Annual Qualified Persons Report for the Ballarat Gold Mine, Australia for the Year Ended 31 March 2018

LionGold Corp Ltd

Singapore

Effective date 31 March 2018

Prepared in accordance with the requirements of Practice Note 4C of the Singapore Exchange Securities Trading Limited Listing Manual Section B: Rules of Catalist

Qualified Persons:
Mr Philip Petrie *BAppSc (Geol) GradDipEng (Min.)*
Mr Matthew Hernan *BAppSc (Geol)*

CONTENTS

1 Executive Summary....7
1.1 Project Description....7
1.2 Geology and Mineralisation....7
1.3 Mine Production....7
1.4 Mineral Resources and Ore Reserves....7
1.5 Economic Analysis....9
1.6 Risk Assessment....9

2 Introduction....11
2.1 Aim and Scope of Report....11
2.2 Use of Report....11
2.3 Reporting Standard....11
2.4 Report Authors and Contributors....11
2.5 Qualified Persons Statement....12
2.6 Basis of the Report....13

3 Project Description....14
3.1 Location....14
3.2 Tenure....15
3.3 Tenure Conditions....16
3.4 Access....17
3.5 Climate....17
3.6 Landforms, Soils, Flora and Fauna....17

4 History....18
4.1 Previous Exploration and Development Work....18
4.2 Reliability of Historical Estimates....19
4.3 Production History....19

5 Geological Setting....20
5.1 Regional Geological Setting....20
5.2 Local Geological Setting....21
5.3 Mineralisation....22
5.3.1 Mineralisation Styles....23
5.3.2 Resource mineralisation....24
5.3.2.1 Britannia Tiger....26
5.3.2.2 Normanby Mako....27
5.3.2.3 Victoria Mako....28
5.3.2.4 Llanberris Mako Hinge....29
5.3.2.5 Canton Mako....31

6 Exploration Activities....33
6.1 Exploration Overview....33
6.2 Exploration Methods....33
6.2.1 Geology....33
6.2.2 Geophysics and Remote Sensing....33
6.2.3 Geochemistry....33
6.2.4 Drilling....33
6.2.5 Sampling....34
6.2.6 Analysis....35
6.2.7 Sample Security....36
6.3 Exploration Results....36
6.4 QA/QC Results....36
6.4.1 Blanks and Certified Reference Materials (CRM)....36

7 Mineral Processing and Metallurgical Testing....38
7.1 Overview....38
7.2 Metallurgical Test Work....38
7.3 Metallurgical Accounting....39
7.4 Mineral Processing Design....39

8 Mineral Resources....40
8.1 Summary of Mineral Resources....40
8.2 General Description of Mineral Resource Estimation Process....41
8.3 Mineral Resource Estimate....42
8.3.1 Mineral Resource Input Data....42
8.3.2 Geological Interpretation....46
8.3.3 Data Analysis and Geostatistics....48
8.3.4 Domaining....52
8.3.5 Block Modelling and Estimation....54
8.3.6 Classification....61
8.3.7 Reported Mineral Resources....62

9 Ore Reserves....68
9.1 Summary of Ore Reserves....68
9.2 General Description of Ore Reserve Estimation Process....68
9.3 Ore Reserve Assumptions....68
9.3.1 Mining Method....68
9.3.2 Cut-off Grade....69
9.3.3 Processing Method and Recovery....69
9.3.4 Right to Mine....69
9.4 Ore Reserve Estimate....69
9.4.1 Ore Reserve Input Data....69
9.4.2 Estimation....69
9.4.3 Validation....70
9.4.4 Classification....70
9.4.5 Reported Ore Reserves....70
9.4.6 Production Reconciliation....71

10 Mining....73
10.1 Mining Overview....73
10.2 Mining Operations....73
10.3 Production Schedule....75
10.3.1 Development....75
10.3.2 Ore Production....75
10.4 Geotechnical Inputs....76
10.4.1 Geological Structures....76
10.4.2 Ground Support....77
10.4.3 Monitoring and stress measurements....77

11 Processing....79
11.1 Processing Overview....79
11.1.1 Crushing, Gravity and Flotation Separation....79
11.1.2 Leaching....79
11.1.3 Gold room....80
11.2 Performance....81

12 Infrastructure....82
12.1 Mine Infrastructure....82
12.2 Power....82
12.3 Water....82
12.4 Staff and Accommodation....83

13 Social, Environmental, Heritage and Health and Safety Management....84
13.1 Social, Environmental, Heritage and Health and Safety Management....84
13.1.1 Noise....84
13.1.2 Blast vibration....84
13.1.3 Air quality....84
13.1.4 Water quality....84
13.1.5 Waste rock....84
13.2 Heritage Management....84
13.3 Health and Safety Management....85

14 Financial Analysis 86
14.1 Historical Financial Analysis 86
All currency values are in Australian Dollars unless otherwise denoted. The actual 2017-2018 March operating expenditure by department is detailed in Table 14.1. 86
14.2 Forecast Capital Costs 86
14.3 Forecast Operating Costs 86
14.3.1 Royalties 87
14.3.2 Company Tax 87
14.3.3 Sale of Product 87
14.3.4 Hedging Program 87
14.3.5 Exchange Rate and Gold Price Factors 87
15 Interpretation and Conclusions 88
16 Recommendations 89
17 References 90
18 Date and Signature Pages 92
19 Glossary of Terms 94

TABLES

Table 1.1 Gold production history for the Ballarat East goldfield from 2006 to March 2018 7
Table 1.2 Mineral Resource summary for the Ballarat East mine as of 31 March 2018 8
Table 1.3 Indicated Mineral Resource estimate, lode by lode for the Ballarat East mine as of 31 March 2018 8
Table 2.1 QPs for this QPR 11
Table 2.2 CGT staff who contributed to this QPR(3) 12
Table 3.1 Tenure details for Ballarat mine 16
Table 4.1 Hard rock and alluvial gold production history for the Central Victorian goldfields (Phillips and Hughes, 1998) 18
Table 6.1 Relationship between mine grid and Map Grid of Australia (MGA94) 34
Table 6.2 Primary assaying laboratories 35
Table 6.3 Apparent relative densities attributed to the Ballarat Resource (2007-2018) 36
Table 6.4 Rate of blanks and standards inserted into sample submissions. 36
Table 8.1 Mineral Resource summary as of 31 March 2018. All Mineral Resources reported at 0g/t Au cut-off 41
Table 8.2 Summary of drillhole data informing the Ballarat Mineral Resource 2018 42
Table 8.3 Topography elevation layer data quality summary 44
Table 8.4 Summary statistics for raw and composite samples (length weighted, not declustered) 50
Table 8.5 Summary statistics for top cuts used for domains used in the Mineral Resource estimate 51
Table 8.6 Comparison of wireframe and block model volumes 54
Table 8.7 Mean grade comparison between the uncut composites and block model 55
Table 8.8 Summary of proportion of blocks estimated by each search pass for each lode 61
Table 8.9 Inferred Mineral Resource classification criteria 61
Table 8.10 Indicated Mineral Resource estimate for the Ballarat mine for 31st March 2018 63
Table 8.11 Inferred Mineral Resource estimate for the Ballarat mine for 31 March 2018 63
Table 8.12 Comparison between current and previous Mineral Resource estimates at Ballarat mine. All Mineral Resources reported at a 0 g/t Au cut-off 64
Table 9.1 Ore Reserve summary, as of 31 March 2018 68
Table 9.2 Comparison of block model tonnes and grade versus reconciled tonnes and grade 71
Table 10.1 Main geologic types and their failure modes. 76
Table 10.2 Ground condition and additional support guidelines 77
Table 11.1 Process plant performance 81
Table 14.1 Ballarat mine actual operating costs by department. Currency A$ 86

FIGURES

Figure 3-1 Location of Ballarat mine tenements 15
Figure 5-1 Plan of Victoria showing location of the Bendigo-Ballarat zone and gold deposits in yellow .20
Figure 5-2 Geological Interpretation of the First Chance anticline on the Ballarat East goldfield at the 38050 mN section (Allibone, 2009) 21
Figure 5-3 Gold distribution as recovered from a metallurgical test sample 22
Figure 5-4 Composite cross section for the MFZ in the Llanberris 23
Figure 5-5 Resource location, Ballarat East. Long section looking west 25
Figure 5-6 Cross section of Britannia Tiger Resource looking north at 38,350 mN 26
Figure 5-7 Section view of the Normanby Mako Resource looking north at 36,730 mN. 27
Figure 5-8 Cross section of the Victoria Resource at 38,740 mN. 28
Figure 5-9 Llanberris Mako Resource. Cross section at 38,050 mN looking north. 30
Figure 5-10 Llanberris Mako Resource. Cross section at 38,050 mN looking north. 32
Figure 6-1 Relationship between mine grid north, true north and magnetic north (2015) 34
Figure 8-1 General relationship between Exploration Results, Mineral Resources and Ore Reserves ..40
Figure 8-2 Plan view of drilling (green trace) used to inform the 2018 Mineral Resource. 43
Figure 8-3 DTM over the Ballarat mine site (1 m contours – not to scale) 45
Figure 8-4 Mining depletion wireframe construction and sterilisation around unstable void 47
Figure 8-5 Sterilisation of the Normanby Mako Lode due to historic mining. 48
Figure 8-6 Raw sample lengths within modelled domains. 49
Figure 8-7 Example of interpreted mineralisation domains in the Llanberris Basking fault zone (38175 mN) – not to scale 53
Figure 8-8 Moving window sectional swath plot for the Britannia Tiger fault zone 56
Figure 8-9 Moving window sectional swath plot for the Canton Mako fault zone 57
Figure 8-10 Moving window sectional swath plot for the Victoria Mako fault zone 58
Figure 8-11 Moving window sectional swath plot for the Normanby Mako fault zone 59
Figure 8-12 Moving window sectional swath plot for the Llanberris Mako fault zone 60
Figure 8-13 Diagram of Inferred and Indicated Resource material relative to development. 62
Figure 8-14 Grade-tonnage curve for the Ballarat Indicated Resource as at 31 March 2018 63
Figure 8-15 Grade-tonnage curve for the Ballarat Inferred Resource as at 31 March 2018 64
Figure 8-16 Waterfall chart showing cumulative differences in tonnage between current and previous Mineral Resource estimate 65
Figure 8-17 Waterfall chart showing cumulative differences in gold grade between current and previous Mineral Resource estimate 66
Figure 8-18 Waterfall chart showing cumulative differences in gold troy ounces between current and previous Mineral Resource estimate 67
Figure 10-1 Mine plan view 74
Figure 10-2 Quarterly development break-down 75
Figure 10-3 Ore tonnes by location 76
Figure 10-4 Failure style associated with shallow angle faults 77
Figure 11-1 Simplified separation circuit flow diagram 80
Figure 11-2 Simplified leach circuit flow diagram 80

APPENDICES

Appendix A Checklist of assessment and reporting criteria, based on Table 1 of the JORC Code 2012

1 EXECUTIVE SUMMARY

1.1 Project Description

The Ballarat mine is owned and operated by Castlemaine Goldfields Pty Ltd ("**CGT**"). The mine comprises of two granted mining licences (MIN5396 – Ballarat East, MIN4847 – Ballarat South) and an Exploration Licence (EL3018), which encompasses the whole of the mine as well as the historic Ballarat West goldfield. The operating Ballarat mine is located beneath the city of Ballarat approximately 115km north-west of Melbourne, the capital of the State of Victoria.

1.2 Geology and Mineralisation

Mineralisation occurs within Lower Ordovician sandstones, siltstones and mudstones that have been weakly metamorphosed and tightly folded about north-trending axes. The western limbs of the known anticlines dip approximately 70^0W, eastern limbs 85^0W to 85^0E and fold axial planes dip approximately 80^0W. The regional strike of the bedding is northerly. The quartz veins are located predominantly within fold limbs in structurally controlled bodies known as lodes and stockworks. These lodes and stockworks are hosted in west-dipping fault zones (e.g. the Llanberris Mako fault zone). Mineralisation is characterised by notable quantities of coarse gold (>80% +100-micron gold) and very coarse gold (locally >50% +1,000-micron gold) hosted in the quartz veins. High spatial grade variability is observed, where grades over a few metres may reach 50 g/t Au or higher, but reduce to a few g/t Au out of the high grade.

1.3 Mine Production

Hard rock 'quartz-mining' commenced in 1858 at Ballarat. Between 1858 and 1918, the goldfield produced over 1.2 Moz Au at a head grade of approximately 9 g/t Au. Recent gold production commenced in 2006 (Table 1.1).

Table 1.1 Gold production history for the Ballarat East goldfield from 2006 to March 2018

Company	Year	Tonnes processed (t)	Head grade (g/t Au)	Recovery %	Recovered (oz Au)
Ballarat Goldfields NL (**"BGF"**)	2006-2010	349,616	3.02	74.6	25,360
CGT	2011-2012	57,771	5.00	82.6	7,546
CGT	2012-2013	167,996	6.65	85.2	30,612
CGT	2013-2014	170,392	8.35	87.5	40,038
CGT	2014-2015	250,664	6.84	83.6	46,083
CGT	2015-2016	250,610	6.08	81.3	39,870
CGT	2016-2017	270,699	5.64	82.9	42,620
CGT	2017 -2018	260,165	5.41	81.3	35,315
Total	**2006-2018**	**1,777,913**	**5.66**	**81.6**	**267,444**

Note: Totals may vary due to rounding errors, Yearly totals based on April 1st to March 31st financial year.

1.4 Mineral Resources and Ore Reserves

The Ore Reserve defined at Ballarat is based on the Indicated Mineral Resources and represent a relatively small portion of the mine's overall Resources. The low rate of conversion from Inferred to Indicated Resource to support the Ore Reserve principally relates to the effects of complex vein orientations and high nugget on the geological and grade continuity. Economic decisions are thus based on a combination of Probable Ore Reserves and Inferred Mineral Resources. The project has appropriate infrastructure and plant in place. Mining costs, parameters and methods are now determined as a result of five years continuous mining. Project viability is highly sensitive to gold price and operating costs.

CGT has completed an update of its Mineral Resource and Ore Reserve for the Ballarat mine. Resources have been estimated and are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (the "**JORC Code 2012**"). Discrete domains within each lode were modelled using an inverse distance squared estimation algorithm with composite top-cut grades selected using statistical analysis of the distribution of grade within each domain. The final Resource (Table 1.2) is reported at a 0 g/t Au cut-off.

Table 1.2 Mineral Resource summary for the Ballarat East mine as of 31 March 2018

Category	Mineral type	Gross attributable to licence		Net attributable to issuer			Contained gold (koz Au)
		Tonnes (kt)	Grade (g/t Au)	Tonnes (kt)	Grade (g/t Au)	Change in ounces Increase % / (Decrease %)	
Indicated Resources	Gold	34	13.0	34	13.0	14	14
Inferred Resources	Gold	381	9.9	381	9.9	3	122
Total Resources	**Gold**	**414**	**10.2**	**414**	**10.2**	**4**	**136**

Note: Mineral Resources which are not Ore Reserves do not have demonstrated economic viability. Tonnage is reported in metric tonnes (t), grade as grams per tonne gold (g/t Au), at a 0 (g/t Au) cut-off grade and contained gold in troy ounces (oz Au). Tonnages rounded to the nearest 1000 t. Mineral Resources are reported inclusive of Ore Reserves. Totals may vary due to rounding errors.

Table 1.3 Indicated Mineral Resource estimate, lode by lode for the Ballarat East mine as of 31 March 2018

Lode	Tonnes (kt)	Grade (g/t Au)	Ounces (koz Au)
Canton Mako	3	9.6	0.8
Llanberris Mako	31	13.3	13.2
Total	**34**	**13.0**	**14.0**

Note: Mineral Resources which are not Ore Reserves do not have demonstrated economic viability. Tonnage is reported in metric tonnes (t), grade as grams per tonne gold (g/t Au), at 0 (g/t Au) cut-off and contained gold in troy ounces (oz Au). Tonnages rounded to the nearest 500 t. Ounces rounded to the nearest 100 oz Au.

Table 1.4 Inferred Mineral Resource estimate, lode by lode for the Ballarat East mine as of 31 March 2018

Lode	Tonnes (kt)	Grade (g/t Au)	Ounces (koz Au)
Britannia Tiger	52	7.7	12.9
Llanberris Mako	24	5.4	4.2
Victoria Mako	82	11.0	29.1
Normanby Mako	100	8.8	28.0
Canton Mako	123	12.0	47.4
Total	**381**	**9.9**	**121.6**

Note: Mineral Resources which are not Ore Reserves do not have demonstrated economic viability. Tonnage is reported in metric tonnes (t), grade as grams per tonne gold (g/t Au), at 0 (g/t Au) cut-off and contained gold in troy ounces (oz Au). Tonnages rounded to the nearest 500 t. Ounces rounded to the nearest 100 oz Au, exclusive of Indicated Resources.

The company has also calculated a Probable Ore Reserve as summarised in Table 1.5. The mine's Ore Reserves are comprised of a number of lodes contained within three mine compartments as outlined in Table 1.6. The mine is segregated into a series of compartments separated by a series of significant cross-course faults.

Table 1.5 Ore Reserves summary, as of 31 March 2018

Category	Mineral type	Gross attributable to licence		Net attributable to issuer			Remarks
		Tonnes (kt)	Grade (g/t Au)	Tonnes (kt)	Grade (g/t Au)	Change from previous update Increase % / (Decrease %)	
Proved	-	-	-	-	-	-	
Probable	Au	**36**	**7.1**	**36**	**7.1**	**(17%)**	
Total		**36**	**7.1**	**36**	**7.1**	**(17%)**	**Issuer owns 100% of the company**
Note: Mineral Resources are reported inclusive of Ore Reserves.							

Table 1.6 Breakdown of Ore Reserves as of 31 March 2018

Category	Mineral type	Gross attributable to licence		Net attributable to issuer			Remarks
		Tonnes (kt)	Grade (g/t Au)	Tonnes (kt)	Grade (g/t Au)	Change from previous update Increase % / (Decrease %)	
Proved	-	-	-	-	-		-
Probable							
Canton Compartment	Au	3	5.2	3	5.2	First Reserve	-
Llanberris Compartment	Au	33	7.3	33	7.3	(22%)	-
Total		**36**	**7.1**	**36**	**7.1**	**(17%)**	**Issuer owns 100% of the company**

The Ballarat Mine Indicated and Inferred Resources are based on block models which are constructed using tightly constrained and often quite narrow domain wireframes. Wireframing is carried out with an emphasis on constraining the width of the domains to the true widths of the high grade zones within ore lodes. As a result, it is common for the high grade domains to be modelled down to widths between 0.5m and 1.5m.

Current mining methods have a minimum mining width of 2.5m (for up-hole stoping) meaning that a significant amount of planned dilution is required for extraction to occur. This is accounted for during Ore Reserve estimations. In addition to this, due to the challenging ground conditions some over-break is also included in the Ore Reserve estimations.

The combination of these factors results in a significant increase in tonnes and decrease in gold grade during the conversion from Indicated Resources to Probable Reserves.

1.5 Economic Analysis

All currency values are in Australian dollars (A$) unless otherwise stated and all unit cost references include all operational expenditure associated with the site and exclude all capital related expenditure. Mined ore tonnes for the 2017-2018 year totalled 262,559 t and the site operating cost per tonne of ore mined averaged A$187. Gold ounces sold for the 2017-2018 totalled 33,948 oz Au, with an associated site cash operating cost per ounce at A$1,395. The average gold price received per ounce for the 2017-2018 year was A$1,662. The revenue from bullion sales totalled A$56.4M.

Revenues for the 2018-2019 budget years are estimated assuming US$1,310/oz Au and an exchange rate of 0.78, to give a gold price of A$1,680/oz Au. The plan is to mine 270,000 t at a head grade of 5.8 g/t Au at a site unit operating cost per tonne of ore mined of A$201 for a gross revenue of A$71M, with a forecast mill recovery of 81.2%. A key objective of the 2018-2019 budget is to ensure sufficient funds are available for the operation to be self-sustaining, including its ability to fund major projects such as the underground diamond drill programme and the sustaining capital expenditure requirements.

1.6 Risk Assessment

The current Mineral Resource at Ballarat carries an overall “high” risk. The risk principally relates to geological and grade variability. It is reflected by the predominate use of the Inferred Mineral Resource category. At any one time, the mine generally has no more than 12 to 18 months of Mineral Resources in front of it.

While a Probable Ore Reserve has been defined at Ballarat, it is insufficient to underpin a 12-month mine plan, therefore some economic decisions to mine are based on Inferred Mineral Resources – these carry a "medium-high" risk. Mine planning and scheduling is carried out with some flexibility built in to allow for change to be implemented efficiently if and when required. The project has established infrastructure and plant in place. Mining costs, parameters and methods are now determined as a result of over 5 years of continuous mining. The processing plant is designed for Ballarat's typical coarse-gold ore. It can achieve a recovery of around 84% and has designed capacity of approximately 600,000 tpa.

The Qualified Persons (as specified in section 2.4) are of the opinion the accuracy of the grade and tonnage estimate for the Inferred Mineral Resources is considered to be within ±20-30% globally based on general experience of this style of mineralisation. Mine reconciliation data over the past five years also supports this range.

Social, legal, political and environmental risks are considered "low", given the relatively stable and developed nature of Australia.

2 INTRODUCTION

2.1 Aim and Scope of Report

This Qualified Persons Report ("**QPR**") has been prepared by CGT for LionGold Corp Ltd ("**LionGold**") in compliance with the disclosure requirements of the Singapore Exchange Securities Trading Limited ("**SGX-ST**"). This QPR is intended to be read as a whole, and sections or parts thereof should therefore not be read or relied upon out of context. Unless otherwise stated, information and data contained in this report or used in its preparation have been provided by CGT, a wholly-owned subsidiary of LionGold.

The SGX-ST Listing Manual Section B: Rules of Catalist (the "**Catalist Rules**") require the preparation of this QPR in accordance with Practice Note 4C of the Catalist Rules.

2.2 Use of Report

The Mineral Resource will be publically released by LionGold on the SGXNET of the SGX-ST and used by CGT to plan mining operations at Ballarat.

2.3 Reporting Standard

The contained Mineral Resource has been reported in accordance with the JORC Code 2012.

2.4 Report Authors and Contributors

Qualified Persons ("**QPs**") for this QPR are listed in Table 2.1.

Table 2.1 QPs for this QPR

Name	Position	Employer	Independent of LionGold	Date of site visit	Professional designation	Contribution to QPR
Mr Matthew Hernan	Geology Manager	CGT(1)	No	Based on site. Visits mine on a weekly basis	MAusIMM & MAIG	All Sections Qualified Person.
Mr Philip Petrie	Senior Mining Engineer	CGT(1)	No	Based on site. Visits mine on a weekly basis.	MAusIMM	Sections 9,10,12 Section 4 JORC Table 1 Qualified Person.

(1)Address: 10 Woolshed Gully Drive, Mount Clear, Ballarat, VIC 3350, Australia.

Other experts contributed to this QPR under the supervision of the QPs (Table 2.2).

Table 2.2 CGT staff who contributed to this QPR[(3)]

Name	Position	Employer	Professional designation	Contribution
Mr Jason Fothergill	Principal Geologist/ Tenements Officer	CGT[(3)]	MAusIMM	Section 3
Mr Matthew Hernan	Geology Manager	Balmaine[(1)]	MAusIMM	All Sections
Mr Mark Davies	Processing Manager	Balmaine	-	Sections 7 and 11
Mr Kurtis Noyce	Manager Environment and Community	Balmaine	-	Sections 3, 12 and 13
Mr Darren Watkins	Mining Manager	Balmaine	-	Section 10 and 12
Mr Philip Petrie	Senior Mining Engineer	Balmaine	MAusIMM	Section 9,10,12, Table 1
Mr Darren Stephens	Senior Mine Geologist	Balmaine	MAIG	All Sections
Mr Tom Cochrane	Senior Mine Geologist	Balmaine	MAIG	Section 6.4
Mr Daniel Braunsteins	Resource Geologist	Balmaine	-	All sections
Mr Tarrant Meehan	Project Mine Geologist	Balmaine	MAusIMM	Sections 5 and 8
Mr Bill Reid	Exploration Manager	CGT	MAusIMM	Section 6
Mr Hilko Dusseljee	Finance and Administration Manager	Balmaine	Certified Practicing Accountant	Section 14
Mr Brett White	Accounting Superintendent	Balmaine	Certified Practicing Accountant	Section 14

*[(1)]Balmaine Gold Pty Ltd ("**Balmaine**") is 100% owned by CGT and operates the Ballarat mine*

[(2)] CGT is 100% owned by LionGold

[(3)] The personnel listed in Table 2.2 are not independent of LionGold

2.5 Qualified Persons Statement

The QPs responsible for preparation of this QPR are:

- Mr Matthew Hernan – Geology Manager with CGT is a member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has 15 years of experience in the mining industry.
- Mr Philip Petrie – Senior Mining Engineer with CGT is a member of the Australasian Institute of Mining and Metallurgy and has 32 years of experience in the mining industry.

All QPs have visited the Ballarat mine within the preceding three months to 31 March 2018.

Messers Hernan and Petrie are not independent of LionGold.

The effective date of this QPR is 31 March 2018.

This report is prepared in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code 2012).

The information in this report that relates to Mineral Resources is based on information compiled by Mr Matthew Hernan, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Hernan is a full-time employee of the company. Mr Hernan has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hernan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Ore Reserves is based on information compiled by Mr Philip Petrie, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Petrie is a full-time employee of the company. Mr Petrie has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Petrie consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

2.6 Basis of the Report

This report presents a Mineral Resource estimate undertaken by Mr Hernan, and an Ore Reserve estimate undertaken by Mr Petrie. The Resource is reported in accordance with the JORC Code 2012. The database and geological model used to estimate the Mineral Resource were compiled by CGT. The Mineral Resource was estimated using Vulcan Version 9.1 software.

Other data have been supplied by members of the Ballarat mine team (Table 2.2).

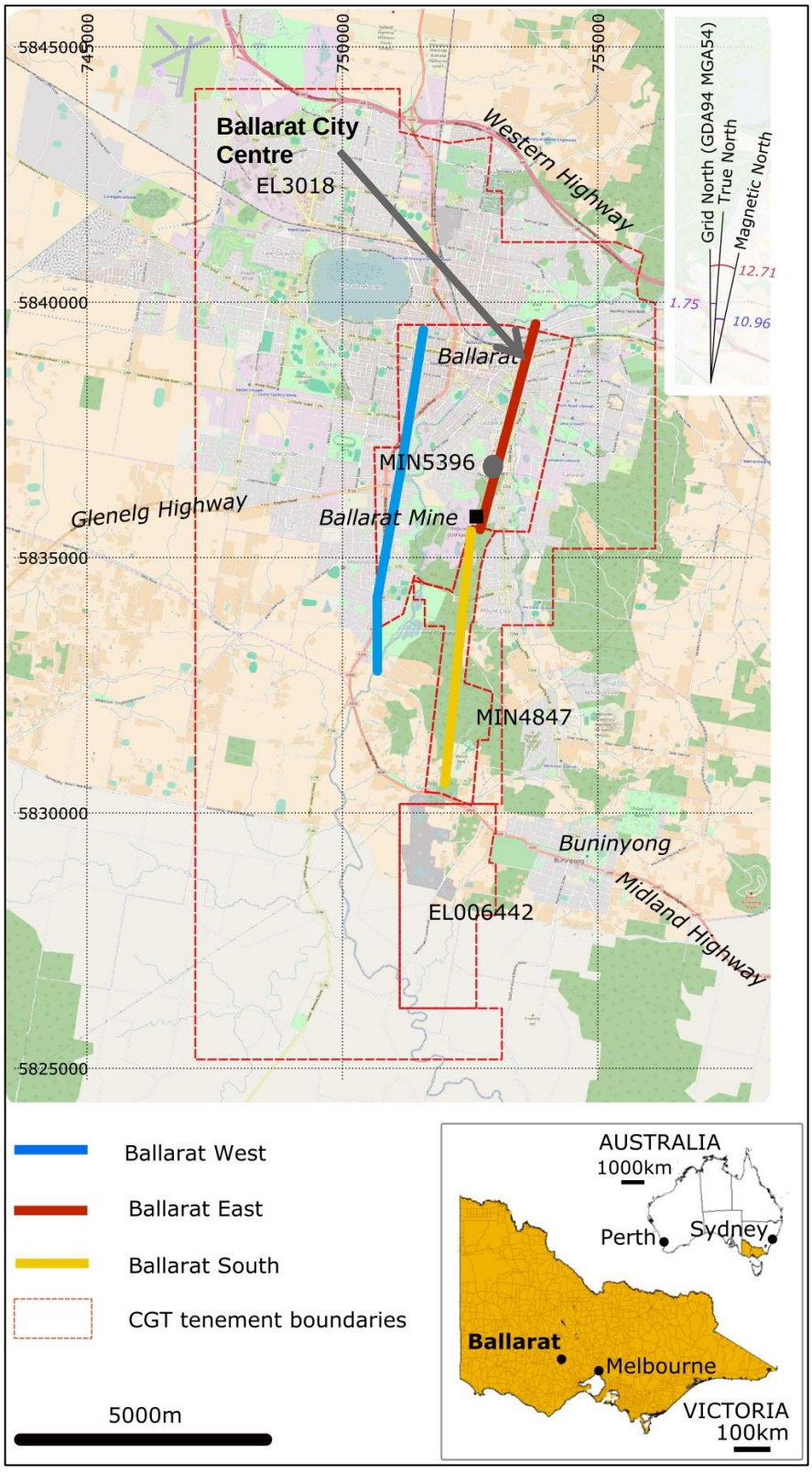
The QPs have reviewed all input data, models and outputs in this QPR and believe that they are appropriate and permit the Mineral Resource to be reported in accordance with the JORC Code 2012.

3 PROJECT DESCRIPTION

3.1 Location

The Ballarat gold mine site is located to the south of the City of Ballarat, approximately three kilometres south from the city centre, and approximately 115 km northwest of Melbourne.

Figure 3-1 Location of Ballarat mine tenements



3.2 Tenure

CGT holds the mining and exploration tenements listed below in Table 3.1 through its 100% owned subsidiary Balmaine Gold Pty Ltd (**"Balmaine"**) (Figure 3-1). The tenements cover the major historic hard rock mining areas of the Ballarat East, Ballarat South and Ballarat West goldfields.

The Mineral Resources being reported are located entirely within Mining Licence MIN5396. This tenement is wholly contained within Exploration Licence EL3018. The tenements are in good standing with the regulatory authority, with all required bonds, plans and permits in place to allow mining and exploration operations to be undertaken.

Table 3.1 Tenure details for Ballarat mine

Tenement	Asset name/ Country	Issuer's interest (%)	Tenement Status	Licence expiry date	Licence Area	Type of mineral, oil or gas deposit
Mining Licence (MIN5396)	Ballarat, Australia	100%	Mining	4/10/2023	14.86 km^2	Gold,
Mining Licence (MIN4847)	Ballarat, Australia	100%	Mining	1/11/2019	4.10 km^2	Gold,
Exploration Licence (EL3018)	Ballarat, Australia	100%	Exploration	3/10/2018*	122.78 km^2	Gold, platinum, silver
Exploration Licence Application (EL006442)	Ballarat, Australia	100%	Exploration	Application	6.77km^2	Gold, Base Metals

3.3 Tenure Conditions

The Ballarat Gold Project consists of the two mining licences MIN5396 and MIN4847, surrounded by the exploration licence EL3018. A further exploration licence application, EL006442, was submitted in January 2017 to extend companies exploration licence coverage south over the southern end of the goldfield. The application for EL006442 is still being processed as at 31 March 2018, having been advertised for objections and currently being advertised for Native Title requirements.

Mining licence conditions in Victoria state that a minimum expenditure must be met and mining must be ongoing and not cease for a period of greater than two years for the licence to remain valid, as stated under the Mineral Resources (Sustainable Development) Act, 1990 (**"MRSDA"**). The current operations of CGT satisfy all conditions for the ongoing maintenance of both mining licences.

Exploration licence 3018 will expire on 3 October 2018, having reached the permissible lifespan of an exploration licence under the MRSDA. CGT has the option to apply for renewal of the licence, however must show exceptional circumstances as to why the licence should be renewed and display that the company is capable of identifying further Mineral Resources. CGT may apply for a retention licence over part or all of the EL3018 tenement area, provided the company has identified a Mineral Resource over the application area as part of the application process. CGT may re-apply for an exploration licence over part, all of, or a greater area than that occupied by EL3018 upon the completion of the moratorium period as defined in the MRSDA, this may include competing applications for the tenement area.

Conditions for tenure of exploration licences in Victoria are based on a combination of exploration activity and expenditure determined by the government under the MRSDA conditions.

An area Work Plan permitting surface exploration on the current tenements was approved in 2008 for a term of 10 years, and requires reviewing and submission prior to the commencement of any surface disturbing exploration activities. As at the March 31 2018 there is no valid Work Plan permitting ground disturbing surface exploration on any of the Ballarat Gold Project tenements.

The mining project area covered by mining Work Plans spans some 13 km^2 surrounding the City of Ballarat. Land tenure within the project area consists of both freehold and Crown Land managed by a range of entities. The land managers include; City of Ballarat, Central Highlands Water (CHW), Hancock Victoria Plantations (HVP), Sporting Clubs, private land owners and various other Committees of Management. Crown Land includes that reserved for particular purposes, restricted crown land and unrestricted crown land.

The dominant land use at Ballarat is residential. In the immediate vicinity of the mine site, the land is managed by CGT, CHW and HVP for forestry purposes.

Other conditions imposed by other local and State government agencies are listed below:

An Environment Effects Statement (EES) was approved in September 1988.

A Planning Permit was issued by Shire of Buninyong in September 1993 and subsequently extended by City of Ballarat until September 2027.

The authority to commence work for MIN4621 (one of several licences now amalgamated as MIN5396) was granted on 11 November 1993, and full-scale mining and ore processing now proceeds under that authority.

The mining Work Plan for the Ballarat East tenements was approved in 1993 under the MRSDA for development of the underground access, dewatering, ventilation shafts, process plant (including the use of cyanide), tailings and waste rock storage facilities, services and rehabilitation.

Subsequent variations to the Work Plan were granted for; rehabilitation works near Elsworth Street (1994), the Golden Point ventilation intake shaft (2008, 2009 and 2012), the Terrible Gully tailings storage facility (2005) and a concrete batching plant (2005).

A waste discharge licence (18092) issued by the Environment Protection Authority allows for discharge of treated mine water to Yarrowee river.

3.4 Access

The site is located in the suburbs of Ballarat which is only 115km from Melbourne the state capital of Victoria and is accessible by rail and an extensive road transport network. Domestic and international flights are accessible via Melbourne.

The City of Ballarat Planning Permit states that Heavy Vehicles (those being in excess of 10 t) shall only be permitted to enter and leave the site between 0700 and 1800 from Monday to Friday (except where emergency repair works are required to be undertaken to maintain the on-site operation).

A combination of sealed and graded roads provides good light vehicle access from the main gate to buildings and plant areas throughout the site. Separate haul roads for underground haul trucks and light vehicles provide access to the underground portal and run of mine ("**ROM**") pad.

3.5 Climate

The Ballarat region has a moderate climate (elevation 435 m above sea level). The mean daily maximum temperature for January is 25.2°C while the mean daily minimum is 10.9°C. In July, the mean daily maximum is 10.1°C and the mean daily minimum is 3.2°C. The mean annual rainfall is 689 mm, August being the wettest month with an average of 74 mm. Like much of Australia, Ballarat experiences cyclical drought and heavy rainfall.

3.6 Landforms, Soils, Flora and Fauna

Ballarat's location is in the southern foothills of the Great Dividing Range at an elevation of 435 m above sea level. The surrounding areas with fertile red soils from the basalt flows have been cleared for grazing and cropping with higher areas utilised for commercial pine plantation and the preservation of areas of remnant native forest. Areas with poor siliceous soils generated on the Palaeozoic bedrock hills are covered in Heathy Dry Forests and Grassy Woodlands, these ecosystems are dominated by eucalypts with an understory of shrubs, herbs and graminoids.

The exploration project area may contain protected flora and fauna species which are either listed under the Flora and Fauna Guarantee Act 1988 (Vic), or under the Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth). There are 5 International Union for Conservation of Nature (IUCN) Red Listed species that are present in the region. These areas are identified during planning stages and avoided by the company. Should disturbance to vegetation be unavoidable, the company is required to provide and protect adequate vegetation offsets for the disturbance. The CGT Ballarat mine has not been required to provide any vegetation offsets to date. It is not anticipated that this will be required for works planned in the immediate future.

4 HISTORY

Gold was discovered in the Ballarat district during August 1851, underground mining of quartz veins started in the late 1850s and continued until 1918. The Ballarat goldfield was the second largest gold producer in the state of Victoria as shown in Table 4.1.

Table 4.1 Hard rock and alluvial gold production history for the Central Victorian goldfields (Phillips and Hughes, 1998)

Goldfield	Total Gold (t)
Bendigo	697
Ballarat	**408**
Castlemaine	127
Stawell	82
Creswick	81
Walhalla	68
Maldon	65
Woods Point	52
Clunes	47
Chiltern	46

The historical quartz mines at Ballarat East occur along a narrow corridor some 400 m wide and approximately four kilometres long with typical mined depth of 350 m (maximum 500 m). Recorded underground gold production totalled 1.6 Moz at an average recovered grade of 9 g/t Au. No significant gold mining or exploration took place until BGF commenced work in the mid 1980s.

4.1 Previous Exploration and Development Work

Between 1985 and 1988, BGF carried out a programme of diamond drilling to test for continuation of mineralisation below the old mines. Approximately 8,000 m of diamond coring was drilled along a strike length of 400 m. The results confirmed the existence of significant gold quartz mineralisation. Data obtained from this drilling programme is presented in Canavan and Hunt (1988).

During 1991, a further 11,000 m of diamond drilling was carried out under a joint venture between BGF and North Broken Hill-Peko. This drilling tested for mineralisation beneath the old mines and extended the tested strike length from 400 m to 2,800 m. Results of this phase of drilling are detailed in O'Neill *et al*. (1992). In 1994, a decline located at Woolshed Gully was commenced to access a resource delineated by Livingstone and d'Auvergne (1992). In 1996, the decline development was suspended without having reached its target and placed on care and maintenance.

In 2003, exploration drilling resumed from both the Woolshed Gully decline and surface locations. Between 2003 and 2009, 23,108 m of underground development and 246,977 m of drilling was completed. Lihir Gold Limited (**"LGL"**) acquired the project in 2007 via a merger with the aim of developing the project to mine 600,000 tpa for target production of 200,000 oz Au of gold. In late 2008, stope production commenced in the southern end of the deposit, mineralisation was more variable and discontinuous than previously modelled.

During 2008, LGL mined 129,000 t at a grade of 3.5 g/t Au and during 2009, mined 105,000 t at a grade of 4.3 g/t Au. By mid-2009, total gold production from the Ballarat East operation was approximately 29,000 oz Au. In February 2010, LGL suspended operations.

CGT entered into an agreement to acquire the Ballarat tenement package including the mill, various equipment and substantial mine development from LGL in March 2010 for an acquisition cost of A$8.6M (A$4.5M and assuming a A$4.1M rehabilitation bond) plus a 2.5% royalty on future production, capped at A$50M (to Newcrest Mining Ltd). The mineral licences which comprise the Ballarat Gold Mine are held by Balmaine which is a wholly-owned subsidiary of CGT. Licence transfer to Balmaine occurred in May 2010.

CGT underground exploration activities were focused on the northern exploration targets on the First Chance and Suleiman anticlines, in the Llanberris compartment with 15,000 m of diamond drilling completed in the period May-December 2010. Exploration success led to the completion of a feasibility study targeting gold

production of 40,000 to 50,000 oz Au per annum. Underground mining activity recommenced in March 2011, the process plant was recommissioned and first gold production occurred in September 2011. CGT became a wholly-owned subsidiary of LionGold in August 2012.

4.2 Reliability of Historical Estimates

Since commencement of operations at Ballarat, CGT has carried out a continuous drilling programme to delineate existing and new resources. With increased geological knowledge and drill density, the interpretation of grade, geological orientations and continuity has evolved.

Compared to CGT's interpretation of lode continuity, previous interpretations had excessive extrapolation. The resource estimates were audited by a number of independent parties and found to be appropriate apart from the assumptions on the extent of lode continuity. As a result, estimates made by CGT's predecessors, either LGL or BGF have not been utilised by CGT.

4.3 Production History

Gold production from the commencement of production in 2006 is tabulated to the end of March 2018 in Table 1.1.

5 GEOLOGICAL SETTING

5.1 Regional Geological Setting

Ballarat is located in the south-western part of the Lachlan Fold Belt (LFB) within the Palaeozoic sedimentary rocks of the Bendigo-Ballarat subdivision, the location of which is shown in Figure 5-1. The outcropping bedrocks of the region are graptolite-bearing Ordovician age turbidites of the Castlemaine Super Group which comprises the majority of the bedrock of the Bendigo-Ballarat zone of the LFB in Victoria.

To the north of the region, the Ordovician rocks are covered by Tertiary-age shallow water sediments of the Murray Basin, and to the south, they are overlain by Miocene marine sediments. East and west of Ballarat, Quaternary age basalt flows cover the Ordovician rocks.

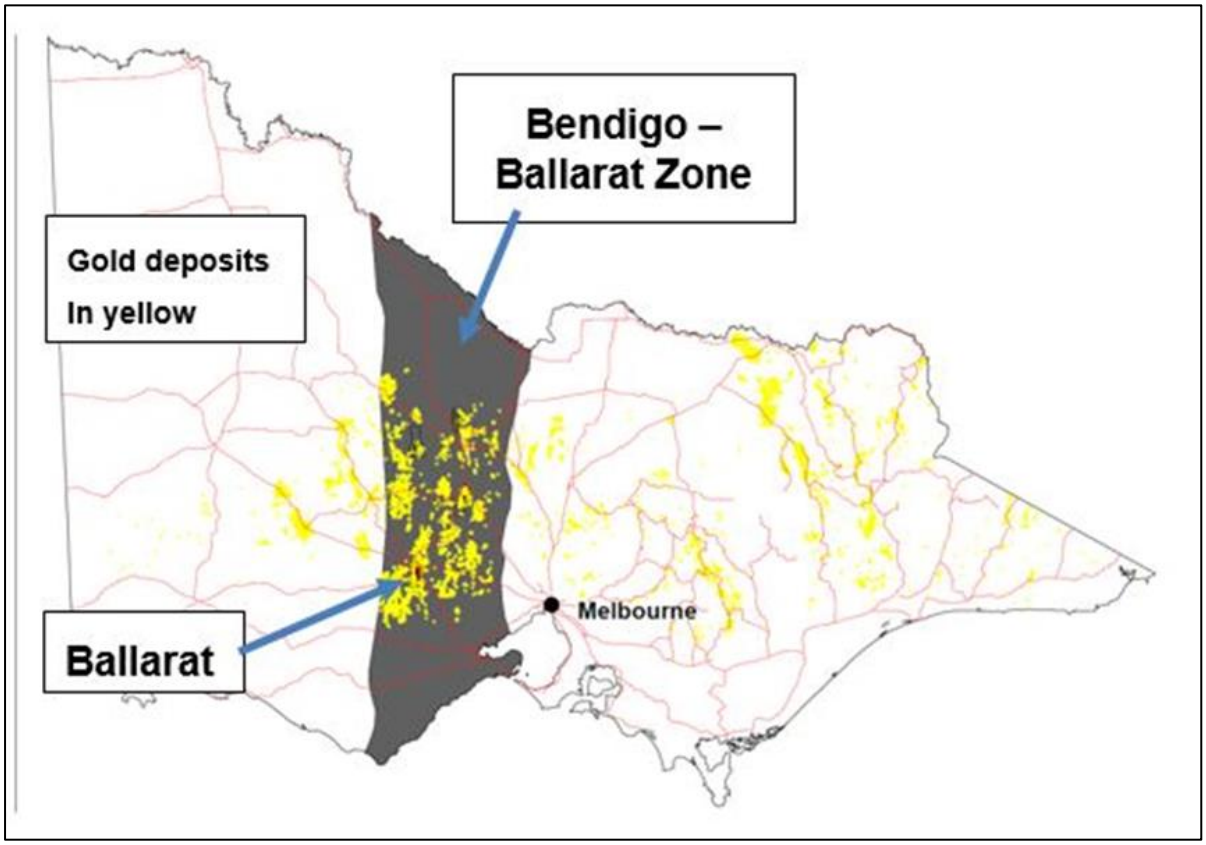
The Quaternary volcanics are part of the extensive basaltic plains to the south and west of Ballarat. No mineralisation has been recorded to occur within them. Four flows have been identified in the Ballarat area with a total thickness of up 150 m. The flows have filled in the pre-existing drainage forming the Deep Lead deposits exploited early in Ballarat's mining history.

The Ordovician sediments have been folded into north-south striking of anticlinoriums and synclinoriums during the Benambran Orogen. Regional scale, north-south striking, west-dipping reverse faults occur across the zone and have been interpreted to be related to the formation and the distribution of the numerous gold deposits in the region.

They have been intruded by a suite of Devonian age granites and, locally, by Jurassic lamprophyre dykes.

Summaries of regional and local geology are found in Taylor *et al*. (1996) and Vandenberg *et al*. (2000) and the references contained therein. The geology of the Ballarat East goldfield and the forms and control of the mineralisation are described at length in Gregory and Baragwanath (1907), Baragwanath (1923), Canavan and Hunt (1988), d'Avergne (1990), Osborne (2008) and Fairmaid *et al.* (2011).

Figure 5-1 Plan of Victoria showing location of the Bendigo-Ballarat zone and gold deposits in yellow



5.2 Local Geological Setting

The Ballarat goldfield is located in the hangingwall of the regional north-south striking, west-dipping reverse, Williamson Creek fault.

Ordovician sedimentary rocks range in grain size from pelagic black shale to coarse grain sandstones. The rocks have been folded into a series of upright chevron-style anticlines with wavelengths ranging from 50 m to 300 m with numerous parasitic folds occurring around the hinge zone of the larger folds (Figure 5-2).

To the east of the goldfield, the rocks have been intruded by the un-mineralised Gong Gong granodiorite which has a contact metamorphic aureole of hornfelsed sediment up to 200 m.

Figure 5-2 Geological Interpretation of the First Chance anticline on the Ballarat East goldfield at the 38050 mN section (Allibone, 2009)



5.3 Mineralisation

Mineralisation at Ballarat is *orogenic* in character. The vein systems can generally be described as those forming at temperatures of between 200°C and 300°C at 1,500 m and 4,500 m crustal depth. The vein mineral assemblage includes several generations of quartz with chlorite, sericite, albite and carbonate minerals. Arsenopyrite and pyrite are the dominant sulphide minerals with galena, sphalerite, chalcopyrite and pyrrhotite also commonly observed. The estimated percentage of sulphide minerals in the veins is 2%. No correlation has been established between sulphides and the presence or grade of gold.

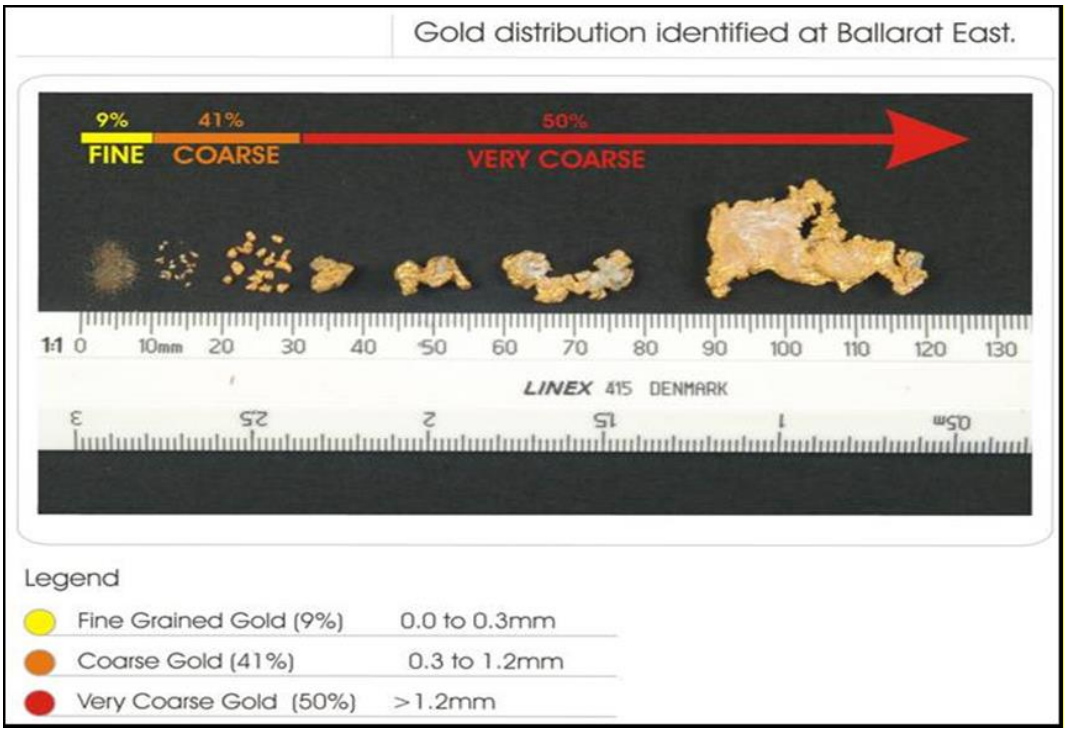
The host rocks show bleaching carbonate aggregates, disseminated pyrite, arsenopyrite and pervasive sericitic alteration as a halo around quartz veining.

Observation has shown that gold may occur within fractures within sulphide minerals or be deposited on the margins of sulphide grains, indicating that gold was deposited last. Gold has been observed as native particles which range in size from microns up to 30 mm in length (Figure 5-3).

The historical reports of occurrence of the gold (Baragwanath, 1923) and the observations made during the current mining operations have shown no change in the style and nature of gold occurrence throughout the Ballarat East goldfield.

The presence of coarse often visible gold (>100 µm in size) imparts a degree of risk due to both grade and geological variations that cannot be easily estimated. They rank amongst the most difficult of ore deposits types, in terms of producing an accurate and precise Mineral Resource estimate (Dominy, 2014).

Figure 5-3 Gold distribution as recovered from a metallurgical test sample



5.3.1 Mineralisation Styles

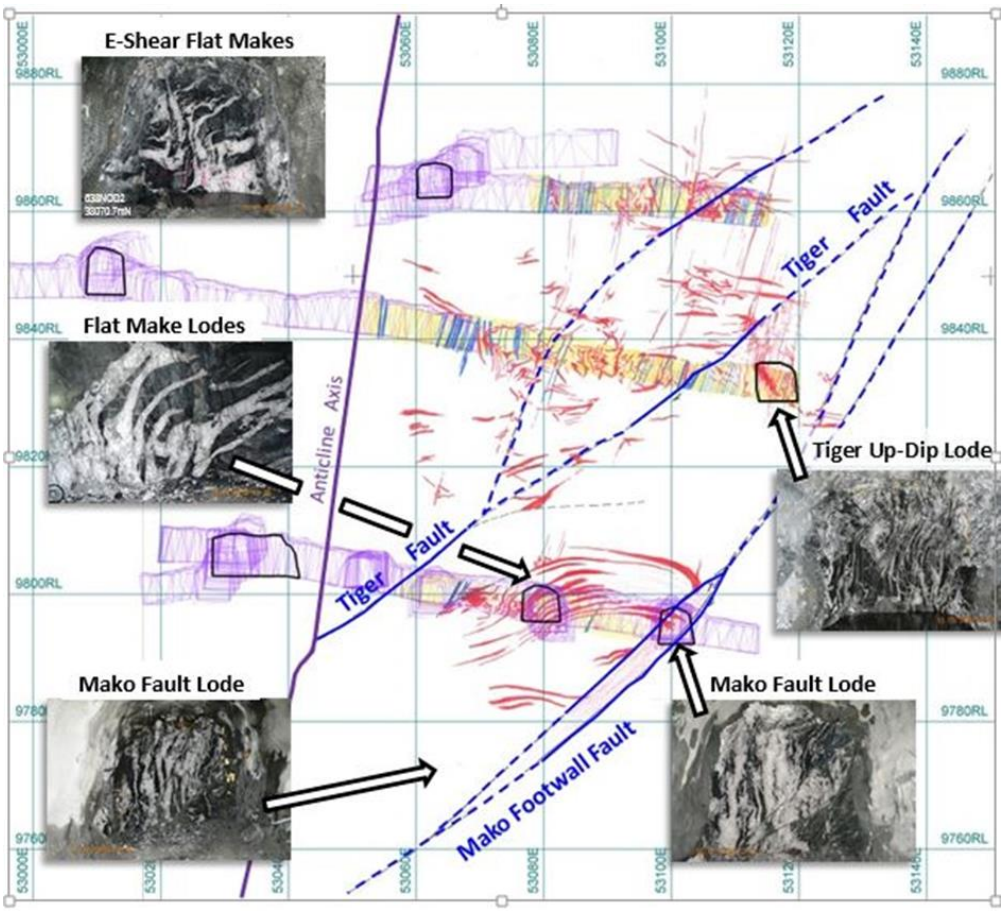
The Ballarat East goldfield has three major productive lines of reef, located on anticlines of the same name, the Suleiman minor Line, the Scandinavian Line and the First Chance Line (Figure 5-2). A minor gold bearing line is the Oregon line to the east of current development.

Each line of reef has been divided into local geological packages called “compartments” which are defined by a series of major sub-vertical brittle faults (cross courses) which obliquely cross cut the goldfield at semi-regular intervals. The resultant compartments range in length from 150m to 500m along strike.

The majority of the gold mined occurred in a semi-continuous series of lodes associated with shallow or steep west-dipping reverse faults that cross-cut the vertical to overturned eastern limb of the anticlines. The major folds are continuous along the length of the goldfield.

The Mako Fault Zone (MFZ) in the Llanberris compartment is an example of a west-dipping reverse fault zone (Figure 5-4). The fault zones dip between 20º and 70º degrees, extend up to 250 m along strike (north-south), 90 m down dip and range in thickness from 0.5 m to 6 m. Veining comprises a combination of massive quartz, weakly laminated quartz, brecciated quartz and stockwork veins. Later faults offsetting early stage veining has been observed amongst a complex zone of shearing and fault gouge development.

Figure 5-4 Composite cross section for the MFZ in the Llanberris



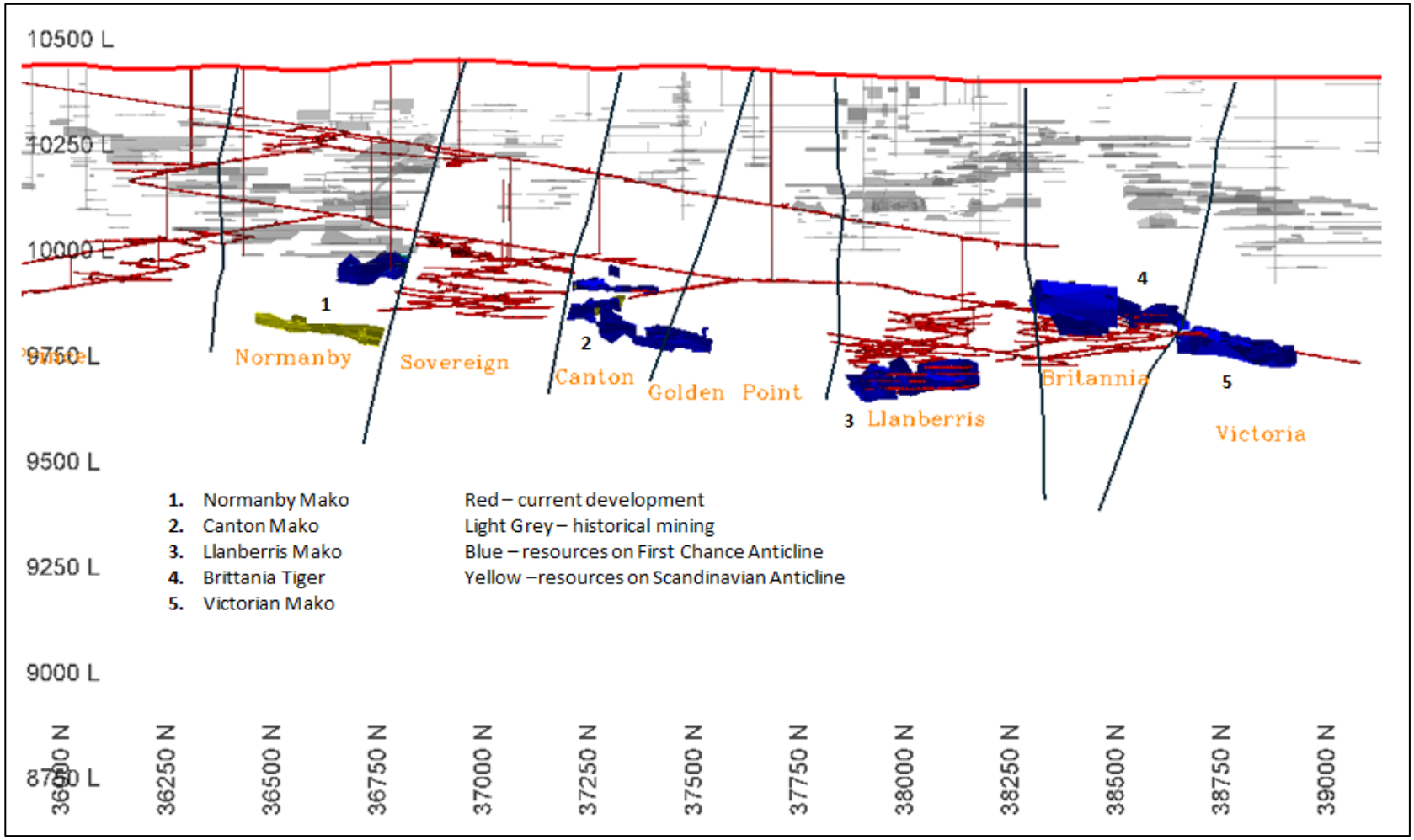
Composite cross section for the MFZ in the Llanberris compartment with representative photos for different lode styles. Mapped quartz veins are extrapolated between mining levels using drill hole information. Shale beds are coloured blue, Sandstone beds are coloured yellow and quartz veins are coloured red.

Steep to moderately east-dipping vein arrays developed between the major west-dipping faults have been observed. These are important as linking structures or by forming local hots spots where they interact with the west dipping faults. Generally, the east dipping fault lodes only form a small proportion of the mineralised resources.

5.3.2 Resource mineralisation

The mineralisation of each of the resources estimated in this report is described in the following section. The resource locations are shown in Figure 5-5.

Figure 5-5 Resource location, Ballarat East. Long section looking west

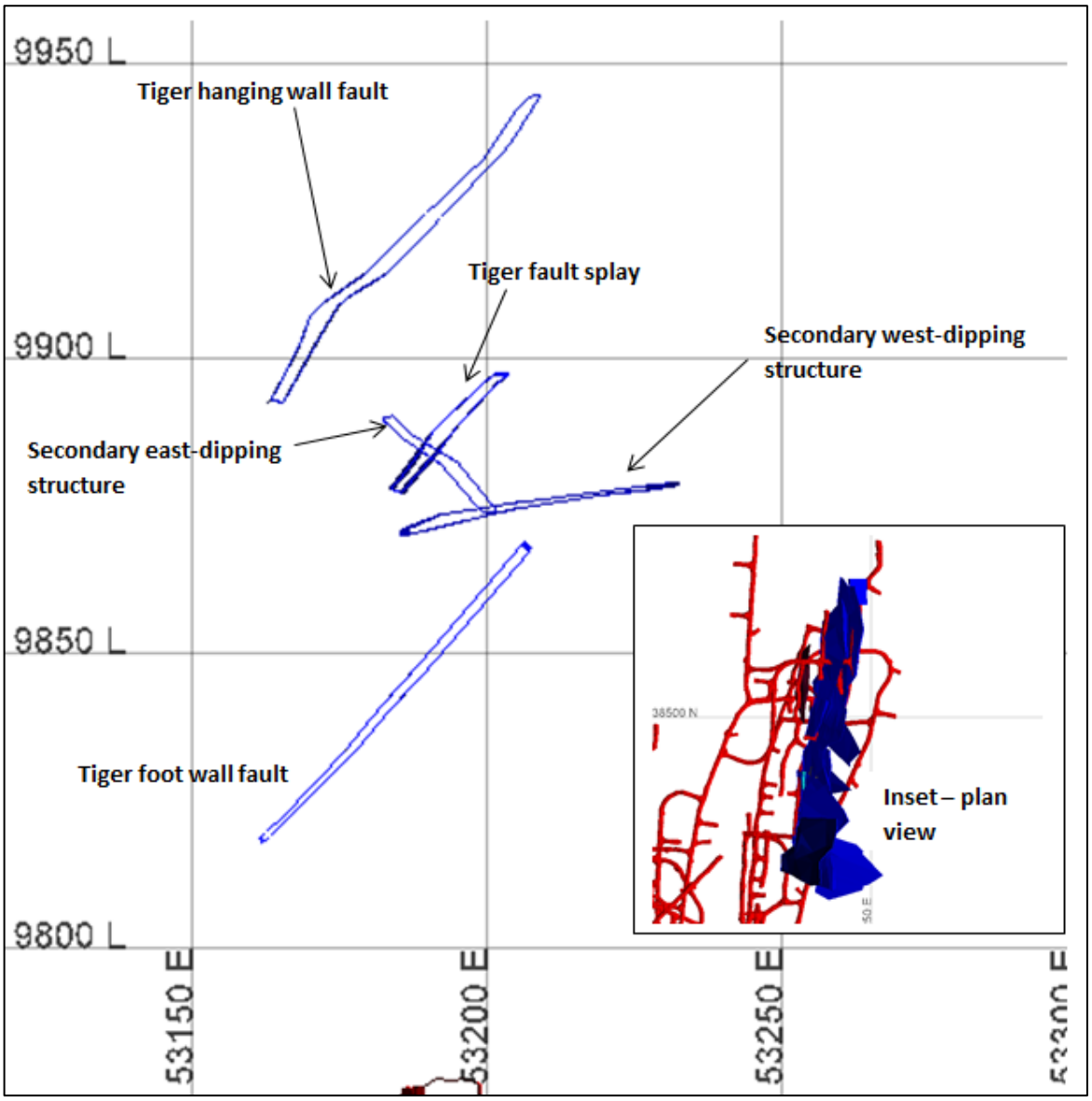


5.3.2.1 Britannia Tiger

The Britannia First Chance Tiger Mineral Resource extends across the whole of the Britannia compartment (Figure 5-6). Mineralisation consists of a broad zone of faulting over a strike length of 350 m, height of 80 m and maximum width of 60 m. Mineralisation on the Britannia Tiger predominantly consists of three faults dipping between 40 and 60 degrees to the west with on overall plunge of 4.5 degrees to the north. These three faults make up the Tiger Fault Zone across the east-limb of the First Chance Anticline within the Brittania compartment and are the only inferred domains in the Mineral Resource. The northern portion of the Mineral Resource has been mined throughout 2017.

Mineralisation is characterised by strong fault lodes dipping to the west with significant stock work veining in flat spur vein sets observed adjacent to the major fault structures. Due to the dis-continuous nature of the stock work veining and flat spur sets, this mineralisation has not been included in the Mineral Resource estimation.

Figure 5-6 Cross section of Britannia Tiger Resource looking north at 38,350 mN



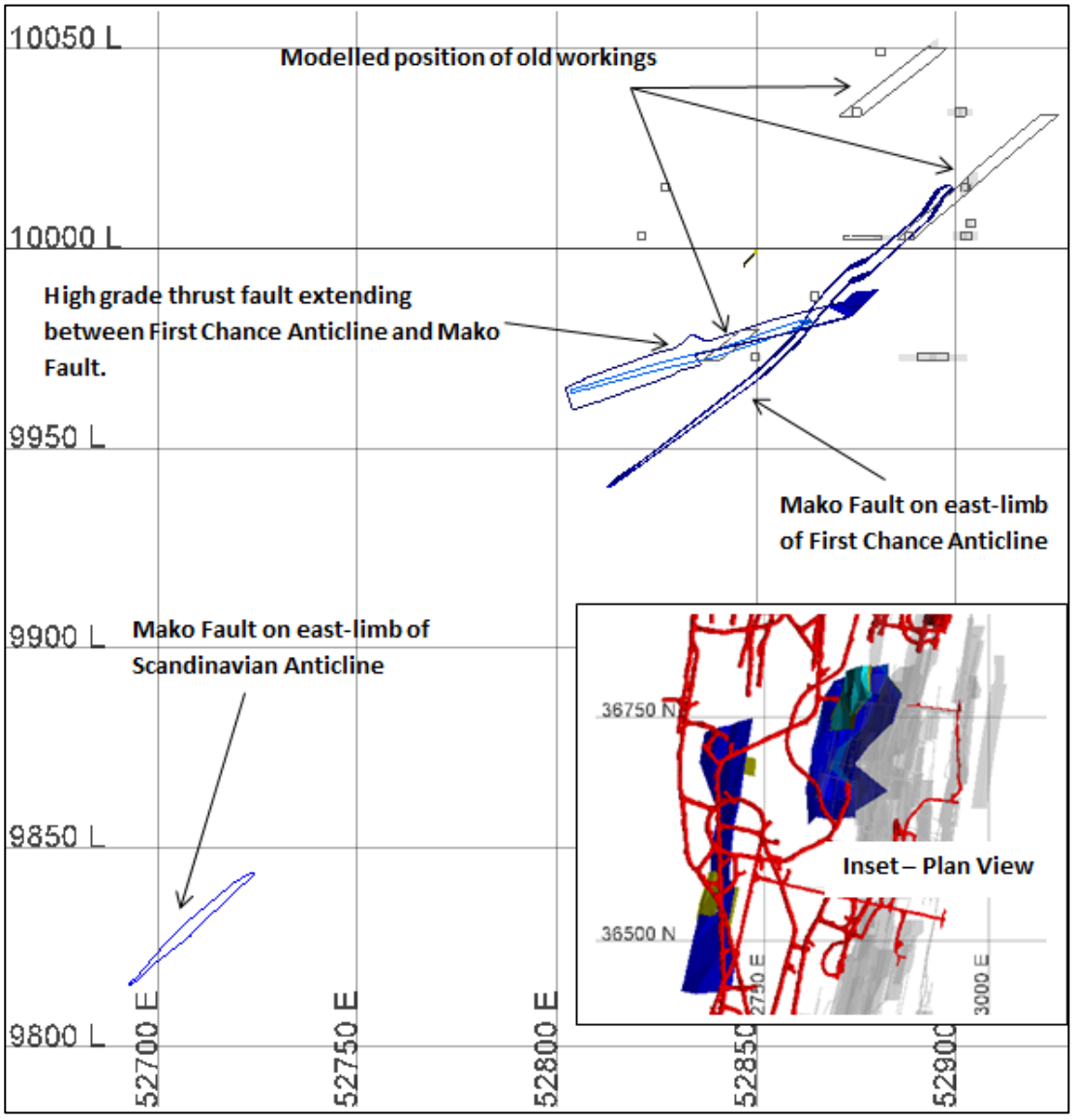
5.3.2.2 Normanby Mako

The Normanby Mako Mineral Resource is comprised of two mineralised zones. The upper zone of mineralisation occurs where the Mako Fault zone intersects the east limb of the First Chance Anticline, whilst the lower zone of mineralisation occurs some 120 m down dip of this location where the Mako Fault zone intersects the east-limb of the Scandinavian Anticline. The Mineral Resource has a maximum width of 15m and extends 300m along strike from the northern compartment boundary.

The Mako Fault is modelled to dip at 40-60º to the west and plunge at 7º to the North. On the East-limb of the First Chance Anticline there is a high grade thrust fault, bounded by the Mako Fault and the First Chance Anticline hinge. This structure dips at 15-25º to the west and is prominent at the northern x-course boundary before weakening towards the centre of the Normanby compartment.

The Normanby First Chance Anticline Mineral Resource is within modelled old workings.

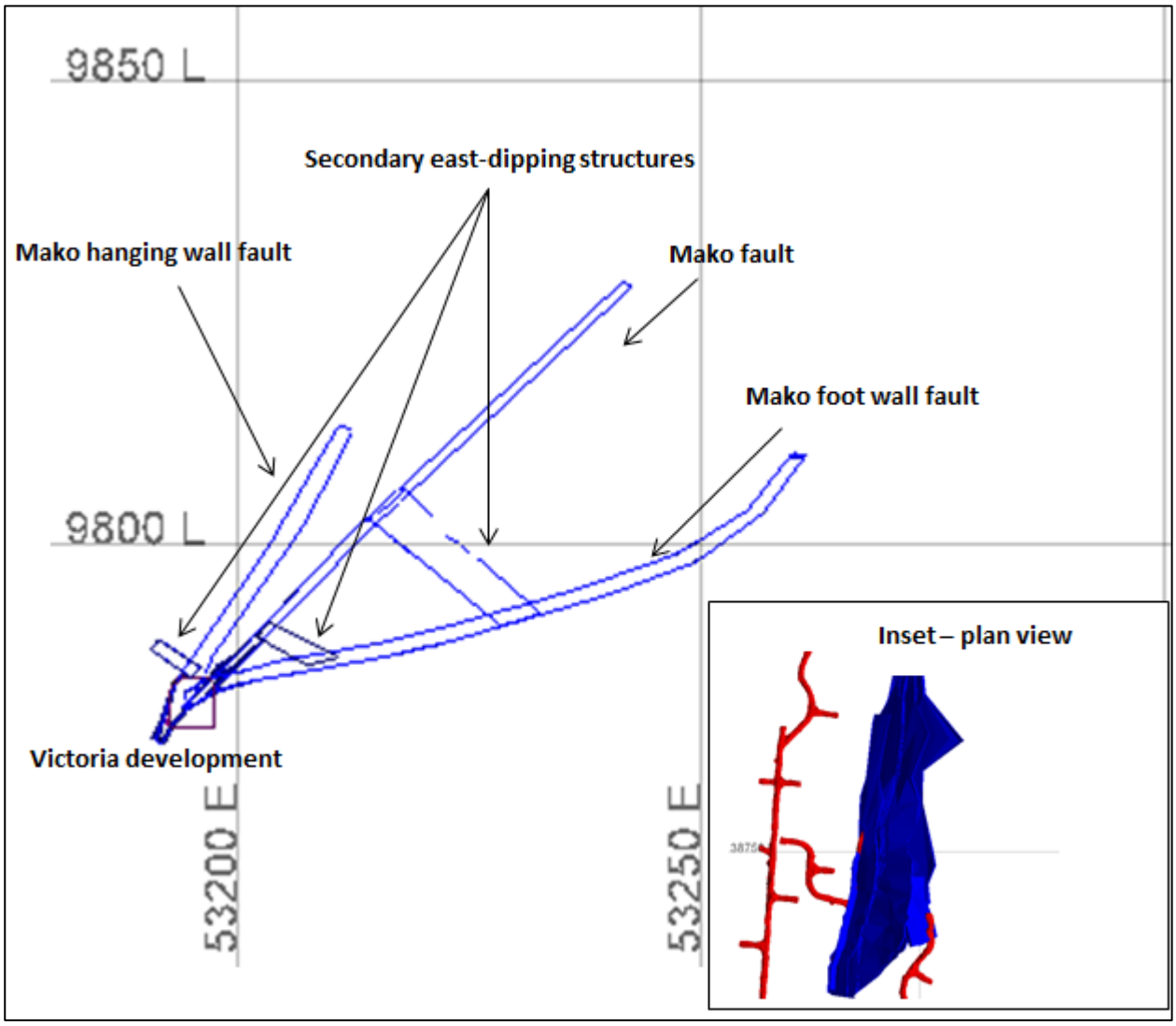
Figure 5-7 Section view of the Normanby Mako Resource looking north at 36,730 mN.



5.3.2.3 Victoria Mako

The Victoria Mako Mineral Resource extends across the southern 290 m of the Victoria compartment and has a maximum height of 60 m, a width of 30m and plunges at 6º to the north (Figure 5-8). The framework of the Mineral Resource is a set of three anastomosing west dipping faults on the east-limb of the First Chance Anticline. As a consequence of varying degrees of movement and dip angles on the west-dipping faults, prominent east-dipping structures, bounded by the west-dipping faults, have developed. This Mineral Resource is currently being mined.

Figure 5-8 Cross section of the Victoria Resource at 38,740 mN.

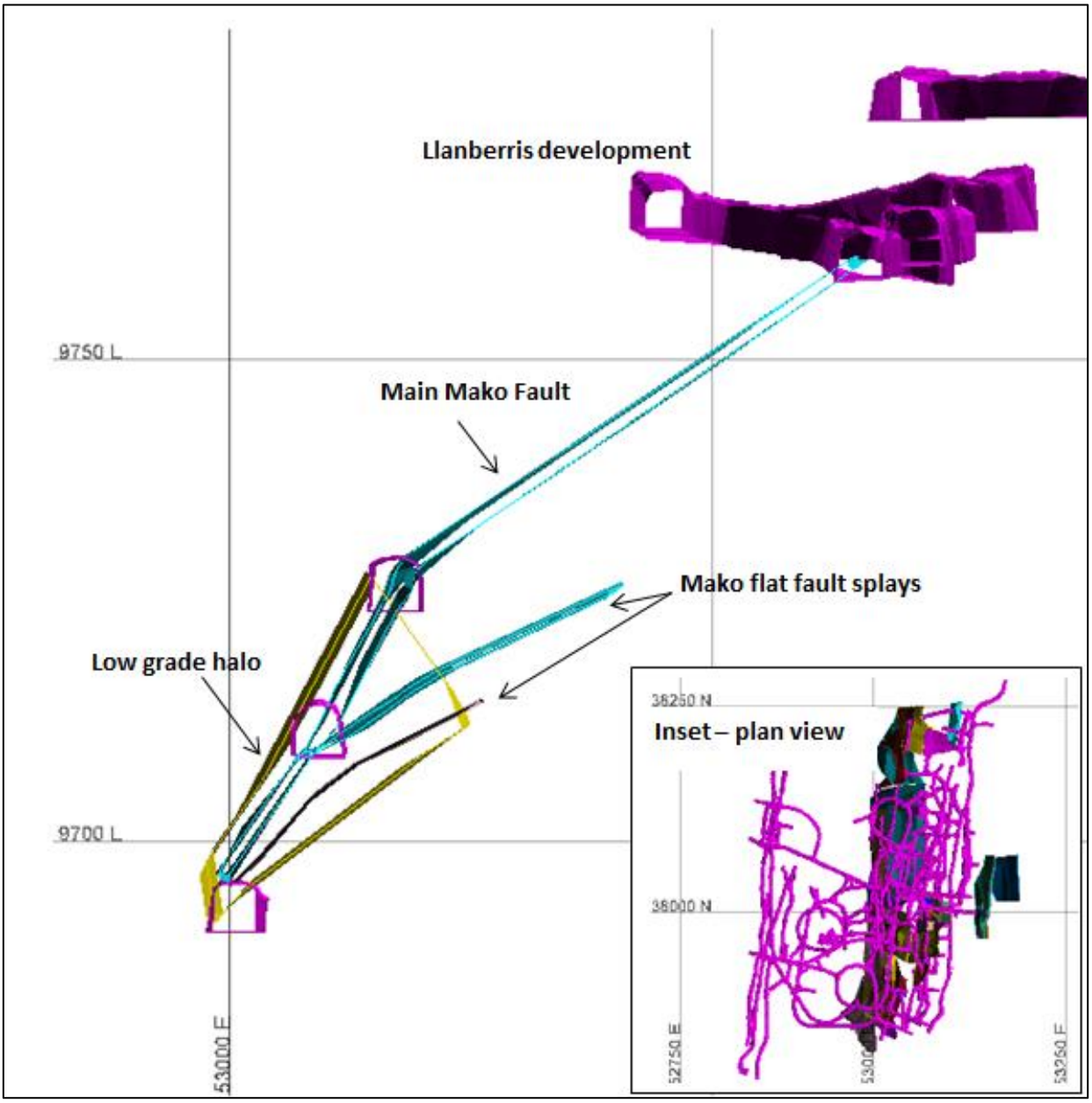


5.3.2.4 Llanberris Mako Hinge

The Llanberris Mako Hinge Mineral Resource is located on the First Chance Anticline, within the Llanberris compartment (Figure 5-9). It extends from the western portion of the east limb to the fold axis. The Mineral Resource has a strike extent of 395 m, a height of up to 130 m and widths ranging from 10 – 50 m.

The Mako Fault is interpreted to act as the major fluid pathway and the hanging-wall of the Llanberris Mako Hinge Mineral Resource. The Mako Fault is roughly bedding parallel on the west limb and then gradually flattens to 40^0 in the middle of the east limb. Several roughly parallel flat faults are interpreted to branch off from the Mako Fault. Quartz emplacement is generally concentrated in the Mako Fault across the Mineral Resource. Gold mineralisation is discretely concentrated in the Mako Fault in the north of the Mineral Resource however in the south, gold mineralisation transitions from the Mako Fault into a footwall splay. Interaction between this footwall splay and the Mako Fault has also created complex high grade spur veining. The Mineral Resource is currently being mined.

Figure 5-9 Llanberris Mako Resource. Cross section at 38,050 mN looking north.



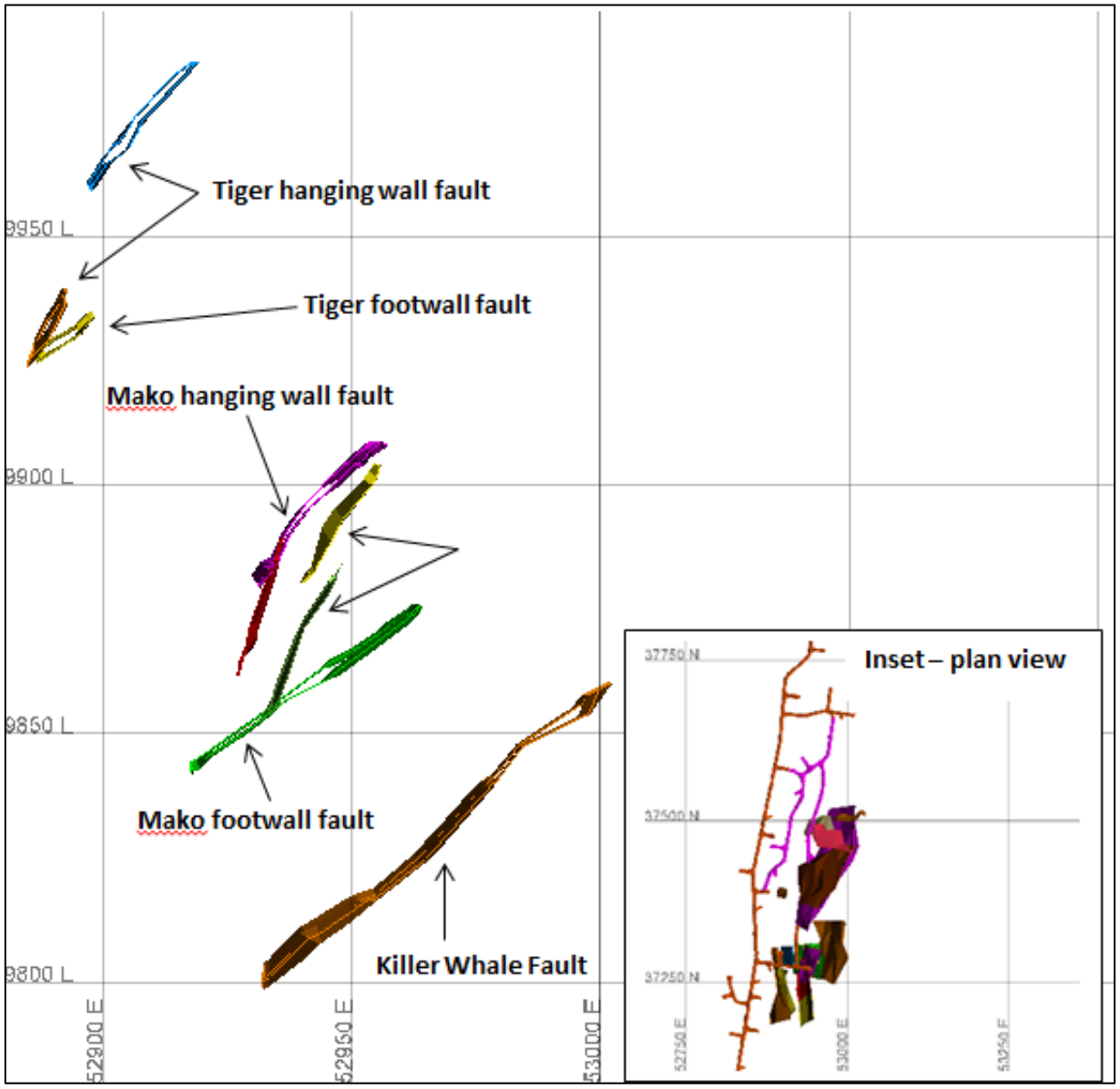
5.3.2.5 Canton Mako

The Canton Mako Mineral Resource extends across the whole Canton compartment and consists of mineralisation on two levels: Tiger (Upper) and Mako Lower (lower) (Figure 5-9). Mineralisation extends across 350m of strike, a height of 150 m and a thickness of 5-30 m; mineralisation is also observed to plunge at 15^0 to the North.

Tiger Mineralisation extends southwards from the centre of the compartment on the First Chance Minor Anticline. Mineralisation is controlled by a series of parallel west-dipping faults. The Tiger fault is also expressed 20m down-dip on the east-limb of the Scandinavian Anticline however this is only a short-ranged structure with a steep 20 degree plunge to the south.

Mako mineralisation in the south of the compartment consists of a steep west-dipping hanging wall fault diverging from a flatter footwall fault. In the north of the compartment the north plunging mako converges with the west dipping Killer Whale Fault. As the Mako mineralisation merges with the Killer Whale Fault the mineralisation flattens and appears to mimic the orientation of the Killer Whale Fault. The Killer Whale Fault is generally considered to have low grade mineralisation with strong faulting.

Figure 5-10 Llanberris Mako Resource. Cross section at 38,050 mN looking north.



6 EXPLORATION ACTIVITIES

6.1 Exploration Overview

Previous exploration activities are summarised in Section 4.1.

6.2 Exploration Methods

Both historically and currently, in mine exploration is dominated by diamond core drilling and development.

Priority regional targets are being tested with surface geochemistry. Programs have focused on data consolidation, surface geochemistry and interpretation. A necessary focus on Resource geology and in-mine exploration has taken priority from regional exploration.

6.2.1 Geology

Ballarat regional and local geology is presented in Sections 5.1.

6.2.2 Geophysics and Remote Sensing

No geophysical exploration has been undertaken at Ballarat.

6.2.3 Geochemistry

A regional exploration survey is on-going at the Ballarat Gold Project. The survey, based on nominal 30m x 300m sample spacings approximately across strike, will cover the EL3018 footprint, excluding alluvial drainage channels and areas of basalt cover.

The program uses an in-house portable XRF (Olympus Delta DP-4050) at surface for data collection. The program includes significant challenges, principally the migration of chemistry from fresh through weathered bedrock and surface cover, a known history (and continuation of) surface disturbance.

The program includes three components:

- Selective scanning of core and from underground operations to identify detectable chemical variation that vectors towards mineralisation (901 samples)
- Baseline surface programs to identify chemical variation in saprolite and to demonstrate a usable correlation between surface XRF and historic CRA c-horizon auger chemistry surveys (603 samples), and
- Campaign surface chemistry sampling (501 samples and on-going).

6.2.4 Drilling

All drilling data utilised in the Mineral Resource estimate were collected from diamond drill core drilled between July 2007 and February 2018. The drillholes informing this Mineral Resource total 90,225 m with an average hole depth of 158.3 m. Since January 2014, the majority of the drilling carried out has used NQ size drilling equipment, however a small proportion of the holes drilled have been used HQ sized. Drilling is generally completed on sections normal to the strike of the mineralisation with some exploration-level drilling having steeper or more acute angles of intercept.

Grid coordinate system

All references are in mine grid. All underground survey data is stored using mine grid with vertical control being Australian Height Datum 1971 (AHD) plus 10,000 m. The relationship between the national grid systems that have been used and the mine grid since it was established are shown below (Table 6.1). The mine grid was established prior to CGT taking ownership of the Ballarat mine in 2010. The declination of the Ballarat area to magnetic north is shown in Figure 6-1.

Relationship between mine grid and Map Grid of Australia (MGA94)

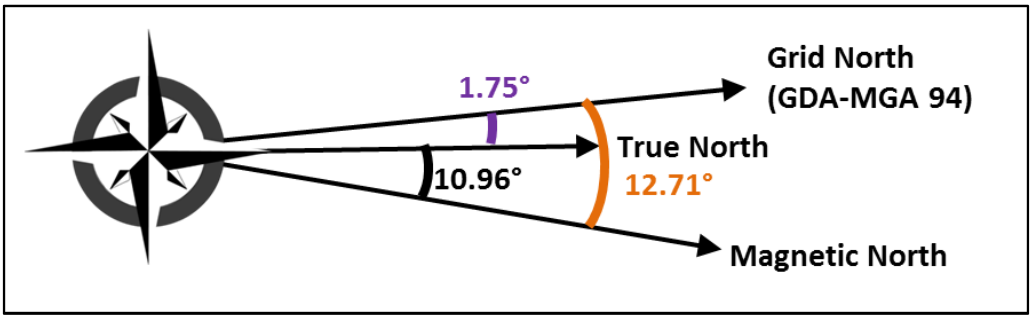
Scale	1.000310271
Rotation	00deg 00min 00sec

Shift North	5800177.789
Shift East	700120.707

Table 6.1 Relationship between mine grid and Map Grid of Australia (MGA94)

	Mine Grid			MGA94		
Point #	Easting	Northing	AHD Elevation	Easting	Northing	AHD Elevation
BGF003	52401.537	35638.516	452.951	752522.244	5835816.305	452.951
BGF004	52150.073	35776.976	435.426	752270.702	5835954.808	435.426

Figure 6-1 Relationship between mine grid north, true north and magnetic north (2015)



Drilling Survey Data

Drillhole collars have been surveyed by CGT surveyors, using a one-man total station, and downloaded electronically. Five holes informing this Mineral Resource estimate were not collar surveyed; all these holes were within fans of drilling and had their positions estimated based on the position of adjacent surveyed collars. These holes are considered acceptable for inclusion in the estimate as they are deemed accurate to within 300 mm. Where a drillhole collar is not picked up and its position cannot be estimated, it is omitted from use in any Mineral Resource estimation.

Downhole surveys were carried out using Globaltech Pathfinder® downhole multi-shot cameras up to January 2015 when they were replaced with Reflex EZ-Trac 6393 cameras. These cameras are used to carry out single-shot surveys every 30 m during drilling and multi-shot surveys every three metres upon completion of the hole. The cameras are routinely replaced every 6 months with certified re-calibrated cameras. Onsite calibration checks of each camera occur on arrival and then once a month or if results are anomalous.

All holes informing the estimates have had a final multi-shot survey carried out.

6.2.5 Sampling

Primary samples

Both CGT and LGL used the logged geology to define expected ore zones, sampling being extended at least 1 m into waste zones to avoid missing any contact mineralisation.

Sampling intervals have a nominal length of 0.7 m with a minimum length of 0.3 m if required. Prior sampling schemes used nominal intervals of 0.4 m for CGT (2011-2014) and 1.0 m for LGL (pre 2011). Sample weights vary from 1.6 kg to 4 kg. Where the sample size exceeds the maximum Leachwell sample weight (2.3 kg) the sample is then rotary split down to a 2 to 2.3 kg sub-sample and the remaining material is bagged as reject.

Laboratory preparation

The primary Laboratories used between 2007 and 2018 are listed in Table 6.2.

Table 6.2 Primary assaying laboratories

Period	Laboratory	Location
September 2007 to April 2008	Amdel	Adelaide and Kalgoorlie
April 2008 to August 2009	Ballarat Goldfields (BGF) owned by LGL	On site at Ballarat mine
June 2011 to March 2018	Gekko Systems Laboratory	On site at Ballarat mine

An on-site (BGF) laboratory was commissioned by LGL in March 2008 which then replaced Amdel Kalgoorlie for the processing of all geological samples. Upon CGT's purchase of the mine the BGF laboratory was sold to Gekko Systems Pty Ltd (**"Gekko**") who continue to operate with the mine as a client.

6.2.6 Analysis

Drill hole sample analysis methods

The Mineral Resource is informed by 8,239 samples within mineralisation domains of which 175 (2.1%) are half-core analysed, the remaining 8,064 (97.9%) samples are full core analysed.

6487 (98.9%) samples have been treated using the Leachwell 2000 method which uses a nominal sample weight of 2 kg which is bottle rolled for 24 hours with the Au level in the resulting aliquot measured via Atomic absorption spectroscopy (AAS). Since 2011, all primary assays are analysed using full-core and the Leachwell method.

41 samples (0.5%) have been treated using the fire assay technique on a nominal 50 g charge.

53 samples (0.6%) were treated using the PAL 1000 (Pulverise and Leach) method whereby roughly 1 kg of sample, 2 kg of grinding media, 1 L of water and two cyanide assay tabs were combined in an iron pot where grinding and leaching was simultaneously completed in roughly 30-60 mins.

The PAL 1000 and 50 g Fire Assay analytical techniques are no longer used by CGT to analyse diamond drill core samples. However, the samples informing this estimate which were analysed using these techniques are considered to be representative of the in-situ gold grades on the basis that they are;

- considered within industry to be acceptable methods of analysis for gold mineralisation in similar gold deposits and,
- supported by adjacent drilling analysed using Leachwell 2000 assays confirming the tenure of the gold grades returned.

Assay Certificates have been provided with analytical results received from the Gekko Laboratory since 2010. These certificates have been reviewed by company geologists as they have been received and filed on the company's computer network. Any issues identified (e.g. failure of standards, missing samples and compromised samples) have been addressed with the laboratory and corrected where possible before assays are loaded into the company's drilling database.

Some Assay certificates from drilling carried out by the mines previous owners (Lihir and BGF) have not been located. These affect less than 10% of the drill hole data informing this Mineral Resource and as such are not considered to be a material concern

Apparent relative density

Apparent relative density was determined by the water immersion technique with results shown in Table 6.3. This data was used to assign a density of 2.66 g/cm^3 to ore domains and a density of 2.74 g/cm^3 to the surrounding blocks. Three anomalous results have been noted and discarded, two BGF results which were light due to vuggy quartz and an extremely heavy Gekko result due to a calculation error.

Table 6.3 Apparent relative densities attributed to the Ballarat Resource (2007-2018)

Source	Lithology	No. samples	Average bulk density (t/m^3)
BGF/GEKKO/CGT	Quartz	395	2.66
BGF/GEKKO/CGT	Shale	102	2.77
BGF/GEKKO/CGT	Sandstone	135	2.71
Combined Sample Total			632

6.2.7 Sample Security

Core trays are brought directly from the underground drill sites to the site core shed, located within 500 metres of the mine portal and within the fenced perimeter of the mine site, which is not accessible to the general public. After core logging and sampling the prepared samples are packed into pods and delivered to the assay laboratory located 50 metres from the core shed and within the mine site compound. Access to mine site is restricted to employees and authorised visitors.

Geological data is entered into and uploaded electronically from laptop computers into the SQL database via an acQuire software program front end. Internal validations restrict the codes that can be entered with additional safeguards including automated overlap and interval gap checks. For hole ID's and sample numbers only unique values can be entered in to the database. Data entry is limited to geology logging staff with access permission set by the site IT manager.

6.3 Exploration Results

Exploration results are used to support the Mineral Resource estimate. Further details are provided in Section 8.

6.4 QA/QC Results

6.4.1 Blanks and Certified Reference Materials (CRM)

BGF, LGL and CGT undertook laboratory QA/QC programmes using standards and blanks. Assay data from 570 diamond drill holes are included in this resource estimate, of which 31 were completed during the BGF/LGL era and 539 were drilled by CGT. Insertion rates during BGF/LGL era are not well documented, however during CGT's stewardship standards were inserted randomly at a rate of 1 per 20 primary samples. Blank samples were inserted at greater than 1 per 20 primary samples and following samples that are considered likely to contain elevated gold grades.

Between June 2005 (earliest assay data used in estimated resources) and March 2018 11,378 standard samples, from a suite of 44 standards, were included in laboratory reports with 95.4% returning results within 2 standard deviations of their declared value. The standards submitted are considered appropriate to the style of mineralisation being analysed and covered a range of gold grades consistent with the expected range of results. During the same period 12,928 blank samples were reported with 98.2% returning results less than 0.2 g/t Au. The majority of blank samples returning results above 0.2 g/t were investigated and found to follow high-grade or very high-grade primary samples.

Field duplicate samples are not currently submitted due to the highly variable nature of gold grades within Ballarat's ore lodes. Splitting of samples at any point prior to complete pulverisation has been shown to produce non-repeatable grades.

Table 6.4 Rate of blanks and standards inserted into sample submissions.

Company	Blanks	Samples per blank	Number of standards inserted	Samples per standard	Number of unique standards
BGF/LGL	3,925	-	5,118	-	8
CGT	9,003	14	6,260	20	42

The historical insertion rates are shown in Table 6.4 above.

Geological logging validation

Geological core logging for mineralisation, lithology, alteration, structure and rock quality designation is entered directly into the acQuire database using laptop computers. Only approved lithology and alteration codes can be entered into the database.

During data entry any overlapping intervals entered by the logging geologist are flagged by an error message as soon as they occur. Gaps in logging are identified via scripts run regularly in acQuire for each drill hole.

Core photography is verified prior to sampling. Upon receipt of assays all significant intersections are reviewed against logging and core photos to ensure consistency with expectations. This check is initially carried out by the responsible logging geologist or their supervisor.

Core recovery validation

Core recovery is recorded in the lithology logging field of AcQuire database as “core-loss”. Core loss is initially delineated by diamond drilling staff during core layout underground. During core orientation and mark up by field assistants, the position of the core loss is reviewed for consistency, if the mark up does not match the geologist responsible for logging the core is consulted to determine the correct position of the interval. Where necessary, diamond drilling staff are consulted to determine the final position.

7 MINERAL PROCESSING AND METALLURGICAL TESTING

7.1 Overview

processed have matched the supply of mined ore. The plant continues to operate at 50% of its rated capacity in line with ore availability.

The gravity and flotation metallurgical performance was as expected, with tailings grades comparable to that of previous years.

A second hand ball mill, purchased in the 2016/17 year, was transported to Site and will be installed in the existing circuit when finances allow. This will grind the gravity tail to liberate fine locked gold prior to flotation. At present, only the pre-existing -300 micron fraction is being fed to flotation while fine gold and sulphides still captive in the +300 micron tail are bypassing flotation direct to tailings. The capture of this fine gold represents a significant opportunity, not only for higher gold recoveries from ore, but the potential reclamation and retreatment of the existing (higher grade) tailings.

The leaching circuit was again constrained for much of the year by resin column capacity, with some increase in the amount of gold entering the concentrate stockpile between the gravity and leaching circuits. A number of additional shifts were worked to maximise leach production and keep the concentrate stockpile at a reasonable level, however the ultimate solution requires a second resin column to remove the current bottle neck. However, this is still cost prohibitive, particularly since a second column would produce no additional gold in itself.

Leach metallurgical performance improved slightly on the previous year with overall recovery increasing from 87 to 88%. This improvement came from the leach recovery from solids (94% to 96%), with greater control over grind size and less competition from deleterious minerals such as Stibnite.

Considerable effort went into upgrading the flocculent dosing system to the feed cones and the thickeners to generate higher underflow densities (additional 5% solids by weight) with lower amounts of entrained soluble gold being lost to detox. However despite this work, soluble recovery fell slightly from 92% to 91% and continues its dominant influence on overall metallurgical efficiency. With concentrate GIC increasing and cash reserves falling, priority was given to moving gold from stock through leach at higher rates to maximise gold production at the expense of recovery. However this strategy is only temporary and based on business needs at the time.

The process flowsheet has not changed appreciably in the past 12 months. Process water replaced dirty water on the 5mm screen wash which eliminated spray blockages and greatly improved screening efficiency. This resulted in a significant reduction in unnecessary circulating load around the VSI crushing circuit, reducing liner wear and doubling the life of the VSI wear tips. A dewatering cyclone was installed on the DSM screen feed to reduce loading and improve efficiency by directing water and fines directly to flotation feed.

The processing plant can be split into two main stages, Crushing, Gravity & Flotation (Figure 11-1) and Leaching (Figure 11-2).

7.2 Metallurgical Test Work

- The key areas of metallurgical test work and plant optimisation over the 2017/2018 year have included:
- Water balancing – substitution of dirty water for 5mm screen sprays with clean process water and subsequent re-balancing of the dirty water balance.
- Leach thickener flocculent automation – dedicated pumps now installed on all feed cones and thickeners with automated reagent dosing based on leach feed rates to deliver higher underflow densities and lower soluble gold losses.
- Incorporation of a dewatering cyclone ahead of the gravity tail DSM screen to send water and fines directly to flotation, improving screen performance and reducing fines losses to tailings.
- Testwork, selection and installation of a positive displacement (hose) pump on the leach thickener 2 underflow to better handle the higher densities being produced as a result of the flocculent optimisation project.
- Modification of the acid wash tank to handle 2 beds of resin to match double bed stripping and deliver greater strip/EW production rates whilst easing the resin bottle-neck. Previously during acid washing, stripping would revert to single beds with a reduction in production during this time.

- Filtration test work on leach residue to evaluate whether filtration was a viable alternative to thickening in order to reduce soluble gold losses via entrainment with the tailings solids. The result was marginal at best, with recovery improvements barely able to offset the capital and operating costs. Subsequently, improvements to the existing CCD circuit were then considered, namely incorporation of a third thickener to increase wash efficiency and therefore gold recovery. The economics were quite strong, but the project will see a hiatus until the availability of cash improves to progress the project.

7.3 Metallurgical Accounting

- Metallurgical accounting is based on gold produced + gold in tailings + change in circuit GIC to determine gold in feed.
- Samples are taken by hand sampling of solid and slurry streams.
- Monthly plant recovery calculations are based on actual gold recovered – gold in feed less gold in tail plus circuit stock changes.
- There were no significant changes to the metallurgical accounting process during the year

7.4 Mineral Processing Design

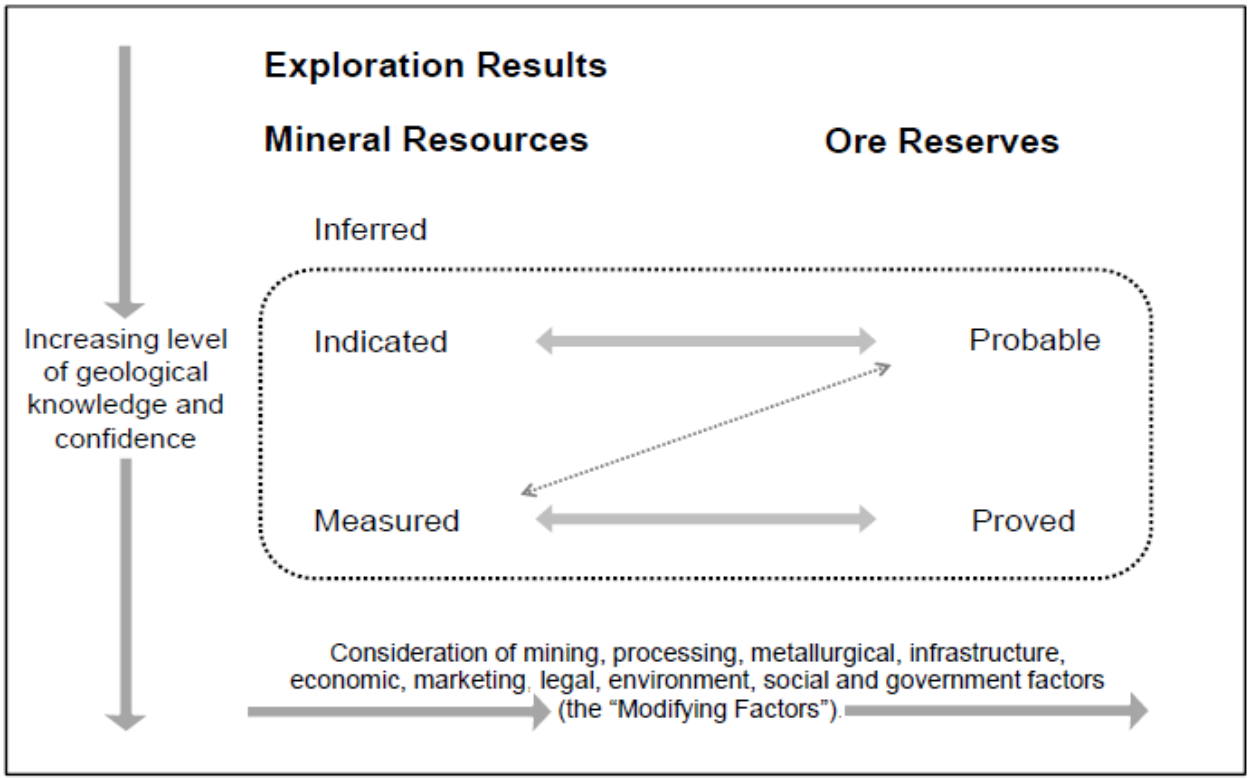
- The focus on future flowsheet design will concentrate on the incorporation of the mill ahead of the flotation circuit to provide additional liberation and improved gold recovery. However, the ball mill is unlikely to be commissioned until the 2019 year when additional (separate) tailings storage capacity is available to segregate the ball milled (lower grade) tailings from existing higher grade tailings in such a way as to allow future tailings retreatment.

8 MINERAL RESOURCES

8.1 Summary of Mineral Resources

This Mineral Resource has been classified in accordance with the JORC Code 2012. When following the guidelines of the JORC Code 2012, tonnage and grade estimates are classified so as to reflect different levels of geological confidence and different degrees of technical and economic evaluation. A geologist will estimate the Mineral Resource using geoscientific information such as drillhole cores, sample assay values and QA/QC data (Figure 8-1).

Figure 8-1 General relationship between Exploration Results, Mineral Resources and Ore Reserves



The Mineral Resource of the five Ballarat lodes as of March 2018 is given in Table 8.1.

Table 8.1 Mineral Resource summary as of 31 March 2018. All Mineral Resources reported at 0g/t Au cut-off

Category	Mineral type	Gross attributable to licence		Net attributable to issuer -100%			Remarks
		Tonnes (kt)	Grade (g/t Au)	Tonnes (kt)	Grade (g/t Au)	Change (tonnes) from previous update Increase %/(Decrease %)	
Indicated Mineral Resource*	Gold	-	-	-	-	0%	Victoria Mako
	Gold	-	-	-	-	0%	Britania Tiger
	Gold	-	-	-	-	0%	Normanby Mako
	Gold	3	9.6	3	9.6	100%	Canton Mako
	Gold	31	13.3	31	13.3	41%	Llanberris Mako
Inferred Mineral Resource*	Gold	-	-	-	-	(100%)	Llanberris Basking
	Gold	-	-	-	-	(100%)	Llanberris Cookiecutter
	Gold	82	11.0	82	11.0	100%	Victoria Mako
	Gold	24	5.4	24	5.4	(79%)	Llanberris Mako
	Gold	52	7.7	52	7.7	13%	Britannia Tiger
	Gold	100	8.8	100	8.8	100%	Normanby Mako
	Gold	123	12.0	123	12.0	(22)%	Canton Mako
Total	**Gold**	**414**	**10.2**	**414**	**10.2**	**5%**	**-**

** The Ore Reserves reported in **Section 9** of this report are based on Gold contained within the Mineral Resources listed above; therefore, this Mineral Resource estimate is reported inclusive of Ore Reserves. Note: Mineral Resources which are not Ore Reserves do not have demonstrated economic viability. Tonnage is reported in metric tonnes (t), grade as grams per tonne gold (g/t Au) and contained gold in troy ounces (oz Au). Tonnages rounded to the nearest 500 t, the figures in the table above may not balance due to rounding errors.*

8.2 General Description of Mineral Resource Estimation Process

CGT has completed an update of its Mineral Resource estimate for the Ballarat mine. The estimate consists of mineralisation within five separate fault zones referred to as lodes. Each lode is represented by a series of mineralisation wireframes with a combined volume of 1,985,420 m^3. Tonnage and grade values have been estimated based on 570 diamond drill holes drilled between 2007 and 2018.

Five block models have been created to estimate each of the lodes defined by CGT. Wireframes were constructed of geological domains within each of the lodes and were used to constrain the block model. Blocks that had already been mined were flagged as depleted in order to avoid reporting gold mineralisation which has been extracted by previous mining. An inverse distance squared estimation algorithm was applied, with composite top-cut grades selected using statistical analysis of the distribution of grade within each domain.

Portions of the models were classified as Indicated and Inferred Mineral Resources according to the definitions in the JORC Code 2012. After all items specified within the JORC Code 2012 (see JORC Table 1 in Appendix A of this report) such as sampling techniques, data quality and estimation techniques were considered, the Mineral Resources were classified according to drill hole density and spacing, as well as taking into account the number of samples and search ranges used to inform block estimates. The interpolated block model was validated through visual checks, a comparison of the mean composite and block grades, and through the generation of section validation slices.

8.3 Mineral Resource Estimate

8.3.1 Mineral Resource Input Data

Drillhole data

The total drillhole database covers a region spanning from 35,400 mN to 39,150 mN and 51,700 mE to 53,800 mE (mine grid). Since modern exploration commenced in 1991, over 4,600 diamond drill holes have been drilled into the Ballarat East goldfield.

The dataset used for this Mineral Resource estimate has been restricted to drill holes which penetrate the five lodes relevant to the current Mineral Resource estimate and only considers holes drilled between 2005 and 2018 (Table 8.2). This consists of 570 unique diamond drill holes representing, 90,225 m of diamond drill core and a total of 38,143 assay data records. 40 holes have been omitted from the data set due to lack of either a reliable collar position and/or downhole survey.

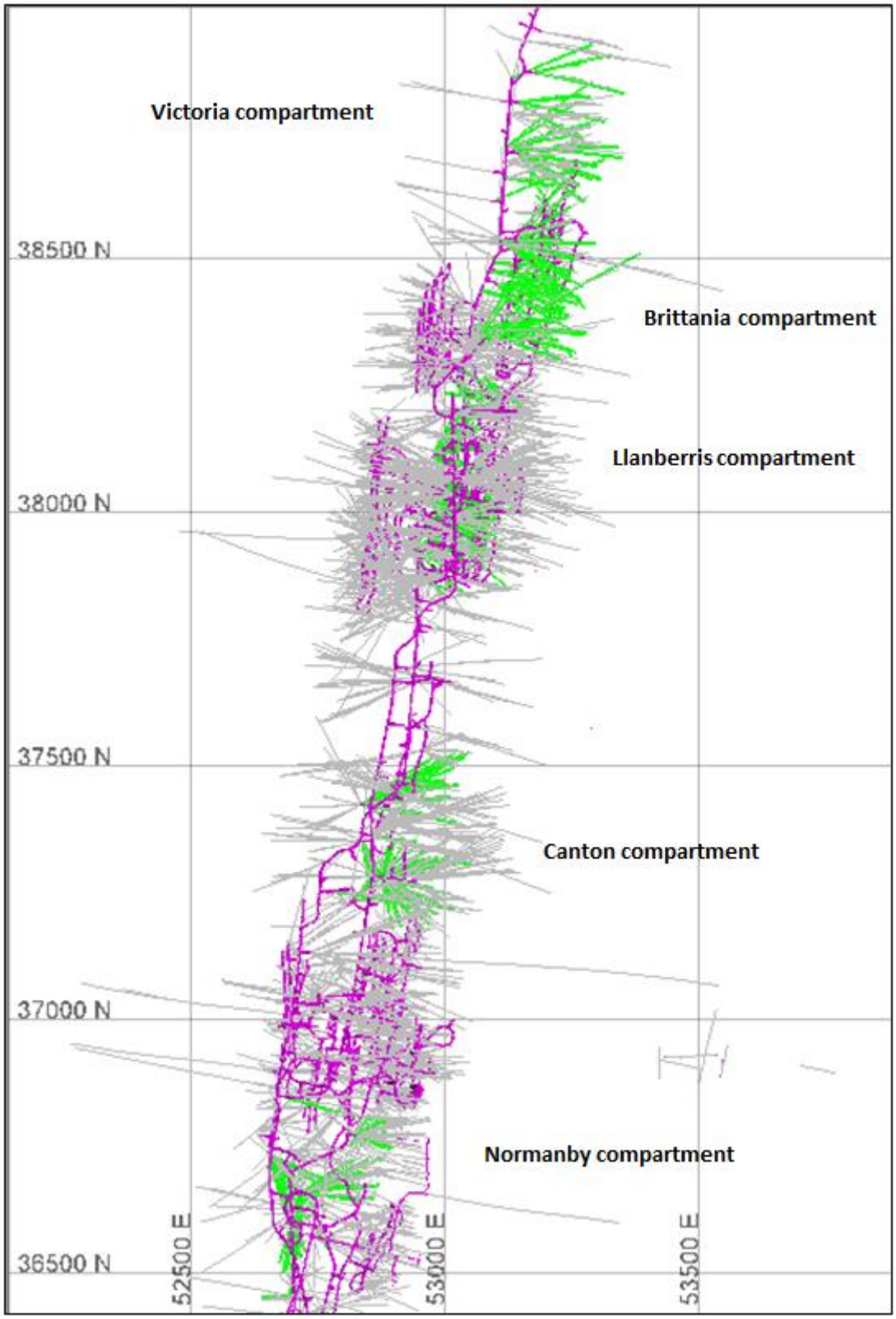
Drilling is carried out in east-west trending vertical fans spaced between 25m and 50m apart. Hole spacing within fans varies between 7 m and 15 m. Placement of diamond drill holes within the current Mineral Resources is shown in Figure 8-2.

Table 8.2 Summary of drillhole data informing the Ballarat Mineral Resource 2018

Resource	Diamond drill holes	Samples	Metres drilled (m)
Normanby Mako	65	3,060	12,849
Llanberris Mako	201	13,879	26,224
Victorian Mako	77	5,314	10,070
Canton Mako	107	7,585	22,181
Brittania Tiger	120	8,892	18,860
Total (unique drillholes only)	**570**	**38,730**	**90,184**

Note: Some drill holes intersect multiple ore lodes, as a result the total No. of drillholes is less than the sum used for each lode

Figure 8-2 Plan view of drilling (green trace) used to inform the 2018 Mineral Resource.



Drillhole logging

Qualitative code logging was undertaken for lithology, alteration, veining and geotechnical rock quality. Structural measurements of bedding, cleavage and fault planes were taken where possible to aid in the interpretation of the ore body orientation. The core is oriented against the north-south trending cleavage which is pervasive throughout the goldfield. This has been confirmed by geological mapping to be consistent throughout the underground mine workings. The intersection of geological structures logged from drill core and subsequently intersected by underground development has verified the means of core orientation.

Geological logging was carried out on all drill holes informing the estimate. Core photos are taken of each core tray throughout all holes informing the Mineral Resource. Over the period during which the drilling was carried out, a number of changes have been made to the core logging procedure to streamline and improve the process. These changes did not affect the way mineralisation domains are identified and interpreted.

Drillhole sampling

Core sample intervals were selected to represent mineralised zones. Mineralised zones are identified based on lithology and structural features i.e. such as faulting, percentage quartz and quartz textures. Sample start and finish points were adjusted so as not to cross lithological boundaries where possible. This practise allows for statistical analysis of grade distributions within specific zones of mineralisation. However, samples must be composited to a constant length to ensure consistent sample support for estimation purposes.

Three sample collection methods were used to collect samples from drill holes informing the estimate. Samples collected prior to 2011 were half diamond saw cut and sampled to nominal 1 m lengths. In 2011, the sampling method was changed to whole core sampling on nominal 0.4 m lengths for NQ2 core and 0.5 m lengths for LTK60 core. The nominal lengths were selected to generate approximately 2 kg of sample material as required for Leachwell 2000 analysis.

The change to full core sampling in 2011 was made to increase the volume of samples collected from diamond drill holes. This required a reduction in maximum sample length to provide the requisite 2 kg of sample required for Leachwell 2000 analysis. From August 2014 the maximum sampling length was increased to 70cm, which increased the sample size to 3.5 kg, the sample is now pulverised using LM5's and once homogenised is then split using a rotary splitter. Approximately 2 to 2.3 kg is then analysed using Leachwell.

Topography

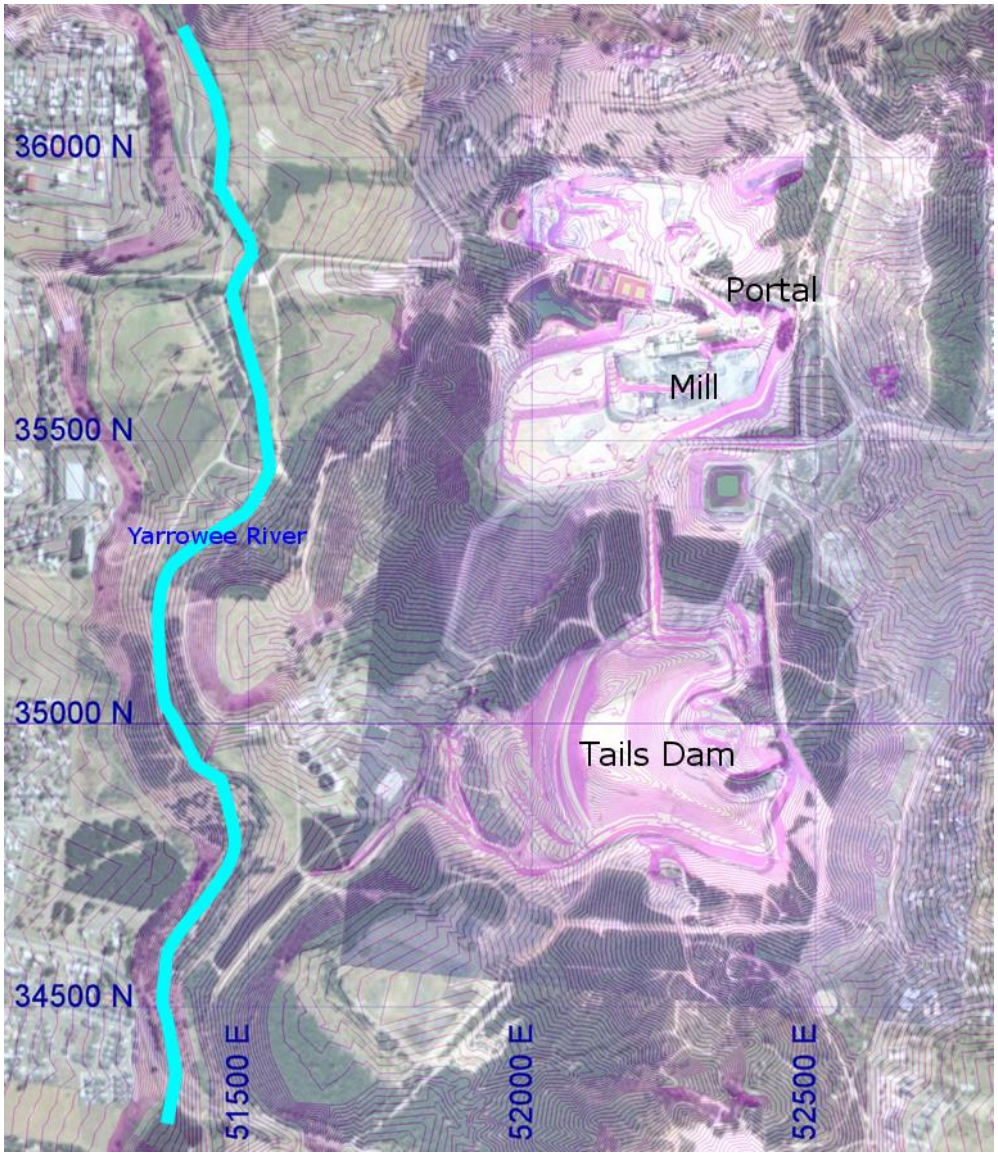
CGT's Topographical GIS layers (Figure 8-3) have been supplied by Spatial Vision (August 2012) under licence through the Victorian Government Department of Sustainability and Environment Spatial Information Infrastructure.

Since all holes used in this Mineral Resource estimate were drilled from underground, accuracy of topography is not a primary concern. Details regarding the lineage and accuracy of the topographic layer are outlined in Table 8.3. A review of surface holes and the Digital Terrain Model (DTM) showed 10 diamond or air core holes which differed by more than 5m and less than 22m from the DTM, none of these are used for Mineral Resource estimations, these holes will be corrected or marked for exclusion from future models.

Table 8.3 Topography elevation layer data quality summary

Data set source	
Lineage	Data have been derived from Melbourne water base maps and converted to Microstation .DGN format.
Processing steps	
Positional Accuracy	Varies with scale of capture and the contour interval. e.g., 1 m contours from aerial photos +/- 0.5 m 0.2 m contours from survey +/- 0.1 m
Attribute Accuracy	Varies with scale of capture and the contour interval. e.g., 1 m contours from aerial photos +/- 0.5 m 0.2 m contours from survey +/- 0.1 m

Figure 8-3 DTM over the Ballarat mine site (1 m contours – not to scale)



Data validation

Validation of the drillhole data was performed before commencing statistical analysis and estimation. These validation checks were;

- checks for duplicate collar location records
- overlapping assay intervals
- negative assay values
- drillhole depth vs. final “To” depth

There were no errors found in the final data-set for duplicate collar locations, overlapping assay intervals, negative assay intervals or drill hole depth vs. final “To” depth check. When importing .csv files into acquire automatic pre-load checks are done on blanks and standards. The file is not loaded if any anomalies are picked up until they are investigated and rectified.

Collar validation

As the collars for all holes informing this Mineral Resource are all drilled from underground positions, validation was limited to a comparison of the collars against the triangulation of the underground workings. This validation was performed using Vulcan software. No significant discrepancies between collar positions and the surveyed underground workings were identified.

Drillhole collars are regularly picked up by survey and that data is integrated into the drillhole database. In situations where a collar is lost before the survey pick up an estimated collar is used. An estimated collar can only be generated when there is a minimum of two drillholes with known collar positions drilled in the same campaign without out any rig move and thus sharing a common centre point.

Drillhole validation identified 22 holes having no survey pick up for the collar location; estimated collar positions were generated for 3 of these. Drill holes with only planned collar locations have been removed from the Mineral Resource estimate. Drill holes with estimated collar locations have been included in the Mineral Resource estimate as they are assumed to a level of accuracy within 300 mm.

Downhole survey data validation

All drill holes informing this Mineral Resource have been surveyed using multi-shot downhole surveys with measurements taken at nominal three meter intervals starting at end of hole and working back towards the collar. In some circumstances poor ground conditions have prevented multi-shot surveys being completed over the entire hole length, the remaining portions of these holes have been surveyed using single shot surveys on nominal 15 – 30 m intervals, however CGT believes that this has an immaterial effect on the quality of the Mineral Resource estimate

Assay validation

The assay data was validated for negatives, text values, significant figures, overlapping intervals and above and below detection limits. Assay intervals were compared against lithology logs to ensure no assays were attributed to intervals of lost core. This highlighted 1.95 m (0.05%) of sample length from a total of 3,737 m which had grade for invalid lithological codes (lost core, pre-collar, not logged), these have been reviewed to ensure they do not have a material impact on the Mineral Resource and have been corrected where possible. Procedures and systems are being developed to prevent these errors from occurring.

8.3.2 Geological Interpretation

Interpretation

Geological interpretation is by CGT staff on paper sections at a 1:100 and/or 1:250 scale, a working section interpretation is carried out by the core logging geologist. Once all drillhole information has been collected and verified, a final interpretation is carried out by the project exploration geologist supervising the drill rig.

Geological interpretations take into consideration lithological units identified, the orientation of major faults intersected, the orientation of individual quartz veins and the position of fold hinges. Interpretations are based on recognition of mineralisation styles based on characteristics observed during mining. Where available, face, wall and backs mapping of exposures underground were also incorporated into geological interpretations. All geological interpretations are peer reviewed by the Geology Manager and senior Mine Geologists.

This estimate considers mineralisation within five separate lodes. These lodes are separated by a combination of cross-course faults and major thrust faults. In general, major cross-course faults have divided the goldfield into compartments. The major thrust faults have been offset by these cross-course faults (Figure 5-5) Descriptions of the mineralisation styles specific to each of the lodes can be found in Section 5.

Modelling

Sectional strings are digitised by the Geologists using Vulcan software V9.1. Ore domains are defined based on the geological interpretations carried out by logging geologists. These strings are used to generate solid wireframes. Wireframes are checked for closure, consistency, crossing triangles, small triangles, small angles, coincident points and sample interval position prior to estimation. All wireframes informing this estimate passed these tests.

Assay intervals are selected during sampling to, wherever possible, honour lithological boundaries. This is the case for the main west-dipping and east-dipping structures. However, in the stockwork zones adjacent to the main structural features it is common for mineralisation to consist of a number of very narrow (less than 5 cm thick) veins spaced between 5 cm and 20 cm apart. In this instance it is not practical for sampling to represent each of the veins present, so sample intervals are selected to represent the stockwork zone rather than each

of the veins. Extrapolation of wireframes is limited to half the drill spacing or less if geological interpretations indicate an earlier change.

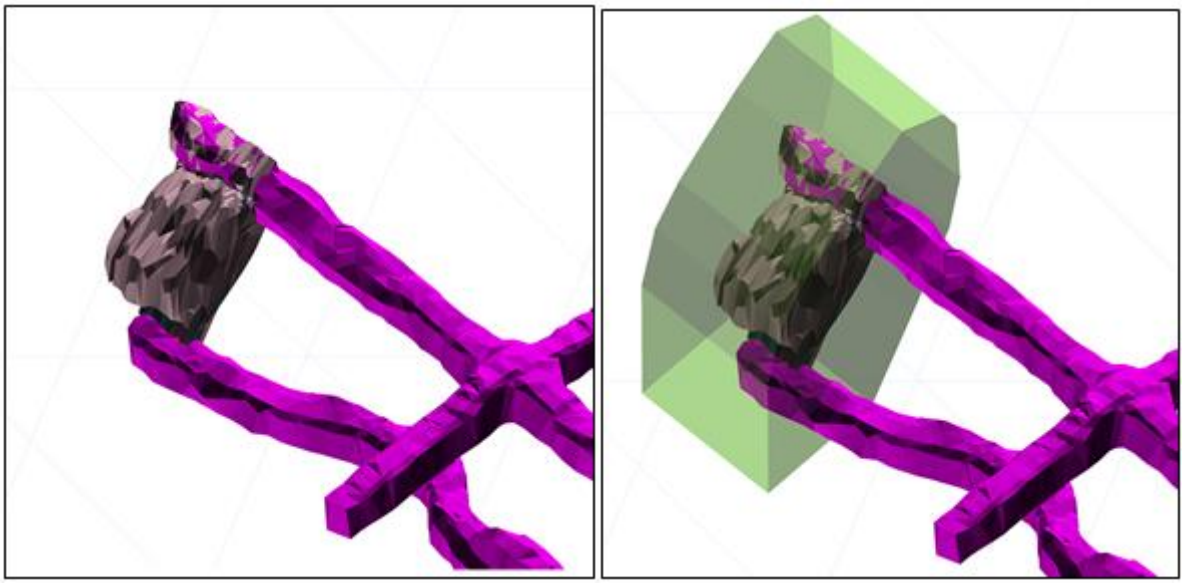
Model depletion due to modern mining

Mining depletion shapes are generated from strings created in Surpac software by the mine surveyor and exported into Vulcan. These strings are collected underground using a total station for ore drives, and a CMS for stope voids. Depletion zones around stopes are wireframed directly in Vulcan.

The models created to deplete block models represent both mined voids and any zones of sterilisation around unstable voids such as un-filled stopes. A single triangulation is created for each lode; this triangulation consists of the surveyed void, with areas of sterilisation modelled to include the specified sterilisation in each case.

Geotechnical staff are consulted regarding the size of exclusion zones around unstable voids during the modelling process. Figure 8-4 provides an example of the application of an 8 m exclusion zone around an open stope. This zone is considered sterilised and has been depleted from the block model.

Figure 8-4 Mining depletion wireframe construction and sterilisation around unstable void

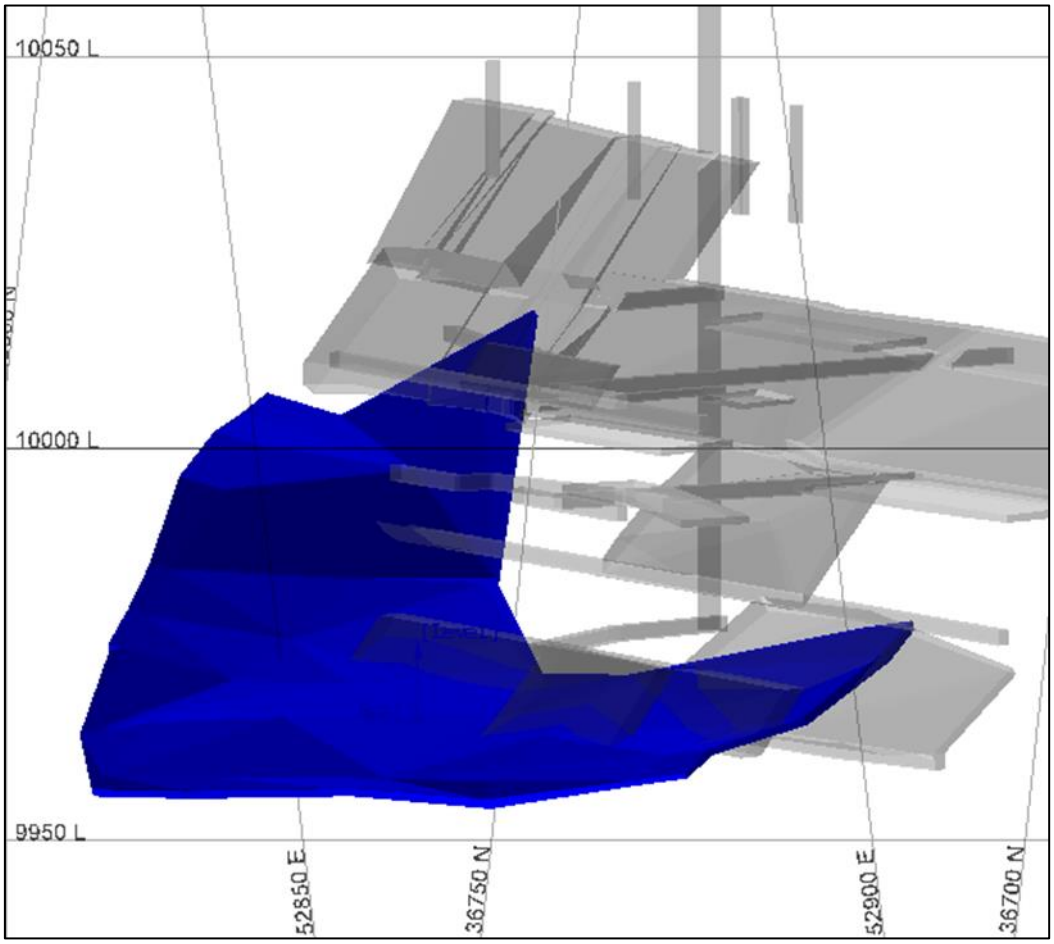


Model depletion due to historic mining

The upper portion of the Normanby Mako Mineral Resource is located adjacent historic underground workings mined during the late 19th and early 20th century. Using historic mine managers reports, level plans and survey data, three dimensional void models have been generated to replicate the historic workings including shafts, drives and stopes. These models have then been verified and where necessary adjusted to reflect actual void intersections during recent diamond drilling.

The Normanby Mako block model has been depleted using these historic void models Figure 8-5 shows the position of the Normanby Mako Mineral Resource relative to the modelled historic workings. The Normanby Mako Fault Lode is the only Mineral Resource affected by historic mining.

Figure 8-5 Sterilisation of the Normanby Mako Lode due to historic mining.



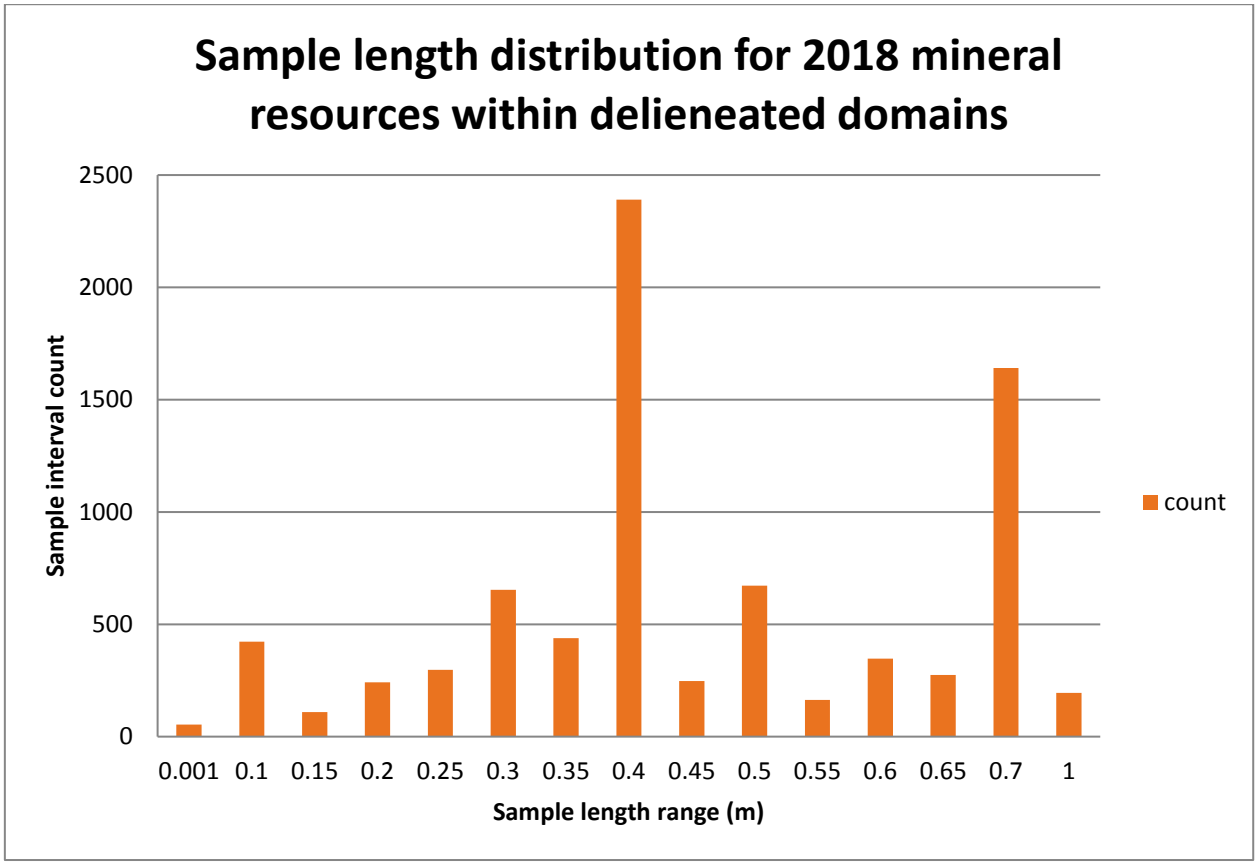
Note: The Normanby Mako Mineral Resource envelope is shown in blue relative to Historic Mining voids in grey.

8.3.3 Data Analysis and Geostatistics

Sample Lengths

Sample lengths vary through all five lodes due to the variation found through the different generations of drilling as well as interaction with often narrow geological domains. The distribution of the original sample interval lengths prior to compositing are shown in Figure 8-6.

Figure 8-6 Raw sample lengths within modelled domains.



Sample compositing

Sample compositing is performed to obtain samples of equal length. Samples with different lengths or volumes may result in grade bias. The selection of an appropriate composite length needs to take into consideration the sample lengths present and should honour geological or domain boundaries. The greater the composite length chosen, the greater the extent of grade smoothing that occurs.

There are six different methods of compositing available in Vulcan. CGT has selected the “run-length” method. This method produces composites of equal length (except for end of hole, geological and triangulation boundaries). “Short” composites (those less than 0.2 m length) were merged with the preceding composite where possible. The composite grade is length weighed mean of its components.

For consistency a composite length of 0.7m was used for all estimates informing the Mineral Resource, this length was chosen to more accurately represent recent drill campaigns which have used a maximum sample length of 0.7 m.

Statistical analysis

The effect of compositing within the domain wireframes changes statistical measures, the coefficient of variance (CV) for gold is reduced; summary statistics for the raw and composited samples are presented in Table 8.4. It is recognised that through the compositing process the mean grade of some lodes can increase or decrease depending on the samples being aggregated. This is attributed to domains being informed by a variety of sample lengths. Whilst compositing attempts to normalise sample support it can cause grade smearing.

Table 8.4 Summary statistics for raw and composite samples (length weighted, not declustered)

Lode	Raw CV	Gold grade (g/t Au)			Composite length	Composite CV	Gold grade (g/t Au)		
		Mean	Min	Max			Mean	Min	Max
Brittania Tiger	3.89	7.53	0.01	521.55	0.70	2.41	8.75	0.01	231.46
Canton Mako	3.21	11.68	0.01	480.18	0.70	2.93	12.79	0.01	480.18
Victoria Mako	6.24	9.41	0.01	1274.15	0.70	6.10	11.63	0.01	1274.15
Normanby Mako	2.79	10.00	0.01	220	0.70	2.42	9.43	0.01	173.22
Llanberris Mako	3.87	14.14	0.01	1072.5	0.70	2.57	14.87	0.01	389.02

Top-cut analysis of composite data

Top-cutting is applied to all domains estimated at Ballarat. This is done to prevent extreme grades resulting in over-estimation. All composite samples were considered when analysing domain data-sets for top-cut selection. Log probability plots were generated for all domains, with top-cuts selected by identifying inflection points in the grade distribution. Where multiple inflection points on the grade distribution curve are observed, the selection of top-cut grades is influenced by the level of confidence held in the domain estimated. Maximum gold grade and the associated top cut used for domains informing this Mineral Resource can be found in Table 8.5.

Table 8.5 Summary statistics for top cuts used for domains used in the Mineral Resource estimate

Britannia Tiger			Normanby Mako			Llanberris Mako			Victorian Mako			Canton Mako		
Domain	max Au g/t	Top Cut	Domain	max Au g/t	Top Cut	Domain	max Au g/t	Top Cut	Domain	max Au g/t	Top Cut	Domain	max Au g/t	Top Cut
hwf	110.07	56.00	fw1	73.69	55.00	mfn1	203.72	112.00	ed4	186.59	112.00	fw1	22.90	21.00
hws	66.63	26.00	hw2	173.22	95.00	mfn2	31.12	19.00	ez1	1274.15	188.00	ore13	232.77	76.00
wd2	76.84	34.00				mfn3	184.71	125.00	fw1	168.43	78.00	tfz1	23.96	22.00
wd3	221.16	45.00				mfs1	71.06	55.00				tfz6	43.12	36.00
wd4	231.46	71.00				sib	78.55	57.00				tfz9	65.62	37.00
wd5	147.93	145.00				sib2	59.52	42.00				west3	69.67	58.00
wd6	135.84	53.00				sib3	22.96	13.00				west4	121.67	62.00
						tfw1	43.85	28.00				C561S	480.18	128.00
						tfw2	163.22	17.00						
						mid_wd	389.02	187.00						
						tfw7	107.03	62.00						

Note: No lower cut was used for any of the estimates informing this Mineral Resource, exploration level domains not included

8.3.4 Domaining

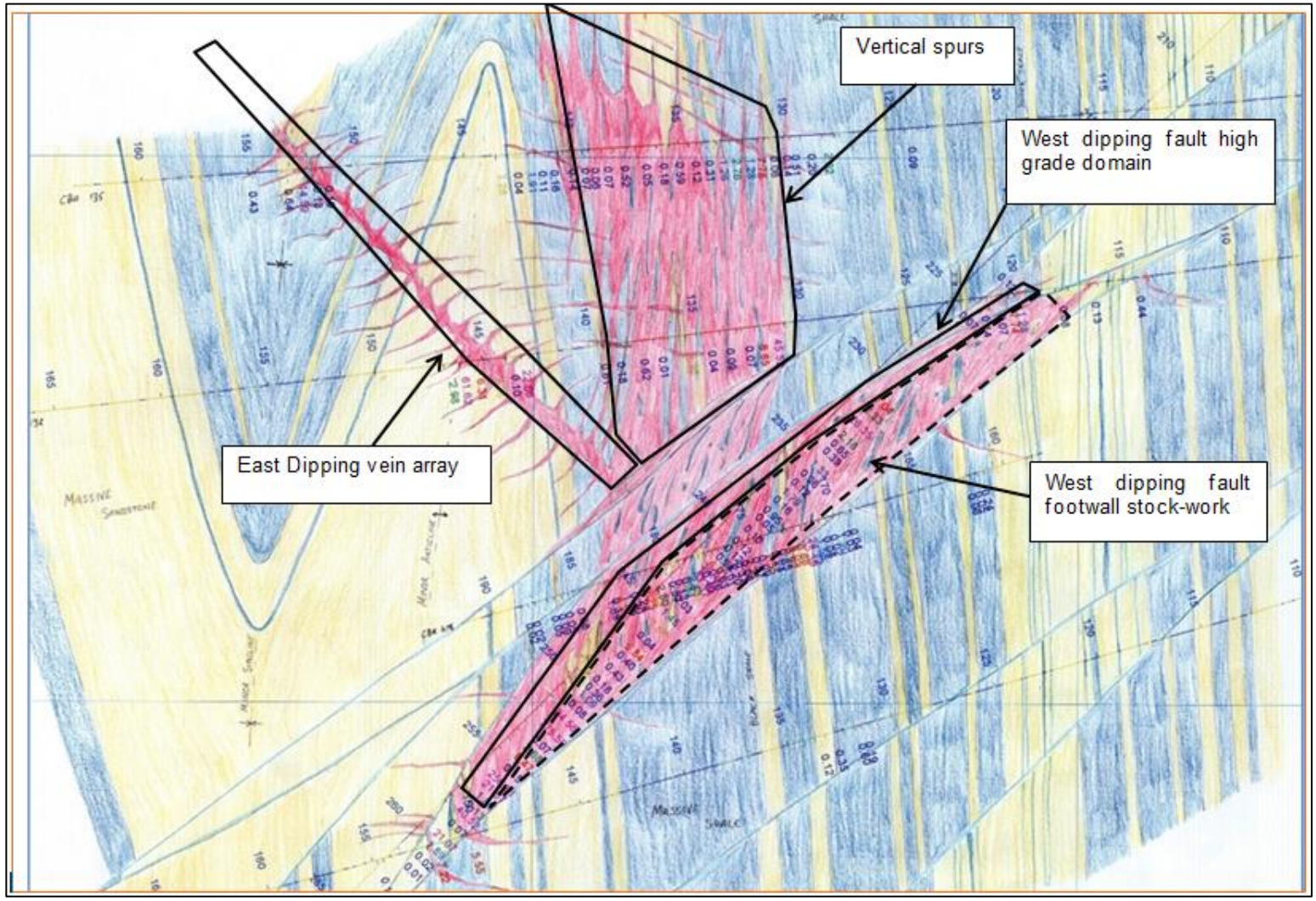
Geological domains

Domains are modelled in order of structural importance based on geological interpretations, however they are often refined by the distribution of gold grades. Domains are constructed to delineate zones of quartz mineralisation with consistent geological and grade characteristics.

It is common for large volumes of quartz mineralisation to be associated with the major west- and east-dipping fault zones, with elevated gold grades more frequently occurring immediately adjacent to the major structures. Figure 8-7 shows west- and east-dipping fault zones domained separately from a stockwork zone. The mineralisation associated with the Basking fault has been separated into two domains based on the gold grade distribution. This reflects drillhole assays which suggest there is a narrow zone of high-grade (frequently above 10 g/t Au) mineralisation on the hangingwall of the fault, with low to moderate (predominantly below 5 g/t Au) grades on the footwall.

It is common for zones of weak stockwork veining (less than 20% quartz veins relative to sediments) to be modelled and estimated to better assess the impact of dilution from these areas, but are not reported as part of the Mineral Resource.

Figure 8-7 Example of interpreted mineralisation domains in the Llanberris Basking fault zone (38175 mN) – not to scale



8.3.5 Block Modelling and Estimation

Volume model construction

Independent block models were constructed for each of the five lodes included in this Mineral Resource. The models were constructed using Vulcan software. The parent block size of 15 mN by 5 mE by 5 mRL reflects half the drill spacing. Variable sized sub-blocking down to a minimum of 0.2 mN by 0.2 mE by 0.2 mRL was utilised to enable blocks to fit the constraints of the wireframes more closely. Where domains overlap or cross each other, priority flags are set so that estimations populate the domains in order of importance.

Since 2014 the relative density data set has been doubled with quartz still set at 2.66 g/cm^3 and sediments now set at 2.74 g/cm^3.

Search neighbourhood parameters

Search parameters were based on drill fan spacing and the orientation of the domain being estimated, with blocks estimated in two separate passes. All search ellipses were oriented to match the geometry of the domain being estimated. The extents of the first pass search ellipse were constrained to 60 m along strike; 20 m down dip and 10 m across strike (approximately twice drill spacing). The second pass, low confidence search ellipse was extended to 90 m along strike; 30 m down dip and 20 m across strike (approximately three times drill spacing). Visual checks of the selected search ellipse orientation are conducted to ensure they match the associated domains.

Grade estimation

Grade interpolation method

Gold grade was estimated using inverse distance weighting (IDW) estimation to the power of two for all five lodes. Top-cutting was applied to composite grades prior to block estimation with grades above the top-cut threshold re-assigned to the top-cut grade. Block estimation was carried out one domain at a time. Sub-blocks were selected for estimation based on the unique flag field assigned to them during block construction. Composite samples used for estimation are selected using the unique "bound" field codes assigned during compositing. This ensures that sub-blocks are estimated using only composites from their associated domain.

Block models were validated by on-screen inspection and visual comparison of block and sample grades for gold. Additionally, a comparison of the mean input sample grades and the mean output block grades was also conducted.

A comparison of wireframe volumes against block model volumes was carried out. As some wireframes overlap others not all wireframe volumes are comparable with block volumes (dependent on the manner in which block priorities have been applied). Instead a comparison was made on a selection of wireframes which were not overlapped in order to obtain a true assessment of the efficiency with which blocks estimate the wireframe volumes. One domain was selected from each of the lodes estimated, the comparison showed a 0.01% difference between wireframe and block volumes (Table 8.6).

Block construction in areas of overlapping domains were visually assessed in Vulcan to ensure that block construction “priorities” have assigned blocks to the correct wireframes. All overlapping wireframes were reviewed visually in Vulcan and found to have blocks assigned to the correct wireframes.

Table 8.6 Comparison of wireframe and block model volumes

Lode	Domain	Block volume (m^2)	Wireframe volume (m^2)	% difference
Brittania Tiger	hws	7,955.96	7,953.55	0.03%
Canton Mako	ore13	16,873.48	16,872.92	0.00%
Normanby Mako	hwf	28,708.46	28,709.53	0.00%
Victoria Mako	ez1	6,409.74	6,420.03	-0.16%
Llanberris Mako	mfn3	13,974.86	13,974.98	0.00%
Total		79,195.56	80,653.59	-0.01%

Visual validation

Block grades were validated visually by comparing raw diamond drillhole grades (not de-clustered) against block estimates. The estimated grades show moderate variation from adjacent drillhole grades. This is due to sub-blocks for each domain being assigned the grade of the parent block for the specific domain.

Input and output means

The mean grade of the uncut sample composites (not declustered) and the estimated block grades were compared for all inferred/indicated domains estimated. Table 8.7 summarises the differences for each of the lodes in the Mineral Resource.

This analysis shows that the estimation has produced blocks with a mean grade 17% lower than the average of the uncut composite grades. The difference is attributed largely to composite top-cutting prior to estimation; however geological domaining and the estimation method used are also likely to have an effect.

Table 8.7 Mean grade comparison between the uncut composites and block model

Lode	Composites (g/t Au)	Block model (g/t Au)	Difference Increase %/(Decrease %)
Britannia Tiger	8.75	7.69	(12.1)
Canton Mako	12.79	11.98	(6.3)
Normanby Mako	9.43	9.15	(3.0)
Victoria Mako	11.63	5.67	(51.2)
Llanberris Mako	14.87	13.44	(9.6)

Note: Input data not declustered, includes all domains

Moving window statistics

Sectional validation graphs were created comparing the average of the estimated grades to the top-cut and uncut composite grades by northing. The graphs also chart the number of samples within each slice. Block estimates in well-drilled areas should compare well with the average grade of the respective composites. Areas that show significant discrepancy between the average composite grades and the estimated grades are areas of concern and require further investigation.

Figure 8-8 to Figure 8-12 show the sectional swath plot comparing uncut and top-cut composite grades against estimated grades. A north-south direction was used due to maximum continuity in that direction.

The plots show a reasonable correlation between the estimated block grades and input composited drill hole grades within well drilled regions. Discrepancies were found in sections of all lodes analysed, however in each case this could be explained by a combination of top-cutting of composite grades, tight domaining of narrow high grade zones and sample density.

Figure 8-8 Moving window sectional swath plot for the Britannia Tiger fault zone

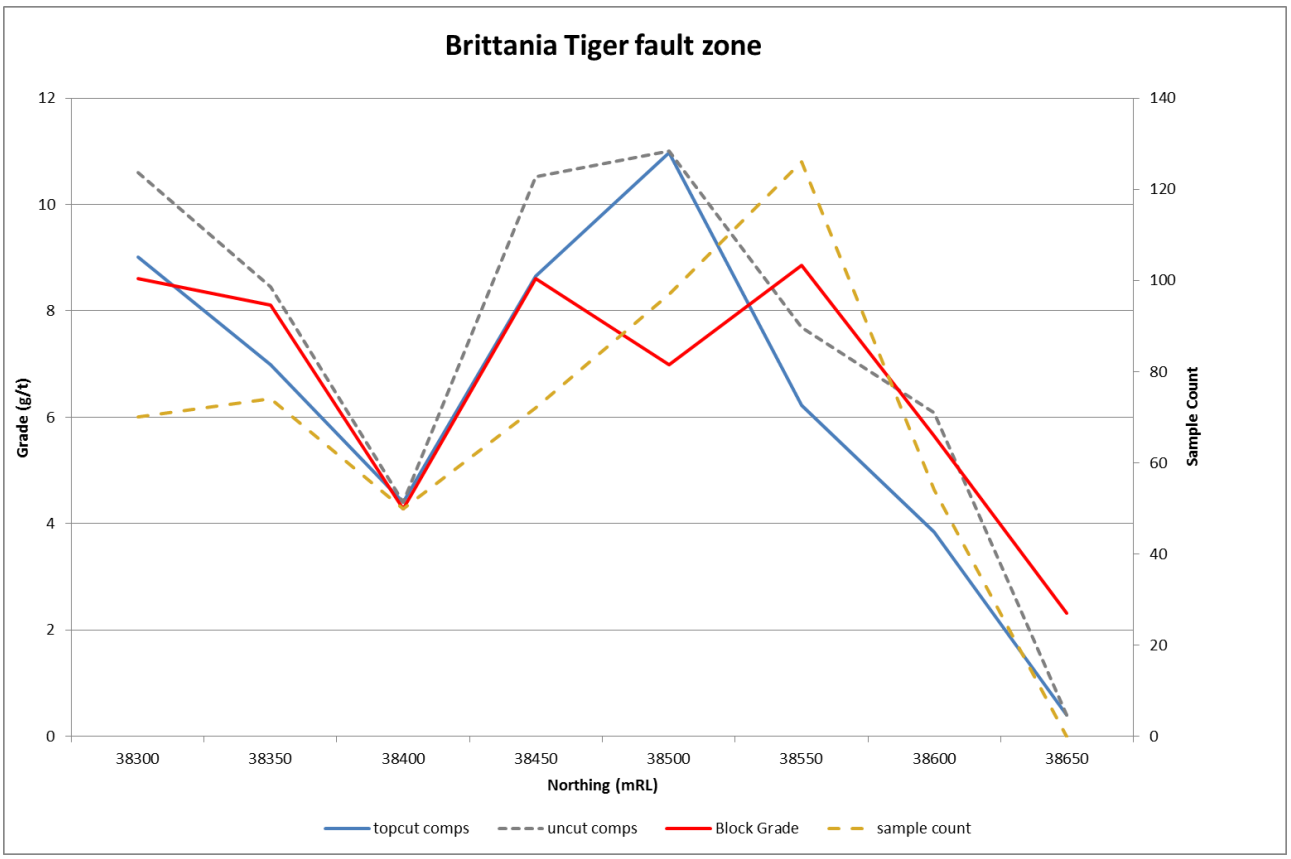


Figure 8-9 Moving window sectional swath plot for the Canton Mako fault zone

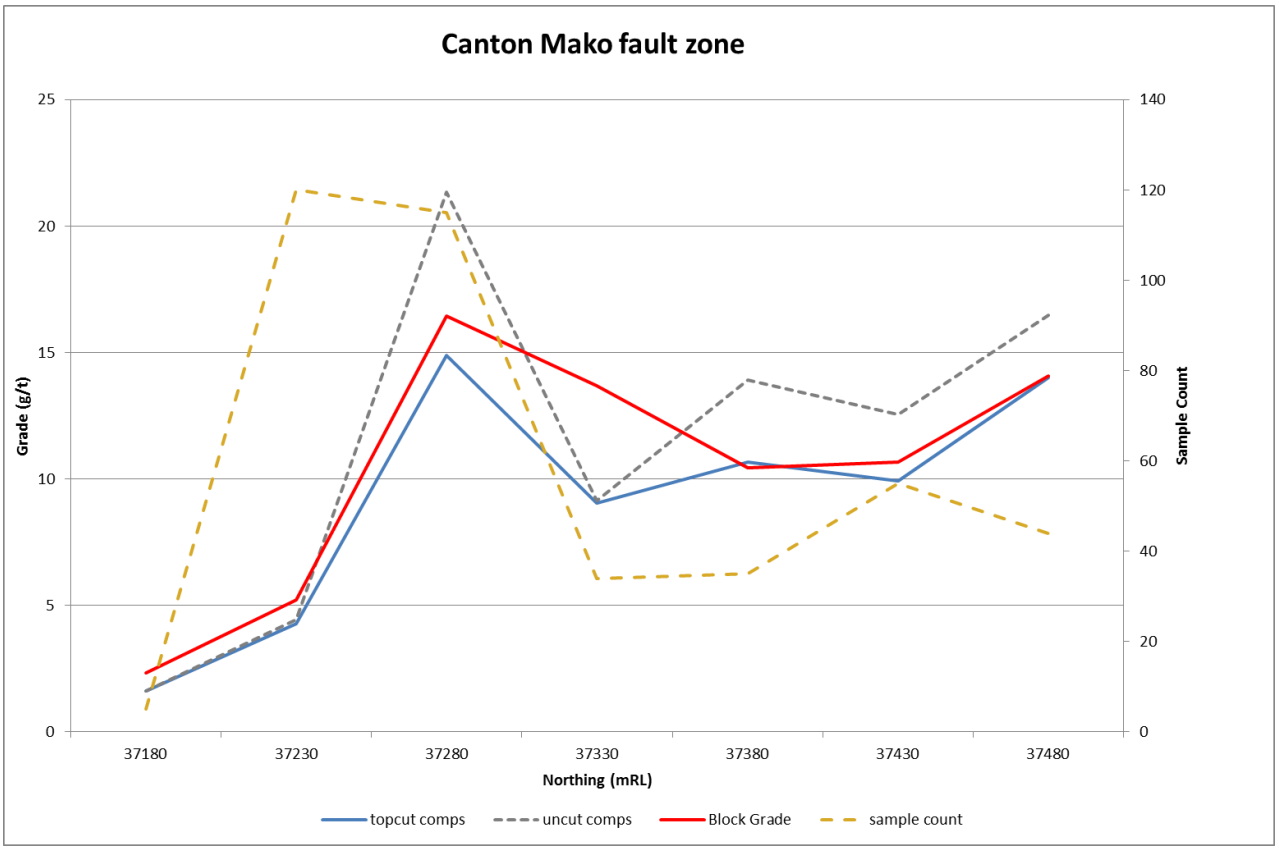


Figure 8-10 Moving window sectional swath plot for the Victoria Mako fault zone

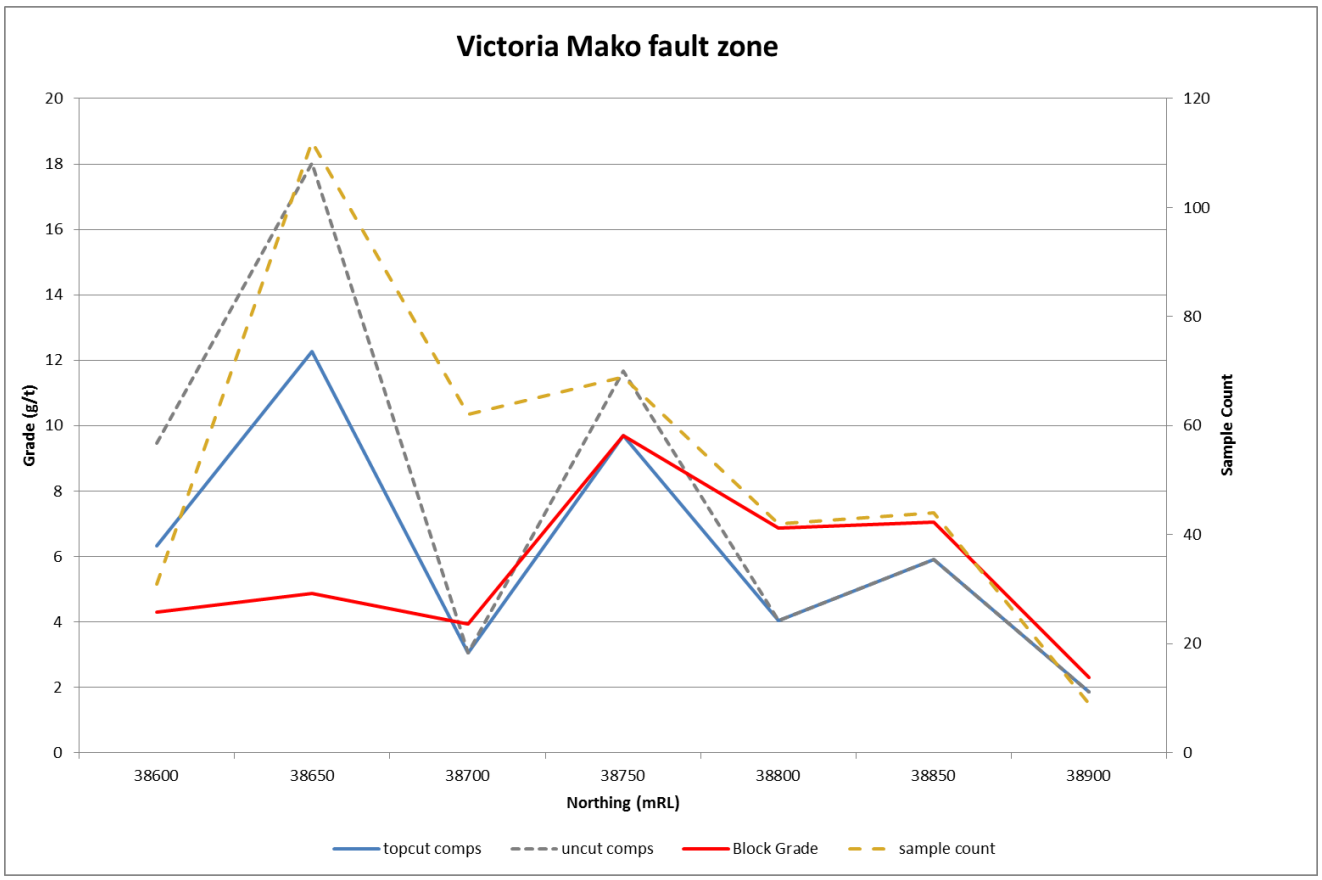


Figure 8-11 Moving window sectional swath plot for the Normanby Mako fault zone

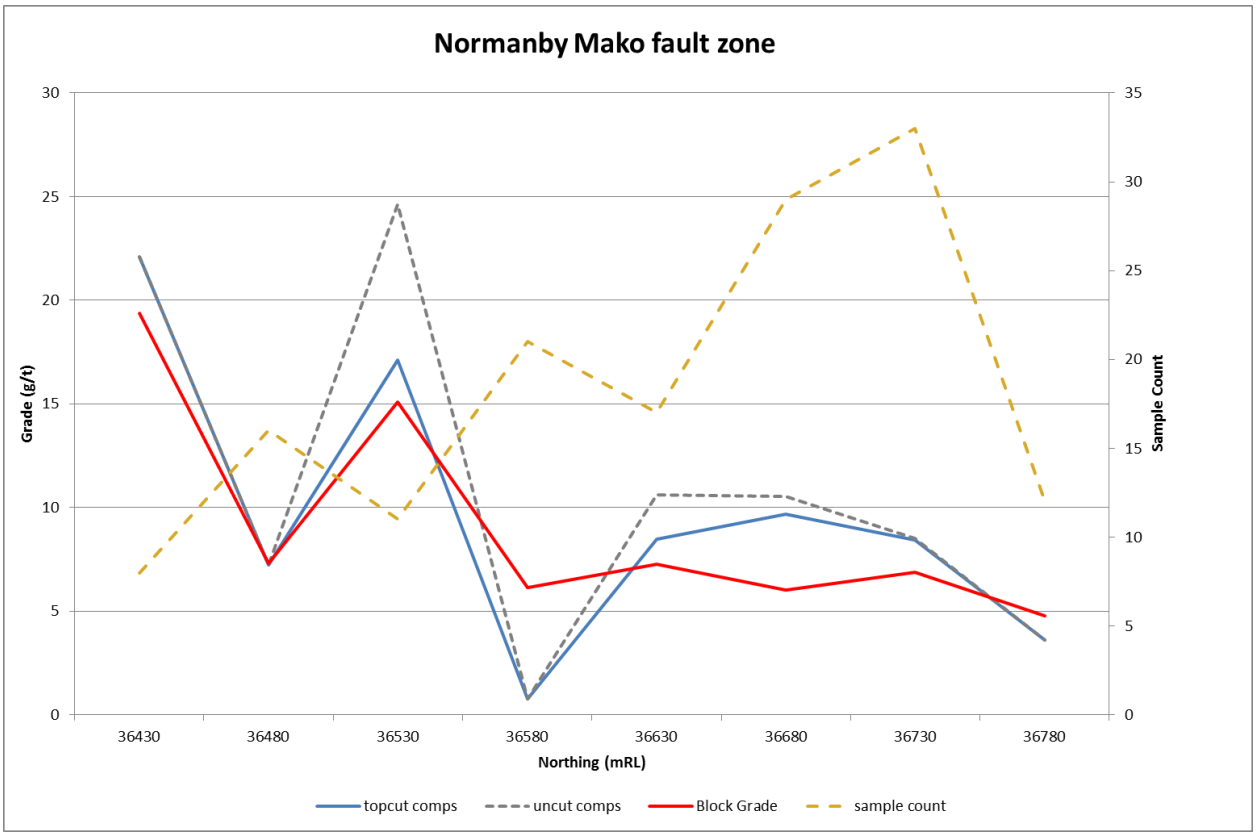
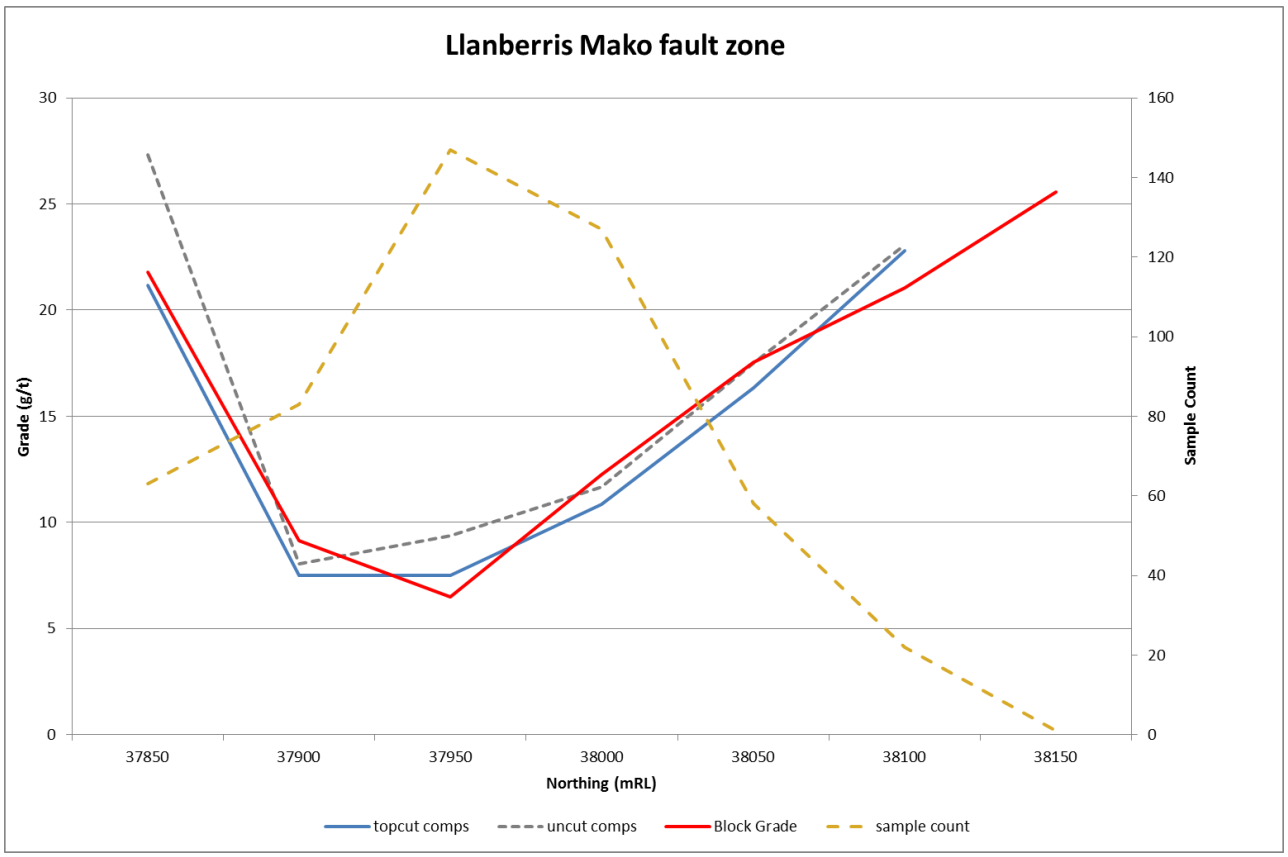


Figure 8-12 Moving window sectional swath plot for the Llanberris Mako fault zone



Search pass comparison

Block estimations were carried out in two passes, whereby the second pass used a larger search ellipse than the first. Analysis of the proportion of blocks estimated on each pass can highlight errors in domain codes and search ellipse orientations. In general, the current estimation parameters result in 65% or greater of all blocks to be estimated on the first pass, with the remainder either estimated on the second pass, or not estimated if insufficient samples are found within the search ellipse. All domains estimated were reviewed and found to meet these expectations. Table 8.8 summarises the proportion of blocks estimated.

Table 8.8 Summary of proportion of blocks estimated by each search pass for each lode

Lode	Pass 1 %	Pass 2 %	Not estimated %
Britannia Tiger	91.26	8.04	0.69
Canton Mako	75.84	21.79	2.37
Victoria Mako	86.02	12.43	1.54
Normanby Mako	67.93	28.15	3.91
Llanberris Mako	81.32	16.96	1.72

Comment on validation

The validation procedures undertaken shows that the model is a reasonable approximation of the input data, but it is not best practice. This is reflected in the Resource classification.

The Mineral Resource estimation process is under continual review, currently areas of focus include:

- Variography to define spatial variability
- QKNA to optimise estimation block size
- Kriging or variant thereof to interpolate grade

8.3.6 Classification

Inferred Resources

In high-nugget narrow-vein gold deposits such as Ballarat, proving continuity of both mineralisation (geology) and grade can be economically prohibitive. Generally, such deposits remain high risk even during mining operations (Dominy, 2014).

The drilling carried out for this Mineral Resource is considered sufficient to verify geological continuity, however, due to the high grade variability observed it is only considered sufficient to imply grade continuity, and not to verify it. As such, estimations solely based on drilling have been classified as an **Inferred Mineral Resource** and where sufficient mining development exists to support the drilling, classified as **Indicated Mineral Resource** as defined by the JORC Code 2012.

Whilst all geological domains were estimated, they were only classified as a Mineral Resource if they met a set of criteria outlined in Table 8.9.

Table 8.9 Inferred Mineral Resource classification criteria

Criteria	Minimum requirement
No. drillholes	>3 drillholes per domain
Spatial distribution	Must be intersected on two or more drill fans
No. Samples	>8
Estimated domain grade	>4 g/t Au
Mining depletion/sterilisation	>500 t remaining

The number of drill holes required for a domain to be included in the Mineral Resource is three holes. This is considered the minimum requirement to verify geological continuity. A minimum of eight composites was

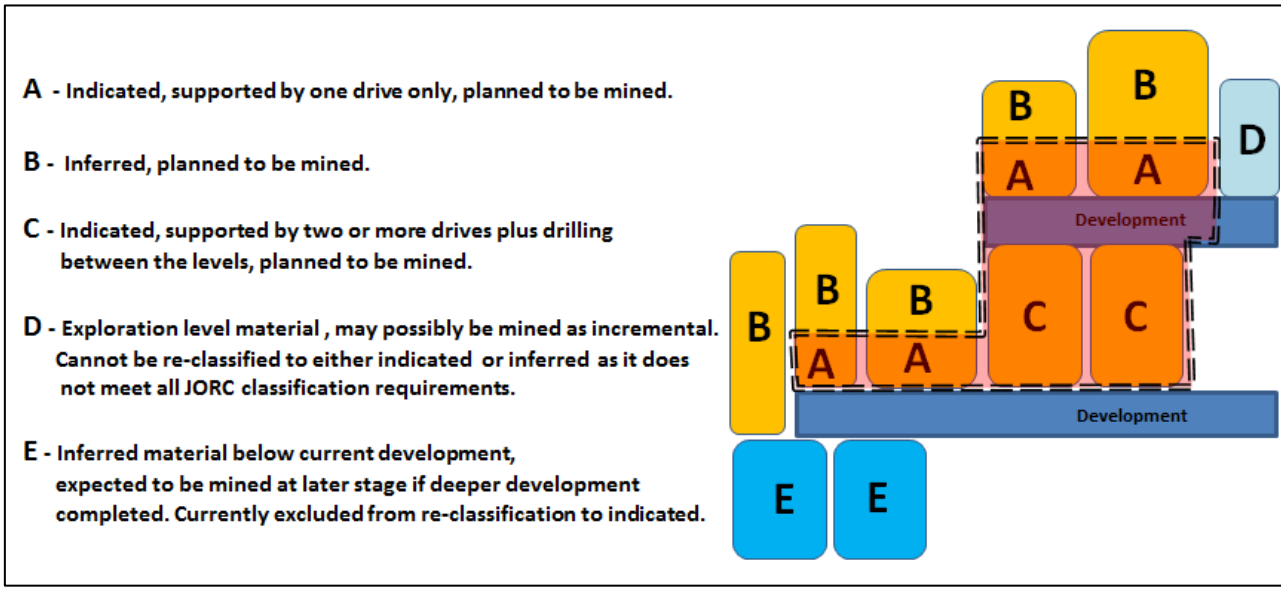
required for a domain to be included. Whilst these numbers are quite low, they are considered adequate to meet the requirements for classification as an Inferred Mineral Resource.

Indicated Resources

The delineation of Indicated Resources is based on several conditions (Figure 8-13);

1. Existing Inferred Resources that are likely to be mined and have been verified by geological observations from the development and also drilling matching the modelled orientation and expected structural/geological setting. Mineralised material that does not meet the required grade or support may still be mined as incremental ore but is not classified as either an Inferred or Indicated Resource.
2. The development to access the mineralisation must be in place, where there is only one drive and there is no expectation of another below it, then only a zone up to **10m** above the drive is reclassified as an Indicated Resource if condition 1 is met.
3. Where two or more levels of development exist on the same mineralised structure and sufficient support exists in the drilling between them, then spans up to 30m can be reclassified if condition 1 is met.
4. Once initial indicative Mineral Resources are delineated the shapes are forwarded to the Mining Engineering department for evaluation. Mining shapes are then generated on the initial Indicated Resources are then used to convert any remaining geologically supported Inferred Resources within the mining shapes to an Indicated Resource. Condition 1 and either of 2 or 3 must still be met; non-Inferred mineralised materials do not change status.

Figure 8-13 Diagram of Inferred and Indicated Resource material relative to development.



Based on the predicted 2018-2019 budget combined mining and processing cost of A$201 per t (excluding capital development costs), a gold price of A$1,680 per oz Au and mill recovery of 81.2%, a breakeven cut-off grade of 4.5 g/t Au is estimated. Accordingly, for the Mineral Resource those domains whose average grade is less than 4 g/t Au are excluded from the estimate.

8.3.7 Reported Mineral Resources

This Mineral Resource estimate comprises mineralisation from within five separate lodes (Table 8.10 and Table 8.11) within the Ballarat mine.

The estimation block size used (15 m by 5 m by 5 m; approximately 1,010 t equivalent) is larger than the expected selective mining unit (SMU). A development SMU may reasonably be expected to be 200 t to 270 t and a stope SMU (single ring) between 50 t and 200 t. As a result, selective mining above a cut-off on an estimation block by block (e.g. 1,010 t) basis is unlikely to be achievable. The Mineral Resource is thus reported at a 0 g/t Au cut-off and is global in nature.

For completeness, an assessment of the application of cut-off grades to this Mineral Resource is given in Figure 8-14 and Figure 8-15.

Table 8.10 Indicated Mineral Resource estimate for the Ballarat mine for 31st March 2018

Lode	Tonnes (kt)	Grade (g/t Au)	Ounces (koz Au)
Llanberris Mako	31	13.3	13.2
Canton Mako	3	9.6	0.8
Total	**34**	**13.0**	**14.0**

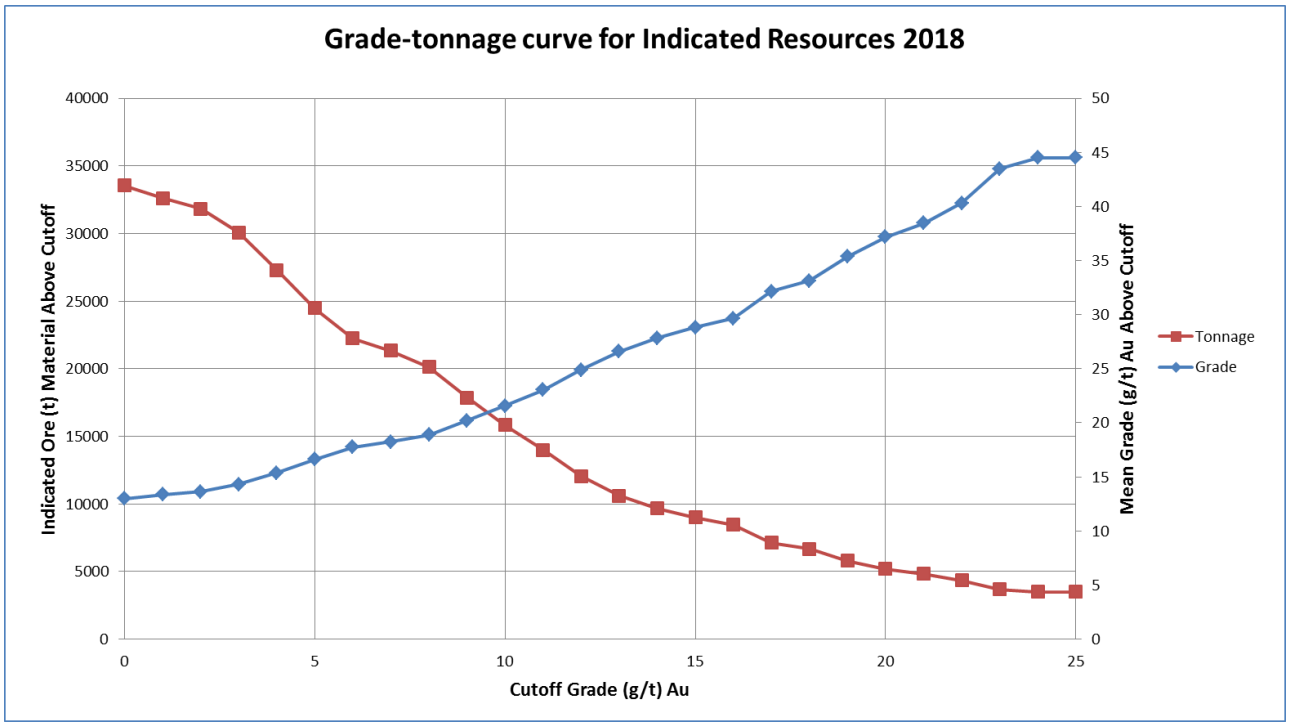
Note: Mineral Resources which are not Ore Reserves do not have demonstrated economic viability. Tonnage is reported in metric tonnes (t), grade as grams per tonne gold (g/t Au), at 0 (g/t Au) cut-off and contained gold in troy ounces (oz Au). Tonnages rounded to the nearest 500 t. Ounces rounded to the nearest 100 oz Au.

Table 8.11 Inferred Mineral Resource estimate for the Ballarat mine for 31 March 2018

Lode	Tonnes (kt)	Grade (g/t Au)	Ounces (koz Au)
Britannia Tiger	52	7.7	12.9
Llanberris Mako	24	5.4	4.2
Victoria Mako	82	11.0	29.1
Normanby Mako	100	8.4	28.0
Canton Mako	123	12.0	47.5
Total	381	9.9	121.6

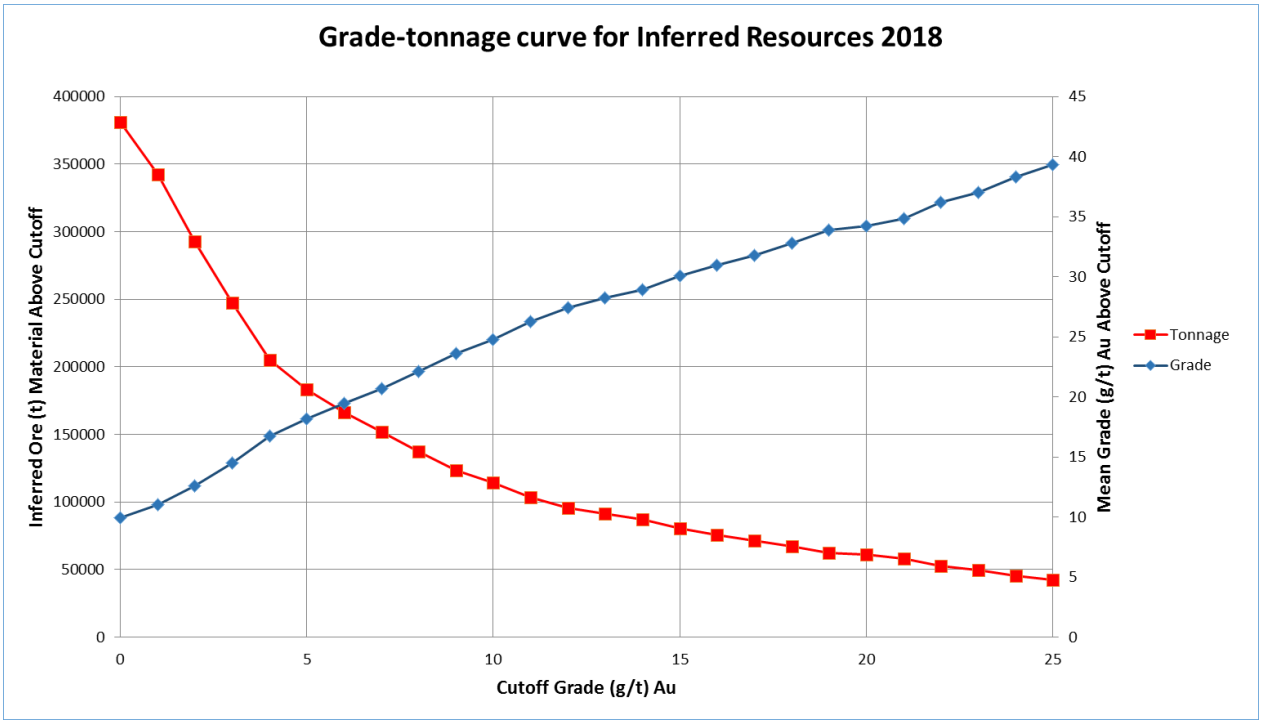
Note: Mineral Resources which are not Ore Reserves do not have demonstrated economic viability. Tonnage is reported in metric tonnes (t), grade as grams per tonne gold (g/t Au), at 0 (g/t Au) cut-off and contained gold in troy ounces (oz Au). Tonnages rounded to the nearest 500 t. Ounces rounded to the nearest 100 oz Au.

Figure 8-14 Grade-tonnage curve for the Ballarat Indicated Resource as at 31 March 2018



Note for the reasons provided above, this grade-tonnage curve should be treated with caution

Figure 8-15 Grade-tonnage curve for the Ballarat Inferred Resource as at 31 March 2018



Note for the reasons provided above, this grade-tonnage curve should be treated with caution

The JORC Code 2012 requires that a Mineral Resource must have "*reasonable prospects for eventual economic extraction*". The Ballarat gold mine is currently operational, based on decline access and fully mechanised mining methods. Stoping is via a combination of conventional drive development and open stoping. The on-site processing plant achieved in 2017-2018 a recovery of 81%. Due to these reasons the Mineral Resource is demonstrated to have reasonable prospects for eventual economic extraction.

Comparisons with previous Mineral Resource estimate

This Mineral Resource represents a 4% increase in the contained gold (oz) when compared against the March 2017 estimate. As outlined in Table 8.12.

Table 8.12 Comparison between current and previous Mineral Resource estimates at Ballarat mine. All Mineral Resources reported at a 0 g/t Au cut-off

	31 March 2017			31 March 2018			
Classification	**Tonnes (kt)**	**Grade (g/t Au)**	**Ounces (koz Au)**	**Tonnes (kt)**	**Grade (g/t Au)**	**Ounces (koz Au)**	**Change Increase %/(Decrease %)**
Indicated	21.6	17.4	12.1	34	13.0	14.0	14
Inferred	371.9	8.4	118.5	381	9.9	121.6	3
Total	**393.5**	**10.3**	**130.6**	**414**	**10.2**	**135.7**	**4**

Note: Mineral Resources which are not Ore Reserves do not have demonstrated economic viability. Tonnage is reported in metric tonnes (t), grade as grams per tonne gold (g/t Au) and contained gold in troy ounces (oz Au). Tonnages rounded to the nearest 500 t. Ounces rounded to the nearest 100 oz Au.

Table 8.13 Comparison between current and previous Inferred Resource estimates at Ballarat mine

Lode	31 March 2017 Tonnes (kt)	Grade (g/t Au)	Ounces (koz Au)	31 March 2018 Tonnes (kt)	Grade (g/t Au)	Ounces (koz Au)
Llanberris Basking	28	8	7			
Llanberris Cookiecutter	26	9	7			
Llanberris Mako	114	9	31	24	5.4	4
Canton Mako	157	12	62	123	12.0	47
Britannia Tiger	46	7	10	52	7.7	13
Normanby Mako				100	8.8	28
Victoria Mako				82	11.0	29
Total	**371.9**	**9.9**	**118.5**	**381.0**	**9.9**	**121.6**

Note: Excludes Indicated Resources, Mineral Resources which are not Ore Reserves and do not have demonstrated economic viability. Tonnage is reported in metric tonnes (t), grade as grams per tonne gold (g/t Au), at 0 (g/t Au) cut-off and contained gold in troy ounces (oz Au). Tonnages rounded to the nearest 500 t. Ounces rounded to the nearest 100 oz Au.

The delineation of two new ore lodes (Normanby Mako and Victoria Mako) in addition to the strike extension of the Britannia Tiger has added sufficient tonnes to the global Mineral Resource and has offset Mineral Resources depleted by mining over the previous year (Llanberris Mako, Canton Mako and Britannia Tiger). Mining depletion is comprised of a combination of the material extracted via mining and in-situ mineralisation sterilised as a result of the mining process. Overall there has been an increase in the gold grade of the Mineral Resource, Figure 8-16 to Figure 8-18 provide detail of the cumulative changes to the tonnes, grade and contained ounces reported.

Figure 8-16 Waterfall chart showing cumulative differences in tonnage between current and previous Mineral Resource estimate

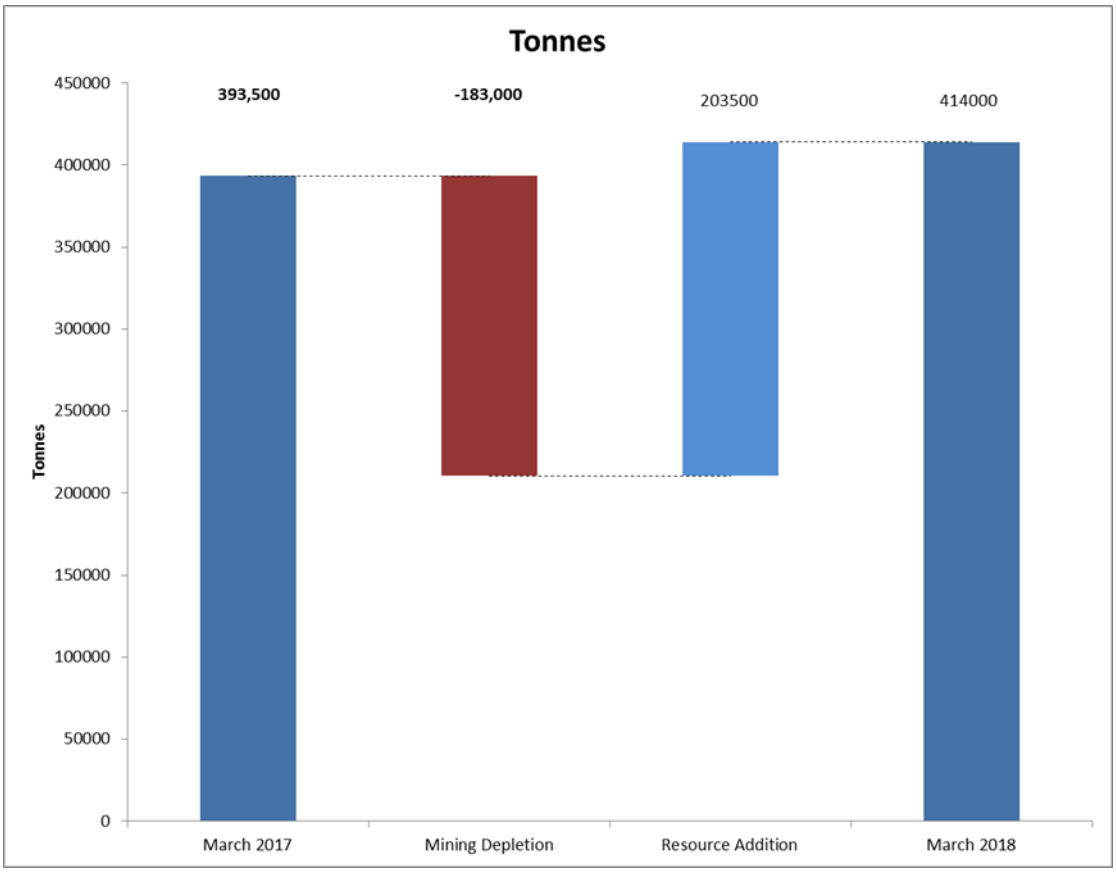


Figure 8-17 Waterfall chart showing cumulative differences in gold grade between current and previous Mineral Resource estimate

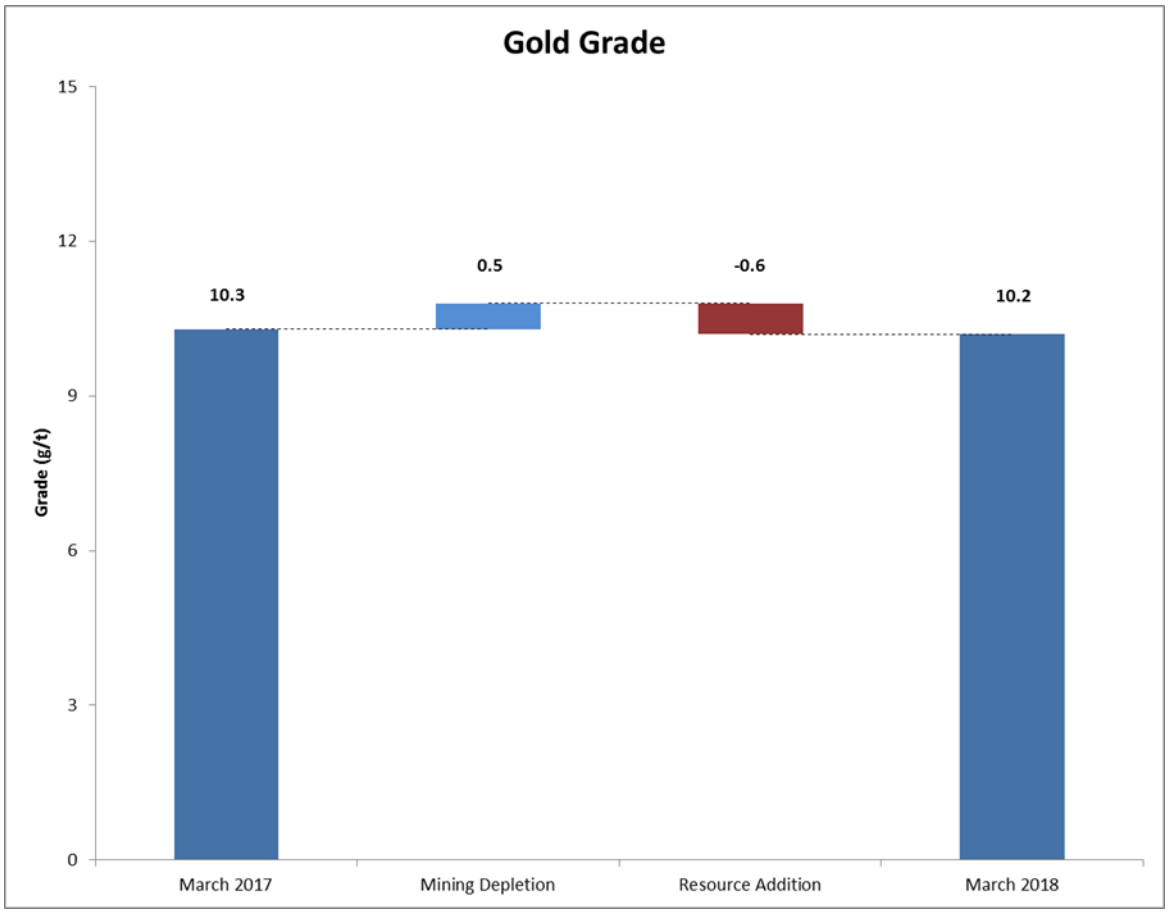
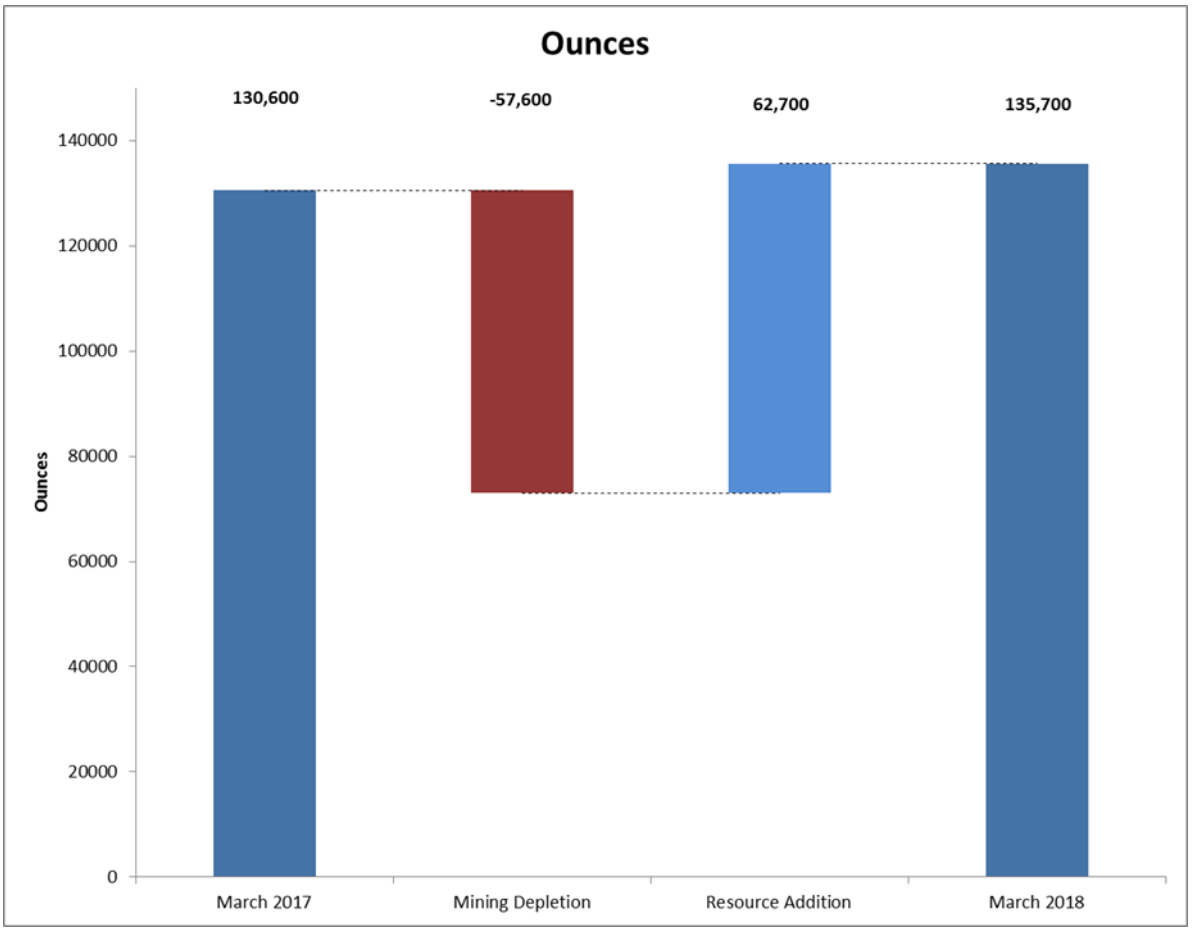


Figure 8-18 Waterfall chart showing cumulative differences in gold troy ounces between current and previous Mineral Resource estimate



9 ORE RESERVES

9.1 Summary of Ore Reserves

The Ore Reserve for the Ballarat Gold Mine has been estimated and reported in Table 9.1 in accordance with the JORC Code 2012.

Table 9.1 Ore Reserve summary, as of 31 March 2018

Category	Mineral type	Gross attributable to licence		Net attributable to issuer			Remarks
		Tonnes (kt)	Grade (g/t Au)	Tonnes (kt)	Grade (g/t Au)	Change from previous update Increase %/(Decrease %)	
Proved	-	-	-	-	-	-	
Probable	Au	36	7.1	36	7.1	(17%)	
Total		**36**	**7.1**	**36**	**7.1**	**(17%)**	**Issuer owns 100% of the company**

Note: This is the second ore reserve estimate published by Castlemaine Goldfields Pty Ltd.

9.2 General Description of Ore Reserve Estimation Process

The Probable Ore Reserve is derived from the Indicated Mineral Resource, in accordance with the JORC Code 2012. Reported Indicated Mineral Resources are within 10 metres of established development. The Indicated Mineral Resource is defined by 2 block models which are spatially defined by generally east-west striking locally termed “cross-course” faults and vertically by north-south mineralised bedding or anticlinal parallel faults. Please refer to section 8 of this report.

The underground Probable Ore Reserve is based on portions of the Indicated Mineral Resource model which are). The mining shapes are based in Indicated Mineral Resource material and are considered to be mineable based on historic unit cost, established and operating mining parameters and a processing recovery (please refer to section 7 of this report) projected to provide a minimum break-even margin within incremental (where development exists) stoping panels.

9.3 Ore Reserve Assumptions

Ballarat Gold Mine is an established operating mine.

The underground Probable Ore Reserve is based on several assumptions which include:

- Reserves lie within 10m of established development
- Current minimum mining widths
- Geological and geotechnical similarities to current mining areas
- Historical cost base for estimation of operating and capital costs
- Historical and budgeted metallurgical performance.

The Probable Ore Reserve is not based on a fixed cut-off grade. It is costed on historical unit cost data, modified for changing activity levels and location within the mine.

9.3.1 Mining Method

Mining of the Ballarat Gold Mine ore bodies by CGT commenced in March 2011 with the first gold doré poured in September 2011. The principal mining method adopted is retreat longhole stoping, retreat blind uphole stoping and occasional cut & fill or modified drift & fill mechanised stoping.

The longhole stopes are extracted between levels based on geotechnical parameters for stope lengths, then backfilled with loose or consolidated (cemented rock fill (“CRF”)) fill before the next retreating stope is extracted. Retreat blind uphole stoping, extracts panels of ore with no backfill horizon, pillars are left between the individual panels. Limited backfilling is completed. Cut & Fill and Modified Drift & Fill is mechanised production by the drill jumbo completing lifts above or adjacent to the previous development. Subsequent lifts are backfilled with loose fill. These methods have been used extensively at Ballarat over the last six years.

All Reserves estimated in this report are amenable to these mining methods.

A minimum mining width for stoping of 2.5m is used at the Ballarat Mine. This is based on the mine plan and existing production drilling equipment on site.

The cut-off for Probable Ore Reserves are not based on a fixed cut-off grade. They are costed on historical unit cost data, modified for changing activity levels and location within the mine.

9.3.2 Cut-off Grade

Cut-off grades are not used to estimate Ore Reserves; they are used to determine broad areas of economic significance. There are numerous cut-off values dependent on the cost structures applied. A fully costed break even stoping cut-off grade of 2.65 g/t gold is representative of a mine cut-off grade in an area of established development (incremental stope).

All Ore Reserves are fully costed within an economic model (Ore Decision Model) and based on the proportion of operation and/or capital development required for extraction. Thus the cut-off grade varies dependent on these factors, and no one cut-off grade has been used for the mineralisation.

9.3.3 Processing Method and Recovery

At the Ballarat Gold Mine ore is trucked to the Woolshed Gully processing plant. The plant is located within 300 metres of the main access portal of the mine. The Ballarat East Mill consists of a primary crushing circuit with ore separation/treatment via primary gravity circuit/floatation cell with a secondary cyanide leach of the sulphide mineral tail. Probable Reserve ore mineralogy is similar to that already being treated in the process plant. The mill has been operating in current configuration since 2011.

The metallurgical process is well tested technology.

Under the existing mill configuration the 2017 year to date (April 2017 to March 2018) recovery is 81%. Recovery is variable and is related to ore head grade combined with ore source location. The figure used is based on current plant performance.

Forecast metallurgical recovery of 81.2% has been applied for the Probable Ore Reserve. No elements or minerals have been conclusively determined to have a deleterious effect on recovery rates in the processing circuit.

The current Mineral Resource is supported by a history of operational experience.

For detail of processing data refer section 11.

9.3.4 Right to Mine

Refer to section 3.2 and 3.3.

9.4 Ore Reserve Estimate

9.4.1 Ore Reserve Input Data

Probable Ore Reserves are derived from the Indicated Mineral Resources, in accordance with the JORC Code 2012.

9.4.2 Estimation

The underground Probable Ore Reserve is based on portions of the Indicated Mineral Resource model which are considered to be mineable based on historic unit cost, established and operating mining parameters and year to date mill recovery (please refer to section 7 & 11 of this report). The mining shapes are based in Indicated Mineral Resource material that is projected to provide a notional breakeven margin on total costs.

Table 9.2 Ore Reserves summary by compartment, as of 31 March 2018

Ore Reserve

Category	Gross attributable to licence		Net attributable to issuer			Remarks
	Tonnes (kt)	Grade (g/t Au)	Tonnes (kt)	Grade (g/t Au)	Change from previous update Increase %/(Decrease %)	
Proved	-	-	-	-	-	
Probable						Forth report Reserve
Canton Compartment	3	5.2	3	5.2	First Reserve	Forth report
Llanberris Compartment	33	7.3	33	7.3	(22%)	Forth report
Total	**36**	**7.1**	**36**	**7.1**	**(17%)**	**Issuer owns 100% of the company**

9.4.3 Validation

The estimated tonnes and grade of individual Probable Reserve stoping shapes generated from the Indicated Mineral Resource were validated by company peer review.

The estimates were validated using.

- The Vulcan computer program has an automatic check for validating wireframed triangulations that checks for closure, consistency and crossings triangles.
- Tonnes and grade estimations have been replicated and confirmed by peer review.
- The mine void model was checked against Probable Reserve stoping shapes to ensure previously mined Mineral Resources have not been included in the estimation.
- Visual comparison of the model grades and corresponding drillhole grades show a reasonable correlation.
- Wireframe triangulations have been checked, including that the final geometric shapes looked achievable using current mining methods.

9.4.4 Classification

The reported Reserve is for Probable Ore Reserves. The Probable Ore Reserves are derived from the Indicated Mineral Resources, and are not in addition to the Mineral Resource.

9.4.5 Reported Ore Reserves

Table 9.3 Ore Reserves summary, as of 31 March 2018

Category	Gross attributable to licence		Net attributable to issuer			Remarks
	Tonnes (kt)	Grade (g/t Au)	Tonnes (kt)	Grade (g/t Au)	Change from previous update Increase %/(Decrease %)	
Proved	-	-	-	-	-	
Probable	36	7.1	36	7.1	(17%)	
Total	**36**	**7.1**	**36**	**7.1**	**(17%)**	**Issuer owns 100% of the company**

9.4.6 Production Reconciliation

Reconciliation of Mineral Resource estimates with gold production

The Ballarat mine has reconciled gold production with Mineral Resource estimates on a monthly basis. The amount of gold poured, the calculated tailings grade and the estimated change of the amount of gold retained within the processing circuit is compared with the estimated tonnage and grade of material mined.

The size of individual ore zones and the mining sequence does not allow sufficient material from any one source to be processed as an individual batch. Some material has been mined and processed from development outside the bounds of the Mineral Resource block models. Over the past 12 months this material has contributed 9,952t (3.8% of reconciled ore mined) at an estimated grade (based on rock chip sampling) of 2.7 g/t Au for a total of 865oz Au (2.0% of reconciled ounces mined) delivered to the ROM.

Process plant sampling of crushed material

Sampling of material within the process plant is not used in the reconciliation process, rather the final calculated head grade based on recovered gold and tail grades is used for direct comparison against estimates.

Comparison of Mineral Resource estimates with process plant results

A comparison of the material mined from within the block model titled “block model” with the “reconciled ore mined”, described above, for the period April 2017 to March 2018 is shown in Table 9.2 below. Material mined from sources outside the block model has been excluded from this analysis so as to make a more direct comparison between estimated block grades and mined grades.

Table 9.2 Comparison of block model tonnes and grade versus reconciled tonnes and grade

2017-2018	Block model		Reconciled	
	Tonnes (t)	Gold (g/t Au)	Tonnes (t)	Gold (g/t Au)
April	14,724	3.96	17,314	3.69
May	22,927	5.16	24,141	4.21
June	23,261	6.19	23,587	4.86
July	20,680	5.30	21,984	4.13
August	20,762	5.82	19,328	5.41
September	29,467	6.72	24,270	6.90
October	19,030	6.46	21,972	3.25
November	18,881	5.60	20,504	6.56
December	23,009	5.92	22,721	5.10
January	23,779	5.94	23,909	6.14
February	22,763	4.43	21,731	5.87
March	22,753	5.09	21,098	5.37
Total	**262,036**	**5.62**	**262,560**	**5.15**

Note that there is a 525 tonne (0.2%) difference between the tonnage estimates in Table 9.2 for mined voids using the block model and the “Reconciled” for development carried out during 2017-2018. This difference is likely due to a combination of factors including variability in survey pickups underground and on the surface ROM pad, inaccuracies in the Process plants throughput estimates including weightometer calibration issues and moisture content calculations and/or variability in the apparent relative densities of the mines ore sources. The less than 1% difference in estimates is considered acceptable given the range or variables involved.

During the course of the year the mines block model estimates of grade over represented the grade of the material reconciled through the process plant. This represents both a risk and an opportunity to CGT, and

geologists have been investigating possible reasons for the discrepancy. The processes involved with grade estimation and production reconciliations are complex. The geology team has been systematically testing the sensitivity of Mineral Resource estimates to modelling parameters. This has been highlighted as an issue of paramount importance and will continue to be a focus for the geology team in the coming year

10 MINING

10.1 Mining Overview

The current mine covers a relatively narrow area approximately 400 metres in width and five kilometres in length, extending to a depth of approximately 760 metres below the surface. Much of the mine extends under the Ballarat residential area, with operating restrictions placed around noise, dust and blasting vibration.

Primary access underground is via the Woolshed Gully decline, nominal dimensions of 4.6 metres high and 4.6 metres wide at a gradient of 1:6.5 down to a depth of approximately 130 metres below the surface. The mine entrance (portal) is located at the southern end of the mine (Figure 10.1).

The decline system below the Woolshed Gully decline has been developed at nominal dimensions of 5.3 metres high by 5.0 metres wide at a gradient of 1:6.5 down. At approximately 1,200 metres from the portal, twin declines split into the Suleiman decline (approximately 1,900 metres long) and the Woah Hawp decline (approximately 3,700 metres long).

A number of internal declines (Canton, Prince, Sovereign, Llanberris, Britannia and Britannia West) are developed off the Woah Hawp decline to access ore zones within each compartment.

Fresh “intake” air is supplied by the Woolshed Gully decline and the 6.1 metre diameter concrete lined 318 metre deep Golden Point ventilation shaft. The mine operates on a through flow ventilation principal, with air returning to the surface via the 6.1 metre diameter concrete lined 129 metre deep North Prince Extended shaft.

The mine is dewatered as outlined in section 12.3 of this report.

Underground mining includes development drilling, ground support, blasting, loading and hauling. All works are carried out by CGT as an “owner operator”.

Production drilling and mechanised cable bolting is carried out by a separate contactor (MacMahon).

Exploration drilling is carried out by a separate contractor (Deepcore Drilling).

10.2 Mining Operations

Underground development is carried out using conventional drill and blast techniques with twin boom 1000V electric hydraulic jumbos. Jumbos drill blast holes in development faces, blast holes are then charged with explosives and fired breaking the rock. Jumbos are also utilised for the installation of ground support in the walls and backs of the excavation.

The ground support design for mine development considers the expected prevailing ground conditions and service life of the excavation. For example, the minimum support requirements for:

- Capital infrastructure/permanent access with a life span greater than two years includes galvanized primary support (split sets) and secondary support (full encapsulated rock bolts or cable bolts) and floor to floor surface support (typically 50 mm fibrecrete);

- Waste access or ore development with a life span less than 12 months includes black or galvanized primary and secondary support and surface support less than 0.5 m from floor (typically mesh).

Rubber tyred diesel powered loaders and trucks are used to move broken rock (ore and waste) from development drives or stopes.

Development waste is preferentially placed in underground voids (development or stope) as backfill or trucked via the decline to the surface waste rock facility.

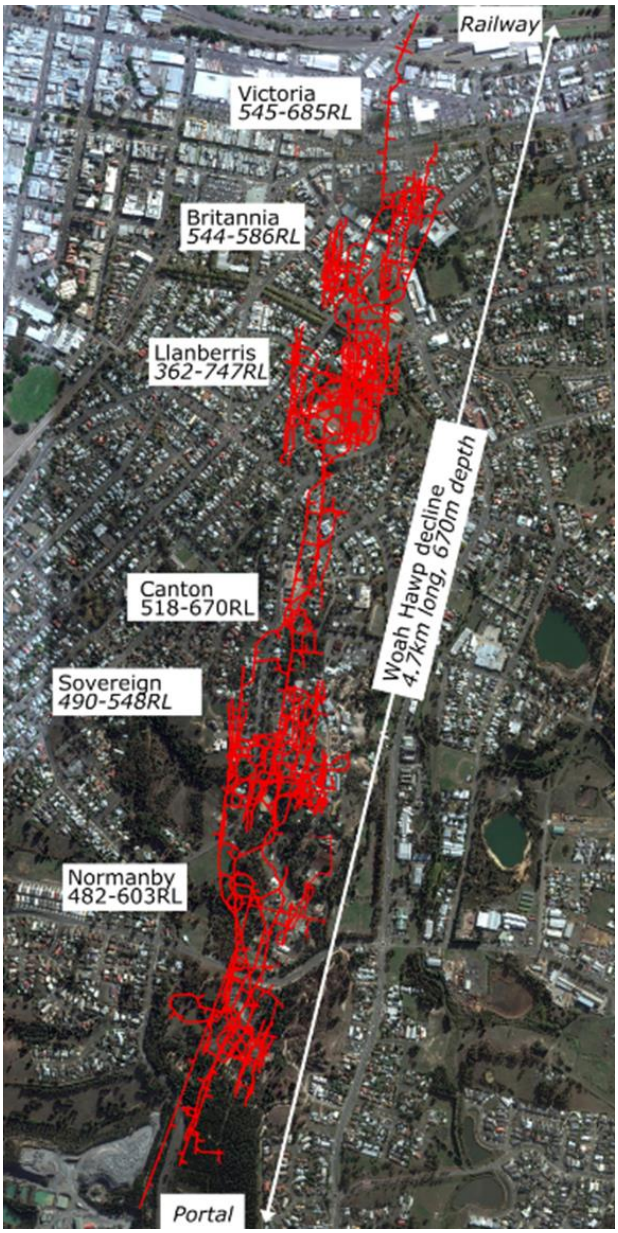
Ore from development or stopes is trucked via the decline to the surface ROM pad.

The current mine production plan is based on a combination of ore generated from Jumbo development along the strike of the ore zone and long hole open stoping. Mining method is selected based on geotechnical conditions and geometry of the ore body.

A minimum stope width of 2.5 m is used in the current mine plan based on levels approximately 15 vertical metres apart. Production drilling involves the drilling of either 64 mm or 76 mm diameter production holes. Long hole stoping is a combination of “blind up hole” stopes with no backfill and stopes where a top access is present allowing the stope void to be backfilled. The bulk of near future production is scheduled in two main areas, Llanberris and Canton.

Mining dilution factors have been applied according to historical data from stoping and development. The Ballarat Gold Mine is a complex orebody with mineralisation associated closely with faulting, hence dilution factors vary. A 95% recovery factor is used for long hole stoping.

Figure 10-1 Mine plan view



10.3 Production Schedule

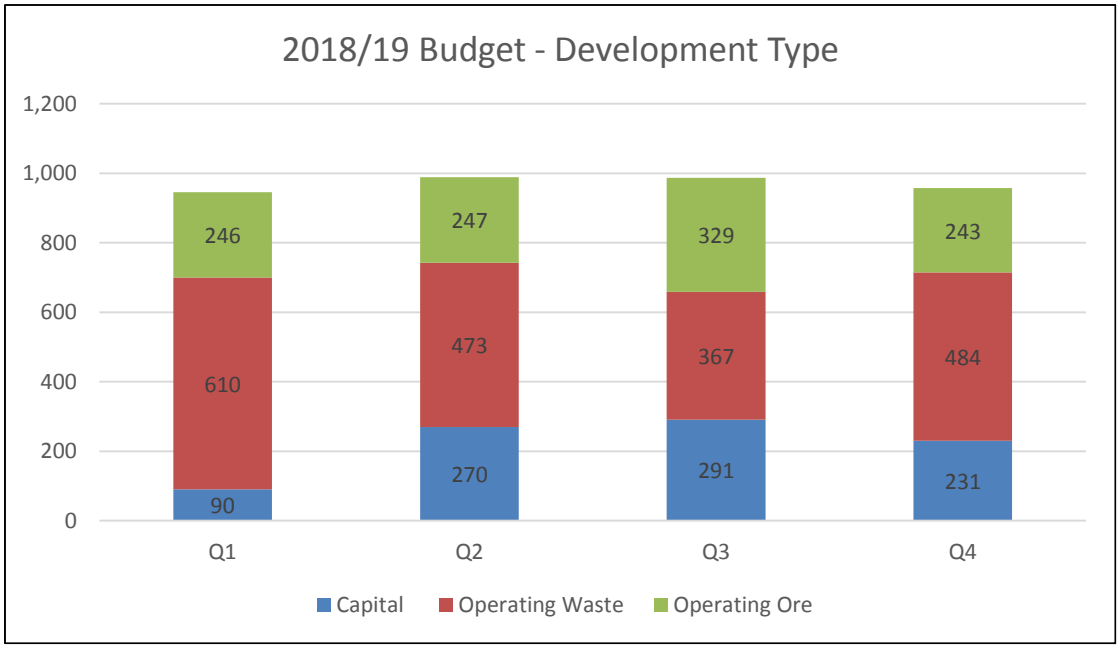
The 2018/19 ore production schedule is discussed in the following subsections.

10.3.1 Development

Lateral development totalling 3,880 metres is planned for the 2018/19 Budget year, Figure 10 2 outlines the quarterly allocation of development metres by development type. The planned development occurs in the two main mining areas – Canton and Llanberris.

Development advance (capital waste, operating waste and ore development) rates of approximately 323 metres per month are required.

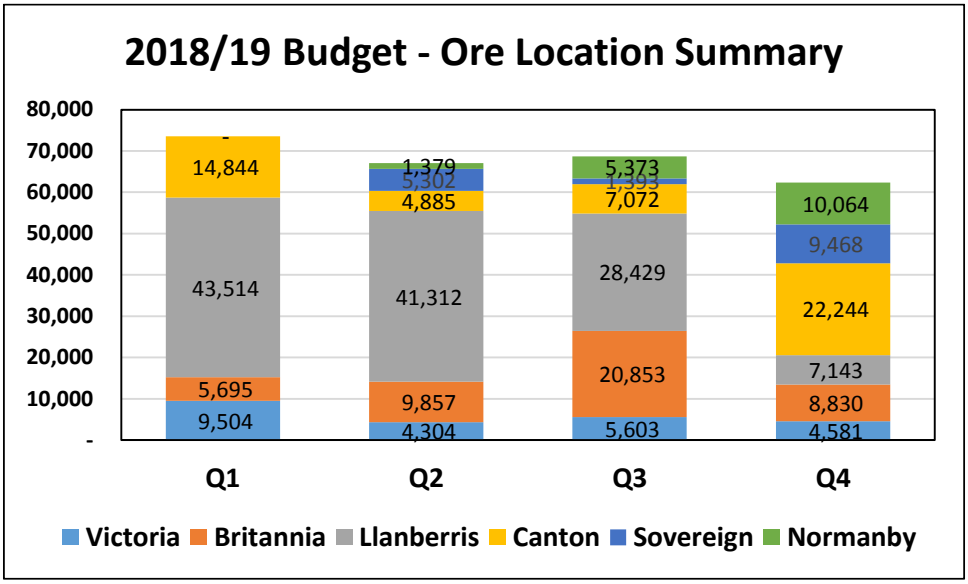
Figure 10-2 Quarterly development break-down



10.3.2 Ore Production

Ore production totalling 270,000 tonnes at a grade of 5.9 g/t for 51,000 Oz gold hauled is planned for the 2018/19 Budget year, Figure 10-3 outlines a summary of the ore tonnes by location. The planned ore production occurs in six mining areas – Victoria, Britannia, Llanberris, Canton, Sovereign and Normanby.

Figure 10-3 Ore tonnes by location



10.4 Geotechnical Inputs

10.4.1 Geological Structures

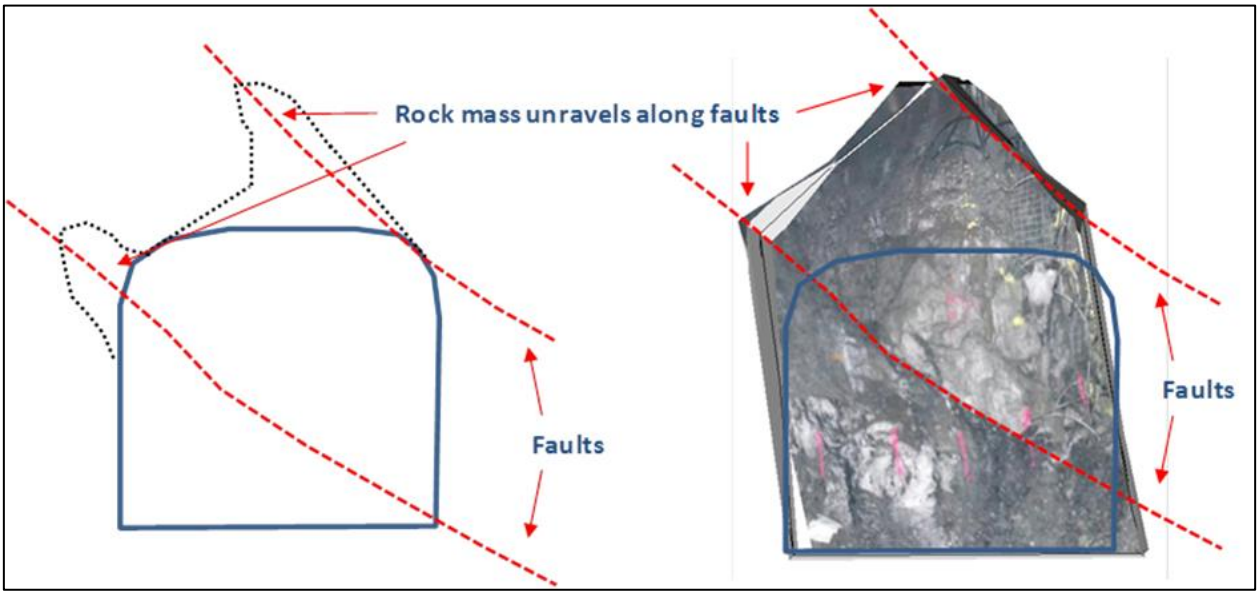
Domains

The geology of the mine is complex and can be described as an anisotropic rock mass. Five basic lithological/structural/weathering domains exist as per Table 10.1.

Table 10.1 Main geologic types and their failure modes.

Domain	Failure mode	Specification
Sandstone	Sidewall slabbing	Sparsely bedded
Shale/Siltstone	Sidewall slabbing, deformation, creep	Closely bedded and inherently weaker than the sandstone
Cross Course Faults	Unravelling	Small pug zones (decomposed rock flour), surrounded by a zone of highly jointed rock.
West Dipping Faults	Wedge failure	Quartz veins and rotated sandstone/siltstone/shale beds
Weathered rock	Sidewall degradation	Weak interbedded sandstone and siltstone

Figure 10-4 Failure style associated with shallow angle faults



10.4.2 Ground Support

Typical ground support in current development drives and declines include fibrecrete, split set, Mech-lok bolts and mesh. The typical support regimes are outlined in Table 10.2.

Stope Reinforcement

Stope support has been very successful at Ballarat. This has improved further with the use of a cable bolter on site allowing large quantities of cables to be installed rapidly.

Table 10.2 Ground condition and additional support guidelines

Ground Condition	Typical ground control strategy
Fault zone (clayey and/or soft ground conditions)	4.5 m long spiling bars (rebar) and 100 mm fibrecrete
West dipping fault in face (non-ore zone)	Mechanically anchored 3 m bolts in backs only, cable bolts may be required
Wedge	Cable bolts, 1.5 m x 1.5 m pattern (typical), 6 m length single strand bulbed type.
Ground deforming (bulging, creeping); - Fibrecrete cracking - Friction bolt plates popping off/bending	Replace bolts with additional friction bolts, Mech-LOK bolts or cables. Mesh over significant fibrecrete damage. Use mesh straps.
Wide development – planned or excavated; >5.6m >7m	Change bolt lengths 3 m split sets Cablebolts 1.5 m x 1.5 m spacing, 6m single strand bulbed type.

10.4.3 Monitoring and stress measurements

Geotechnical instrumentation is used to measure rock mass movement, monitor ground support system performance and assist with validating ground control design assumptions. Monitoring locations, instrument type and measurement frequencies are determined by the Geotechnical Engineer and may vary depending on data acquisition requirements and ground movement observations and trends.

The following monitoring equipment is currently used:

- SMART Multipoint Borehole Extensometers (MPBX)
- SMART Cablebolts
- Convergence pins

A number of stress measurements have been taken, including AE and HI Cell measurements. Results show a considerable variation in magnitude and orientation. This is quite possible due to the complex geology, anisotropic, and locations that measurements were taken in. Observations indicate the stress direction is likely to be perpendicular to the orebody and dominant fault direction..

11 PROCESSING

11.1 Processing Overview

The gold processing plant was constructed in 2005 and was purposely designed to suit the coarse grained nuggetty Ballarat ore with the aim of capturing gold and sulphides at the point of liberation without over-grinding. The gold and sulphide minerals are separated away from the waste using the difference in density.

Approximately 70% of the recovered gold is 'free' and is direct smelted into bars, with the other 30% present as sulphide bound gold which must be leached first. Silver is a very minor component in the gold produced at Ballarat with only 0.2% to 0.5% Ag present in the gold bullion produced.

The processing plant consists of a three-stage crushing and screening plant, a gravity separation circuit with pressure jig separators, falcon concentrator and tables to recover both direct smeltable gold as well as sulphide concentrate, the latter requiring further processing via the Intensive Leach Plant (ILR).

A flotation circuit is also used to recover fine gold and sulphides from the gravity tail which is below the recoverable size range of the gravity circuit. The flotation concentrate joins the gravity sulphides for leaching. Since there is currently no grinding of the gravity tail prior to flotation, the flotation circuit receives only the fine material (sub 300 micron) pre-existing in the gravity tail. Further recovery of the fine gold which is still locked will require the installation of a ball mill.

The gold processing facility has a capacity of around 250,000 t of ore per annum (at 50% rostered availability) and 500,000 tpa when fully resourced.

The processing plant can be split into two main stages, Crushing, Gravity & Flotation (Figure 11-1) and Leaching (Figure 11-2).

11.1.1 Crushing, Gravity and Flotation Separation

Three stages of crushing are used to liberate the gold and sulphide minerals prior to gravity recovery. The primary and secondary crushing stages are in a separate part of the circuit and operate on a batch basis. The crushing plant capacity is around 250 t per hour, shutting down at 2200 hrs, which allows the crushed product to be stored in bins providing approximately 12 hours of feed supply to the downstream tertiary crushing and screening circuit.

The tertiary crushing and screening circuit operates on a continuous basis at a nominal rate of 70 t per hour and consists of two crushers (one duty and one standby) and two wet vibrating screens. The purpose of this circuit is to control the feed size of ore presented to the gravity jigs.

Free gold particles and sulphide minerals which are liberated in the crushing and screening circuit are pumped to the jigs, where the mineral bed is fluidized with pulsated water. The high-density gold and sulphides settle through the bed to form a concentrate whilst the lighter materials remain on top of the bed and are removed as tailings. There are three parallel trains of jigs, with two jigs in each train, and each capable of processing 25 t per hour. The jig tailings are processed through a Falcon concentrator to scavenge fine gold and then over a Sieve Bend Screen to separate the fine portion for Flotation and divert the oversize for tailings disposal.

The flotation circuit aims to recover the fine liberated native gold and sulphides that the gravity circuit misses. Collector and frothing reagents are added to render the gold and sulphides hydrophobic such that they collect on air bubbles and rise to the surface of the flotation cell to affect a separation. This gold containing froth (concentrate) is thickened to remove water before joining the sulphide component of the jig concentrate for leaching.

The jig concentrate is cleaned in two additional jig stages with the final concentrate delivered to the gold room for processing over Wilfley and Gemini tables. The sulphide component of the concentrate cannot be smelted directly and is tabled away from the free gold and sent to the leaching circuit.

11.1.2 Leaching

The gold associated with the sulphides is not refractory and can be leached directly with cyanide. The sulphide concentrates are first ground in a small ball mill to a size of 130 microns and sent to the cyanide leaching circuit. Only the sulphide concentrate which equates to approximately 5% of the total ore mass is leached. Hence the leaching plant differs from many gold processing facilities that employ CIP/CIL to leach the entire volume of ore.

Leaching occurs in two rotating drum leach reactors (Gekko ILR's) to ensure maximum contact between cyanide and the gold. The gold is dissolved into solution and then separated from the barren solids by thickening. The solution is pumped across a resin column where the gold is transferred onto an ion exchange resin. The resin performs a similar role to carbon in a conventional CIP/CIL circuit. The resin is periodically stripped of its gold into a concentrated gold solution which forms the electrolyte feed to the electrowinning circuit. The gold is plated out of the electrolyte using an electrical current and deposited onto stainless steel cathode wool. The wool is periodically stripped of its gold and the gold is smelted in a gas fired furnace to form gold doré.

The residual cyanide remaining in the leach tailings is destroyed prior to disposal in the tailings storage facility. The cyanide destruction process is known as the INCO method and uses sodium metabisulphite and copper sulphate for the destruction of the cyanide complexes.

Figure 11-1 Simplified separation circuit flow diagram

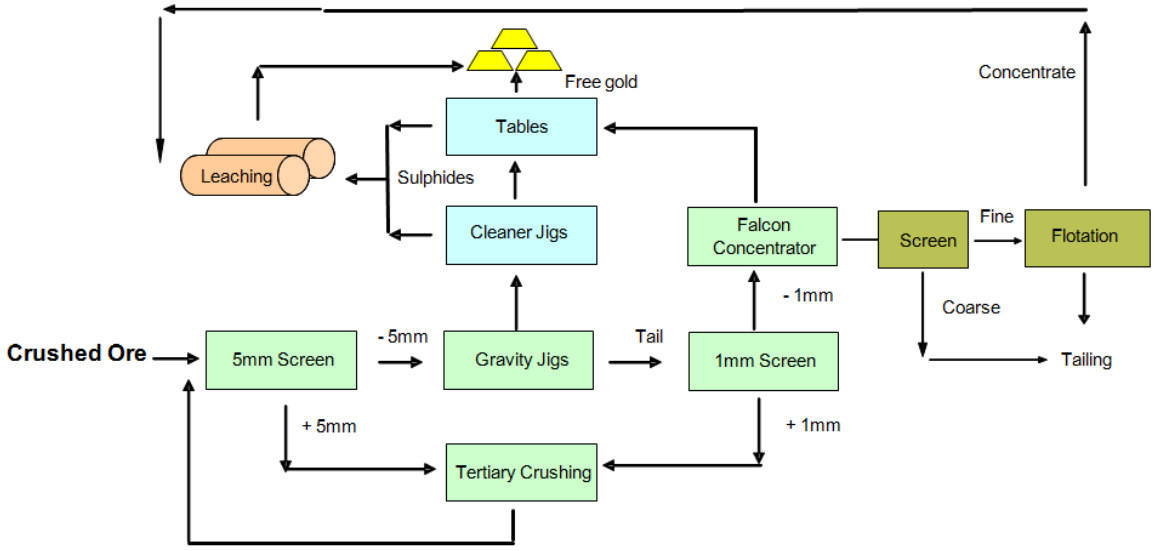


Figure 11-2 Simplified leach circuit flow diagram



11.1.3 Gold room

Free gold produced from the Gemini tables is smelted with fluxes in a gas fired furnace and poured as doré gold.

The gold sludge from the electrowinning cathodes is separately fluxed and smelted to also produce doré gold.

11.2 Performance

The Ballarat Processing plant for the previous year 2017-2018 is detailed in Table 11.1; the forecast recovery rate for the 2018/2019 year is 81.2%.

Table 11.1 Process plant performance

Month	Milled Ore (t)	Head Grade (g/t Au)	Recovery overall (%)
Apr 2017	17,365	4.1	77%
May 2017	20,084	4.0	75%
Jun 2017	21,067	5.2	84%
Jul 2017	23,744	3.8	73%
Aug 2017	22,509	5.4	82%
Sep 2017	20,727	6.4	83%
Oct 2017	24,589	4.4	74%
Nov 2017	22,385	6.1	82%
Dec 2017	19,882	5.7	83%
Jan 2018	26,832	5.8	84%
Feb 2018	20,462	6.0	87%
Mar 2018	20,519	5.4	84%
Total	260,165	5.2	81%

12 INFRASTRUCTURE

12.1 Mine Infrastructure

Site Infrastructure includes the following:

- Administration buildings.
- Maintenance workshops.
- Stores building.
- Core shed.
- Gold room.
- Process plant.
- Independent Laboratory.
- Electrical infrastructure supporting above ground and underground operations.

12.2 Power

CGT purchases electricity directly from the national electricity grid under a contracted supply agreement with Energy Australia. This agreement is due to expire at the end of July 2020 and is for the supply of 28 GWh pa of electricity along with associated services.

Power is supplied from the local 66kV grid to the Company owned Elsworth Street substation (commissioned in 2008) which consists of incoming SF6 gas filled circuit breakers, 66kV/11kV 5MVA transformer and 11kV switch room.

From there, power is fed underground to the nearby North Prince Extended ventilation shaft leading to the UGRMU No 1 (underground ring main unit) situated in the First Chance decline approximately 150 m directly below the surface.

UGRMU No 1 feeds a total of nine underground substations each consisting of incoming protection fuses or circuit breakers, 11kV/1000V 1.5MVA transformers and switchboards located in the First Chance, Suleiman, Sovereign, Llanberris and Woah Hawp declines.

UGRMU No 1 also feeds Substation 1 situated at the surface which has two RMU's situated in the switch room which in turn feed:

- The Process Plant main substation (Sub 3) via two 11kV/433 V,1 x 2MVA transformer and 1 x 1MVA transformer .
- Surface mine substation (Sub 2) which supplies the part of the mine surface infrastructure including the workshops via a 11kV/433V 500kVA step-down transformer.
- Substation 6 which then feeds via 3 x 500kVA, 1 x 315kVA and 1 x 750kVA 11kv/433V step-down transformers:
- RO plant (not used but still remains powered for some control processes),
- Workshops,
- Laboratory building,
- Concrete batch plant,
- Office buildings.

12.3 Water

Ballarat has a positive water balance due to the dewatering of the historic mine voids and groundwater entering the underground mine. This water is either used on site for dust suppression or processing, the remainder being discharged to the environment under strict EPA discharge licence conditions.

The mine dewatering system comprises approximately 13 “Mono” pump stations, which are fed by submersible Flygt pumps in decline face and settling sumps, these pump approximately 1.5 ML per day. Mine water passes through two parallel trains of aeration tanks where blowers force air bubbles to help form iron, arsenic and manganese precipitates which separate into the first of three settling ponds. The treated water is then reused within the mine or processing plant with any surplus passing through wetland/polishing ponds before discharge to the nearby Yarrowee River.

Recycled process water from the TSF flows into the lined process water dam which is topped up from the mine dewatering system. This is a zero release closed water circuit between the TSF and the process plant.

The main mine operation is connected to a reticulated potable water supply managed by Central Highlands Region Water Authority (CHW).

12.4 Staff and Accommodation

The mine employs 154 permanent staff and 49 contractors (March 2018). The mine is residential based and no accommodation for employees is required.

13 SOCIAL, ENVIRONMENTAL, HERITAGE AND HEALTH AND SAFETY MANAGEMENT

13.1 Social, Environmental, Heritage and Health and Safety Management

All exploration and mining conducted by CGT is undertaken in a manner to ensure minimal impact on the existing land use, environment and community and there is comprehensive Environmental Management, Community Engagement and Safety Management System in place. An Environmental Risk Register has been developed to identify the broad aspects/hazards and impacts associated with the various activities that are either currently undertaken, or planned to be undertaken. The register is reviewed regularly.

Environmental monitoring results for noise, blast vibration, air quality, surface and ground water quality are compared against regulatory limits and reported to the various state and federal regulatory authorities and the Ballarat Mine Environmental Review Committee (ERC). Breach of licence conditions can result in financial losses in the form of remedial costs, fines or loss of the licence in question.

13.1.1 Noise

Noise control has been an integral part of the design of the Ballarat mine site including locating all infrastructures away from residences and below the natural surface to minimise the noise impact of the operation and to comply with noise limits specified within the work plan.

13.1.2 Blast vibration

Regular review of blast performance allows for any potential improvements of blasting practices to be implemented as the underlying geology may change as underground mining proceeds.

The community is informed of current and planned mining activities and complaints followed up to identify areas of concern.

13.1.3 Air quality

Air emissions and dust resulting from surface activity have been identified as issues that affect local air quality. Dust suppression is an ongoing task and monthly depositional dust monitoring occurs at 8 locations surrounding the mine site and monitoring of the North Prince Extended ventilation shaft emissions occurs biennially.

13.1.4 Water quality

Regular water analysis is undertaken of both surface and groundwater to ensure protection of the environment and compliance with regulatory limits.

Two waterways are located adjacent to the site, the Canadian Creek and Yarrowee River. EPA Waste Discharge Licence 18092 provides for discharge of treated groundwater to the Yarrowee River, and whilst not currently in use, the licence also has provision to allow discharge into the Canadian Creek. Monitoring has been undertaken for the last 26 years to ensure water discharged meets the regulatory requirements.

The impact of mine dewatering on the groundwater in the region was addressed in the BGF Environmental Effects Statement prepared in 1987; it was concluded that the resultant lowering of the water table will not have a significant effect on the users in the area. The main area of potential groundwater impact is around the TSF. As per the TSF Work Plan Variation (2005), potential leakage from the TSF is monitored by CGT.

13.1.5 Waste rock

The chemical nature of the waste rock generated at the Ballarat site has been analysed for acid mine drainage (AMD) generating potential. Tests indicated that most of the rock is inert and will not pose a risk of producing AMD when exposed to air and water.

13.2 Heritage Management

Heritage sites have been identified and documented within the EL3018 and site management processes are in place to ensure there is no future disturbance. Preference will always be given to areas where cultural heritage features have not been identified to carry out work. Consultation will occur with the relevant Registered Aboriginal Party (RAP) to ensure an appropriate assessment is completed prior to work being undertaken.

13.3 Health and Safety Management

The health, safety and welfare of its employees, contractors and the community are of paramount importance to CGT. The highest standards of health, safety and welfare are to be maintained in accordance with CGT's Occupational Health and Safety Policy, Safety Management System and associated policies and procedures.

CGT's Safety Management System (SMS) provides a framework for the management and continual improvement of Health and Safety in all mine and exploration related activities. The CGT SMS includes:

- Hazard identification and control of risk.
- Consultation and communication (internal and external).
- Contractor management.
- Injury and incident reporting/investigation.
- Emergency Response – use of trained staff as well as external resources (police, Country Fire Authority, local hospitals).

CGT is required by law to report certain types of incidents to WorkSafe Victoria. WorkSafe have the authority to stop or limit CGT activities until they are satisfied that the hazard/incident has been dealt with accordingly.

14 FINANCIAL ANALYSIS

14.1 Historical Financial Analysis

All currency values are in Australian Dollars unless otherwise denoted. The actual 2017-2018 March operating expenditure by department is detailed in Table 14.1.

The mined ore tonnes for the 2017-2018 year totalled 262,559 t and the operating cost per tonne mined averaged A$187. The unit cost by department per tonne of ore mined is shown in Table 14.1.

Gold ounces sold for 2017 - 2018 totalled 33,948 oz, and the cash operating cost per ounce sold averaged A$1,395. The total production cost per ounce sold was A$1,808.13.

The average gold price received per ounce for the 2017-2018 year was A$1,662 and revenue from bullion sales totalled A$56.4M.

Site infrastructure established prior to 2010. Any future capital costs associated with infrastructure will be to improve capacity or productivity.

Table 14.1 Ballarat mine actual operating costs by department. Currency A$

	Total Expenditure	Cost / Tonne Ore Mined
Geology (excluding UG exploration)	6,329,107	24
Mining (excluding capital development)	30,420,517	116
Processing	7,657,450	29
HSE, Admin & Security	4,639,631	18
Total	**49,046,705**	**187**

14.2 Forecast Capital Costs

Capital mine development totals A$4.5M in the 2018-2019 budget year to support the development to and extraction of the scheduled ore sources, at a budgeted cost of A$5,054/m of advance.

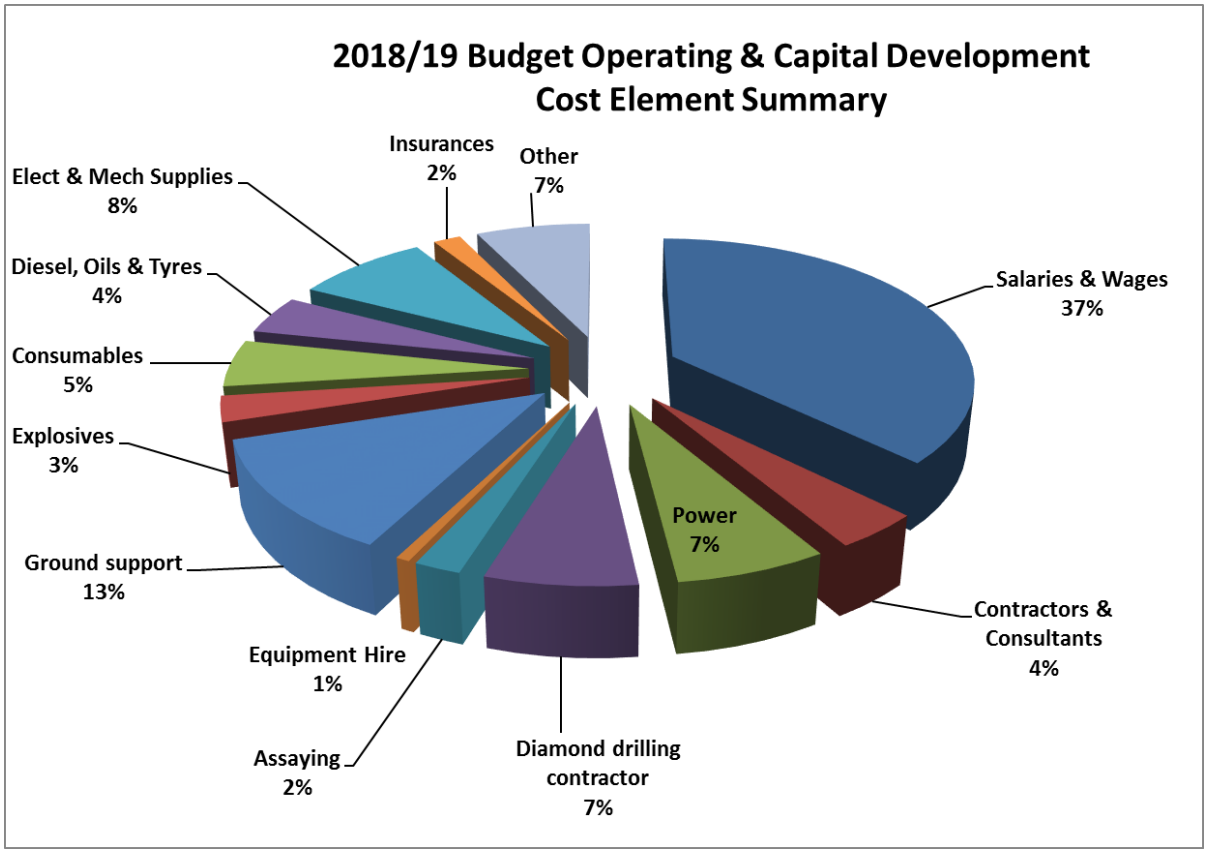
Site sustaining capital and productivity improvements total A$6.6M, with the larger items including:

- Tailings storage facility uplift and new design (A$3.5M)
- Maintaining (through replacement or rebuilds) some of the underground mobile equipment
  - Trucks (A$0.3M)
  - Loader (A$0.4M)
- Pumping, electrical and ventilation infrastructure (A$1.0M)

14.3 Forecast Operating Costs

The 2018-2019 budget expenditure across all departments has been worked up from cost element/first principles basis. Current costs have been used where known (salaries and wages, and key consumables – power, cyanide, diesel, explosives, ground support, tyres etc.). The operating and capital development cost by expense element is summarised in Figure 14-1**.**

Figure 14-1 Ballarat mine cost breakdown



14.3.1 Royalties

No gold mineral royalties are payable to the State of Victoria, Australia.

However, as part of the acquisition negotiated in 2010, there is a 2.5% royalty on gold production payable to Newcrest Mining Ltd, capped at A$50M, from inception to date (March 2018) $9.2M of this royalty has been paid.

14.3.2 Company Tax

The current Australian Company Tax rate of 30% on net profit, payable to the Australian Federal Government is applicable.

14.3.3 Sale of Product

CGT sells to a gold refiner at “Australian spot market” prices. The company is paid on the refined weight of gold by the refiner at the “Australian spot market” price on the day of sale.

14.3.4 Hedging Program

No hedging program is in place.

14.3.5 Exchange Rate and Gold Price Factors

Based on recent average trading ranges for the AUD/USD exchange rate of $0.78 and an average gold price of US$1,310 per troy ounce an Australian Gold price of A$1,680 per troy ounce is being used for economic forecast models and the 2018-2019 mine site budget.

15 INTERPRETATION AND CONCLUSIONS

The Ballarat underground gold mine is owned and operated by CGT, a wholly-owned subsidiary of LionGold Pty. Ltd. CGT holds an exploration licence which covers the historic Ballarat East, Ballarat West and Ballarat South goldfields. This area includes two mining licenses which covers the Ballarat mine site, process plant and tailings storage facility, and the Ballarat South goldfield. The Ballarat mine is located beneath the city of Ballarat.

Gold mineralisation is found within narrow (less than 2 m thick) quartz veins associated with a series of major west-dipping faults which traverse the goldfield. The distribution of gold within these quartz veins exhibits a high- to extreme-nugget effect and the presence of coarse often visible gold particles (>1 mm in size).

CGT has completed an update of its Mineral Resource estimate for the Ballarat mine. Mineral Resources have been estimated and are reported in compliance with the JORC Code 2012. The Mineral Resource consists of mineralisation within five discrete lodes. Each lode is represented by a series of mineralisation wireframes. Tonnage and grade values have been estimated based on 570 diamond drill holes drilled between 2007 and 2018. Five block models have been created to estimate each of the lodes defined by CGT. Wireframes were constructed of geological domains within each of the lodes and were used to constrain the block model. An inverse distance squared estimation algorithm was applied, with composite top-cut grades selected using statistical analysis of the distribution of grade within each domain. Continuous selective mining may not be achievable due to the high-nugget effect and the Mineral Resources are therefore reported at a 0 g/t Au cut-off. Domains containing estimated gold grades of less than 4 g/t Au are excluded from the Mineral Resource as they are considered unlikely to have a reasonable chance of eventual economic extraction based on costs and gold price at the time of estimation.

The project has excellent infrastructure, including surface buildings, a fully operating plant, a fleet of mining vehicles (e.g. light vehicles, trucks, jumbos, etc.) and underground decline access to development. Production areas are accessed via the 1,200 m long Woolshed Gully decline and the 3,700 m long Woah Hawp decline, development in the Llanberris compartment is at a depth of 750 m below the portal. The entire underground network comprises some 26 km of tunnels.

The 2018-2019 budget aims to schedule ore from the current Mineral Resource (Table 1.2). This is achieved such that 84% of the tonnes scheduled to be mined are from the current Mineral Resource. The remaining 16% is based on the assumption that on-going exploration success will be achieved from drilling the exploration targets from within the existing mine footprint and this will identify further ore sources to allow economic extraction in 2018-2019 at production rates, grades and costs similar to the 2017-2018 budget year.

Three diamond drill rigs currently operate underground on a 24/7 basis, a fourth rig is planned during the latter part of the year with a forecast of an average of 4880 m of drill core to be produced per month for 2018-2019 budget year. CGT has, over the last five years, demonstrated its capacity to replace Mineral Resources depleted for mining. The existing infrastructure allows quick exploitation of areas identified during drilling and over the next 12 months.

Probable Ore Reserves have been defined at Ballarat, based on the Indicated Mineral Resource. The presence of additional Mineral Resources to support the reserves is the result of better understanding of the grade distribution and structural setting of mineralisation as well as close-spaced drilling to continue to resolve geological and grade continuity, in particular a high to extreme-nugget effect of gold grade. In addition, localised variations in lode geometry are present. The project has appropriate infrastructure and plant in place. Mining costs, parameters and methods are now determined as a result of over four years continuous mining. Project viability is highly sensitive to gold price and operating costs.

16 RECOMMENDATIONS

A number of recommendations are made in order to improve the quality of future Mineral Resource estimation. They are as follows:

- Continue on-going geological studies to understand the nature of the mineralisation, in particular controls on grade distribution.

- Continue a review of Mineral Resource classification criteria. Production reconciliations over recent years have demonstrated an improving level of estimation reliability. It is proposed that a review of the current Mineral Resource classification parameters may enable portions of the current Inferred Resource to be reclassified to a higher level of confidence.

- Continue to advance the estimation methodologies employed including:
  - Use of de-clustering in statistical analysis of sample grades.
  - Improved statistical analysis and correlation of assay and block estimate values.
  - Use of variography to determine spatial relationships.
  - Use QKNA to optimise parent block size and estimation parameters.
  - Investigate the use of kriging (or variant thereof) as an alternative estimation methodology.

- Continue to refine reconciliation procedures.

- In relation to mining:
  - On-going review of stoping methods and seek opportunities for improvement where possible.
  - Continued rigorous ground control and monitoring, and control of additional mining dilution where possible.
  - Reconciliation of mining dilution and over-break by ore style should be implemented in order for over-break and dilution numbers for specific mineralisation styles to be included into scheduling.

17 REFERENCES

http://earthresources.vic.gov.au/earth-resources/maps-reports-and-data/geovic
Accessed 28-04-2017

Peel MC, Finlayson BL & McMahon TA (2007), Updated world map of the Köppen-Geiger climate classification, Hydrol. Earth Syst. Sci., 11, 1633-1644.

http://www.bom.gov.au/climate/averages/tables/cw_089002.shtml
Accessed 24-04-2017 – Footnote "Product IDCJCM0026 Prepared at Thu 20 Apr 2017 01:13:30 AM EST"

Reid, B., Clarke, D. and Adams, M. 2016. Information Memorandum March 2016. CGT internal document – unpublished. CGT

Allibone, A. (2009). Internal Lihir Gold Report.

Baragwanath, W. (1923). The Ballarat Goldfield. Geological Survey of Victoria Memoir 14.

Canavan, F. and Hunt, F.L. (1988). Ballarat East Project, Resource Report, Ballarat Goldfields NL unpublished company report.

Carnie, C. and Cox, B. (2007). Ballarat East Resource Report, September 2007. Ballarat Goldfields NL unpublished company report.

Hernan M, Petrie P and Valle S (2016) Annual QPR for the Ballarat Gold Mine, Australia for the Year Ended 31 March 2016

Cox, B. (2008). Ballarat East Fact File. Ballarat Goldfields NL unpublished company report.

D'Auvergne, P. (2009). Exploration Licence 3018 and Mining Licences 5396, 4847 and 5444, annual Technical Report for the Period 1 July 2008 to 30 June 2009. Ballarat Goldfields Pty Ltd (LGL) unpublished company report to Victorian Department of Primary Industries.

D'Auvergne, P. (2010). Exploration Licence 3018 and Mining Licences 5396, 4847 and 5444, Progress Report for the Period 1 July 2000 to 28 February 2010. Ballarat Goldfields Pty Ltd (LGL) unpublished company report to Victorian Department of Primary Industries.

Dominy, S. C. (2014). Predicting the unpredictable: evaluating high-nugget effect gold deposits, Mineral Resource and ore reserve estimation – The AusIMM guide to good practice, Monograph #30, 659-678, Melbourne, Australasian Institute of Mining and Metallurgy.

Dominy, S. C. and Edgar, W. B. (2012). Approaches to reporting grade uncertainty in high nugget gold veins, Applied Earth Sciences, **121**, pp 29-42.

Dominy, S. C. and Hernan, M.J. (2012). Castlemaine Goldfields Ltd: Ballarat Mine Mineral Resource Report, March 2014, JORC 2012 Mineral Resource Report.

Fairmaid, A, Kendrick, M.A., Phillips, D. and Fu, B. (2011). The Origin and Evolution of Mineralizing Fluids in a Sediment-Hosted Orogenic- Gold Deposit, Ballarat East, Southeastern Australia. Economic Geology, 106, 653-666.

Finlay, I.S. and Douglas, P.M. (1992). Ballarat Mines and Deep Leads, Geological Survey of Victoria Report 94.

Gregory, J.W. and Baragwanath, W. (1907). The Ballarat East Goldfield, Memoir No 4, 53p, Geological Survey of Victoria.

Lidggey, E. (1893). Report on the Ballarat East goldfield, Special Report for the Department of Mines, Victoria.

Olsen, S and Cox, B (2005) Ballarat East Resource Report, July 2006. Ballarat Goldfields NL unpublished company report.

Osborne, D.J. (2008) The Ballarat East Goldfield – New Insights on an Old Model. In Proceedings Narrow Vein Mining Conference, pp59-70 (The Australasian Institute of Mining and Metallurgy, Melbourne).

Phillips, G.N. and Hughes, M. Victorian Gold Deposits (1998), AGSO Journal of Australian Geology and Geophysics 17(4), 213 -216.

Taylor, D.H., Whitehead, M.L., Olshina, A., and Leonard, J.G. (1996) - Ballarat 1:100 000 Map Geological Report, Geological Survey of Victoria, Report 101

Taylor, D.H., (2003) - Ballarat Goldfields Region, Victoria,, Geological Survey of Victoria, Report 101

Vandenberg, A., Willman, C.E., Maher, S., Simons, B.A., Cayley, R.A., Taylor, D.H., Morand, V.J., Moore, D.H., and Radojkovic, A. (2000). The Tasman Fold Belt System in Victoria, Special Publication, Geological Survey of Victoria.

18 DATE AND SIGNATURE PAGES

I, Philip Petrie, do hereby consent to the public reporting of the Ballarat gold mine Mineral Resource and release of the Qualified Persons Report entitled "*Annual QPR for the Ballarat Gold Mine, Australia for the Year Ended 31 March 2018*". I have given and have not withdrawn prior to lodgement, my written consent to be named in any announcement as a person responsible for this Mineral Resources statement and to the inclusion of this statement in the form and context in which it appears.

I certify that I have read the Qualified Persons Report and that it fairly and accurately represents the work for which I am responsible.

Based on the requirements of Practice Note 4C of the Singapore Exchange Securities Trading Limited Listing Manual Section B: Rules of Catalist, I am a Qualified Person. I am also a Competent Person as defined by the JORC Code 2012, having at least five years of experience that is relevant to the style of mineralisation and type of deposit described in the report, and to the activity for which I am accepting responsibility.

Dated: 30th June 2018

Philip Petrie

_____

Philip Petrie
MAusIMM

I, Matthew J. Hernan, do hereby consent to the public reporting of the Ballarat gold mine Mineral Resource and release of the Qualified Persons Report entitled "*Annual QPR for the Ballarat Gold Mine, Australia for the Year Ended 31 March 2018*". I have given and have not withdrawn prior to lodgement, my written consent to be named in any announcement as a person responsible for this Mineral Resources statement and to the inclusion of this statement in the form and context in which it appears.

I certify that I have read the Qualified Persons Report and that it fairly and accurately represents the work for which I am responsible.

Based on the requirements of Practice Note 4C of the Singapore Exchange Securities Trading Limited Listing Manual Section B: Rules of Catalist, I am a Qualified Person. I am also a Competent Person as defined by the JORC Code 2012, having at least five years of experience that is relevant to the style of mineralisation and type of deposit described in the report, and to the activity for which I am accepting responsibility.

Dated: 30th June 2018

Matthew J Hernan.

_____

Matthew J Hernan
MAusIMM, MAIG

19 GLOSSARY OF TERMS

Alteration	A change in mineralogical composition of a rock commonly brought about by reactions with hydrothermal solutions or by pressure changes.
Au	The chemical element gold
Breccia	A rock mass composed of large, angular fragments of pre-existing rocks
Cambrian	Period of geological time between 542 Ma and 488 Ma
Carbonates	Any carbonate mineral, compound composed of carbonate ions and metal such as calcium, magnesium or iron
Carboniferous	Period of geological time between 359 Ma and 299 Ma
Chalcopyrite	The mineral copper iron sulphide
Cleavage	A regular parting in rock formed as a result of compression. Typically seen in slate
Development	Underground activity to access an orebody (vein) for evaluation and mining
Devonian	Period of geological time between 416 Ma and 359 Ma
Diamond (core) drilling	Method of obtaining a cylindrical core of rock by drilling with a diamond impregnated bit. Produces a high quality sample
Dip/dipping	Angle and direction of steepest slope on a planar surface
Fault	A fracture plane in rocks showing significant movement between the two sides
Galena	The mineral lead sulphide
Grade	The relative quantity or percentage of mineral content. Gold grade is commonly expressed in the terms: g/t - grams per tonne, ppb – parts per billion, ppm – parts per million
Group	A major sequence of sedimentary rocks forming a distinctive unit by virtue of rocks and/or fossils present
g/t	Grams per tonne, used to express concentration of rare metals in rock. 1 g/t is equivalent to 1 ppm and 1,000 ppb
Indicated Mineral Resource	An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical, characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and or

	grade continuity but are spaced closely enough for continuity to be assumed
Inferred Mineral Resource	An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is Inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered though appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability
JORC / the JORC Code 2012	The Reporting Code of the Joint Ore Reserves Committee (of the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia)
Ma	Millions of years
Measured Mineral Resource	A 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaces closely enough to confirm geological and grade continuity
Metamorphism	The process of recrystallisation of rock as result of increased temperature and pressure
Micron (µm)	A measurement of distance – 1,000 µm is equivalent to 1 mm. A µm is 1 x 10^{-6} of a metre
Mineral Resource	A technical term which is controlled in its use by the JORC Code 2012. A 'Mineral Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are subdivided, in order of increasing confidence, into Inferred, Indicated and Measured categories. The words 'ore' and 'reserves' must not be used in describing Mineral Resources as the terms imply technical feasibility and economic viability and are only appropriate when all relevant Modifying factors have been considered
Nugget effect	A term that describes grade variability for samples at small distances apart (less than a few cm). A low nugget effect (<20%) indicates minimal grade variation, whereas a high nugget effect (>70%) indicates that grade is highly variable and potentially relatively unpredictable. Pure nugget effect (100%) indicates an almost random grade distribution.
Ordovician	Period of geological time between 488 Ma and 443 Ma.

Ore Reserve	A technical term which is controlled in its use by the JORC Code 2012. An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could be reasonably justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves
Ore shoot / shoot	A high grade zone within a mineral vein
Pyrite	The mineral iron disulphide
QA/QC (for sampling and assaying)	There are two components to a QA/QC system – quality assurance and quality control. Quality assurance (QA) refers to the protocols and procedures, which ensure that sampling and assaying is completed to the required quality. Quality control (QC), however, is the use of control samples and statistical analysis to ensure that the assay results are reliable
QKNA	Qualitative Kriging Neighbourhood Analysis, a statistical technique used to test the appropriateness of the parameters used in Kriging based estimations.
Quartz	The mineral silicon dioxide
Strike	Trend of a horizontal line on any geological plane
Strike slip	Movement parallel to the strike of a fault plane
Sulphides	Minerals composed of metals combined with sulphur
Variogram	A graphic representation of spatial correlation between samples in a given orebody. The variogram allows the calculation of the nugget effect and the sphere of influence of samples (the range)
Vein	A relative thin (millimetres to 10 m scale) sheet of quartz or other minerals cutting across pre-existing rocks

Appendix A
Checklist of assessment and reporting criteria, based on Table 1 of the JORC Code 2012

Section 1 Sampling techniques and data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code 2012 explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	• Diamond drilling was used to obtain either nominal 1 m lengths of halved drill core, or full core sampling on nominal 0.4 m or 0.7 m (2014 onwards) lengths of drill core, from which between 2 kg and 2.5 kg of material was pulverised for analysis using either Fire Assay (50 g) analysis, PAL 1000 or the LeachWELL 2000 g Cyanide leaching technique. For further details see section 6.2.5 of the report. • The mineralisation contains coarse particles of gold, up to 10 mm. The sampling method has been selected to accommodate the coarse nature of the gold particles. • The sample size preparation and the assay method are regarded as suitable for the style of mineralization. • Sample start and finish points and sample lengths were adjusted to match the boundaries of ore zones in order to maximise sample representivity. Sample compositing was utilised during the estimation process to compensate for any change of sample support occurring as a result of sample length variation incurred by these adjustments.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	• Diamond drilling was used for all holes within the Mineral Resource comprising NQ2 (50.6 mm), LTK60 (43.9 mm) and HQ (63.5 mm) sized core. • Core orientation was carried out by one of two methods; either using the Globaltech Orifinder® Orientation tool, or by using the pervasive north south trending upright cleavage as a reference plane.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Intervals of lost core are identified using core blocks by drilling staff as core is recovered underground. During geological logging, intervals of lost core are verified by inspecting the core either side of the interval to ensure the breaks do not fit neatly together, if necessary drilling staff is consulted to determine the most likely position of the lost core. The final position is recorded within the lithological log as "lost core". • During core sampling, sample intervals are terminated at the edge of the lost core intervals to ensure that no assays are attributed to intervals of lost core. • During sample compositing, intervals of lost core are ignored. The result is that an intercept with a section of lost core will have a run of composites which stop precisely at the start of the lost core interval, and re-commence at the end of the interval of lost core. This ensures that block model estimates will only utilise composite data where assay data have been collected. • Core recovery can be poor in faulted zones often associated with gold mineralisation. It is anticipated that core loss as a result of faulted ground may

Criteria	JORC Code 2012 explanation	Commentary
		result in under-reporting the true grade of the intersection. This is not anticipated to have a material impact on the resource estimation as core loss accounts for less than 1% of the ore intersected.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged.	• Qualitative code logging was undertaken for lithology, alteration, veining and geotechnical rock quality. Structural measurements of bedding, cleavage and fault planes were taken where possible to aid in the interpretation of the ore body orientation. • Geological logging was carried out on all drill holes informing the estimate. • Core photos were taken of each core tray throughout all holes informing this Mineral Resource. • Over the time during which the drilling was carried out a number of changes have been made to the core logging procedure to streamline and improve the logging process. These changes did not affect the way mineralisation domains are identified and interpreted.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	• Core sampling has collected half diamond saw cut drill core on nominal 1.0 m lengths of drill core prior to 2014, and full core samples on nominal 0.4 m or 0.7 m (2014 onwards) lengths of drill core. Approximately 2 kg to 2.5 kg of sample was used for assaying. • Samples were pulverised for 4 minutes using an LM5 pulveriser. 1 in every 10 samples have a 2 g sub sample taken and tested using laser sizing analysis to ensure that >95% of the sample passes 75 µm. • Second-half sampling was carried out on samples during 2010 to assess sample representivity. 336 samples with lengths between 0. 5m and 0.9 m, greater than 20% quartz content and greater than 0.1 g/t were analysed. As expected extreme variability was observed, with a 12% difference between the average grade of the LHS of the core and the RHS of the core. The change to full core sampling was made to improve sample representivity.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• From November 2010 samples have been assayed by the Gekko Laboratory at the Castlemaine Goldfields Pty Ltd (“CGT”) Ballarat mine site. Samples prior to this date were processed in house at the BGF laboratory at the CGT Ballarat mine site or at Genalysis laboratory in Adelaide. • LeachWELL is not a total assay method; this technique generally recovers 95% - 98% of gold at Ballarat on a 24 hour leach. • QA/QC Procedures include the submission of standards and blanks. A campaign of duplicate sampling was carried out in 2010 whilst half core sampling was carried out. No duplicate samples have been submitted with full core samples. Internal laboratory standards were analysed within all submitted batches. • Drill hole samples have been supported by the submission of certified

Criteria	JORC Code 2012 explanation	Commentary
		reference standards, details of which are given in Section 6.4 of the report.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	• Significant intersections were identified and modelled during detailed geological interpretation by company geologists listed in Section 2.4 under the supervision of the Geology Manager (Mr. Matthew Hernan). All significant intersections modelled are reviewed by the Geology Manager. • Sample intervals are allocated unique sample identification numbers and entered directly into the company's AcQuire™ database. Analytical results are received from the Gekko assay laboratory as .CSV files and imported directly into the database. Data validation functions built into the AcQuire™ database data entry and importing forms reduce the potential of importing incorrect data. • CGT regularly audits the assay laboratory and routinely submits and monitors a series of Certified Reference standards and blanks in accordance with the company's sampling QA/QC procedure.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	• All diamond drill holes are located relative to a local mine grid. The mine grid is based on a modified AMG66 grid whereby northing's are AMG66 minus 5,800,000 m and easting's AMG66 minus 700,000 m. Relative levels are based on the Australian height datum 1971 (AHD), whereby relative levels are AHD plus 10,000 m. • Drill hole collars have been surveyed by CGT surveyors. Down hole surveys were carried out using a Reflex ez-trac down hole multi shot camera. Holes which lacked collar surveys and/or downhole surveys have been discussed in sections 0. • Topographic surface level has been surveyed for the mine, however is not considered material to this estimate due to the depth of the mineralization being between 450m and 750m below the surface.
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	• Diamond drilling within the Mineral Resource was completed on 25 m to 50 m spaced east-west oriented drill fans. Hole spacing within fans varies between 7 m and 15 m. • The drill hole spacing used in this estimate is considered adequate to test the geological continuity of the domains identified. The spatial variability of gold grades observed within ore domains indicates it is unlikely that the drill spacing will enable an accurate estimation of grades on a local scale. • The drill spacing is regarded as typical of that used to define Mineral Resources that have been mined during the past year. Grade estimates have been validated against processed grades over the past year and found to be within acceptable tolerances, given the Inferred Mineral Resource classification previously applied to all Mineral Resources at Ballarat. • The drill spacing used for this Mineral Resource is considered adequate to

Criteria	JORC Code 2012 explanation	Commentary
		qualify it as an Inferred Mineral Resource as defined by the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves (“the JORC Code 2012”). • Where drilling is supported by the inclusion of development levels showing acceptable reconciliation between face and block model grade, then this is considered adequate to qualify it as an Indicated Mineral Resource as defined by the JORC Code 2012. • Sample intervals were adjusted to ensure sampling was not carried out across mineralisation boundaries; as a result, there is some variation in the lengths of the sample intervals informing this estimate. • Sample compositing was undertaken in an effort to attain equal sample support as described in section 8.3.5
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• The drill orientation is variable within the deposit; however, most holes are drilled at angles approaching perpendicular to the orientation of the main west-dipping fault zones. • As the mineralisation is comprised of a combination of west-dipping fault zones and east-dipping vein arrays, it is common for west-dipping fault zones to be well delineated by drilling perpendicular to their orientation, but for east-dipping vein arrays to be poorly represented due to holes being almost parallel to their orientation. The drill intersection angle common for east-dipping vein arrays may cause bias whereby they are under-represented by volume due to conservative wireframing commonly applied to domains of low geological confidence.
Sample security	The measures taken to ensure sample security.	• Samples from drilling used in the estimate were retained at the Ballarat mine site at all times. The assay laboratory is located on the mine site and subject to the same security monitoring as the mine site.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• No independent audit or review has been carried out on the sampling techniques or data • Sampling techniques and data have been internally reviewed by the Geology Manager Mr Hernan • The Competent Person Mr Hernan, continually reviews sampling techniques and data as part of the QAQC program.

Section 2 Reporting of exploration results

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code 2012 explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• Details of the tenement and all related material issues, and the security of the tenure as reported in the relevant section, have been verified by the Competent Person, Mr Hernan, via the DSDBI web site.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• Acknowledgment and appraisal of exploration by other parties is contained within section 4 of the report.
Geology	Deposit type, geological setting and style of mineralisation.	The deposit type, geological setting and style of mineralisation are all detailed within section 5 of the report.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• A summary of all information material to the understanding of the exploration results is contained within relevant sections of the report including sections □, 8.3.1 and has been verified by the Competent Person Mr Hernan.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	• All data aggregation methods are detailed within section 0 of the report.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	• All relationships between mineralisation widths and intercept lengths are detailed within the appropriate sections of the report.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• All maps and sections (with scales) and tabulations of intercepts that are considered appropriate have been included in the report.

Criteria	JORC Code 2012 explanation	Commentary
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• Comprehensive reporting of all Exploration Results is not practicable; however, a representative reporting of both low and high grades and/or widths has been provided in section 0
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• The Competent Person Mr Hernan is unaware of any substantive exploration data not included within the report.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• The nature and scale of planned further work has been discussed in the relevant sections of the report. Diagrams and detailed discussions have been restricted due to the commercial sensitivity of such items.

Section 3 Estimation and reporting of Mineral Resources

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section)

Criteria	JORC Code 2012 explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.	• Geological logging is entered directly into the company's AcQuire™ Database. The data entry module will not allow invalid logging codes to be entered, nor will it allow overlapping intervals. • Geological logging has been validated visually against drill core photos. • Drill hole collars are visually inspected in Vulcan to validate their position is consistent with the position of development. • Before any assays are imported into the database, the results of standards and blanks submitted are reviewed. Any inconsistencies identified are addressed with the assay laboratory before being imported. • Access to the CGT drilling database used for resource estimation is restricted to geological and selected technical staff. • The database, together with all data on the company's computer network is backed up on a daily, weekly and monthly basis by CGT's IT coordinator.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	• Mr Matthew Hernan (the Competent Person) who has compiled and prepared this Mineral Resource estimate has regularly inspected the underground workings and diamond drill core as part of his duties.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	• This Mineral Resource estimate is based on detailed geological interpretations carried out by CGT geologists outlined in Section 2.4. A broad description of the geology has been given in section 5 • Geological interpretation is based primarily on hand drawn detailed paper sections of drill fans on individual cross-sections. As described in section 8.3.2. • Geological wireframing is based on the detailed interpretations as described in section 5.3.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Mineral Resource is comprised of discrete mineralised zones associated with the First Chance, Scandinavian and Suleiman anticlines within the Ballarat East goldfield. • The five zones estimated occur within an area 1800 m in strike (north-south), 500 m in width (east-west) and 270 m in height (elevation). The base of the Mineral Resource is located approximately 750 m below the surface, with the upper-most portion terminating approximately 450 m below the surface.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	• Wireframes of geological domains based on detailed hand drawn interpretations were constructed using Vulcan Version 9.1 Software. • Wireframes were extrapolated no more than 15m beyond the limit of drilling data (approximately half drill fan spacing).

Criteria	JORC Code 2012 explanation	Commentary
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• Block model construction, Sample compositing and grade estimations were all carried out using Vulcan version 9.1 Software. • Geological domaining is carried out to reduce the potential for grade smearing. Geological domains are constructed to constrain high grade assays within high grade domain wireframes. • No variography has been performed on the assays informing this Mineral Resource, however statistical analysis was undertaken as described in section 8.3 • Top cutting was carried out on all domains estimated. Refer to section 8.3.3 for details. • Geological domains were estimated independently of one another. Sample selection for each domain honoured the boundaries of the domain. • Block models were constructed for each of the five lodes estimated, the construction parameters for which are described in section 8.3.5 • Inverse Distance squared estimation was used for estimation of gold grade within the modelled geological domains. • Each of the block models created had checks and validations carried out on them as described in Section 8.3.5.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• The estimation is based upon dry tonnages. Moisture content has not been included
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	• Due to the highly variable grade distribution within this Mineral Resource, there is a lower level of confidence in estimations of individual mining blocks, than there is in the overall Mineral Resource (local vs. global scale). As a result, selective mining above a grade threshold, on a block by block basis, may not be achievable. The Mineral Resource reported is global in nature and reported at a 0g/t cut-off. • Generally if whole domains were estimated to contain gold grades less than 4 g/t, these domains were omitted from the Inferred Resource. However rarely some high volume domains, with an estimated grade below 4 g/t, have portions of Inferred Resource that are above the 4g/t gold cut-off. Blocks are only classified as an Inferred Resource if they are considered likely to have reasonable prospects of eventual economic extraction based on mining costs and the gold price at the time of estimation.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Mining at Ballarat is via a combination of conventional drive development and open stoping. • Based on current all in operating costs the mineralisation estimated is considered to have reasonable prospects for economic extraction. • This assumes (for the FY 2018-2019) a gold price of A$1,680 per ounce and combined mining, processing, geology and shared services costs of $201 per

Criteria	JORC Code 2012 explanation	Commentary
		tonne (based on 2018 budget).
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• The recovery is variable to head grade and based on actual plant performance data. The model has been updated post flotation circuit commissioning and reflects the most accurate information currently available. The recovery model assumptions are reviewed against actual performance periodically as part of reforecast processes.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• Mining activity is being carried out on MIN5396 and MIN4847. • The Ballarat mine has sufficient waste and tailings storage facilities in place to store any by-products generated as a result of processing the ore contained in this Mineral Resource. • All required permits are in place. • All required monitoring is undertaken to ensure compliance with licenses.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• Bulk density was determined by the water immersion technique, details of which can be found in Section 6.2.6. • A bulk density of 2.66 g/cm3 for quartz and 2.74 for other lithologies was determined and applied to all estimations in this Mineral Resource. • All modelled domains are assigned the bulk density for quartz. However, most domains are expected to have varying portions of quartz and sediment e.g. some domains represent continuous bulk or laminated quartz while others consist of vein arrays emanating from fault. No attempt is made to account for quartz-sediment portions in the assigned density
Classification	The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.	• Whilst the drilling carried out for this Mineral Resource is considered sufficient to verify geological continuity of fault zones, due to the high grade variability observed, the assay data informing this Mineral Resource is only considered sufficient to imply grade continuity, and not to verify it. • Where mine development has accessed and exposed ore lodes the additional information gained by geologists during underground mapping and sampling is considered sufficient to verify grade continuity locally. • This estimation has been classified as comprising **Indicated** and **Inferred Mineral Resources** as defined by the JORC Code 2012 on the basis of extrapolation which has been kept to a minimum.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	• No independent audit or review has been undertaken on this report.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is	• The tonnages estimated in this Mineral Resource estimate are reported with varying levels of confidence, with models created to emulate geological structures observed during recent mining at the Ballarat mine. • Estimates of grade at a global scale within this Mineral Resource are reported with a moderate level of confidence. This is based on review of reconciliation

Criteria	JORC Code 2012 explanation	Commentary
	not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	data discussed in Section 9.4.6. • Due to grade variability observed within the assay data set used in this estimate, grade estimates of discrete blocks are considered to be indicative only and insufficient to be used as the basis for selective mining practices. • The Competent Persons believe that a global precision of ±20% to ±30% is reasonable for the Ballarat Gold Mine Resources and is reflected by their classification as **Indicated** and **Inferred Mineral Resources.**

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code 2012 explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.*	• The underground Ore Reserve estimate is based on the Mineral Resource estimate prepared in March 2018 by CGT in accordance with the reporting guidelines of the JORC Code 2012.
	• *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Mineral Resources are reported inclusive of the Ore Reserve.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Persons work at the site.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*	• The Ballarat Gold Mine is a current and operating mine. Historic costs and operating parameters have been used in determining the Ore Reserve estimate.
	• *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• As historical operating data have been utilised it is considered to be more accurate than a feasibility study. As such, no material Modifying Factors have been considered.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• The Probable Ore Reserve estimate lies within 10 metres of existing development. All stopes were evaluated on an incremental basis, with a fully costed notional break even cut-off grade of approximately 2.7 g/t.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*	• The Ballarat Gold Mine Ore Reserve has been estimated by generating detailed mining shapes based on existing development and stopes. Individual factors for dilution and mining recovery have been completed post-geological interrogation to generate the final diluted and recovered ore reserve.
	• *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.*	• The Ballarat Gold Mine is in production with all planned mining methods currently practiced on site. Production history demonstrates these mining methods to be successful. • Stope size, development placement and ground support strategies are designed in accordance with recommendations from professional geotechnical personnel

Criteria	JORC Code 2012 explanation	Commentary
	• *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	during several phases of mine design. The existing mine plan approval process and Stope Note documentation ensure that individual stope parameters are considered. • Grade control Block Models are generated utilising a combination of diamond drilling results and information gathered during underground development by mine geologists. These are updated, as required, with additional drilling once the development for the stope is in place. • A minimum stope width of 2.5 m is used based on the current mine plan (levels 14 to 20 metres vertically apart) and the production equipment utilised (64 mm or 76 mm production holes). The Mineral Resource model used has been prepared under the supervision of the geological Competent Persons. • The Ballarat Gold Mine is a complex orebody with mineralisation closely associated with faulting. Dilution factors have been applied according to historical dilution data from past stoping and development. Mining dilution has been applied at 5% in Floor Stripping, through to an upper range for Long Hole Stoping of 50% in areas of poor ground conditions. • Mining recovery factors of 72 to 95% for blind uphole stoping, where stope pillars have not been incorporated into the design and 95% for detail design where pillars have been taken into account. 95% for longhole stoping. • The minimum mining width for stopes is 2.5 m. • Inferred Mineral Resources are included within the mine plan to allow for well-informed strategic planning. Historically, Ballarat Gold Mine has mined an Inferred Mineral Resource. • Mining infrastructure will comprise ventilation, and escape raises, typical underground operating and capital development such as stockpiles, electrical substations, and pump stations, As an operating mine the infrastructure requirements of the stoping and development methods used are already in place or are an integrated part of development design when development in new areas commences.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*	• At Ballarat Gold Mine the ore is trucked to the processing plant which is located within 300 metres of the main access portal of the mine. The mill consists of a crushing circuit with ore separation/treatment via a primary gravity circuit that co-recovers both free gold (70%) and “sulphide gold”. The free gold component is smelted to doré and the sulphide component is cyanide leached, electrowon, and smelted. Probable Reserve ore mineralogy is similar to that historically and currently treated through the processing plant. Note that the processing plant has been operating in its current configuration since 2011. A flotation circuit was commissioned in 2015 to assist with the recovery of fine gold, too small for effective gravity recovery.

Criteria	JORC Code 2012 explanation	Commentary
	• *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• The metallurgical process is well tested technology. The plant was designed purposely to treat the Ballarat style of mineralogy. The plant has been operating successfully for 10 years. • Recovery is variable to ore head grade is based on current plant performance of 81.4% with the forecast (2017/2018) metallurgical recovery factor applied of 83.9%. • No negative impact has been observed in regards to the level of lead and zinc, work to negate the impact of antinomy has meant that the forecast recovery rate remains unchanged. • The current Mineral Resource has a history of operational processing experience. • N/A
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Ballarat Gold Mine currently possesses all necessary government permits, licences and statutory approvals and is compliant with all legislative and regulatory requirements. The mining the Probable Ore Reserve will have no further environmental impact except to increase the height of the tailings within the approved storage facility and possibly increase the footprint of the permanent waste rock storage facility. Where appropriate underground voids resulting from stoping will be filled with waste rock from underground access development.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• The mine is currently in operation and therefore has adequate infrastructure to support current and future mining.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.*	• The Ore Reserve lies within 10 metres of established operational and capital development. All capital costs have been estimated based upon the Mine Plan and experience of costs incurred through past mining and processing activities in the past. Site infrastructure capital costs have already been expended prior to 2010. Any future capital costs associated with infrastructure will improve capacity or productivity. • The operating cost estimates are based upon historical costs incurred over previous periods and the internal budgeting process. • No allowance has been made for deleterious elements work to negate the impact of antinomy has meant that the forecast recovery rate remains unchanged. • Exchange rates are based upon internal technical and economic analysis. • Mining and Haulage costs are based on historical costs incurred during previous operating periods.

Criteria	JORC Code 2012 explanation	Commentary
	• *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Processing costs are based on historical data from the process plant at the Ballarat Gold Mine. • No Victorian State royalty. 2.5% royalty on gold production payable to Newcrest Mining Ltd, capped at A$50M of which from inception to date (March 2018) A$9.2M has been paid.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• N/A • Revenue is calculated using a gold price of A$1,680/oz. This is based on a gold price of US$1,310 and an AUD/USD exchange rate of $0.78. All products are sold at "Australian dollar spot market" prices.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• The Ballarat Gold Mine Ore Reserve will produce a revenue stream from the sale of gold doré. All products are sold at "Australian spot market" prices. • N/A • N/A • N/A
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• N/A. • The Ore Reserve represents less than one year's production so that no discount rate or inflation modifiers have been applied to the cash flow estimate.
Social	• *The status of agreements with key stakeholders and matters leading to social license to operate.*	• CGT maintains its social license to operate by engaging with neighbours to the mine and the local community to foster a close relationship and actively seek and provide feedback and dialogue. • To the best of the Competent Person's knowledge all agreements are in place and are current with all the key stakeholders.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• None • Supply and service contracts are in place for all critical goods and services required to operate the mine. • The Ballarat Gold Mine is currently in operation with all government and third party approvals in place for the stated reserves.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.*	• The Ore Reserve estimate is based on the Mineral Resource estimate contained within the designed stopes and classified as "Indicated" after consideration of all drilling, geological validation, the orebody experience, mining method,

Criteria	JORC Code 2012 explanation	Commentary
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	metallurgical, social, environmental, and financial aspects of the project. The Ore Reserves include Probable Ore derived from the Indicated Mineral Resource. • The Ore Reserve classification appropriately reflects the Competent Person's view of the deposit. • There is no Measured Mineral Resource estimated. The Probable Ore Reserves are not derived from nor do they include a Measured Mineral Resource.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	The Ballarat East Ore Reserve estimate was subject to an internal peer review and was reviewed by the Competent Person and is considered to be reasonable, and adequately supported.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Ore Reserve estimate is prepared within the guidelines of the JORC Code 2012. The relative confidence of the estimate falls within the criteria of Probable Reserves. Significant operating history supports the Mineral Resource model, metallurgical factors and operating unit costs. • This statement relates to global estimated tonnes and grade. • Not applicable as the Ballarat Gold Mine is in operation and historic data have been used. • Reconciliation results from past mining at Ballarat Gold Mine has been considered and factored into the Ore Reserve assumptions where appropriate.