

MILESTONE OF 1MOZ OF GOLD EQUIVALENT¹ REACHED IN LATEST MINERAL RESOURCE UPDATE

This announcement should be read in conjunction with the attached Mineral Resource Statement

Navarre Minerals Limited (ASX:NML) (Navarre or the Company) is pleased to provide a mid-year update of the Group's Mineral Resource inventory which reflects significant growth for the wholly-owned Mt Carlton Operation (Mt Carlton) in Queensland, inclusive of Crush Creek.

The Company's Mineral Resources are reported in accordance with the guidelines of the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012).

Highlights

- Navarre's commitment to resource definition and exploration drilling at Mt Carlton has delivered an important milestone for the Group with total Mineral Resource inventory reaching one million ounces of gold equivalent¹, net of mining depletion, following the recent resource update.
- Group Mineral Resources, as at 30 June 2022, are 17.5Mt at 1.8 g/t AuEq¹ for 1 million ounces of gold equivalent¹, comprising:
 - Group Gold Mineral Resources of 17.5Mt at 1.45 g/t gold for 819,000 ounces of gold
 - Group Silver Mineral Resources of 13.6Mt at 24.1 g/t silver for 10,585,000 ounces of silver
 - Group Copper Mineral Resources of 11.2Mt at 0.2% copper for 19,200 tonnes of copper metal
- The Queensland Mineral Resources, net of mining depletion, have grown substantially since Navarre's maiden Mineral Resource announcement (refer ASX announcement on 30 March 2022):
 - Gold metal has increased by 24% to 515koz (414koz Dec 21)
 - Silver metal has increased by 58% to 10.6Moz (6.7Moz Dec 21)
 - Copper metal has increased 81% to 19.2kt (10.6kt Dec 21)
- Four new Mineral Resource estimates were completed at Mt Carlton using the latest drilling data, comprising:
 - Mt Carlton mine lease: V2, Mt Carlton United and Telstra Hill deposits; and
 - Crush Creek: maiden Inferred Mineral Resource estimate for BV1 of 425kt @ 2.8 g/t gold for 40,000 ounces of gold to complement existing resources at Delta and BV7.

¹ The AuEq was calculated with the following formula: $AuEq\ g/t = ((Au_g * Au_r * Au_p) + (Ag_g * Ag_r * Ag_p) + (Cu_g * Cu_r * Cu_p)) / (Au_p * Au_r)$ where:

- Au_g, Ag_g, Cu_g = Element grade
- Au_r, Ag_r, Cu_r = Element Metallurgical recovery %
- Au_p, Ag_p, Cu_p = Element price per gram (Au = \$77.16/g, Ag = \$0.96/g, Cu = \$0.0002/g)

- Resource estimates remain unchanged for A39, BV7 and Delta in Queensland and the Victorian projects.
- Resource definition, grade control and exploration drilling programs continue with up to two surface rigs in operation targeting further resource growth and mine life extensions at Mt Carlton and Crush Creek.
- Work on an updated Ore Reserve for Mt Carlton is in progress.

Navarre Managing Director Ian Holland said:

“We are extremely excited to have reached one million ounces of gold equivalent in Group Mineral inventory in just under a year of ownership of the Mt Carlton Operation. This represents another important milestone for Navarre as we execute on our strategy of becoming a significant Australian gold producer.

“The Mt Carlton Operation is a strategic, cornerstone asset for our business and it is pleasing that our ongoing drilling programs continue to deliver significant resource growth.

“Going forward, we are working diligently towards securing a long and sustainable production future at Mt Carlton, providing benefits for all stakeholders.”

This announcement has been approved for release by the Board of Directors of Navarre Minerals Limited.

– ENDS –

For further information, please visit www.navarre.com.au or contact:

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APPENDIX A:

NAVARRE MINERALS LIMITED MINERAL RESOURCE STATEMENT – JUNE 2022

Summary

The Company's consolidated Group Mineral Resource estimates (MRE) are presented in Table 1, below. Estimates for each mine and deposit are summarised in Table 2 to Table 4. Plan views of the Mineral Resources have been provided in Figures 2 to 3.

Table 1: Group Mineral Resource Estimate as at 30 June 2022

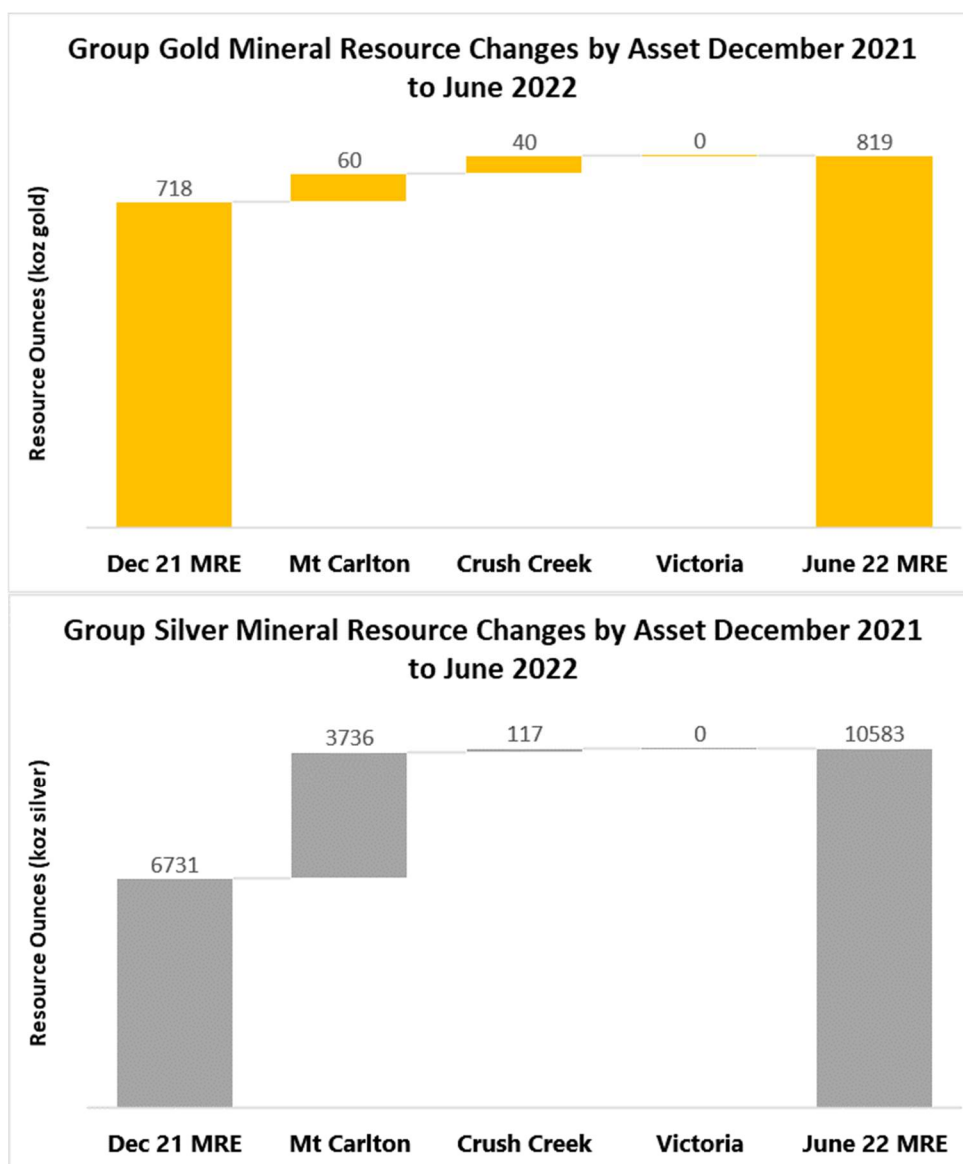
Navarre Minerals – Consolidated Mineral Resource Estimate - 30 June 2022										
Project	Resource Classification	Tonnes (kt)	Gold grade (g/t)	Silver grade (g/t)	Copper grade (%)	AuEq ¹ grade (g/t)	Gold Metal (koz)	Silver Metal (koz)	Copper Metal (t)	AuEq ¹ Metal (koz)
Mt Carlton Operation	Measured	172	1.19	16.3	0.21	1.46	7	90	400	8
	Indicated	9,270	0.78	25.7	0.13	1.28	233	7,660	11,700	382
	Inferred	1,756	1.31	42.5	0.41	2.57	74	2,402	7,100	145
	Total	11,198	0.87	28.2	0.17	1.49	313	10,152	19,200	535
Crush Creek Project	Measured	-	-	-	-	-	-	-	-	-
	Indicated	1,352	2.45	5.4	-	2.50	107	237	-	109
	Inferred	1,094	2.69	5.5	-	2.74	95	194	-	97
	Total	2,447	2.56	5.5	-	2.61	201	431	-	205
Queensland	Total	13,645	1.17	24.1	-	1.69	515	10,583	19,200	740
Stawell Corridor Project	Measured	-	-	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-	-	-
	Inferred	3,889	2.43	-	-	2.43	304	-	-	304
	Total	3,889	2.43	-	-	2.43	304	-	-	304
Victoria	Total	3,889	2.43	-	-	2.43	304	-	-	304
GRAND TOTAL		17,534	1.45	-	-	1.85	819	10,583	19,200	1,044

Notes:

- All Mineral Resources are reported in accordance with the JORC Code 2012 Edition.
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.
- Mineral Resources are inclusive of Ore Reserves. There is no certainty that Mineral Resources not included in Ore Reserves will be converted to Ore Reserves.
- Mineral Resources are depleted for mining.
- The V2, Mt Carlton United, Telstra Hill and A39 Open Pit Mineral Resources for the Mt Carlton Operation are reported at varying Net Smelter Return (NSR) cut-off values inside optimised pit shells allowing for processing costs, metallurgical recovery, payability factors and haulage costs to the Mt Carlton Mill.
- The Delta, BV7 and BV1 Open Pit Mineral Resources for the Crush Creek Project are reported at a 0.55 g/t gold cut-off grade inside optimised pit shells allowing for processing costs and haulage to the Mt Carlton Mill. The cut-off grades applied do not consider site

support costs.

- All Open Pit Mineral Resources are constrained within optimised pit shells that have used mining, processing and geotechnical parameters from Pre-Feasibility Study (PFS) work completed and current V2 operational cost data. Price assumptions used for the key economic elements were gold – A\$2,400/oz; silver – A\$30/oz; and copper – A\$12,000/t.
- For all Underground Mineral Resources, a series of resource stope optimisations have been undertaken in Mineable Stope Optimiser (MSO). The MSOs have been run based on extraction by either longhole open stoping or by mechanised cut and fill mining methods which are dependent on the mineralisation geometry. The inclusion of waste material during the stope optimisation process precludes the requirement to apply a cut-off grade to the reporting of the Mineral Resources, since the application of the calculated NSR or grade cut-off has been applied within the MSO and the creation of the wireframe solids.
- ¹ The AuEq was calculated with the following formula: $AuEq\ g/t = ((Au_g * Au_r * Au_p) + (Ag_g * Ag_r * Ag_p) + (Cu_g * Cu_r * Cu_p)) / (Au_p * Au_r)$
where:
 - Au_g, Ag_g, Cu_g = Element grade
 - Au_r, Ag_r, Cu_r = Element Metallurgical recovery %
 - Au_p, Ag_p, Cu_p = Element price per gram ($Au = \$77.16/g, Ag = \$0.96/g, Cu = \$0.0002/g$)



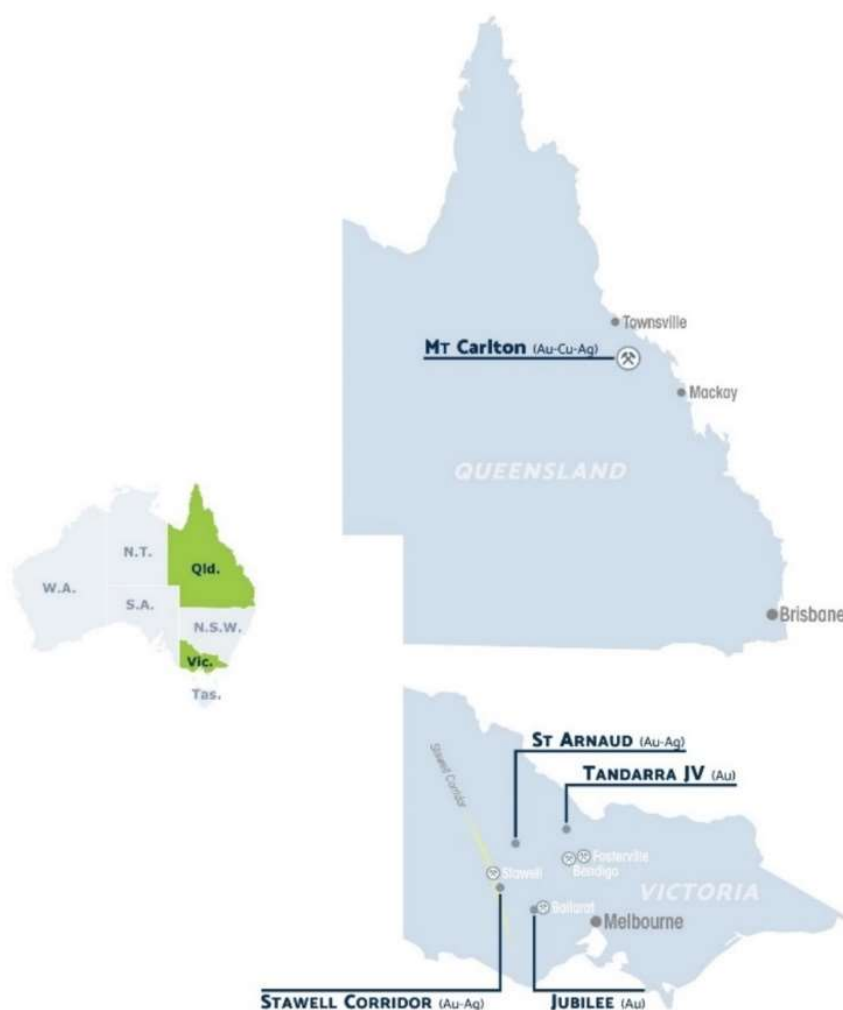
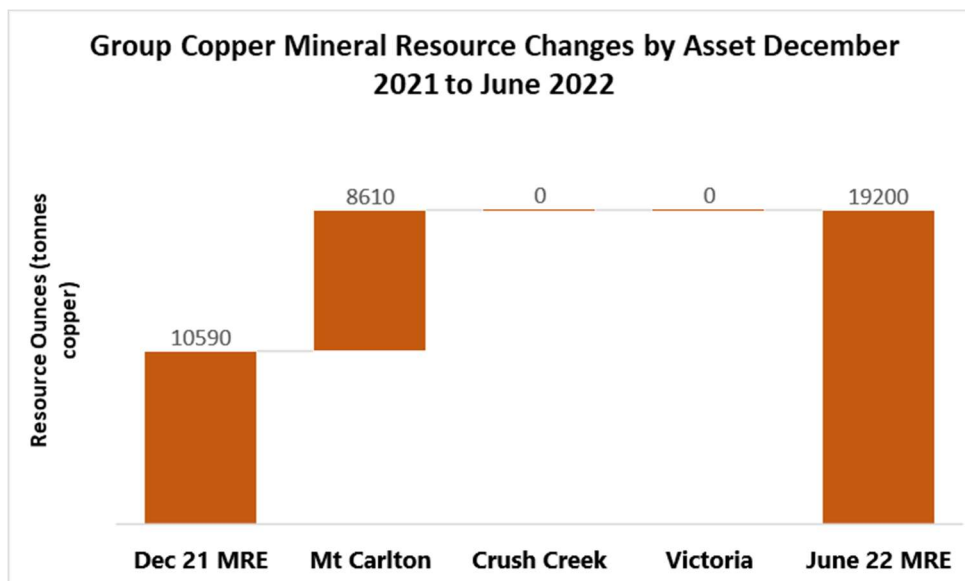


Figure 1: Location of Navarre's key project areas

QUEENSLAND MINERAL RESOURCE ESTIMATES

Table 2: Mt Carlton Mine Lease Mineral Resources as at 30 June 2022

Deposit	Category	Tonnes (kt)	Gold grade (g/t)	Silver grade (g/t)	Copper grade (%)	AuEq ¹ grade (g/t)	Gold Metal (koz)	Silver Metal (koz)	Copper Metal (t)	AuEq ¹ Metal (koz)
V2	Measured	-	-	-	-	-	-	-	-	-
	Indicated	1,260	1.53	48.9	0.58	3.10	62	1,981	7,300	126
	Inferred	1,392	1.36	28.2	0.48	2.52	61	1,261	6,700	113
	Total	2,652	1.44	38.0	0.53	2.79	123	3,243	13,900	238
Mt Carlton United (MCU)	Measured	32	1.82	52.7	0.19	2.82	2	54	60	3
	Indicated	727	1.88	92.9	0.32	3.74	44	2,170	2,300	87
	Inferred	346	1.04	102.3	0.13	2.77	12	1,138	450	31
	Total	1,104	1.61	94.7	0.26	3.41	57	3,361	2,820	121
A39*	Measured	-	-	-	-	-	-	-	-	-
	Indicated	96	0.30	409.8	0.14	5.98	1	1,267	100	18
	Inferred	-	-	-	-	-	-	-	-	-
	Total	96	0.30	409.8	0.14	5.98	1	1,267	100	18
Telstra Hill	Measured	-	-	-	-	-	-	-	-	-
	Indicated	111	2.73	3.4	0.08	2.90	10	12	90	10
	Inferred	18	2.40	5.2	0.07	2.58	1	3	10	2
	Total	129	2.68	3.6	0.08	2.86	11	15	100	12
Stockpiles	Measured	140	1.05	8.1	0.21	1.16	5	36	300	5
	Indicated	-	-	-	-	-	-	-	-	-
	Inferred	-	-	-	-	-	-	-	-	-
	Total	140	1.05	8.1	0.21	1.16	5	36	300	5
TSF	Measured	-	-	-	-	-	-	-	-	-
	Indicated	7,076	0.51	9.8	0.03	0.62	117	2,230	1,900	140
	Inferred	-	-	-	-	-	-	-	-	-
	Total	7,076	0.51	9.8	0.03	0.62	117	2,230	1,900	140
GRAND TOTAL		11,198	0.87	28.2	0.17	1.49	313	10,152	19,200	535

Notes:

- The Mt Carlton MRE is inclusive of Ore Reserves.
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.
- The V2, Mt Carlton United, Telstra Hill and A39 Open Pit Mineral Resources for the Mt Carlton Operation are reported at varying NSR cut-off values inside optimised pit shells allowing for processing costs, metallurgical recovery, payability factors and haulage to the Mt Carlton Mill.
- All Open Pit Mineral Resources are constrained within optimised pit shells that have used mining, processing and geotechnical parameters from PFS study work completed and current V2 operational cost data. Price assumptions used for the key economic elements were gold – A\$2,400/oz; silver – A\$30/oz; and copper – A\$12,000/t.
- For Underground Mineral Resources, a series of resource stope optimisations have been undertaken in Mineable Stope Optimiser (MSO). The MSOs are based on extraction by either longhole open stoping or by mechanised cut and fill mining methods, dependent on the ore geometry. The inclusion of waste material in the MSO precludes the requirement to apply a cut-off grade to the reporting of the Mineral Resources, since the application of the calculated NSR or grade cut-off has been applied within the MSO and the creation of the wireframe solids.

- Full details of the maiden Mineral Resource Estimates for A39 were released to the ASX on 30 March 2022
- ¹ The $AuEq$ was calculated with the following formula: $AuEq\ g/t = ((Au_g * Au_r * Au_p) + (Ag_g * Ag_r * Ag_p) + (Cu_g * Cu_r * Cu_p)) / (Au_p * Au_r)$
where:
 - Au_g, Ag_g, Cu_g = Element grade
 - Au_r, Ag_r, Cu_r = Element Metallurgical recovery %
 - Au_p, Ag_p, Cu_p = Element price per gram ($Au = \$77.16/g$, $Ag = \$0.96/g$, $Cu = \$0.0002/g$)

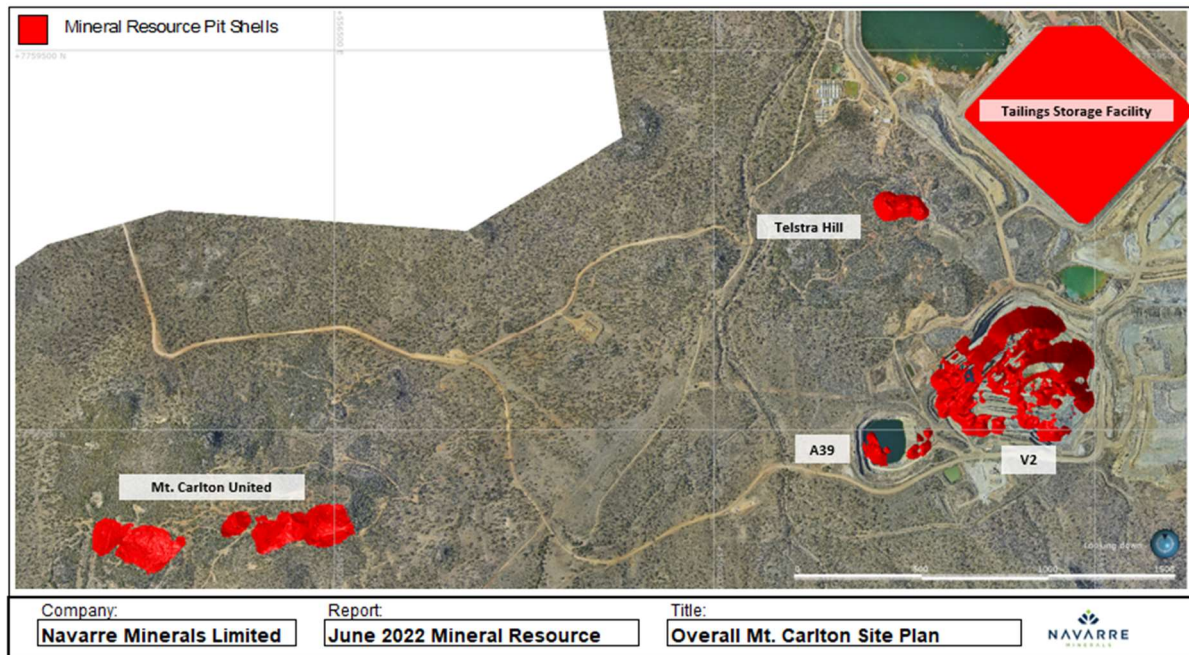


Figure 2: Location plan of Mt Carlton mine lease Mineral Resources.

Table 3: Crush Creek Project Mineral Resources as at 30 June 2022

Deposit	Category	Tonnes (kt)	Gold grade (g/t)	Silver grade (g/t)	AuEq ¹ grade (g/t)	Gold Metal (koz)	Silver Metal (koz)	AuEq ¹ Metal (koz)
BV1	Measured	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-
	Inferred	425	2.92	8.5	3.00	40	116	41
	Total	425	2.92	8.5	3.00	40	116	41
Delta*	Measured	-	-	-	-	-	-	-
	Indicated	792	2.37	3.2	2.40	60	82	61
	Inferred	375	1.90	3.1	1.93	23	37	23
	Total	1,168	2.22	3.2	2.25	83	120	84
BV7*	Measured	-	-	-	-	-	-	-
	Indicated	560	2.57	8.6	2.65	46	154	48
	Inferred	294	3.36	4.3	3.40	32	40	32
	Total	854	2.84	7.1	2.91	78	195	80
GRAND TOTAL		2,447	2.56	5.5	2.61	201	431	205

Notes:

- The Mt Carlton MRE is inclusive of Ore Reserves.
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.
- The Delta and BV7 Open Pit Mineral Resources for the Crush Creek Project are reported at a 0.55 g/t gold cut-off grade inside optimised pit shells allowing for processing costs and haulage to the Mt Carlton Mill. The cut-off grades applied do not consider site support costs.
- All Open Pit Mineral Resources are constrained within optimised pit shells that have used mining, processing and geotechnical parameters from PFS study work completed and current V2 operational cost data. Price assumptions used for the key economic elements were gold – A\$2,400/oz; silver – A\$30/oz; and copper – A\$12,000/t.
- For all Underground Mineral Resources, a series of resource stope optimisations have been undertaken in Mineable Stope Optimiser (MSO). The MSOs have been run based on extraction by either longhole open stoping or by mechanised cut and fill mining methods which are dependent on the mineralisation geometry. The inclusion of waste material during the stope optimisation process precludes the requirement to apply a cut-off grade to the reporting of the Mineral Resources, since the application of the calculated NSR or grade cut-off has been applied within the MSO and the creation of the wireframe solids.
- Full details of the maiden Mineral Resource Estimates for Delta and BV7 deposits were released to the ASX on 30 March 2022.
- ¹ The AuEq was calculated with the following formula: $AuEq\ g/t = ((Au_g * Au_r * Au_p) + (Ag_g * Ag_r * Ag_p)) / (Au_p * Au_r)$ where:
 - Au_g, Ag_g = Element grade
 - Au_r, Ag_r = Element Metallurgical recovery %
 - Au_p, Ag_p = Element price per gram ($Au = \$77.16/g, Ag = \$0.96/g$)

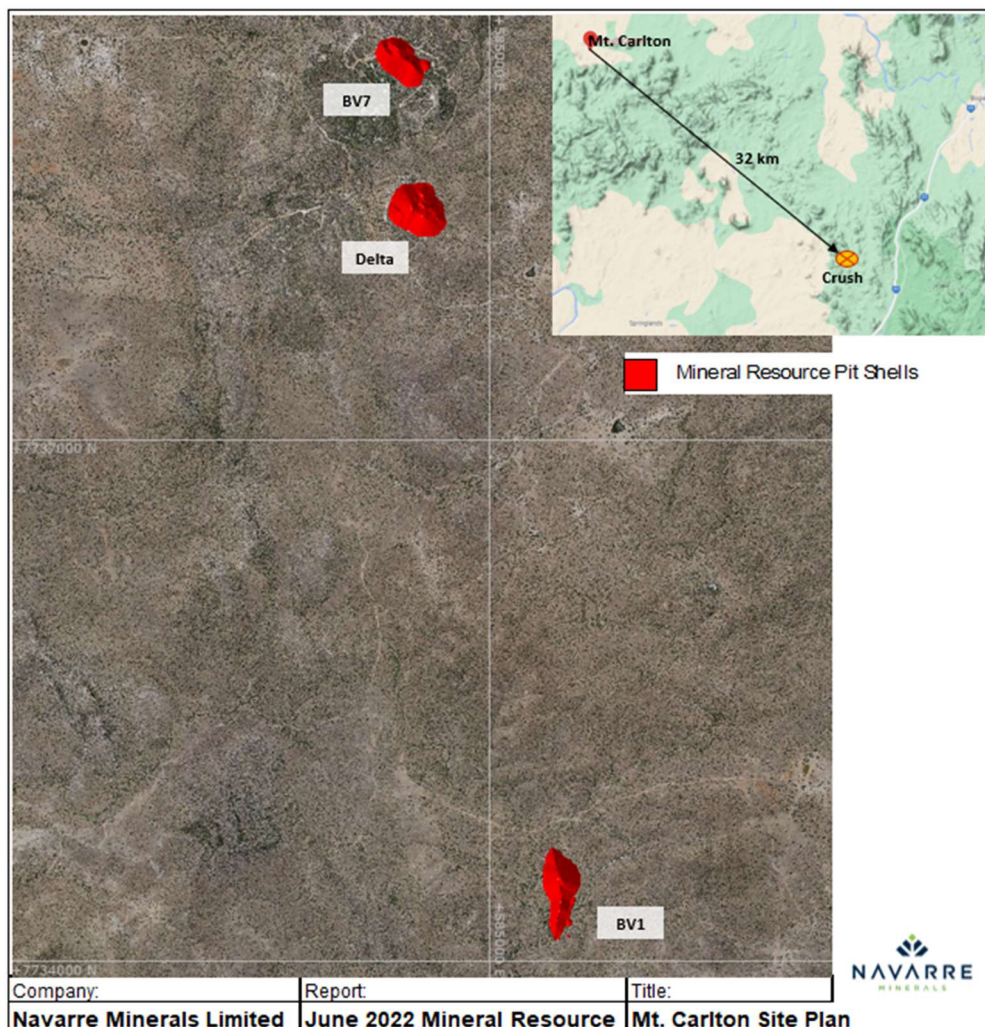
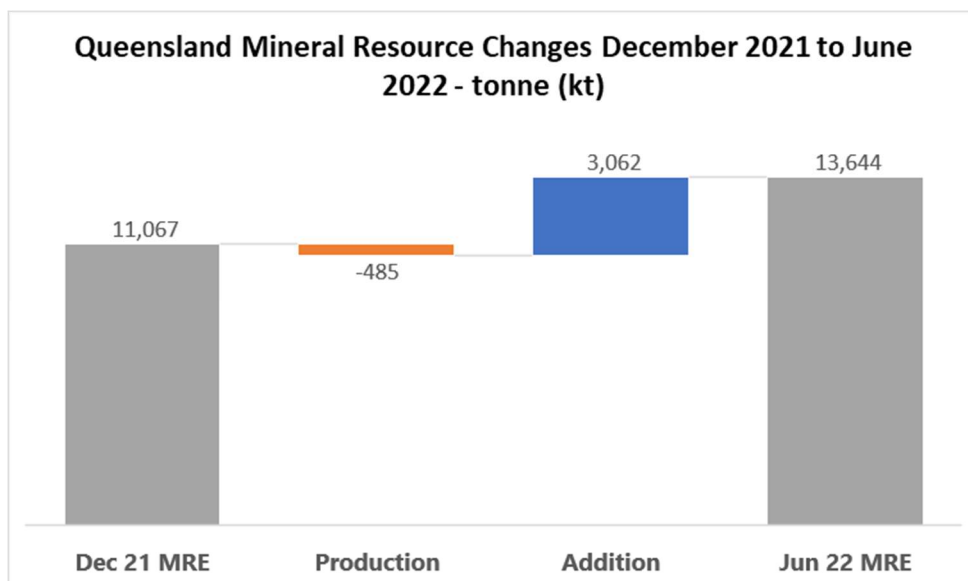
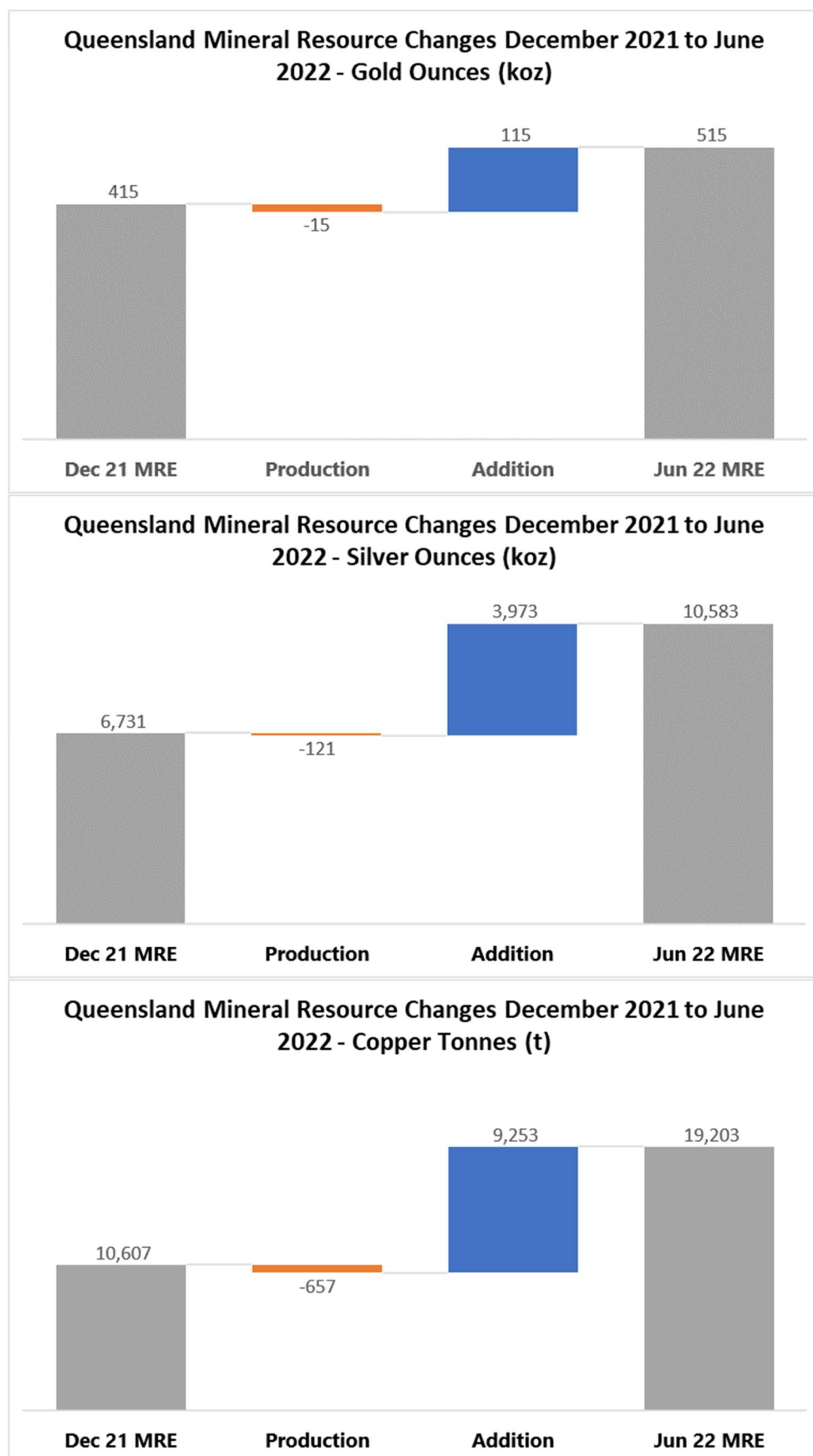


Figure 3: Location of the Crush Creek Mineral Resources at BV1, BV7 and Delta.





VICTORIA MINERAL RESOURCE ESTIMATES

Table 4: Stawell Corridor Project, Victoria MRE as of 30 June 2022

Deposit	Category	Tonnes (kt)	Gold grade (g/t)	Gold Metal (koz)
Resolution OP	Measured	-	-	-
	Indicated	-	-	-
	Inferred	1,754	2.09	118
	Total	1,754	2.09	118
Resolution UG	Measured	-	-	-
	Indicated	-	-	-
	Inferred	1,455	3.12	146
	Total	1,455	3.12	146
Adventure OP	Measured	-	-	-
	Indicated	-	-	-
	Inferred	680	1.85	40
	Total	680	1.85	40
GRAND TOTAL		3,889	2.43	304

Notes:

- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.
- MREs were reported within constraining pit shells (OP) and MSO shapes (UG) based on a gold price assumption of A\$2,500 per ounce.
- Full details of the maiden Mineral Resource Estimates for Resolution and Adventure prospects were released to the ASX on 30 March 2021.

GROUP COMMODITY PRICE ASSUMPTIONS

Navarre commodity price assumptions used to report the June 2022 Group Mineral Resources are provided below:

- Gold: A\$2,400/oz for Mineral Resources in Queensland. A A\$2,500/oz gold price was applied for Victorian Mineral Resources;
- Silver: A\$30/oz for Mineral Resources
- Copper: A\$12,000/t for Mineral Resources

All open pit MREs are reported within optimised pit shells which have been developed using a A\$2,400/oz gold price assumption and consider forecast mining costs, metallurgical recoveries and payability factors. All underground Mineral Resources are reported within underground mining shapes (MSOs) using a A\$2,400/oz gold price assumption and consider forecast mining costs, metallurgical recoveries and payability factors.

JORC CODE 2012 EDITION AND ASX LISTING RULES REQUIREMENT

This annual Statement of Mineral Resources and Ore Reserves has been prepared in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code 2012 Edition), Chapter 5 of the ASX Listing Rules and ASX Guidance Note 31.

All Material Information Summaries for the Mt Carlton and Crush Creek Open Pit and Underground Mineral Resources are provided in accordance with ASX Listing Rules 5.8 and 5.9 and the Assessment and Reporting Criteria, and JORC Code 2012 Edition requirements. The summary can be found in Appendix 1, below.

There are no material changes to the Victorian Mineral Resources. Navarre's 100% owned, Resolution and Adventure Mineral Resources remain unchanged from previously released statements (refer ASX announcement on 30 March 2021).

The V2, Mt Carlton United, Telstra Hill and BV1 Mineral Resource estimates (both OP and UG) have been compiled by Mr Richard Buerger (MAIG – 6031), a Competent Persons as defined under the JORC Code (2012).

COMPETENT PERSON STATEMENTS

Exploration Results

The information in this report which relates to Exploration Results is based on information compiled by Mr Richard Buerger BSc (Geology with Hons), Manager – Resources. Mr Buerger is an employee of Navarre, and a Member of the Australasian Institute of Geoscientists (MAIG 6031). Mr Buerger 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 Buerger consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Mineral Resources

The information in this release that relates to Sampling Techniques and Data and the Estimation and Reporting of Mineral Resources for V2, Mt Carlton United, Telstra Hill, A39, BV7 and Delta has been compiled by Mr. Richard Buerger BSc (Geology with Hons). Mr Buerger is a full-time employee of Navarre Minerals as Manager – Resources. Mr Buerger is a Member of the Australasian Institute of Geologists (6031) and has sufficient experience with the style of mineralisation, the deposit type under consideration and to the activities 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” (The JORC Code). Mr Buerger consents to the inclusion in this report of the contained technical information relating the Mineral Resource Estimation in the form and context in which it appears.

The information in this release that relates to the Estimation and Reporting of Mineral Resources for the Resolution deposit has been compiled by Mr David Coventry BSc (Geology). At the time of the estimation, Mr Coventry was a full-time employee of Mining Plus Pty Ltd and has acted as an independent consultant on the Resolution prospect Mineral Resource estimation. Mr Coventry is a Member of the Australasian Institute of Geologists (5288) and has sufficient experience with the style of mineralisation, the deposit type under consideration and to the activities 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" (The JORC Code). Mr. Coventry consents to the inclusion in this report of the contained technical information relating the Mineral Resource Estimation in the form and context in which it appears.

The information in this release that relates to the Estimation and Reporting of Mineral Resources for Adventure Lode has been compiled by Mr Richard Buerger BSc (Geology). At the time of the estimation, Mr Buerger was a full-time employee of Mining Plus Pty Ltd and acted as an independent consultant on the Adventure Lode Mineral Resource Estimation. Mr Buerger is a Member of the Australasian Institute of Geologists (6031) and has sufficient experience with the style of mineralisation, the deposit type under consideration and to the activities 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" (The JORC Code). Mr Buerger consents to the inclusion in this report of the contained technical information relating the Mineral Resource Estimation in the form and context in which it appears.

This Mineral Resources statement is based on and fairly represents, information and supporting documentation prepared by the Competent Persons. The Mineral Resources statement as a whole has been approved by Mr Geoff McDermott, who is a Member of the Australian Institute of Geoscientists and is Technical Director of Navarre Minerals Limited. Mr McDermott has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity currently 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 McDermott has provided written consent for the issue of this report in the form and context in which it appears.

New Information or Data

Navarre confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

The Company confirms that the form and context in which the Competent Person's findings are presented have not materially changed from the original market announcement.

FORWARD LOOKING STATEMENTS

This document may contain forward-looking information within the meaning of securities laws of applicable jurisdictions. These forward-looking statements are made as of the date of this document and Navarre Minerals Limited (the Company) does not intend, and does not assume any obligation, to update these forward-looking statements. Forward-looking statements relate to future events or future performance and reflect Company management's expectations or beliefs regarding future events and include, but are not limited to, the estimation of mineral reserve and mineral resources, the realisation of mineral reserve estimates, the likelihood of exploration success, the timing and amount of estimated future production, costs of production, capital expenditures, success of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage. Forward-looking statements can generally be identified using forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "outlook", "guidance" or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. These forward-looking statements involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Navarre and any of its officers, employees, agents or associates. Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Readers are cautioned not to place undue reliance on forward-looking statements and Navarre assumes no obligation to update such information.

ABOUT NAVARRE MINERALS LIMITED

Navarre Minerals Limited (ASX: NML) is a gold, silver and copper producer with a core mission to develop and operate large, high-grade and long-life mineral deposits.

Headquartered in Victoria, Navarre's gold-dominant portfolio comprises the operating 0.9Moz Mt Carlton mine, five development projects and a highly prospective exploration portfolio across Queensland and Victoria.

Navarre maintains an aggressive exploration program aimed at delivering a strong pipeline of organic growth opportunities. The Company also continues to investigate transformational acquisition and strategic merger opportunities to grow the business.

The Company sustains a lean operating model and has a deeply experienced board and management team with a proven track record in value creation.

Navarre's highest priority is the health and safety of our people, contractors, their families and the communities in which we operate. We are committed to building strong partnerships with our key community, workforce and investment stakeholders.

See more at www.navarre.com.au

APPENDIX 1: MATERIAL INFORMATION SUMMARIES

Mt Carlton Operation

The Mt Carlton Mineral Resource, as at 30 June 2022, includes the V2 open pit and underground mines, the A39 underground mine, Telstra Hill, the Tailings Storage Facility (TSF), surface stockpiles and the satellite deposit of Mt Carlton United (Figure 2). All Mineral Resources lie within ML10343. The ML area covers 1151.9 ha. Native title agreements are in place for activities within the Mining Lease, and surrounding EPMs. ML 10343 is surrounded by several EPMs forming the Mt Carlton project area, with ML10343 within EPM10164.

Exploration within the Mt Carlton EPMs and ML10343 commenced in the 1970s, with BHP, Ashton Mining, MIM exploration and others exploring the Capsize Range area within the current EPM10164 for porphyry copper and epithermal styles of mineralisation. In 2006, Conquest Mining discovered the V2 high sulphidation epithermal gold-copper deposit, and Ag-rich A39 deposit, with follow up work within the ML10343 by Evolution Mining defining the mineralisation at Mt Carlton United and Telstra Hill.

Geology and Mineralisation

The Mt Carlton deposits are hosted within Early Permian Lizzie Creek Volcanic Group rocks close to the northern margin of the Bowen Basin. Mineralisation at Mt Carlton ranges from intermediate to high sulphidation epithermal gold-silver-copper mineralisation. V2 and A39 are high sulphidation epithermal gold-silver-copper rich deposits hosted within a doubly plunging rhyodacite package, with the higher-grade mineralisation occurring in steeply dipping NE trending structures surrounded by lower grade flat to shallowly dipping stratiform mineralisation. Mt Carlton United and Telstra Hill are intermediate sulphidation epithermal gold-silver-copper deposits, hosted within rhyodacite volcanic and volcanoclastic sequence. Further details on the geological control and mineralisation modelling are provided in the description for each deposit.

Exploration and Resource Definition Methods

Further details of the drilling, sampling and assaying techniques for each deposit have been provided in the JORC Code Tables at the back of this release.

The drilling data utilised in the Mineral Resource Estimates (MRE) have been collected from either Reverse Circulation (RC) or Diamond (DD) drilling as part of Exploration, Resource Definition and Grade Control infill programs. The majority of the RC drill holes have been drilled utilising a 5.5" diameter face sampling hammer, with the DD drill holes either NQ2 or HQ3 size. Apart from some DD drill holes drilled from underground locations within V2 and A39, all other drill holes have been drilled from surface locations. A Reflex Act RD2 orientation tool has been used for DD drill holes at regular intervals to orientate the core. Although open hole percussion drill holes have been drilled into the mineralisation at all deposits (either from surface or via underground sludge holes), these have not been used in the MRE process. Data spacing

and distribution has been designed to collect enough data for establishing geological and grade continuity appropriate for classifying either an Inferred, Indicated or Measured Mineral Resource in the majority of V2, Telstra Hill and Mt Carlton United, as well as to explore along the strike of key mineralised structures for further mineralisation.

All drill hole collars have been marked and picked up by qualified surveyors using RTK GPS methods. Downhole surveys have been conducted by drillers using either Reflex digital cameras or true-north gyroscopic survey instruments. Downhole survey kink checks have been completed as part of the data validation processes prior to interpretation and modelling. Topographic control has been generated from aerial LIDAR DTM surveys, with this topography used to check the drill hole collar surveys using a 2 metre tolerance threshold (for site pad preparations).

RC drill chips have been geologically logged on 1 metre intervals by a qualified Geologist capturing the relevant lithological, alteration, texture, weathering and mineralisation attributes of the chips. All drill cores are geologically logged as full core with all relevant lithological, alteration, texture, veining, structure, weathering and mineralisation features collected via LogChief digital data capture. For orientated core, structural measurements are routinely recorded of key geological and mineralisation features to assist with the interpretation and modelling process. All drill cores have been photographed (wet and dry), with these high-resolution photos stored on the site server which is routinely backed up. All logging is captured directly into computers using LogChief software with inbuilt validation processes to ensure data integrity.

RC samples have been split using either a riffle or cone splitter depending on the program that was either mounted on the drill rig underneath the cyclone or the entire sample has been collected and manually split in the core shed using a portable riffle splitter by Mt Carlton Operation personnel. The splitting has been completed to obtain a representative 3 kg sub-sample of the 1 m down-hole sample interval. The cyclone and riffle splitter have been routinely cleaned between drill rods and drill holes to maintain sample hygiene. Wet or moist samples have been recorded by the drillers on their drill plods. Entire RC drill holes have been sampled for all drill holes used in the Mineral Resource estimates. Some historical RC drill holes have been sampled using 2 metre or 4 metre composites. Sub-sampling methods for these composites have not been recorded. Analysis of the distribution of these samples and their impact on the MRE process has been completed with the conclusion reached that the inclusion of these samples will not materially impact the MRE.

Diamond drill core has been cut in half using a diamond saw along either orientation or cut lines, with a consistent side of the cut sample selected for assay to ensure unbiased sampling. Within mineralised zones, sample intervals have been selected to reflect mineralisation widths where appropriate. Single intervals have not exceeded 1.4 m length to ensure that a sample less than 3 kg has been submitted to the laboratory for processing and analysis. The sampling and assaying methods are considered appropriate and representative for the style of mineralisation evident at Mt Carlton. The methods employed have been

validated using Mt Carlton's QAQC protocols.

Chain of custody protocols to ensure the security of samples are followed. Prior to submission samples are retained on site where access to the samples is restricted. Samples are delivered to the Townsville laboratory either in person by company personnel or through a third-party trucking company in cages or crates. Where samples on delivery arrive late at the laboratory facility, they are kept in locked yards prior to delivery. A reconciliation report is sent via email from the Laboratories to acknowledge sample receipt.

Analysis and QAQC

All samples have been submitted to commercial laboratories for preparation and sub-sampling prior to analysis. This preparation involved registering and weighing of the samples upon receipt, followed by oven drying at between 85°C and 105°C. The dry samples are then jaw crushed to a nominal 3 mm size and if required split by a cone splitter to achieve the desired 3 kg sample weight. The entire ≤ 3 kg sample is then pulverised in an LM5 pulveriser to achieve 90% passing 75 μm , from which 200 g is sampled within the pulverising bowl using a spatula to a numbered pulp bag. The Fire Assay charge and any multi-element samples are taken from this 200 g pulp after ensuring the sample selected is homogenous.

For gold assays, all samples are analysed using the Fire Assay method which is considered a total analytical technique suitable for epithermal style mineralisation. The technique utilises primarily a 50 g charge with a lead flux, which is decomposed in a furnace with the prill being totally digested by hydrochloric and nitric acids before the gold content is determined by an AAS machine. A small proportion of assays have utilised a 25 g Fire Assay charge. ICP analyses have been completed on all samples for a suite of ten elements (Ag, Cu, Pb, Zn, Fe, S, As, Au, Sb and Bi). For grade control, resource definition and some exploration samples, a 4 acid digest has been used with the analysis completed by either MS or OS means. For most exploration samples, 90% of the samples have been assayed for the multi-elements by ICP-OS using an Aqua Regia digest with every tenth sample analysed by ICP-MS using a 4-Acid digest.

The CRM's selected are matrix matched and have been created by an accredited laboratory from Mt Carlton high sulphidation epithermal mineral assemblages. Up to 6 CRM's have been circled through that cover a range of gold, silver, and base metal grades at an insertion rate of 5% (1:20), with the CRM selected by the logging Geologist based on the expected grade of the mineralised intersections in the drill hole. The performance of the CRM's is assessed on a batch-by-batch basis using a 3SD error limit from the expected value. Any failures results in the entire batch being re-analysed. Analysis of the previous six months of CRM performance (the time period from the last MR update) for gold, silver and copper have indicated an acceptable level of precision and accuracy for the CRM's used, giving confidence that the assays received are suitable for use in the MRE process.

Coarse blanks and pulp blanks have been inserted at a rate of approximately 5% (1:20), with the insertion of these targeted in and around the mineralisation for the drilling completed in 2022. The performance of the

blank is measured against 10 times the detection limit for gold, with any blanks returning outside this threshold requiring reanalysis. No blanks have failed for the samples submitted in 2022 to date, which is deemed an acceptable performance of the laboratory and indicates no contamination during sample preparation.

For the drilling completed prior to 2022, coarse crush duplicates of both core and RC samples have been the primary duplicate sample sent for QAQC, with only a small number of field duplicates submitted for assay. For the diamond drilling completed in 2022, field duplicates comprising either quarter core for exploration drill holes and half core for resource definition drill holes have been selected in and around mineralised intercepts and submitted for analysis. For the RC drill holes, a second split taken from the on-rig cyclone has been collected and submitted for analysis. The results of the field duplicates are in line with the expected and modelled variability for the style of mineralisation evident at Mt Carlton.

Data Storage and Management

Assay data is loaded directly into Datashed in batches. In-built checks in Datashed flags errors and ensures batches pass validation checks prior to upload. Validation checks include mis-matching sample numbers, inconsistent “depth to intervals” etc. A batch QAQC control chart report is generated once the batch is successfully loaded. Visual checks of standards, duplicates and blanks of reported assays are also conducted before batches are uploaded into Datashed. Assay data is plotted in mining software package (Leapfrog) as a final validation check for collar location, hole path and assay data. Any drill holes or samples that did not pass these validation steps or without sufficient confidence in either their location or assays have been excluded from the Mineral Resource estimation process.

V2 Mineral Resource Estimate

The V2 Deposit comprises both Open Pit and Underground Mineral Resources, with this deposit being the main contributing mining asset to the Mt Carlton Operation in the short term.

Deposit	NSR Cut-Off	Tonnes (kt)	Gold (g/t)	Gold (koz)	Silver (g/t)	Silver (koz)	Copper (%)	Copper (t)	AuEq ¹ (g/t)	AuEq ¹ (koz)
Indicated Mineral Resources										
V2 - OP	\$52/t	1,087	1.43	50	53.6	1,872	0.54	5,900	2.99	104
V2 - UG	MSO	173	2.15	12	19.7	109	0.81	1,400	3.78	21
Total		1,260	1.53	62	48.9	1,981	0.58	7,300	3.10	125
Inferred Mineral Resources										
V2 - OP	\$52/t	1,128	1.32	48	30.5	1,106	0.41	4,600	2.38	86
V2 - UG	MSO	264	1.53	13	18.4	156	0.78	2,100	3.09	26
Total		1,392	1.36	61	28.2	1,261	0.48	6,700	2.52	113

¹ The AuEq was calculated with the following formula: $AuEq\ g/t = ((Au_g * Au_r * Au_p) + (Ag_g * Ag_r * Ag_p) + (Cu_g * Cu_r * Cu_p)) / (Au_p * Au_r)$ where:

- Au_g, Ag_g, Cu_g = Element grade
- Au_r, Ag_r, Cu_r = Element Metallurgical recovery %
- Au_p, Ag_p, Cu_p = Element price per gram ($Au = \$77.16/g, Ag = \$0.96/g, Cu = \$0.0002/g$)

Geology and Mineralisation Modelling

V2 is a high-sulphidation epithermal gold-silver-copper rich deposit hosted within a rhyodacite package, with the higher-grade mineralisation occurring in steeply dipping NE-trending structures surrounded by lower grade flat to shallowly dipping stratiform mineralisation. As a significant amount of drilling (both RC and DD) has been completed since the initial discovery of V2, combined with exposures of the mineralisation in both open pit and underground mining, the confidence in the geological and mineralisation model for V2 is considered to be very high. All geological and mineralisation modelling has been completed utilising Leapfrog Geo's implicit modelling functionality for the key elements of economic interest, gold, silver, and copper. All grade thresholds selected as part of the interpretation and modelling process have been based on statistical analysis of the grade distributions within each deposit. Each threshold represents an inflection point in the grade distribution of the length weighted raw assays.

This MRE update represents a refinement of the gold, copper and silver mineralisation interpretation used in previous MREs. For gold, statistical analysis has identified a mineralisation threshold of 0.2 g/t gold which has been used to model an arcuate zone of continuous mineralisation, which is sub-parallel to the upper contact of the rhyodacite. Within this low-grade "halo", thresholds have been identified at 0.8 g/t gold, 2.0 g/t gold and 5.0 g/t gold that represent different grade populations, with these used to create nested grade shells of the gold mineralisation at V2. The structural orientation of these grade shells varies from parallel to the rhyodacite contact (0.8 g/t gold) to steeply NW-dipping, NE striking for the higher-grade domains. This modified interpretation has been adopted based on observations and interpretation gained over years of mining and reconciliation against the plant performance. Apart from the structural control evident in the location and orientation of the high-grade feeder structures, the vertical extents of the gold-silver-copper mineralisation are controlled by the upper contact of the host rhyodacite with this boundary used to constrain the mineralisation model. The orientation of this contact is considered a primary control and has been used as the basis for the trend applied when modelling the mineralisation.

After analysis of the correlation and distribution between the major elements in the deposit, separate mineralisation wireframes (including high- and low-grade sub-domains) have been interpreted and modelled for silver and copper. Grade thresholds of 20 g/t silver, 50 g/t silver, 100 g/t silver and 200 g/t silver have been utilised for defining and modelling the different silver grade populations within the deposit. These have been modelled utilising an arcuate, shallow-dipping, doubly plunging structural trend toward the top of the rhyodacite contact, which transitions into a steeply dipping, NE-striking trend toward the base

of the mineralisation. For copper, thresholds at 400 ppm copper, 1,000 ppm copper, 2,000 ppm copper, 4,000 ppm copper and 30,000 ppm copper have been modelled utilising an arcuate, shallow-dipping, doubly plunging structural trend toward the top of the rhyodacite contact, which transitions into a steeply dipping, NE-striking trend toward the base of the mineralisation.

The gold mineralisation at V2 is orientated in a predominantly NE-SW trend with strike extents of 750 metres, across strike extents of 700 metres and dip extents of 250 metres. The NE trending, high-grade feeder structures vary in width from 1 to 20 metres with the thicker parts often associated with the thickest part of the shallow dipping low-grade halo zone toward the upper contact of the rhyodacite. The copper and silver mineralisation extends 750 metres along and across strike with a dip extent of 250 metres, although the mineralisation does thin quite considerably along strike to the NE. Copper mineralisation is significantly more extensive than both gold and silver particularly in the upper part of the deposit leading into the upper contact of the rhyodacite.

Grade Estimation

The geological, gold, silver and copper mineralisation domains and weathering wireframes generated within LeapFrog Geo have been used to flag the drill hole samples with the relevant geological or mineralisation code. Grade distributions across the geological and grade threshold boundaries have been analysed with hard boundaries selected and applied across all oxidation and domain boundaries.

Raw sample lengths have been analysed within the gold, silver, and copper mineralisation domains to select an appropriate composite length that suits not only the mineralisation style but also the sampling methodology applied during the drilling. As ~95% of the mineralised gold samples are less than or equal to 1 m, a 1 m composite length has been selected with a 0.1 m residual applied. Composite samples within each estimation domain for all elements have been analysed in Snowden Supervisor v8.14 software for the existence of extreme grades. The influence of these extreme grades has been reduced by applying top-cuts with the top-cut values determined using a combination of histograms, log probability and mean variance plots. The top-cuts have been reviewed and applied on a domain-by-domain basis.

Variography has been determined for gold, silver and copper using either individual or grouped mineralisation domains as well as within the surrounding waste domain. The output variogram models have been checked to ensure that they are consistent with the modelled geology.

A block model has been constructed covering the extents of the deposit with a parent block size of 5 m (X) by 5 m (Y) by 2.5 m (Z) utilised. As the majority of the Mineral Resource will be reported as an open pit, no sub-blocking has been undertaken as the parent block size selected is equivalent to the Smallest Mineable Unit (SMU). The parent block size is considered appropriate for the drill hole spacing (10 m by 10 m) defining most of the in-situ mineralisation at V2.

Grade estimation of gold, silver, copper, arsenic, lead, iron, sulphur and zinc has been completed using Ordinary Kriging (OK) into gold, silver and copper domains using Leapfrog EDGE software. Dynamic anisotropy has been used to orientate the search ellipse according to the dip and strike of the individual domains. The gold domains have been used to constrain the estimation of lead, zinc, iron and sulphur. Arsenic is considered the main deleterious element for V2, with this element estimated inside the copper mineralisation domains due to the close correlation between these two elements

Gold estimations have been undertaken as hard boundary estimations within three passes:

- *Pass 1 estimations have used a minimum of 4 and a maximum of 6 samples into a search ellipse approximately half the variogram range. No sample per drill hole limit has been applied for pass 1.*
- *Pass 2 estimations have used a minimum of 2 and a maximum of 8 samples into a search ellipse at the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 2.*
- *Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 12 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3.*

Silver estimations have been undertaken as hard boundary estimations within three passes:

- *Pass 1 estimations have used a minimum of 4 and a maximum of 8 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1.*
- *Pass 2 estimations have used a minimum of 2 and a maximum of 8 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2.*
- *Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 8 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3.*

Copper estimations have been undertaken as hard boundary estimations within three passes:

- *Pass 1 estimations have used a minimum of 4 and a maximum of 12 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1.*
- *Pass 2 estimations have used a minimum of 2 and a maximum of 12 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2.*
- *Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 12 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3.*

Bulk density values have been assigned within the deposit based on an analysis of bulk density measurements split by weathering and lithology. The bulk density measurements have been collected using the water immersion method on either dried rock samples or diamond core. For those categories that contained insufficient data to determine a mean bulk density, the bulk density has been assigned with consideration of the mean.

Deposit	Modelled Lith	Oxide		Transitional		Fresh	
		No.	BD	No.	BD	No.	BD
V2	Rhyodacite	635	2.50	137	2.56	20700	2.65
	Sediments	150	2.35	43	2.46	533	2.46
	Granite	1	2.60	27	2.6	589	2.61
	V_Andesite	95	2.39	10	2.5	489	2.5
	V_Mid_Andesite	387	2.47	28	2.48	6639	2.63
	Z_Andesite	4338	2.50	From Rhyodacite	2.56	From Rhyodacite	2.65
	Dyke	28	2.53	7	2.53	1537	2.61

Volume comparisons between the wireframes and coded block model have been completed to ensure that the sub-blocking has adequately filled the wireframes and is therefore representative of the mineralisation as modelled. Due to the absence of sub-celling, slight volumetric discrepancies exist between the modelled mineralisation and the block model, although these are not considered to be material for the reported Mineral Resource.

Final grade estimates for the key elements (gold, silver, and copper) within each domain have been validated by statistical analysis and visual comparison between the input composites (clustered and declustered) and estimated blocks as well as using swath plots on Easting, Northing and Reduced Level comparing the estimated grades with the input composites. All gold, and copper domains validate within 10% of the declustered input composites. Most silver domains validate within 10% of the declustered input composites, except for the high grade 200 g/t silver grade shell, within which the block model validates significantly lower than the input samples. A review of this domain indicates that the poor validation is from the portion of the deposit that has already been extracted via underground mining. Visual validation of the in-situ blocks within this domain indicates an acceptable level of correlation between the input composites and the estimated block grades. Global grade validations have been completed for the subsidiary elements. The Competent Person considers that the estimated grades are an accurate reflection of the input composite grades.

The resource classification has been applied to the Mineral Resource estimate based on a combination of the data integrity and spacing, grade and geological continuity, validation against the input composites and estimation quality parameters. No areas of the estimated Mineral Resources satisfied the requirement to be classified as **Measured Mineral Resources**. **Indicated Mineral Resources** have been assigned to those sections of the deposit that have been informed by drilling spaced up to 20 m by 20 m and have been estimated on either the first or second interpolation pass. For the broader lower grade mineralised zones, only those blocks that meet estimation quality requirements (> 0.7) as defined by the slope of regression have been classified as Indicated. **Inferred Mineral Resources** have been assigned to those sections of the deposit that have been informed by drilling spaced wider than 40 m by 40 m and have the estimation informed by at least two drill holes. All mineralisation domains have been reviewed individually, with the

criteria described above used to define contiguous zones of classified blocks to avoid a spotted dog classification being applied. The classification reflects the view of the Competent Person.

The Competent Person is of the opinion that the current block estimate for V2 provides a local estimate of tonnes and grade, as the estimation parameters have been selected to increase the influence of samples in close proximity to the block being estimated. The use of sectional validation plots comparing the estimated grades with the input composites (clustered and declustered) by Easting, Northing, Reduced Level and along strike for individual and grouped mineralisation domains confirms that the grade estimates suitably conform with the overall mineralisation trend. Any areas of the mineralisation in which the grade estimate is not considered an appropriate representation of the input grades have been dealt with in the classification of the Mineral Resources.

The Mineral Resource model has been reconciled against the actual monthly production (Declared Ore Mined – DOM) over 2021 and the first 6 months of 2022 for the open pit mining of V2. In addition, the Mineral Resource model inside underground surveyed voids (stope and development) have been reconciled against the DOM for the entire underground production for V2.

The open pit DOM has been reconciled against the Mineral Resource block model reported at the production grade bins inside the end of month surfaces for the 18 months from January 2021 to June 2022, with the following results for Tonnes, gold metal, silver metal and copper metal:

- *Tonnes MR / Tonnes DOM = 0.90*
- *Gold Oz's MR / Gold Oz's DOM = 1.06*
- *Silver Oz's MR / Silver Oz's DOM = 0.83*
- *Copper t MR / Copper t DOM = 1.01*

The total UG DOM has been compared against the Mineral Resource block model reported tonnes and grade inside the completed CMS of each stope (no cut-off grade applied) and within the development as-builts (using a 0.8 g/t gold cut-off), with the following results:

- *Tonnes MR / Tonnes DOM = 0.89*
- *Gold Oz's MR / Gold Oz's DOM = 0.76*
- *Silver Oz's MR / Silver Oz's DOM = 0.78*
- *Copper t MR / Copper t DOM = 0.90*

The OP reconciliation indicates that the estimation of the gold mineralisation is within 10% of the ounces produced, whereas the underground portion of the Mineral Resource significantly under-estimates the contained gold. This is most likely caused by the under-estimation of the grade within the high-grade feeder structures, which, although modelled separately may still be impacted by over-smoothing during the grade estimation. The absence of these high-grade feeders in the open pit portion of the deposit that has been assessed in the reconciliation indicates that the main low-grade halo is accurately estimated.

The reconciliation indicates that silver is consistently under-estimated in the Mineral Resource block model, whereas the copper estimate is within an acceptable error. The Competent Person does not consider this material as gold is the dominant value generating commodity within the V2 deposit.

Mt Carlton United Mineral Resource Estimate

The Mt Carlton United (MCU) Deposit comprises both Open Pit and Underground Mineral Resources, with this deposit forming a significant part of the mining operation in the short to medium term.

Deposit	NSR Cut-Off	Tonnes (kt)	Gold (g/t)	Gold (koz)	Silver (g/t)	Silver (koz)	Copper (%)	Copper (t)	AuEq ¹ (g/t)	AuEq ¹ (koz)
Measured Mineral Resources										
MCU – OP	\$52/t	32	1.82	2	52.7	54	0.19	60	2.82	3
Total		32	1.82	2	52.7	54	0.19	60	2.82	3
Indicated Mineral Resources										
MCU – OP	\$52/t	659	1.85	39	96.3	2,041	0.35	2,300	3.39	72
MCU – UG	MSO	68	2.16	5	59.2	129	0.03	-	3.11	7
Total		727	1.88	44	92.9	2,170	0.32	2,300	3.74	87
Inferred Mineral Resources										
MCU – OP	\$52/t	193	1.51	9	75.0	465	0.21	400	2.71	17
MCU – UG	MSO	153	0.45	2	136.8	673	0.03	-	2.64	13
Total		346	1.04	12	102.3	1,138	0.13	400	2.77	31

¹ The AuEq was calculated with the following formula: $AuEq\ g/t = ((Au_g * Au_r * Au_p) +$

$(Ag_g * Ag_r * Ag_p) + (Cu_g * Cu_r * Cu_p)) / (Au_p * Au_r)$ where:

- Au_g, Ag_g, Cu_g = Element grade
- Au_r, Ag_r, Cu_r = Element Metallurgical recovery %
- Au_p, Ag_p, Cu_p = Element price per gram ($Au = \$77.16/g, Ag = \$0.96/g, Cu = \$0.0002/g$)

Geology and Mineralisation Modelling

Mt Carlton United (MCU) is considered to be an intermediate sulphidation epithermal gold-silver-copper dominant deposit, hosted within the same rhyodacite volcanic and volcanoclastic sequence that hosts the V2, Telstra Hill and A39 deposits. MCU comprises two distinct mineralised zones, Far West (FW) and East-Central-West (ECW) separated and offset by a post-mineralisation, NW striking fault.

The ECW component represents an up-faulted block within the gold-copper-silver rich part of a medium to high sulphidation epithermal system. Mineralisation is predominantly structurally controlled and is hosted within a series of sub-parallel, stacked, moderately dipping, E-W striking structures high-grade mineralised veins/breccias surrounded by a halo or stockwork of lower grade mineralisation developed within the upper rhyodacite. Seven gold mineralisation domains have been interpreted and modelled using either the vein tool for high grade veins and indicator interpolants at a 0.2 g/t gold threshold for the surrounding halo,

based on drill hole logging, surface mapping and assays. This part of MCU contain high-grade silver and copper mineralisation, with three mineralised copper domains interpreted using mineralisation thresholds set at 100 ppm copper, 1,500 ppm copper and 10,000 ppm copper. The mineralisation domains have been generated in Leapfrog Geo using an Indicator Interpolant to create nested grade shell that define the broad copper mineralisation. The silver mineralisation is closely correlated with the gold mineralisation. A small N-S striking post-mineralisation fault has been identified causing a slight offset in the mineralisation between the central and western parts of the ECW. ECW mineralisation extends 600 m E-W along strike with the stacked lenses covering approximately 100 m N-S. The mineralisation has been defined between 75 – 100 m down-dip to a depth of 55 – 75 m below surface. Individual high-grade lenses of gold, silver and copper vary between 1 – 5 m in width, surrounded by a lower grade halo up to 30 m thick.

The FW mineralisation is gold-silver rich with two dominant structural orientations interpreted from assays and oriented core measurements; a moderate NW-dipping, NE-trending set of structures and an E-W, moderately to steeply north dipping set of structures. The high-grade veins associated with the NE-striking structures form the northern and southern bounds of the mineralisation, between which are interpreted a series of moderately to steeply dipping, E-W to ENE-WSW trending lodes. Both structural orientations host continuous high-grade mineralised veins and breccias surrounded by a halo of lower grade mineralisation hosted within the upper part of a rhyodacite volcanoclastic package. Seven gold mineralisation domains have been interpreted in the FW based on drill hole logging, surface mapping and assays. The main high-grade domains have been interpreted and modelled utilising the vein tool in Leapfrog Geo, with the surrounding lower-grade stockwork mineralisation modelled using an Indicator approach at a 0.2 g/t gold threshold with a structural trend applied that is sub-parallel to the main vein orientations. Elevated silver and lead grades have resulted in these two elements being interpreted and modelled separately. Grade thresholds for silver of 15 g/t silver, 55 g/t silver and 255 g/t silver have been used to model separate grade populations with the NE-SW and E-W structural orientations evident in the gold mineralisation used as the primary control during the modelling of silver. Similar trends have been applied for modelling lead, with thresholds applied at 800 ppm lead, 1,250 ppm lead and 1,750 ppm lead to model the different grade populations. FW mineralisation extends 600 m E-W along strike, with the stacked set of mineralised veins covering over 200 m of N-S lateral extent. The dip extents of several lenses extend up to 150 down-dip to approximately 110 m below surface although these lenses remain open at depth. Gold mineralisation widths vary between 0.5 m and 5 m wide for the high-grade lenses surrounded by a lower grade halo between 10 – 30 m thick. The silver mineralisation is generally thicker with widths between 25 – 50 m over the same lateral extents as the gold.

Grade Estimation

The geological, gold, silver, copper (ECW) and lead (FW) mineralisation domains and weathering wireframes generated within LeapFrog Geo have been used to flag the drill hole samples with the relevant geological

or mineralisation code. Grade distributions across the geological and oxidation boundaries have been analysed with hard boundaries selected and applied across all oxidation and domain boundaries.

For the FW part of the deposit, a review of the element correlations within the deposit has resulted in the lead domains being used to constrain the estimation of arsenic, lead, zinc, iron, and sulphur grades, with the copper grades estimated inside the silver domains. Gold estimation has been constrained within the separate gold domains. For the ECW part of the deposit, the gold domains have been used to constrain the estimation of gold, silver, and lead, with the copper domains used to constrain the estimation of copper, arsenic, zinc, iron, and sulphur.

Raw sample lengths have been analysed within the mineralisation domains to select an appropriate composite length that suits not only the mineralisation style but also the sampling methodology applied during the drilling. Within the gold mineralisation domains, approximately 95% of the samples are at or less than 1 m, with a 1 m composite length selected with a 0.1 m residual applied. Composite samples have been analysed for the existence of extreme grades, with the influence of these reduced by applying a combination of top-cuts and high-grade yields or clamps. The thresholds at which top-cuts or yields have been determined using a combination of histograms, log probability and mean variance plots with each domain reviewed individually. For the main elements at MCU, only four gold domains and one silver domain have been assessed as requiring top-cuts or having a yield restriction applied. A top cut has been applied to waste zones to reduce the influence of composites with grades above the modelling cut off, but without the required continuity for inclusion within the estimation.

Variography has been determined for gold, silver, copper (ECW) and lead (MCU FW) using either individual or grouped mineralisation domains as well as within the surrounding waste domain. The output variogram models have been checked to ensure that they are consistent with the modelled geology. Some estimation domains have utilised borrowed variography from neighbouring domains, with the rotations adjusted to match the orientation.

A block model has been constructed covering the extents of each part of the deposit with a parent block size of 5 m (X) by 5 m (Y) by 2.5 m (Z) utilised for both FW and ECW. A sub block size of 0.625 m (X) by 0.625 m (Y) by 0.625 m (Z) has been used to define the mineralisation edges with the estimation undertaken at the parent block scale. The parent block size is considered appropriate for the drill hole spacing defining the bulk of the mineralisation at MCU.

Grade estimation of all elements has been completed using Ordinary Kriging (OK) into separate gold, silver, copper and/or lead domains using Leapfrog EDGE software. Dynamic anisotropy has been used to orientate the search ellipse according to the dip and strike of the individual domains.

Gold estimations for both ECW and FW have been undertaken as hard boundary estimations within three passes:

- *Pass 1 estimations have used a minimum of 6 and a maximum of 24 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1.*
- *Pass 2 estimations have used a minimum of 4 and a maximum of 24 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2.*
- *Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3.*

Silver estimations for both ECW and FW have been undertaken as hard boundary estimations within three passes:

- *Pass 1 estimations have used a minimum of 6 and a maximum of 24 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1.*
- *Pass 2 estimations have used a minimum of 4 and a maximum of 24 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2.*
- *Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3.*

Copper estimations for ECW have been undertaken as hard boundary estimations within three passes:

- *Pass 1 estimations have used a minimum of 6 and a maximum of 24 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1.*
- *Pass 2 estimations have used a minimum of 4 and a maximum of 24 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2.*
- *Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3.*

Bulk density values have been assigned within the deposit based on an analysis of bulk density measurements split by weathering and lithology. The bulk density measurements have been collected using the water immersion method on either dried rock samples or diamond core. For those categories that contained insufficient data to determine a mean bulk density, the bulk density has been assigned with consideration of the mean.

Deposit	Modelled Lith	Oxide		Transitional		Fresh	
		No.	BD	No.	BD	No.	BD
MCU	Andesite	37	2.11	17	2.49	79	2.61
	Gabbro Dyke	10	2.00	6	2.44	44	2.68
	Rhyodacite	25	2.52	46	2.59	187	2.59
	Granite	-	-	2	2.47	25	2.58
	Dyke	-	-	-	-	2	2.67

Volume comparisons between the wireframes and coded block model have been completed to ensure that the sub-blocking has adequately filled the wireframes and is therefore representative of the mineralisation as modelled. Apart from some of the very thin domains at depth or along strike, the block model is an accurate representation of the mineralisation as modelled for both ECW and FW.

Final grade estimates for the key elements within each domain have been validated by statistical analysis and visual comparison between the input composites (clustered and declustered) and estimated blocks as well as using swath plots on Easting, Northing and Reduced Level comparing the output estimated grades with the input composites. For ECW, all gold and copper domains have validated within +/- 10% of the input composites, with only one of the silver domains returning a validation outside this +/- 10% tolerance. Several high-grade gold and silver domains in the FW produce poor validation statistics, returning results outside the accepted 10% variance between the declustered input composites and the output block model grades. Analysis of these domains in longitudinal projection indicates that the poor validation is due to a small number of samples defining the dip or strike extents of these domains influencing a large number of blocks. These areas have been dealt with during the classification of the Mineral Resource for these domains. Global grade validations have been completed for the subsidiary elements. The Competent Person considers that the estimated grades within the bulk of the reported deposit are an accurate reflection of the input composite grades.

The resource classification has been applied to the Mineral Resource estimate based on a combination of the data integrity and spacing, grade and geological continuity, validation against the input composites and estimation quality parameters. A portion of the MCU ECW deposit has been drilled for grade control purposes on a 10 m by 10 m pattern. A review of the block model validation and estimation quality variables within this part of the deposit has concluded that there is a suitable level of confidence in the grade and tonnage estimate within the area defined by the grade control drilling to be classified as a Measured Mineral Resource. Indicated Mineral Resources have been assigned to those sections of the deposit that have been defined by drilling spaced between 20 m by 20 m and 40 m by 40 m, have been estimated on either the first or second interpolation pass and have returned acceptable validation against the input composites. Due to the narrow mineralisation, estimation quality parameters such as kriging efficiency or slope of regression have not been used. Inferred Mineral Resources have been assigned to those sections of the deposit that have been informed by drilling spaced wider than 40 m by 40 m and have the estimation informed by at least two drill holes. All mineralisation domains have been reviewed individually, with the criteria described above used to define contiguous zones of classified blocks to avoid a spotted dog classification being applied. The classification reflects the view of the Competent Person.

The Competent Person is of the opinion that the current block estimates provide a good estimate of tonnes and grades on a global scale, which is appropriate given the classification of most of the Mineral Resources

as Indicated. The use of sectional validation plots comparing the estimated grades with the input composites (clustered and declustered) by Easting, Northing, Reduced Level and along strike for individual and grouped mineralisation domains confirms that the grade estimates suitably conform with the overall mineralisation trend and have an acceptable level of smoothing applied. Any areas of the mineralisation in which the grade estimate is not considered an appropriate representation of the input grades have been dealt with in the classification of the Mineral Resources.

Telstra Hill Mineral Resource Estimate

The Telstra Hill (TH) Deposit comprises an Open Pit Mineral Resources, as summarised in the Table below.

Deposit	NSR Cut-Off	Tonnes (kt)	Gold (g/t)	Gold (koz)	Silver (g/t)	Silver (koz)	Copper (%)	Copper (t)	AuEq ¹ (g/t)	AuEq ¹ (koz)
Indicated Mineral Resources										
Telstra Hill	\$52/t	111	2.73	10	3.4	12	0.08	100	2.90	10
Inferred Mineral Resources										
Telstra Hill	\$52/t	18	2.40	1	5.1	3	0.07	-	2.58	2

¹ The AuEq was calculated with the following formula: $AuEq\ g/t = ((Au_g * Au_r * Au_p) +$

$(Ag_g * Ag_r * Ag_p) + (Cu_g * Cu_r * Cu_p)) / (Au_p * Au_r)$ where:

- Au_g, Ag_g, Cu_g = Element grade
- Au_r, Ag_r, Cu_r = Element Metallurgical recovery %
- Au_p, Ag_p, Cu_p = Element price per gram ($Au = \$77.16/g$, $Ag = \$0.96/g$, $Cu = \$0.0002/g$)

Geology and Mineralisation Modelling

Telstra Hill is an intermediate sulphidation epithermal gold dominant deposit, hosted within the same rhyodacite volcanic and volcanoclastic sequence that hosts V2 and Mt Carlton United. The gold mineralisation at Telstra Hill has been defined over 380 m E-W with N-S extents ranging from 150 – 250 m. The shallowly-dipping, higher-grade stacked lenses vary from 1 to 5 m thick, with lateral extents ranging from 100 to 200 m (E-W) and strike extents in the vicinity of 50 – 100 m. The silver and copper mineralisation have been modelled between 10 – 30 m thick as shallowly dipping zones with extents up to 500 m E-W and 300 m N-S.

The primary control on Telstra Hill gold mineralisation is stratigraphy, with a set of shallowly dipping mineralised lenses hosted within and oriented sub-parallel to the upper part of the host rhyodacite package. The underlying lower rhyodacite is unmineralised. The rhyodacite package is cross-cut and offset by two normal faults, the first being a steeply S-dipping, ENE striking fault with an interpreted south block down sense of movement. A second, NNW striking, steeply E-dipping normal fault crosscuts the stratigraphy, offsetting the rhyodacite package with an east-block down sense of movement. These two faults are interpreted to be syn to post the mineralisation as high grade mineralisation is associated with these structures.

There appears to be a slight enrichment and dispersion of mineralisation within the oxidised portion of the deposit, with this surface used to differentiate between different domains and orientations for gold, silver, and copper. The higher-grade gold mineralisation within the upper rhyodacite has been modelled using a 1.5 g/t gold mineralisation threshold as a series of stacked shallowly dipping lenses sub-parallel to the host rhyodacite contact. These lenses are surrounded by a low-grade halo modelled using an indicator interpolant in Leapfrog Geo at a 0.15 g/t gold threshold. The mineralisation associated with the steep faults has been interpreted using a 1.5 g/t gold threshold. The silver and copper mineralisation has been modelled as sub-parallel to the upper rhyodacite contact using a 3 g/t silver and 500 ppm copper threshold to define the boundary between mineralised and un-mineralised samples. The same thresholds have been applied for the oxide and transitional-fresh portions of the deposit.

Grade Estimation

The geological, gold, silver and copper mineralisation domains and weathering wireframes generated within LeapFrog Geo have been used to flag the drill hole samples with the relevant geological or mineralisation code. Grade distributions across the geological and oxidation boundaries have been analysed with hard boundaries selected and applied across all oxidation and domain boundaries during the estimation. After a review of the element correlations within the deposit, silver, arsenic and lead have been estimated inside the silver domains, gold has been estimated inside the gold domains, with copper, sulphur, iron and zinc estimated inside the copper domains.

Raw sample lengths have been analysed within the mineralisation domains to select an appropriate composite length that suits not only the mineralisation style but also the sampling methodology applied during the drilling. A 1 m composite length has been selected with a 0.1 m residual applied. A small percentage of raw samples greater than 1 m in length occur inside the lower-grade halo domains. Analysis of the impact of splitting these longer samples during compositing indicates that this process will not materially impact on the grade distributions within these domains.

Composites have been analysed for the existence of extreme grades, with the influence of these reduced by applying a top cut. The top cut levels have been determined using a combination of histograms, log probability and mean variance plots, with these reviewed and applied on a domain-by-domain basis. Two of the gold mineralisation domains required grade capping, with the surrounding waste zones for all elements being capped to reduce the influence of higher-grade composites within the waste estimation.

Variography has been determined for gold, silver and copper using either individual or grouped mineralisation domains as well as within the surrounding waste domains – the high-grade veins within both the oxide and fresh horizons have been grouped to provide enough samples for continuity modelling. The output variogram models have been checked to ensure that they are consistent with the modelled geology. No variograms have been modelled for the subsidiary elements as these have been estimated using Inverse Distance methods.

A block model has been constructed covering the extents of the deposit with a parent block size of 10 m (X) by 10 m (Y) by 5 m (Z) utilised. A sub block size of 0.625 m (X) by 0.625 m (Y) by 0.625 m (Z) has been used to define the mineralisation edges with the estimation undertaken at the parent block scale. The parent block size is considered appropriate for the dominant 20 m by 20 m drill hole spacing defining the mineralisation at Telstra Hill.

Grade estimation of gold, silver and copper has been completed in Leapfrog Edge software using Ordinary Kriging (OK). Dynamic anisotropy has been used to orientate the search ellipse according to the dip and strike of the individual high grade gold domains. Estimation of the grade for the minor elements has been completed using Inverse Distance to the power of 2 (ID²).

Gold grade estimations have been completed within three passes:

- *Pass 1 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse approximately half the variogram range. A four sample per drill hole limit has been applied for pass 1.*
- *Pass 2 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse at the variogram range in all three directions. A four sample per drill hole limit has been applied for pass 2.*
- *Pass 3 estimations have been undertaken using a minimum of four and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for the third pass.*

Silver grade estimations have been completed within three passes:

- *Pass 1 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse approximately half the variogram range. A four sample per drill hole limit has been applied for pass 1.*
- *Pass 2 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse at the variogram range in all three directions. A four sample per drill hole limit has been applied for pass 2.*
- *Pass 3 estimations have been undertaken using a minimum of four and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for the third pass.*

Copper grade estimations have been completed within three passes:

- *Pass 1 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse approximately half the variogram range. A four sample per drill hole limit has been applied for pass 1.*
- *Pass 2 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse at the variogram range in all three directions. A four sample per drill hole limit has been applied for pass 2.*
- *Pass 3 estimations have been undertaken using a minimum of four and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for the third pass.*

Bulk density values have been assigned within the deposit based on an analysis of bulk density measurements split by weathering and lithology. For those categories that contained insufficient data to

determine a mean bulk density, the bulk density has been assigned with consideration of the mean. The bulk density measurements have been collected using the water immersion method on either dried rock samples or diamond core.

Deposit	Modelled Lith	Oxide		Transitional		Fresh	
		No.	BD	No.	BD	No.	BD
TH	Upper Rhyodacite	164	2.35	170	2.56	6	2.56
	Lower Rhyodacite	4	2.38	137	2.48	34	2.50
	Andesite	-	-	-	-	19	2.63
	Dacite	-	-	13	2.59	115	2.62
	Granite	-	-	1	2.59	49	2.66

Volume comparisons between the wireframes and coded block model have been completed to ensure that the sub-blocking has adequately filled the wireframes and is therefore representative of the mineralisation as modelled. All domains apart from two thin gold domains within the oxide portion of the deposit are within 0.5% of the mineralised volume.

Final grade estimates for the key elements within each domain have been validated by statistical analysis and visual comparison between the input composites (clustered and declustered) and estimated blocks as well as using swath plots on Easting, Northing and Reduced Level comparing the output estimated grades with the input composites. Several high-grade gold domains produce poor validation statistics, returning results outside the accepted 10% variance between the declustered input composites and the output block model grades. Analysis of these domains in longitudinal projection indicates that the poor validation is due to a small number of samples defining the dip or strike extents of these domains are influencing a large number of blocks. Areas within these domains impacted by this have been classified as Inferred Mineral Resources at best, with a number remaining unclassified. Global grade validations have been completed for the subsidiary elements. The Competent Person considers that the estimated grades within the bulk of the reported deposit are an accurate reflection of the input composite grades.

The resource classification has been applied to the Mineral Resource estimate based on a combination of the data integrity and spacing, grade and geological continuity, validation against the input composites and estimation quality parameters. No part of the Telstra Hill Mineral Resource meets the confidence criteria to be classified as a Measured Mineral Resource. Indicated Mineral Resources have been assigned to those sections of the deposit that have been defined by drilling spaced at 20 m by 20 m and which have been estimated on either the first or second interpolation pass and have returned acceptable validation against the input composites. Due to the narrow mineralisation, estimation quality parameters such as kriging efficiency or slope of regression have not been used. Inferred Mineral Resources have been assigned to those sections of the deposit that have been informed by drilling spaced wider than 40 m by 40 m and have the estimation informed by at least two drill holes. All mineralisation domains have been reviewed individually, with the criteria described above used to define contiguous zones of classified blocks to avoid

a spotted dog classification being applied. The classification reflects the view of the Competent Person.

The Competent Person is of the opinion that the current block estimates provide a good estimate of tonnes and grades on a global scale, which is appropriate given the classification of most of the Mineral Resources as Indicated. The use of sectional validation plots comparing the estimated grades with the input composites (clustered and declustered) by Easting, Northing, Reduced Level and along strike for individual and grouped mineralisation domains confirms that the grade estimates suitably conform with the overall mineralisation trend and have an acceptable level of smoothing applied. Any areas of the mineralisation in which the grade estimate is not considered an appropriate representation of the input grades have been dealt with in the classification of the Mineral Resources.

Mt Carlton Tailings Storage Facility (TSF)

The gold and silver metal contained within the TSF has been estimated using the weighted average tonnes and grade of the tailings emplaced in the TSF. This has been summarised and reported monthly over the life of the TSF. This estimation has been performed via a Microsoft excel spreadsheet. The estimation process is considered appropriate considering the continuity & security of records, sampling protocols and ownership of the TSF with past owner, Evolution Mining and, recently Navarre, during the entire life of the TSF. The inventory is considered to have a high confidence but within the limitations of spatial sample testing in the Tailings Dam, a resource category of Indicated has been assigned. Further details of the potential treatment of the TSF have been provided in the Ore Reserve section for Mt Carlton.

Reasonable Prospects for Eventual Economic Extraction (RPEEE)

In order to satisfy the Reasonable Prospects for Eventual Economic Extraction requirements within the JORC Code for reporting Mineral Resources, both open pit and underground optimisation studies have been completed for all four deposits. A Net Smelter Return (NSR) cut-off has been used to report the Mineral Resources. Gold, copper, and silver exist in potential payable quantities for all deposits, with the metallurgical recovery and payability factors for each deposit well understood. Therefore, an NSR cut-off has been calculated including the total recoveries and price assumptions. The following price assumptions for the key economic elements have been used (all values are in AUD):

- *Gold = \$2,400/oz*
- *Silver = \$30/oz*
- *Copper = \$12,000/t*

The Process Plant metallurgical recoveries for most of the deposits is well understood, with preliminary test work for Telstra Hill indicating similar processing streams and recoveries as Mt Carlton United ECW. In addition, the payability factors for the key elements of interest are also well understood. For the UG and OP optimisation processes for reporting the Mineral Resources, average recovery and payability factors have been applied with processing costs (including site support costs) calculated and applied individually as per the table below.

PROCESSING OPTIMISATION INPUTS					
Items	Unit	V2	MCU E	MCU FW	TH
Processing Recovery (Total of Proc. Rec. & Metal Payable)					
Gold	%	73.5	71.9	55.3	71.9
Silver	%	47.4	52.6	48.5	52.6
Copper	%	55.8	48.1	0.0	48.1
Processing Costs (includes site support costs)	\$/t feed	52.00	52.00	52.00	52.00
Inventory to be Processed					
Indicated		Yes	Yes	Yes	Yes
Inferred		Yes	Yes	Yes	Yes
Unclassified		No	No	No	No

Open pit optimisation studies have been completed on the Mineral Resource for all Mt Carlton deposits utilising Whittle optimisation software completed on regularised versions of the block models. The regularisation block size selected reflected the likely size of the mining fleet to be used for open pit extraction. As the regularisation process has introduced some level of ore loss and dilution to the original input block model, no additional ore loss and dilution parameters have been applied. A comparison has

been completed during the optimisation process with no material difference in the optimisations completed with and without ore loss (5%) and dilution (5%) factors applied.

The following table summarises the OP optimisation input assumptions and factors.

OP OPTIMISATION INPUTS					
Items	Unit	V2	MCU E	MCU FW	TH
Whittle Mining Parameters					
Slope - Domain 1 (V2); Oxide (MCU/TH)	Deg	54	40	43	43
Slope - Domain 2 (V2); Trans (MCU/TH)	deg	44	40	43	43
Slope - Domain 3 (V2); Fresh (MCU/TH)	deg	52	40	43	43
Mining Recovery	%	100%	100%	100%	100%
Mining Dilution	%	0%	0%	0%	0%
Minimum Mining Width	m	15	15	15	15
Whittle Reference Mining Cost	\$/t rock	535	7.00	7.00	535
Inventory to be Included					
Indicated		Yes	Yes	Yes	Yes
Inferred		Yes	Yes	Yes	Yes
Unclassified		No	No	No	No
Royalties					
Au	%	7.38	7.38	7.38	7.38
Ag	%	7.38	7.38	7.38	7.38
Cu	%	2.5	2.5	2.5	2.5

For V2 and Mt Carlton United FW, mineralisation extends underneath the optimised pit shells used for reporting the OP Mineral Resources. For these parts of the deposits, a series of resource stope optimisations have been undertaken in Mineable Stope Optimiser (MSO). The MSOs have been run based on extraction by either longhole open stoping (LHOS – MCU) or by mechanised cut and fill (V2) mining methods. The optimisation has been applied to Indicated and Inferred Mineral Resource blocks only. It is important to note that these wireframes should not be described as “mineable shapes”. Mining factors excluded in this analysis include, but are not limited to, capital costs (non-mining, access and footprint establishment), regional pillars, footprint geometries, unplanned dilution and the time value of money. However, the wireframes do enclose a contiguous and appropriately diluted Mineral Resource. As such, the Competent Person considers that the reported underground Mineral Resources have reasonable prospects for eventual economic extraction by either the LHOS or cut-and-fill underground mining method. An assessment of whether the project as a whole is economically viable has not been made under this analysis.

Numerous stope wireframes have been generated in MSO by applying the relevant NSR \$/t cut-off to the MRE block models during the optimisation. These wireframes maximize the tonnes above the cut-off while ensuring that all material is part of a minimum mining unit with geometry appropriate for the mining method

selected. Isolated stope shapes that meet the cut-off grade criteria but are located too far from other stope shapes have been excluded from the reporting of the Mineral Resource. The inclusion of waste material during the stope optimisation process precludes the requirement to apply a cut-off grade to the reporting of the Mineral Resources, since the application of the calculated NSR cut-off has been applied within the MSO and the creation of the wireframe solids.

UG OPTIMISATION INPUTS			
Items	Unit	V2	MCU FW
MSO Mining Parameters			
Mining Method		Cut and Fill	LHOS
Minimum Stope Width (including dilution)	m	4.5	10.0
Stope Length	m	20	30
Stope Height	m	-	15.5
Level Spacing	m	4.5	20.0
Mining Recovery	%	100	73
MSO Reference Mining Cost	\$/t rock	140	106
Inventory to be Included			
Indicated		Yes	Yes
Inferred		Yes	Yes
Unclassified		No	No
Royalties			
Gold	%	7.38	7.38
Silver	%	7.38	7.38
Copper	%	2.5	2.5

All individual MSO wireframes contain material at or above the NSR cut-off value applied. Waste material below the cut-off may be included within individual wireframes, however the total grade of all wireframes must be at or above the NSR cut-off.

Crush Creek Project

The Crush Creek Mineral Resource, as of 30 June 2022, has been updated to include the Maiden Mineral Resource for the BV1 deposit, which adds to the Mineral Resources previously reported in March 2022 for the Delta and BV7 deposits (Figure 3 and Table 3). All Mineral Resources are wholly located within MDL2010, which is located 10 km NNE of Collinsville. MDL2010 is wholly owned by Navarre Minerals. Navarre Minerals has all the required operational, environmental and heritage permits/approvals for the work conducted on the Mineral Development License. There are not any other known significant factors or risks that may affect access, title, or the right or ability to perform further work programs on the Mineral Development License.

Exploration for gold has been carried out by several parties over MDL2010. These companies include

Australian Oil and Minerals Ltd. (AOM) and CRA Exploration Pty Ltd. (CRAE) both independently and in JV (1987 to 1991), Basin Gold Pty Ltd. (BG) (1994-1996), BG in JV operated by Battle Mountain Australia (BMA) (1996-1998), Resolute Limited (1998 – 2000), Goldfields Australasia Pty Ltd (GFA) (2000-2002), GFA in JV with Conquest Mining Ltd (CQT) (2002 – 2005), CQT in JV with BG (2005-2007) and then back to 100% BG ownership from 2007 onwards. Evolution Mining Ltd., under its wholly owned subsidiary Conquest Mining Ltd, signed a JV agreement in September 2019 with exploration activities beginning in November 2019. On 15 December 2021, Navarre Minerals completed the acquisition of the Mt Carlton gold mining and processing operation from Evolution Mining Ltd, which included the Crush Creek exploration project. BV1 was discovered in 1988 under the JV between AOM and CRAE with RC drilling following up anomalous stream sediment and rock chip geochemistry. Previous exploration activities include stream sediment sampling, soil sampling, geological mapping, geophysical surveys, RC drilling, diamond drilling and open-hole percussion drilling.

Geology and Mineralisation

Crush Creek mineralisation is located within the apex of Bowen Basin volcanic stratigraphy which comprises the late Carboniferous to early Permian Lizzie Creek Volcanics, consisting locally of andesitic and felsic derived volcanoclastics, sub-volcanics and lavas, including a series of rhyolitic intrusives and extrusive flow-domes. The low sulphidation epithermal gold-silver mineralisation at BV1 is structurally controlled within steep to sub-vertical N-S striking structures hosted in andesitic lavas and volcanoclastic rocks. Mineralisation is associated with quartz vein and silica breccia development within these structures.

Exploration and Resource Definition Methods

Further details of the drilling, sampling and assaying techniques for BV1 have been provided in the JORC Code Tables at the back of this release.

The drilling data utilised in the Mineral Resource Estimate (MRE) have been collected from either Reverse Circulation (RC) or Diamond (DD) drilling as part of Exploration and Resource Definition infill programs. Most of the RC drill holes have been drilled utilising a 5.25" diameter face sampling hammer, with the DD drill holes either NQ or HQ3 size. All RC and DD drill holes have been drilled from surface locations. A Reflex Act RD2 orientation tool has been used for the 2022 DD drill holes at regular intervals to orientate the core. Data spacing and distribution has been designed to collect enough data for establishing geological and/or grade continuity appropriate for classifying an Inferred Mineral Resource for most of BV1, as well as to explore along the strike of key mineralised structures for further mineralisation.

All 2022 drill holes at BV1 have been surveyed for easting, northing and reduced level using a Real Time Kinematic GPS. Recent data has been collected and stored in MGA 94 Zone 55. The collar survey methods for the historical drilling have not been well documented. Topographic control was generated from an aerial LIDAR survey completed as part of the 2022 collar surveying program. The collar RL's for numerous

historical drill holes have been adjusted onto the topographic LIDAR surface with both the original and adjusted levels recorded in the database.

Downhole surveys for the 2022 drilling have been completed using a true-north seeking Gyro. Downhole survey kink checks have been completed as part of the data validation processes prior to interpretation and modelling. All survey data is entered into Datashed using designated templates. Most of the historical RC and some of the historical DD drill holes have no downhole survey measurements. The locational accuracy of these holes, especially the deeper ones is poor with additional infill drilling required to obtain a suitable level of confidence in the data for achieving a resource classification above Inferred in future Mineral Resource Estimates.

RC drill chips have been sieved and collected in chip trays for every 1 m sample, with these geologically logged by a qualified Geologist capturing the relevant lithological, alteration, texture, weathering, and mineralisation attributes of the chips. All intervals are geologically logged for RC drill holes. Diamond drill cores are geologically logged as full core for all relevant lithological, alteration, texture, veining, structure, weathering and mineralisation features. For orientated core, structural measurements are taken using a Kenometer instrument to assist with the interpretation and modelling process. Historical drill cores have been logged onto paper for the entire drill hole recording relevant lithological, alteration, texture, veining, structure, weathering, and mineralisation features. These historical drill hole paper logs have been verified against the data contained in the database with no discrepancies identified. All drill cores have been photographed (wet and dry), with these high-resolution photos stored on the site server which is routinely backed up. All recent RC and DD logging has been captured directly into computers with inbuilt validation processes to ensure data integrity.

RQD measurements are taken from diamond core to allow preliminary understanding of recovery, rock competency and fracture frequency. Geotechnical logging has been undertaken for select drill holes on site by geologists. All logging is both qualitative and quantitative in nature recording features such as structural data, sample recovery, lithology, mineralogy, alteration, mineralisation types, vein density/type, oxidation state, weathering, colour, magnetic susceptibility, bulk density, etc.

Sampling during 2022 of the Au and Ag mineralisation at BV1 has been undertaken using RC drill chips and DD core (HQ3). RC samples have been split using a cone splitter mounted on the drill rig underneath the cyclone. The splitting was completed to obtain a representative 3 kg sub-sample of the 1 m down-hole sample interval. The cyclone and splitter have been routinely cleaned between drill rods and drill holes to maintain sample hygiene. Wet or moist samples have been recorded by the drillers on their drill plods. Entire RC drill holes have been sampled for all resource definition and exploration drill holes. DD samples have been cut in half using a diamond saw along either orientation lines or cut lines, with a consistent side of the cut sample selected for assay to ensure unbiased sampling. Within mineralised zones, sample intervals have been selected to reflect mineralisation widths where appropriate. Single intervals have not

exceeded 1.4 m in length to ensure that a sample less than 3 kg has been submitted to the laboratory for processing and analysis.

The sampling methods for historical drill holes at BV1 are poorly documented. The RC drill holes completed prior to 2007 have no details on their sampling methods – these holes have been drilled by large mining and exploration companies (CRAE, Resolute & Gold Fields), so it has been assumed that the sampling methods would have been in line with Company protocols and are therefore considered industry standard at the time. RC drill holes completed by Basin Gold from 2007 onward have been sampled at 1 m intervals using a cone splitter. All historical RC drill holes have been composited to either 2 m or 4 m samples for initial analysis, with individual 1 m samples only sent for analysis if the composite sample returned a value above a specified mineralisation threshold. Historical diamond drill holes were mainly drilled at NQ2 size, with a small proportion of HQ drilling. It has been assumed that for the older drill holes, diamond drill core has been cut in half using a diamond saw along either orientation or cut lines, with a consistent side of the cut sample selected for assay to ensure unbiased sampling. Analyses has been undertaken comparing the various RC and DD drill programs over time with no evidence of bias in the historical data. A twinned drill hole analysis has not been undertaken as there are insufficient drill holes in close enough proximity at BV1.

The sampling and assaying methods are considered appropriate and representative for the style of mineralisation evident at BV1. The methods employed have been validated using established QAQC protocols.

Chain of custody protocols to ensure the security of samples are followed. Prior to submission, samples are retained on site where access to the samples is restricted. Samples are then dropped off and loaded onto a dedicated freight truck in secured bags the morning of dispatch. This dedicated truck transports the samples directly to the laboratory, without trans-shipping or storage. Collected samples are then received at the respective commercial laboratories in Townsville. The laboratories are contained within a secured, fenced compound. Access into the laboratory is restricted and movements of personnel and the samples are tracked under supervision of the laboratory staff. Upon arrival, the laboratory undertakes an inventory of samples received, reconciling against the documented submission. Any visible evidence of tampering, mistreatment or compromising of samples would be identified at this stage.

Analysis and QAQC

All BV1 samples have been submitted to accredited commercial laboratories for preparation and sub-sampling prior to analysis. For the 2022 drilling, this preparation involved registering and weighing of the samples upon receipt, followed by oven drying at between 85°C and 105°C. The dry samples are then jaw crushed to a nominal 3 mm size and if required split by a cone splitter to achieve the desired 3 kg sample weight. The entire <= 3 kg sample is then pulverised in an LM5 pulveriser to achieve 90% passing 75 µm, from which 200 g is sampled within the pulverising bowl using a spatula to a numbered pulp bag. The Fire Assay charge and any multi-element samples are taken from this 200 g pulp after ensuring the sample

selected is homogenous. Details on the sample preparation techniques in use for the historical RC and DD drill holes have not been located. However, all samples have been prepared and analysed at commercial laboratories (ALS-Chemex or Analabs), so it has been assumed that industry standard sample preparation techniques for the time would have been used.

The assaying protocols in use for Crush Creek samples in 2022 has been developed to ensure that the expected levels of accuracy and precision are met for the style of mineralisation being targeted. For gold assays, all samples are analysed using the Fire Assay method which is considered a total analytical technique suitable for epithermal style mineralisation. The technique utilises primarily a 50 g charge with a lead flux, which is decomposed in a furnace with the prill being totally digested by hydrochloric and nitric acids before the gold content is determined by an AAS machine. Historical Au assaying has used either a 50 g charge for Fire Assay (1987 – 2008, 2018 – 2020) or a 25 g charge for Fire Assay (2009 – 2018). For Ag and base metals in 2022, ICP analyses have been completed on all samples for a suite of ten elements (Ag, Cu, Pb, Zn, Fe, S, As, Au, Sb and Bi). A 4-acid digest has been used with the analysis completed by either MS or OS means. For most historical samples, the samples were assayed for the multi-elements by ICP-OS using an Aqua Regia digest.

The quality control procedures adopted for the 2022 drilling include the regular submission of Standards (CRM's), blanks and duplicates. CRMs have been inserted every 20th sample with four different Au grade standards cycled through. The intent of the procedure for reviewing the performance of certified standard reference material is to examine for any erroneous results (a result outside of the expected statistically derived tolerance limits) and to validate if required, the acceptable levels of accuracy and precision for all stages of the sampling and analytical process. Batches which fail quality control checks are re-analysed. Blanks and duplicates have been targeted in and around the projected mineralisation intervals. A tolerance of ten times the detection is applied when analysing the performance of the blank. Any blank failing this threshold results in the resubmission of the duplicates (for RC) and remaining half of the core (for DD) for the surrounding 20 metres. No umpire laboratory checks have been undertaken as part of this drilling program. The QAQC procedures for the historical samples are poorly documented although the annual reports do mention that no QAQC issues were evident for the drilling completed during that year.

Data Storage and Management

Assay data is loaded directly into Datashed in batches. In-built checks in Datashed flags errors and ensures batches pass validation checks prior to upload. Validation checks include mis-matching sample numbers, inconsistent “depth to intervals” etc. A batch QAQC control chart report is generated once the batch is successfully loaded. Visual checks of standards, duplicates and blanks of reported assays are also conducted before batches are uploaded into Datashed. Assay data is plotted in mining software package (Leapfrog) as a final validation check for collar location, hole path and assay data. Any drill holes or samples that did not pass these validation steps or without sufficient confidence in either their location or assays

have been excluded from the Mineral Resource estimation process.

BV1 Mineral Resource Estimate

The Delta Deposit comprises both Open Pit and Underground Mineral Resources, which are summarised in the table below.

Deposit	Gold Cut-Off	Tonnes (kt)	Gold (g/t)	Gold (koz)	Silver (g/t)	Silver (koz)	AuEq ¹ (g/t)	AuEq ¹ (koz)
Inferred Mineral Resources								
Bv1	0.55	425	2.92	40	8.5	116	3.00	41

¹ The AuEq was calculated with the following formula: $AuEq\ g/t = ((Au_g * Au_r * Au_p) + (Ag_g * Ag_r * Ag_p)) / (Au_p * Au_r)$ where:

- Au_g, Ag_g = Element grade
- Au_r, Ag_r = Element Metallurgical recovery %
- Au_p, Ag_p = Element price per gram ($Au = \$77.16/g$, $Ag = \$0.96/g$)

Geology and Mineralisation Modelling

BV1 mineralisation is contained within steeply dipping, low-sulphidation epithermal veins and breccias hosted within andesitic lavas and volcanoclastics. The two main BV1 structures shows significant continuity along strike and down-dip with several smaller, less continuous structures evident in the footwall and hangingwall to the main structures. Surface outcrop mapping is consistent with the intercepts in the drill holes with a steep dip and north-south strike. Mineralisation within the main structures is interpreted to be shoot controlled, however the drill density is currently inadequate to determine plunge orientations or controls. Although structurally controlled, vein style mineralisation is dominant, a lower grade stockwork zone has also been identified and modelled utilising a 0.1 g/t gold threshold. The grade threshold selected has been based on statistical analysis of the grade distributions. The threshold represents an inflection point in the grade distribution of the length weighted raw assays.

Ten gold mineralisation domains have been interpreted based on drill hole logging and assays, with the two main structures identified, along with a series of splays either linking the two veins at the strike extents or interpreted to be in the hangingwall or footwall. All veins have been interpreted and modelled utilising the vein tool in Leapfrog Geo, with the stockwork mineralisation interpreted and modelled with Leapfrog Geo's indicator method using a 0.1 g/t gold threshold to define mineralised from un-mineralised intercepts. The relatively close correlation of silver to gold has resulted in the silver estimation using the gold mineralisation domains. All other elements have also been estimated inside the gold mineralised domains.

The gold mineralisation at BV1 strikes N-S for over 680 m, with a sub-vertical dip that extends from surface to over 200 m depth. The structures hosting the gold mineralisation vary from 1.5 m to 5 m thickness.

Grade Estimation

The geological and mineralisation domains generated within LeapFrog Geo have been used to flag the drill hole samples with the relevant geological or mineralisation code. Grade distributions across the mineralisation boundaries have been analysed with hard boundaries selected and applied across all domain boundaries. As most of the mineralisation is hosted within silicified breccias and structures, all elements have been estimated inside these vein domains. The gold stockwork mineralisation domains have been used to constrain the estimation of gold, silver, copper, lead, arsenic, zinc, sulphur and iron.

Raw sample lengths have been analysed within the mineralisation domains to select an appropriate composite length that suits not only the mineralisation style but also the sampling methodology applied during the drilling. A 1 m composite length has been selected with a 0.1 m residual applied. There is a population of 2 and 4 m raw samples which have been split during the compositing process – analysis of grade versus length indicates that this splitting into composites will result in a slight decrease in the average grade of the composites within some domains. This will result in a slight under-call in the estimated grade and is one of the reasons why an Inferred Resource classification has been applied for BV1 at this stage of the project.

Composite samples have been analysed in Snowden Supervisor v8.14 software for the existence of extreme grades. The influence of these extreme grades has been reduced by applying a combination of top-cuts and/or employing a high-grade yield or clamp. These levels have been determined using a combination of histograms, log probability and mean variance plots. The top-cuts and high-grade yields have been reviewed and applied on a domain-by-domain basis. A top cut has been applied to waste zones to reduce the influence of composites with grades above the modelling cut off, but without the required continuity for inclusion within the estimation.

As there are a limited number of composites available for continuity analyses, variography has been determined for gold and silver using grouped mineralisation domains as well as within the surrounding low grade stockwork domain. The output variogram models have been checked to ensure that they are consistent with the modelled geology. The grouping of domains for continuity analysis is another reason why an Inferred Resource classification has been applied for most of BV1, as there is limited confidence in the grade continuity between intercepts.

A block model has been constructed covering the extents of the deposit with a parent block size of 20 m (X) by 20 m (Y) by 20 m (Z) utilised. A sub block size of 1.25 m (X) by 1.25 m (Y) by 1.5 m (Z) has been used to define the mineralisation edges with the estimation undertaken at the parent block scale. The parent block size is considered appropriate for the drill hole spacing defining the mineralisation at BV1.

Grade estimation for all elements has been completed using Ordinary Kriging (OK) into ten gold domains as well as the surrounding waste using Leapfrog Edge software. Dynamic anisotropy has been used to orientate the search ellipse and variograms according to the dip and strike of the individual domains.

Estimations have been undertaken as hard boundary estimations within three passes:

- *Pass 1 estimations have used a minimum of six and a maximum of 24 samples into a search ellipse at half the variogram range for all vein and stockwork zones. No sample limits per drill hole have been applied for any domains due to the limited number of samples available for estimation.*
- *Pass 2 estimations have used a minimum of four and a maximum of 24 samples into a search ellipse at the variogram range for all vein and stockwork zones. No sample limits per drill hole have been applied for any domains due to the limited number of samples available for estimation.*
- *Pass 3 estimations have used a minimum of two and a maximum of 24 samples into a search ellipse at double the variogram range for all vein and stockwork zones. No sample limits per drill hole have been applied for any domains due to the limited number of samples available for estimation.*

Bulk density values have been assigned within the deposit based on an analysis of bulk density measurements split by weathering, lithology, and mineralisation. The bulk density measurements have been collected using the water immersion method on either dried rock samples or diamond core. For those categories that contained insufficient data to determine a mean bulk density, the bulk density has been assigned with consideration of the mean.

Deposit	Modelled Lith	Oxide		Transitional		Fresh	
		No.	BD	No.	BD	No.	BD
BV1	Basalt	-	2.20	-	2.55	39	2.65
	Andesite	1	2.20	14	2.55	137	2.62
	Mineralisation	-	2.20	-	2.25	3	2.60

Volume comparisons between the wireframes and coded block model have been completed to ensure that the sub-blocking has adequately filled the wireframes and is therefore representative of the mineralisation as modelled. Apart from some of the very thin domains at depth, the block model is an accurate representation of the mineralisation as modelled. Final grade estimates for the key elements (gold and silver) within each domain have been validated by statistical analysis and visual comparison between the input composites (clustered and de-clustered) and estimated blocks as well as using swath plots on Easting, Northing and Reduced Level comparing the output estimated grades with the input composites. Most domains have validated within +/- 10% of the input composites. A small number of domains with variable drill spacing have returned statistical validations outside these limits, with these domains reviewed in long projection to ensure that the estimated grades are an accurate representation of the input composites – in all cases, the parts of the block model with poor validation have remained unclassified due to the presence of grade extrapolation. The Competent Person considers that the estimated grades within the bulk of the reported deposit are an accurate reflection of the input composite grades.

The resource classification has been applied to the Mineral Resource estimate based on a combination of the data integrity and spacing, grade and geological continuity, validation against the input composites and estimation quality parameters. No Mineral Resources at BV1 satisfy the requirement to be classified as

either **Measured or Indicated Mineral Resources**, due to the reasons listed previously. The portions of the deposit that have been informed by drilling spaced closer than 100 m by 100 m and have the estimation informed by at least two drill holes meet the requirements to be classified as **Inferred Mineral Resources**. All mineralisation domains have been reviewed individually, with the criteria described above used to define contiguous zones of classified blocks to avoid a spotted dog classification being applied. The classification reflects the view of the Competent Person.

The Competent Person is of the opinion that the current block estimates provide a global estimate of tonnes and grade at a deposit scale. Variances to the tonnage, grade, and metal of the Mineral Resource estimate are expected with further definition drilling. The Competent Person considers that these variances will not significantly affect the potential economic extraction of the deposit.

Reasonable Prospects for Eventual Economic Extraction (RPEEE)

In order to satisfy the Reasonable Prospects for Eventual Economic Extraction requirements within the JORC Code for reporting Mineral Resources, open pit optimisation studies have been completed for BV1. A gold cut-off grade has been used to report the Mineral Resources inside the optimised pit shell. Gold is the dominant element of economic interest and analysis within the optimised pit shell has indicated that silver grades do not impact significantly on the potential economic viability of the deposits. The following price assumptions for the key economic elements have been used (all values are in AUD):

- *Gold = \$2,400/oz*
- *Silver = \$30/oz*

The Process Plant metallurgical recoveries for BV1 is not well understood, with no test work having been completed. For the optimisation processes for reporting the Mineral Resources, the same recovery factors as applied for other Crush Creek low-sulphidation epithermal deposits have been applied with processing costs (including site support costs) calculated and applied as per the table below.

PROCESSING OPTIMISATION INPUTS		
Items	Unit	BV1
Processing Recovery (Total of Proc. Rec. & Metal Payable)		
Au	%	96.0%
Ag	%	71.0%
Processing Costs (includes site support costs)		
	\$/t feed	50.14
Inventory to be Processed		
Inferred		Yes
Unclassified		No

Open pit optimisation studies have been completed on the BV1 Mineral Resource utilising Whittle optimisation software completed on regularised versions of the block model. The regularisation block size selected reflected the likely size of the mining fleet to be used for open pit extraction. As the regularisation

process has introduced some level of ore loss and dilution to the original input block model, no additional ore loss and dilution parameters have been applied. A comparison has been completed during the optimisation process with no material difference in the optimisations completed with and without ore loss (5%) and dilution (5%) factors applied.

The following table summarises the OP optimisation input assumptions and factors.

OP OPTIMISATION INPUTS		
Items	Unit	BV1
Whittle Mining Parameters		
Slope - Oxide (Overall Slope Angle)	deg	43
Slope - Fresh (Overall Slope Angle)	deg	43
Mining Recovery	%	100
Mining Dilution	%	0
Minimum Mining Width	m	15
Whittle Reference Mining Cost		
	\$/t rock	5.35
Inventory to be Included		
Indicated		Yes
Inferred		Yes
Unclassified		No
Royalties		
Au	%	5.00
Ag	%	5.00

Victoria – Resolution and Adventure Mineral Resource

Full details of the maiden MRE for Resolution and Adventure were released to the ASX on 30 March 2021 *“Maiden Gold Mineral Resource & Exploration Target for Resolution & Adventure Prospects.”* Navarre confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

The Company confirms that the form and context in which the Competent Person’s findings were presented have not materially changed from the original market announcement.

APPENDIX 2: JORC TABLE 1
Mt Carlton Operation – V2, Mt Carlton United, Telstra Hill
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	Sampling of the Au, Ag, & Cu mineralisation used as inputs into the Mineral Resource estimation at Mt Carlton has been undertaken using reverse circulation (RC) drill chips and diamond (DD) drill core (HQ3 or NQ2). RC samples have been split using either a riffle or cone splitter depending on the program, mounted on the drill rig underneath the cyclone. For some of the historical drill programs, the entire sample has been collected and manually split in the core shed using a portable riffle splitter by Mt Carlton Operations personnel. The splitting has been completed to obtain a representative 3 kg sub-sample of the 1 m down-hole sample interval. The cyclone and riffle splitter have been routinely cleaned between drill rods and drill holes to maintain sample hygiene. Wet or moist samples have been recorded by the drillers on their drill plods. Entire RC drill holes have been sampled for all drill holes used in the Mineral Resource. Pre 2022, NQ2 drill core comprises most of the diamond drilling defining the mineralisation at Mt Carlton, with all DD drill holes in 2022 being HQ3 diameter. Diamond drill core has been cut in half using a diamond saw along either orientation or cut lines, with a consistent side of the cut sample selected for assay to ensure unbiased sampling. Within mineralised zones, sample intervals have been selected to reflect mineralisation widths where appropriate. Single intervals have not exceeded 1.4 m length to ensure that a sample less than 3 kg has been submitted to the laboratory for processing and analysis. The sampling and assaying methods are considered appropriate and representative for the style of mineralisation evident at Mt Carlton. The methods employed have been validated using Mt Carlton's QAQC protocols. No sampling instruments or tools requiring calibration have been used as part of the sampling process. All RC chip samples and cut half core DD samples have been dried, crushed and pulverised (total preparation) to produce a 50g charge for fire assay of Au, Ag, As, Bi, Cd, Cu, Fe, Pb, S, Sb and Zn have also been assayed in addition to Au assays using an aqua-regia digest with ICP/AES finish.
Drilling techniques	For the V2 Deposit, the majority of the drill holes defining the open pit part of the Mineral Resource are RC, most of which have been drilled utilising a 5.5" diameter face sampling hammer. Diamond drill core of either NQ2 or HQ3 size have been drilled from surface locations, often utilising a Reflex Act RD2 orientation tool at regular intervals to orientate the core. Underground diamond drill holes of NQ2 size have been used to define the majority of the underground Mineral Resource. Although open hole percussion drill holes have been drilled into the mineralisation at V2 (either from surface or via underground sludge holes), these have not been used in the Mineral Resource estimation (MRE) process at V2. For Mt Carlton United (MCU), 70% of the drill holes used in the MRE have been drilled using a 5.5" diameter face sampling hammer RC rig. Of the diamond drill holes defining the mineralisation, the majority of these have been drilled at either NQ2 or HQ3 size, although a small number of PQ3 drill holes have been completed to minimise sample loss through broken zones. A Reflex Act RD2 orientation tool has been used for diamond drill holes at regular intervals to orientate the core. Although open hole percussion drill holes have been drilled into the mineralisation at MCU, these have not been used to either model the mineralisation or in the MRE process.

	For Telstra Hill, RC drill holes comprise 66% of the drilling used in the MRE, all of which have been drilled using a 5.5" diameter face sampling bit. The diamond drill holes have been drilled at either NQ2 or HQ3 size, with the more recent drill holes utilising a Reflex Act RD2 orientation tool at regular intervals to orientate the core.
Drill sample recovery	Measures taken to maximise sample recovery during RC drilling include ensuring the sample box has been cleaned for each metre, ensuring the splitter was level and cleaning out sample chutes routinely. Numerous RC drill programs implemented routine weighing of bulk, primary and duplicate samples at a ratio of 1:20 to ensure adequate sample recovery. When required, sampling chutes on the splitter have been adjusted to maintain a consistent representative sample. If water had been encountered during RC drilling, samples affected have been recorded by the drillers on their drill plods. For diamond drill holes, core recovery measurements have been routinely collected and compared against the drillers core blocks to ensure adequate core recovery. Core loss blocks have been inserted by the drillers and verified by Mt Carlton staff during core markup, with sample intervals adjusted to ensure that core loss zones have not been included in the sample interval. Core recovery for all deposits is considered adequate for the mineralisation in the transitional and fresh oxidation states, with over 90% recovery recorded for the areas in and adjacent to the mineralisation. For the mineralisation contained in the oxide portion of the weathering profile, core loss can at times, be in excess of 50%. The mineralisation modelled and estimated in this weathering horizon have been classified as Inferred Resource to indicate the level of confidence in the tonnage estimates due to core loss. There is no evidence of a relationship between sample recovery and grade, indicating no sample bias has been caused poor sample recovery.
Logging	RC drill chips have been sieved and collected in chip trays for every 1 m sample. These have been geologically logged by a qualified Geologist capturing the relevant lithological, alteration, texture, weathering, and mineralisation attributes of the chips. All intervals have been geologically logged for RC drill holes. All logging has been captured directly into computers using LogChief software with inbuilt validation processes to ensure data integrity. All drill cores have been geologically logged as full core with all relevant lithological, alteration, texture, veining, structure, weathering, and mineralisation features collected via LogChief digital data capture. For orientated core, structural measurements have routinely been recorded of key geological and mineralisation features to assist with the interpretation and modelling process. All drill cores have been photographed (wet and dry), with these high-resolution photos stored on the site server which has been routinely backed up. Drill cores have been routinely geotechnically logged, with core recovery, RQD and details of joint spacing and infill collected. All core and RC chip logging is qualitative in nature.
Sub-sampling techniques and sample preparation	RC samples have been taken as primary splits of bulk samples using rig-mounted riffle or cone splitters with adjustable sample chutes to ensure an approximately 3 kg sub-sample has been collected for analysis for every 1 m sample. Samples have been collected dry wherever possible, with wet or moist samples recorded by the drillers on their plods. On the occasion where rig mounted splitters have not been available, RC samples have been collected in large plastic bags and manually split via a three-tier riffle splitter by qualified Mt Carlton staff in the core shed. The RC sample methodology is considered appropriate for the style of mineralisation being targeted at Mt Carlton. Some historical RC drill holes have been sampled using 2 m or 4 m long composites. Sub-sampling methods for

	these composites have not been recorded. Analysis of the distribution of these samples and their impact on the MRE process has been completed with the conclusion reached that the inclusion of these samples will not materially impact the MRE. Drill core sampling has utilised a diamond core saw to cut the core in half adjacent to either an orientation or cut line. A consistent side of the cut sample has been selected for assaying to minimise any bias through preferential sampling. Sample intervals have been selected by the logging Geologist using prescribed minimum and maximum sample lengths suitable for the mineralisation style being tested. The drill core sample methodology is considered appropriate for the style of mineralisation being targeted at Mt Carlton. Quality Control procedures including the submission of routine quarter (exploration core) and half (resource definition) core field duplicates have been implemented for the diamond drill core to check the representivity of the primary samples being selected. Routine field duplicates have not been collected for the RC samples collected prior to 2022, with only coarse crush duplicates taken at the laboratory as part of the sample preparation process. In 2022, routine field duplicates have been collected for each 1 m sample with the duplicates selected sent for assay targeted to be in and around the expected mineralised zones. Sample preparation of RC and DD samples has been undertaken by external laboratories according to the sample preparation and assaying protocol established to maximise the representation of epithermal style Au-Ag-Cu mineralisation. All samples have been submitted to commercial laboratories for preparation and sub-sampling prior to analysis. This preparation involved registering and weighing of the samples upon receipt, followed by oven drying at between 85°C and 105°C. The dry samples have then been jaw crushed to a nominal 3 mm size and if required split by a cone splitter to achieve the desired 3 kg sample weight. The entire <= 3 kg sample has then been pulverised in an LM5 pulveriser to achieve 90% passing 75 µm, from which 200 g has been sampled within the pulverising bowl using a spatula to a numbered pulp bag. The Fire Assay charge and any multi-element samples have been taken from this 200 g pulp after ensuring the sample selected is homogenous. The sub-sampling methods for Au, Ag and base metals are considered appropriate for the style and grain size of the mineralisation being tested as the gold particles are not considered to be coarse enough to require other sub-sampling methods.
Quality of assay data and laboratory tests	The assaying protocols in use for Mt Carlton samples has been developed to ensure that the expected levels of accuracy and precision are met for the style of mineralisation being targeted. For Au assays, all samples have been analysed using the Fire Assay method which is considered a total analytical technique suitable for epithermal style mineralisation. The technique utilises primarily a 50 g charge with a lead flux, which is decomposed in a furnace with the prill being totally digested by hydrochloric and nitric acids before the gold content is determined by an AAS machine. A small proportion of assays have utilised a 25 g Fire Assay charge. ICP analyses have been completed on all samples for a suite of ten elements (Ag, Cu, Pb, Zn, Fe, S, As, Au, Sb and Bi). For grade control, resource definition and some exploration samples, a 4-acid digest has been used with the analysis completed by either MS or OS means. For most exploration samples, 90% of the samples have been assayed for the multi-elements by ICP-OS using an Aqua Regia digest with every tenth sample analysed by ICP-MS using a 4-Acid digest.

	The quality control procedures adopted for Mt Carlton include the regular submission of Standards (CRM's), blanks and duplicates. The CRM's selected are matrix matched and have been created by an accredited laboratory from Mt Carlton high sulphidation epithermal mineral assemblages. Up to 6 CRM's have been circled through that cover a range of gold, silver, and base metal grades at an insertion rate of 5% (1:20), with the CRM selected by the logging Geologist based on the expected grade of the mineralised intersections in the drill hole. The performance of the CRM's is assessed on a batch-by-batch basis using a 3SD error limit from the expected value. Any failures results in the entire batch being re-analysed. Analysis of the previous six months of CRM performance (the time period from the last MR update) for Au, Ag and Cu have indicated an acceptable level of precision and accuracy for the CRM's used, giving confidence that the assays received are suitable for use in the MRE process. Coarse blanks and pulp blanks have been inserted at a rate of approximately 5% (1:20), with the insertion of these targeted in and around the mineralisation for the drilling completed in 2022. The performance of the blank is measured against 10 times the detection limit for Au, with any blanks returning outside this threshold requiring reanalysis. No blanks have failed for all samples submitted in 2022 to date, which is deemed an acceptable performance of the laboratory and indicates no contamination during sample preparation. For the drilling completed prior to 2022, coarse crush duplicates of both core and RC samples have been the primary duplicate sample sent for QAQC, with only a small number of field duplicates submitted for assay. For the diamond drilling completed in 2022, field duplicates comprising either quarter core for exploration drill holes and half core for resource definition drill holes have been selected in and around mineralised intercepts and submitted for analysis. For the RC drill holes, a second split taken from the on-rig cyclone has been collected and submitted for analysis. The results of the field duplicates are in line with the expected and modelled variability for the style of mineralisation evident at Mt Carlton. No umpire laboratory checks have been undertaken in 2022.
Verification of sampling and assaying	Sampling intervals and numbering have been validated by the geologist prior to cutting diamond drill core, with the technicians systemically checking the pre-marked bags to ensure every sampled interval goes into the correct bag. Internal verification of the significant intercepts has been routinely completed by the logging and senior Geologists through the comparison between the core photos or chip trays and the assays received to ensure that the mineralised intercepts match the logged mineralisation. Key intercepts have also been verified during the interpretation and modelling phase by the Resource Geologist and Competent Person. Several diamond drill holes have been completed at MCU for metallurgical test work in 2022, with these drill holes effectively twinning existing RC drill holes. Comparative analysis of the intercepts between the diamond and RC drill hole indicates close correlation in the received assays, although the width of the width of the mineralisation in the RC is often slightly longer (<10% longer) than that returned from the drill core. This is to be expected given the difference in sampling methods between the two drilling styles. For the other deposits, comparisons between different drilling methods and different drilling programs have been completed utilising a 5 m buffer within the modelled mineralisation. These comparisons indicate a good correlation between RC and DD samples. However, the poor correlation between either RC and DD with some of the earlier phases of open hole percussion drilling at Telstra Hill and Mt Carlton United have led to the exclusion of these earlier drill holes from the interpretation and resource estimation process. Assay data has been loaded directly into Datashed in batches via an external data management consultancy. In-

	built checks in Datashed flags errors and ensures batches pass validation checks prior to upload. Validation checks include mis-matching sample numbers, inconsistent “depth to intervals” etc. A batch QAQC control chart report has been generated with any failures brought to the attention of the Senior Geologists for action with the laboratory. Assay data has been plotted in the modelling software package (Leapfrog) as a final validation check for collar location, hole path and assay data. No adjustments or calibrations have been made to any assay data used in this report.
Location of data points	All drill hole collars have been marked and picked up by qualified surveyors using RTK GPS methods. Downhole surveys have been conducted by drillers using either Reflex digital cameras or True North seeking gyroscopic surveys. All survey data has been entered into Datashed using designated templates. All underground and open pit voids and back fill zones have been picked up and verified by the Company’s qualified surveyors using either a Total Station (UG and OP) or RTKGPS (OP). The grid system is Map Grid of Australia 1994 (MGA94) Zone 55. Periodic checks of the survey control network ensure accurate information is provided. (Last AusPos control check was 23/10/2020). Topographic control has been generated from aerial LIDAR DTM surveys, with this topography used to check the drill hole collar surveys using a 2 m tolerance threshold (for site pad preparations). Any historical drill hole collars outside of this threshold have been reviewed and if appropriate, the Z value has been adjusted to the LIDAR topography surface.
Data spacing and distribution	Data used in the Mineral Resource Estimates includes Exploration, Resource Definition, and Grade Control infill. Resource definition drill programs are generally drilled to a spacing of 20 m by 20 m, which is considered appropriate for a Mineral Resource. This spacing includes data that has been verified from previous exploration activities on the project. At V2 and MCU, Grade Control Infill programs have been drilled to a spacing of 10 m by 10 m. Data spacing and distribution has been designed to collect enough data for establishing geological and grade continuity appropriate for classifying either an Inferred or Indicated Mineral Resource in the majority of V2, Telstra Hill and Mt Carlton United, as well as explore along the strike of key mineralised structures for further mineralisation. No compositing of samples has been applied to the raw assays.
Orientation of data in relation to geological structure	At V2, the main high grade “feeder” zones dip moderately to steeply north-west and strike north-east with these areas surrounded by a flat to shallowly dipping lower grade plume of mineralisation. This, combined with the need to drill from either existing development locations for underground and mining pit floors for open-pit has resulted in variable orientations of intercepts. Wherever possible, holes have been designed to intersect the mineralisation as orthogonal as possible for the dominant style of mineralisation in that area. Mineralisation at Mt Carlton United comprises predominantly moderately to steeply north dipping stacked east-west striking mineralised lenses, except for some north-west dipping, north-east striking high grade mineralised “feeder” veins in the far western part of the deposit. The surface drilling has been designed to intersect the mineralisation at an angle to minimise any bias. Several historical drill holes have been at very low angles to the current mineralisation interpretation, with these drill holes excluded from the MRE process. Mineralisation at Telstra Hill comprises strata-bound predominantly shallow dipping stacked mineralised zones

	which are conformable with the stratigraphy. The surface drilling has been designed to intersect the mineralisation at an angle to minimise any sample bias. Several pre to syn-mineralisation sub-vertical faults, which are variably mineralised have been intersected at low angles in both diamond and RC drill holes, although these mineralised are volumetrically insignificant in terms of the overall mineralisation at Telstra Hill. Any drill holes deemed to be too oblique which could result in bias during the estimation have been excluded from the MRE process.
Sample Security	Chain of custody protocols to ensure the security of samples have been followed. Prior to submission, samples have access to the samples has been restricted. Samples have then been delivered to the Townsville laboratory either in person or through a third-party trucking company in cages or crates. Where samples on delivery arrive late at the laboratory have been kept in locked yards prior to delivery. A reconciliation report is sent via email from the Laboratories to acknowledge receipt.
Audits or reviews	Internal audits and reviews have been conducted by the previous owners' Specialist Technical Services Group (Transformation & Effectiveness). Laboratory visits and reviews from site personnel form part of a compliance audit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	All of the Mineral Resources lie within ML10343. The ML area covers 1151.9 ha. Native title agreements are in place for activities within the Mining Lease, and surrounding EPMs. ML 10343 is surrounded by several EPMs forming the Mt Carlton project area, with ML10343 within EPM10164. The Mt Carlton project currently covers 875 km², the EPMs are in good standing with no significant risk regarding land access which inhibit future work. A royalty agreement is currently in place between Conquest Mining Pty Ltd and Gold Fields Australasia Pty Ltd.
Exploration done by other parties	Exploration within the Mt Carlton EPMs and ML10343 commenced in the 1970's, with BHP, Ashton Mining, MIM exploration and others exploring the Capsize Range area within the current EPM10164 for porphyry copper and epithermal styles of mineralisation. In 2006, Conquest Mining discovered the V2 high sulphidation epithermal Au-Cu deposit, and Ag-rich A39 deposit, with follow up work within the ML10343 by Evolution Mining defining the mineralisation at Mt Carlton United and Telstra Hill.
Geology	The Mineral Resources which comprise the Mt Carlton deposits are hosted within Early Permian Lizzie Creek Volcanic Group rocks close to the northern margin of the Bowen Basin. Mineralisation at Mt Carlton ranges from high sulphidation to lower sulphidation epithermal Au-Ag-Cu mineralisation. V2 is a high sulphidation epithermal Au-Ag-Cu rich deposits hosted within a doubly plunging rhyodacite package, with the higher-grade mineralisation occurring in steeply dipping NE trending structures surrounded by lower grade flat to shallowly dipping stratiform mineralisation. Au mineralisation at V2 is associated with enargite-tennantite copper and silver minerals. Both Mt Carlton United and Telstra Hill are defined as intermediate sulphidation epithermal Au-Ag dominant deposits, hosted within the same rhyodacite volcanic and volcanoclastic sequence that hosts the V2 and A39 deposits.

	MCU mineralisation in the central and eastern parts of the deposit is Au-Ag-Cu rich and occurs in a series of sub-parallel, stacked moderately dipping mineralised horizons. The western part of the deposit is separated from the central and eastern mineralisation by a NW-striking normal fault. The Au-Ag dominant mineralisation in the west is bound by two moderately to steeply NW-dipping, NE striking veins within which a series of moderately to steeply dipping, E-W to ENE-WSW trending lodes have been interpreted. Telstra Hill mineralisation occurs in a series of stacked shallowly dipping higher grade mineralised horizons, enveloped within a low-grade halo zone. Two steeply dipping feeder structures associated with normal faults have been interpreted and modelled from stratigraphic offsets and veining.
Drill hole Information	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource.
Data aggregation methods	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource.
Relationship between mineralisation widths and intercept lengths	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource.
Diagrams	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource.
Balanced reporting	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource.
Other substantive exploration data	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource.
Further work	The following work programs are currently planned for the four deposits: ▪ V2 – Infill grade control drilling on a 10 m x 10 m grid prior to ore block delineation and extraction via open pit mining methods. ▪ MCU – Minor resource extension drilling has been planned for the central part of Mt Carlton United to increase confidence in the grade and geological continuity as well as test the strike extensions immediately adjacent to an interpreted N-S fault that offsets a part of the deposit. In addition, infill grade control drilling on a 10 m x 10 m grid prior to ore block delineation and extraction via open pit mining methods. Sub-parallel mineralised trends to the north and south of MCU will be drill tested to identify their extents and potential to be modelled as a Mineral Resource.

	TH – Infill grade control drilling on a 10 m x 10 m grid prior to ore block delineation and extraction via open pit mining methods. If required, some metallurgical test work holes will be drilled.
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Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	The following measures are in place to ensure database integrity: - All data is stored in an SQL database that is routinely backed up, - All logging is digital and directly entered into the onsite Datashed database. Data integrity is managed by internal Datashed validation checks/routines that are administered by the Geology Superintendent or their designate. Routine data validations have been completed prior to updating the interpretations and Mineral Resources for V2, MCU and TH which included topography to collar checks, downhole survey kink checks, checks for overlapping intervals or duplicate points and missing data. Any drill holes or samples that did not pass these validation steps or without sufficient confidence in either their location or assays have been excluded from the Mineral Resource estimation process.
Site visits	The Competent Person has regularly completed site visits throughout 2022, including visits to each project and the core shed. These visits included a review and updating of the drilling, sampling, and assaying protocols in place at Mt Carlton Operations, as well as reviews of the geological controls on the mineralisation at V2, MCU and Telstra Hill. These reviews have led to a re-interpretation of the mineralisation at MCU and Telstra Hill increasing the level of confidence in the Mineral Resources for these deposits.
Geological interpretation	All grade thresholds selected as part of the interpretation and modelling process have been based on statistical analysis of the grade distributions within each deposit. Each threshold represents an inflection point in the grade distribution of the length weighted raw assays. V2 Confidence in the geological interpretation for V2 is considered very high as the mineralisation has been exposed in both underground and open pit mining. In addition, a significant amount of drilling (both RC and DD) has been completed since the initial discovery of V2. All drill holes used in the estimation have been either RC or DD. Open hole percussion drill holes have been completed both from the surface and underground (sludge) but these have not been used in the MRE process. All the geological and mineralisation modelling has been completed utilising Leapfrog Geo's implicit modelling functionality, with indicator methods used for the key elements of economic interest, Au, Ag and Cu. This MRE update represents a refinement and semi-automation of the Au, Ag & Cu mineralisation interpretation used in previous MRE's for the process to mesh with the current grade control estimations being completed for the open pit mining. The key geological controls on the mineralisation within V2 are a combination of steeply dipping,

	NE-striking structures which control the high-grade Au, Ag and Cu mineralisation and the upper contact of the rhyodacite which forms a barrier and stratigraphic trap for the fluids to form an arcuate plume of low to medium grade mineralisation beneath this contact. - For Au, statistical analysis has identified multiple mineralisation thresholds at 0.2 g/t Au, 0.8 g/t Au, 2.0 g/t Au and 5.0 g/t Au. The two lower grade thresholds have been used to model an arcuate zone of continuous mineralisation, which is sub-parallel to the upper contact of the rhyodacite. Within this low-grade “halo”, the 2 and 5 g/t Au thresholds has been used to define separate, continuous NE-trending, steeply dipping, high-grade feeder zones. This modified interpretation has been adopted based on observations and interpretation gained from years of mining and reconciliation against the plant performance. The Au domains have been used to constrain the estimation of Fe, S, Pb and Zn. - As the distribution of Ag differs from that of Au, separate Ag mineralisation wireframes have been modelled for V2. Statistical analysis of the Ag length weighted raw assays indicated separate grade populations at 20 g/t Ag, 50 g/t Ag, 100 g/t Ag and 200 g/t Ag. These have been modelled utilising an arcuate, shallow-dipping, doubly plunging structural trend toward the top of the rhyodacite contact, which transitions into a steeply dipping, NE-striking trend toward the base of the mineralisation. - Similar to Ag, the distribution of Cu differs from that of Au and Ag. Therefore, separate Cu mineralisation wireframes have been modelled for V2, utilising grade thresholds of 400 ppm Cu, 1,000 ppm Cu, 2,000 ppm Cu, 4,000 ppm Cu and 30,000 ppm Cu, all of which represent separate grade populations within the system. These have been modelled utilising an arcuate, shallow-dipping, doubly plunging structural trend toward the top of the rhyodacite contact, which transitions into a steeply dipping, NE-striking trend toward the base of the mineralisation. The close correlation between As and Cu has led to the estimation of As inside the Cu domains. The Competent Person believes that the refined interpretation effectively defines the Au, Ag & Cu grade populations effectively to achieve a robust estimation of the various grade populations and distributions within the deposit. MCU MCU comprises two zones of mineralisation, Far West (FW) and East-Central-West (ECW) separated by a post-mineralisation offset fault. The ECW component represents an up-faulted block with the mineralisation interpreted to be contained within the Cu-Au-Ag rich part of a medium to high sulphidation epithermal system. The FW mineralisation is within the Au-Ag-Pb part of the system with potential for the Cu-Au-Ag system to be present at depth. Confidence in the geological interpretation for both FW and ECW is considered high, given the significant amount of drilling, including oriented diamond core that has been completed prior to this update of the Mineral Resource. Surface mapping has confirmed the interpreted geological controls and orientations, particularly in the ECW. All drill holes used in the estimation have been either RC or DD. All percussion and RAB drill holes have been excluded from the MRE process. As with most of the deposits at Mt Carlton, the mineralisation at MCU is controlled by a mixture of structure and lithology. In the FW part of the deposit, two dominant structural orientations have been interpreted from assays and oriented core measurements; a NE-trending set of structures with a moderate NW-dip and an E-
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W, moderately to steeply north dipping set of structures. Both orientations host continuous high-grade mineralised veins and breccias surrounded by a halo of lower grade mineralisation hosted within the upper part of a rhyodacite volcanoclastic package. Similarly, the ECW mineralisation is predominantly structurally controlled with a series of stacked, E-W striking, moderately to steeply north dipping high-grade mineralised veins/breccias forming on these structures surrounded by a halo or stockwork of lower grade mineralisation developed within the upper rhyodacite. A small N-S striking post-mineralisation fault has been identified causing a slight offset in the mineralisation between the central and western parts of the ECW.

Seven Au mineralisation domains have been interpreted in the FW with seven Au domains also interpreted and modelled in the ECW, both based on drill hole logging, surface mapping and assays. The main high-grade domains in both parts of MCU have been interpreted and modelled utilising the vein tool in Leapfrog Geo, with the surrounding lower-grade stockwork mineralisation modelled using an Indicator approach at a 0.2 g/t Au threshold with a structural trend applied that is sub-parallel to the main vein orientations.

In the FW, the elevated Ag and Pb grades have resulted in these two elements being interpreted and modelled separately. Grade thresholds for Ag of 15 g/t Ag, 55 g/t Ag and 255 g/t Ag have been used to model separate grade populations with the NE-SW and E-W structural orientations evident in the Au mineralisation used as the primary control during the modelling of Ag. Similar trends have been applied for modelling Pb, with thresholds applied at 800 ppm Pb, 1,250 ppm Pb and 1,750 ppm Pb to model the different grade populations.

In the ECW part of the deposit, three mineralised Cu domains have been interpreted based on grades using mineralisation thresholds set at 100 ppm Cu, 1,500 ppm Cu and 10,000 ppm Cu. The mineralisation domains have been generated in Leapfrog Geo using an Indicator Interpolant to create nested grade shell that define the broad Cu mineralisation.

Telstra Hill

Confidence in the geological interpretation for Telstra Hill is considered moderate to high, with the recent diamond drilling providing valuable evidence of the geological controls on the mineralisation. The deposit has been defined by a combination of DD (34%) and RC (66%) drill holes. Older, open hole percussion drill holes have not been used in the interpretation or grade estimation processes.

The mineralisation at Telstra Hill is interpreted to be controlled by a combination of structure and stratigraphy. The primary control is stratigraphy, with a package of upper rhyodacite volcanoclastics hosting most of the Au mineralisation in a set of shallowly dipping mineralised lenses sub-parallel to the contact of this package. This upper rhyodacite package is cross-cut and offset by two normal faults, the first being a steeply S-dipping, ENE striking fault with a south block down movement interpreted. A second, NNW striking, steeply E-dipping normal fault crosscuts the stratigraphy, offsetting the rhyodacite package with an east-block down sense of movement. The relative timing of these two faults has not been determined with relation to each other, but as both contain thin, high-grade mineralisation, they are interpreted to be syn to post the mineralising fluids.

There appears to be a slight enrichment and dispersion of mineralisation within the oxidised portion of the deposit, with this surface used to differentiate between different domains and orientations for Au, Ag and Cu. The higher-grade Au mineralisation within the upper rhyodacite has been modelled using a 1.5 g/t Au mineralisation threshold mainly as a series of stacked shallowly dipping lenses sub-parallel to the host rhyodacite contact. These lenses are surrounded by a low-grade halo modelled using an indicator approach

	in Leapfrog Geo at a 0.15 g/t Au threshold. The mineralisation associated with the steep faults has been interpreted using a 1.5 g/t Au threshold. The silver and copper mineralisation has been modelled as sub-parallel to the upper rhyodacite contact using a 3 g/t Ag and 500 ppm Cu threshold to define the boundary between mineralised and un-mineralised. The same thresholds have been applied for the oxide and transitional-fresh portions of the deposit.
Dimensions	V2 The Au mineralisation at V2 is oriented in a predominantly NE-SW trend with strike extents of 750 m, across strike extents of 700 m and dip extents of 250 m. The NE trending, high-grade feeder structures vary in width from 1 m to 20 m with the thicker parts often associated with the thickest part of the shallow dipping low-grade halo zone toward the upper contact of the rhyodacite. The copper and silver mineralisation extends 750 m along and across strike with a dip extent of 250 m, although the mineralisation does thin quite considerably along strike to the NE. Copper mineralisation is significantly more extensive than both Au and Ag particularly in the upper part of the deposit leading into the upper contact of the rhyodacite. Mount Carlton United Mineralisation at MCU occurs in two distinct zones, with these extending in an E-W orientation over 1,500 m of strike length. The Far West part of the MCU deposit extends 600 m E-W along strike, with the stacked set of mineralised veins covering over 200 m of N-S lateral extent. The dip extents of several lenses extend up to 150 down-dip to approximately 110 m below surface although these lenses remain open at depth. Au mineralisation widths vary between 0.5 m and 5 m wide for the high-grade lenses surrounded by a lower grade halo between 10 – 30 m thick. The silver mineralisation is generally thicker with widths between 25 – 50 m over the same lateral extents as the gold. The ECW part of the deposit extends 600 m E-W along strike with the stacked lenses covering approximately 100 m N-S. The mineralisation has been defined between 75 – 100 m down-dip to a depth of 55 – 75 m below surface. Individual high-grade lenses of Au, Ag and Cu vary between 1 – 5 m in width, surrounded by a lower grade halo up to 30 m thick. Telstra Hill The Au mineralisation at Telstra Hill has been defined over 380 m E-W with N-S extents ranging from 150 – 250 m. The shallowly-dipping, higher grade stacked lenses vary from 1 to 5 m thick, with lateral extents ranging from 100 to 200 m (E-W) and strike extents in the vicinity of 50 – 100 m. The Ag and Cu mineralisation have been modelled between 10 – 30 m thick as shallowly dipping zones with extents up to 500 m E-W and 300 m N-S.
Estimation and modelling techniques	V2 The geological, and mineralisation domains and weathering wireframes generated within LeapFrog Geo have been used to flag the drill hole samples with the relevant geological or mineralisation code. Grade distributions across the geological and grade threshold boundaries have been analysed with hard boundaries selected and applied across all oxidation and domain boundaries.

After a review of the distributions and element correlations within the deposit, separate Au, Ag and Cu mineralisation domains have been interpreted and modelled.

Raw sample lengths have been analysed within the Au, Ag and Cu mineralisation domains to select an appropriate composite length that suits not only the mineralisation style but also the sampling methodology applied during the drilling. As ~95% of the mineralised Au samples are less than or equal to 1 m, a 1 m composite length has been selected with a 0.1 m residual applied. Composite samples within each estimation domain for all elements have been analysed in Snowden Supervisor v8.14 software for the existence of extreme grades. The influence of these extreme grades has been reduced by applying top-cuts with the top-cut values determined using a combination of histograms, log probability and mean variance plots. The top-cuts applied have balanced the need to reduce the impact of extreme values on the grade estimate against the potential loss of metal within each domain. The top-cuts have been reviewed and applied on a domain-by-domain basis. A top cut has been applied to waste zones to reduce the influence of composites with grades above the modelling cut off, but without the required continuity for inclusion within the estimation.

Variography has been determined for Au, Cu and Ag using either individual or grouped mineralisation domains as well as within the surrounding waste domain. The output variogram models have been checked to ensure that they are consistent with the modelled geology.

A block model has been constructed covering the extents of the deposit with a parent block size of 5 m (X) by 5 m (Y) by 5 m (Z) utilised. As the majority of the Mineral Resource will be reported as an open pit, no sub-blocking has been undertaken as the parent block size selected is equivalent to the Smallest Mineable Unit (SMU). The parent block size is considered appropriate for the drill hole spacing (10 m by 10 m) defining most of the in-situ mineralisation at V2.

Grade estimation of Au, Cu, Ag, As, Pb, Zn, Fe and S has been completed using Ordinary Kriging (OK) into four Au domains, four Ag and five Cu domains using Leapfrog EDGE software. Dynamic anisotropy has been used to orientate the search ellipse according to the dip and strike of the individual domains. The Au domains have been used to constrain the estimation of Pb, Zn, Fe and S. Arsenic is considered the main deleterious element for V2, with this element estimated inside the Cu mineralisation domains due to the close correlation between these two elements

Au estimations have been undertaken as hard boundary estimations within three passes:

- Pass 1 estimations have used a minimum of 4 and a maximum of 6 samples into a search ellipse approximately half the variogram range. No sample per drill hole limit has been applied for pass 1.
- Pass 2 estimations have used a minimum of 2 and a maximum of 8 samples into a search ellipse at the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 2.
- Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 12 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3.

Ag estimations have been undertaken as hard boundary estimations within three passes:

- Pass 1 estimations have used a minimum of 4 and a maximum of 8 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1.

	• Pass 2 estimations have used a minimum of 2 and a maximum of 8 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2. • Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 8 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3. Cu estimations have been undertaken as hard boundary estimations within three passes: • Pass 1 estimations have used a minimum of 4 and a maximum of 12 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1. • Pass 2 estimations have used a minimum of 2 and a maximum of 12 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2. • Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 12 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3. Volume comparisons between the wireframes and coded block model have been completed to ensure that the sub-blocking has adequately filled the wireframes and is therefore representative of the mineralisation as modelled. The 0.2, 0.8 and 2 g/t Au gold domain wireframes are generally 1 – 2% more voluminous than the coded block model, whereas the high grade 5 g/t Au domain is within 0.1%. Volumetric validation for the silver domains to the block model are all within 1%, as are the copper domains apart from the 3% copper domain. The slight volume discrepancies between the modelled mineralisation and the block model is not considered to be material. Final grade estimates for the key elements (Au, Ag and Cu) within each domain have been validated by statistical analysis and visual comparison between the input composites (clustered and declustered) and estimated blocks as well as using swath plots on Easting, Northing and Reduced Level comparing the estimated grades with the input composites. All Au and Cu domains validate within 10% of the declustered input composites. Most silver domains validate within 10% of the declustered input composites, except for the high grade 200 g/t Au grade shell, within which the block model validates significantly lower than the input samples. A review of this domain indicates that the poor validation is from within the portion of the deposit that has already been extracted from underground. Visual validation of the in-situ blocks within this domain indicates an acceptable level of correlation between the input composites and the estimated block grades. Global grade validations have been completed for the subsidiary elements including As, Pb, Zn, Fe and S. The Competent Person considers that the estimated grades are an accurate reflection of the input composite grades. No assumptions have been made regarding recovery of any by-products. A regular block size has been adopted that assumes an SMU of 5.0 m (X) by 5.0 m (Y) by 2.5 m (Z) for the V2 deposit. The Mineral Resource model has been reconciled against the actual monthly production (Declared Ore Mined – DOM) over 2021 and the first 6 months of 2022 for the open pit mining of V2. In addition, the Mineral
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Resource model inside underground surveyed voids (stope and development) have been reconciled against the actual DOM for the entire underground production for V2. The open pit DOM has been reconciled against the current version of the Mineral Resource block model reported at the production grade bins inside the end of month surfaces for the 18 months from January 2021 to June 2022, with the following results for Tonnes, Au, Ag and Cu:

- Tonnes MR / Tonnes DOM = 0.90
- Au Oz's MR / Au Oz's DOM = 1.06
- Ag Oz's MR / Ag Oz's DOM = 0.83
- Cu % MR / Cu % DOM = 1.01

The total UG DOM has been compared against the Mineral Resource block model reported tonnes and grade inside the completed CMS of each stope (no cut-off grade applied) and within the development as-builts (using a 0.8 g/t Au cut-off), with the following results:

- Tonnes MR / Tonnes DOM = 0.89
- Au Oz's MR / Au Oz's DOM = 0.76
- Ag Oz's MR / Ag Oz's DOM = 0.78
- Cu % MR / Cu % DOM = 0.90

The OP reconciliation indicates that the estimation of the Au mineralisation is within 10% of the ounces produced, whereas the underground portion of the Mineral Resource significantly under-estimates the contained gold. This is most likely caused by the under-estimation of the grade within the high-grade feeder structures, which, although modelled separately may still be impacted by over-smoothing during the grade estimation. The absence of these high-grade feeders in the open pit portion of the deposit that has been assessed in the reconciliation indicates that the main low-grade halo is accurately estimated.

The reconciliation indicates that Ag is consistently under-estimated in the Mineral Resource block model, whereas the Cu estimate is within an acceptable error. The Competent Person does not consider this material as Au is the dominant value generating commodity within the V2 deposit.

Mount Carlton United

The geological, and mineralisation domains and weathering wireframes generated within LeapFrog Geo have been used to flag the drill hole samples with the relevant geological or mineralisation code. Grade distributions across the geological and oxidation boundaries have been analysed with hard boundaries selected and applied across all oxidation and domain boundaries.

For the Far West part of the deposit, a review of the element correlations within the deposit has resulted in the Pb domains used to constrain the estimation of As, Pb, Zn, Fe and S grades, with the Cu grades estimated inside the Ag domains. Au estimation has been constrained within the separate Au domains. For the East-Central-West (ECW) part of the deposit, the Au domains have been used to constrain the estimation of Au, Ag and Pb, with the Cu domains used to constrain the estimation of Cu, As, Fe, S and Zn.

Raw sample lengths have been analysed within the mineralisation domains to select an appropriate composite length that suits not only the mineralisation style but also the sampling methodology applied during the drilling. Within the Au mineralisation domains, approximately 95% of the samples are at or less

than 1 m, with a 1 m composite length selected with a 0.1 m residual applied. Analysis of the impact of the compositing process has identified that the splitting of the samples longer than 1 m has not resulted in bias in the grade distributions within the mineralised domains for all elements. Composite samples have been analysed in Snowden Supervisor v8.14 software for the existence of extreme grades. The influence of these extreme grades has been reduced by applying a combination of top-cuts and high-grade yields or clamps. The high-grade yield limits the influence of very high grades to an area defined by one quarter or one eighth of the variogram range during the estimation. The thresholds at which top-cuts or yields have been determined using a combination of histograms, log probability and mean variance plots with each domain reviewed individually. For the main elements at MCU, only four Au domains and one Ag domain have been assessed as requiring top-cuts or having a yield restriction applied. A top cut has been applied to waste zones to reduce the influence of composites with grades above the modelling cut off, but without the required continuity for inclusion within the estimation.

Variography has been determined for Au, Ag, Cu (MCU ECW) and Pb (MCU FW) using either individual or grouped mineralisation domains as well as within the surrounding waste domain. The output variogram models have been checked to ensure that they are consistent with the modelled geology. Some estimation domains have utilised borrowed variography from neighbouring domains, with the rotations adjusted to match the orientation. The domains which have borrowed variograms have a lower confidence applied during the resource classification.

A block model has been constructed covering the extents of each part of the deposit with a parent block size of 5 m (X) by 5 m (Y) by 2.5 m (Z) utilised for both FW and ECW. A sub block size of 0.625 m (X) by 0.625 m (Y) by 0.625 m (Z) has been used to define the mineralisation edges with the estimation undertaken at the parent block scale. The parent block size is considered appropriate for the drill hole spacing defining the bulk of the mineralisation at MCU.

Grade estimation of Au, Cu, Ag, As, Pb, Zn, Fe and S has been completed using Ordinary Kriging (OK) into separate Au, Ag, Cu and/or Pb domains using Leapfrog EDGE software. Dynamic anisotropy has been used to orientate the search ellipse according to the dip and strike of the individual domains.

Au estimations for both ECW and FW have been undertaken as hard boundary estimations within three passes:

- Pass 1 estimations have used a minimum of 6 and a maximum of 24 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1.
- Pass 2 estimations have used a minimum of 4 and a maximum of 24 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2.
- Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3.

Ag estimations for both ECW and FW have been undertaken as hard boundary estimations within three passes:

	- Pass 1 estimations have used a minimum of 6 and a maximum of 24 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1. - Pass 2 estimations have used a minimum of 4 and a maximum of 24 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2. - Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3. Cu estimations for ECW have been undertaken as hard boundary estimations within three passes: - Pass 1 estimations have used a minimum of 6 and a maximum of 24 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1. - Pass 2 estimations have used a minimum of 4 and a maximum of 24 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2. - Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3. Pb estimations for FW have been undertaken as hard boundary estimations within three passes: - Pass 1 estimations have used a minimum of 6 and a maximum of 24 samples into a search ellipse approximately half the variogram range. A two sample per drill hole limit has been applied for pass 1. - Pass 2 estimations have used a minimum of 4 and a maximum of 24 samples into a search ellipse at the variogram range in all 3 directions. A two sample per drill hole limit has been applied for pass 2. - Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for pass 3. Volume comparisons between the wireframes and coded block model have been completed to ensure that the sub-blocking has adequately filled the wireframes and is therefore representative of the mineralisation as modelled. Apart from some of the very thin domains at depth or along strike, the block model is an accurate representation of the mineralisation as modelled for both ECW and FW. Final grade estimates for the key elements (Au, Ag and Cu) within each ECW domain have been validated by statistical analysis and visual comparison between the input composites (clustered and declustered) and estimated blocks as well as using swath plots on Easting, Northing and Reduced Level comparing the output estimated grades with the input composites. All Au and Cu domains have validated within +/- 10% of the input composites, with only 1 one of the silver domains returning a validation outside this +/- 10% tolerance. Global grade validations have been completed for the subsidiary elements including As, Pb, Zn, Fe and S.
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	The Competent Person considers that the estimated grades within the bulk of the reported deposit are an accurate reflection of the input composite grades. Final grade estimates for the key elements (Au & Ag) within each FW domain have been validated by statistical analysis and visual comparison between the input composites (clustered and declustered) and estimated blocks as well as using swath plots on Easting, Northing and Reduced Level comparing the output estimated grades with the input composites. Several high-grade Au and Ag domains produce poor validation statistics, returning results outside the accepted 10% variance between the declustered input composites and the output block model grades. Analysis of these domains in longitudinal projection indicates that the poor validation is due to a small number of samples defining the dip or strike extents of these domains influencing many blocks. Areas within these domains impacted by this have been dealt with during the classification of the Mineral Resource for these domains. Global grade validations have been completed for the subsidiary elements including As, Pb, Zn, Fe and S. No assumptions have been made regarding recovery of any by-products. No selective mining units are assumed in these estimates. No reconciliation or production data is available for Mt Carlton United. Telstra Hill The geological, and mineralisation domains and weathering wireframes generated within LeapFrog Geo have been used to flag the drill hole samples with the relevant geological or mineralisation code. Grade distributions across the geological and oxidation boundaries have been analysed with hard boundaries selected and applied across all oxidation and domain boundaries during the estimation. After a review of the element correlations within the deposit, Ag, As and Pb have been estimated inside the Ag domains, Au has been estimated inside the Au domains, with Cu, S, Fe and Zn estimated inside the Cu domains. Raw sample lengths have been analysed within the Au, Ag and Cu mineralisation domains to select an appropriate composite length that suits not only the mineralisation style but also the sampling methodology applied during the drilling. A 1 m composite length has been selected with a 0.1 m residual applied. A small percentage of raw samples greater than 1 m in length occur inside the lower-grade halo domains. Analysis of the impact of splitting these longer samples during compositing indicates that this process will not materially impact on the grade distributions within these domains. Composite samples have been analysed for the existence of extreme grades, with the influence of these reduced by applying a top cut. The top cut levels have been determined using a combination of histograms, log probability and mean variance plots, with these reviewed and applied on a domain-by-domain basis. Two of the Au mineralisation domains required grade capping, with the surrounding waste zones for Au, Ag and Cu all being capped to reduce the influence of higher-grade composites within the waste estimation. Variography has been determined for Au, Ag and Cu using either individual or grouped mineralisation domains as well as within the surrounding waste domains – the high-grade veins within both the oxide and fresh horizons have been grouped to provide enough samples for continuity modelling. The output variogram models have been checked to ensure that they are consistent with the modelled geology. No variograms have been modelled for As, Pb, Zn, S or Fe as these have been estimated using Inverse Distance methods.
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A block model has been constructed covering the extents of the deposit with a parent block size of 10 m (X) by 10 m (Y) by 5 m (Z) utilised. A sub block size of 0.625 m (X) by 0.625 m (Y) by 0.625 m (Z) has been used to define the mineralisation edges with the estimation undertaken at the parent block scale. The parent block size is considered appropriate for the dominant 20 m by 20 m drill hole spacing defining the mineralisation at TH.

Grade estimation of Au, Ag and Cu has been completed using Ordinary Kriging (OK). Au grades have been estimated into 17 Au domains, with Ag, As and Pb estimated into three Ag domains and Cu, Fe, S & Zn estimated into three Cu domains using Leapfrog Edge software. Dynamic anisotropy has been used to orientate the search ellipse according to the dip and strike of the individual high grade Au domains. Estimation of As, Pb, Fe, S and Zn grades has been completed using Inverse Distance to the power of 2 (ID2). Estimations have been undertaken as hard boundary estimations for all elements.

Au grade estimations have been completed within three passes:

- Pass 1 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse approximately half the variogram range. A four sample per drill hole limit has been applied for pass 1.
- Pass 2 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse at the variogram range in all three directions. A four sample per drill hole limit has been applied for pass 2.
- Pass 3 estimations have been undertaken using a minimum of four and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for the third pass.

Ag grade estimations have been completed within three passes:

- Pass 1 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse approximately half the variogram range. A four sample per drill hole limit has been applied for pass 1.
- Pass 2 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse at the variogram range in all three directions. A four sample per drill hole limit has been applied for pass 2.
- Pass 3 estimations have been undertaken using a minimum of four and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for the third pass.

Cu grade estimations have been completed within three passes:

- Pass 1 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse approximately half the variogram range. A four sample per drill hole limit has been applied for pass 1, along with a high-grade yield to limit the impact of grades about 3,500 ppm Cu.
- Pass 2 estimations have used a minimum of four samples and a maximum of 24 samples into a search ellipse at the variogram range in all three directions. A four sample per drill hole limit has been applied for pass 2, along with a high-grade yield to limit the impact of grades about 3,500 ppm Cu.

	Pass 3 estimations have been undertaken using a minimum of four and a maximum of 24 samples into a search ellipse approximately double the variogram range in all 3 directions. No sample per drill hole limit has been applied for the third pass, along with a high-grade yield to limit the impact of grades about 3,500 ppm Cu. Volume comparisons between the wireframes and coded block model have been completed to ensure that the sub-blocking has adequately filled the wireframes and is therefore representative of the mineralisation as modelled. All domains apart from two thin Au domains within the oxide portion of the deposit are within 0.5% of the mineralised volume. Final grade estimates for the key elements (Au, Ag and Cu) within each domain have been validated by statistical analysis and visual comparison between the input composites (clustered and declustered) and estimated blocks as well as using swath plots on Easting, Northing and Reduced Level comparing the output estimated grades with the input composites. Several high-grade Au domains produce poor validation statistics, returning results outside the accepted 10% variance between the declustered input composites and the output block model grades. Analysis of these domains in longitudinal projection indicates that the poor validation is due to a small number of samples defining the dip or strike extents of these domains are influencing many blocks. Areas within these domains impacted by this have been classified as Inferred Mineral Resources at best, with a number remaining unclassified. Global grade validations have been completed for the subsidiary elements including As, Pb, Zn, Fe and S. The Competent Person considers that the estimated grades within the bulk of the reported deposit are an accurate reflection of the input composite grades. No assumptions have been made regarding recovery of any by-products. No selective mining units are assumed in these estimates. No reconciliation or production data is available for Telstra Hill as no mining has occurred at this deposit.
Moisture	The tonnes have been estimated on a dry basis for all deposits.
Cut-off parameters	Open Pit Mineral Resources A Net Smelter Return (NSR \$/t) cut-off has been used to report the Mineral Resources inside the optimised pit shells. Au, Ag and Cu exist in potential payable quantities for all four deposits, with the metallurgical recovery and payability factors for each deposit well understood. Therefore, an NSR cut-off has been calculated including the total recoveries (detailed in the Metallurgical Factors and Assumptions) and price assumptions. The following price assumptions have been used (all values are in AUD): - Au = \$2,400/oz - Ag = \$30/oz - Cu = \$12,000/t A consistent NSR cut-off value has been applied for all deposits which is equal to or greater than the processing cost per tonne of mineralisation (\$52/t). Underground Mineral Resources For those parts of V2 and MCU Far West which are located below the optimised pit shell, Mineable Shape Optimisations (MSO's) have been run at variable NSR values for each deposit, including:

	• V2 - \$140/t • MCU Far West - \$111/t All individual MSO wireframes contain material at or above the NSR cut-off grade applied. Waste material below the cut off may be included within individual wireframes, however the total grade of all wireframes must be at or above the NSR cut-off.																																																																																																												
Mining factors or assumptions	Open Pit Mining Factors and Assumptions Open pit optimisation studies have been completed on the Mineral Resources for all four Mt Carlton deposits utilising Whittle optimisation software completed on regularised versions of the block models. The regularisation block size selected reflected the likely size of the mining fleet to be used for open pit extraction. As the regularisation process has introduced some level of ore loss and dilution to the original input block model, no additional ore loss and dilution parameters have been applied. A comparison has been completed during the optimisation process with no material difference in the optimisations completed with and without ore loss (5%) and dilution (5%) factors applied. The following table summarises the OP optimisation input assumptions and factors. <table><tr><th colspan="6">OP OPTIMISATION INPUTS</th></tr><tr><th>Items</th><th>Unit</th><th>V2</th><th>MCU E</th><th>MCU FW</th><th>TH</th></tr><tr><td colspan="6">Whittle Mining Parameters</td></tr><tr><td>Slope - Domain 1 (V2); Oxide (MCU/TH)</td><td>Deg</td><td>54</td><td>40</td><td>43</td><td>43</td></tr><tr><td>Slope - Domain 2 (V2); Trans (MCU/TH)</td><td>deg</td><td>44</td><td>40</td><td>43</td><td>43</td></tr><tr><td>Slope - Domain 3 (V2); Fresh (MCU/TH)</td><td>deg</td><td>52</td><td>40</td><td>43</td><td>43</td></tr><tr><td>Mining Recovery</td><td>%</td><td>100%</td><td>100%</td><td>100%</td><td>100%</td></tr><tr><td>Mining Dilution</td><td>%</td><td>0%</td><td>0%</td><td>0%</td><td>0%</td></tr><tr><td>Minimum Mining Width</td><td>m</td><td>15</td><td>15</td><td>15</td><td>15</td></tr><tr><td>Whittle Reference Mining Cost</td><td>\$/t rock</td><td>535</td><td>7.00</td><td>7.00</td><td>535</td></tr><tr><td colspan="6">Inventory to be Included</td></tr><tr><td>Indicated</td><td></td><td>Yes</td><td>Yes</td><td>Yes</td><td>Yes</td></tr><tr><td>Inferred</td><td></td><td>Yes</td><td>Yes</td><td>Yes</td><td>Yes</td></tr><tr><td>Unclassified</td><td></td><td>No</td><td>No</td><td>No</td><td>No</td></tr><tr><td colspan="6">Royalties</td></tr><tr><td>Au</td><td>%</td><td>7.38%</td><td>7.38%</td><td>7.38%</td><td>7.38%</td></tr><tr><td>Ag</td><td>%</td><td>7.38%</td><td>7.38%</td><td>7.38%</td><td>7.38%</td></tr><tr><td>Cu</td><td>%</td><td>2.5%</td><td>2.5%</td><td>2.5%</td><td>2.5%</td></tr></table> Underground Mining Factors and Assumptions For V2 and Mt Carlton United, mineralisation extends underneath the optimised pit shells used for reporting the OP Mineral Resources. For these parts of the deposits, a series of resource stope optimisations have been undertaken in Mineable Stope Optimiser (MSO). The MSO's have been run based on extraction by either Longhole Open Stopping (LHOS – MCU) or by Mechanised cut and fill (V2) mining methods. The optimisation has been applied to Indicated and Inferred Mineral Resource blocks only. It is important to note that these wireframes should not be described as “mineable shapes”. Mining factors excluded in this analysis include, but are not limited to, capital costs (non-mining, access, and footprint establishment), regional pillars, footprint geometries, unplanned dilution and the time value of money.	OP OPTIMISATION INPUTS						Items	Unit	V2	MCU E	MCU FW	TH	Whittle Mining Parameters						Slope - Domain 1 (V2); Oxide (MCU/TH)	Deg	54	40	43	43	Slope - Domain 2 (V2); Trans (MCU/TH)	deg	44	40	43	43	Slope - Domain 3 (V2); Fresh (MCU/TH)	deg	52	40	43	43	Mining Recovery	%	100%	100%	100%	100%	Mining Dilution	%	0%	0%	0%	0%	Minimum Mining Width	m	15	15	15	15	Whittle Reference Mining Cost	\$/t rock	535	7.00	7.00	535	Inventory to be Included						Indicated		Yes	Yes	Yes	Yes	Inferred		Yes	Yes	Yes	Yes	Unclassified		No	No	No	No	Royalties						Au	%	7.38%	7.38%	7.38%	7.38%	Ag	%	7.38%	7.38%	7.38%	7.38%	Cu	%	2.5%	2.5%	2.5%	2.5%
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Cu	%	2.5%	2.5%	2.5%	2.5%																																																																																																								

However, the wireframes do enclose a contiguous and appropriately diluted Mineral Resource. As such, the Competent Person considers that the reported underground Mineral Resources have reasonable prospects for eventual economic extraction by either the LHOS or cut-and-fill underground mining method. An assessment of whether the project is economically viable has not been made under this analysis.

The inclusion of waste material during the stope optimisation process precludes the requirement to apply a cut-off grade to the reporting of the Mineral Resources, since the application of the calculated NSR cut-off has been applied within the MSO and the creation of the wireframe solids.

Numerous stope wireframes have been generated in MSO by applying the relevant NSR \$/t cut-off to the MRE block models during the optimisation. These wireframes maximize the tonnes above the cut-off while ensuring that all material is part of a minimum mining unit with geometry appropriate for the mining method selected. Isolated stope shapes that meet the cut-off grade criteria but are located too far from other stope shapes have been excluded from the reporting of the Mineral Resource.

UG OPTIMISATION INPUTS			
Items	Unit	V2	MCU FW
MSO Mining Parameters			
Mining Method		Cut and Fill	LHOS
Minimum Stope Width (including dilution)	m	4.5	10.0
Stope Length	m	20	30
Stope Height	m	-	15.5
Level Spacing	m	4.5	20.0
Mining Recovery	%	100	73
MSO Reference Mining Cost	\$/t rock	140	106
Inventory to be Included			
Indicated		Yes	Yes
Inferred		Yes	Yes
Unclassified		No	No
Royalties			
Au	%	7.38%	7.38%
Ag	%	7.38%	7.38%
Cu	%	2.5%	2.5%

Metallurgical factors or assumptions

The Process Plant metallurgical recoveries for most of the deposits is well understood, with preliminary test work for Telstra Hill indicating similar processing streams and recoveries as V2. In addition, the payability factors for the key elements of interest are also well understood. For the UG and OP optimisation processes for reporting the Mineral Resources, average recovery and payability factors have been applied with processing costs (including site support costs) calculated and applied individually as per the table below.

PROCESSING OPTIMISATION INPUTS					
Items	Unit	V2	MCU E	MCU FW	TH
Processing Recovery (Total of Proc. Rec. & Metal Payable)					
Au	%	73.5	71.9	55.3	71.9
Ag	%	47.4	52.6	48.5	52.6
Cu	%	55.8	48.1	0.0	48.1

	<table><tr><td>Processing Costs (includes site support costs)</td><td>\$/t feed</td><td>52.00</td><td>52.00</td><td>52.00</td><td>52.00</td></tr><tr><td colspan="6">Inventory to be Processed</td></tr><tr><td colspan="2">Indicated</td><td>Yes</td><td>Yes</td><td>Yes</td><td>Yes</td></tr><tr><td colspan="2">Inferred</td><td>Yes</td><td>Yes</td><td>Yes</td><td>Yes</td></tr><tr><td colspan="2">Unclassified</td><td>No</td><td>No</td><td>No</td><td>No</td></tr></table>	Processing Costs (includes site support costs)	\$/t feed	52.00	52.00	52.00	52.00	Inventory to be Processed						Indicated		Yes	Yes	Yes	Yes	Inferred		Yes	Yes	Yes	Yes	Unclassified		No	No	No	No																																																																																																										
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Environmental factors or assumptions	For V2, Mt Carlton Operations are current with all environmental approvals and compliant to the conditions set out within those approvals. For MCU and Telstra Hill, there is an EA Submission (Amendment) that has been made. The Competent Person considers that there are no potential environmental issues that could negatively impact on the project.																																																																																																																																								
Bulk density	Bulk density values have been assigned within each deposit based on an analysis of bulk density measurements split by weathering, lithology and mineralisation. For those categories that contained insufficient data to determine a mean bulk density, the bulk density has been assigned with consideration of the mean. <table><tr><th rowspan="2">Deposit</th><th rowspan="2">Modelled Lith</th><th colspan="2">Oxide</th><th colspan="2">Transitional</th><th colspan="2">Fresh</th></tr><tr><th>No.</th><th>BD</th><th>No.</th><th>BD</th><th>No.</th><th>BD</th></tr><tr><td rowspan="7">V2</td><td>Rhyodacite</td><td>635</td><td>2.50</td><td>137</td><td>2.56</td><td>20700</td><td>2.65</td></tr><tr><td>Sediments</td><td>150</td><td>2.35</td><td>43</td><td>2.46</td><td>533</td><td>2.46</td></tr><tr><td>Granite</td><td>1</td><td>2.60</td><td>27</td><td>2.6</td><td>589</td><td>2.61</td></tr><tr><td>V_Andesite</td><td>95</td><td>2.39</td><td>10</td><td>2.5</td><td>489</td><td>2.5</td></tr><tr><td>V_Mid_Andesite</td><td>387</td><td>2.47</td><td>28</td><td>2.48</td><td>6639</td><td>2.63</td></tr><tr><td>Z_Andesite</td><td>4338</td><td>2.50</td><td>From Rhyodacite</td><td>2.56</td><td>From Rhyodacite</td><td>2.65</td></tr><tr><td>Dyke</td><td>28</td><td>2.53</td><td>7</td><td>2.53</td><td>1537</td><td>2.61</td></tr><tr><td rowspan="5">MCU</td><td>Andesite</td><td>37</td><td>2.11</td><td>17</td><td>2.49</td><td>79</td><td>2.61</td></tr><tr><td>Gabbro Dyke</td><td>10</td><td>2.00</td><td>6</td><td>2.44</td><td>44</td><td>2.68</td></tr><tr><td>Rhyodacite</td><td>25</td><td>2.52</td><td>46</td><td>2.59</td><td>187</td><td>2.59</td></tr><tr><td>Granite</td><td>-</td><td>-</td><td>2</td><td>2.47</td><td>25</td><td>2.58</td></tr><tr><td>Dyke</td><td>-</td><td>-</td><td>-</td><td>-</td><td>2</td><td>2.67</td></tr><tr><td rowspan="5">TH</td><td>Upper Rhyodacite</td><td>164</td><td>2.35</td><td>170</td><td>2.56</td><td>6</td><td>2.56</td></tr><tr><td>Lower Rhyodacite</td><td>4</td><td>2.38</td><td>137</td><td>2.48</td><td>34</td><td>2.50</td></tr><tr><td>Andesite</td><td>-</td><td>-</td><td>-</td><td>-</td><td>19</td><td>2.63</td></tr><tr><td>Dacite</td><td>-</td><td>-</td><td>13</td><td>2.59</td><td>115</td><td>2.62</td></tr><tr><td>Granite</td><td>-</td><td>-</td><td>1</td><td>2.59</td><td>49</td><td>2.66</td></tr></table> The bulk density measurements have been collected using the water immersion method on either dried rock samples or diamond core.	Deposit	Modelled Lith	Oxide		Transitional		Fresh		No.	BD	No.	BD	No.	BD	V2	Rhyodacite	635	2.50	137	2.56	20700	2.65	Sediments	150	2.35	43	2.46	533	2.46	Granite	1	2.60	27	2.6	589	2.61	V_Andesite	95	2.39	10	2.5	489	2.5	V_Mid_Andesite	387	2.47	28	2.48	6639	2.63	Z_Andesite	4338	2.50	From Rhyodacite	2.56	From Rhyodacite	2.65	Dyke	28	2.53	7	2.53	1537	2.61	MCU	Andesite	37	2.11	17	2.49	79	2.61	Gabbro Dyke	10	2.00	6	2.44	44	2.68	Rhyodacite	25	2.52	46	2.59	187	2.59	Granite	-	-	2	2.47	25	2.58	Dyke	-	-	-	-	2	2.67	TH	Upper Rhyodacite	164	2.35	170	2.56	6	2.56	Lower Rhyodacite	4	2.38	137	2.48	34	2.50	Andesite	-	-	-	-	19	2.63	Dacite	-	-	13	2.59	115	2.62	Granite	-	-	1	2.59	49	2.66
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TH	Upper Rhyodacite	164	2.35	170	2.56	6	2.56																																																																																																																																		
	Lower Rhyodacite	4	2.38	137	2.48	34	2.50																																																																																																																																		
	Andesite	-	-	-	-	19	2.63																																																																																																																																		
	Dacite	-	-	13	2.59	115	2.62																																																																																																																																		
	Granite	-	-	1	2.59	49	2.66																																																																																																																																		
Classification	The resource classification has been applied to the Mineral Resource estimate for all four deposits based on a combination of the data integrity and spacing, grade and geological continuity, validation against the input composites and estimation quality parameters. Measured Mineral Resources The Run of Mine Stockpiles have been classified as Measured Mineral Resources due to the high level of																																																																																																																																								

	confidence in their tonnage from surveys and mined grade from additional sampling. A portion of the MCU ECW deposit has been drilled for grade control purposes on a 10 m by 10 m pattern. A review of the block model validation and estimation quality variables within this part of the deposit has concluded that there is a suitable level of confidence in the grade and tonnage estimate within the area defined by the grade control drilling to be classified as a Measured Mineral Resource. Indicated Mineral Resources The criteria used to classify each of the four deposits as Indicated Mineral Resources include: • V2 – those sections of the deposit that have been informed by drilling spaced up to 20 m by 20 m and have been estimated on either the first or second interpolation pass. For the broader lower grade mineralised zones, only those blocks that meet estimation quality requirements (slope of regression > 0.7) have been classified as Indicated. • Mt Carlton United – mineralisation that have been defined by drilling spaced between 20 m by 20 m and 40 m by 40 m, have been estimated on either the first or second interpolation pass and have returned acceptable validation against the input composites. Due to the narrow mineralisation, estimation quality parameters such as kriging efficiency or slope of regression have not been used. • Telstra Hill – mineralisation that have been defined by drilling spaced at 20 m by 20 m, have been estimated on either the first or second interpolation pass and have returned acceptable validation against the input composites. Due to the narrow mineralisation, estimation quality parameters such as kriging efficiency or slope of regression have not been used. The Tailings Storage Facility has also been classified as an Indicated Mineral Resource as the level of sampling (grade and moisture content) and survey accuracy meets the requirements for increased confidence in the grade continuity within the TSF. Inferred Mineral Resources The criteria used to classify each of the four deposits as Inferred Mineral Resources include: • V2 – those sections of the deposit that have been informed by drilling spaced wider than 40 m by 40 m and have the estimation informed by at least two drill holes. • Mt Carlton United – mineralisation that have been defined by drilling spaced wider than 40 m by 40 m (up to 80 m by 80 m) and have been informed by at least two drill holes during the grade estimation. • Telstra Hill – mineralisation that have been defined by drilling spaced wider than 40 m by 40 m (up to 80 m by 80 m) and have been informed by at least two drill holes during the grade estimation. All mineralisation domains have been reviewed individually, with the criteria described above used to define contiguous zones of classified blocks to avoid a spotted dog classification being applied. The classification considers the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity. The classification reflects the view of the Competent Person.
Audits or reviews	No audits or reviews have been completed on the Mineral Resource estimates completed for the Mt Carlton Operations.

Discussion of relative accuracy/confidence	The Competent Person is of the opinion that the current block estimates provide a good estimate of tonnes and grades on a global scale, which is appropriate given the classification of most of the Mineral Resources as Indicated. The use of sectional validation plots comparing the estimated grades with the input composites (clustered and declustered) by Easting, Northing, Reduced Level and along strike for individual and grouped mineralisation domains confirms that the grade estimates suitably conform with the overall mineralisation trend and have an acceptable level of smoothing applied. Any areas of the mineralisation in which the grade estimate is not considered an appropriate representation of the input grades have been dealt with in the classification of the Mineral Resources. Variances to the tonnage, grade, and metal of the Mineral Resource estimate are expected with further definition drilling. The Competent Person considers that these variances will not significantly affect the potential economic extraction of the deposit. The Mineral Resource model has been reconciled against the actual monthly production (Declared Ore Mined – DOM) over 2021 and the first 6 months of 2022 for the open pit mining of V2. In addition, the Mineral Resource model inside underground surveyed voids (stope and development) have been reconciled against the DOM for the entire underground production for V2. The open pit DOM has been reconciled against the current version of the Mineral Resource block model reported at the production grade bins inside the end of month surfaces for the 18 months from January 2021 to June 2022, with the following results for Tonnes, Au, Ag and Cu: • Tonnes MR / Tonnes DOM = 0.90 • Au Oz's MR / Au Oz's DOM = 1.06 • Ag Oz's MR / Ag Oz's DOM = 0.83 • Cu % MR / Cu % DOM = 1.01 The total UG DOM has been compared against the Mineral Resource block model reported tonnes and grade inside the completed CMS of each stope (no cut-off grade applied) and within the development as-builts (using a 0.8 g/t Au cut-off), with the following results: • Tonnes MR / Tonnes DOM = 0.89 • Au Oz's MR / Au Oz's DOM = 0.76 • Ag Oz's MR / Ag Oz's DOM = 0.78 • Cu % MR / Cu % DOM = 0.90 The OP reconciliation indicates that the estimation of the Au mineralisation is within 10% of the ounces produced, whereas the underground portion of the Mineral Resource significantly under-estimates the contained gold. This is most likely caused by the under-estimation of the grade within the high-grade feeder structures, which, although modelled separately may still be impacted by over-smoothing during the grade estimation. The absence of these high-grade feeders in the open pit portion of the deposit that has been assessed in the reconciliation indicates that the main low-grade halo is accurately estimated. The reconciliation indicates that Ag is consistently under-estimated in the Mineral Resource block model, whereas the Cu estimate is within an acceptable error. The Competent Person does not consider this material as Au is the dominant value generating commodity within the V2 deposit.
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Crush Creek Project – BV1

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	Sampling during 2022 of the Au and Ag mineralisation at BV1 has been undertaken using reverse circulation (RC) drill chips and diamond (DD) core (HQ3). RC samples have been split using a cone splitter mounted on the drill rig underneath the cyclone. The splitting was completed to obtain a representative 3 kg sub-sample of the 1 m down-hole sample interval. The cyclone and splitter have been routinely cleaned between drill rods and drill holes to maintain sample hygiene. Wet or moist samples have been recorded by the drillers on their drill plods. Entire RC drill holes have been sampled for all resource definition and exploration drill holes. DD samples have been cut in half using a diamond saw along either orientation lines or cut lines, with a consistent side of the cut sample selected for assay to ensure unbiased sampling. Within mineralised zones, sample intervals have been selected to reflect mineralisation widths where appropriate. Single intervals have not exceeded 1.4 m in length to ensure that a sample less than 3 kg has been submitted to the laboratory for processing and analysis. The sampling methods for historical drill holes at BV1 are poorly documented. The RC drill holes completed prior to 2007 have no details on their sampling methods – these holes have been drilled by large mining and exploration companies (CRAE, Resolute & Gold Fields), so it has been assumed that the sampling methods would have been in line with Company protocols and are therefore considered industry standard at the time. RC drill holes completed by Basin Gold from 2007 onward have been sampled at 1 m intervals using a cone splitter. All historical RC drill holes have been composited to either 2 m or 4 m samples for initial analysis, with individual 1 m samples only sent for analysis if the composite sample returned a value above a specified mineralisation threshold. Historical diamond drill holes were mainly drilled at NQ2 size, with a small proportion of HQ drilling. It has been assumed that for the older drill holes, diamond drill core has been cut in half using a diamond saw along either orientation or cut lines, with a consistent side of the cut sample selected for assay to ensure unbiased sampling. Analyses has been undertaken comparing the various RC and DD drill programs over time with no evidence of bias in the historical data. A twinned drill hole analysis has not been undertaken as there are insufficient drill holes in close enough proximity at BV1. The sampling and assaying methods are considered appropriate and representative for the style of mineralisation evident at BV1. The methods employed have been validated using established QAQC protocols. No sampling instruments or tools requiring calibration have been used as part of the sampling process.
Drilling techniques	Reverse Circulation drilling has been completed using a 5.25" face sampling hammer. The diamond core drill holes have been drilled at either NQ2 (historical) and HQ3 size (2020 – present), with a Reflex Act RD2 orientation tool used at regular intervals to orientate the core for the most recent drill holes.
Drill sample recovery	Measures taken to maximise sample recovery during the 2022 RC drilling include ensuring the sample box has been cleaned for each metre, ensuring the splitter was level and cleaning out sample chutes routinely. Routine weighing of bulk, primary and duplicate samples at a ratio of 1:20 to ensure adequate sample recovery has been completed with no evidence of sample recovery issues from these data. When required, sampling chutes on the splitter have been adjusted to maintain a consistent representative sample. If water had been encountered during RC drilling, samples affected have been recorded by the drillers on their drill plods. Historical RC drill hole logs contain qualitative data collected by the Geologist on sample recovery with no indication of sample recovery issues in these logs.

	Measures taken to maximise sample recovery during recent diamond drilling include using triple tube methodology, instructions to drillers to slow down drilling rates during key parts of drill holes or reducing the core run length in less competent ground. All diamond core was orientated and measured during processing and the recovery of individual core runs recorded. The core was reconstructed into continuous runs on a cradle for orientation marking. Hole depths were checked against driller's core blocks. Core loss blocks have been inserted by the drillers and verified by Crush Creek staff during core markup, with sample intervals adjusted to ensure that core loss zones are not included in the sample interval. Core recovery is considered adequate with more than 90% recovery recorded for the areas in and adjacent to the mineralisation. Core recovery measurement have been recorded on the historical DD drill hole logs within excess of 90% recovery recorded for the areas in and adjacent to the mineralisation. There is no evidence of a relationship between sample recovery and grade, indicating no sample bias has been caused poor sample recovery.
Logging	RC drill chips have been sieved and collected in chip trays for every 1 m sample. These have been geologically logged by a qualified Geologist capturing the relevant lithological, alteration, texture, weathering, and mineralisation attributes of the chips. All intervals are geologically logged for RC drill holes. All recent logging is captured directly into computers with inbuilt validation processes to ensure data integrity. Historical RC drill hole paper logs have been verified against the data contained in the database with no discrepancies identified All recent drill cores are geologically logged as full core with all relevant lithological, alteration, texture, veining, structure, weathering, and mineralisation features collected via digital data capture. For orientated core, structural measurements are taken from core using a Kenometer instrument to assist with the interpretation and modelling process. All drill cores have been photographed (wet and dry), with these high-resolution photos stored on the site server which is routinely backed up. Historical drill cores have been logged onto paper for the entire drill hole recording relevant lithological, alteration, texture, veining, structure, weathering, and mineralisation features. These historical drill hole paper logs have been verified against the data contained in the database with no discrepancies identified. All logging is both qualitative and quantitative in nature recording features such as structural data, sample recovery, lithology, mineralogy, alteration, mineralisation types, vein density/type, oxidation state, weathering, colour, magnetic susceptibility, bulk density, etc.
Sub-sampling techniques and sample preparation	Samples for the 2022 RC drill holes have been taken as primary splits of bulk samples using a rig mounted cone splitter with adjustable sample chutes, attached to the RC cyclone beneath the sample collection box. 1:20 bulk, primary, and duplicate splits have been weighed to ensure the primary sample split consistently represented the interval downhole – targeting 3kg primary and duplicate samples. Major discrepancies in sample weights were immediately brought to the attention of drill crews, with chutes adjusted or cleared to restore non-bias sample weights. The RC sample methodology is considered appropriate for the style of mineralisation being targeted at BV1. Historical RC drill holes have been sampled at 1 m intervals with these samples then composited into 2 m or 4 m lengths for analysis. Methods for this compositing have not been recorded. Any composited sample that returned greater than 0.2 g/t Au have had the individual 1 m samples submitted for analysis. 2022 drill core sampling has utilised a diamond core saw to cut the core in half adjacent to either an orientation or cut line. A consistent side of the cut sample has been selected for assaying to minimise any bias through preferential sampling. Sample intervals have been selected by the logging Geologist using prescribed minimum and maximum sample lengths suitable for the mineralisation style being tested. The drill core sample

	methodology is considered appropriate for the style of mineralisation being targeted at BV1. Routine field duplicates have been collected for both the diamond core (other half of the core) and RC samples (duplicate chute) in 2022. These duplicates have been targeted in and around the mineralisation for both RC and DD holes. All 2022 samples have been submitted to commercial laboratories for preparation and sub-sampling prior to analysis. This preparation involved registering and weighing of the samples upon receipt, followed by oven drying at between 85°C and 105°C. The dry samples are then jaw crushed to a nominal 3 mm size and if required split by a cone splitter to achieve the desired 3 kg sample weight. The entire ≤ 3 kg sample is then pulverised in an LM5 pulveriser to achieve 90% passing 75 µm, from which 200 g is sampled within the pulverising bowl using a spatula to a numbered pulp bag. The 50 g Fire Assay charge and any multi-element samples are taken from this 200 g pulp after ensuring the sample selected is homogenous. Details on the sample preparation techniques in use for the historical RC and DD drill holes have not been located. However, all samples have been prepared and analysed at commercial laboratories (ALS-Chemex or Analabs), so it has been assumed that industry standard sample preparation techniques for the time would have been used. The sub-sampling methods for Au and Ag are considered appropriate for the style and grain size of the mineralisation being tested as the Au particles are not considered to be coarse enough to require other sub-sampling methods.
Quality of assay data and laboratory tests	The 2022 assaying protocols for BV1 samples has been developed to ensure that the expected levels of accuracy and precision are met for the style of mineralisation being targeted. For Au assays, all samples are analysed using the Fire Assay method which is considered a total analytical technique suitable for epithermal style mineralisation. The technique utilises primarily a 50 g charge with a lead flux, which is decomposed in a furnace with the prill being totally digested by hydrochloric and nitric acids before the Au content is determined by an AAS machine. Historical Au assaying has used either a 50 g charge for Fire Assay (1987 – 2008, 2018 – 2020) or a 25 g charge for Fire Assay (2009 – 2018). For Ag and base metals in 2022, ICP analyses have been completed on all samples for a suite of ten elements (Ag, Cu, Pb, Zn, Fe, S, As, Au, Sb and Bi). A 4-acid digest has been used with the analysis completed by either MS or OS means. For most historical samples, the samples were assayed for the multi-elements by ICP-OS using an Aqua Regia digest. The quality control procedures adopted for the 2022 drilling include the regular submission of Standards (CRM's), blanks and duplicates. CRMs have been inserted every 20th sample with four different Au grade standards cycled through. The CRM's used for the 2022 drilling program cover a range of grades from 0.42 g/t Au up to 50.3 g/t Au, with three low-sulphide fresh CRM's and one oxide CRM used. The intent of the procedure for reviewing the performance of certified standard reference material is to examine for any erroneous results (a result outside of the expected statistically derived tolerance limits) and to validate if required, the acceptable levels of accuracy and precision for all stages of the sampling and analytical process. Batches which fail quality control checks are re-analysed. Blanks and duplicates have been targeted in and around the projected mineralisation intervals. A tolerance of ten times the detection is applied when analysing the performance of the blank. Any blank failing this threshold results in the resubmission of the duplicates (for RC) and remaining half of the core (for DD) for the surrounding 20 metres.

	No umpire laboratory checks have been undertaken as part of this drilling program. The QAQC procedures for the historical samples are poorly documented although the annual reports do mention that no QAQC issues were evident for the drilling completed during that year.
Verification of sampling and assaying	No external verification has been completed on the intercepts included in this Mineral Resource estimate, although the individual intercepts have been reviewed by Company personnel against the RC chip trays and DD core photos to ensure that the mineralisation as logged is consistent with the reported intersections. Sampling intervals and numbering are validated by the geologist prior to cutting diamond drill core, with the technicians systemically checking the pre-marked bags to ensure every sampled interval goes into the correct bag. The quality control / quality assurance (QAQC) process ensures the intercepts are representative for epithermal gold systems. Half core and sample pulps are retained for when further verification is required. Although no specific twinned drill holes have been completed in 2022, comparisons between different drilling methods and different drilling programs have been completed for both the mineralised intercepts and all assays at BV1. These comparisons indicate a good correlation between RC and DD samples as well as no indication of systematic bias between the various drill programs. 2022 assay data is loaded directly into Datashed in batches. In-built checks in Datashed flags errors and ensures batches pass validation checks prior to upload. Validation checks include mis-matching sample numbers, inconsistent "depth to intervals" etc. A batch QAQC control chart report is generated once the batch is successfully loaded. Visual checks of standards, duplicates and blanks of reported assays are also conducted before batches are uploaded into Datashed. Assay data is plotted in mining software package (Leapfrog) as a final validation check for collar location, hole path and assay data. No adjustments or calibrations have been made to the final assay data reported by the laboratory.
Location of data points	All 2022 drill holes at BV1 have been surveyed for easting, northing and reduced level using a Real Time Kinematic GPS. Recent data has been collected and stored in MGA 94 Zone 55. The collar survey methods for the historical drilling have not been well documented. The collar RL's for numerous historical drill holes have been adjusted onto the topographic LIDAR surface with both the original and adjusted levels recorded in the database. Topographic control was generated from an aerial LIDAR survey completed as part of the 2022 collar surveying program. Downhole surveys for the 2022 drilling have been completed using a true-north seeking Gyro. Downhole survey kink checks have been completed as part of the data validation processes prior to interpretation and modelling. All survey data is entered into Datashed using designated templates. Most of the historical RC and some of the historical DD drill holes have no downhole survey measurements. The locational accuracy of these holes, especially the deeper ones is poor with additional infill drilling required to obtain a suitable level of confidence in the data for achieving a resource classification above Inferred in future Mineral Resource Estimates.
Data spacing and distribution	The 2022 drill program has comprised infill and extensional drill holes with the aim to achieve a nominal intercept spacing of approximately 50 m x 50 m including the historical drill intercepts. This data spacing is considered adequate to collect enough data for establishing geological continuity and grade variability appropriate for classifying an Inferred Mineral Resource at BV1, as well as explore along the strike of key mineralised structures for further mineralised zones.

	Sample compositing has occurred for the historical RC drilling programs with generally 2 m composites present in the drill hole database. Analysis of the relationship between sample length and grade indicate no bias caused by the longer intercepts.
Orientation of data in relation to geological structure	Mineralisation at BV1 is hosted within a series of N-S striking structures that dip steeply to the W. There is one main mineralised zone, with accessory lodes in the hanging-wall and footwall to this main zone. Historical and recent drilling has been designed to test this main orientation by drilling west to east. Some east to west drilling has been completed but due to the steep dip of the mineralisation, this is considered to not have biased the mineralisation intercepts. The relationship between the drilling orientation and the orientation of mineralised structures at BV1 is not considered to have introduced a sampling bias to drilling and is not considered to be material.
Sample security	Chain of custody protocols to ensure the security of samples are followed for the recent drilling (2020 onward). Prior to submission, samples are retained on site where access to the samples is restricted. Samples are then dropped off and loaded onto a freight truck in secured bags the morning of dispatch. Collected samples are then received at the respective commercial laboratories in Townsville. The laboratories are contained within a secured/fenced compound. Access into the laboratory is restricted and movements of personnel and the samples are tracked under supervision of the laboratory staff. Sample security measures in place for the historical drill holes have not been documented.
Audits or reviews	No internal or external audits or reviews have been conducted on the sampling techniques for BV1 to date. Laboratory audits have been conducted on the respective commercial laboratories in Townsville.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	MDL2010 (the Mineral Development License) hosts the BV1 prospect where the drilling in this report has taken place. MDL2010 is located 10 km NNE of the town of Collinsville, approximately 70 km SW of Bowen. This License is wholly owned by Navarre Minerals. Navarre Minerals has all the required operational, environmental and heritage permits/approvals for the work conducted on the Mineral Development License. There are not any other known significant factors or risks that may affect access, title, or the right or ability to perform further work programs on the Mineral Development License.
Exploration done by other parties	Exploration for Au and Ag has been carried out by several parties over MDL2010 areas. These companies include Australian Oil and Minerals Ltd. (AOM) and CRA Exploration Pty Ltd. (CRAE) both independently and in JV (1987 to 1991), Basin Gold Pty Ltd. (BG) (1994-1996), BG in JV operated by Battle Mountain Australia (BMA) (1996-1998), Resolute Limited (1998 – 2000), Goldfields Australasia Pty Ltd (GFA) (2000-2002), GFA in JV with Conquest Mining Ltd (CQT) (2002 – 2005), CQT in JV with BG (2005-2007) and then back to 100% BG ownership from 2007 onwards. Evolution Mining Ltd., under its wholly owned subsidiary Conquest Mining Ltd, signed a JV agreement in September 2019 with exploration activities beginning in November 2019. On 15 December 2021, Navarre Minerals completed the acquisition of the Mt. Carlton gold mining and processing operation from Evolution Mining Ltd, which included the Crush Creek exploration project. BV1 was discovered in 1988 under the JV between AOM and CRAE with RC drilling following up anomalous stream sediment and rock chip geochemistry.

	Previous exploration activities include stream sediment sampling, soil sampling, geological mapping, geophysical surveys, RC drilling, diamond drilling and open-hole percussion drilling.
Geology	Crush Creek mineralisation is located within the apex of Bowen basin volcanic stratigraphy which is also host to epithermal Au-Ag-Cu mineralisation at the nearby high-sulphidation epithermal deposits at Mt. Carlton, located ~30km NW of the Crush Creek Mineral Development License. Local geology at Crush Creek comprises the late Carboniferous to early Permian Lizzie Creek Volcanics, consisting locally of andesitic and felsic derived volcaniclastic units intruded by a series of rhyolitic domes. The low sulphidation epithermal Au-Ag mineralisation at BV1 is structurally controlled within steep to sub-vertical N-S striking structures hosted in andesitic lavas and volcaniclastic rocks. Mineralisation is associated with quartz vein and silica breccia development within these structures.
Drill hole Information	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resources.
Data aggregation methods	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resources.
Relationship between mineralisation widths and intercept lengths	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resources.
Diagrams	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resources.
Balanced reporting	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resources.
Other substantive exploration data	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resources.
Further work	Although no specific work program has been developed for BV1, it is envisaged that future work on this deposit will involve the following: Extensional drilling targeting the along strike and down dip continuity of the main mineralised structures. Infill resource definition drilling, including twinned drill holes to identify internal grade continuity and identify any plunge controls on the higher-grade mineralisation. Targeted geotechnical and metallurgical test work drill holes.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	The following measures are in place to ensure database integrity: - All data is stored in an SQL database that is routinely backed up, - All logging is digital and is loaded into the corporate DataShed database by an external party. Data integrity is managed by validation checks/routines that are administered by the external database management Company. Any validation issues are returned to the logging Geologist for rectification prior to finalising the data loading. Routine data validations have been completed prior to updating the interpretations and Mineral Resources for BV1 which included topography to collar checks, downhole survey kink checks, checks for overlapping intervals or duplicate points and missing data. Several historical drill holes have had their collar coordinates adjusted (Reduced Level) to match the LIDAR topography surface – both the original and adjusted value have been stored in the drill hole database.
Site visits	The Competent Person has completed numerous site visits to Crush Creek since Navarre assumed ownership of the asset, including visits to BV1 and the core shed. These visits included a review and updating of the drilling, sampling, and assaying protocols in place at Crush Creek Operations.
Geological interpretation	Confidence in the geological interpretation for BV1 is considered moderate to high, with most of the mineralisation contained within steeply dipping, low-sulphidation epithermal veins and breccias hosted within andesitic lavas and volcanoclastics. The two main BV1 structures shows significant continuity along strike and down-dip with a number of subsidiary, less continuous structures evident in the footwall and hangingwall to the main structures. Surface outcrop mapping is consistent with the intercepts in the drill holes with a steep dip and north-south strike. Mineralisation within the main structures is interpreted to be shoot controlled, however the drill density is currently inadequate to determine plunge orientations or controls. Although structurally controlled, vein style mineralisation is dominant, a lower grade stockwork zone has also been identified and modelled utilising a 0.1 g/t Au threshold. The grade threshold selected has been based on statistical analysis of the grade distributions. The threshold represents an inflection point in the grade distribution of the length weighted raw assays. All drill holes used in the estimation have been either RC or DD. Ten Au mineralisation domains have been interpreted based on drill hole logging and assays, with the two main structures identified, along with a series of splays either linking the two veins at the strike extents or interpreted to be in the hangingwall or footwall. All veins have been interpreted and modelled utilising the vein tool in Leapfrog Geo, with the stockwork mineralisation interpreted and modelled with Leapfrog Geo's indicator method using a 0.1 g/t Au threshold to define mineralised from un-mineralised intercepts. The relatively close correlation of Ag to Au has resulted in the Ag estimation using the Au mineralisation domains. All other elements have also been estimated inside the Au mineralised domains. The Competent Person believes that the refined interpretation effectively defines the Au and Ag grade populations effectively to achieve a robust estimation of the various grade populations and distributions within the deposit.

Dimensions	The BV1 mineralisation strikes N-S for over 680 m with a sub-vertical dip that extends from surface to over 200 m depth. The structure thicknesses vary from 1.5 m to up to 5 m wide. The subsidiary veins and stockwork mineralisation are significantly less extensive with dimensions of between 100 to 300 m along strike, 250 m across strike and 50 to 100 m vertical extents.
Estimation and modelling techniques	The geological and Au mineralisation domains and weathering wireframes generated within LeapFrog Geo have been used to flag the drill hole samples with the relevant geological or mineralisation code. Grade distributions across the mineralisation boundaries have been analysed with hard boundaries selected and applied across all domain boundaries. As most of the mineralisation is hosted within silicified breccias and structures, all elements have been estimated inside these vein domains. The Au stockwork mineralisation domains have been used to constrain the estimation of Au, Ag, Cu, Pb, Zn, As, Fe and S. Raw sample lengths have been analysed within the mineralisation domains to select an appropriate composite length that suits not only the mineralisation style but also the sampling methodology applied during the drilling. A 1 m composite length has been selected with a 0.1 m residual applied. There is a population of 2 and 4 m raw samples which have been split during the compositing process – analysis of grade versus length indicates that this splitting into composites will result in a slight decrease in the average grade of the composites within some domains. This will result in a slight under-call in the estimated grade and is one of the reasons why an Inferred Resource classification has been applied for BV1 at this stage of the project. Composite samples have been analysed in Snowden Supervisor v8.14 software for the existence of extreme grades. The influence of these extreme grades has been reduced by applying a combination of top-cuts and/or employing a high-grade yield or clamp. The high-grade yield limits the influence of very high grades to an area defined by the range of the first structure of the variogram during the estimation. These levels have been determined using a combination of histograms, log probability and mean variance plots. The top-cuts and high-grade yields have been reviewed and applied on a domain-by-domain basis with only one Au domain having a top-cut and yield applied. A top cut has been applied to waste zones to reduce the influence of composites with grades above the modelling cut off, but without the required continuity for inclusion within the estimation. Top-cuts have also been assessed and applied to Ag grades within the mineralisation domains. As there are a limited number of composites available for continuity analyses, variography has been determined for Au, Ag and Cu using grouped mineralisation domains as well as within the surrounding low grade stockwork domain. The output variogram models have been checked to ensure that they are consistent with the modelled geology. The grouping of domains for continuity analysis is another reason why an Inferred Resource classification has been applied for most of BV1, as there is limited confidence in the grade continuity between intercepts. A block model has been constructed covering the extents of the deposit with a parent block size of 20 m (X) by 20 m (Y) by 20 m (Z) utilised. A sub block size of 1.25 m (X) by 1.25 m (Y) by 1.5 m (Z) has been used to define the mineralisation edges with the estimation undertaken at the parent block scale. The parent block size is considered appropriate for the drill hole spacing defining the mineralisation at BV1. Grade estimation of Au, Ag, Cu, As, Pb, Zn, Fe and S has been completed using Ordinary Kriging (OK) into 10 Au domains as well as the surrounding waste using Leapfrog Edge software. Dynamic anisotropy has

	been used to orientate the search ellipse and variograms according to the dip and strike of the individual domains. Estimations have been undertaken as hard boundary estimations within three passes: • Pass 1 estimations have used a minimum of six and a maximum of 24 samples into a search ellipse at half the variogram range for all vein and stockwork zones. No sample limits per drill hole have been applied for any domains due to the limited number of samples available for estimation. • Pass 2 estimations have used a minimum of four and a maximum of 24 samples into a search ellipse at the variogram range for all vein and stockwork zones. No sample limits per drill hole have been applied for any domains due to the limited number of samples available for estimation. • Pass 3 estimations have used a minimum of two and a maximum of 24 samples into a search ellipse at double the variogram range for all vein and stockwork zones. No sample limits per drill hole have been applied for any domains due to the limited number of samples available for estimation. Volume comparisons between the wireframes and coded block model have been completed to ensure that the sub-blocking has adequately filled the wireframes and is therefore representative of the mineralisation as modelled. Apart from some of the very thin domains at depth, the block model is an accurate representation of the mineralisation as modelled. Final grade estimates for the key elements (Au and Ag) within each domain have been validated by statistical analysis and visual comparison between the input composites (clustered and de-clustered) and estimated blocks as well as using swath plots on Easting, Northing and Reduced Level comparing the output estimated grades with the input composites. Most domains have validated within +/- 10% of the input composites. A small number of domains with variable drill spacing have returned statistical validations outside these limits, with these domains reviewed in long projection to ensure that the estimated grades are an accurate representation of the input composites – in all cases, the parts of the block model with poor validation have remained unclassified due to the presence of grade extrapolation. The Competent Person considers that the estimated grades within the bulk of the reported deposit are an accurate reflection of the input composite grades. No assumptions have been made regarding recovery of any by-products. No selective mining units are assumed in these estimates. No reconciliation or production data is available for BV1.
Moisture	The tonnes have been estimated on a dry basis for BV1.
Cut-off parameters	An Au cut-off grade has been used to report the Mineral Resources inside the optimised pit shell. Gold is the dominant element of economic interest and analysis within the optimised pit shells has indicated that Ag grades do not impact significantly on the potential economic viability of the deposits. For the OP optimisation work, the following price assumptions have been used (all values are in AUD): • Au = \$2,400/oz • Ag = \$30/oz

	The results of the pit optimisation work indicated that a cut-off grade of 0.55 g/t Au is the most appropriate for reporting the OP Mineral Resources in order to satisfy the Reasonable Prospects for Eventual Economic Extraction. This cut-off grade has been calculated with the exclusion of the site support costs as it has been assumed that the Crush Creek Operations will run in parallel with Mt Carlton Operations which will take all of the site support costs.																																																			
Mining factors or assumptions	Open pit optimisation studies have been completed on the BV1 Mineral Resource utilising Whittle optimisation software completed on regularised versions of the block models. The regularisation block size selected reflected the likely size of the mining fleet to be used for open pit extraction. As the regularisation process has introduced some level of ore loss and dilution to the original input block model, no additional ore loss and dilution parameters have been applied. A comparison has been completed during the optimisation process with no material difference in the optimisations completed with and without ore loss (5%) and dilution (5%) factors applied. The following table summarises the OP optimisation input assumptions and factors. <table><tr><th colspan="3">OP OPTIMISATION INPUTS</th></tr><tr><th>Items</th><th>Unit</th><th>BV1</th></tr><tr><td colspan="3">Whittle Mining Parameters</td></tr><tr><td>Slope - Oxide (Overall Slope Angle)</td><td>deg</td><td>43</td></tr><tr><td>Slope - Fresh (Overall Slope Angle)</td><td>deg</td><td>43</td></tr><tr><td>Mining Recovery</td><td>%</td><td>100</td></tr><tr><td>Mining Dilution</td><td>%</td><td>0</td></tr><tr><td>Minimum Mining Width</td><td>m</td><td>15</td></tr><tr><td colspan="3"> </td></tr><tr><td>Whittle Reference Mining Cost</td><td>\$/t rock</td><td>5.35</td></tr><tr><td colspan="3">Inventory to be Included</td></tr><tr><td>Indicated</td><td></td><td>Yes</td></tr><tr><td>Inferred</td><td></td><td>Yes</td></tr><tr><td>Unclassified</td><td></td><td>No</td></tr><tr><td colspan="3">Royalties</td></tr><tr><td>Au</td><td>%</td><td>5.00</td></tr><tr><td>Ag</td><td>%</td><td>5.00</td></tr></table>	OP OPTIMISATION INPUTS			Items	Unit	BV1	Whittle Mining Parameters			Slope - Oxide (Overall Slope Angle)	deg	43	Slope - Fresh (Overall Slope Angle)	deg	43	Mining Recovery	%	100	Mining Dilution	%	0	Minimum Mining Width	m	15				Whittle Reference Mining Cost	\$/t rock	5.35	Inventory to be Included			Indicated		Yes	Inferred		Yes	Unclassified		No	Royalties			Au	%	5.00	Ag	%	5.00
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Metallurgical factors or assumptions	The Process Plant metallurgical recovery for BV1 is not well understood, with no test work having been completed. For the optimisation processes for reporting the Mineral Resources, the same recovery factors as applied for other Crush Creek low-sulphidation epithermal deposits have been applied with processing costs (including site support costs) calculated and applied as per the table below. <table><tr><th colspan="3">PROCESSING OPTIMISATION INPUTS</th></tr><tr><th>Items</th><th>Unit</th><th>BV1</th></tr><tr><td colspan="3">Processing Recovery (Total of Proc. Rec. & Metal Payable)</td></tr><tr><td>Au</td><td>%</td><td>96.0%</td></tr><tr><td>Ag</td><td>%</td><td>71.0%</td></tr></table>	PROCESSING OPTIMISATION INPUTS			Items	Unit	BV1	Processing Recovery (Total of Proc. Rec. & Metal Payable)			Au	%	96.0%	Ag	%	71.0%																																				
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		Processing Costs (includes site support costs)	\$/t feed	50.14	
		Inventory to be Processed			
		Inferred		Yes	
		Unclassified		No	
Environmental factors or assumptions	For Crush Creek, there is an EA Submission (Amendment) that has been made. The Competent Person considers that there are no potential environmental issues that could negatively impact on the project.				

Bulk density	Bulk density values have been assigned within the block model based on an analysis of bulk density measurements split by weathering, lithology, and mineralisation. For those categories that contained insufficient data to determine a mean bulk density, the bulk density has been assigned with consideration of the mean. <table><tr><th rowspan="2">Deposit</th><th rowspan="2">Modelled Lith</th><th colspan="2">Oxide</th><th colspan="2">Transitional</th><th colspan="2">Fresh</th></tr><tr><th>No.</th><th>BD</th><th>No.</th><th>BD</th><th>No.</th><th>BD</th></tr><tr><td rowspan="3">BV1</td><td>Basalt</td><td>-</td><td>2.20</td><td>-</td><td>2.55</td><td>39</td><td>2.65</td></tr><tr><td>Andesite</td><td>1</td><td>2.20</td><td>14</td><td>2.55</td><td>137</td><td>2.62</td></tr><tr><td>Mineralisation</td><td>-</td><td>2.20</td><td>-</td><td>2.55</td><td>3</td><td>2.60</td></tr></table> The bulk density measurements have been collected using the water immersion method on either dried rock samples or diamond core.	Deposit	Modelled Lith	Oxide		Transitional		Fresh		No.	BD	No.	BD	No.	BD	BV1	Basalt	-	2.20	-	2.55	39	2.65	Andesite	1	2.20	14	2.55	137	2.62	Mineralisation	-	2.20	-	2.55	3	2.60
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Classification	The resource classification has been applied to the Mineral Resource estimate based on a combination of the data integrity and spacing, grade and geological continuity, validation against the input composites and estimation quality parameters. Measured Mineral Resources No Mineral Resources at BV1 satisfy the requirement to be classified as Measured Mineral Resources. Indicated Mineral Resources No Mineral Resources at BV1 satisfy the requirement to be classified as Indicated Mineral Resources. Inferred Mineral Resources Inferred Mineral classification has been applied for those parts of each vein and stockwork zone defined by drilling spaced closer than 100 m by 100 m with estimated grades not extrapolating. All mineralisation domains have been reviewed individually, with the criteria described above used to define contiguous zones of classified blocks to avoid a spotted dog classification being applied. The classification considers the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity. The classification reflects the view of the Competent Person.																																				
Audits or reviews	No audits or reviews have been completed on the Mineral Resource estimates completed for the Crush Creek Project.																																				

Discussion of relative accuracy/confidence	The Competent Person is of the opinion that the current block estimate provides a global estimate of tonnes and grades on a deposit scale, which is appropriate given the classification of most of the Mineral Resources as Inferred. Variances to the tonnage, grade, and metal of the Mineral Resource estimate are expected with further definition drilling. The Competent Person considers that these variances will not significantly affect the potential economic extraction of the deposit.
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Mt Carlton Operation – Tails Storage Facility

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	Reported assay data for this report is based on sampling of the tailings discharge line. These samples were collected via a full stream sampler with sample collected every 2 1/2 minutes and composited into a 12hr composite sample for Assay. The sampling methodology of the tailing stream is conducted as a full stream sample to ensure that a representative sample is collected. Samples were 20g and were processed by the Mt Carlton onsite laboratory using Aqua Regia with an AAS finish.
Drilling techniques	No drilling was used to inform the TSF resource. Samples were collected on the tailings discharge line.
Drill sample recovery	No drilling was used to inform the TSF resource.
Logging	No logging of any kind (geological or geotechnical) was performed
Sub-sampling techniques and sample preparation	Tailings sample preparation involves oven drying, followed by pulverisation of the entire sample (total prep) using LM5 grinding mills to a grind size 85% passing 75 microns. A 25g sub-sample is utilised for Aqua Regia with an AAS Finish. Sample preparation and analysis follows industry best practise and appropriate for the mineralisation. High, medium and low-grade standards are available for the Internal site lab with standards inserted into every batch processed. The tailing's sampling methodology is complete, non-biased technique. No duplicate field samples were collected. Lab duplicates are routinely taken. The sample sizes are considered appropriate for the material sampled. It is believed that grain size bears no impact on sampled material.
Quality of assay data and laboratory tests	All samples are analysed at the Mt Carlton onsite laboratory. Gold was analysed using 20g charge Aqua Regia digest followed by AAS finish. The analytical method used by the site laboratory is industry standard for site-based laboratory. Aqua Regia is a partial technique and therefore potential exists for the grades to be understated. Comparison of site assays and umpire assays conducted at SGS Townsville using a 25g or 50g charge fire assay and AAS finish indicate an acceptable accuracy of the site assay for classification as in Indicated Resource. No Spectral data was used. The site laboratory employs industry standard QAQC protocols. The accuracy and spread of "Standard" data are acceptable within 2 standard deviations. Any outlier between the second and third standard deviation triggers an anomaly and is

	investigated. An entire batch is re-analysed when a sample plots outside three standard deviations. Based on quality assurance and quality control acceptable performance, assay data is suitable for use in Mineral Resource estimation.
Verification of sampling and assaying	Not relevant to TSF – no drilling intersections. There were no twinned holes drilled. Not relevant to TSF. Daily assay results emailed from the Lab to the Processing department for compiling in the Metallurgical/Processing monthly Spreadsheet (Dry tonnage emplaced is also captured daily within the processing departments spreadsheet as is calculated by differential equation using the input Mill Weightometer tonnage and Mass Pull measurement. Digital copies kept in dedicated folders on the Company server and backed up regularly. No adjustment or calibrations were made to any assay data used in this report.
Location of data points	No drilling was used to inform the TSF resource. The Location of the TSF along with regular pickups of the surface were conducted by Evolution mining surveyors using Total stations and Differential Global Position System (DGPS) or aerial drone survey. The TSF pickup was surveyed in Map Grid of Australia 1994 (MGA94) Zone 55. •Benchmark and temporary survey stations are checked annually by a third party (Minstaff Survey Pty).
Data spacing and distribution	Exploration results are not being reported. Geological continuity is not relevant to the reporting of a tailings storage facility as the material has been processed and emplaced by manmade processes. The sample data was collected on the tailings line exiting the Mt Carlton processing plant. Samples taken at this point on 21/2 minute increments are deemed sufficient to capture the nature of the mineralisation of this material. The rock material being processed by the plant to produce the tailings is of an Indicated Resource Classification. Sample compositing was applied. A sample was collected every 21/2 minutes and was composited into a single 12hr sample for assaying.
Orientation of data in relation to geological structure	The sampling system is designed to capture the entire tailings flow and ensure a non-biased sample. No drilling was used to inform the TSF resource.
Sample security	Chain of custody was managed by Evolution Mining. Samples were delivered to the Mt Carlton site laboratory by Evolution Mining Employees. Umpire samples were sent to SGS Townsville laboratory by company personnel or through a third-party trucking company. Samples delivered after hours to the laboratory facility are stored in locked yards prior to receipt.
Audits or reviews	Monthly QAQC reports are completed by the site laboratory. Umpire assays outside of tolerance are resubmitted as a blind sample to test for accuracy. The SGS umpire laboratory is subject to Unannounced Laboratory visits and reviews from site personnel form part of a compliance audit

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	No exploration results have been reported in this release. This section is not relevant to this report on ore Reserves and Mineral Resources Exploration Results are not being reported.
Exploration done by other parties	No exploration results have been reported in this release. This section is not relevant to this report on ore Reserves and Mineral Resources Exploration Results are not being reported.
Geology	No exploration results have been reported in this release. This section is not relevant to this report on ore Reserves and Mineral Resources Exploration Results are not being reported.
Drill hole Information	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource and Ore Reserves.
Data aggregation methods	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource and Ore Reserves.
Relationship between mineralisation widths and intercept lengths	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource and Ore Reserves.
Diagrams	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource and Ore Reserves.
Balanced reporting	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource and Ore Reserves.
Other substantive exploration data	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource and Ore Reserves.
Further work	No exploration results have been reported in this release. This section is not relevant to this report on Mineral Resource and Ore Reserves.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Access to the compiled month end data used to calculate the dry tonnes milled and tailings grade is restricted. Only Navarre Employees may access the Navarre system, with this data further restricted with a lock folder system and password protection on the sheets. Only authorised users may view or have read/write access to this data. Regular back-ups of the entire Mt Carlton server are conducted and stored remotely.
Site visits	The Competent Person was a full-time employee of Evolution, based at the Mt Carlton site.
Geological interpretation	No geological interpretation was performed as this is a tailings dam. A global estimation of the contained resource was performed.
Dimensions	The TSF is of a square shape 650m x 600m and varies in depth from 2.5 m to 11 m.
Estimation and modelling techniques	The Au & Ag metal contained within the TSF was calculated using the weighted average tonnes and grade of tails emplaced in the TSF. This has been summaries and reported monthly over the life of the TSF. This calculation was performed via Microsoft excel spreadsheet.
Moisture	Tonnages are estimated on a dry basis.
Cut-off parameters	No cut-off grade has been applied as it is assumed that the entire TSF will be recovered. At this stage it is not possible to be selective.
Mining factors or assumptions	It is assumed that a bulk recovery, non-selective mining method, such as hydraulic mining, will be used
Metallurgical factors or assumptions	No metallurgical test work or factors have been applied. Laboratory test work has indicated recoveries in the 70% range for Au and 55% for Ag via a cyanide leach process.
Environmental factors or assumptions	Mt Carlton operates under permitted environmental guidelines with no material concerns defined that will impact the operations viability. It is assumed that during mining there will be no run-off of solution into the groundwater system and that spent tailings can be redeposited into a suitable containment facility (or even the same TSF)
Bulk Density	Dry tonnes emplaced were provided by the Mt Carlton processing department. No bulk density measurements were required.
Classification	The Mineral Resource is stated inclusive of Ore Reserves was calculated on emplaced tails as of 31 December 2019. As the material processed through the Mill that produced the tailings was of an Indicated resource classification, the sampling & assaying methodology is considered robust and the records securely and well maintained, the material in the TSF is also classified as Indicated. For additional information for how the Mt Carlton primary ore is classified please see the table 1 for the V2 deposit. It is the Competent Person's view that the classification used for the Mineral Resources is appropriate.
Audits or reviews	A review of the TSF estimation was performed by the Mt Carlton Process department. The Mt Carlton TSF has also

	been the subject of a PFS level study.
Discussion of relative accuracy/confidence	There is no historical production from the TSF to compare against. In 2018 a drilling program to test geotechnical attributes of the TSF was conducted. As part of this program 46 samples were collected and assayed from representative locations around the pit. The average grade and grade distribution of these samples compares well with the expected grades based on the Mill data (within 10%)