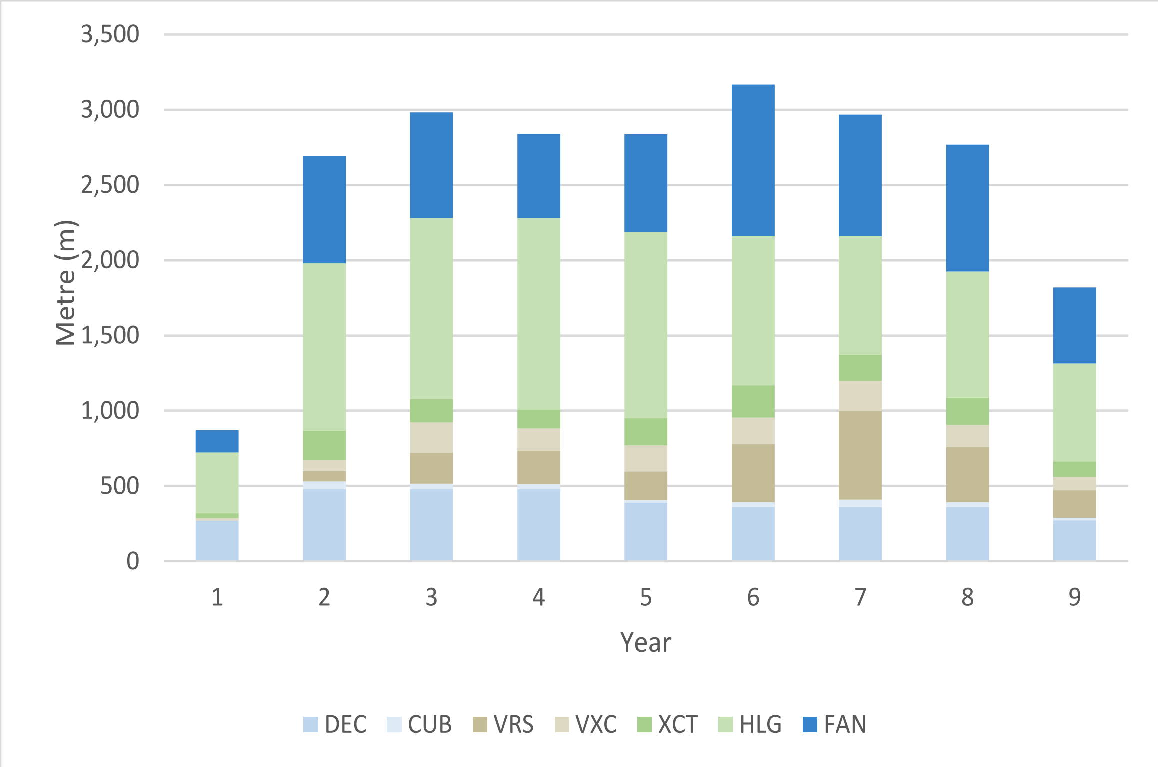


Note: The different colours represent different period in months

Princeton Planned Development	June 2020

The development profile for Princeton is illustrated in Figure 88. Princeton has higher development requirements compared to Galaxy because of developing off-reef drives on each level along the strike of the orebodies.

Figure 88: Princeton Development Profile

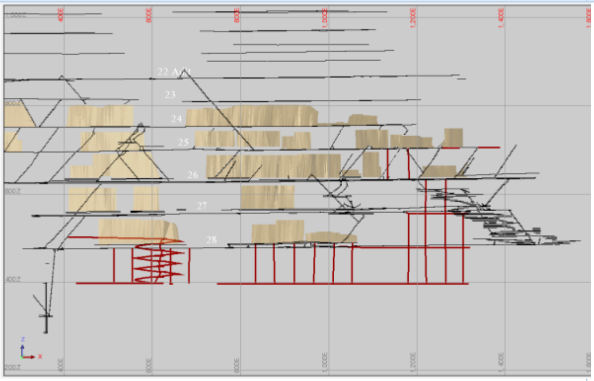
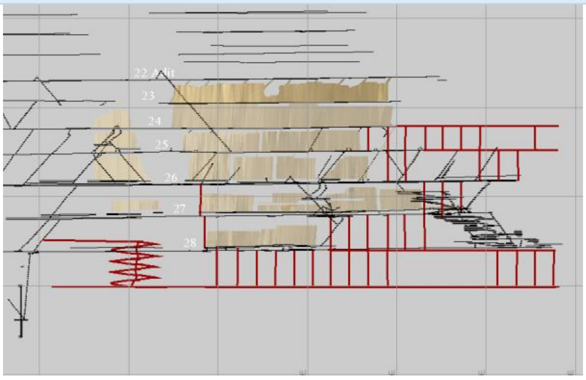


Woodbine and Giles Development

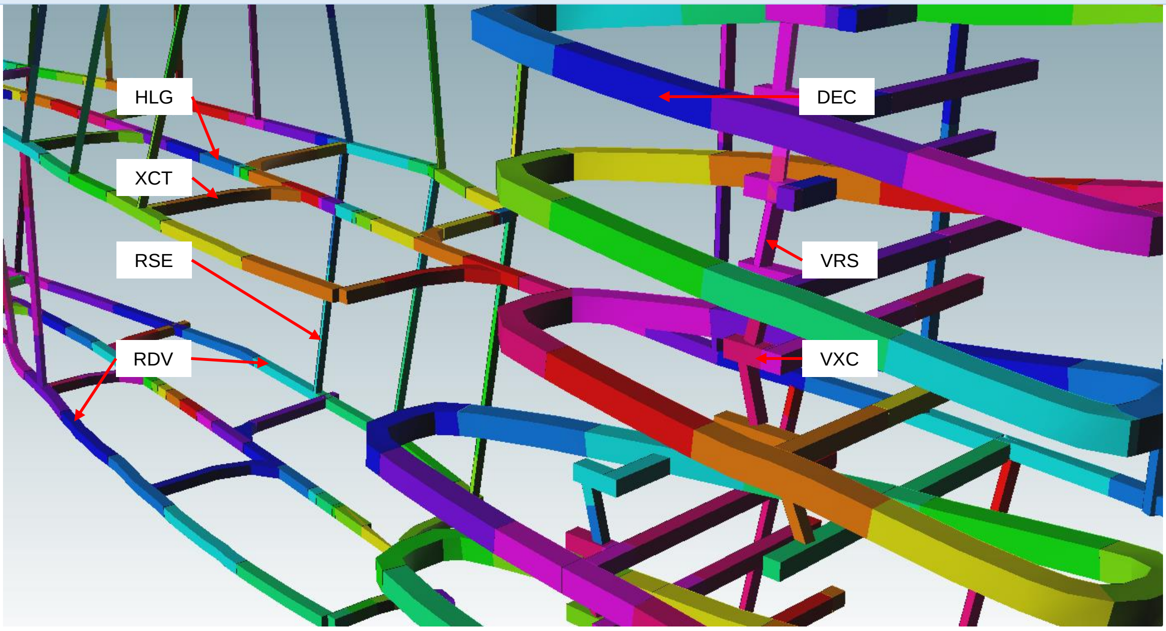
Development in the Woodbine and Giles sections is required from 24 Level down to provide access to the targeted stoping areas. A spiral ramp is developed adjacent to the orebodies which provides access from 28 Level down. Crosscuts are developed from the ramp to provide level access. The crosscuts connect the off-reef drive to the ramp. An off-reef drive is developed between the Woodbine and Giles orebodies to create mining flexibility.

Ventilation crosscuts are developed from the main crosscuts that provide level access. Ventilation raises are developed between levels to connect the ventilation crosscuts. Crosscuts connect the off-reef drive to reef drives along strike to both the Woodbine and Giles orebodies. Raises are developed to connect levels and serve as a starting point for stoping operations.

Figure 89: Woodbine and Giles Planned Development

Planned Development - Woodbine	Planned Development - Giles
	

Development Design

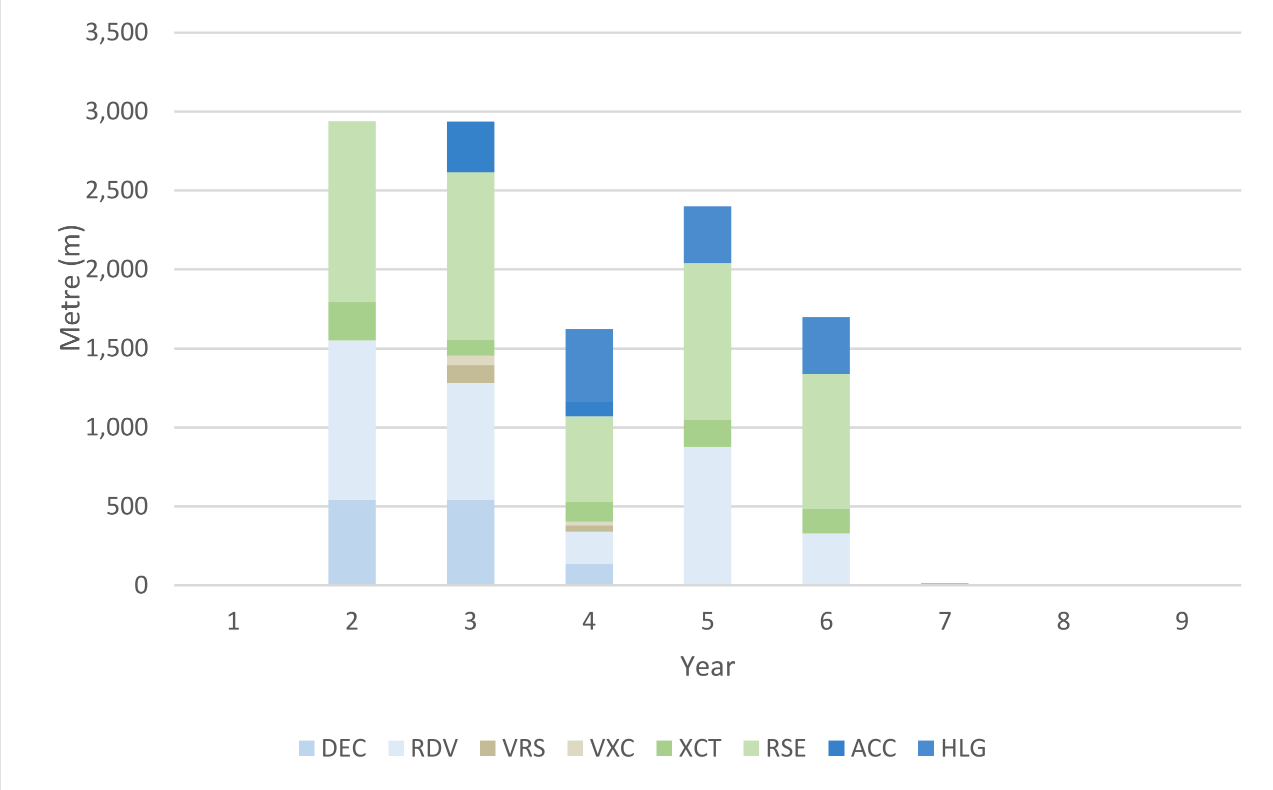


Note: The different colours represent different period in months

Woodbine and Giles Planned Development	June 2020

The development profile for Woodbine and Giles is illustrated in Figure 90.

Figure 90: Woodbine and Giles Development Profile



A large amount of development within the Woodbine and Giles orebodies consists of on-reef development. This is attributed to the reef drives developed along the strike of each orebody and level to level raises that are developed through the orebodies to create a starting point for stoping operations.

II. Backfilling

The type of backfill selected by the Galaxy Gold Mine for the mechanised cut-and-fill mining is waste rock fill. Mined out stopes in both the Galaxy and Princeton orebodies will be backfilled. The fill will be sourced from underground waste development.

A calculation was done to determine the waste produced and backfill required over the LoM. A swell factor of 1.6 was applied to the waste tonnage produced. Applying a swell factor of 1.6 to the waste produced, implies that 1.6 t of waste is required for backfilling 1.0 t of ore mined.

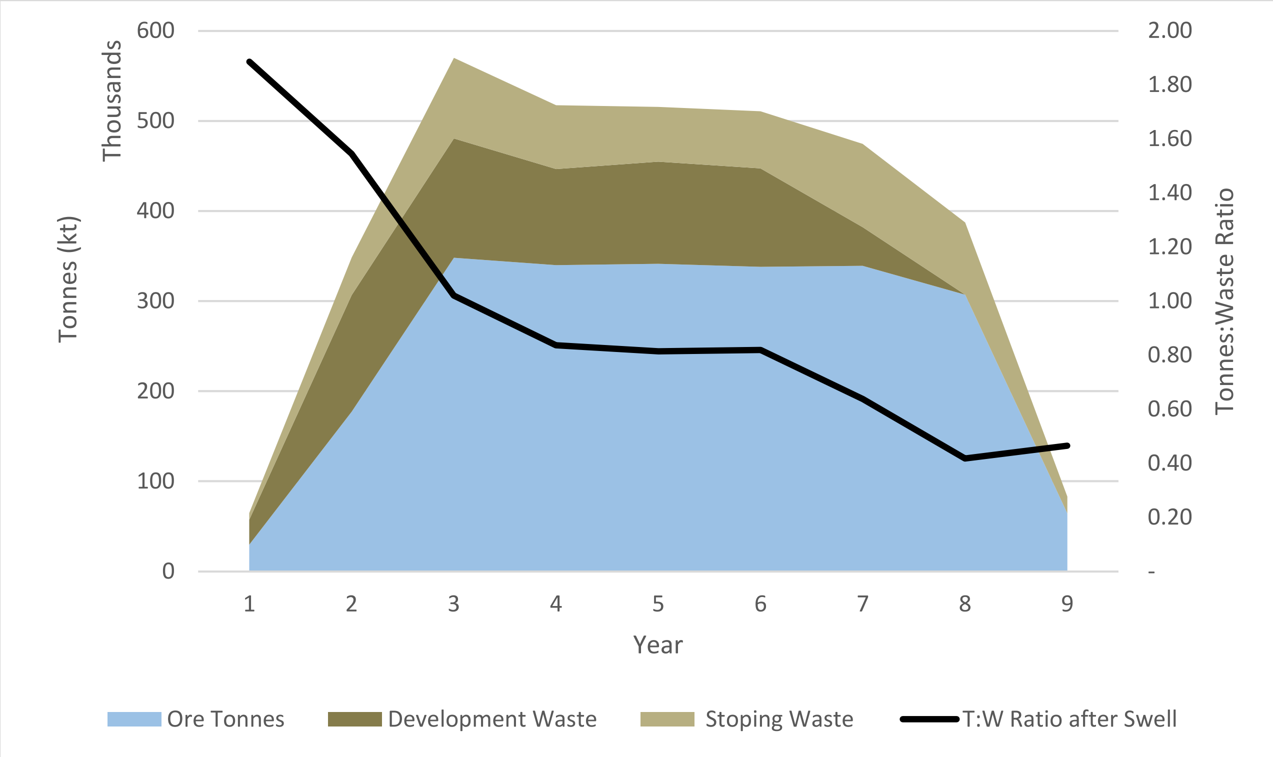
The results are indicative of whether sufficient waste material for backfilling the mined-out stopes is available. The result of this calculation is summarised in Table 55.

Table 55: Galaxy and Princeton Ore to Waste Ratio

Orebody	Waste Produced to Ore Mined Ratio	Waste Available to Ore Mined Ratio (After applying swell factor)	Backfill Shortage or Surplus (%)
Galaxy	0.51	0.84	-16 %
Princeton	1.20	1.92	+92 %

The waste produced versus backfill required for the Galaxy LoM plan is illustrated in Figure 91. A shortage of backfill material is anticipated for the Galaxy operation from year three, when the tonnes produced to waste ratio falls below a value of one. A tonnes to waste ratio of 1:1 implies that the waste produced is enough to satisfy the backfill required. A value lower than one, implies that there is a shortage of waste produced for the backfill required. Values higher than one imply that more waste is produced than backfill required.

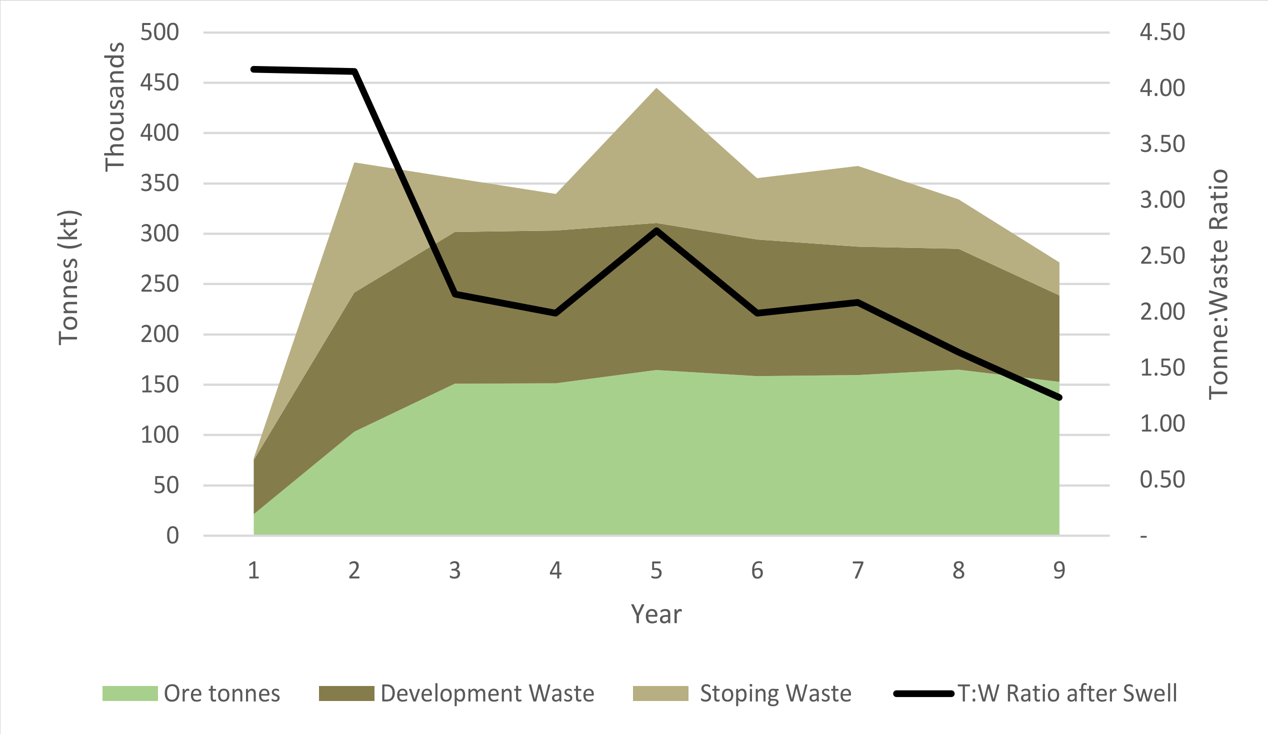
Figure 91: Galaxy Waste Produced vs Backfill Required



The shortage of waste material can be addressed by increasing development rates to obtain the required waste material production, or by making use of the surplus waste produced from Princeton to fulfil the backfill requirements of Galaxy.

The backfill requirements for the Princeton LoM plan is illustrated in Figure 92. The tonnes produced to waste ratio for the Princeton section is consistently higher than one over the LoM. This implies that waste produced from the Princeton section is sufficient to fulfil the backfill requirements over the LoM. The additional waste produced from the Princeton section may be used to supplement the backfill requirements of the Galaxy section.

Figure 92: Princeton Waste Produced vs Backfill Required



Item 16 (d) - Required Mining Fleet and Machinery

All mining operations at the Galaxy Gold Mine will be executed by a mining contractor. Galaxy Gold Mine has selected S and B Mining Consultants (Pty) Ltd to provide the required mining services. The contractor will render all services in accordance with the mine plans and production schedule as set out by the Mine.

The contract between Galaxy Gold Mine and S and B Mining Consultants (Pty) Ltd, dated 10 January 2019, currently includes only mining operations associated with the Galaxy and Princeton orebodies and does not include a contract for mining the Woodbine and Giles orebodies.

The initial contractor rates reflect sharing of equipment for development and stoping activities during production build up. As mining activities progress, additional equipment will be required to sustain the required production rates from Galaxy and Princeton.

The required mining fleet at steady state production of 50 ktpm for Galaxy and Princeton is listed in Table 56.

Table 56: Galaxy and Princeton Mining Fleet

Equipment	Quantity Galaxy	Quantity Princeton
Drill Rig	3	2
LHD (10 m³ bucket capacity)	5	2
Dump Trucks (20 t capacity)	8	4
Utility Vehicle (8 t)	3	1

The Woodbine and Giles section will require handheld pneumatic rockdrills, locomotives and hoppers. The required equipment for Woodbine and Giles is detailed in Table 57. The equipment requirements were calculated using a production rate of 5 ktpm from the Woodbine and Giles sections.

Table 57: Woodbine and Giles Equipment Requirements

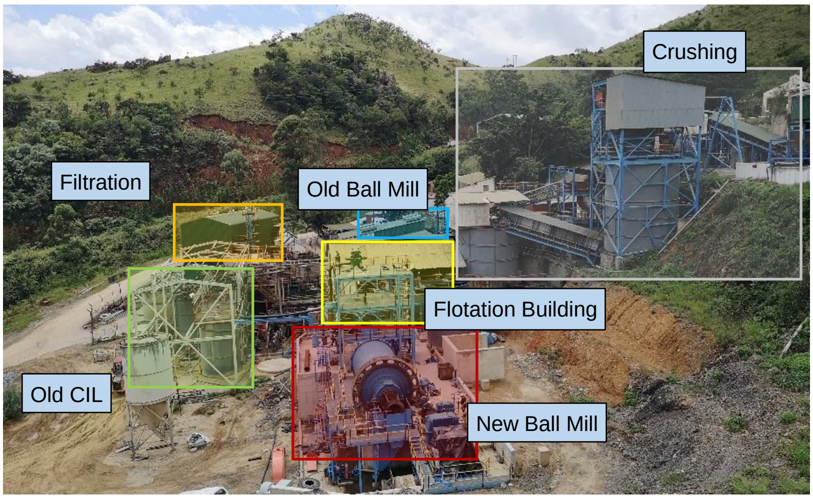
Equipment	Quantity
Handheld Pneumatic Rock Drill	8
Locomotive	1
Hoppers	7

ITEM 17 - RECOVERY METHODS

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

The processing plant (Figure 93) was recommissioned in April 2019 and is producing and selling a gold flotation concentrate. The plant consists of crushing, milling, flotation and concentrate filtration circuits. The existing infrastructure was used for as long possible, with crucial expansions and refurbishments completed in order to meet the interim production target of 15 ktpm. Further expansions are planned to meet the 30 ktpm and then eventually the 50 ktpm production targets.

Figure 93: Processing Plant



Source: Site visit photos (4 March 2020)

Processing Plant	May 2020

The old CIL tanks have been repurposed and are being used as flotation conditioning/feed tanks, float concentrate holding tanks as well as process water tanks. The building that housed the elution, electrowinning, carbon regeneration circuits and smelt house was converted to a concentrate filtration house.

GGR is currently processing historic TSF material as well as underground ore. Underground ore is obtained primarily from the Princeton mine development.

The CMF circuit was expanded to a capacity of 30 ktpm by adding roughers and scavengers. However, the old ball mill has a capacity of 15 ktpm, which is limiting current plant throughput.

A new ball mill with a capacity of 50 ktpm is being built and is due to be commissioned in May 2020. This will allow the Mine to ramp up production to 30 ktpm and process underground material from the Princeton and Galaxy orebodies.

Flotation tailings is pumped to and deposited onto the historic TSF.

Item 17 (b) - Operating Results Relating to Recoverability of Valuable Metals

The total actual plant production results between August 2019 and February 2020 is illustrated in Figure 94. There was a period of gradual recovery increase from below 40% in April 2019 to an average of 67% between August 2019 and February 2020.

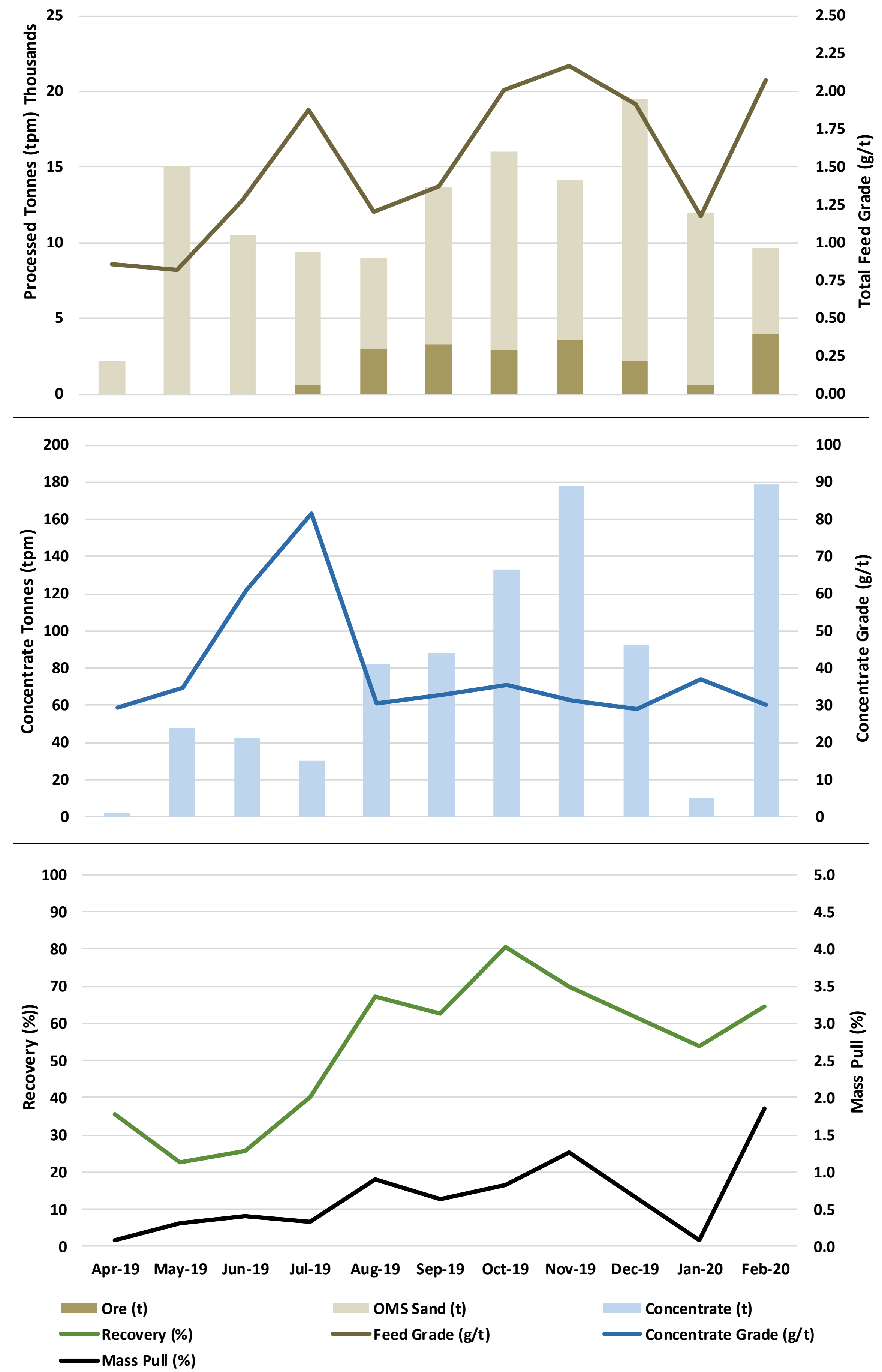
Furthermore, the concentrate grade stabilised from August 2019 onwards with Galaxy producing concentrate with average grades of about 32 g/t.

The plant feed was made up primarily of TSF material.

The plant treated between 9 ktpm and 19.5 ktpm of material at an average of 13.4 ktpm and average total plant feed grade of 1.75 g/t. These tonnes were made up primarily of TSF material.

The total recovery was fairly consistent and averaged at 67%. Concentrate grade was also consistent at an average of 32 g/t. Concentrate production fluctuated with mass pulls varying between 0.08% and 1.85%.

Figure 94: Actual Plant Production (April 2019 to February 2020)

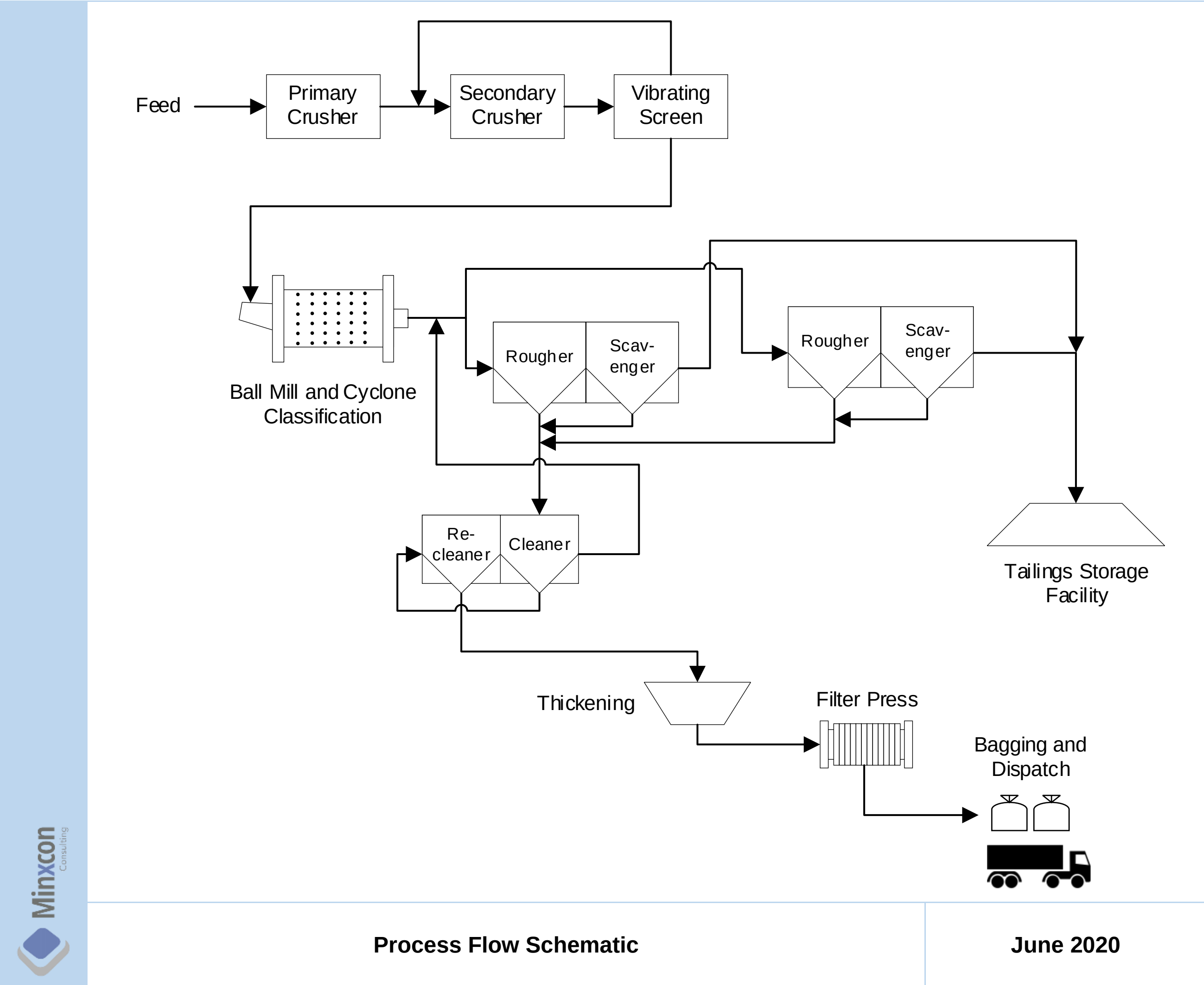


Item 17 (c) - PLANT DESIGN AND EQUIPMENT CHARACTERISTICS

Comminution takes place by means of primary and secondary crushing in closed circuit with a screen followed by ball mill grinding.

Referring to the process flow schematic in Figure 95, Run of mine ("RoM") material is delivered to the plant and tipped onto the static grizzly. The grizzly underflow is crushed by a primary jaw crusher.

Figure 95: Process Flow Schematic



Jaw crusher product is conveyed to the secondary crushing circuit feed bin. The bin discharges onto a conveyor which transfers the primary crushed material into the secondary cone crusher (Figure 96). The cone crusher product is screened with the screen overflow redirect back to the cone crusher. The screen underflow discharges into a bin. The bin material is then conveyed to the ball mill.

Figure 96: Ore Feed and Crushing, and Cone Crusher

Ore Feed and Crushing	Cone Crusher
	
Ore Feed and Crushing, and Cone Crusher	June 2020

The old ball mill circuit (Figure 97) consists of a tube mill with a capacity of 15 ktpm. The mill operates in closed circuit with a cyclone. The cyclone overflow gravitates into one of the old CIL tanks (CIL tank No. 4) prior to flotation.

Figure 97: Old Ball Mill Circuit

Old Ball Mill Circuit	June 2020

The flotation circuit was upgraded to a capacity of 30 ktpm with the addition of new rougher and scavenger cells. The flotation circuit consists of two parallel rougher-scavengers with a single cleaner-recleaner circuit. Additional cleaner-recleaner capacity will be commissioned when expanding to 50 ktpm.

The flotation concentrate is housed in CIL tank No. 1 and 2 prior to thickening (Figure 98). The thickener overflow water (process water) gravitates into CIL tank No. 3 from where it is reused in the plant. Make-up water is sourced from underground workings.

Thickener underflow is filtered through one of two filter presses (Figure 98). The filter cake discharges onto a conveyor which transfers the material to the bagging and storage area.

Figure 98: Thickener Circuit and Filter Presses

Thickener Circuit

Filter Presses

Thickener Circuit and Filter Presses **June 2020**

Item 17 (d) - Current Requirements for Energy, Water and Process Materials

The Galaxy plant has a current installed capacity of 2,500 kW and consuming approximately 1,000,000 kWh/month. The projected power consumption is expected to increase with the planned expansions as part of the PEA.

Water for the plant is sourced from underground workings. The operation is expected to have a positive water balance. As a result, no additional make-up water will be required for the plant.

The forecasted reagent and steel ball consumptions are detailed in Table 58.

Table 58: Forecasted Reagent and Steel Ball Consumption

Item	Unit	Value
Sulphurdiser (NaHS)	kg/feed tonne	0.12
Sodium Isobutyl Xanthate (SIBX)	kg/feed tonne	0.2
Copper Sulphate ($CuSO_4$)	kg/feed tonne	0.17
Flotation Frother	kg/feed tonne	0.2
Steel Balls	kg/feed tonne	1

A new reagent area has been established, as shown in Figure 99.

Figure 99: New Reagent Area

New Reagent Area	June 2020

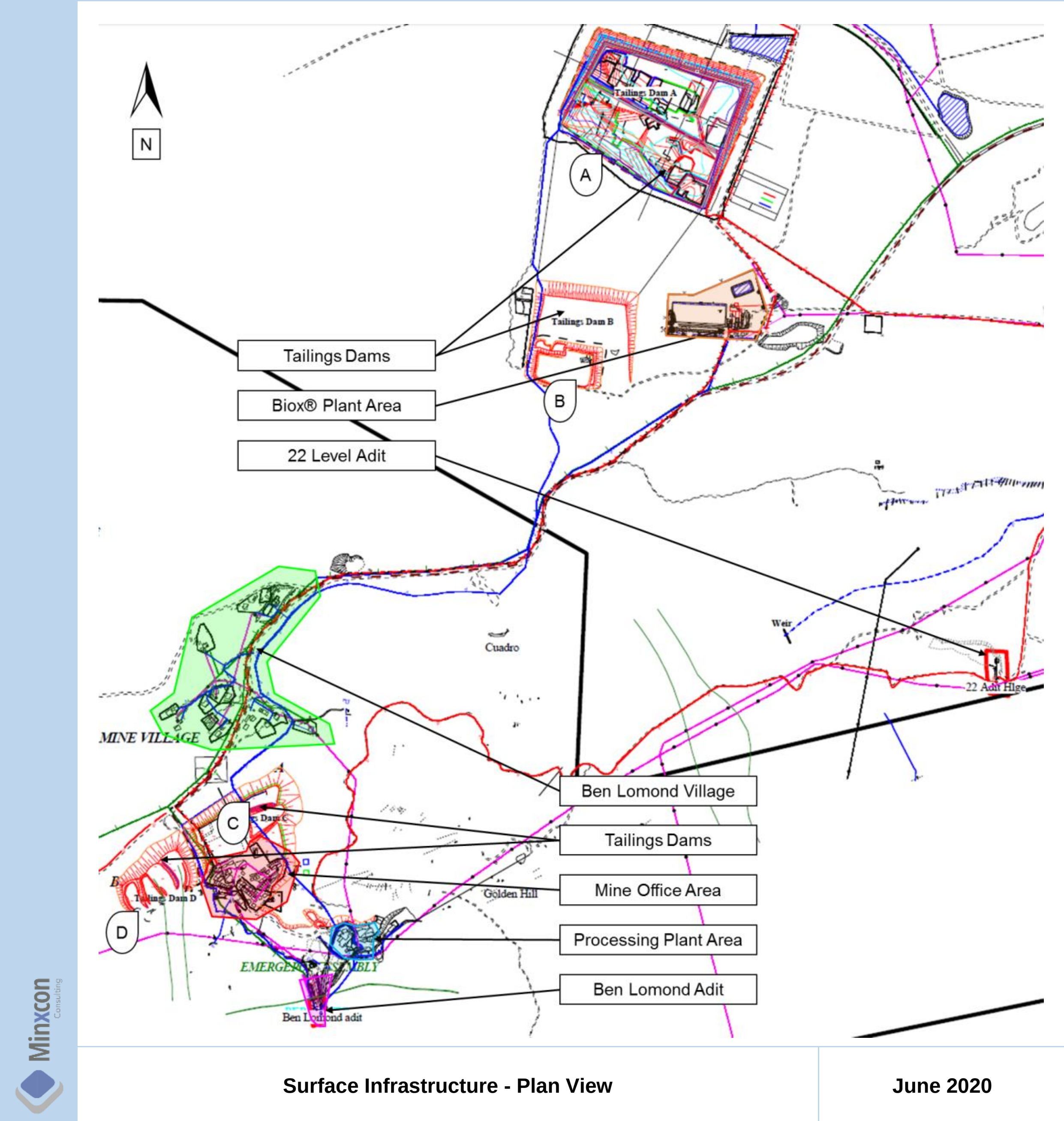
ITEM 18 – PROJECT INFRASTRUCTURE

The Galaxy Gold Mine is well established in terms of infrastructure as the Mine was historically operational. Currently mining activities are limited to sands mining (tailings reclamation) and some development at the Princeton orebody. Adits allowing access to the underground workings remain accessible and are guarded by security guards stationed on site.

Item 18 (a) - Mine Layout and Operations

The general arrangement and layout of the Galaxy Gold Mine infrastructure and operations is illustrated in Figure 100.

Figure 100: Surface Infrastructure - Plan View



Referring to Figure 100 the main infrastructure areas include:-

- access and haul roads;
- security and access control infrastructure and facilities;
- access to underground workings through various exiting adits;
- flotation processing plant area;
- BIOX® process facility (non-operational);
- mining support infrastructure:-
    - offices;
    - workshops;
    - changing facilities (200 employees);
    - stores;
    - salvage yard;
    - explosives magazine;
- mine ventilation infrastructure;
- water distribution infrastructure;
- power supply and distribution infrastructure;
- water and waste management infrastructure including a sewage plant;
- compressed air infrastructure;
- TSFs; and
- mining villages.

Item 18 (b) - INFRASTRUCTURE

I. SURFACE INFRASTRUCTURE

The Galaxy Gold Mine consists of various adits from which historical mining operations were conducted. One of these adits, the Ben Lomond adit, as photographed on a site visit is illustrated in Figure 101. Infrastructure on site is generally in good condition. However, additional capital will be required in order to conduct maintenance and repairs, and re-commission the infrastructure in order to place the Mine back in full production.

Figure 101: Ben Lomond Adit

Ben Lomond Adit	June 2020

In addition to the various adits from which mining operations were historically conducted, two dormant adits are also present on the Project Area namely the Alpine Adit and the Pioneer Adit. The two adits that will be used to mine the various orebodies collectively forming the Galaxy Gold Mine are the Ben Lomond and 22 Level adits.

i. Access, Roads and Routes

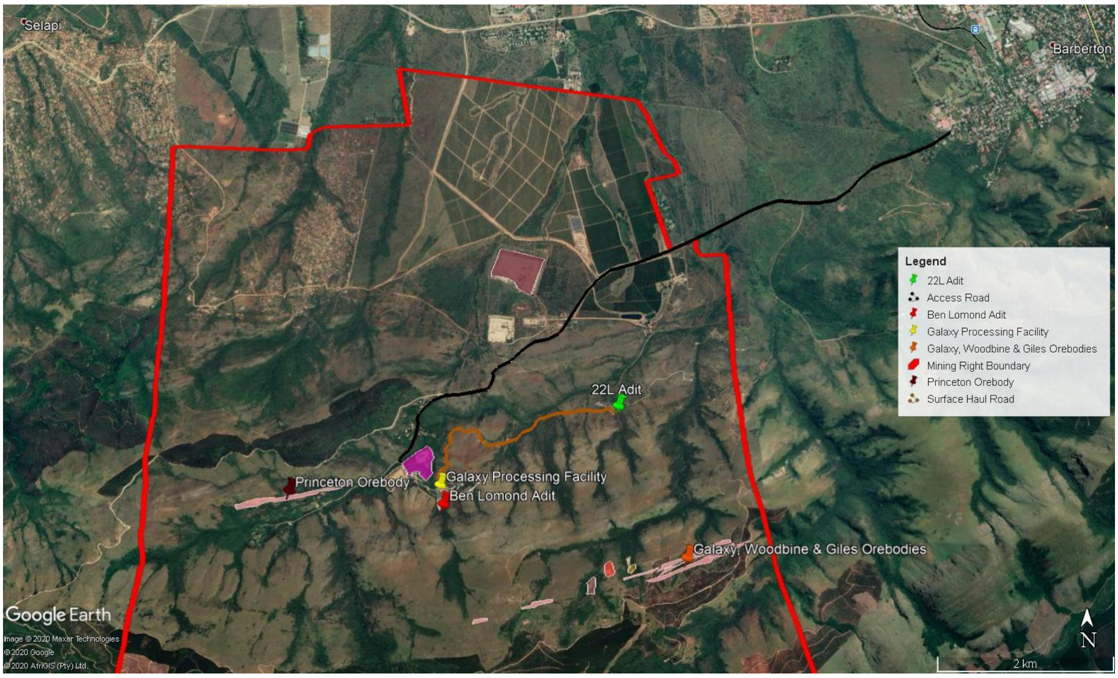
Access to the Mine is gained from the town of Barberton via sections of paved and unpaved roads. These roads service the mining operation, surrounding forestry industry and the Moodies agricultural estate.

Direct access to the Mine consists of gravel roads that cut along the mountain sides and link the access gate to the Mine offices, staff complexes and the residential and recreational areas.

Historically, the work force travelled by taxi or by bus to the Mine. The work force residing on the Mine generally travelled by foot or car to their respective work areas. Roads are in a reasonable condition and access to the Mine is easily obtainable.

The roads and routes surrounding and on the operation is illustrated in Figure 102.

Figure 102: Surface Roads and Routes



Surface Roads and Routes	June 2020

ii. Mine Office Area

The Mine office area consists of various offices and infrastructure capable of sustaining mining operations. Offices are currently in good condition and are utilised by skeleton staff. As per information supplied by the Client, a basic breakdown of the Mine office complex and the amount of personnel that can be accommodated on the premises is illustrated in Table 59.

Table 59: Mine Office Complex Breakdown

Description	Personnel	Comment
Admin 1	5	
Admin 2	2	
General Manager	1	
HR Office	1	
HR Assistant	1	
Accounting	1	
Finance Manager	1	
Ablutions		2 separate toilets and wash basins
Technical Services Manager	1	
Survey Office	3	
Underground Manager	1	
Mine Captain	1	
Strong Room		2 strong rooms with 1 safe
Management Change House	8	1 toilet
Boardroom		Seats 15
Shift boss Office	2	
Senior Shift boss Office	1	
Engineering Foreman	1	
Officials Change House	24	
Engineering and Miners Change House	37	
Lamp Room		140 rescue packs and 145 lamps available
Shaft Clerk Office	2	

Existing offices and facilities are illustrated in Figure 103 and Figure 104.

Figure 103: Galaxy Gold Mine - Offices

Main Office	Security Office
	
Plant Office	**Engineering Office**
	

Mine Offices (Park Homes)

Galaxy Gold Mine – Offices	June 2020

Figure 104: Galaxy Gold Mine - Surface Facilities

Mine Stores

Changes Facilities & Hostel

Workshops

Engineering Workshops

Salvage Yard

Galaxy Gold Mine –Surface Facilities	**June 2020**

iii. Workshops and Stores

A workshop with dimensions 24 m x 12 m exists on surface. As per staff on site, this workshop is empty and would need to be re-equipped. The Mine store with dimensions 21 m x 21 m is situated adjacent the workshop and has office space for four persons. A fuel storage and refuelling facility is in place and has a storage capacity of 10 kL.

Underground workshops are located at 27 Level, 28 Level, Ben Lomond Adit and 17 Level at Princeton. The workshops require re-equipping to be fully operational.

II. Underground Infrastructure

Access to the underground workings is via the main Ben Lomond Adit located on 17 Level and 22 Level Adit.

The Ben Lomond adit is used as the main haulage leading to the Woodbine sub-vertical shaft and is equipped with single line track over its 3 km length. A separate haulage that breaks away from the main haulage close to the adit entrance allows access to the Princeton orebody. The Woodbine sub-vertical shaft is 579 m in depth up to 28 Level although the shaft sump extends to 30 Level (852 m below collar). At present, the shaft bottom is filled with spillage and debris and requires significant work to the shaft steelwork from 28 Level downwards.

The Woodbine Shaft is a two-compartment sub-vertical shaft that is equipped with two 4 t skips. Ore is hoisted from between 28 Level and 17 Level as well as provide transport for men and equipment. The Woodbine shaft will mainly be utilised for the transport of ore form the Woodbine and Giles orebodies. The sub-vertical shaft, since the introduction of an underground crusher, has a capacity of 18,000 tpm RoM. Waste tonnage generated underground was used in the cut-and-fill mining cycle.

A decline shaft leads from the 22 Level Adit on surface to 22 Level. A spiral ramp adjacent the mineralised envelope of the Galaxy Orebody is developed from 22 Level to approach 28 Level. The spiral ramp and decline shaft will be used for the transport of ore from the Galaxy Orebody to surface.

Underground workshops are located at 27 Level, 28 Level, Ben Lomond Adit and 17 Level at Princeton. The workshops require re-equipping in order to be fully operational.

Item 18 (c) – SERVICES

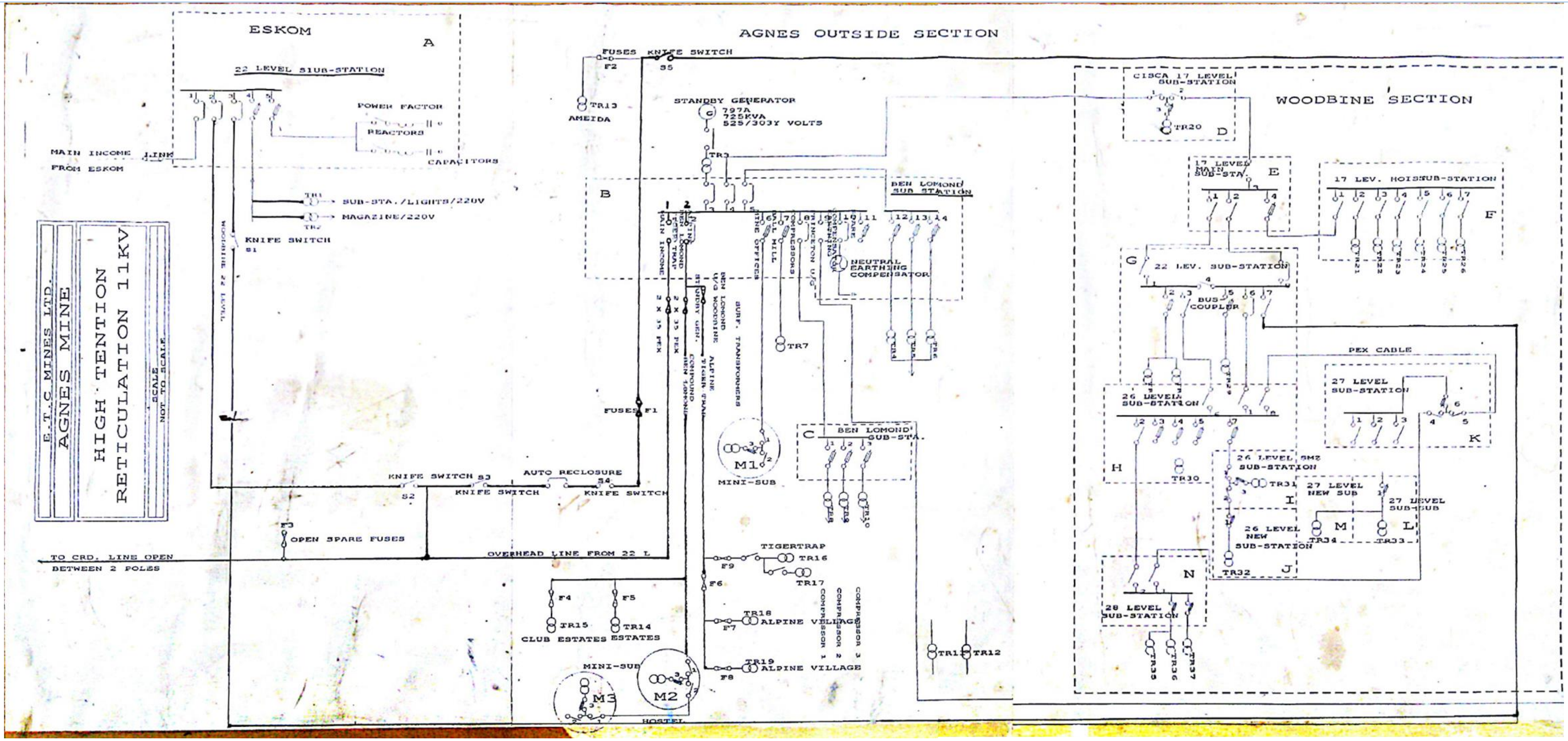
I. POWER SUPPLY

Grid power is supplied to the Galaxy operation from the 22 Level Adit Eskom substation. The 22 Level adit substation has an installed capacity of 5 MVA (2 x 2.5 MVA transformers – 1 x operational, 1 x standby). The current notified maximum demand ("NMD") for the Galaxy operations is 2.5 MVA. An application has been lodged with Eskom to increase the NMD to 4.5 MVA to ensure sufficient capacity.

The transformers at the 22 Level adit substation have historically shown low power factors and need to be replaced. Power is distributed to the various mining areas via 11 kV overhead power lines.

A single line diagram of the high tension reticulation for the previously named Agnes Mine is illustrated in Figure 105.

Figure 105: Agnes Mine - High Tension Reticulation



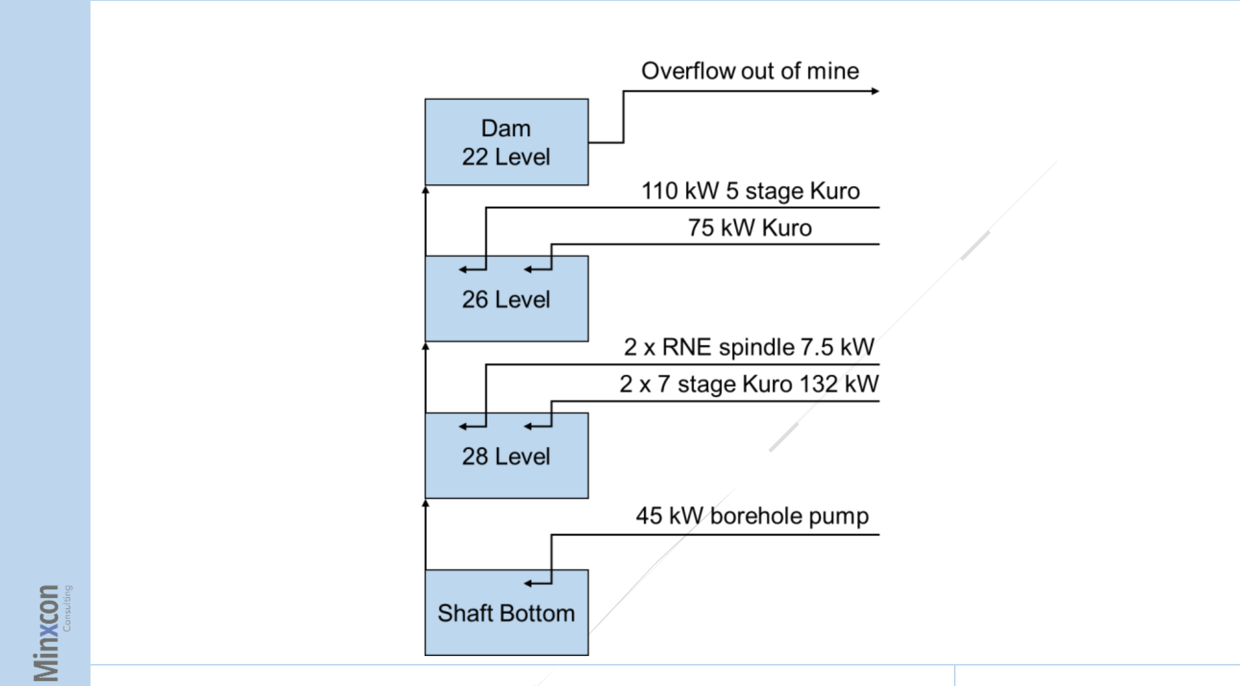
Agnes Mine - High Tension Reticulation	June 2020

II. Water Supply

Three underground dams situated at the Ben Lomond Adit supply water to the Mine and the surrounding villages. The water from the Princeton mine flowed from an aquifer within the Mine. This water is used for processing and stored in two 6 metre diameter reservoirs. Two underground dams are located on 26 level. Additional water for mining purposes was obtained from surface floodwater. All water is obtained from the underground dams and reservoirs, potable water supply is stored in a 300-kL tank.

Volumes associated with the water reticulation from underground sources are illustrated in Figure 106.

Figure 106: Basic Water Reticulation Schematic



Basic Water Reticulation Schematic	April 2020

Process water will be returned to the plant from the TSF RWD while potable water will be treated on-site at the existing a sand and chlorination filter.

Approximately 3,500 m^3 of water flowing from the adit is discharged into a tributary of Concession Creek through a pipe located at the base of the plant on a daily basis. A further 1,200 m^3 of water flowing from the 22 Level Adit was released into a tributary of the creek daily.

The Mine also supplies water, flowing from the adits to the local municipality. The municipality treats the water from the adits in a purification plant located next to Tiger Trap, where after it is piped to a reservoir for distribution to end users.

III. Stormwater Management

Stormwater in and around the Mine infrastructure area natural flows into creeks surrounding the property. Stormwater at the TSFs are managed by several trenches, diverting dirty run-off water to the RWD and clean stormwater to the environment.

IV. WASTE MANAGEMENT

The Mine historically operated a domestic waste dump which has been in existence since the late 1900s. All general waste is disposed of in this landfill site.

Sewage from the hostel is treated in a 600-person Becon Bio Filter RBC sewage plant installation. Clean/treated water from this system is discharged into a tributary of Concession Creek.

V. COMMUNICATION

Cellular reception for all major networks is available at the operation's offices. Reception elsewhere on the Mine including the flotation plant has little to no reception. Wi-Fi as well as streamline internet is available at the mine offices. The intra web system is currently damaged and needs upgrading. VoIP can be used to make phone calls; however, voice quality is low.

ITEM 19 – MARKET STUDIES AND CONTRACTS

Item 19 (a) – MARKET STUDIES AND COMMODITY MARKET ASSESSMENT

The following sections provide an overview of the gold market. The QPs have reviewed these studies and analyses and are satisfied that the results support the assumptions in the Report.

I. GOLD COMMODITY OVERVIEW - 2019

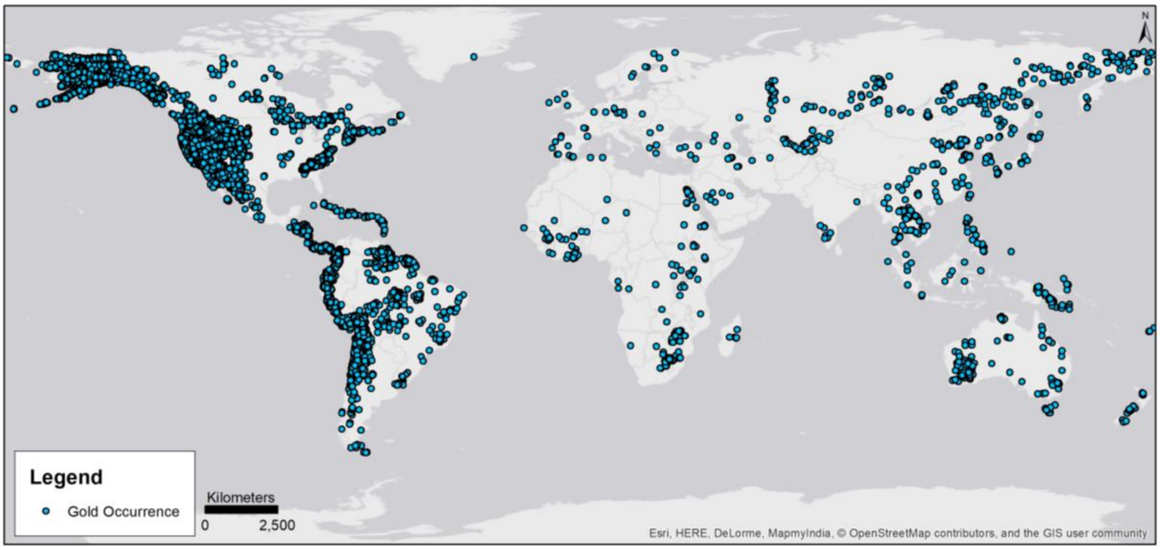
The gold market comments have largely been extracted from the World Gold Council's Gold Demand Trends report for the full year and Q4 2019 from investor information published into the public domain.

- Gold demand fell by 1% in 2019 as a huge rise in investment flows into ETFs and similar products was matched by the price-driven slump in consumer demand.
- Global central bank reserves grew by 650 t (-1% year-on-year) – the second highest annual total for 50 years.
- China and India controlled global consumer demand, together accounting for 80% of the year-on-year decline in Q4 2019 jewellery and retail investment demand. This is accredited to high gold prices and a softer economic environment.
- Total annual gold supply increased by 2% to 4,776.1 t attributed to an 11% jump in recycling in response to a sharp rise in the gold price in the second half of the year. Annual mine production was marginally lower at 3,463.7 t - the first annual decline for more than 10 years.
- The gold price averaged USD1,481/oz in Q4 2019, the highest average price since Q1 2013, while the average All-In Sustaining Costs rose to USD977/oz (GFMS, 2019). The elevated pricing was driven largely by the increased production costs, global uncertainty pushing up central bank and investor demand, and US interest rates cuts.

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

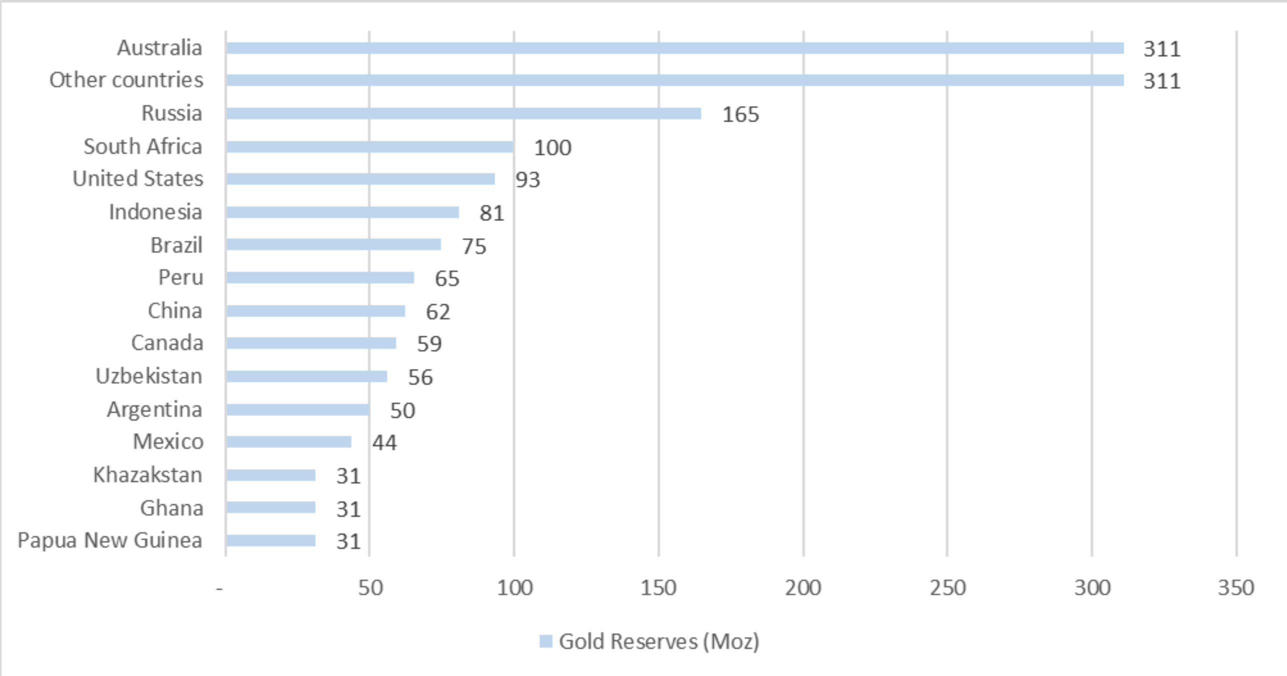


Global Distribution of Gold Deposits	February 2020

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 increased by 2% to 4,776.1 t in 2019 – despite mine production decreasing by 1% – largely due to an increase in recycling in response to a sharp rise in the gold price.

Mine Production

According to the World Gold Council (2020), mine production dropped 1% in 2019 to 3,463.7 t. This was the first annual decline in production since 2008. Highlights affecting mine production in 2019 are as follows:-

- Production growth was largely from greenfield and brownfield development, with Russia, Australia, Turkey and West Africa all seeing higher mine output. This was, however, outweighed by declines elsewhere.
- For the third consecutive year, Chinese mine output fell.
- Industrial action and local disputes in South Africa and South America curtailed production.
- Indonesia – and the transition at Grasberg – had the biggest impact on global mine production.

Table 60 displays the top 20 gold mining countries for the years 2017 to 2018. China is by far the largest producer, whilst South Africa has moved down to occupying the 9th position.

Table 60: Top 20 Gold Mining Countries

Country	Mine Production (t)		Change %
	2017	2018	year-on-year
China	429.4	404.1	-6
Australia	292.5	314.9	8
Russia	280.7	297.3	6
United States	236.5	221.7	-6
Canada	171.2	189.0	10
Peru	166.6	158.4	-5
Indonesia	114.1	136.9	20
Ghana	130.2	130.5	0
South Africa	154.0	129.8	-16
Mexico	119.4	115.4	-3
Brazil	95.8	97.1	1
Uzbekistan	89.0	92.5	4
Sudan	88.0	76.6	-13
Papua New Guinea	64.3	69.1	7
Kazakhstan	56.0	68.4	22
Mali	50.4	61.2	21
Argentina	62.9	60.0	-5
Burkina Faso	52.6	59.3	13
Tanzania	54.6	47.7	-13
Democratic Republic of Congo	36.6	44.9	23
Rest of World	696.9	727.7	4
World Total	**3,442**	**3,503**	**2**

Source: World Gold Council (2020)

Net Producer Hedging

2019 saw modest net hedging of 8.3 t, despite sizeable de-hedging in the final quarter. De-hedging in the other three quarters failed to offset the 49 t of hedging in Q2, when miners took advantage of a higher gold price in order to protect project financing and securing cash prepayments (World Gold Council, 2020).

Recycling

The 2019 year saw the highest level of recycling since 2012, with recycled gold supply rising 11% year-on-year to 1,304 t. This was driven by a stark increase in the USD gold price. The effect was especially seen in key consumer markets where currency weakness generated even greater local gold price gains, and in some cases, achieving record price levels (World Gold Council, 2020).

ii. Gold Demand

The full year average in 2019 saw a decline of 1% in gold demand to 4,355.7 t in 2019, largely due to a surge in investment flows into gold-backed ETFs which were matched by a price-driven 11% slump in consumer demand.

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), investment demand in 2019 was up 9% to 1,271.7 t.

ETF investment inflows drove the trend, totalling 2,885.5 t thanks to annual inflows of 401 t, a 426% increase from 2018. Annual inflows were primarily fuelled by monetary policy and geopolitics, while the price rise also drew in momentum-driven inflows. North American funds saw the largest net increase in 2019, adding 206 t as growing geopolitical tensions and the first Fed rate cuts in a decade fuelled market uncertainty and reduced the opportunity cost of investing in gold. European funds added 188 t with half of this growth directed into UK-based funds due to ongoing Brexit concerns. Demand for coins and bars was down slightly by a stark 20% year-on-year.

Technology

Application of gold in the technology sector remains relatively small. According to the World Gold Council (2020), the full year demand in 2019 contracted a further 2% year-on-year to 326.6 t mainly due to high gold prices and ongoing substitution away from gold. While electronics demand showed signs of recovery, gold used in dentistry continued its long-term downtrend, down 9% to 14 t in 2019. Gold is facing a continuation of the long-term trend away from gold to other cheaper alternatives (mainly cobalt, chrome, porcelain, and ceramics).

Jewellery

According to the World Gold Council (2020), over 2019 the net jewellery demand contracted 6% year-on-year to 2,107 t. This mainly attributed to elevated gold prices.

Central Banks

Central banks saw a tenth consecutive year of net purchases in 2019, adding 650.3 t to official gold reserves (the second highest annual total in 50 years), a decline of 1% from 2018. A total of 15 central banks from emerging markets increased their gold reserves by at least one tonne in 2019, highlighting the breadth of buying.

According to the World Gold Council (2020), the transition to a new, multicurrency international monetary system in response to the shift of economic power from the west to the east (China), may be destabilising and accompanied by financial and currency crises. Some central banks have started purchasing gold as a hedge against structural changes in the international monetary system. The National Bank of Hungary increased its gold reserves tenfold last year.

The majority of recent central bank purchases have been coming from countries in Southeast and Central Asia which have strong trade and investment links with China. Rising exposure of these countries to China will result in higher future holdings of the Chinese currency in their central bank reserves. Full regionalisation of the Chinese renminbi is long-term and destabilising, thus these countries have been purchasing gold instead as a safe alternative and thus also removing the USD contribution.

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 last year, 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 2019 are displayed in Table 61.

Table 61: Top 40 Reported Official Gold Holdings (2019)

Rank	Country	Tonnes	Rank	Country	Tonnes
1	United States	8,133.5	21	Spain	281.6
2	Germany	3,366.5	22	Austria	280.0
3	International Monetary Fund	2,814.0	23	Poland	228.6
4	Italy	2,451.8	24	Belgium	227.4
5	France	2,436.0	25	Philippines	197.9
6	Russian Federation	2,271.2	26	Algeria	173.6
7	China, P.R.: Mainland	1,948.3	27	Venezuela, Republica Bolivariana de	161.2
8	Switzerland	1,040.0	28	Thailand	154.0
9	Japan	765.2	29	Singapore	127.4
10	India	633.1	30	Sweden	125.7
11	Netherlands	612.5	31	South Africa	125.3
12	ECB	504.8	32	Mexico	120.1
13	Taiwan Province of China	422.4	33	Libya	116.6
14	Turkey	412.5	34	Greece	113.5
15	Kazakhstan	385.5	35	Korea, Republic of	104.4
16	Portugal	382.5	36	Romania	103.6
17	Uzbekistan	335.9	37	BIS	102.0
18	Saudi Arabia	323.1	38	Iraq	96.3
19	United Kingdom	310.3	39	Egypt	79.2
20	Lebanon	286.8	40	Kuwait	79.0

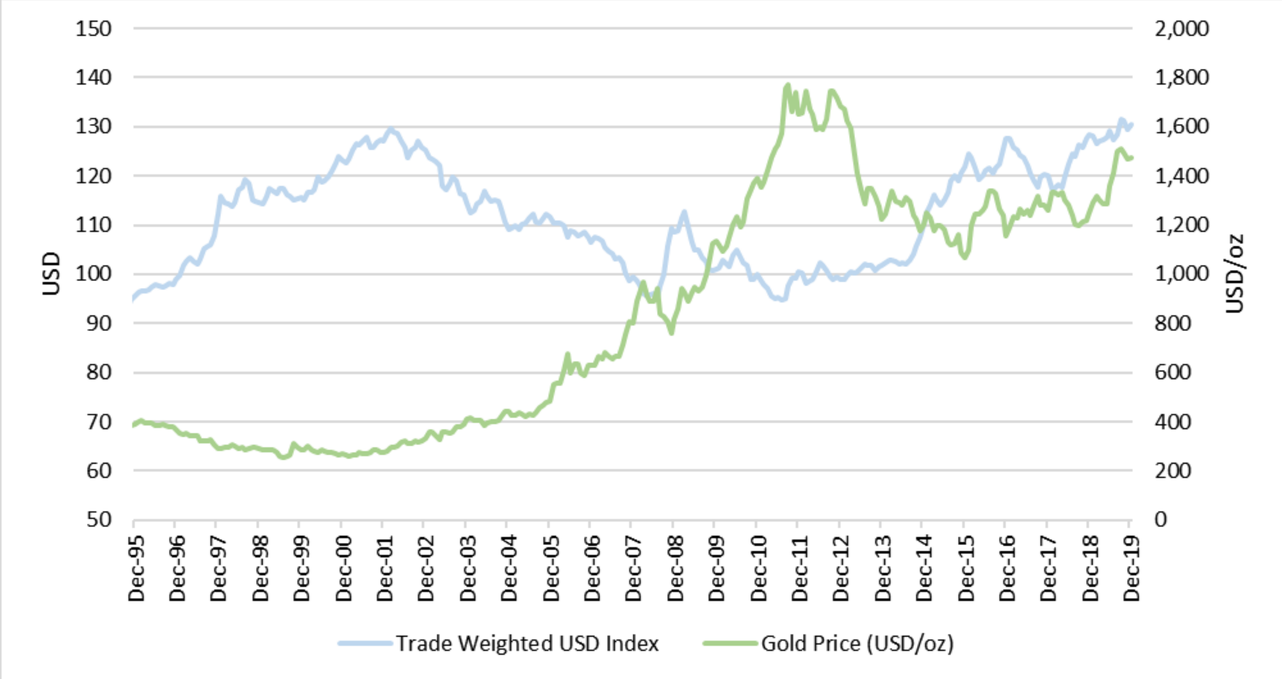
Source: World Gold Council (2020)

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.

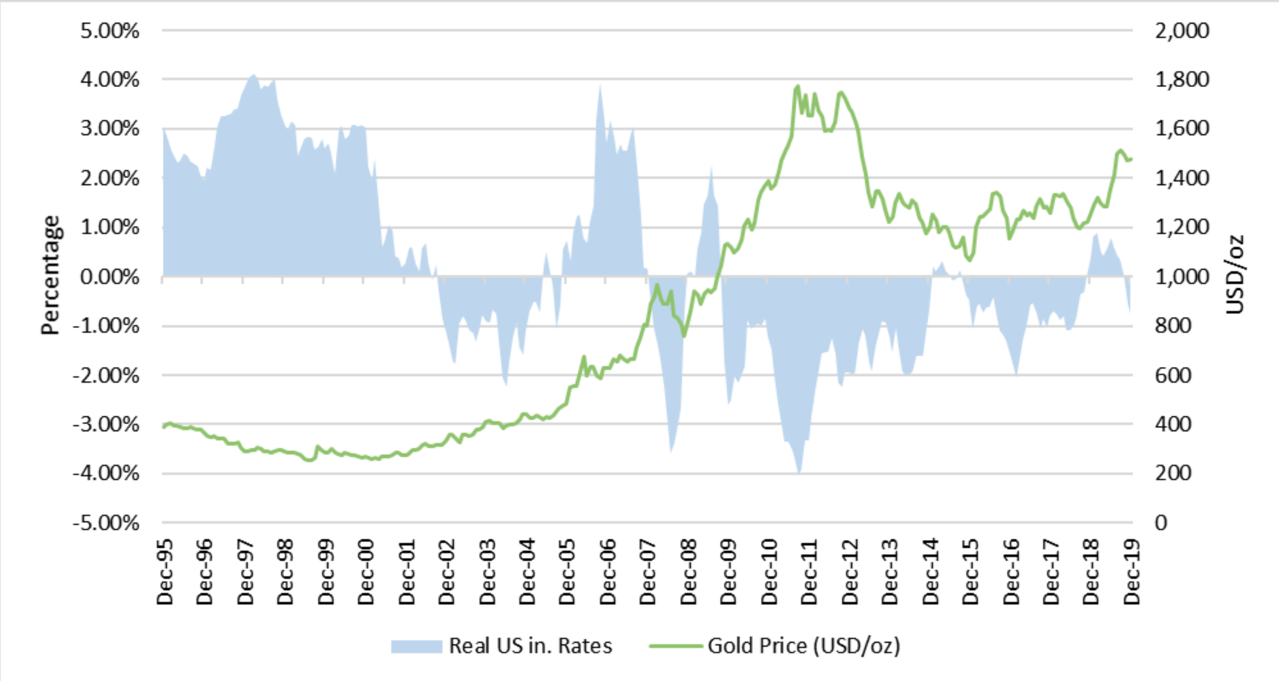
Driven by China's desire to increase its financial influence, the Chinese Renminbi is likely to emerge gradually as a genuine international currency as Beijing eases restrictions on its use in transactions and investments abroad. It is expected that during the coming period of uncertainty and transition 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 (Figure 109).

V. US INFLATION AND INTEREST RATES

A common argument for buying gold is that it is seen as an inflation hedge. Consumer price indices ("CPI") measure 'representative' baskets of goods that may well reflect a general price trend, but these will likely not reflect everyone's experience of inflation. The reason 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



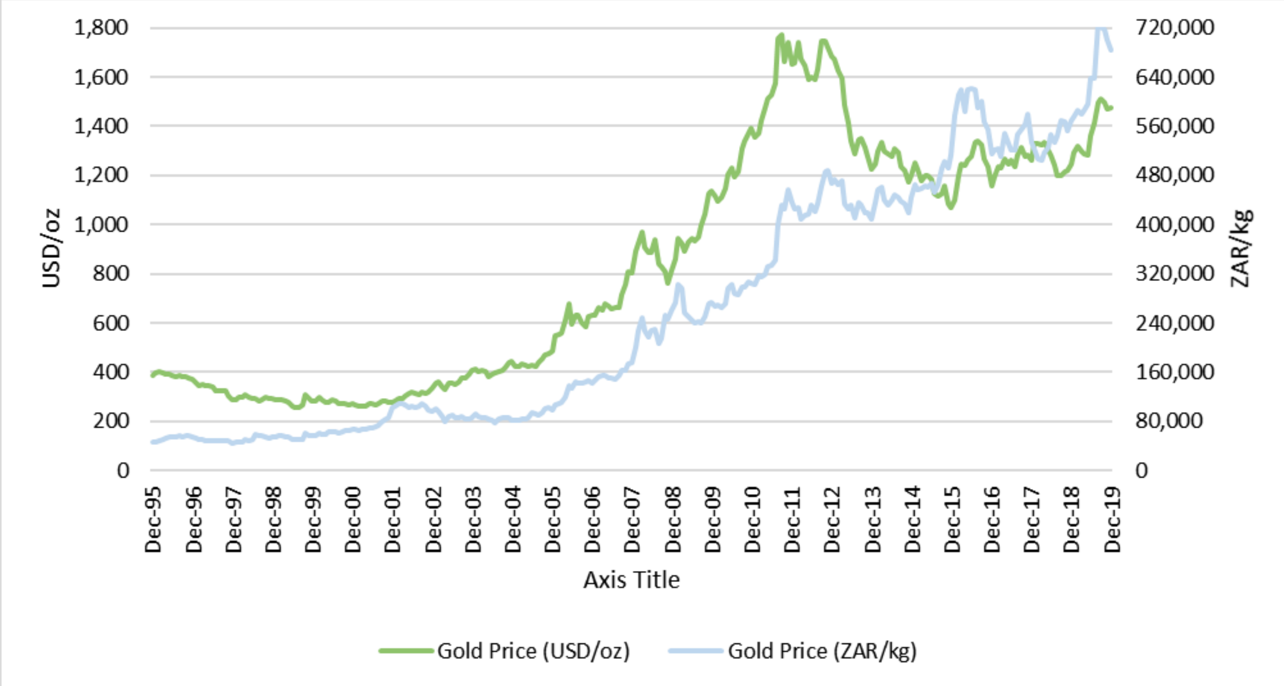
VI. Gold Pricing

Gold was one of the best performing assets in 2019. The December 2019 gold price of USD1,476/oz was 15% higher than the December 2018 price, but 12% lower than the record-high annual price in December 2012 of USD1,648/oz.

Early in the year gold traded at around USD1,300/oz and started increasing at the end of May, reaching a projected annual high of USD1,547/oz in September. The gains were primarily driven by an increased demand from central banks and investors. In addition, the U.S. Federal Reserve Board cut interest rates, and trade negotiations halted between the United States and China (USGS, 2020). Brexit negotiations brought limited volatility to the markets. The price started a downward trend in October and November, rebounding into December amidst the outbreak of the coronavirus driving investors to seek a safe haven for their funds. As investors looked to balance higher stock prices with an increasingly uncertain environment, the gold price increased by 18% by the end of the year to outperform EM stocks, global bonds, and most commodities (World Gold Council, 2020). Into week one of January 2020, the price increased by an additional 6% relating additionally to tensions in the Middle East linked to the US-Iran confrontation. Subsequent comments by US President Donald Trump aimed to ease concerns, and pushed the price down to the USD1,550/oz level as of 10 January 2020. Yet, gold still remains still higher relative to the end of 2019.

Figure 111 shows the gold price since 1995.

Figure 111: Gold Yearly Prices



Consensus opinion has the real gold price remaining relatively constant over the coming months and years.

Table 62: Gold Price Forecast (Nominal Terms)

	Unit	2020	2021	2022	2023	2024	Long-term (Constant)
Gold	USD/oz	1,690	1,704	1,622	1,581	1,534	1,400

Source: Minxcon (June 2020)

VII. Gold Outlook

Gold investment demand will likely remain high in the short-term due to financial and geopolitical uncertainty combined with low interest rates (World Gold Council, 2020). In addition, 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.

Uncertainty in geopolitics, the macroeconomy, and monetary policy is likely to elevate gold price volatility. Higher price volatility together with expectations of weaker economic growth may result in softer gold consumer demand near term. Structural economic reforms in India and China will likely support long-term demand.

According to the World Gold Council (2020), the Federal Reserve board cut rates three times during 2019 and is expected to cut at least one more in 2020. Historically, gold has performed well in the year following shifts in Fed policy from tightening to "on-hold" or to "easing". In addition, when real rates have been negative, gold has seen to return twice as much annually as the long-term average or 15.3%. The low rate environment has also pushed investors to increase the level of risk in the portfolio by buying longer term bonds, lower-quality riskier bonds, or replacing them with riskier assets. The current worldwide low level of interest rates will keep stock prices and valuations high.

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 concentrate off-take agreement is in place between GGR and a UK-based company (the “Buyer”) which was executed in September 2018 (the “Offtake Agreement”). Pursuant to the terms of the Offtake Agreement, GGR will sell aggregate of an anticipated 85,000 t of concentrate over a 36-month period. The concentrate will have a grade of at least 25 g Au per dry metric tonne, failing which the parties will have to renegotiate the implications thereof. If GGR produces more concentrate over the stipulated time period, the Buyer will be obliged to purchase the additional concentrate. The concentrate would be exported to smelters oversees, and it is GGR’s responsibility to deliver free-on-board (“FOB”) at the Durban port. As consideration for the concentrate to be delivered under the Offtake Agreement, the Buyer pays GGR for 75% of the gold content in the concentrate, at a price equal to the mean of the daily London Bullion Market Association gold price over the relevant quotation period.

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

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

As part of the EA application, specialist studies were undertaken and an Environmental Risk Report compiled by Digby Wells dated March 2017. This report detailed the following major risks after implementation of mitigation measures, all of which may impact the natural environment:-

- Mamba Creek Area - Potential contamination of natural environment and not being a stable landform:-
  - The tailings material within Mamba Creek was reclaimed. Some tailings material was left on the site which will become mobile during rainfall events and runoff from this area will impact on the water quality of Concession Creek.
- Possibility of not achieving formal mine closure:-
  - Mine will not be able to demonstrate that relinquishment criteria have been achieved, resulting in closure not being granted.
- Potentially inaccurate long term predictions and provisions associated with future impacts:-
  - As a result of the undefined concept of "in perpetuity" and the difficulty of predicting hydro, hydrogeological and land form evolutionary process far into the future, identifying management options that provide impact mitigation indefinitely is impractical with the result that residual and latent environmental risks will always remain and cannot adequately be provided for.
- Possibility of incurring additional liabilities not planned for:-
  - Mine will potentially not be able to achieve mine closure due to illegal mining activities taking place within the mining right boundary, subsequently causing additional damage to the natural environment which the mine could be held accountable for.

A specialist groundwater study was conducted as part of the EA process, which noted the following main conclusions:-

- 49 boreholes are present at the project site, and are predominantly used for drinking and mine groundwater monitoring.
- The mine area groundwater quality is pH neutral and fairly good in quality. A contamination plume is restricted in the footprint of the Operational TSF.
- The current size of the plume in the aquifer is expected to remain the same even after closure and the size of the no-go area in the groundwater will not extend more than 1.3 km^2. However, although the plume size in the aquifer is limited, its impact on the surface water is expected to be significant.
- The mine is not acid generating; however, elevated groundwater sulphate concentrations indicate that the mine has impacted the local aquifers.
- There is no significant groundwater contamination from the underground mine.
- The groundwater elevation mimics the topography and in the project area flows towards the north. This may also indicate that the underground mine workings are not hydraulically connected with the top shallow aquifer, where the hydraulic head is controlled by topography.

Digby Wells (2017) noted that The TSFs are not lined. With no barrier underneath any seepage is expected to contaminate the surface or groundwater.

Based on a 2016 Digby Wells surface water assessment study, the main surface water uses in the area are domestic use (Moodies Estate to the east of the Mine draws water from Concession Greek via a canal) and agricultural use (small dam on the tributary of Concession Creek, downstream of the TSF is used for irrigation and livestock watering). The water quality results indicated high levels of TDS, with most of them being above the SAWQG for domestic and irrigational use, but within the SANS 241: 2015 drinking water quality standards. The RWD and sewerage treatment plant showed unsuitability for drinking purposes.

Dust generation from the Mine has been found to be insignificant, as is the impact of noise from operations. No sensitive landscapes or archaeological sites have been identified within the Project Area.

It is not anticipated that the items discussed in this section will materially impact the Company's ability to extract the Mineral Resources.

Item 20 (b) – Waste Disposal, Site Monitoring and Water Management

An Integrated Water and Waste Management Plan ("IWWMP") was compiled by Digby Wells in 2017 as part of the IWULA for the Mine.

I. Waste Disposal

In terms of the IWWMP, waste management will be implemented once the mine becomes operational including:-

- Waste will be separated where possible.
- General waste that cannot be recycled will be disposed of to an appropriate licenced landfill site.
- Contractors will be appointed to remove the recyclable waste to an appropriate facility for further processing.

The Mine currently operates a domestic waste dump landfill site dating back to the late 1900s into which all general waste is disposed of. Sewage from the hostel is treated in a 600-man Becon biofilter biodisk installation. Water from this system is discharged into a Concession Creek tributary, while sewage from other areas on the Mine are treated in French drains.

II. Site Monitoring

The monitoring of the mine area is vital to ensure that the impact of mining activities on the environment and ecosystems is managed effectively and minimised.

Dust suppression is monitored on-site and results are within the ambit of regulations.

No long-term surface water or groundwater monitoring programmes are currently in place but a number of samples have been taken since 2010. No biomonitoring is currently in place or has been undertaken, nor is waste monitoring taking place currently as the Mine is not operational.

A monitoring programme is required to be drafted and implemented to monitor and measure the impacts associated with the operations. In particular, a monitoring programme will aim to assess the impacts on the Concession Creek and tributaries and ensure sustainable mitigation measures are implemented. Digby Wells (2017b) notes that the Mine decants at least the Ben Lomond Adit and 22 Level Adit, and recommend at least quarterly monitoring of the decant rates and decant chemistry.

Regular sampling and assessment of groundwater, surface water and soil resources should be undertaken throughout the LoM and conducted post-closure at defined intervals that satisfy legal guidelines. This will also be applicable to air quality (dust fallout). In particular, groundwater and surface water monitoring networks should be installed for both upstream and downstream of the TSF.

III. WATER MANAGEMENT

The Galaxy Gold Mine falls within the Kaap River Catchment. The management of surface and groundwater quality must form an imperative part of the mine plan throughout the LoM to ensure that water quality is not negatively impacted upon by the Project and that on-going review and update of water management plans is undertaken to ensure suitability as mining progresses. The implementation of water management measures must in particular be aligned with the DWA Best Practice Guidelines Series. The design, placement, operation and maintenance of water management systems should be in line with the prescribed Schedules of Regulation 704, of the NWA.

The Mine currently does not have an updated water balance. GGR has committed to prepare a water balance once the mine is operational and flow meters can be installed to monitor the consumption of all water streams on site to obtain accurate values.

A surface water, groundwater and stormwater management plan was developed as part of the IWULA and IWWMP. Owing to the extensive use of groundwater on the site as well as the supplying of water to the Municipality, this resource requires protection. Water management post closure will be one of the key aspects that need to be managed post closure to ensure that downstream uses are not impacted negatively post closure. Management measures for the protection of groundwater have been recommended to the site in the IWWMP.

Digby Wells (2017) note that Galaxy Gold Mine has an existing stormwater management system in place but requires improvement on certain sections taking into account the varying site topography. The runoff from the mining areas is treated as dirty water and contained for reuse in the PCD and/or RWD. Diversion canals are in place to divert clean water to the receiving water environment. The water management system at Galaxy Gold Mine generally implements good practices. Digby Wells identified a few shortfalls and measures have been recommended for stormwater and mine water management.

Sewage is treated in a package plant with final treated effluent discharged to a maturation pond area where it is subsequently discharged to the environment. The effluent is currently not reused. Solids are removed from the balancing tank by a service provider who is responsible for the disposal of the sludge to an appropriate licenced facility.

Currently, raw water is sourced from the Ben Lomond Adit for portable use.

Process water will be sourced from groundwater from the Ben Lomond Adit, and runoff from the processing plant is contained in the PCD, which is pumped to the plant for reuse.

It is noted by Digby Wells (2017b) that water management post closure will be one of the key aspects that need to be managed to avoid negative impacts to downstream uses, and should include:-

- A water management needs to be installed and maintained around the TSFs.
- Decanting mine water from Golden Hill, Tiger Trap and Ben Lomond Adits should be captured and channelled to collection pond. Prior to release, water should be tested to ensure that it is of an acceptable quality. Water should be discharged into Concession Creek.
- Water from the falls should be channelled along the existing channel. Where it flows over the WRD, a channel over the WRD must be constructed and the water discharged into Concession Creek.
- A culvert needs to be designed for where the Golden Hill Adit haul road will cross the drainage channel.

Item 20 (c) – Permit Requirements

As described in Item 4 (g), applications for an EA, Waste Management Licence and WUL have been submitted and are pending decision by the DMR. An AEL is not required for the operations.

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 and to serve the community.

Programmes with regards to Human Resource Development, Local Economic Development and the Management of Downscaling and Retrenchment are outlined in the SLP. An SLP progress report is required to be submitted to the DMR regional department annually.

An updated SLP was submitted to the DMR in October 2010 in fulfilment of one of the requirements for the application for the conversion of the old order mining licence (ML 16/2000) to the new order mining right (413 MR) and subsequently approved. This 2010 SLP detailed activities for a five year period ending 2015.

Through the 2010 SLP, the Mine aimed to supply their Mine employees with skills development initiatives in order to advance their operational skills as well as those applicable to general living and well-being through implementation of an integrated Human Resources Development Plan including Adult Basic Education and Training and Broad Based Black Economic Enterprise Development, as well as cohesive mentorships and drafting of an Employment Equity policy.

There are currently two water projects hosted by GGR:-

- Kamadakwa Project: the establishment of this project was completed in 2012 and is currently active. Through the project, GGR hosts a water purification plant to supply water to the Kamadakwa residents area.
- Moses Stone Project: this project aims to allow the supply of extra groundwater from the Mine to the City of Mbombela, uMdjindini Trust Areas who are experiencing drought conditions. GGR is currently in final discussions with the local municipality to implement the project.

In addition, various SMME projects are underway with one currently active, which aim to support small black enterprises.

GGR has also implemented a gender based violence project, through which local women and children can seek refuge at a dedicated house. Through the project, they are provided with medical, psychological and other support as required.

A revised SLP is currently being drafted.

Item 20 (e) – Mine Closure Costs and Requirements

Digby Wells compiled a Rehabilitation, Decommissioning and Mine Closure Plan for the Mine in 2017 as part of the EA application. Closure and rehabilitation are aimed at long-term site stability and establishment of a self-sustaining ecosystem.

The major items described by Digby Wells are summarised as follows:-

- *"Adits need to be sealed and the seals need to be engineered to ensure that access to these areas by illegal miners is restricted where possible. Engagement with adjacent land owners, such as Sappi needs to be undertaken to ensure that a collaborate effort is undertaken to manage personnel on site and access to old abandoned workings.*
- *Historical tailings facilities (East and West TSFs and the TSF located neat Woodbine Vertical Shaft) need to be reclaimed and rehabilitated back to as far as practicably possible to the pre-mining environment. Tailings that is generated during the reclamation process, will need to be deposited on the operational TSF.*
- *An appropriately engineered capping for the [1]K21 and K22 and the operational TSFs needs to be designed. This design needs to include contour banks for these facilities, capping requirements and appropriate water management installed and maintained around these facilities.*
- *Capture decanting mine water from Golden Hill, Tiger Trap and Ben Lomond Adits and channel this water to a collection pond. Water should be tested prior to be released to ensure that it is of an acceptable quality. If water is discharged it should be discharged into Concession Creek.*
- *Water from the falls should be channelled along the existing channel that has been built and then where is flows over the waste rock dump, a channel over the waste rock dump is constructed and then this water is then discharged into the Concession Creek.*
- *Engineering designs for the haul road that has been constructed near Golden Hill Adit for the side slopes and design and installation of a culvert to capture and channel water from the drainage channel that the haul road has been constructed through.*
- *The waste rock dump should be rehabilitated in situ and stabilised to present degradation of the facility post closure.*
- *Instillation of a monitoring network for both groundwater and surface water upstream and downstream of the operational TSF and K21 and K22 TSFs.*
- *Clean up and rehabilitation of the reclaimed TSFs located adjacent to Tiger Trap and Mamba Creek and rehabilitation of the riparian habitat associated with Mamba Creek.*
- *Update the numerical model and decant rates annually for the first five years with the monitoring data."*

Rehabilitation can be divided into concurrent rehabilitation and final rehabilitation. Concurrent rehabilitation will decrease the final liability that the Mine will carry at the time of closure. Final rehabilitation will be carried out once the Mine goes into its closure phase. As recommended by Digby Wells (2017b), "*When rehabilitation of the site is undertaken, consideration must be given to try and reduce the level of latent impacts to both ground and surface water as far as reasonably possible*."

The estimated financial provision for the rehabilitation and closure of the Mine is ZAR32,251,031 and ZAR32,956,916 (excl. VAT), respectively, as described in Item 4 (f).

It is the understanding of the QPs that given the re-strategising of the operations, this closure plan is still relevant and applicable to the proposed operations.

[1] Biox North TSF

ITEM 21 – CAPITAL AND OPERATING COSTS

Item 21 (a) – OPERATING COST

I. MINING OPERATING COST

The Mine has a fully executed mining contract that specifies contractor rates for the Galaxy Orebody and the Princeton Orebody lenses. The contract provided “dry” stoping and development rates with the Mine owners providing the contractors with power, water, air, diesel, lubricants and oils. The stoping and development rates are calculated using the number of machines in operation in a given year, number of crews and machine operators, a fixed P&Gs cost and a 10% mark-up. The stoping rate and development rate are calculated by allocating the nominal cost to either stoping and development and dividing by the average stoping tonnes and development meters, respectively.

Minxcon adjusted the provided costs over a four-year period by adjusting the equipment for lead times as to when they will be available, and the reasonable production and development meters the available fleet will be capable of in the given year. In addition, the development rates were adjusted for specific development end dimensions so as to not apply a universal rate for an end that is 3 m x 3 m and one that is 5 m x 5 m. The development rates were calculated to be inclusive of the provided equipping rates.

Other OPEX adjustments include the grade control drilling, which was converted from a fixed cost of ZAR260,000 per month to a variable cost per stoping tonnes.

Table 63 details the Galaxy mining rates. The decrease in stoping rates and development to 2023 is due to the ramp-up in production and the right-sizing of the fleet for the required production.

Table 63: Galaxy Gold Mining Rates

Type	Item	Unit	2020	2021	2022	2023
Fixed	Lubricants	ZAR/month	72,700	72,700	72,700	72,700
	Contractor P&Gs	ZAR/month	341,331	433,084	490,881	490,881
	Fixed Total	**ZAR/month**	**414,031**	**505,784**	**563,581**	**563,581**
Variable	Stoping Costs	ZAR/Stope t	142	107	88	88
	Explosives - Development	ZAR/Dev t	9.7	9.7	9.7	9.7
	Explosives - Stoping	ZAR/Stope t	7.0	7.0	7.0	7.0
	Ore sampling	ZAR/Sample	73.0	73.0	73.0	73.0
	Grade Control Drilling	ZAR/Stope t	17.3	17.3	17.3	17.3
	Diesel	ZAR/l	15.5	15.5	15.5	15.5
	Diesel Consumption	l/month	59,400	86,400	178,200	178,200
	Development Haulage	ZAR/m	20,783	13,038	12,893	12,893
	Development X-Cut	ZAR/m	22,589	19,011	18,851	18,851
	Development Cut-lifts	ZAR/m	16,258	13,038	12,893	12,893
	Development Ventilation Raise	ZAR/m	6,503	5,215	5,157	5,157
	Development Ventilation X-Cut	ZAR/m	16,258	13,038	12,893	12,893
	Development Level X-Cut	ZAR/m	20,783	17,563	17,418	17,418
	Development Adit	ZAR/m	22,589	19,011	18,851	18,851
	Development Decline	ZAR/m	22,589	19,011	18,851	18,851
	Development Access X-cut	ZAR/m	22,589	19,011	18,851	18,851

Note: Development rates inclusive of equipping.

Table 64 details the Princeton mining rates. As with Galaxy, the decrease in Princeton’s stoping rates and development to 2023 is due to the ramp-up in production and the right-sizing of the fleet for the required production.

Table 64: Princeton Rates

Type	Item	Unit	2020	2021	2022	2023
Fixed	Lubricants	ZAR/month	62,000	62,000	62,000	62,000
	Contractor P&Gs	ZAR/month	337,501	402,227	408,464	408,464
	Fixed Total	**ZAR/month**	**399,501**	**464,227**	**470,464**	**470,464**
Variable	Stoping Costs	ZAR/Stope t	253	139	100	100
	Explosives - Development	ZAR/Dev t	17.2	17.2	17.2	17.2
	Explosives - Stoping	ZAR/Stope t	11.7	11.7	11.7	11.7
	Ore sampling	ZAR/Sample	73.0	73.0	73.0	73.0
	Grade Control Drilling	ZAR/Stope t	17.3	17.3	17.3	17.3
	Diesel	ZAR/l	15.5	15.5	15.5	15.5
	Diesel Consumption	l/month	56,700	79,650	95,850	95,850
	Development Haulage	ZAR/m	20,762	15,817	12,510	12,510
	Development X-Cut	ZAR/m	20,762	15,817	12,510	12,510
	Development Cut-lifts	ZAR/m	16,237	11,292	7,985	7,985
	Development Ventilation Raise	ZAR/m	6,495	4,517	3,194	3,194
	Development Ventilation X-Cut	ZAR/m	16,237	11,292	7,985	7,985
	Development Level X-Cut	ZAR/m	20,762	15,817	12,510	12,510
	Development Adit	ZAR/m	22,567	17,071	13,397	13,397
	Development Decline	ZAR/m	22,567	17,071	13,397	13,397
	Development Access X-cut	ZAR/m	22,567	17,071	13,397	13,397
	Development Reef Drive	ZAR/m	20,762	15,817	12,510	12,510

Note: Development rates inclusive of equipping.

Table 65 details the Woodbine and Giles mining rates. The increase in stoping rates from 2023 is due to mechanised equipment being required for tramming the stoping ore below LV28 using the decline. In addition, relevant development ends will be larger to accommodate the mechanised equipment, hence the increase in development rates.

Table 65: Woodbine & Giles Rates

Type	Item	Unit	2020	2021	2022	2023
Fixed	Lubricants	ZAR/month	62,000	62,000	62,000	62,000
	Contractor P&Gs	ZAR/month	289,009	300,097	300,097	300,097
	Fixed Total	**ZAR/month**	**351,009**	**362,097**	**362,097**	**362,097**
Variable	Stoping Costs	ZAR/Stope t	147.0	147.0	147.0	217.3
	Explosives - Development	ZAR/Dev t	17.2	17.2	17.2	17.2
	Explosives - Stoping	ZAR/Stope t	11.7	11.7	11.7	11.7
	Ore sampling	ZAR/Sample	73.0	73.0	73.0	73.0
	Grade Control Drilling	ZAR/Stope t	17.3	17.3	17.3	17.3
	Diesel	ZAR/l	15.5	15.5	15.5	15.5
	Diesel Consumption	l/month	-	27,000	27,000	27,000
	Development Haulage	ZAR/m	8,298	8,298	8,298	15,312
	Development X-Cut	ZAR/m	8,298	8,298	8,298	11,643
	Development Ventilation Raise	ZAR/m	1,859	1,859	1,859	1,859
	Development Ventilation X-Cut	ZAR/m	4,182	4,182	4,182	4,182
	Development Decline	ZAR/m	14,903	14,903	14,903	15,312
	Development Access X-cut	ZAR/m	8,298	8,298	8,298	8,707
	Development Reef Drive	ZAR/m	8,298	8,298	8,298	8,707
	Development Raise	ZAR/m	5,975	5,975	5,975	6,384

Note: Development rates inclusive of equipping.

II. Processing and Tailings Storage Facility Operating Cost

The processing and tailings deposition costs are summarised in Figure 11.

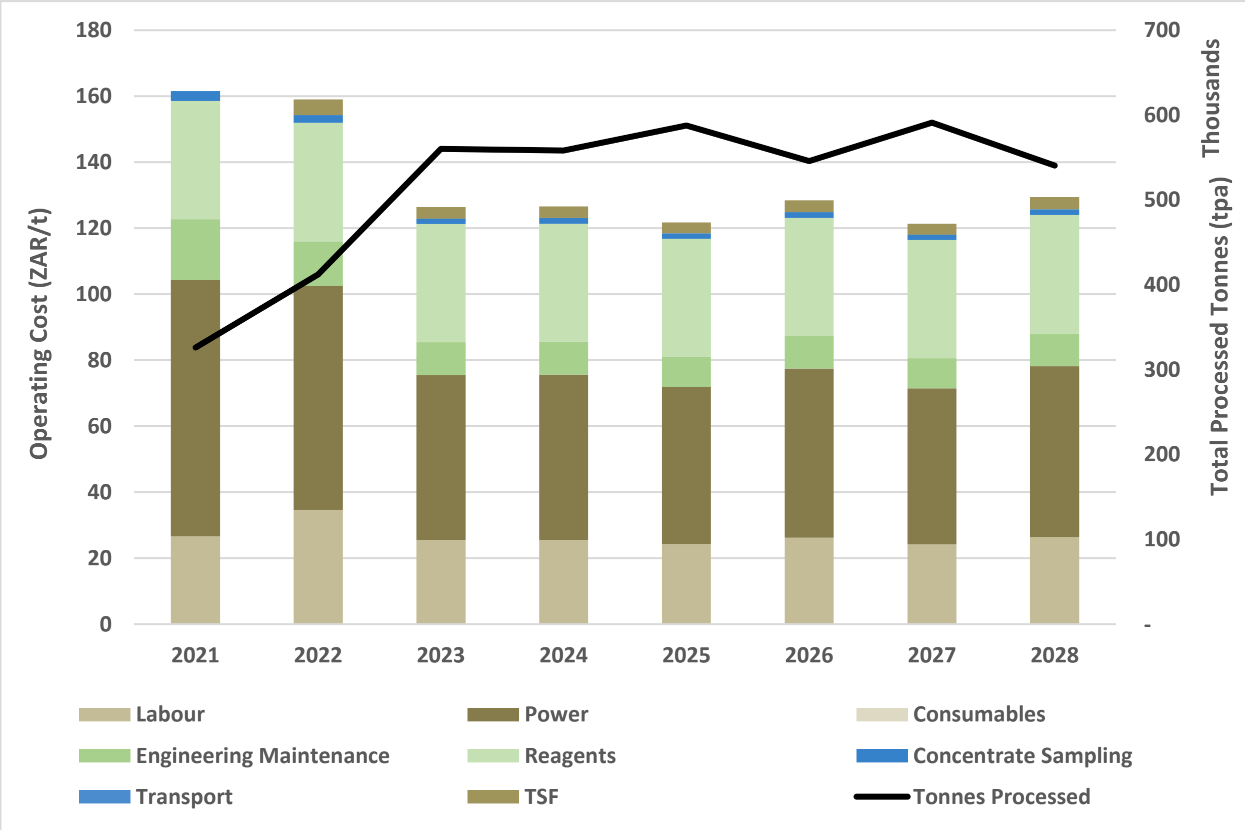
Minxcon estimated the average plant-only power cost for the 30 ktpm and 50 ktpm phases. The power costs calculations are detailed in Table 4.

Table 66: Power Cost Calculation for the 30 ktpm and 50 ktpm

Phase	Installed Power	Estimated Average Power Consumption (at Steady State)	Power Cost	Average Power Cost	
	MW	kWh/month	ZAR/kWh	ZAR/month	ZAR/t
Phase 2 (30 ktpm)	3.2	946,080	1.19	1,125,835	37.53
Phase 3 (50 ktpm)	4.5	1,314,000		1,563,660	31.27

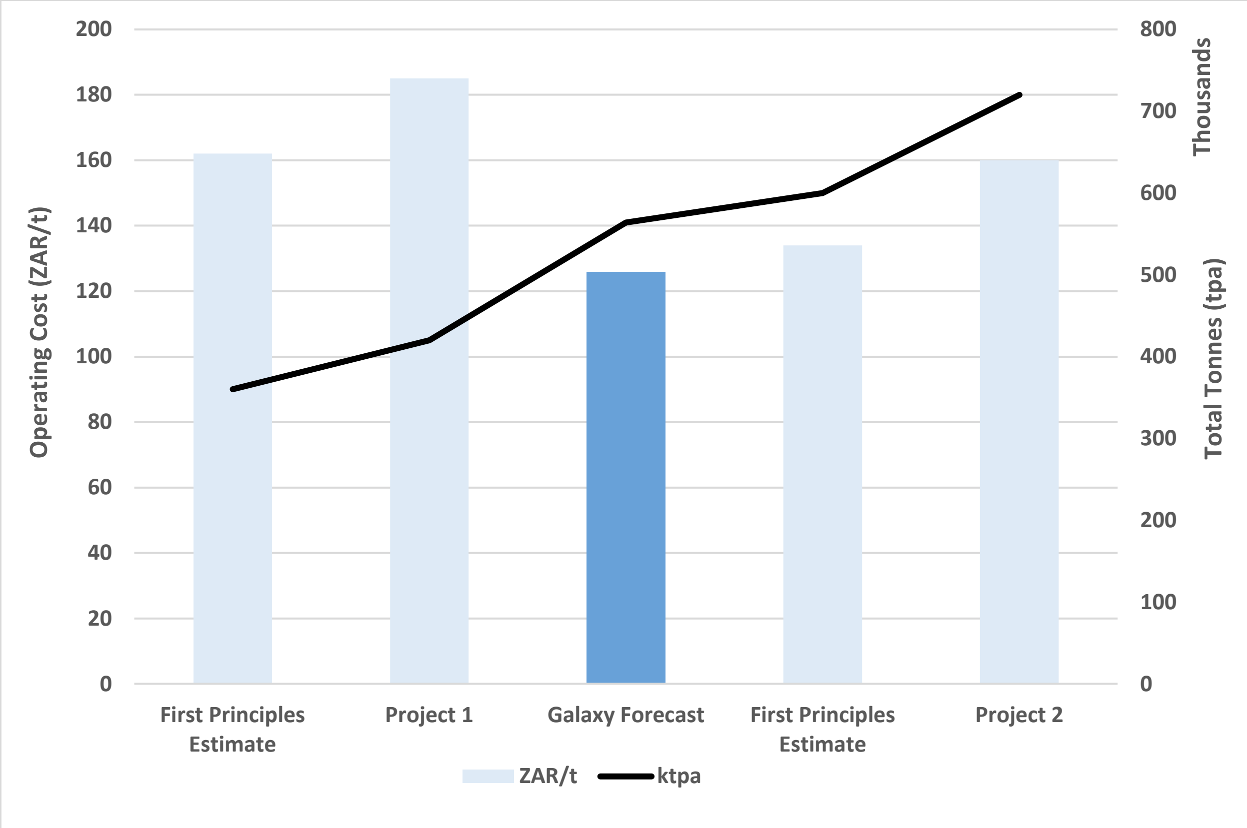
Referring to Figure 112, the forecast steady state operating costs is estimated to average at ZAR126 per tonne at a steady state throughput of approximately 565 ktpa.

Figure 112: Forecast Processing Operating Costs



Referring to Figure 113, the forecasted average processing cost of ZAR126/t is considered to be in line with the benchmarked projects and first principles estimates.

Figure 113: Benchmarked Plant Operating Costs



The plant operating costs summary is detailed in Table 67. The plant operating costs provided by the client were deemed appropriate and hence the costs as provided were used for the PEA. The power costs were independently accounted for with the decrease in cost consistent with the ramp-up of tonnes.

Table 67: Plant Operating Costs

Type	Item	Unit	2020	2021	2023	2024
Fixed	Plant Labour	ZAR/month	750,000	908,261	1,191,626	1,191,626
	Engineering maintenance	ZAR/month	501,122	463,670	463,670	446,618
	TSF Contract Management	ZAR/month	163,000	163,000	163,000	163,000
	Concentrate Sampling	ZAR/month	80,622	80,622	80,622	80,622
	Fixed Total	**ZAR/month**	**1,494,743**	**1,615,552**	**1,898,917**	**1,881,866**
Variable	Reagents	ZAR/t	22	22	22	22
	Grinding Media	ZAR/t	14	14	14	14
	Power	ZAR/t	36	36	31	31
	Variable Total	**ZAR/t**	**72**	**72**	**67**	**67**

III. Other Operating Cost

Table 68 details the G&A costs of the operation. The G&A costs were sourced from the client cost model. No SLP costs were provided for. Minxcon used the SLP costs from 2010 and escalated them to 2020 terms for use in the financial model. Electricity costs were calculated by Minxcon over three production scenarios, *i.e.* 15 ktpm, 30 ktpm and 50 ktpm and varied depending on the mining schedule. Similarly, two diesel rates were provided, which were adjusted between 30 ktpm and 50 ktpm.

Table 68: G&A Costs

Item	Unit	15 ktpm	30 ktpm	50 ktpm
Administration costs	ZAR/Month	845,190	845,190	845,190
Administration labour	ZAR/Month	1,379,129	1,379,129	1,379,129
Ancillary TMM	ZAR/Month	345,542	345,542	345,542
Ancillary labour	ZAR/Month	1,835,663	1,835,663	1,835,663
Ancillary consumables	ZAR/Month	110,000	110,000	110,000
Lubricants and maintenance	ZAR/Month	87,808	87,808	87,808
Lamp room	ZAR/Month	33,613	33,613	33,613
Diesel	ZAR/Month	594,270	594,270	954,180
Electricity	ZAR/Month	708,223	1,088,394	1,644,780
SLP	ZAR/Month	301,841	301,841	301,841
Fixed Total	**ZAR/Month**	**6,241,278**	**6,319,609**	**7,235,905**

The logistics costs applicable to delivering the concentrate FOB Durban port is USD85/conc. tonne. A moisture content of 10% was included for logistics costing.

IV. Financial Costs Indicators

The operating costs in the financial model were reported into different categories as defined by the World Gold Council. Table 69 illustrates a breakdown off all the costs included in each costing category:-

a. (Operating) Adjusted Operating Cost;
b. AISC; and
c. AIC.

Table 69: Financial Cost Indicators

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

The general definitions of these costs are as follows:-

i. Adjusted Operating Cost

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 Adjusted Operating Costs. Costs are reported as "per oz" of gold. The operating margin is defined as metal price received minus Adjusted Operating Costs.

Adjusted 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, over the metal price received. 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, over the metal price received.

Costs reported for the PEA on this basis are displayed per plant feed tonne as well as per recovered gold ounce in Table 70. It should be noted that no contingencies have been applied to either the operating costs or capital costs as most of these costs are based on contracts or actuals. A sensitivity analysis to increase in OPEX and CAPEX has been included in Item 22 (a).

Table 70: Project Cost Indicators

Item	Unit	Galaxy Gold Mine
Net Turnover	**ZAR/Feed tonne**	**1,576**
Mine Cost	ZAR/Feed tonne	306
Plant Costs	ZAR/Feed tonne	123
Other Costs	ZAR/Feed tonne	317
Royalties	ZAR/Feed tonne	64
Operating Costs	**ZAR/Feed tonne**	**810**
SIB	ZAR/Feed tonne	267
Reclamation	ZAR/Feed tonne	15
Other Costs	ZAR/Feed tonne	0
All-in Sustainable Costs (AISC)	**ZAR/Feed tonne**	**1,092**
Capital	ZAR/Feed tonne	31
Other Cash Costs	ZAR/Feed tonne	12
All-in Costs (AIC)	**ZAR/Feed tonne**	**1,134**
All-in Cost Margin	**%**	**28%**
EBITDA[1]	ZAR/Feed tonne	740
EBITDA Margin	%	47%
Gold Recovered	oz	413,421
Average Gold Price	**USD/Gold oz**	**1,439**
Payability - Off-take Agreement	%	75%
Net Turnover[2]	**USD/Gold oz**	**1,079**
Mine Cost	USD/Gold oz	209
Plant Costs	USD/Gold oz	84
Other Costs	USD/Gold oz	217
Royalties	USD/Gold oz	44
Operating Costs	**USD/Gold oz**	**555**
SIB Capex	USD/Gold oz	183
Reclamation	USD/Gold oz	10
Other Costs	USD/Gold oz	0
All-in Sustainable Costs (AISC)	**USD/Gold oz**	**747**
Capital	USD/Gold oz	21
Other Cash Costs	USD/Gold oz	8
All-in Costs (AIC)	**USD/Gold oz**	**777**
EBITDA	USD/Gold oz	506

Notes:

1. Earnings before interest, tax, depreciation and amortisation (excludes CAPEX)
2. Net turnover will be the realised income per produced gold oz after 75% payability has been applied.

The net turnover in Table 70 indicates the net realised income received per produced gold oz after applying the 75% payability as per the off-take agreement.

Figure 114 illustrates the annual operating cost per plant feed tonne against the feed tonnes. The increase in costs towards the end of life is due to the depletion of the Galaxy and Woodbine and Giles orebodies.

Figure 114: Operating Costs vs. Feed Tonnes

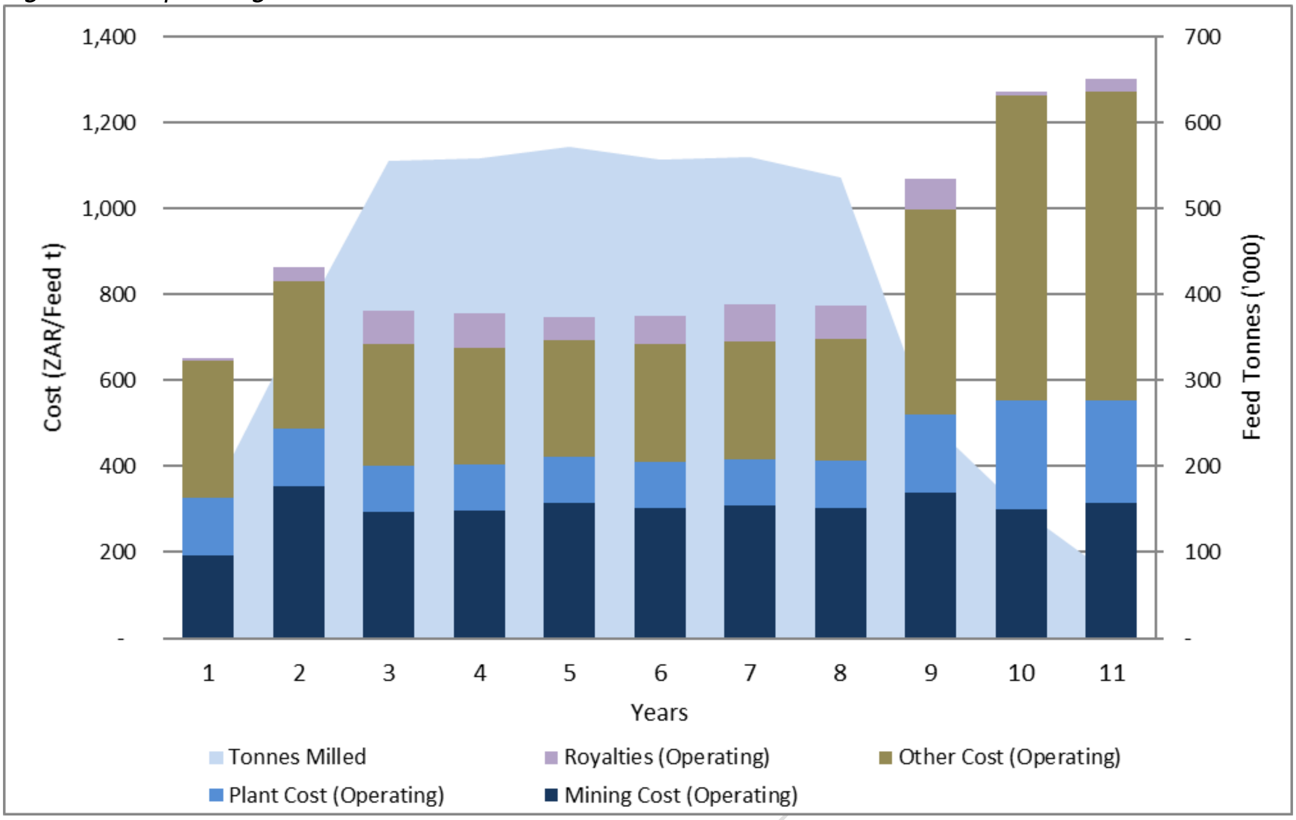
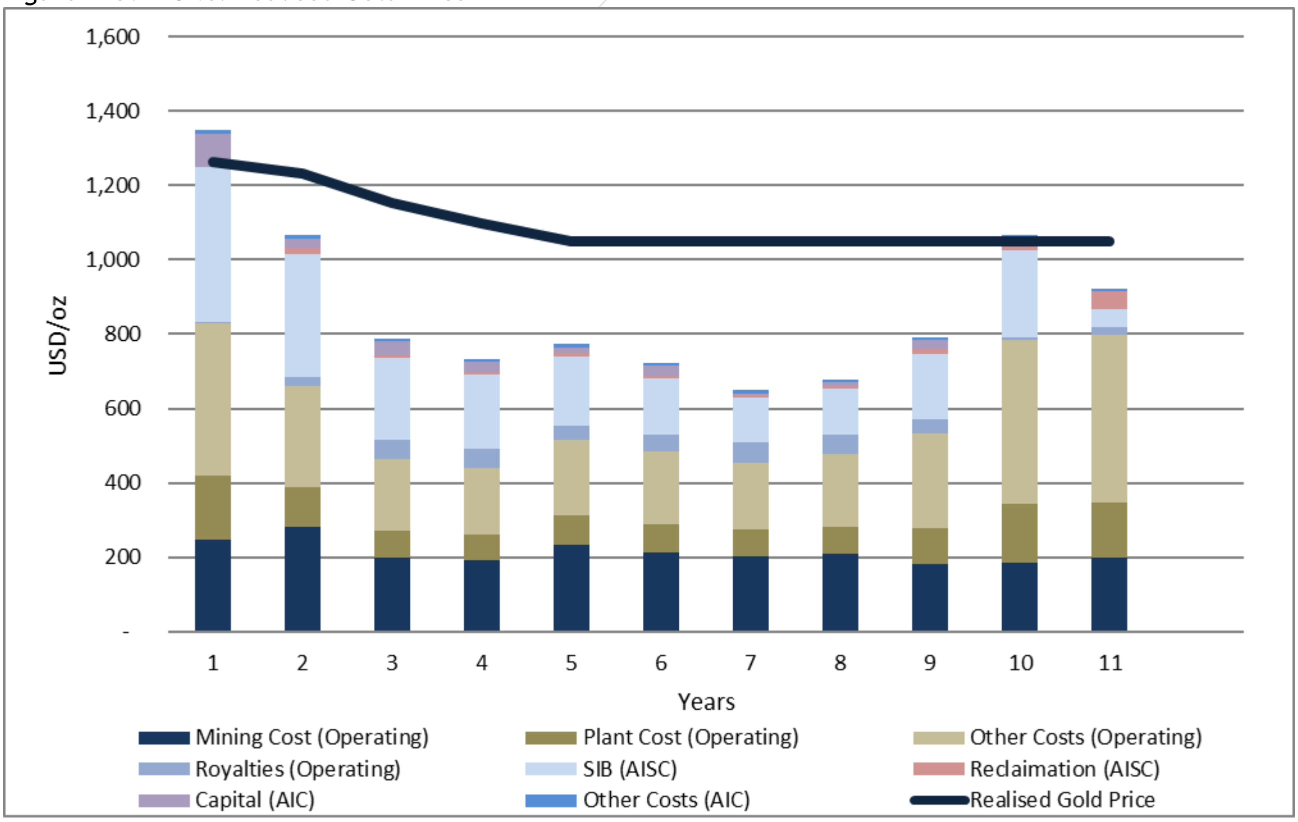


Figure 115 illustrates the all-in costs of the operation along with the realised gold price after applying the 75% payability.

Figure 115: AIC vs. Realised Gold Price



Item 21 (b) - Capital Cost

I. Mining Equipment and Shared Infrastructure

The mining and shared infrastructure capital costs are summarised in Table 5. The capital spend schedule is illustrated in Figure 13.

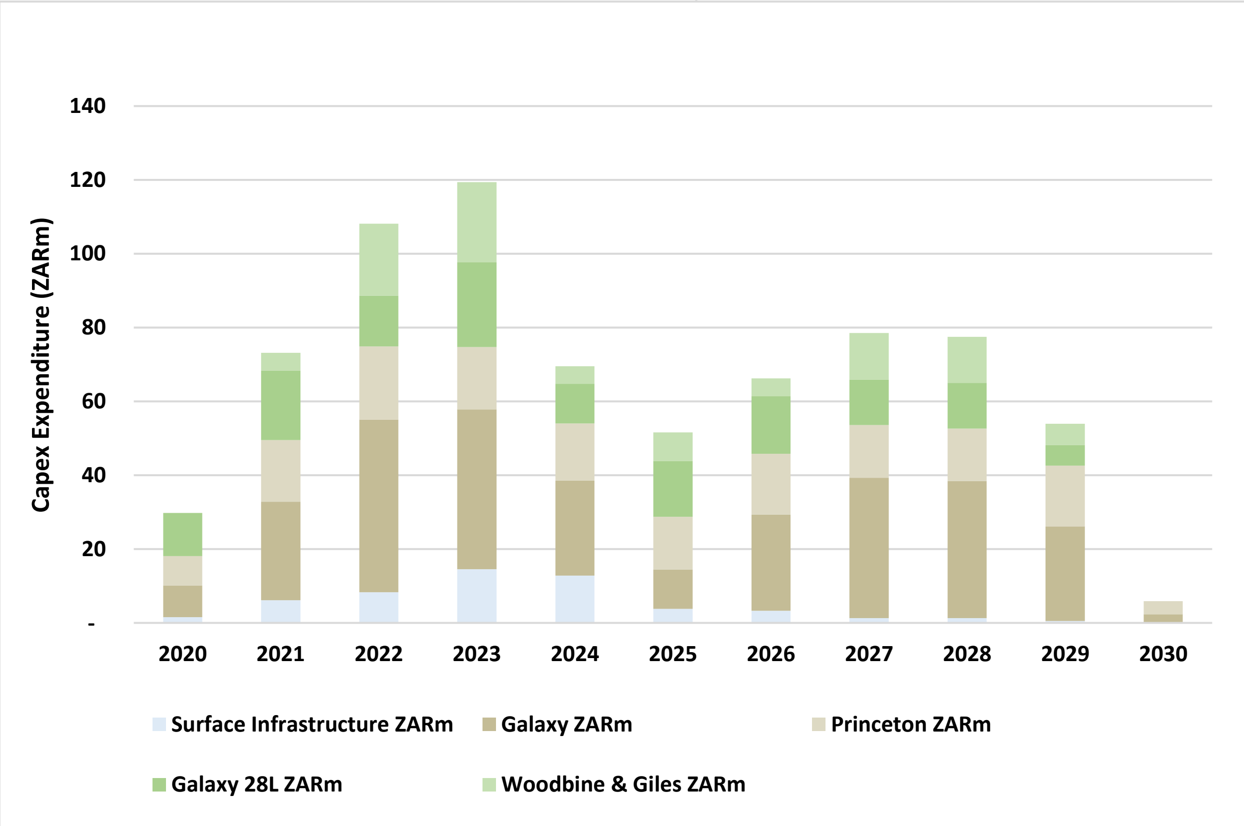
The capital costs and schedule were provided by the Client. The overall cost accuracy is deemed to be between 15% and 20% accuracy. Although the majority of the capital cost is based on quotations (specifically the mining fleet and equipment that constitute the bulk of the costs), the level of accuracy is deemed to be conceptual. This is attributed to the fact that the cost estimation is based on a conceptual mine plan and Inferred Mineral Resource. The accuracy of the equipment and infrastructure requirements thus needs be increased for a higher level of accuracy.

Table 71: Mining Equipment and Shared Infrastructure Capital Expenditure Estimation

Description	Mining and Shared Infrastructure Capital	Study Level Assessment	
	ZARm	Comment	% Accuracy
Surface Infrastructure	53.80	Conceptual	15% to 20%
Galaxy	290.93	Conceptual	15% to 20%
Princeton	156.07	Conceptual	15% to 20%
Galaxy 28 Level	138.79	Conceptual	15% to 20%
Woodbine & Giles	94.21	Conceptual	15% to 20%
Total	**733.80**	**Conceptual**	**15% to 20%**

The capital expenditure schedule is aligned with the target tonnage ramp up and sequencing of the various shafts and mining areas.

Figure 116: Mining Equipment and Shared Infrastructure Capital Expenditure Schedule



II. Processing and Tailings Storage Facility

The plant and TSF capital costs are summarised in Table 5. The capital spend schedule is illustrated in Figure 13.

The capital costs and schedule were provided by the Client. The overall cost accuracy is deemed to be between 20% and 25% which is on a Pre-Feasibility Study level of accuracy.

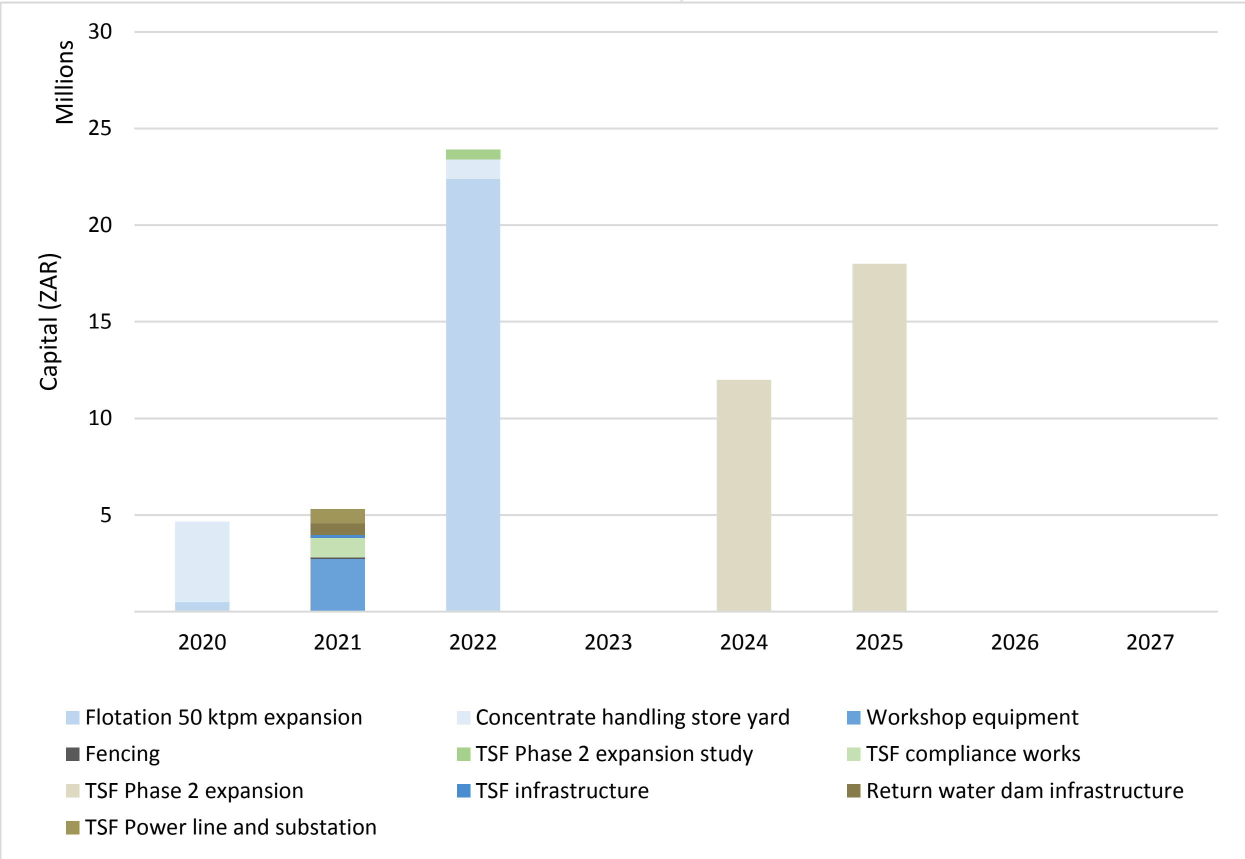
The capital spend schedule is aligned with the target tonnage ramp up from the current 15 ktpm to 30 ktpm in 2020, and then finally to the final nameplate capacity of the new mill of 50 ktpm in 2023.

Phase 2 of the TSF will be built in the years of 2024 and 2025. Further detailed engineering work is required to improve the TSF expansion capital estimation accuracy.

Table 72: Plant and TSF Capital Cost Summary

Item	Plant and TSF Capital	Study Level Assessment	
	ZARm	Comment	% Accuracy
Flotation 50 ktpm expansion	22.90	Quotes	5% to 10%
Concentrate handling store yard	5.18	Conceptual	25% to 30%
Workshop equipment	2.74	Conceptual	25% to 30%
Fencing	0.06	Conceptual	25% to 30%
TSF Phase 2 expansion study	0.50	Conceptual	25% to 30%
TSF compliance works	1.02	Conceptual	25% to 30%
TSF Phase 2 expansion	30.00	Conceptual	25% to 30%
TSF infrastructure	0.15	Conceptual	25% to 30%
Return water dam infrastructure	0.60	Conceptual	25% to 30%
TSF Power line and substation	0.75	Conceptual	25% to 30%
Totals	**63.89**	**Conceptual-level**	**25% to 30%**

Figure 117: Plant and TSF Capital Cost Schedule



III. CAPITAL SUMMARY

Capital cost relating to the project has been subdivided based on definitions from the World Gold Council's guidelines for precious metal cost reporting. The capital cost has been allocated according to these definitions in the financial model and project valuation. The definitions are as follows:-

1). Non-Sustaining Capital:

i). Initial Capital

Capital expenditure required for the initial establishment and/or development of infrastructure, machinery and equipment, facilities, and mining areas for the purpose of exploiting a mineral deposit.

ii). Expansion Capital

Capital expenditure required for the establishment and/or development of infrastructure, machinery, equipment, facilities, and mining areas to increase the following metrics by at least 10%:-

- production capacity;
- net present value ("NPV") as compared to the remaining LoM NPV prior to the inclusion of the capital expenditure;
- Reserves as compared to the reserve report prior to the inclusion of the capital expenditure

2). Sustaining Capital:

Capital expenditure required for the maintenance, repair, establishment and or development of infrastructure, machinery, equipment, facilities, and mining areas to maintain the existing production capacity of an operating mining operation. Ongoing capital can further be subdivided into the following:-

- Sustaining Capital – Establishment and development activities required to sustain steady state production (development/pre-stripping for the replacement of mined out areas to maintain a steady production rate);
- Stay-in-Business Capital – Renewal and replacement of infrastructure, machinery, and equipment to maintain sustain steady state production. (Conducting major repair or refurbishment of mining equipment such as winding plants to ensure a steady production rate can be maintained)

Figure 118 illustrates the LoM capital schedule for the PEA. It should be noted that all off-reef development, excepting raises, were capitalised under sustaining capital. In addition, the majority of equipment purchases were also captured under sustaining capital as they are budgeted for under lease payments and not upfront payments.

Figure 118: Capital Schedule

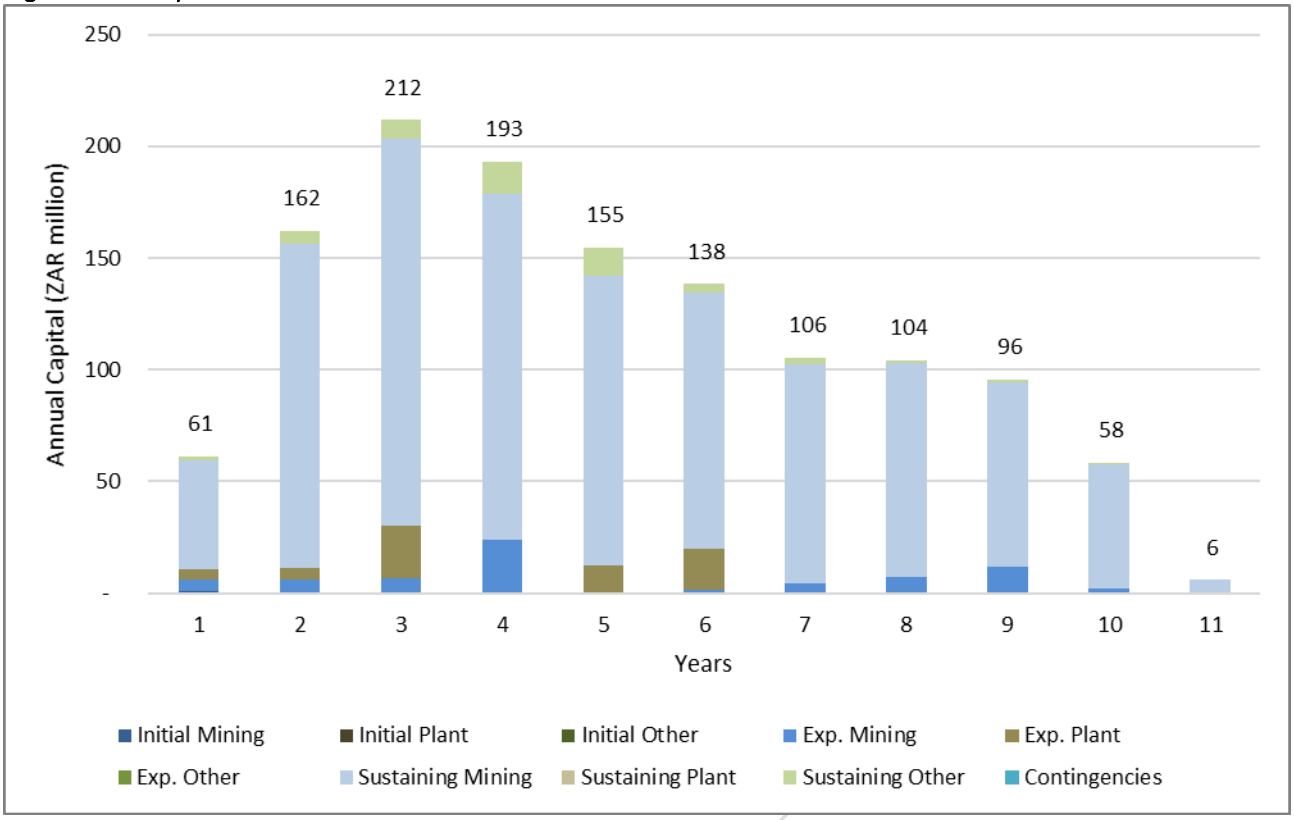


Table 73 details the capital expenditure summary over the LoM inclusive of capitalised development (sustaining capital).

Table 73: PEA Capital Summary

Capital Expenditure	Over LoM	Galaxy Gold Mine
Mining Capital	**Unit**	
Mining Infrastructure	ZARm	1.3
Study Work	ZARm	0.5
Sub-Total Initial Mining Capital	**ZARm**	**1.8**
Mining Infrastructure	ZARm	9.1
Exploration	ZARm	48.6
Mining Equipment	ZARm	10.7
Sub-Total Expansion Mining Capital	**ZARm**	**68.4**
Surface Infrastructure	ZARm	13.4
Mining Infrastructure	ZARm	50.0
Study Work	ZARm	0.5
Exploration	ZARm	31.7
Mining Equipment	ZARm	514.2
Capitalised Development	ZARm	494.0
Sub-Total Sustaining Mining Capital	**ZARm**	**1,103.7**
Mining Capital Contingency	**ZARm**	**-**
Total Mining Capital	**ZARm**	**1,174.0**
Plant Capital		1.0
Flotation 50 ktpm expansion	ZARm	0.1
Concentrate handling store yard	ZARm	20.0
Workshop equipment	ZARm	7.1
Fencing	ZARm	1.0
TSF Phase 2 expansion study	ZARm	2.7
TSF compliance works	ZARm	0.5
TSF Phase 2 expansion	ZARm	1.0
TSF infrastructure	ZARm	30.0
Return water dam infrastructure	ZARm	0.2
TSF Power line and substation	ZARm	0.6
Sub-Total Expansion Plant Capital	**ZARm**	0.8
Plant Capital Contingency	**ZARm**	**63.9**
Total Plant Capital	**ZARm**	**-**
Other Non-Direct Capital		**63.9**
Surface Infrastructure	ZARm	1.0
Sub-Total Sustaining Other Capital	**ZARm**	53.8
Other Capital Contingency	**ZARm**	**53.8**
Total Other Capital	**ZARm**	**-**
Total Initial Capital	**ZARm**	**1.8**
Total Expansion Capital	**ZARm**	**132.3**
Total Sustaining Capital	**ZARm**	**1,157.5**
Total Capital Contingencies	**ZARm**	**-**
Total Capital	**ZARm**	**1,291.7**

ITEM 22 - ECONOMIC ANALYSIS

Minxcon was commissioned by GGR to complete a PEA study on the Galaxy Gold Mine. GGR has decided to move the project back to a PEA stage as the project strategy has changed significantly. This change is attributed to modification of the on-site processing plant to produce and sell a high-grade concentrate rather than producing bullion from a BIOX® plant as before.

The PEA is speculative in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorised as Mineral Reserves. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that the PEA will be realised.

The basis of the PEA is described in Item 22 (a)(I).

I. Economic Analysis Date

Value relates to a specific point in time. The effective date for the economic analysis is 29 June 2020.

II. Economic Analysis Approaches and Methods

The following economic analysis approaches are three internationally accepted methods of valuing mineral projects, and are illustrated in Table 74:-

- **Cost Approach**: used to value early-stage exploration properties. The economic analysis is dependent on the historical and future exploration expenditure.
- **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.
- **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.

Table 74: Acceptable Methods of Mineral Project Economic Analysis

Economic Analysis Approach	Exploration Properties	Development Properties	Production Properties	Dormant Properties		Defunct Properties
				Economically Viable	Not Viable	
Income	Not generally used	Widely used	Widely used	Widely used	Not generally used	Not generally used
Market	Widely used	Less widely used	Quite widely used	Quite widely used	Widely used	Widely used
Cost	Widely used	Not generally used	Not generally used	Not generally used	Less widely used	Quite widely used

i. *Income Approach*

The DCF economic analysis is based on future free cash flow discounted to present value. This analysis is widely used within investment banking and company economic analysis. 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 economic analysis 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. Additionally, Mineral Reserves must be based on a LoM plan for an operating (going concern) mine, or at least a PFS for a mine project.

ii. Market Approach

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 Mineral 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 value 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 economic analysis.

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.

iii. 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, economic analysis 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 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.

iv. Methodology Justification

The valuator performed an independent preliminary economic analysis on the Mine's Mineral Resources. Owing to the fact that the Project has a budget plan based on a conceptual mine plan, the income approach was applied on the total mineable resource incorporated in a conceptual mine plan as the primary economic analysis methodology in determining the value of the asset. The PEA includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorised as Mineral Reserves, and there is no certainty that the PEA will be realised.

Item 22 (a) – INCOME APPROACH

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 Mine. This is illustrated by using the DCF method on a FCFF basis, to calculate the NPV and subsequently, the intrinsic value of the Mine in real terms.

The NPV is derived from post-royalties and tax, pre-debt real cash flows, after taking into account operating costs, capital expenditures for the mining operations and the processing plant and using forecast macro-economic parameters.

I. BASIS OF ECONOMIC ANALYSIS OF THE MINING ASSETS

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

- The cash flow model with economic input parameters as per forecasts from various banks and analysts.
- The cash flow model is in real money terms and done in ZAR, and was subsequently converted to USD terms.
- The cash flow model is based on a detailed mine plan, but due to the inclusion of Inferred Mineral Resources is considered conceptual in nature.
- A hurdle rate of 9.8% (in real terms) was calculated for the discount factor.
- The impact of the Royalty Act using the formula for refined metals was included.
- Valuation of the tax entity was performed on a stand-alone basis.
- The full value of the operation was reported for the Galaxy Gold Mine – no attributable values were calculated.
- Sensitivity analyses were performed to ascertain the impact of discount factors, commodity prices, grade, working costs and capital expenditures.
- The model was set in calendar years with the first year starting in July 2020 and ending December 2020.
- The payability of 75% of the gold content in the concentrate sold.

II. 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 for the period 2020-2024 have been converted from nominal to real terms. Table 75 illustrates the forecasts for the first five years as well as the long-term forecast used in the financial model. The price forecasts and exchange rate forecasts are based on the median of various banks, brokers and analyst forecasts and are in real-terms throughout the LoM.

Table 75: Macro-Economic Forecasts and Commodity Prices over the Life of Mine (Real Terms)

Item	Unit	2020	2021	2022	2023	2024	Long-term
Gold Price (Nominal terms)	USD/oz.	1,690	1,704	1,622	1,581	1,534	
Gold Price (Real terms)	USD/oz.	1,690	1,664	1,548	1,475	1,399	1,400
Exchange Rate (Nominal terms)	ZAR/USD	16.94	16.12	16.85	16.08	16.46	
Exchange Rate (Real terms)	ZAR/USD	16.74	15.80	15.90	15.00	15.00	15.00

Source: Various Bank and Broker Forecasts (June 2020), Minxcon.

The creditors' days were assumed at 30 days and debtors' days (for payment of gold delivered) were calculated at seven days.

III. Recoveries

The expected recovery and mass pull for each orebody as applied in the financial model is detailed in Table 76.

Table 76: Expected Recoveries and Mass Pulls

Orebody	Float Recovery (%)	Mass Pull (%)
Galaxy	91.0%	8.0%
Princeton	87.0%	15.0%
Woodbine & Giles	91.0%	8.0%
Historic Tailings	48.0%	0.6%

IV. Payability

GGR has entered into the Offtake Agreement with the Buyer, whereby GGR will sell aggregate of an anticipated 85,000 t of concentrate over a 36-month period, with the contract expiring in 2022. The QP has assumed the terms of the contract will apply over the LoM. As consideration for the concentrate to be delivered under the Offtake Agreement, the Buyer pays GGR for 75% of the gold content in the concentrate, at a price equal to the mean of the daily London Bullion Market Association gold price over the relevant quotation period.

V. Discount Rate

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 RSA 5-10 year treasury bond yield rate of 8.85% was considered as an acceptable risk-free rate at the time of the valuation.
- The market risk premium of 6.0%, a rate generally considered as being the investor's expectation for investing in equity, rather than a risk-free government bond.
- The beta of a stock is normally used to reflect the stock price's volatility over and above other general equity investments in the country of listing. Since stock price values are not being considered, Minxcon calculated a project risk parameter of 1.01 on the Project instead of the beta. This specific risk was calculated using an average weighting on ranked criteria based on the most crucial elements in a mining project.
- By using the CAPM, Minxcon calculated a nominal discount rate of 14.93% which translates in a real discount rate of 9.79%.

Table 77: Discount Rate Calculation

Group of Minerals	Royalty %
US risk-free rate	8.85%
Risk premium of market	6.0%
Project Beta	1.01
Nominal Cost of Equity	14.93%
Real Cost of Equity	9.79%

Minxcon calculated an operation beta for the Project 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 1.01 was calculated for the Project.

The beta was benchmarked against the South African gold mining companies listed on the Johannesburg Stock Exchange ("JSE") in order to determine if the calculated beta can be deemed appropriate. The Unlevered Betas of South African gold mining companies were found to range between 0.17 (Pan African Resources) and 2.15 (Sibanye Stillwater). The calculated beta of 1.01 for GGR therefore fall within the higher end-range and is deemed appropriate for the status of the operation. Table 78 shows the betas of South African gold mining companies considered.

Table 78: South African Gold Mining Companies' Beta Values

Betas of Gold Miners	Unlevered	Exchange
Anglo Gold Ashanti	0.88	JSE
Pan African Resources	0.17	JSE
Harmony	0.78	JSE
Sibanye Stillwater	2.15	JSE
Mean	**0.71**	
Median	**0.83**	

VI. Production Forecast

The saleable product tonnes and ounces are displayed in Table 79. Currently the operation treats historic tailings, with approximately 169 kt remaining in the mine plan. The first area mined is the combined Galaxy and Princeton orebodies followed by the Woodbine and Giles orebodies 12 months later. The combined operation produces a total of 436 kt of concentrate containing 413 koz of gold at a grade of 29.5 g/t.

The combined underground mines have a life of 11 years mining 4,335 kt at an average mined grade of 3.35 g/t.

Table 79: Production Breakdown in Life of Mine

Item	Project	Galaxy Gold Mine
Waste Tonnes Mined	kt	3,107
Ore Tonnes Mined	kt	4,335
Total Tonnes Mined	kt	7,442
Average Mined Grade	g/t	3.35
Total Oz in Mine Plan	oz	466,447
Grade Delivered to Plant	g/t	3.35
Recovered grade	g/t	2.97
Yield/Recovery	%	88.6%
Total Oz Recovered	oz	413,421
Concentrate Tonnes Produced	dmt	435,819
Concentrate Tonnes Produced	wmt	479,401
Concentrate Grade	g/t	29.50
LoM	Years	11

The gold ounces produced and the payable gold ounces per year along with the grades are illustrated in Figure 119. The payable gold illustrates the comparative value of the gold in the concentrate after the 75% payability has been accounted for as per the off-take agreement. As per the agreement, the mine will receive only 75% of the value of the contained gold in the concentrate. The gold production decreases after year 8 due to the Galaxy Orebody and the Woodbine and Giles orebodies being depleted.

Figure 119: Saleable Gold

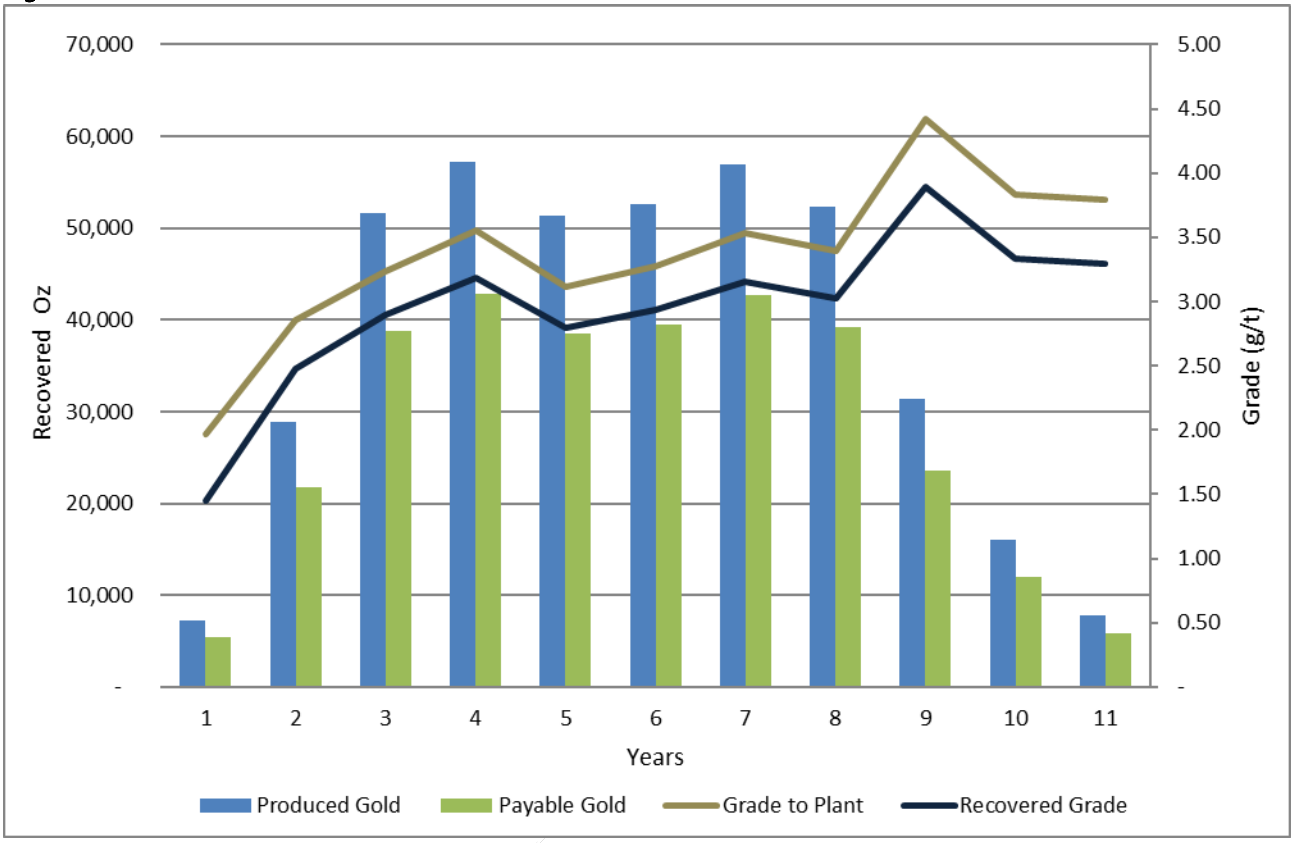
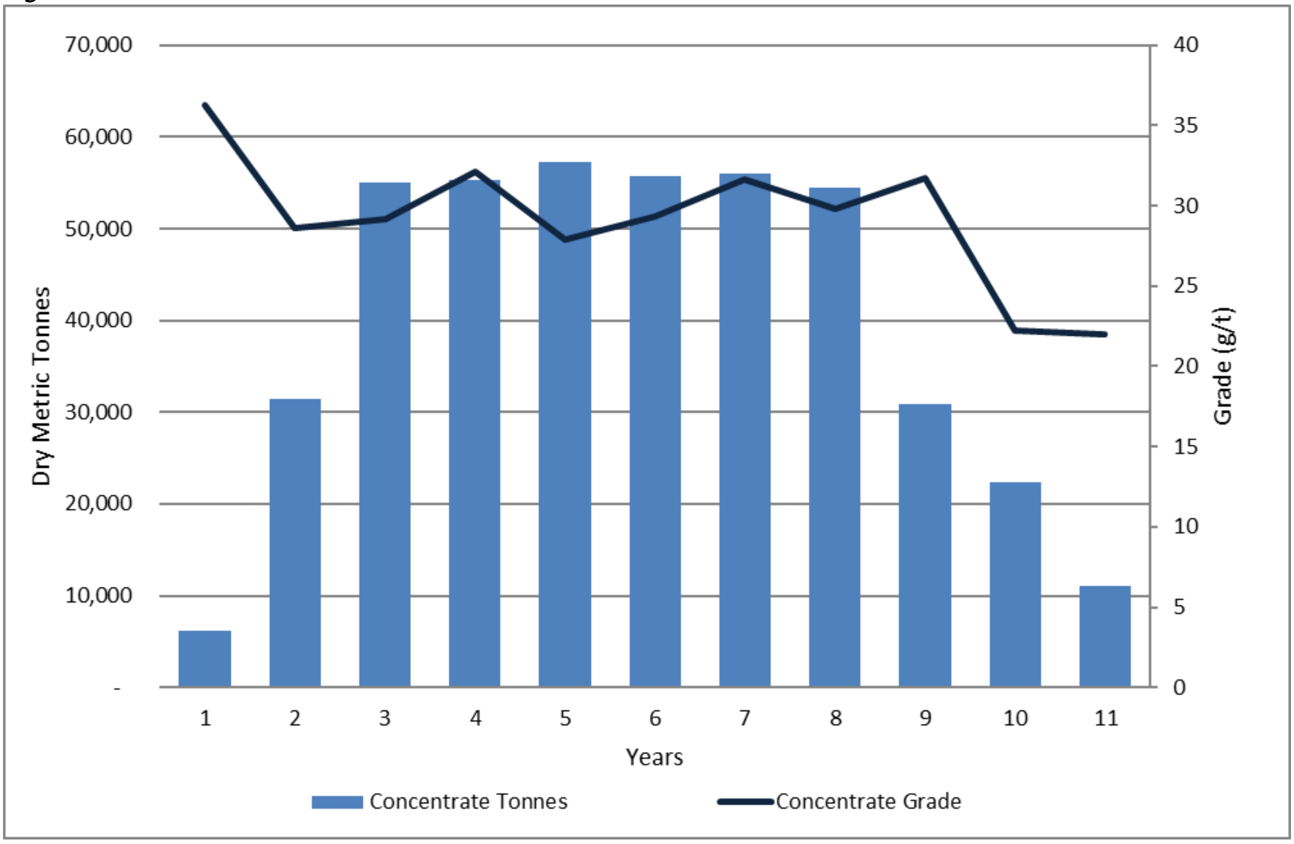


Figure 120 illustrates the concentrate tonnes produced along with the concentrate grade. The grade drops below specifications towards the tail end in year 10 and year 11.

Figure 120: Concentrate Produced



VII. Cash Flows

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.

The annual cash flow before capital expenditure, total capital expenditure and cumulative cash flow forecast for the combined project over the LoM are displayed in the figures to follow. The peak funding requirement of the combined project is displayed in Figure 121 as the minimum value of the cumulative cashflow over the LoM and equals ZAR9 million. It should be noted that the peak funding requirement is offset by revenue in year one (2020) and the planned capital expenditure is ZAR61 million for this period.

The detailed cash flows are illustrated in Appendix 2 and Appendix 3 in ZAR and USD terms, respectively.

Figure 121: Annual and Cumulative Cash Flow - Undiscounted (ZARm)

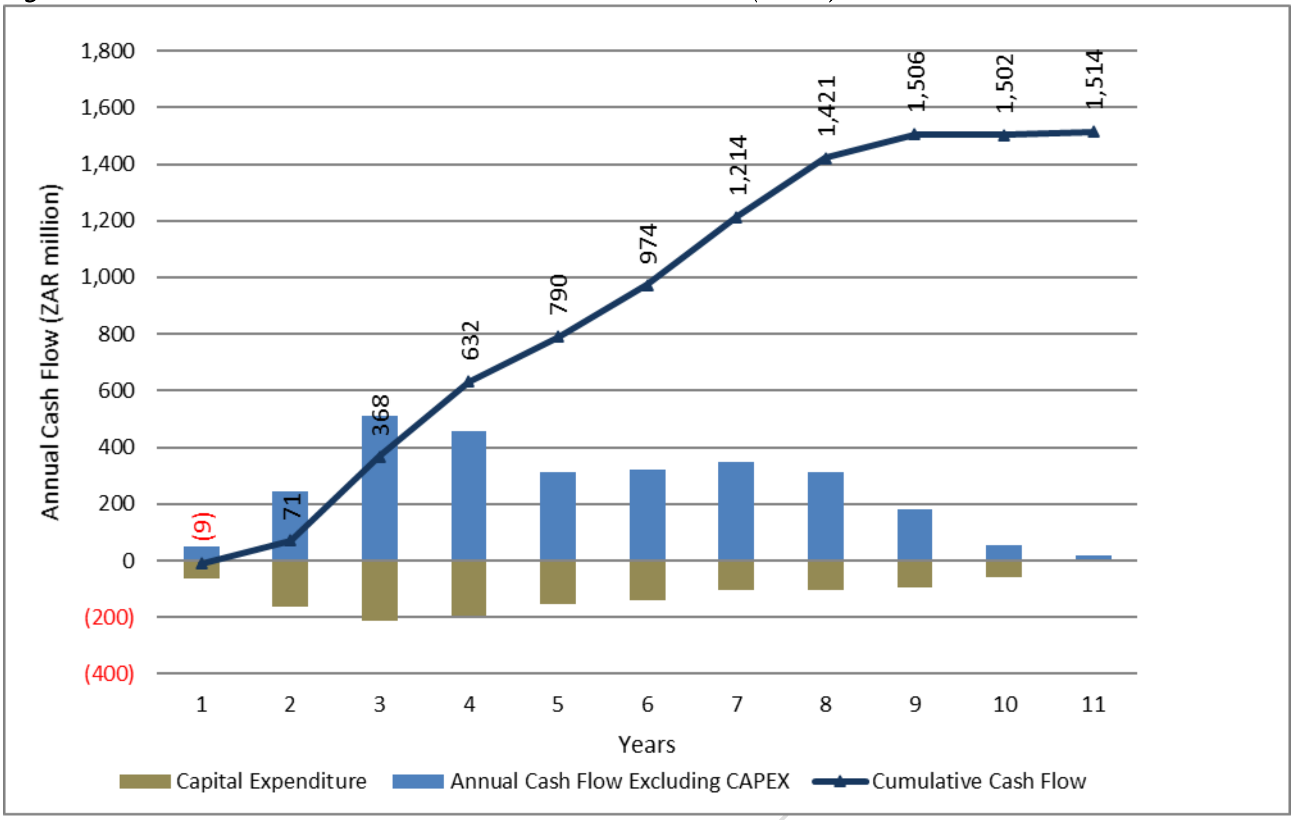
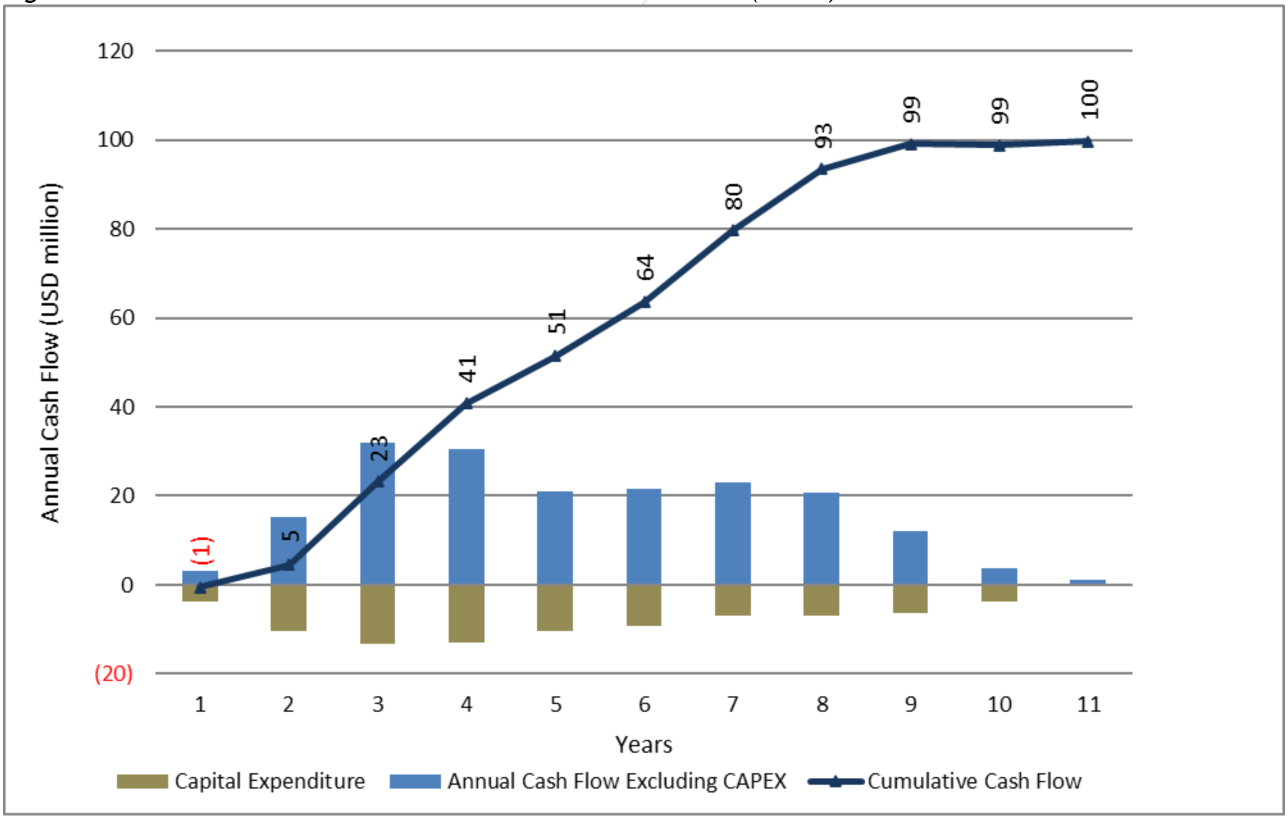


Figure 122 illustrates the annual and cumulative cash flow in USD terms.

Figure 122: Annual and Cumulative Cash Flow – Undiscounted (USDm)



VIII. Valuation Results

Table 80 illustrates the PEA NPV at various discount rates with a best-estimated value of ZAR975 million or USD64 million at a real discount rate of 9.8% and a high internal rate of return ("IRR") of 1,051%. The high IRR is due to the investment requirement being low on a free cash flow basis. The operation is currently producing off-setting the investment requirement, and the additional capital requirements are spread over the LoM.

Table 80: PEA Valuation Summary

Real Discount Rate	ZARm	USDm
NPV @ 0%	1,513	100
NPV @ 2.5%	1,342	88
NPV @ 5%	1,197	79
NPV @ 7.5%	1,073	70
NPV @ 9.8%	**975**	**64**
NPV @ 10%	967	63
NPV @ 12.5%	874	57
NPV @ 15%	794	52
Item	**Unit**	**Value**
IRR	%	1051.0%
All-in Sustainable Cost Margin	%	28%
Peak Funding Requirement	ZAR million	9
Payback	Years	1
Break-even Gold Price	USD/oz.	777

Table 81 details the project profitability ratios.

Table 81: Project Profitability Ratios

Item	Profitability Ratios	Galaxy Gold Mine
Internal Rate of Return (IRR)	%	1051.0%
Total ounces in Mine plan	oz	466,447
In-situ Mining Inventory Valuation	ZAR/oz	2,090
In-situ Mining Inventory Valuation	USD/oz	136
LoM	Years	11
Present Value of Income flow	ZARm	2,072
Present Value of Investment	ZARm	2
Benefit-Cost Ratio	Ratio	1,265.5
Return on Investment	%	10263%
Average Payback Period	Years	1.0
Peak Funding Requirement	ZARm	9
Peak Funding Year	Years	0
Break-even Feed Grade (Excluding Capex)	g/t	1.78
Break-even Feed Grade (Including Capex)	g/t	2.41
Break-even Gold Price (Excluding Capex)	USD/oz	573
Break-even Gold Price (Including Capex)	USD/oz	777

Previous Results

The 2015 Report calculated a Project NPV of ZAR138 million at a real discount rate of 9.07%. The PEA results have substantially improved, however are not strictly comparable. The current PEA has a revised mining and processing strategy, and although costs have increased due to inflationary changes, the economic climate for gold producers are significantly more favourable in 2020 compared to 2015.

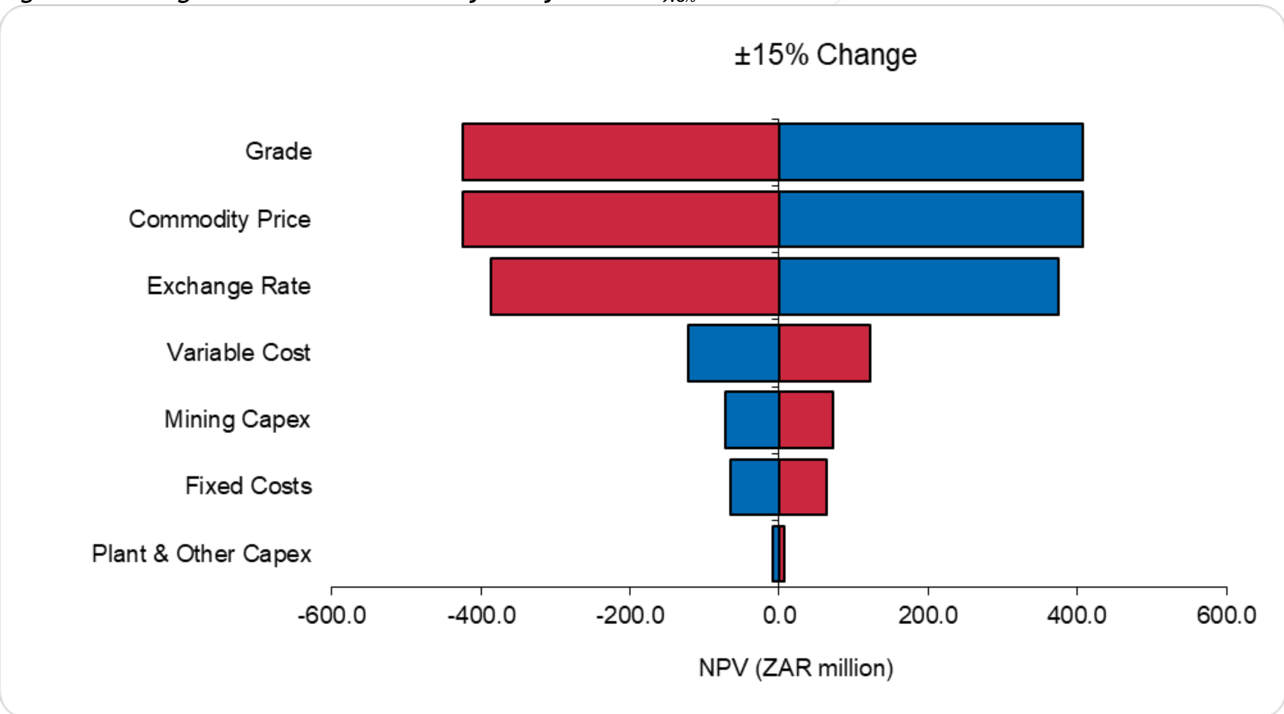
Table 82: Previous Project Valuation Summary – 2015 Report

Item	Unit	Value
Real NPV @ 0.00%	ZARm	179
Real NPV @ 5.00%	ZARm	154
Real NPV @ 9.07%	**ZARm**	**138**
Real NPV @ 10.00%	ZARm	134
Real NPV @ 15.00%	ZARm	119
IRR	%	226%

IX. Sensitivity Analysis

Based on the real cash flow calculated in the financial model, Minxcon performed single-parameter sensitivity analyses to ascertain the impact on the NPV. The bars represent various inputs into the model; each being increased or decreased by 15%. The left-hand side of the graph indicates a negative 15% change in the input while the right-hand side of the graph indicating a positive 15% change in the input. A negative effect to the NPVs represented by red bars and a positive effect represented by blue bars. For the DCF, the gold price, exchange rate and grade have the biggest impact on the sensitivity of the Project followed by the variable operating costs and mining capex (includes capitalised development). The Project is least sensitive to fixed costs and plant and other capital.

Figure 123: Single Parameter Sensitivity Analysis – $NPV_{9.8\%}$



A sensitivity analysis was also conducted on the exchange rate and the commodity prices to better indicate the effect these two factors have on the NPV as well as the operating costs and the capital costs. This is displayed in Table 83 and Table 84 in ZAR terms and in Table 85 and Table 86 in USD terms.

Table 83: NPV$_{9.8\%}$ Sensitivity to Change in Gold Price and Exchange Rate (ZARm)

	Ex Rate	10.72	11.48	12.25	13.02	13.78	14.55	**15.31**	16.08	16.84	17.61	18.38	19.14	19.91
AU Price (USD/oz)		-30.0%	-25.0%	-20.0%	-15.0%	-10.0%	-5.0%		5.0%	10.0%	15.0%	20.0%	25.0%	30.0%
1,026	-30.0%	-719	-588	-457	-326	-194	-68	52	170	286	380	467	559	651
1,100	-25.0%	-569	-427	-285	-143	-11	118	245	354	450	549	648	738	838
1,173	-20.0%	-418	-265	-114	27	164	296	404	511	613	715	821	917	1,011
1,246	-15.0%	-268	-106	44	191	323	438	551	664	772	880	981	1,082	1,183
1,320	-10.0%	-118	42	199	337	458	578	696	817	925	1,032	1,140	1,254	1,367
1,393	-5.0%	21	187	335	463	590	715	842	957	1,070	1,185	1,311	1,423	1,536
1,466		157	319	455	588	721	854	**975**	1,095	1,218	1,349	1,467	1,586	1,705
1,540	5.0%	288	432	573	712	852	980	1,107	1,239	1,373	1,498	1,623	1,749	1,874
1,613	10.0%	395	544	690	837	972	1,105	1,244	1,384	1,516	1,648	1,780	1,911	2,043
1,686	15.0%	500	655	809	950	1,091	1,235	1,383	1,521	1,659	1,797	1,936	2,074	2,213
1,759	20.0%	598	758	916	1,063	1,211	1,368	1,513	1,657	1,802	1,947	2,092	2,238	2,384
1,833	25.0%	701	868	1,021	1,175	1,340	1,492	1,643	1,794	1,945	2,097	2,249	2,402	2,556
1,906	30.0%	805	967	1,127	1,298	1,457	1,615	1,773	1,931	2,089	2,248	2,407	2,568	2,730
1,979	35.0%	899	1,066	1,237	1,410	1,574	1,739	1,903	2,068	2,233	2,399	2,567	2,736	2,915

Table 84: NPV$_{9.8\%}$ Sensitivity to Change in Operating Cost and Capital Cost (ZARm)

	Capital (ZARm)	1,679	1,615	1,550	1,485	1,421	1,356	**1,292**	1,227	1,162	1,098	1,033	969	904
Operating Cost (ZAR/Feed 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%
970	30.0%	392	422	451	483	516	544	573	605	637	665	692	724	757
933	25.0%	460	493	525	554	582	614	646	674	702	732	766	794	821
895	20.0%	535	563	591	623	656	683	711	740	774	804	831	857	884
858	15.0%	601	633	665	693	720	749	783	813	840	867	894	921	948
821	10.0%	675	702	730	757	791	823	850	876	903	930	957	984	1,011
783	5.0%	739	767	799	832	859	886	913	940	966	993	1,019	1,046	1,072
746		808	842	868	895	922	948	**975**	1,001	1,028	1,054	1,081	1,108	1,135
709	-5.0%	878	904	930	957	983	1,010	1,036	1,063	1,090	1,117	1,143	1,171	1,202
671	-10.0%	939	965	992	1,018	1,045	1,072	1,098	1,125	1,151	1,178	1,209	1,240	1,268
634	-15.0%	1,000	1,027	1,054	1,080	1,107	1,133	1,159	1,186	1,217	1,248	1,276	1,302	1,328
597	-20.0%	1,062	1,089	1,115	1,141	1,168	1,194	1,224	1,255	1,284	1,310	1,336	1,362	1,388
560	-25.0%	1,123	1,150	1,176	1,202	1,231	1,262	1,293	1,319	1,344	1,370	1,396	1,422	1,448
522	-30.0%	1,184	1,210	1,238	1,269	1,301	1,327	1,353	1,379	1,404	1,430	1,456	1,482	1,508

Table 85: $NPV_{9.8\%}$ Sensitivity to Change in Gold Price and Exchange Rate (USDm)

	Ex Rate	10.72	11.48	12.25	13.02	13.78	14.55	**15.31**	16.08	16.84	17.61	18.38	19.14	19.91
AU Price (USD/oz)	753.80	-30.0%	-25.0%	-20.0%	-15.0%	-10.0%	-5.0%		5.0%	10.0%	15.0%	20.0%	25.0%	30.0%
1,026	-30.0%	-66	-51	-37	-24	-14	-4	4	11	17	22	26	30	33
1,100	-25.0%	-52	-36	-23	-10	0	9	17	22	27	32	36	39	42
1,173	-20.0%	-38	-22	-9	3	12	21	27	32	37	41	45	48	51
1,246	-15.0%	-24	-8	4	15	24	31	36	42	46	50	54	57	60
1,320	-10.0%	-10	4	17	26	34	40	46	51	55	59	62	66	69
1,393	-5.0%	3	17	28	36	43	50	55	60	64	67	71	74	77
1,466		15	28	38	46	53	59	**64**	68	72	77	80	83	86
1,540	5.0%	28	38	47	55	62	68	73	77	82	85	88	91	94
1,613	10.0%	38	48	57	65	71	76	81	86	90	94	97	100	103
1,686	15.0%	47	58	66	73	79	85	90	95	99	102	105	109	111
1,759	20.0%	56	67	75	82	88	94	99	103	107	111	114	117	120
1,833	25.0%	66	76	84	91	97	103	107	112	116	119	123	126	129
1,906	30.0%	76	85	92	100	106	111	116	120	124	128	131	134	137
1,979	35.0%	84	93	101	109	114	120	124	129	133	136	140	143	147

Table 86: $NPV_{9.8\%}$ Sensitivity to Change in Operating Cost and Capital Cost (USDm)

	Capital (USDm)	110	105	101	97	93	89	**84**	80	76	72	67	63	59
Operating Cost (USD/Feed 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%
63	30.0%	26	28	30	32	34	36	38	40	42	44	46	48	50
61	25.0%	31	33	35	37	38	41	43	44	46	48	50	52	54
58	20.0%	35	37	39	41	43	45	47	49	51	53	55	56	58
56	15.0%	40	42	44	46	47	49	51	53	55	57	59	60	62
54	10.0%	45	46	48	50	52	54	56	58	59	61	63	64	66
51	5.0%	49	51	53	55	56	58	60	62	63	65	67	68	70
49		53	55	57	59	61	62	**64**	66	67	69	71	72	74
46	-5.0%	58	59	61	63	65	66	68	70	71	73	75	77	79
44	-10.0%	62	63	65	67	69	70	72	74	75	77	79	81	83
41	-15.0%	66	67	69	71	73	74	76	78	80	82	83	85	87
39	-20.0%	70	71	73	75	76	78	80	82	84	86	87	89	91
37	-25.0%	74	75	77	79	81	83	85	86	88	90	91	93	95
34	-30.0%	78	79	81	83	85	87	88	90	92	93	95	97	99

X. REGULATORY ITEMS

Corporate Taxes

Gold mining companies in South Africa are taxed according to the gold mine formula. Owing to the nature of the ore bodies in South Africa – deep ore bodies that require significant capital coupled with a fluctuating gold price – the government identified the vulnerability of gold mining companies during times 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.

Historically, there were two formulas for companies selecting to pay Secondary Tax on Dividends ("STC"). However, from 1 April 2012, STC was replaced by the introduction of dividends tax and only one formula is now in use:-

Equation 1: Dividends Tax Formula

$$y = 34 - (170/x)$$

Where x = the ratio, expressed as a percentage, calculated as follows:

$$\frac{\text{Taxable income from gold mining}}{\text{Total revenue (turnover) from gold mining}}$$

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. Excess capital expenditure and tax losses are carried forward as unredeemed capital and assessed losses to be claimed from future mining taxable income. As at 31 December 2019, GRR had an accumulated assessed loss of ZAR422.69 million. The year-to-date loss to 30 April 2020 is ZAR66.27 million, for a total assessed loss of ZAR488.96 million which was utilised against tax.

Royalties

As per Item 4 (e), the unrefined mineral formula was used for this Project. As per Schedule 1 of the Royalty Act, gold is only considered a refined Mineral Resource if refined and smelted to a 99.5% purity.

Carbon Tax

No carbon tax has been applied at this level of study, as no benchmark is available for use. It is not expected that the carbon tax will make a material impact on the financial results.

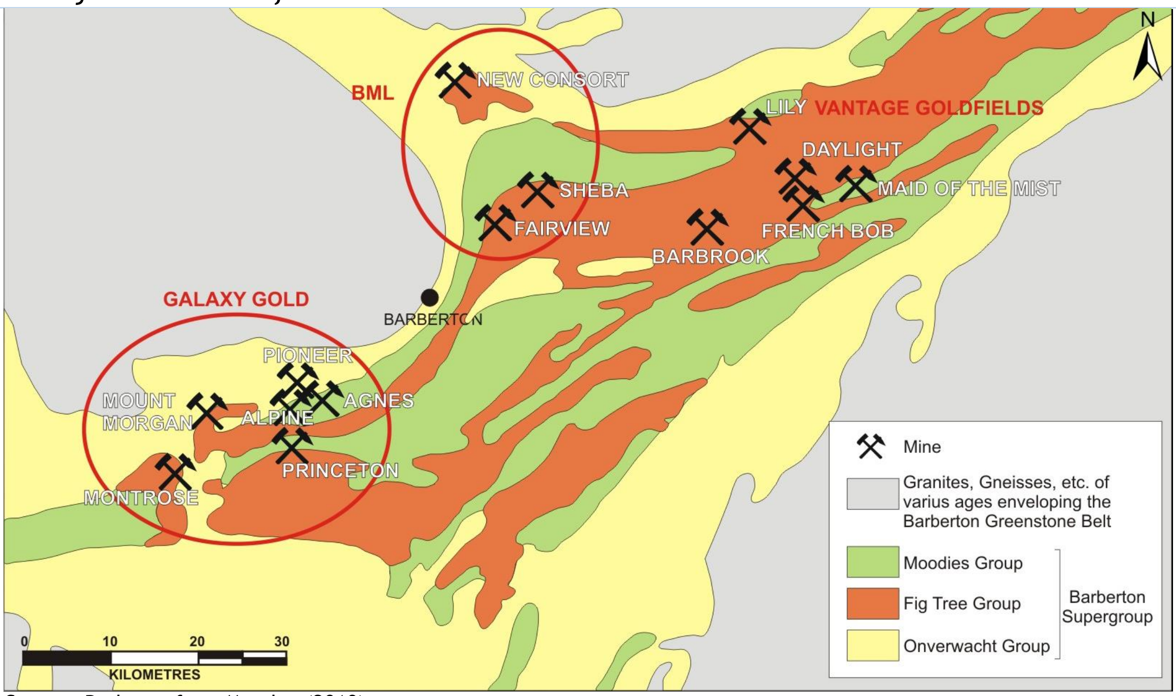
ITEM 23 - ADJACENT PROPERTIES

Item 23 (a) - Public Domain Information

The BGB hosts a number of gold mines, such as the Lily Mine and Barbrook Mines Complex of Vantage Goldfields Limited, as well as the Barberton Mines Complex (Sheba, Fairview and New Consort mines) of Pan African Resources PLC. The Barberton Mines Complex together with the Agnes (Galaxy Gold) Mine have been responsible for the production of over 70% of gold historically within the greater BGB area.

These mines lie some 30 to 50 km northeast of the Galaxy Gold Mine assets (Figure 124). There are no gold projects adjacent to the Mine.

Figure 124: Major Gold Mines of the Barberton Greenstone Belt



Source: Redrawn from Meadon (2010)

Major Gold Mines of the Barberton Greenstone Belt	June 2020

Item 23 (b) - Sources of Information

Information presented in this section is in the public domain and has been sourced from the following:-

- Minxcon, 2015b. An Independent Competent Persons' Report on Vantage Goldfields Limited, Mpumalanga Province, South Africa.
- Pan African Resources Mineral Resource and Mineral Reserve Report, 2014.
- Pan African Resources Mineral Resource and Mineral Reserve Report, 2019.

Item 23 (c) - Verification of Information

Minxcon has exclusively utilised information from sources that are publicly available. The information has not been independently verified by Minxcon, and such information is not necessarily indicative of the mineralisation on the Galaxy Gold Mine.

Item 23 (d) – Applicability of Adjacent Property's Mineral Deposit to Project

The nearby mines lie within the Archaean BGB, which hosts gold in shear zones within Barberton Supergroup metasediments. Although the mineralisation style may be similar to that at the Galaxy Gold Mine, the information presented here, however, is not necessarily indicative of mineralisation at the Mine.

Item 23 (e) – Historical Estimates of Mineral Resources or Mineral Reserves

The following Table 87 and Table 88 respectively detail the Mineral Resources and Mineral Reserves for the Lily and Barbrook mines as estimated by Vantage Goldfields Limited in 2014 and reviewed by Minxcon in 2015.

Table 87: Mineral Resources for Lily and Barbrook Mines (31 December 2014)

Mine	Mineral Resource Category	Tonnes	Grade	Contained Gold	
		Mt	g/t	kg	oz
Lily	Measured	7.11	2.22	15,780	507,400
	Indicated	5.76	2.09	12,040	387,100
	Inferred	13.60	2.09	28,430	914,100
	Total	**26.47**	**2.13**	**56,250**	**1,808,600**
Barbrook	Measured	3.38	3.20	10,830	348,200
	Indicated	2.91	4.44	12,920	415,400
	Inferred	8.41	4.79	40,280	1,295,100
	Total	**14.70**	**4.36**	**64,030**	**2,058,700**

Source: Minxcon (2015)

Table 88: Mineral Reserves for Lily and Barbrook Mines (31 December 2014)

Mine	Mineral Reserve Category	Tonnes	Grade	Contained Gold	
		Mt	g/t	kg	oz
Lily	Proved	0.50	2.56	1,280	41,200
	Probable	4.37	2.36	10,320	331,800
	Total	**4.87**	**2.38**	**11,600**	**373,000**
Barbrook	Proved	0.19	3.80	710	22,800
	Probable	0.64	4.17	2,660	85,500
	Total	**0.82**	**4.10**	**3,370**	**108,300**

Source: Minxcon (2015)

Notes:

1. Mineral Reserves are included in Mineral Resources.
2. Grade and Tonnes reported to plant – head grade.
3. Mineral Reserves as audited and signed off by Mr. Frank Dabrowski.
4. Rounding may cause some apparent discrepancies in totals.
5. All figures are quoted at 100% and not attributable with respect to ownership.

Table 89 details the Mineral Resources for the BMC as at 2014, prepared in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves. It is noted that from 2015, Pan African Resources PLC have reported their gold Mineral Resources as abridged versions and include Witwatersrand targets. Minxcon is unable to split the attributable mine portions out for the 2019 Mineral Resources.

Table 89: Mineral Resources for Barberton Mines Complex (30 June 2014)

Mine	Mineral Resource Category	Tonnes	Grade	Contained Gold	
		Mt	g/t	kg	oz
Fairview	Measured	1.84	8.19	15,086	485,024
	Indicated	0.97	21.16	20,573	661,431
	Total Measured + Indicated	*2.81*	*12.67**	*35,659*	*1,146,455*
	Inferred	0.99	21.51	21,251	683,248
Sheba	Measured	1.01	8.03	8,081	259,817
	Indicated	1.56	4.87	7,603	244,442
	Total Measured + Indicated	*2.57*	*6.11**	*15,684*	*504,259*
	Inferred	1.9	4.69	8,904	286,268
New Consort	Measured	0.33	9.35	3,102	99,722
	Indicated	0.18	11.38	2,010	64,628
	Total Measured + Indicated	*0.51*	*10.07**	*5,112*	*164,350*
	Inferred	0.13	18.97	2,480	79,734
Total Measured + Indicated		**5.89**	**9.58***	**56,455**	**1,815,064**
Total Inferred		**3.02**	**10.81***	**32,635**	**1,049,250**

Source: Pan African Resources (2014)

Note: *Weighted average calculation by Minxcon.

The Mineral Reserves for these mines are given in Table 90.

Table 90: Mineral Reserves for Barberton Mines Complex (30 June 2014)

Mine	Mineral Reserve Category	Tonnes	Grade	Contained Gold	
		Mt	g/t	kg	oz
Fairview	Proved	0.81	8.68	7,031	226,062
	Probable	0.92	19.01	17,396	559,294
	Total	*1.73*	*14.06*	*24,427*	*785,356*
Sheba	Proved	0.51	7.77	3,995	128,454
	Probable	1.41	4.15	5,846	187,960
	Total	*1.92*	*5.12*	*9,842*	*316,414*
New Consort	Proved	0.1	7.48	748	24,056
	Probable	0.11	8.08	924	29,699
	Total	*0.21*	*7.8*	*1,672*	*53,755*
TOTAL		**3.86**	**9.27***	**35,941**	**1,155,525**

Source: Pan African Resources (2014)

Notes:

1. Prepared in compliance with the SAMREC Code.
2. Gold price used: ZAR400,000/kg.
3. Stoping width: 100 cm.
4. Dilution factor: Fairview 4%, Sheba 6%, New Consort 24%.
5. MCF: Fairview 99%, Sheba 100%, New Consort 95%.
6. Cut-off value (cm.g/t): Fairview 383, Sheba 378, New Consort 482.
7. *Weighted average calculation by Minxcon.

ITEM 24 – OTHER RELEVANT DATA AND INFORMATION

Item 24 (a) – Risk Assessment

Minxcon undertook a risk assessment process to identify the main risks associated with the Mine. Additional controls and/or mitigations were identified. This risk assessment was completed by rating the likelihood of occurrence and possible degree of impact of each risk on the Project. The scoring system for the likelihood and the associated consequences is detailed in Table 91.

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

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

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

The major risks identified for the Project are presented in Table 92.

Table 91: Risk Matrix

	Consequence				
	1 - Insignificant	**2 - Minor**	**3 – Moderate**	**4 - Major**	**5 - Catastrophic**
Schedule	Less than 1% impact on overall project timeline	May result in overall project timeline overrun equal to or more than 1% and less than 5%	May result in overall project timeline overrun of equal to or more than 5% and less than 20%	May result in overall project timeline overrun of equal to or more than 20% and less than 50%	May result in overall project timeline overrun of 50% or more
Cost	Less than 1% impact on the budget of the project	May result in overall project budget overrun equal to or more than 1% and less than 5%	May result in overall project budget overrun of equal to or more than 5% and less than 20%	May result in overall project budget overrun of equal to or more than 20% and less than 50%	May result in overall project budget overrun of 50% or more
Investment Return – NPV loss	Less than R5m	R5m to less than R50m	R50M to less than R500m	R500m to R5b	R5b or more
Quality and Technical Integrity	No significant impact on quality of deliverables or effect on production	Quality issues that can be addressed prior to handover or could affect production by more than 1% and less than 5%	Quality issues that can be addressed during ramp-up or could affect production by more than 5% and less than 10%	Quality issues that require significant intervention to maintain performance or could affect production by more than 10% and less than 20%	Quality issues that require significant intervention to achieve performance or could affect production by 20% or more
Safety/Health	First aid case / Exposure to minor health risk	Medical treatment case / Exposure to major health risk	Lost time injury / Reversible impact on health	Single fatality or loss of quality of life / Irreversible impact on health	Multiple fatalities / Impact on health ultimately fatal
Environment	Minimal environmental harm - L1 incident	Material environmental harm - L2 incident remediable short term	Serious environmental harm - L2 incident remediable within LOM	Major environmental harm - L2 incident remediable post LOM	Extreme environmental harm - L3 incident irreversible
Legal & Regulatory	Low level legal issue	Minor legal issue; non compliance and breaches of the law	Serious breach of law; investigation/report to authority, prosecution and or moderate penalty possible	Major breach of the law; considerable prosecution and penalties	Very considerable penalties and prosecutions. Multiple law suits and jail terms
Reputation/Social/Community	Slight impact - public awareness may exist but no public concern	Limited impact - local public concern	Considerable impact - regional public concern	National impact - national public concern	International impact - international public attention

Likelihood				Risk Level				
	90%	Near Certainty: 90% chance	Cannot avoid this risk with standard practices, probably not able to mitigate.	Medium - 11	Significant - 16	Significant - 20	High - 23	High - 25
	75%	Highly Likely: 75% chance	Cannot avoid this risk with standard practices, but a different approach may work.	Medium - 7	Medium - 12	Significant - 17	High - 21	High - 24
	50%	Possible: 50% chance	May avoid risk, but rework will be required.	Low - 4	Medium - 8	Significant - 13	Significant - 18	High - 22
	25%	Unlikely: 25% chance	Have usually avoided this type of risk with minimal oversight in similar cases.	Low - 2	Low - 5	Medium - 9	Significant - 14	Significant - 19
	15%	Rare: 15% chance	Will effectively avoid this risk based on standard practices.	Low 1	Low - 3	Medium - 6	Medium - 10	Significant - 15

Risk Level	**Guidelines for Risk Matrix**
High	A high risk exists that management's objectives may not be achieved. Appropriate mitigation strategy to be devised immediately.
Significant	A significant risk exists that management's objectives may not be achieved. Appropriate mitigation strategy to be devised as soon as possible.
Medium	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.
Low	A low risk exists that management's objectives may not be achieved. Monitor risk, no further mitigation required.

Table 92: Major Risks Identified for Galaxy Gold Mine

Risk Category	Risk	Description / Cause	Risk (%) Likelihood	Impact 1 to 5	Risk Rating	Mitigation/Control	Residual Risk
Mineral Resource/Geology	Planned concentrate grade may not be achieved	Inferred Mineral Resources were included in the mine plan	**50%**	**4**	18	Implementation of a drilling program to increase confidence levels of Resource	5
Mineral Resource/Geology	Lower gold content in mine plan due to unforeseen geological losses	No geological losses have been applied to the Resource Estimation. Existing mine procedure is to exclude geolosses, geolosses should be applied to account for geological uncertainty associated with different Mineral Resource Categories	**50%**	**3**	13	Apply Geological Losses in future Mineral Resource Tabulations. Best practise is 5% for Measured, 10% for Indicated, 15% for Inferred.	3
Mining	Potential delay in the planned production ramp up	Fleet size is calculated on a conceptual mine plan. Additional equipment procurement may cause delays in production ramp-up.	**50%**	**3**	13	Increase confidence in Resource and mine plan and subsequently accurately estimate equipment requirements.	3
Capital	Potential under estimation of capital and operating costs	Fleet size is calculated on a conceptual mine plan. Additional equipment procurement will increase capital requirements and operating costs.	**25%**	**3**	9	Increase confidence in Resource and mine plan and subsequently accurately estimate equipment requirements.	3
Resource/Geology	Grade predicted in models may not be achieved. Due to decreased confidence in historical sample or grade Information	Due to Predominantly historical databases and QAQC, there is little record of procedures or processes. Some areas also do not have available samples captured.	**25%**	**2**	5	Capture historical data where possible and perform data validation exercises on historical QAQC and samples where possible.	1
Mining	Insufficient ventilation availability for planned mining areas.	No detailed ventilation work has been completed on the current mine design.	**25%**	**2**	5	A detailed ventilation study is required to determine the ventilation requirements for the 50 ktpm production plan.	3
Environmental	Fines and/or operational stoppages/delays	An EA application has been submitted but has not been approved. Current operations are not sanctioned by appropriate environmental permits.	**15%**	**2**	3	Ensure that operations remain transparent and compliant, and carry out activities in accordance with directives from authorities	1

Item 24 (b) - Study Level Assessment

The Galaxy Gold Mine is an existing operation currently undertaking low volume underground development in the Princeton and Galaxy sections, and TSF retreatment. The processing plant is operational and materials from the underground workings and TSF retreatment are processed. The operation requires additional opening up and development for ramping up from 15 ktpm to 30 ktpm and eventually to the 50 ktpm steady state production rate including mining the Woodbine and Giles orebodies. The LoM plans have been designed in detail and are at a level of accuracy of a scoping study. The level of detail for the Mine is detailed in Table 93.

Table 93: Level of Detail

Item	Area	Accuracy (%)	Comment
Resources	Mineral Resources	Measured and Indicated 20% Inferred 80%	Measured Mineral Resources and Indicated Mineral Resources amount to 9.19 Mt while Inferred Mineral Resources amount to 10.55 Mt.
Reserves	Mineral Reserves	No Mineral Reserves	No Mineral Reserves have been declared.
LoM Plan	Mine Plan	10% to 15%	Detailed mine designs and scheduling have been completed on a conceptual study level using 3D and MSO software.
Mining Infrastructure	Roads	Existing	Roads on site consist of paved and unpaved roads providing access to the various facilities including the plant, Ben Lomond Village and TSFs. Roads are in a reasonably good condition.
	Mining Site Buildings	Existing	Buildings on site consist of mining offices, workshops, change houses, mine stores, fuel storage facilities and salvage yards. The majority of buildings are in good condition.
	22 Level Adit	Existing	22 Level Adit provides trackless access to the Galaxy underground workings and will also be used for hauling out ore from the Galaxy Orebody.
	17 Level Ben Lomond Adit	Existing	17 Level Adit provides rail bound access to the Princeton underground workings and will be used to transport Woodbine, Giles and Princeton ore to surface.
	Woodbine Shaft	Existing	The shaft will be used for hoisting ore from the Galaxy 28 Level down section and the Woodbine and Giles sections. It is a two-compartment shaft equipped with two 4-t skips.
	Underground Infrastructure	Existing	Underground infrastructure consists of a main haulage that connects the Ben Lomond Adit with the Woodbine sub-vertical shaft and is equipped with a single-line track. A second haulage breaks away from the main haulage to provide access to the Princeton Orebody lenses. A decline shaft from the 22 Level Adit connects to 22 Level underground. A spiral ramp exists adjacent to the Galaxy Orebody from 22 Level to 26 Level. Underground workshops exist on 27 and 28 Level as well as at the Ben Lomond Adit and 17 Level at

Item	Area	Accuracy (%)	Comment
			Princeton. Two underground water dams are located on 26 Level.
	Fans	Existing	The primary extraction fans (one 75 kW and two 45 kW) are located on 22 Level. On 22 Level, the air is pushed out through the old Woodbine and Giles stopes to surface. A 132 kW primary fan is located on 17 Level. The fan pushes air out through the old West Raise Borehole.
	Plant	Existing	The processing plant is operational and requires minor maintenance work.
	Tailings Storage Facility	Existing	The TSF exists. Some minor upgrades are required to allow deposition on top of the TSF.
Operating Cost	Mining and Overheads	10% to 15%	Executed contracts are in place for Galaxy and Princeton; however, a contract for mining Woodbine and Giles must be secured.
	Plant and Tailings Disposal	10% to 15%	An executed contract is in place for the planned 50 ktpm capacity.
Capital	Mining Fleet and Equipment	15% to 20%	Quotations have been obtained, Fleet size and scheduling are based on concept level mine plan.
	Woodbine Shaft Refurbishment	20% to 30%	The shaft is currently on care and maintenance and requires refurbishment work below 28 Level.
	Surface infrastructure refurbishment	20% to 30%	Minor refurbishments to the existing buildings and workshops are required.
	Minor Plant Refurbishment	20% to 30%	Outstanding refurbishments or planned upgrades to the processing plant are included in the CAPEX.
	Underground workshops	20% to 30%	The existing underground workshops require re-equipping to be fully operational.

Note: The project has been re-scoped in that there has been a significant change to the production strategy. Galaxy Gold Mine has decided to take a "step backwards" whereby the entire project moves back to a PEA stage.

The Galaxy Gold Mine is an existing operation with a newly upgraded plant. The Mineral Resource accuracy is 80% Inferred and the accuracy of the capital required ranges from conceptual level to definitive level. In order to meet the minimum requirements for Mineral Reserve declaration purposes, the Mineral Resource needs to be upgraded, the mine plan should be limited to Measured Mineral Resource and Indicated Mineral Resource categories, and capital at a conceptual level needs to be upgraded to pre-feasibility level.

ITEM 25 – INTERPRETATION AND CONCLUSIONS

The QPs reviewed all the information and have made the following observations regarding the Project:-

Permitting:-

All applications for all required permits have been submitted and are pending decision from authorities. GGR has been transparent with the authorities that the Galaxy Gold Mine does not have all environmental permits as required in place, and as such the limited active operations are not officially sanctioned, and are pending fulfilment of obligations from the authorities.

Mineral Resources:-

The Princeton Orebody lenses have been remodelled due to newly captured data that was made available. This has enabled the delineation of PS5, PS19 and a new middling PS12. In addition, the previous upper and lower orebodies have been linked to constitute one continuous model. Thickness and grade continuity can be correlated from the upper to the lower models. Indicated Mineral Resources and Inferred Mineral Resources can be declared at Princeton, with a significant increase in reported tonnage with a slight decrease in grade. This is due to the new interpretation of the geological models, and significant addition of tonnage linking the upper and lower orebodies at Princeton. Galaxy was re-estimated to populate the existing manually estimated gap area. As a result of improved variogram ranges and improved sub-celling additional area was also estimated for the 24 Level and 17 Level domains.

The Princeton and Galaxy re-estimation has also resulted in an increase in the Mineral Resource, including Inferred Mineral Resources and appropriate cut-off grades, of approximately 407 koz and 118 koz respectively. The remainder of the orebodies have not changed apart from minor category reclassification, depletions and application of a lower cut-off grade.

As part of the 2020 review, the Giles and Woodbine orebodies were reviewed in detail. All estimation performed in 2011/2015 is of sufficient quality to enable reporting of Measured Mineral Resources, Indicated Mineral Resources and Inferred Mineral Resources. The estimate input parameters and resulting estimate compares well to the data and can be reproduced. Mineral Resource categories were optimised to increase connectivity between the Mineral Resource Categories. In addition, the classification was adjusted where less than two drillholes were utilised to define a Measured Resource.

The Hostel West, Woodbine West and Woodbine South TSFs were updated to account for mining activity that had occurred since the 2015 Report.

The overall increase in Mineral Resources from 2015 to 2020, based on a 1.85 g/t cut-off grade for 2015 and 1.4 g/t cut-off grade for 2020, is from 602 koz to 971 koz for the Measured and Indicated Mineral Resource and from 886 koz to 1.4 Moz for the Inferred Mineral Resource. At a cut-off grade of 1.85 g/t the Measured and Indicated grade remained virtually unchanged at 3.00 g/t and for the Inferred category it decreased by 3% to 3.31 g/t. The lower grade for the 2020 Mineral Resource is therefore due to the lower cut-off grade because of a higher gold price.

Mining:-

The mining strategy is achievable and mining sequence is logical. Mining commences in areas in which active mining was taking place when the mine closed.

The availability and accessibility of the mining areas where initial mining is planned to commence have not been confirmed; however, experience suggests that the risk associated with this is low as there are mined out areas documented. The mine plan is subject to opening up of the existing mining infrastructure.

The mining plan targeted all Mineral Resources categories, with economic benefit from Inferred Mineral Resources.

Engineering and Infrastructure:-

Infrastructure for the operations is well established and suitable for planned production. Maintenance will be required on some infrastructure and equipment before placing the operation back in full production.

While water supply to the Mine is deemed to be sufficient, power supply capacity needs to be increased. An application has already been submitted to Eskom for this purpose and an Eskom cost estimate has been received.

Sufficient capital has been provided to allow for the required maintenance, upgrades and acquisition of new machinery and equipment.

Processing:-

Historic flotation performance from 2011 as well as recent Mintek and CM Solutions test results are deemed to be a good indication of the expected plant performance for when production is ramped up to 30 ktpm. Recoveries of 85% to 90% can be expected.

Forecasted operating costs for processing are in line with benchmarking.

Economic Analysis:-

The Project analysed is financially feasible at a 9.79% real discount rate with a DCF value of ZAR975 million (full value). The IRR was calculated as 1051%, but it should be noted this is due to the investment requirement being low on a free cash flow basis. The operation is currently producing off-setting the investment requirement, and the additional capital requirements are spread over the LoM.

The all-in cost margin for the Project is 28%.

A peak capital investment of ZAR29 million is required to fund the operation in the first year, offset by revenue. Capital planned in first year totals ZAR61 million.

The Project is most sensitive to commodity prices, exchange rates and grade.

The Project has a break-even gold price of USD777/oz including capital. All-in sustainable costs for the Project amount to ZAR1,092/milled t, which equates to USD747/oz. All-in costs amount to ZAR1,134/milled t, which equates to USD777/oz.

ITEM 26 – RECOMMENDATIONS

The QPs recommend the following for the Project:-

Permitting:-
It is recommended that GGR remain compliant with all legislative requirements and proceed with operations accordingly.

Mineral Resources:-
Future Mineral Resource estimation at the Mine should make use of KNA to optimise kriging input parameters. Mineral Resource classification has been optimised to improve connectivity of Mineral Resource categories - any future estimations should be approached in a similar manner.

It is further recommended that future Mineral Resource declarations apply a geological loss to account for the relative confidence in each of the Mineral Resource categories.

When mining operations commence, QAQC procedures need to be implemented for Mineral Resource compliance purposes.

Mining:-
No Mineral Reserves have been declared in this Report. It is recommended to convert Inferred Mineral Resources to Indicated Mineral Resources to improve the level of accuracy of the LoM plan.

The mine design has been completed in detail, but due to the inclusion of Inferred Mineral Resources is considered at scoping study level of accuracy and should be improved to a higher level of accuracy. The level of detail of the technical aspects of the LoM plan, including ventilation, rock engineering and equipment, should be increased to a pre-feasibility study level.

Processing:-
Additional metallurgical testwork should be completed on blends that include Woodbine and Giles as well as the lower levels of the Galaxy Orebody to confirm forecasted recoveries and reagent requirements.

Further detailed engineering work is required to improve the accuracy of and confirm the TSF expansion capital estimation.

ITEM 27 – REFERENCES

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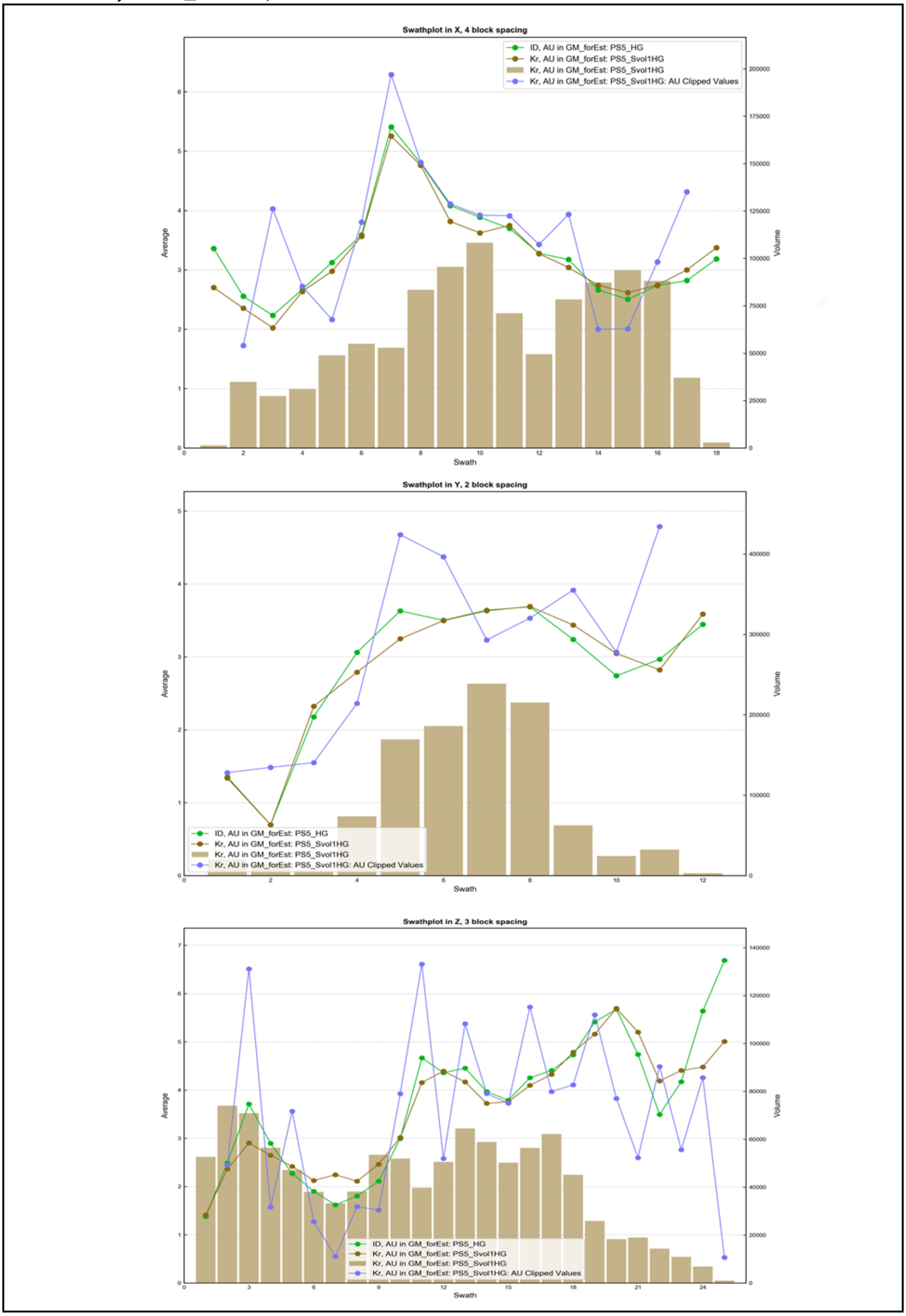
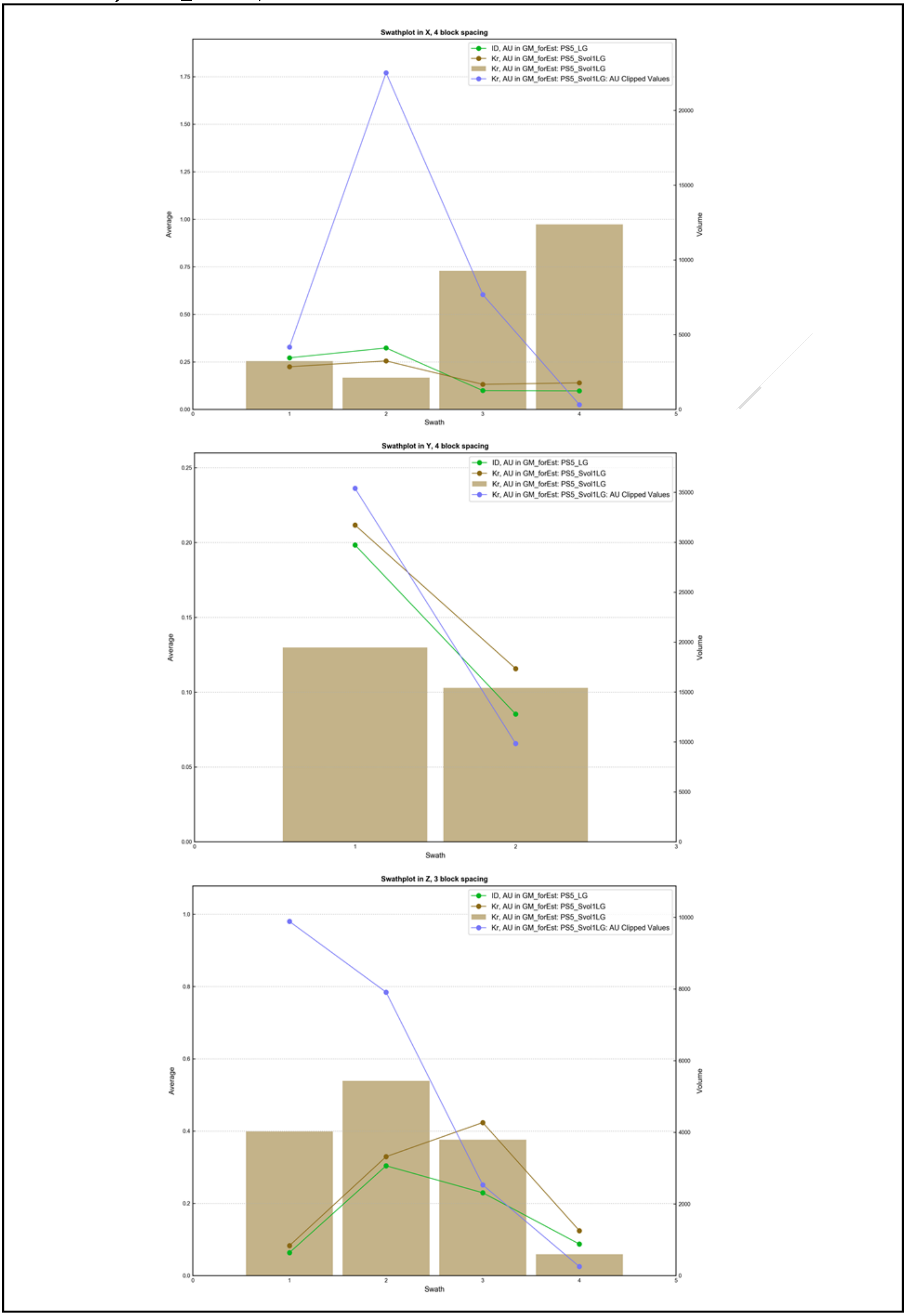
APPENDICES

Appendix 1: Swath Plots

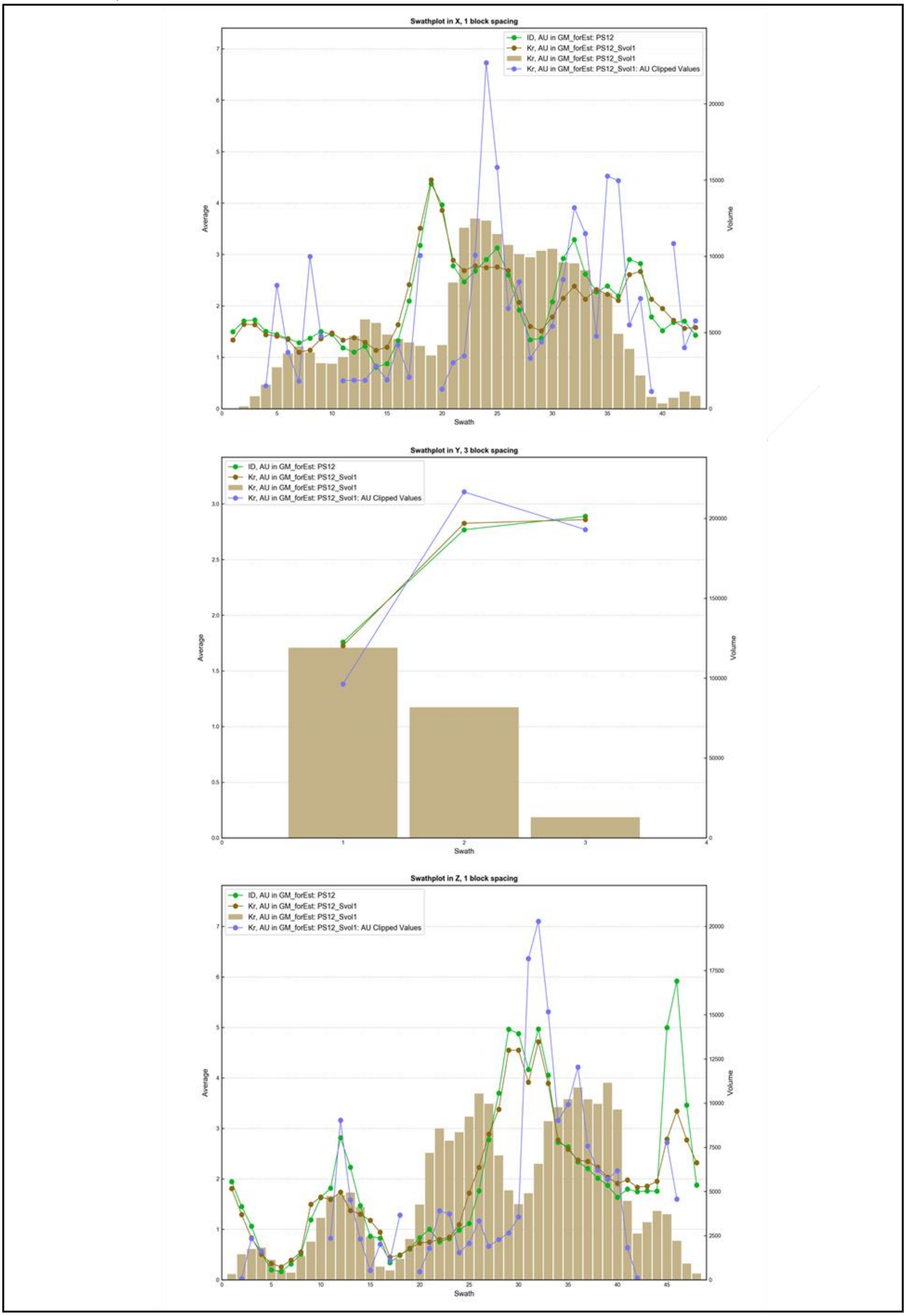
Swath Plots for PS5_HG in X, Y and Z Directions



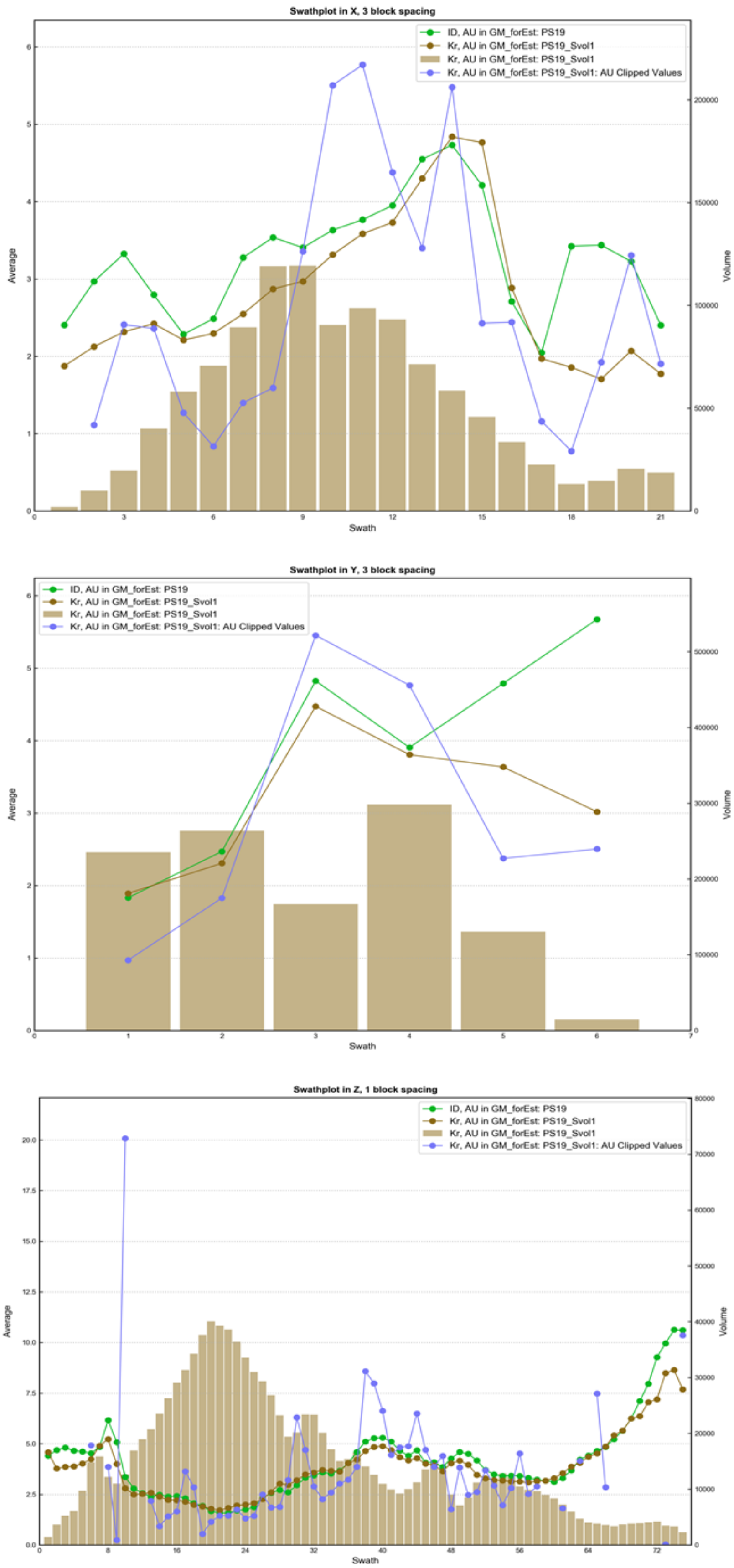
Swath Plots for PS5_LG in X, Y and Z Directions



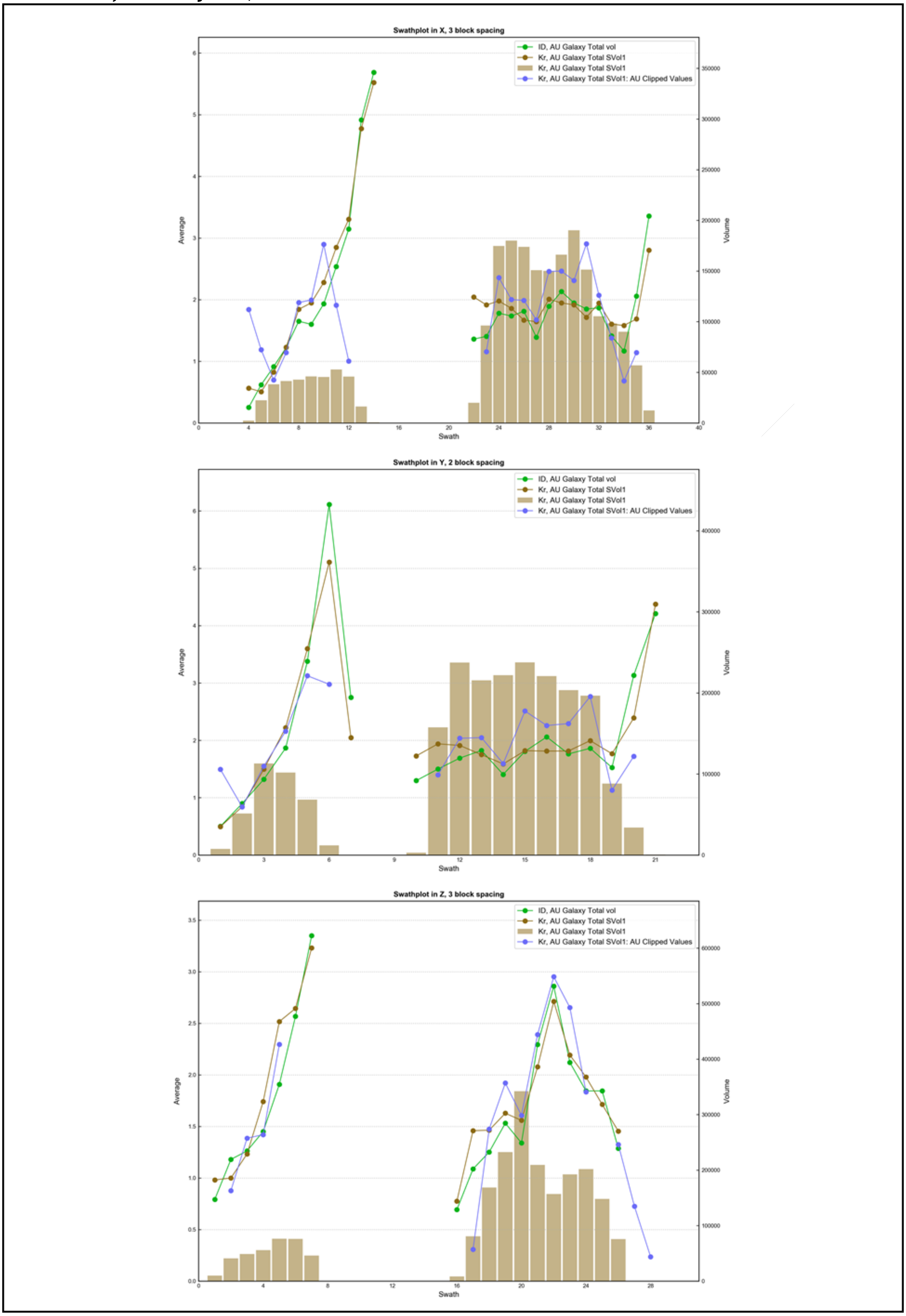
Swath Plots for PS12 in X, Y and Z Directions



Swath Plots for PS19 in X, Y and Z Directions



Swath Plots for Galaxy in X, Y and Z Directions



Appendix 2: Life of Mine Cash Flow - ZAR

Project Title: **Galaxy Gold**
Client: Galaxy Gold Reefs (Pty) Ltd
Project Code: M20-005

Project Valuation Schedule	
Project Valuation Date (Base Date)	01-Jul-20
Financial Year End (month and year)	31-Dec-20
First Year	1
Days remaining	183

Commodity Price	100%	Fixed Costs	100%
Exchange Rate	100%	Variable Cost	100%
Grade	100%	Mining Capex	100%
		Plant Capex	100%

Project Duration		Unit	Totals											
Calendar Years				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Financial Years		years	11	1	2	3	4	5	6	7	8	9	10	11
Macro-Economic Factors (Real Terms)														
Currency		ZAR /USD	15.31	16.741	15.802	15.902	15.000	15.000	15.000	15.000	15.000	15.000	15.000	15.000
Inflation	ZAR Inflation Rate	%	4.62%	3.70%	4.80%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%
Inflation	US Inflation Rate	%	2.31%	2.30%	2.40%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%
Commodities														
Commodity prices	Gold	USD/oz.	1,466	1,685	1,644	1,536	1,463	1,399	1,400	1,400	1,400	1,400	1,400	1,400
Operating Statistics														
Tonnes Produced														
Waste		tonnes	3,107,276	90,686	466,335	473,333	413,207	480,681	397,460	352,182	249,185	137,000	32,110	15,096
Stripping ratio		Ratio	0.72	0.58	1.28	0.85	0.74	0.84	0.71	0.63	0.46	0.54	0.22	0.20
ROM		tonnes	4,334,690	155,322	363,158	555,776	558,531	571,651	557,701	560,931	537,069	251,466	149,236	73,849
ROM	(Max)	tonnes/mnth	47,638	25,463	30,263	46,315	46,544	47,638	46,475	46,744	44,756	20,955	12,436	6,154
Mill Head grade	Gold Grade	g/t	3.35	1.97	2.85	3.24	3.56	3.12	3.28	3.53	3.40	4.42	3.84	3.79
Tonnes to mill		tonnes	4,334,690	155,322	363,158	555,776	558,531	571,651	557,701	560,931	537,069	251,466	149,236	73,849
Recovered Grade														
Recovered grade	Precious Metals	g/t	2.97	1.45	2.48	2.89	3.18	2.79	2.93	3.16	3.03	3.89	3.34	3.30
Metal recovered														
Metal recovered	Gold	kg	12,859	225	900.1	1,608	1,778	1,595	1,635	1,772	1,626	978	498	243
Metal recovered	Gold	oz	413,421	7,244	28,939	51,688	57,155	51,296	52,568	56,965	52,282	31,445	16,011	7,828
Concentrate	Tonnes	dmt	435,819	6,207	31,493	55,041	55,279	57,247	55,702	56,041	54,519	30,828	22,385	11,077
Concentrate	Tonnes	wmt	479,401	6,828	34,643	60,545	60,807	62,972	61,272	61,645	59,971	33,910	24,624	12,185
Concentrate	Grade	g/t	29.50	36	29	29	32	28	29	32	30	32	22	22
Financial														
Revenue		**ZAR**	**6,831,690,117**	**153,297,430**	**563,967,965**	**946,988,420**	**940,528,594**	**807,612,192**	**827,941,705**	**897,199,537**	**823,433,714**	**495,257,629**	**252,170,132**	**123,292,799**
Revenue	Gold	ZAR	6,831,690,117	153,297,430	563,967,965	946,988,420	940,528,594	807,612,192	827,941,705	897,199,537	823,433,714	495,257,629	252,170,132	123,292,799
Mining cost			**(1,326,296,004)**	**(30,033,593)**	**(128,698,207)**	**(163,860,190)**	**(165,155,147)**	**(180,041,117)**	**(168,120,159)**	**(173,942,728)**	**(162,935,440)**	**(85,511,449)**	**(44,765,347)**	**(23,232,626)**
Direct Cash Costs	Fixed Cost	ZAR	(123,025,793)	(4,881,192)	(11,868,440)	(15,075,534)	(15,075,534)	(15,075,534)	(15,075,534)	(15,075,534)	(14,800,275)	(8,907,200)	(4,794,011)	(2,397,005)
Direct Cash Costs	Variable Cost	ZAR	(1,203,270,210)	(25,152,401)	(116,829,768)	(148,784,656)	(150,079,613)	(164,965,583)	(153,044,625)	(158,867,194)	(148,135,166)	(76,604,249)	(39,971,336)	(20,835,621)
Direct Cash Costs	Contingeny	ZAR	0	0	0	0	0	0	0	0	0	0	0	0
Plant cost			**(531,325,941)**	**(20,946,618)**	**(48,710,539)**	**(59,917,395)**	**(60,102,426)**	**(60,983,801)**	**(60,046,702)**	**(60,263,700)**	**(59,230,077)**	**(45,740,593)**	**(37,710,502)**	**(17,673,587)**
Direct Cash Costs	Fixed Cost	ZAR	(224,057,364)	(9,524,689)	(22,582,387)	(22,582,387)	(22,582,387)	(22,582,387)	(22,582,387)	(22,582,387)	(22,582,387)	(22,582,387)	(22,582,387)	(11,291,193)
Direct Cash Costs	Variable Cost	ZAR	(307,268,576)	(11,421,928)	(26,128,152)	(37,335,008)	(37,520,039)	(38,401,414)	(37,464,315)	(37,681,314)	(36,647,691)	(23,158,206)	(15,128,115)	(6,382,394)
Direct Cash Costs	Contingeny	ZAR	0	0	0	0	0	0	0	0	0	0	0	0
Other Costs			**(1,439,103,271)**	**(49,444,224)**	**(132,019,842)**	**(163,706,335)**	**(159,204,775)**	**(161,769,615)**	**(159,406,565)**	**(159,687,072)**	**(158,117,141)**	**(125,454,391)**	**(111,897,994)**	**(58,395,316)**
Direct Cash Costs	Other Cost Fixed	ZAR	(756,936,937)	(39,728,695)	(78,316,875)	(74,895,334)	(74,895,334)	(74,895,334)	(74,895,334)	(74,895,334)	(75,655,677)	(76,416,019)	(74,895,334)	(37,447,667)
Direct Cash Costs	Other Costs Variable	ZAR	(619,248,334)	(9,715,530)	(46,530,967)	(81,834,601)	(77,528,641)	(80,289,081)	(78,121,631)	(78,597,738)	(76,463,064)	(43,235,572)	(31,395,460)	(15,536,049)
Direct Cash Costs	Contingeny	ZAR	0	0	0	0	0	0	0	0	0	0	0	0
Direct Cash Costs	Rehabilitation	ZAR	(62,918,000)	0	(7,172,000)	(6,976,400)	(6,780,800)	(6,585,200)	(6,389,600)	(6,194,000)	(5,998,400)	(5,802,800)	(5,607,200)	(5,411,600)
Direct Cash Costs			**(3,296,725,215)**	**(100,424,436)**	**(309,428,588)**	**(387,483,920)**	**(384,462,348)**	**(402,794,533)**	**(387,573,426)**	**(393,893,500)**	**(380,282,658)**	**(256,706,433)**	**(194,373,843)**	**(99,301,529)**
Production Costs	Initial Capital expenditu	ZAR	**(1,792,001)**	(1,072,358)	(569,643)	(150,000)	0	0	0	0	0	0	0	0
Production Costs	Expansion Capital expe	ZAR	**(132,318,816)**	(9,692,051)	(10,877,722)	(30,223,462)	(23,627,489)	(12,514,211)	(19,821,053)	(4,520,528)	(7,014,100)	(11,842,936)	(2,185,264)	0
Production Costs	Contingency	ZAR	**0**	0	0	0	0	0	0	0	0	0	0	0
Production Costs	SIB	ZAR	**(1,157,543,658)**	(50,463,580)	(150,878,107)	(181,395,015)	(169,522,707)	(142,280,485)	(118,546,135)	(101,079,069)	(97,410,931)	(83,823,197)	(56,258,506)	(5,885,927)
Production Costs		**ZAR**	**(4,588,379,690)**	**(161,652,424)**	**(471,754,061)**	**(599,252,396)**	**(577,612,545)**	**(557,589,228)**	**(525,940,614)**	**(499,493,096)**	**(484,707,689)**	**(352,372,566)**	**(252,817,613)**	**(105,187,457)**
Fully Allocated Costs	Royalty	ZAR	(277,722,090)	(766,487)	(11,539,775)	(42,583,121)	(44,242,875)	(31,145,380)	(37,005,434)	(47,927,936)	(41,067,199)	(17,939,692)	(1,260,851)	(2,243,341)
Fully Allocated Costs	Other Fixed Costs	ZAR	(51,237,676)	(1,149,731)	(4,229,760)	(7,102,413)	(7,053,964)	(6,057,091)	(6,209,563)	(6,728,997)	(6,175,753)	(3,714,432)	(1,891,276)	(924,696)
Fully Allocated Costs	Contingeny	ZAR	0	0	0	0	0	0	0	0	0	0	0	0
Fully Allocated Costs		**ZAR**	**(4,917,339,455)**	**(163,568,642)**	**(487,523,596)**	**(648,937,930)**	**(628,909,384)**	**(594,791,700)**	**(569,155,611)**	**(554,150,029)**	**(531,950,641)**	**(374,026,690)**	**(255,969,740)**	**(108,355,493)**
EBITDA		**ZAR**	**3,206,005,136**	**50,956,777**	**238,769,841**	**509,818,966**	**504,769,407**	**367,615,187**	**397,153,283**	**448,649,104**	**395,908,104**	**216,897,072**	**54,644,163**	**20,823,233**
EBIT		**ZAR**	**1,914,350,662**	**(10,271,212)**	**76,444,369**	**298,050,490**	**311,619,210**	**212,820,492**	**258,786,095**	**343,049,508**	**291,483,073**	**121,230,939**	**(3,799,608)**	**14,937,305**
Taxation		ZAR	(401,072,255)	0	0	0	(47,550,140)	(58,629,560)	(73,912,263)	(101,384,441)	(85,105,872)	(32,799,140)	0	(1,690,840)
Income after tax		ZAR	1,513,278,407	(10,271,212)	76,444,369	298,050,490	264,069,070	154,190,932	184,873,831	241,665,067	206,377,201	88,431,800	(3,799,608)	13,246,466
Working capital changes		ZAR	1	864,695	3,893,910	(896,389)	(108,385)	4,071,913	(1,624,854)	(792,698)	272,195	(3,425,217)	17,860	(1,123,518)
Cash Flow				2,020	2,021	2,022	2,023	2,024	2,025	2,026	2,027	2,028	2,029	2,030
Net Cash Flow	Annual cash flow	ZAR	**1,513,278,407**	(9,406,516)	80,338,279	297,154,101	263,960,686	158,262,845	183,248,977	240,872,370	206,649,396	85,006,583	(3,781,747)	12,122,948

Appendix 3: Life of Mine Cash Flow - USD

Minxcon

Project Title: **Galaxy Gold**
Client: Galaxy Gold Reefs (Pty) Ltd
Project Code: M20-005

Project Valuation Schedule	
Project Valuation Date (Base Date)	01-Jul-20
Financial Year End (month and year)	31-Dec-20
First Year	1
Days remaining	183

Commodity Price	100%	Fixed Costs	100%
Exchange Rate	100%	Variable Cost	100%
Grade	100%	Mining Capex	100%
		Plant Capex	100%

Project Duration		Unit	Totals											
Calendar Years				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Financial Years		years	11	1	2	3	4	5	6	7	8	9	10	11
Macro-Economic Factors (Real Terms)														
Currency		ZAR /USD	15.31	16.741	15.802	15.902	15.000	15.000	15.000	15.000	15.000	15.000	15.000	15.000
Inflation	ZAR Inflation Rate	%	4.62%	3.70%	4.80%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%
Inflation	US Inflation Rate	%	2.31%	2.30%	2.40%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%
Commodities														
Commodity prices	Gold	USD/oz.	1,466	1,685	1,644	1,536	1,463	1,399	1,400	1,400	1,400	1,400	1,400	1,400
Operating Statistics														
Tonnes Produced														
Waste		tonnes	3,107,276	90,686	466,335	473,333	413,207	480,681	397,460	352,182	249,185	137,000	32,110	15,096
Stripping ratio		Ratio	0.72	0.58	1.28	0.85	0.74	0.84	0.71	0.63	0.46	0.54	0.22	0.20
ROM		tonnes	4,334,690	155,322	363,158	555,776	558,531	571,651	557,701	560,931	537,069	251,466	149,236	73,849
ROM	(Max)	tonnes/mnth	47,638	25,463	30,263	46,315	46,544	47,638	46,475	46,744	44,756	20,955	12,436	6,154
Mill Head grade	Gold Grade	g/t	3.35	1.97	2.85	3.24	3.56	3.12	3.28	3.53	3.40	4.42	3.84	3.79
Tonnes to mill		tonnes	4,334,690	155,322	363,158	555,776	558,531	571,651	557,701	560,931	537,069	251,466	149,236	73,849
Recovered Grade														
Recovered grade	Precious Metals	g/t	2.97	1.45	2.48	2.89	3.18	2.79	2.93	3.16	3.03	3.89	3.34	3.30
Metal recovered														
Metal recovered	Gold	kg	12,859	225	900.1	1,608	1,778	1,595	1,635	1,772	1,626	978	498	243
Metal recovered	Gold	oz	413,421	7,244	28,939	51,688	57,155	51,296	52,568	56,965	52,282	31,445	16,011	7,828
Concentrate	Tonnes	dmt	435,819	6,207	31,493	55,041	55,279	57,247	55,702	56,041	54,519	30,828	22,385	11,077
Concentrate	Tonnes	wmt	479,401	6,828	34,643	60,545	60,807	62,972	61,272	61,645	59,971	33,910	24,624	12,185
Financial														
Revenue		**USD**	**448,895,468**	**9,157,010**	**35,689,763**	**59,552,941**	**62,701,906**	**53,840,813**	**55,196,114**	**59,813,302**	**54,895,581**	**33,017,175**	**16,811,342**	**8,219,520**
Revenue	Gold	USD	448,895,468	9,157,010	35,689,763	59,552,941	62,701,906	53,840,813	55,196,114	59,813,302	54,895,581	33,017,175	16,811,342	8,219,520
Mining cost			**(87,156,686)**	**(1,794,015)**	**(8,144,449)**	**(10,304,621)**	**(11,010,343)**	**(12,002,741)**	**(11,208,011)**	**(11,596,182)**	**(10,862,363)**	**(5,700,763)**	**(2,984,356)**	**(1,548,842)**
Direct Cash Costs	Fixed Cost	USD	(8,070,737)	(291,571)	(751,074)	(948,050)	(1,005,036)	(1,005,036)	(1,005,036)	(1,005,036)	(986,685)	(593,813)	(319,601)	(159,800)
Direct Cash Costs	Variable Cost	USD	(79,085,949)	(1,502,444)	(7,393,375)	(9,356,570)	(10,005,308)	(10,997,706)	(10,202,975)	(10,591,146)	(9,875,678)	(5,106,950)	(2,664,756)	(1,389,041)
Direct Cash Costs	Contingeny	USD	0	0	0	0	0	0	0	0	0	0	0	0
Plant cost			**(34,885,213)**	**(1,251,217)**	**(3,082,564)**	**(3,768,005)**	**(4,006,828)**	**(4,065,587)**	**(4,003,113)**	**(4,017,580)**	**(3,948,672)**	**(3,049,373)**	**(2,514,033)**	**(1,178,239)**
Direct Cash Costs	Fixed Cost	USD	(14,709,357)	(568,944)	(1,429,088)	(1,420,131)	(1,505,492)	(1,505,492)	(1,505,492)	(1,505,492)	(1,505,492)	(1,505,492)	(1,505,492)	(752,746)
Direct Cash Costs	Variable Cost	USD	(20,175,856)	(682,273)	(1,653,476)	(2,347,874)	(2,501,336)	(2,560,094)	(2,497,621)	(2,512,088)	(2,443,179)	(1,543,880)	(1,008,541)	(425,493)
Direct Cash Costs	Contingeny	USD	0	0	0	0	0	0	0	0	0	0	0	0
Other Costs			**(94,531,939)**	**(2,953,482)**	**(8,354,653)**	**(10,294,945)**	**(10,613,652)**	**(10,784,641)**	**(10,627,104)**	**(10,645,805)**	**(10,541,143)**	**(8,363,626)**	**(7,459,866)**	**(3,893,021)**
Direct Cash Costs	Other Cost Fixed	USD	(49,638,943)	(2,373,139)	(4,956,152)	(4,709,918)	(4,993,022)	(4,993,022)	(4,993,022)	(4,993,022)	(5,043,712)	(5,094,401)	(4,993,022)	(2,496,511)
Direct Cash Costs	Other Costs Variable	USD	(40,749,098)	(580,344)	(2,944,634)	(5,146,305)	(5,168,576)	(5,352,605)	(5,208,109)	(5,239,849)	(5,097,538)	(2,882,371)	(2,093,031)	(1,035,737)
Direct Cash Costs	Contingeny	USD	0	0	0	0	0	0	0	0	0	0	0	0
Direct Cash Costs	Rehabilitation	USD	(4,143,897)	0	(453,868)	(438,723)	(452,053)	(439,013)	(425,973)	(412,933)	(399,893)	(386,853)	(373,813)	(360,773)
Direct Cash Costs			**(216,573,837)**	**(5,998,715)**	**(19,581,667)**	**(24,367,571)**	**(25,630,823)**	**(26,852,969)**	**(25,838,228)**	**(26,259,567)**	**(25,352,177)**	**(17,113,762)**	**(12,958,256)**	**(6,620,102)**
Production Costs	Initial Capital expenditu	USD	**(109,538)**	(64,056)	(36,049)	(9,433)	0	0	0	0	0	0	0	0
Production Costs	Expansion Capital expe	USD	**(8,603,011)**	(578,941)	(688,378)	(1,900,653)	(1,575,166)	(834,281)	(1,321,404)	(301,369)	(467,607)	(789,529)	(145,684)	0
Production Costs	Contingency	USD	**0**	0	0	0	0	0	0	0	0	0	0	0
Production Costs	SIB	USD	**(75,623,563)**	(3,014,372)	(9,548,067)	(11,407,327)	(11,301,514)	(9,485,366)	(7,903,076)	(6,738,605)	(6,494,062)	(5,588,213)	(3,750,567)	(392,395)
Production Costs		**USD**	**(300,909,949)**	**(9,656,084)**	**(29,854,162)**	**(37,684,983)**	**(38,507,503)**	**(37,172,615)**	**(35,062,708)**	**(33,299,540)**	**(32,313,846)**	**(23,491,504)**	**(16,854,508)**	**(7,012,497)**
Fully Allocated Costs	Royalty	USD	(18,309,484)	(45,785)	(730,275)	(2,677,910)	(2,949,525)	(2,076,359)	(2,467,029)	(3,195,196)	(2,737,813)	(1,195,979)	(84,057)	(149,556)
Fully Allocated Costs	Other Fixed Costs	USD	(3,366,716)	(68,678)	(267,673)	(446,647)	(470,264)	(403,806)	(413,971)	(448,600)	(411,717)	(247,629)	(126,085)	(61,646)
Fully Allocated Costs	Contingeny	USD	0	0	0	0	0	0	0	0	0	0	0	0
Fully Allocated Costs		**USD**	**(322,586,150)**	**(9,770,546)**	**(30,852,110)**	**(40,809,541)**	**(41,927,292)**	**(39,652,780)**	**(37,943,707)**	**(36,943,335)**	**(35,463,376)**	**(24,935,113)**	**(17,064,649)**	**(7,223,700)**
EBITDA		**USD**	**210,645,430**	**3,043,833**	**15,110,147**	**32,060,813**	**33,651,294**	**24,507,679**	**26,476,886**	**29,909,940**	**26,393,874**	**14,459,805**	**3,642,944**	**1,388,216**
EBIT		**USD**	**126,309,318**	**(613,537)**	**4,837,653**	**18,743,401**	**20,774,614**	**14,188,033**	**17,252,406**	**22,869,967**	**19,432,205**	**8,082,063**	**(253,307)**	**995,820**
Taxation		USD	(26,738,150)	0	0	0	(3,170,009)	(3,908,637)	(4,927,484)	(6,758,963)	(5,673,725)	(2,186,609)	0	(112,723)
Income after tax		USD	99,571,168	(613,537)	4,837,653	18,743,401	17,604,605	10,279,395	12,324,922	16,111,004	13,758,480	5,895,453	(253,307)	883,098
Working capital changes		USD	1	51,651	249,489	(58,258)	7,374	271,461	(108,324)	(52,847)	18,146	(228,348)	1,191	(74,901)
Cash Flow				2,020	2,021	2,022	2,023	2,024	2,025	2,026	2,027	2,028	2,029	2,030
Net Cash Flow	Annual cash flow	USD	**99,571,168**	(561,885)	5,087,142	18,685,142	17,611,978	10,550,856	12,216,598	16,058,158	13,776,626	5,667,106	(252,116)	808,197