

# Jupiter Mineral Resource estimate more than doubles to 830,000 Ounces

# **Highlights**

## Updated Jupiter Mineral Resource estimate

- Jupiter Mineral Resource of 24Mt @ 1.1g/t for 830koz, up 133% from the 30 June 2022 MRE of 355 koz
- Resource reported within an A\$2,400/oz optimised pit shell, and above a 0.5 g/t cut-off grade, consistent with the Mineral Resource estimate of 30 June 2022
- Measured and Indicated Mineral Resource estimate comprises 390 koz, or 47% of the updated Jupiter Resource.
- Jupiter mineralisation is open below the A\$2400 resource reporting pit shell and remains open at depth.
- "Discovery<sup>1</sup>" cost of approx. A\$18.50 per Resource ounce.
- Key inputs changed to reflect the recognition of Jupiter potential as a bulk low grade mineralised system.
- Dacian Mineral Resource of 53.6 Mt @ 1.6 g/t for 2.66 Moz including the Jupiter update, up 22% from 2.2 Moz at 30 June 2022

# **Exploration Growth Pipeline**

- **Geophysical anomalies identified along the Calisto structural trend,** associated with the Jupiter syenites, represents syenite intrusives targets under cover exploration at these targets is ongoing.
- A revised Jupiter Exploration Target for this area has been completed and is included below.
- Significant exploration upside from additional targets with potential for large scale discovery, including:
  - Southern Tenement targets
  - Chatterbox Shear Zone
  - Celia Tectonic Zone

Dacian Interim Chief Executive Officer Derek Humphry said "The Jupiter expansion drilling program was initiated in July 2021 in response to the Company's strategic requirement to define opportunities of scale. The subsequent Mineral Resource estimate update marks an important step striving towards a new sustainable business plan, necessary to underpin the future resumption of operations at Mt Morgans. "

"In parallel with exploration, we intend to advance mining studies including the examination of a low-cost owner operator mining model for a potential re-start of Jupiter and other open pit deposits at Mt Morgans." Mr Humphry said.

<sup>&</sup>lt;sup>1</sup> Includes drilling, assay and field consumables costs.

Dacian Gold Limited (**Dacian Gold or the Company**) (**ASX: DCN**) is pleased to announce that the recent drilling campaign at the Jupiter open pit, immediately adjacent to the 2.9Mtpa Mt Morgans mill, has delivered a robust increase in the Jupiter Mineral Resource estimate, shown in Table 1.

Table 1: Jupiter Mineral Resource estimate by prospect reported above a lower cut-off of 0.5 g/t Au and above a A\$2400 pit optimisation shell defining "Reasonable prospect for eventual economic extraction" (RPFFF)

	(*** === /											
Prospect	Ν	Measure	d	Indicated		Inferred			Total Mineral Resource			
	Tonnes	Au	Au Oz	Tonnes	Au	Au Oz	Tonnes Au g/t Au Oz		Tonne	Au g/t	Au Oz	
	(kt)	g/t		(kt)	g/t		(kt)			s (kt)		
Doublejay	625	1.2	24,000	8,400	1.1	288,000	7,500	1.1	265,000	16,500	1.1	577,000
Heffernans				1,600	1.1	55,000	3,600	1.2	132,000	5,200	1.1	187,000
Ganymede				900	0.8	24,000	1,500	0.9	42,000	2,400	0.9	66,000
TOTAL	625	1.2	24,000	10,900	1.0	366,000	12,600	1.1	439,000	24,100	1.1	830,000

Note: RPEEE pit optimisation parameters are detailed within the document.

Rounding of figures has caused total imbalances

Dacian's global MRE is shown in Table 2. Additional depletion to stockpiles has occurred but reconciliation has not yet taken place. The Nambi MRE has been adjusted following a review of historic mining depletion.

MINING CENTRE Deposit/Area		Deposit/Prospect Cut-off grade (Au g/t) and		Measured		Indicated			Inferred			Total Mineral Resource			
		Deposit/Prospect	constraints	Tonnes (kt)	Au g/t	Au Oz	Tonnes (kt)	Au g/t	Au Oz	Tonnes (kt)	Au g/t	Au Oz	Tonnes (kt)	Au g/t	Au Oz
		Beresford	2.0	130	4.3	18,000	1,920	4.0	247,000	1,490	3.0	144,000	3,540	3.6	410,000
	Westralia Mine Corridor	Allanson	2.0	70	4.2	9,000	550	4.5	79,000	890	3.9	113,000	1,510	4.1	201,000
	Westralia Wille Corridor	Morgans North - Phoenix Ridge	2.0							330	6.7	72,000	330	6.7	72,000
		SUBTOTAL		220	3.8	27,000	2,470	4.1	326,000	2,720	3.8	329,000	5,390	3.9	682,000
		Transvaal	2.0				650	3.8	79,000	1,110	3.5	126,000	1,760	3.6	205,000
		Ramornie OP	0.5							570	2.5	46,000	570	2.5	46,000
	Westralia Satellite Deposits	Ramornie UG	0.5 & >290RL OR 2.0 & <290RL							160	2.7	13,000	160	2.7	13,000
	Westralia Satellite Deposits	Craic	2.0				30	7.9	8,000	70	5.9	13,000	100	6.5	21,000
		McKenzie Well	0.5							950	1.1	34,000	950	1.1	34,000
		SUBTOTAL					680	3.9	86,000	2,850	2.5	232,000	3,530	2.8	318,000
	GREATER WESTRALIA MINING AREA	SUBTOTAL		200	4.2	27,000	3,150	4.1	412,000	5,570	3.1	561,000	8,920	3.5	1,001,000
		Doublejay*	0.5	625	1.2	24,000	8,400	1.1	288,000	7,500	1.1	265,000	16,500	1.1	577,000
MT MORGANS	lupitor OP*	Heffernans*	0.5				1,600	1.1	55,000	3,600	1.2	132,000	5,200	1.1	187,000
	Jupiter OF	Ganymede*	0.5				900	0.8	24,000	1,500	0.9	42,000	2,400	0.9	66,000
		SUBTOTAL		620	1.2	24,000	10,900	1.0	366,000	12,600	1.1	439,000	24,100	1.1	830,000
	Mt Marven	Mt Marven*	0.5				1,200	1.2	48,000	500	1.4	23,000	1,700	1.3	71,000
	JUPITER MINING AREA	SUBTOTAL	0.5	625	1.2	23,000	12,100	1.1	415,000	13,090	1.1	462,000	25,815	1.1	900,000
	Cameron Well Project Area	Cameron Well											0	-	-
		Maxwells	0.5				170	0.9	5,000	500	0.8	12,000	660	0.8	17,000
	CAMERON WELL PROJECT AREA	SUBTOTAL					170	0.9	5,000	500	0.8	12,000	660	0.8	17,000
	Stockpiles	Mine Stockpiles	0	370	0.7	9,000							370	0.7	9,000
		LG Stockpiles	0	1,250	0.6	23,000							1,250	0.6	23,000
		Jupiter Heapleach	0							3,630	0.4	48,000	3,630	0.4	48,000
		Total - Stockpiles		1,620	0.6	32,000				3,630	0.4	48,000	5,250	0.5	79,000
	TOTAL MMGO	SUBTOTAL		2,450	1.1	83,000	15,410	1.7	832,000	22,790	1.5	1,082,000	40,650	1.5	1,997,000
		GTS	0.5 & >300RL OR 2.0 & <300RL				930	1.9	56,000	1,360	1.2	51,000	2,290	1.4	107,000
		Hub	0.5 & >300RL OR 2.0 & <300RL				710	4.4	100,000	710	2.4	55,000	1,420	3.4	155,000
	Southern Zone	Bindy	0.5 & >300RL OR 2.0 & <300RL							3,080	1.3	129,000	3,080	1.3	129,000
		Kelly	0.5 & >300RL OR 2.0 & <300RL							2,350	0.9	67,000	2,350	0.9	67,000
		SUBTOTAL					1,640	2.9	155,000	7,500	1.3	302,000	9,130	1.6	458,000
REDCLIFFE FROJECT		Nambi	0.5 & >300RL OR 2.0 & <300RL				720	2.7	62,000	850	2.8	76,000	1,580	2.7	138,000
	Central Zone	Redcliffe	0.5 & >300RL OR 2.0 & <300RL							930	1.2	35,000	930	1.2	35,000
		Mesa - Westlode	0.5 & >300RL OR 2.0 & <300RL							850	1.0	28,000	850	1.0	28,000
		SUBTOTAL					720	2.7	62,000	2,630	1.6	140,000	3,360	1.9	202,000
	TOTAL	SUBTOTAL					2,360	2.9	218,000	10,130	1.4	442,000	12,490	1.6	659,000
TOTAL				2,450	1.1	83,000	17,780	1.8	1,049,000	32,920	1.4	1,524,000	53,140	1.6	2,656,000

## Table 2: Total Mineral Resource estimate as at 31/03/2023 for Jupiter and 30 June 2022 (after mining depletion)

Note: rounding may have caused imbalanced totals. \* Reported above A\$2,400 pit optimisation shell. Additional depletion to stockpiles has occurred but reconciliation has not yet taken place. Nambi MRE updated following review of historic mining depletion.

## **Jupiter**

Drilling by Dacian from 2021 through 2023 permitted an update of the MRE for the Jupiter deposit. This included 1,490 RC holes for 56,644 m (1,224 for 38,223 m being grade control drilling), 50 Diamond holes for 29,089 m, and 16 RC pre-collar holes with diamond tails for 7,521 m drilled since the previous MRE (see Dacian announcement to the ASX dated 31 August 2021).

The geological model supporting the Jupiter Mineral Resource estimate comprises the Doublejay (including Joanne and Jenny), Heffernans, and Ganymede syenite pipes from south to north, which drilling has not closed out at depth, nor the mineralisation hosted by them. The geological model also includes 27 syenite dykes of varying orientation, although typically north-striking, with several converging into a complex breccia/stockwork pipe in the Saddle Zone between the Jenny and Heffernans pipes. The syenites are all mineralised, although more weakly with increasing depth within the syenite dykes. These features are illustrated in plan-view by Figure 1 and long-section by Figure 2. The model also includes 18 porphyry dykes, the Cornwall Shear Zone (CSZ), and mafic mineralisation in the remainder of the geological model's volume, which accounts for 12% of the ounces in the MRE (11% Inferred).

The estimated Mineral Resources have been reported above a lower cut-off of 0.5 g/t Au and within a pit optimisation defined to test the reasonable prospects for eventual economic extraction (RPEEE), and whose parameters are detailed in Appendix 1. The RPEEE shell is illustrated in cross-section with the geological model in cross-section by Figure 3.



 Figure 1:
 Plan view of Jupiter deposit showing the syenite geological model, and drilling by gold grades

 Note: Cornwall Shear Zone, mafic mineralisation, and porphyries have not been displayed for legibility.

 Assays coloured according to the legend and filtered above 0.5 g/t Au.



Figure 2: Long-section of Jupiter deposit showing the syenite geological model, drilling coloured by gold grades, and the RPEEE pit optimisation shell in grey

Note: Cornwall Shear Zone, mafic mineralisation, carbonatites, and porphyries have not been displayed for legibility. Assays coloured according to the legend and filtered above 0.5 g/t Au.



 Figure 3:
 40 m cross-section at 6,813,050 m N through the Joanne syenite pipe of the Jupiter geological model, showing the Joanne pit area, drilling coloured by gold grades, and the RPEEE pit optimisation shell

 Wireframe colours: Joanne syenite pipe = pink (central); syenite dykes s= pale pink (RHS); CSZ = red; unconstrained mafic

 mineralisation = green; Doublejay porphyry = dark grey; carbonatites = blue; mined surface = dark red; RPEEE optimisation shell = light grey. Mafic mineralisation wireframes not displayed for legibility.

Drill hole assays coloured according to the legend and filtered above 0.5 g/t Au.



 Figure 4:
 40 m cross-section at 6,813,050 m N through the Saddle Zone of the Jupiter geological model, showing drilling by gold grades, and the RPEEE pit optimisation shell

Wireframe colours: Joanne syenite pipe = pink (central); syenite dykes s= pale pink (RHS); CSZ = red; unconstrained mafic mineralisation = green; Doublejay porphyry = dark grey; carbonatites = blue; mined surface = dark red; RPEEE optimisation shell = light grey. Mafic mineralisation wireframes not displayed for legibility.

Drill hole assays coloured according to the legend and filtered above 0.5 g/t Au.

The previous MRE model was designed to target a more selective, lower tonnage mining approach. As the infill and extensional exploration programme targeting deeper mineralisation had not been completed, the resource model had not been updated since 2021 except to account for mining depletion. The RPEEE shell created in 2020 on old parameters was reused for the EOFY2022 MRE to provide direct reporting comparisons. The deeper drilling, particularly of the syenite pipes and dykes, allowed a clearer understanding that the Jupiter deposit is a low-grade, bulk tonnage opportunity. Therefore, the modelling and estimation changes described below, including the input parameters included in the pit optimisation shell and used for testing and reporting the RPEEE of the deposit, have changed to support this strategy.

## **Jupiter Exploration Target**

The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

On 22 July 2022 the Company removed its 2021 Jupiter underground MRE<sup>2</sup> from its Mineral Resource Inventory and reclassified the potential for mineralization below the 30 June 2022 Jupiter open pit MRE as part of a broader 22 July 2022 Exploration Target<sup>3</sup>.

The updated Jupiter MRE reported above today now extends into volumes previously included in the 22 July 2022 Exploration Target which requires restatement. The revised Exploration Target has been independently prepared by CSA Global for the Jupiter deposit in accordance with the 2012 edition of the JORC Code.

	Tuble 5.	Jupiter Deposit – Exploration Target Total at 27 March 2025						
Denesit/	Depth	Tonnage F	Range (Mt)	Grade Rar	ige (g/t Au)	Ounces Range (oz Au)		
Prospect	Range (m)	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	
Doublejay <sup>#</sup>	< 400	1.8	2.4	0.6	1.2	30,000	90,000	
	400 - 950	8.3	11.0	1.2	1.7	320,000	610,000	
Heffernan's	< 400	1.6	2.1	0.5	0.9	30,000	60,000	
	400 - 850	2.2	3.0	1.1	2.3	80,000	220,000	
Ganymede	< 400	3.5	4.7	0.6	1.0	60,000	150,000	
Saddle##	< 400	2.8	3.8	0.8	1.8	70,000	220,000	
Cornwall Shear Zone	< 400	2.8	3.7	0.6	1.2	50,000	140,000	
TOTA	L*	23.0	30.6	0.9	1.5	650,000	1.490.000	

### Table 3: Jupiter Deposit – Exploration Taraet Total at 27 March 2023

\*Totals may not add up due to rounding. #Includes Jenny and Joanne syenite pipes. #Includes Saddle, Snake and Ridge dykes; and Iow angle UCB shears. Quantity and grade are conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource, and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Exploration Target is based on grade control, exploration and resource definition drilling. Drill hole spacing for grade control and resource development areas typically range from 10 m by 10 m (X by Y) increasing to 20 m by 20 m. Drill spacing increases to 40 m by 40 m and 80 m by 80 m in the lower confidence areas of the deposit (Figure 5 and Figure 6).

<sup>&</sup>lt;sup>2</sup> ASX announcement titled "2021 Mineral Resources and Ore Reserves Update" dated 31 August 2021

<sup>&</sup>lt;sup>3</sup> CSA Global, 2022. "Exploration Target and Project Evaluation for the Jupiter Deposit". Report to Dacian Gold Ltd, 6 July 2022. CSA Global Ltd, Perth, WA. Doc ID: R269.2022. 55p. Available: <u>https://www.daciangold.com.au/site/PDF/8770a774-72bb-47bb-babc-</u> Ob1c056313be/ExplorationTargetandProjectEvaluationfortheJupiterDeposit



Figure 5: Jupiter Exploration Target below the RPEEE pit optimisation shell. Drill holes informing the Exploration Target are presented and coloured by drill type. Oblique view looking southwest with RPEEE boundary.



Figure 6: Jupiter Exploration Target below the RPEEE pit optimisation shell. Drill holes informing the Exploration Target are presented and coloured by drill type. Plan view with RPEEE boundary.

The Exploration Target, shown in Table 3, is estimated to contain between 23.0 Mt and 30.6 Mt at a grade ranging between 0.9 g/t Au and 1.5 g/t Au across the Jupiter deposit. The Exploration Target was generated for each of the main syenite pipes below the open pits at Doublejay, Saddle area, Heffernans, Ganymede and the Cornwall Shear Zone (CSZ). The CSZ is a major mineralised structure that extends across the 2 km strike of the deposit. The Saddle area includes Saddle, Snake North, and Ridge dykes; and low angle shears occurring within the basalt unit. The Exploration Target was defined below the A\$2,400/oz RPEEE pit shell used to report the Jupiter open pit Mineral Resource.

The 2023 Exploration Target represents a revision of the 2022 Exploration Target. A comparison of 2022 and 2023 Exploration Targets is provided in Table 4 and reveals a material decrease in tonnage range and contained ounces range. The decrease is attributed to a significant increase in the vertical depth/extent of the 2023 RPEEE shell, whereby a significant proportion of the 2022 Exploration Target has been reclassified and is now included in the 2023 Mineral Resource.

	Table 4	: Expl	oration Targ	et Comparis	on	
Exploration Target	Tonnag (N	e Range ⁄It)	Grade (g/t	Range Au)	Ounces Ra	nge (oz Au)
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
2022	31.8	39.7	0.8	1.6	810,000	1,960,000
2023	23.0	30.6	0.9	1.5	650,000	1,495,000
Difference	-8.8	-9.1	0.1	-0.1	-1.6	-4.7
% Difference	-27.7%	-22.9%	12.5%	-6.3%	-19.8%	-23.8%

Drill data and target zones used to define the volumes used to quantify the Exploration Target are shown in Figure 7. The number of drill holes and assays used to inform the Exploration Target comprises: Doublejay (41 drill holes, 818 assays), Heffernans (50 drill holes, 596 assays), Ganymede (38 drill holes, 595 assays), Saddle Area (83 drill holes, 470 assays), and CSZ (49 drill holes, 194 assays).



Figure 7: Long-section facing west of the Jupiter Exploration Target (light blue dashed outlines), drill holes coloured by gold grades (ppm), modelled syenite pipes and dykes and RPEEE pit optimisation shell (yellow).

Exploration Targets for the Doublejay, Heffernan's and Ganymede syenite stocks were constrained using a 0.5 g/t Au boundary above the 0 mRL (approx. 400 m below surface) and 1 g/t Au grade boundary below the 0 m RL. The grade boundaries are based on a potential expanded open pit above the 0 m RL for all stocks, and potential underground mines for Doublejay below the 0 m RL. Mineralised volumes were generated in Leapfrog using economic composites to implicitly model 0.5 g/t and 1.0 g/t Au grade shells constrained within each of the syenite stocks. Detailed assumptions relating to mining parameters have not been considered. Tonnage ranges were created using mineralised volumes constrained within syenite above 0.5 g/t Au and 1 g/t Au boundaries and a density of 2.75 t/m<sup>3</sup>, with an upper range based on the defined mineralised volume, and the lower range derived by reducing the volume by 25%. Grade ranges have been estimated by calculating the 25th and 75th percentile of the full-length (intercept) composite data for drill holes that intercept the mineralised volumes.

Saddle and CSZ Exploration Targets were constrained using a 0.5 g/t Au boundary above the 0 m RL (approx. 400 m below surface) and below the RPEEE pit shell. Grade boundaries are based on a potential expanded open pit above the 0 mRL. Mineralised volumes were generated in Leapfrog to implicitly model 0.5 g/t Au indicator shells constrained within dykes and shears. Detailed assumptions relating to mining parameters have not been considered. Tonnage ranges were created using mineralised volumes modelled above a 0.5 g/t Au boundary within dykes and shears, using densities of 2.75 t/m<sup>3</sup> and 2.8 t/m<sup>3</sup> respectively. The upper tonnage range was based on the defined mineralised volume and the lower range derived by reducing the

mineralised volume by 25%. Grade ranges have been estimated by calculating the 25th and 75th percentile of the full-length (intercept) composite data for drill holes that intercept the mineralised volumes.

Dacian plans additional work on the Exploration Target below the RPEEE shell used to report the MRE and includes:

- Concept Study on the potential for an underground bulk mining opportunity below the RPEEE shell is underway with expected completion in the June quarter.
- Optimisation work to evaluate the potential expanded open pit opportunity is underway with expected completion in the June quarter.
- Any potential future work programs will be subject to a favourable outcome of the concept study and open pit optimisation, with priority and timing evaluated against the exploration growth pipeline.

The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

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This ASX announcement was approved and authorised for release by the Board of Dacian Gold Limited

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### **COMPETENT PERSON STATEMENT**

## **MINERAL RESOURCES**

The information in this report that relates to Mineral Resources is based on information compiled by Mr Alex Whishaw, a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy. Mr Whishaw is a full-time employee of Dacian Gold Ltd. Mr Whishaw 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 (JORC Code 2012). Mr Whishaw consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Where the company refers to the Mineral Resources in this report (referencing previous releases made to the ASX including Mt Marven, Beresford, Allanson, Mt Morgans – Phoenix Ridge, Transvaal, Ramornie, Craic, McKenzie Well, Heffernans, Doublejay, Ganymede, Maxwells, Hub, GTS, Bindy, Kelly, Redcliffe Deposit and Mesa – Westlode), other than mining depletion, it confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate with that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not materially changed from the original announcement.

The information in this report that relates to Exploration Targets is based on information compiled by Mr Matt Clark, a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy. Mr Clark is a full-time employee of CSA Global Pty Ltd (an ERM Group Company). Mr Clark 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 Clark consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

All information relating to Mineral Resources and Ore Reserves were prepared and disclosed under the JORC Code 2012.

## **APPENDIX 1:**

## JUPITER MINERAL RESOURCE ESTIMATE: TECHNICAL BACKGROUND

## **Geology and Geological Interpretation**

Jupiter is an Archean syenite related, lode gold style deposit. The material mined incorporates stacked, gently east-dipping mafic lodes, syenite stocks, and felsic porphyry intrusives.

The Jupiter deposit is interpreted to comprise structurally controlled mesothermal gold mineralisation related to syenite intrusions within altered basalt. Most mineralisation is associated with large, shallow, east-dipping shears, most significantly developed where these shears crosscut syenite intrusions or the altered basalt proximal to the syenite intrusions. Four major syenite pipes or stocks have been defined through exploration with clear dimensions, although not closed out at depth, which include, from south to north, Joanne, Jenny (named "Doublejay" for their historic combined pit), Heffernans, and Ganymede. Within and partially projecting only a short distance out of the Joanne syenite pipe, three carbonatite dykes or sills have been modelled. These are weakly mineralised compared with the Joanne syenite pipe.

On the north side of the Heffernans pipe, a skin-like syenite dyke or radial intrusion has formed with a distinct, relatively consistent band of sericite-hematite-altered basalt separating it from the main pipe by approximately 5 m - 10 m. The skin syenite is interpreted to have intruded in a halo of weakness from prolonged alteration and fluid movement from the multiple pulses or extend intrusive timeframe of Heffernans syenite, which caused an alternate intrusive plane to form and provide a favourable intrusive split from the main pipe at depth.

A deposit-scale, shallow east-dipping structure known as the Cornwall Shear Zone (CSZ) transects all geology, which is most highly mineralised in its intersection of the major syenite pipes. Although the tenor decreases distally from the syenite pipes, the CSZ still presents itself as a higher-grade feature and mineralisation target. Several CSZ-parallel mineralisation lodes in the hanging wall above the CSZ have been mined with some success, although these are largely depleted through mining. The CSZ is clearly defined in the Joanne, Jenny, and Heffernans pipes, and through some Saddle Zone dykes, but becomes gradually less distinct elsewhere, with no clear boundary to its extinction.

The intersection of the structures controlling the lodes with the major syenite pipes has provided shallowto moderate dipping- planes for deposition, around which fuzzy halos of elevated gold grades have disseminated. However, no clear boundaries or grade cut-offs are evident, and placing such boundaries has been shown to cause high-grade biases.

The footwall lodes previously modelled have been shown through the updated drilling to be very shortrange extensions of mineralisation projecting from the intersection of the syenite features. Comparison between numerous estimation techniques in the Doublejay area above the existing final design, showed little departure from total metal balance, and the potential to high-grade bias the grades estimated when hard-boundary wireframes are employed. Additionally, some lodes are shown with grade control to be west-dipping, and in places easily mistaken for a shallow-dip when instead the mineralisation is a skin around the syenite bodies.

No mineralisation cut-off is statistically supported and was introduced at 0.5 g/t, then lowered to 0.3 g/t at the start of operations to delineate zones of higher grades for ore markouts of a selective mining operation, but mining has shown challenges reconciling minor modelled lodes outside the lithological boundaries. Therefore, modelling of these lodes has not been incorporated into the MRE update, and instead a localised estimate using ID<sup>3</sup> was employed after confirmation that this provided the best continuity for all mafic mineralisation types – east-dipping, west-dipping, and syenite skin mineralisation. The approach used, together with estimation within the comprehensive lithological model as the mineralisation control, provide the suitable framework to support a low-grade, bulk mining scenario. The unconstrained mafic mineralisation accounts for 12% of the ounces in the MRE, 11% of which are Inferred.

Porphyry dykes intruding the earlier basalt and syenites display complex geometries particularly around and in the intrusions of the Heffernans and Ganymede pipes, and their chiefly east-west strike paralleling the prevailing drilling orientation to the west hampers their interpretation. These are partly mineralised at the boundaries and where they include wall rock, but where massive porphyry are mineralisation depleting features.

Geological modelling took place within Leapfrog Geo 2022.1.1 yielding 55 domains.

The geological model supporting the Jupiter Mineral Resource estimate comprises the major syenite pipes, which drilling has not closed out at depth, nor the mineralisation hosted by them. The geological model also includes 27 syenite dykes of varying orientation, although typically north-striking, with several converging into a complex breccia/stockwork pipe in the Saddle Zone between the Jenny and Heffernans pipes. The syenites are all mineralised, although more weakly with increasing depth within the syenite dykes. The model also includes three carbonatite dykes or sills within and proximal to the Joanne pipe, 18 porphyry dykes, the Cornwall Shear Zone (CSZ), and mafic mineralisation and waste in the remainder of the geological model's volume.

The confidence in the geological interpretation around the GC and resource development drilling areas is very high where the drilling density is at 10 m by 10 m out to 20 m by 20 m, and is based on mining exposure as well as a high drilling density. Visual confirmation of lode position and orientations has been observed and mapped in the operating open pit.

Base-of-complete-oxidation and top-of-fresh surfaces were modelled.

Topographic control of the land and end-of-mine surfaces has been surveyed by drone aerial photogrammetry at high resolution.

## **DRILLING TECHNIQUES**

Drilling that informed the Mineral Resource estimate (MRE) was exclusively surface drilling, which included 11,140 RC holes for 407,758 m, 118 diamond drill (DD) holes for 43,274.2 m, and 65 RC holes with DD tails for 21,206.2 m. All holes considered to have sufficient quality by the Competent Person were used to inform the estimate, of which 99% were drilled by Dacian.

Dominion Mining Limited drilled 93\*, 94\* and 95\* prefixed holes (40 holes) Ausdrill, Robinsons and Drillex RC rigs. 1 m samples were collected using a riffle splitter. Only samples expected to be anomalous were sent to the onsite lab for analysis.

The following number of holes with specified prefixes were ignored or removed from the MRE, as their data were considered unreliable:

- 14 of the 39 "95\*" prefixed holes
- 14 "HFR\*" prefixed holes
- 184 "HRC\*" prefixed holes
- Five of the "HD\*" prefixed holes
- 95JPRC005, OLD004

149 of Dacian's RC holes were removed, as their data had not been acquired in time, or were dummy entries in the database that had not been drilled.

The Jupiter area includes many historic drilling types not used in the MRE.

Dacian Diamond drilling was mostly carried out with NQ2 sized equipment, along with minor HQ3 and PQ2, using standard tube. Surface drill core was orientated using a Reflex orientation tool.

Dominion holes (94MCRC and 95MCRC holes) were drilled with RC rigs utilising face-sampling hammers for maximum sample return.

#### SAMPLING AND SUB-SAMPLING TECHNIQUES AND SAMPLE ANALYSIS METHOD

Surface holes were angled to intersect the targeted mineralised zones at optimal angles.

In-pit RC holes were dominantly angled to the west to intersect the prevailing east dip and plunge of the mineralisation, but also vertical to target mineralised zones at optimal angles, and to fit around historic workings.

For historical RC drilling, where available, the original logs and laboratory results that are in the central SQL Server database are retained by Dacian as either original hard copies or as scanned copies.

Dominion Mining Limited drilled 93\*, 94\* and 95\* prefixed holes (168 holes) Ausdrill, Robinsons and Drillex RC rigs. 1 m samples were collected using a riffle splitter. Only samples expected to be anomalous were sent to the onsite lab for analysis.

For Dacian RC holes, face sampling hammer bits with size from 5" to 5%" were used (99% of reverse circulation (RC) holes), and then samples were passed over an on-board cone splitter to give an approximate 3 kg sample. The remainder was collected into a plastic sack as a retention sample.

The historic drilling that informs the MRE has been almost entirely mined or represents an insignificant proportion of the informing data

Samples were analysed by different methods depending on the vintage of Dacian drilling, as follows:

- ICPES: 2015 and 2016
- Fire assay: 2014 2023
- Leachwell<sup>™</sup> (laboratories): 2014
- Pulp-and-leach (PAL) method employing the Leachwell<sup>™</sup> leaching process: 2018 2022.

For fire assay, 40 g or 50 g lead collections were then analysed by Atomic Absorption Spectrometry (AAS). This is a full digestion technique. Samples were analysed at Bureau Veritas in Perth or Kalgoorlie, Western Australia. This is a commonly used method for gold analysis and is considered appropriate for this project.

For PAL assays, samples were analysed at the onsite SGS laboratory, using a Pulverise and Leach (PAL) technique which analyses a 600g subsample. The leached solution is analysed by AAS. PAL is a partial digestion method. The PAL method provides a cyanide-soluble gold assay.

Umpire analysis between the methods shows strong correlation. Furthermore, QAQC analysis shows consistently high accuracy and precision of the PAL assays on standards.

Dacian surface diamond core was sampled as half core at 1m intervals or to geological contacts. Sampling did not cross geological boundaries. Samples were cut in half, sampled into lengths in sample bags to achieve approximately 3kg, and submitted to a contract laboratory for crushing and pulverising to produce either a 40g or 50g charge for fire assay.

Dacian surface RC holes are sampled over the entire length of hole. Dacian RC drilling was sampled at 1m intervals via an on-board cone splitter to achieve approximately 3kg samples. Samples were then submitted to a contract laboratory for crushing and pulverising to produce either a 40g or 50g charge for fire assay.

Dacian in pit RC holes were sampled over the entire length of hole on 1m intervals via an on-board cone splitter to achieve approximately 3kg samples.

Prior to December, 2020, all samples were submitted to a contract laboratory for crushing and pulverising to produce either a 40 g or 50 g charge for fire assay.

After December, 2020, GC samples were submitted to the on-site laboratory for Pulverise and Leach (PAL) analyses using a 600 g subsample.

#### **ESTIMATION METHODOLOGY**

The drill hole intervals were coded within the geological domains in Leapfrog and then composited to 1 m intervals using a 'best-fit' approach. The composites were exported to Supervisor v8.12 software for statistical analysis. All modelled lithological objects were treated as hard boundaries for statistics and estimation. Statistics were weighted by composite length and declustered using a cell declustering approach.

To model the spatial continuity of gold grades, variography was conducted in Supervisor 8.12. Statistics were length-weighted. A normal-score transform was applied to continuity analysis data. After variograms were modelled, a back-transform model was exported with Surpac rotations.

Top-cuts were reviewed and applied for every domain after statistical analysis of the input grade distribution. Top cuts applied varied depending on the lithological feature:

- Syenite pipes: Joanne = 19 g/t; Jenny = 21 g/t; Heffernans = 50 g/t; Heffernans skin = 4 g/t; Ganymede 21 g/t.
- CSZ: 26 g/t
- Syenite pipe intersection volume with CSZ: 30 g/t
- Syenite dykes: from 8 g/t to 14 g/t
- Carbonatite dykes/sills: 4 g/t
- Porphyry dykes:4 g/t
- Unconstrained mafic mineralisation: 10 g/t

Variography was undertaken on every domain, which also determine a range for the search ellipse to use in the estimation process.

Variograms were modelled for the major syenite pipes first, and then syenite dykes. Many domains showed good experimental variograms. Other variograms were coerced into the plane of the geological object orientations, and then variograms were constructed with reasonable structures evident for most, although some required variograms to be informed entirely by the orientations and geometries of the object, which was also guided by modelling of other, better-informed domains.

The estimate of gold grades was undertaken using the 1 m composite samples. Kriging neighbourhood analysis (KNA) was used to determine the optimal estimation parameters for the Joanne syenite pipe, and then these parameters were confirmed as optimal for several other major domains with sufficient data for analysis.

An unrotated block model was created in MGA Zone 51 grid to cover the extent of the deposit. A parent block size of 10 m x 10 m x 5 m (X x Y x Z) was chosen subcelled to an eighth in each direction, which was supported by drill hole spacing in X and Y directions. This block size was also selected for planning of a bulk scale deposit, and to reduce the file size for such a large deposit. The deposit has been drilled at a density of 20 m by 20 m in the resource development areas between the pits, and 10 m by 10 m or tighter for grade control within the pits. The dominant 1 m sample length, the shallow-dipping orientation of the CSZ and mineralisation direction, and the current Jupiter bench height of 5 m support the block height.

For all domains other than the mafic mineralisation, the parameters for the estimate employed from the results of the KNA included a four-pass expanding search ellipse radii of 30 m, 40 m, 100 m, and 1000 m in the major direction, using the anisotropic ratios from the variograms to define the search ellipse, and minima of 8, 8, 6 and 2 in each search pass, and maxima of 20, 20, 20, and 10 respectively in search each pass, and with a maximum of six samples per hole in each search pass.

The grades are elevated within the pipes, and although statistically there is no hard-boundary, there are short-ranged gradational decreases proximally from the pipes and within the CSZ. Therefore, soft boundaries for the CSZ within the syenite pipes were used, while a hard-boundary was employed for the CSZ material outside of the syenite pipes.

Dynamic anisotropy in the first estimate pass only was employed for 20 of the 55 domains that displayed geologically reasonable, broad curvatures. Low resolution Leapfrog model centre planes were exported to Surpac to calculate the dip and dip direction of the triangle polygons for assignment of blocks within the polygons. The major-semimajor ratio was set to 1 to avoid the logical error in the Surpac process where changes in dip from sub-vertical across 90° from the original angle causes the plunge to be invalid. Also, Surpac does not dynamically alter the angle of the variogram model.

Mafic mineralisation was unconstrained within the remainder of the rock volume. The estimate used inverse distance (ID) cubed (ID<sup>3</sup>) with a single isotropic search ellipse of 40 m, a minimum of 8 and maximum of 16 samples, and a maximum of 4 samples per drill hole, providing a localised that still smooths across

high-grade anomalies. The most reasonable continuity was visualised at 0.3 g/t, and therefore blocks below 0.3 g/t were set to 0 g/t.

The core-immersion method determinations from Jupiter diamond core number 21,910 on a variety of whole, half and quarter core, approximately 10% of which are from the top 50 m of the hole, although some of these may have been drilled from pit floors or other in-pit platforms. The number of density determinations by core diameter is shown by Table 5.

Hole Diameter	Count
HQ2	567
HQ3	5,679
NQ2	14,254
PQ	7
PQ2	718
PQ3	685
TOTAL	21,910

Table 5:density determinations by core diameter.

Quantitative gamma-density measurements were captured on six Ganymede GC holes and four Doublejay resource development holes in February 2021 by Surtech to mitigate the risk of the lack of density determinations in oxide and transitional material.

Void space has been accounted for in the industry-standard, immersion method core density determination process.

The data were adjusted for measured porosity in fresh Ganymede and Doublejay material utilising borehole magnetic resonance (BMR) data. The BMR data quantitatively assesses the porosity of the material logged, from which the percentage of porosity was removed to provide an in-situ, dry bulk density. A porosity of 5% and 3% was applied to the density of fresh material respectively for Ganymede and Doublejay. Porosity values of 10% for oxide and 7.5% for transitional were assumed. Densities assigned to the Jupiter MRE by material type are shown in Table 6.

Oxidation	Lithology	Density
oxide	Basalt unmineralised	1.8
oxide	Basalt	1.8
oxide	ISY	2
oxide	CSZ	1.8
oxide	CSZ-ISY	1.6
oxide	Basalt	1.8
oxide	Porphyry	1.6
oxide	Carbonatite	1.4
transitional	Basalt unmineralised	2.2
transitional	ISY	2
transitional	CSZ	2.2
transitional	CSZ-ISY	2
transitional	Basalt	2.2
transitional	Porphyry	2
transitional	Carbonatite	1.8
fresh	Basalt unmineralised	2.85
fresh	ISY	2.75
fresh	CSZ	2.85
fresh	CSZ-ISY	2.75
fresh	Basalt	2.85
fresh	Porphyry	2.75
fresh	Carbonatite	2.6

Table C. densities assi	anad to the lunite	· MDE hu avidatio	a and lithe leave
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#### **CLASSIFICATION**

The Mineral Resources have been classified based on the guidelines specified in The JORC Code. Classification level is based on:

- Drill density data
- Geological understanding
- Quality of gold assay grades
- Continuity of gold grades
- Economic potential for mining.

For Indicated Mineral Resources, statistical consideration has been employed to assess the grade estimate quality in considering large, contiguous, and coherent zones of blocks form zones where:

- Large areas are formed that have been grade control drilled, but also extending out to where drill hole spacing reaches 20 m to 20 m max.
- Estimation was chiefly undertaken in search passes of 1 and 2.
- Number of samples was predominantly near the optimum.
- Slope of regression formed large volumes of > 0.4 with cores of 0.6.

For Measured Mineral Resources, large contiguous volumes were required that that had reached a GC drill spacing of 10 m by 10 m, or not more than 20 m by 20 m near the GC drilling areas and where very high grade continuity was established.

The remainder of the mineralisation was classified as Inferred.

#### **CUT-OFF GRADE**

The MRE has been reported above a lower cut-off of 0.5 g/t Au above a RPEEE pit optimisation shell, and above a lower cut-off of 2.0 g/t Au below the same RPEEE shell, which has included the following parameters and assumptions detailed in independent technical studies to target a bulk, low-grade open-pit mining scenario:

- Gold price of A\$2,400/oz.
- Pit overall slope angles: oxide 42°, transitional 45°, fresh 55°.
- No ore loss or dilution.
- Processing recovery of 92% for all material types.
- Gold royalty of 2.5%.
- Processing costs of \$23.43/t, derived from:
- The current cost processing of 4.24/t and \$2.48/t G&A for 2.5 Mt/a
- An independent scoping study in 2019 to expand the mill throughput by 1 Mt/a to support the mining of a low-grade, expanded bulk mining open pit opportunity, was costed at \$11.70/t, which has been increased by 30% to reflect the inflationary pressure on supply and construction.
- $\circ~$  The weighted average processing cost for 3.5 Mt is ~\$21.66 and \$1.77/t G&A for \$23.43/t.
- Mining costs: \$4.21/t average across the variable costs for depth and material type.
- Geotechnical inputs are derived from detailed geotechnical investigations completed by geotechnical consultants.
- The reporting cut-off parameters were selected based on known open pit economic cut-off grades.
- The potential to extract mineralisation via underground mining methods has not been considered due to the depth of drilling and mineralisation.

#### MINING AND METALLURGICAL METHODS AND PARAMETERS

The ore is being processed at the adjacent Jupiter Processing Facility, part of the Mt Morgans Gold Operation. Recoveries achieved to date are 91%.

Dacian mined Jupiter via open pit methods from December 2017 to June 2022. It is assumed that the same mining methods will be applicable for extraction of in-situ material included in this MRE update.

# **APPENDIX 2 – JORC TABLE 1**

## SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling -problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed	<ul> <li>Surface reverse circulation (RC) drilling chips and diamond drilling (DD) core informed the Jupiter Mineral Resource estimate (MRE) update.</li> <li>For Dacian RC holes, face sampling hammer bits with size from 5" to 5%" were used (99% of reverse circulation (RC) holes).</li> <li>The historic drilling that informs the MRE has been almost entirely mined or represents an insignificant proportion of the informing data.</li> <li>The historic drilling that informs the MRE has been almost entirely mined or represents a minor proportion of the informing data.</li> <li>Industry standard tools for sampling the style of deposit have been used, and QAQC protocols reviewing sampling have ensured the sampling meets acceptable levels for informing the MRE.</li> <li>Dacian surface diamond core was sampled as half core at 1m intervals or to geological contacts. To ensure representative sampling, half core samples were always taken from the same side of the core.</li> <li>Dacian RC holes were sampled over the entire length of hole on 1 m intervals via an on-board cone splitter, except recent exploration holes that targeted deep syenite mineralisation, where 4 m samples.</li> <li>QAQC protocols ensure samples achieved representative splits of the rock mass.</li> <li>For the Exploration Target CSA Global has relied on Dacian's representation of the verification of the sampling techniques. The sampling techniques have also been reviewed by the Dacian Competent Person's and in their opinion, provides sufficient confidence that sampling was performed to adequate industry standards and is fit for the purpose of planning exploration programmes and generating targets for investigation.</li> <li>Dacian surface RC holes were sampled over the entire length of hole. Dacian RC drilling was sampled at 1 m intervals via an on-board cone splitter to achieve approximately 3 kg samples.</li> <li>Dacian surface RC holes were sampled over the entire length of hole. Dacian RC drilling was sampled</li></ul>
Drilling techniques	information. Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Drilling that informed the Mineral Resource estimate (MRE) was exclusively surface drilling, which included 11,140 RC holes for 407,758 m, 118 diamond drill (DD) holes for 43,274.2 m, and 65 RC holes with DD tails for 21,206.2 m. All holes considered to have sufficient quality by the Competent Person were used to inform the estimate, of which 99% were drilled by Dacian.</li> <li>Drilling of 1,490 RC for 56,644 m (1,224 for 38,223 m being grade control drilling), 50 Diamond holes for 29,089 m, and 16 RC pre-collar holes with diamond tails for 7,521 m by Dacian in 2021 through 2023 that has been included since the previous MRE in June 2021 (Dacian, 2021) permitted an update of the MRE for the Jupiter deposit.</li> <li>For historical RC drilling, where available the original logs and</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>retained by Dacian as either original hard copies or as scanned copies.</li> <li>Dominion Mining Limited drilled 93*, 94* and 95* prefixed holes (168 holes) Ausdrill, Robinsons and Drillex RC rigs. 1 m samples were collected using a riffle splitter. Only samples expected to be anomalous were sent to the onsite lab for analysis.</li> <li>and one Dominion hole were removed from the resource modelling database,</li> <li>The following number of holes with specified prefixes were ignored or removed from the MRE, as their data were considered unreliable: <ul> <li>14 of the 39 "95*" prefixed holes</li> <li>184 "HRC*" prefixed holes</li> <li>Five of the "HD*" prefixed holes</li> <li>95JPRC005, OLD004</li> </ul> </li> </ul>
		<ul> <li>149 of Dacian's RC holes were removed, as their data had not been acquired in time, or were dummy entries in the database that had not been drilled.</li> <li>The Jupiter area includes many historic drilling types not used in the MRE.</li> <li>Dacian Diamond drilling was mostly carried out with NQ2 sized equipment, along with minor HQ3 and PQ2, using standard tube. Surface drill core was orientated using a Reflex orientation tool.</li> <li>Dominion holes (94MCRC and 95MCRC holes) were drilled with RC rigs utilising face-sampling hammers for maximum sample return.</li> <li>Other than the drill type being RC, nothing is known about the MM historic holes.</li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>Recoveries from Dominion drilling, while not recorded in the database, were noted as being generally greater than 60%.</li> <li>Recoveries from other historical holes are unknown.</li> <li>Recoveries from Dacian diamond drilling were measured and recorded into the database.</li> <li>Recoveries in fresh material generally achieved &gt; 90% and were still twically high in the shallow oxide zone and the transitional zone</li> </ul>
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Dacian RC holes were drilled with a powerful rig with compressor and booster compressor to ensure enough air to maximise sample recovery. The splitter is cleaned at the end of each rod, to ensure efficient sample splitting and reduce contamination. The weight of each sample split was monitored. Drilling is stopped if the sample split size changes significantly.</li> <li>Dacian RC drilling sample volumes, quality and recoveries are monitored by the supervising geologist, with a geologist always supervising RC drilling activities where practical to ensure good recoveries</li> </ul>
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	<ul> <li>No relationship has been observed between sample recovery and grade.</li> </ul>
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	<ul> <li>All diamond drill holes were logged for recovery, RQD, geology and structure. For Dacian drilling, diamond core was photographed both wet and dry.</li> <li>Structural measurements were taken using a kenometer to record alpha and beta angles relative to a bottom of hole line marked on the oriented core. The quality of the bottom of hole orientation line is also recorded.</li> <li>All Dacian drill holes were logged in full.</li> <li>All RC holes were logged for geology, alteration, and visible structure.</li> <li>All RC chip trays were photographed.</li> <li>All drill holes were logged in full.</li> <li>RC drilling was logged by passing a portion of each sampled metre into a sieve to remove rock flour from coarse chips, the chips are then</li> </ul>

Criteria	JORC Code explanation	Commentary
	Whether logging is qualitative	<ul> <li>washed and placed into metre marked chip trays for logging. Where the material type does not allow for the recovery of coarse rock chips the rock flour is retained as a record. The un-sieved sample is also observed for logging purposes. The detail is considered common industry practice and is at the appropriate level of detail to support mineralization studies.</li> <li>Dacian's DD core was photographed wet and dry, and geotechnically logged to industry standards.</li> <li>All Dominion RC holes have lithological, weathering and mineralisation information stored in the database.</li> <li>For historical RC drilling, where available the original logs and laboratory results are retained by Dacian as either original hard copies or as scanned copies.</li> <li>The Competent Person is satisfied that the logging detail supports the MRE.</li> <li>All holes were logged qualitatively by geologists familiar with the</li> </ul>
	or quantitative in nature. Core (or costean, channel, etc) photography.	<ul> <li>geology and control on the mineralisation for various geological attributes including weathering, primary lithology, primary &amp; secondary textures, colour and alteration.</li> <li>For Dacian drilling, diamond core was photographed both wet and dry. For RC drilling chip trays are photographed. Diamond core is retained on site</li> </ul>
	The total length and percentage of the relevant intersections logged.	<ul> <li>All holes are logged qualitatively by geologists familiar with the geology and control on the mineralisation for various geological attributes including weathering, primary lithology, primary &amp; secondary textures, colour and alteration.</li> <li>For Dacian drilling, diamond core was photographed both wet and dry. For RC drilling chip trays are photographed. Diamond core is retained on site</li> </ul>
Sub-sampling techniques and sample	If core, whether cut or sawn and whether quarter, half or all core taken.	<ul> <li>Core was cut in half using an automatic core saw at either 1m intervals or to geological contacts; core samples were collected from the same side of the core where orientations were completed.</li> </ul>
preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	<ul> <li>Dacian RC samples were collected via on-board cone splitters. Most samples were dry, any wet samples are recorded as wet, this data is then entered into the sample condition field in the drillhole database.</li> <li>The RC sample was split using the cone splitter to give an approximate 3kg sample. The remainder was collected into a plastic sack as a retention sample. At the grain size of the RC chips, this method of splitting is considered appropriate.</li> <li>Historical RC samples were collected at the rig using riffle splitters if dry while wet samples were bagged for later splitting. Samples condition was not recorded for most of the historic sampling. For historic RC drilling, information on the QAQC programs used is limited but acceptable with original batch reports having been reviewed and retained by Dacian.</li> <li>The historic drilling that informs the MRE has been almost entirely mined or represents an insignificant proportion of the informing data.</li> </ul>
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<ul> <li>For RC drilling, sample quality was maintained by monitoring sample volume and by cleaning splitters on a regular basis. If due to significant groundwater inflow or drilling limitations sample quality became degraded (consecutive intervals of wet sample or poor sample recovery), the RC hole was abandoned.</li> </ul>
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<ul> <li>For Dacian RC drilling, RC field duplicates were taken from the on-board cone splitter at 1 in 50 or 1 in 25 for exploration and infill drilling respectively.</li> <li>Externally prepared Certified Reference Materials were inserted within the sample stream for QAQC.</li> <li>For Dacian samples analysed by fire assay, sample preparation was conducted by a contract, National Association of Testing Authorities (NATA) Australia accredited laboratory. After drying, the sample is subject to a primary crush, then pulverised to 85% passing 75µm.</li> <li>For Dacian samples analysed by PAL, dried samples were subjected to a</li> </ul>

Quality         of minary and secondary crush to 90% passing 3 mm, before being come split into a 60% gustample, The 600 gustample was then pulverised to 90% passing 80um and simultaneously leached for 60 minutes in a PAL machine using 2&cg of grinding media, 1 Little of water and 2 x 10g cyanide tablets (75% NaCN). The leached solution was separated by centrifuge and analysed by PAS.           Measures token to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second hat samples.         FOR Dacian CG drilling, field duplicates are generally taken a 1 in 25 samples.           Whether sample sizes ore oppropriote to the grain size of the moterial being sampled.         Sample sizes are considered appropriate to correctly represent the gold mineralisation based on the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and assay value ranges for gold.           Quality and and borotrory tests         The nature, quality and appropriate static total.         • For Dacian drilling prior to December 2020, the analytical technique used was 40g or 50g lead collection fire assay and analytical technique was a 40g or 50g lead collection fire assay and analytical technique was considered appropriate for this project.           Vesters         For Dacian drilling prior to December 2020, the analytical technique was a 40g or 50g lead collection fire assay and analyted by A0si. technique which analyses a 50g subsample. The leached solution is analysed by AAS FAL is a partial digetion method.           No information regarding the analysis of the historic holes is known.         For Dacian drilling advironal parkey and tanalysis anal is considered appropriate for this project.	Criteria	JORC Code explanation	Commentary
Whether sample sizes are appropriate to the grain size of the material being sampled.         Sample sizes are considered appropriate to correctly represent the gold mineralisation based on the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and assay value ranges for gold.           Quality of and appropriate notice of the assaying and laboratory procedures used and whether the technique is considered partial or total.         For Dacian drilling prior to December 2020, the analytical technique used was 40g or 50g lead collection fire assay and analysed by Atomic considered partial or total.           First sets         Considered partial or total.         For Dacian drilling prior to December 2020, the analytical technique used was 40g or 50g lead collection fire assay and analysed by Atomic considered appropriate in the construct sets is a commonly used method for gold analysis and is considered appropriation holes were analysed at Bureau Vertures in Perth or Kalgoorite, Western Australia. This is a commonly used method for gold analysis and is considered appropriation holes were analysed at their onsite lab using fire assay (50g). The remaining 19 holes were analysed at their onsite lab using fire assay (50g). The remaining 19 holes were analysed set were assayed using fire assay (50g). The remaining 19 holes were analysed is their onsite lab using fire assay (50g). The remaining 19 holes were analysed is their onsite lab using fire assay (50g). The remaining 19 holes were analysed is their onsite lab using fire assay (50g). The remaining 19 holes were analysed is their onsite lab using fire assay (50g). The remaining 19 holes were analysed is their onsite lab using fire assay (50g). The remaining 19 holes were analysed is their onsite lab using fire assay (50g). The remaining 19 holes were asubayed at their onsite lab using entitide of the fore		Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling	<ul> <li>primary and secondary crush to 90% passing 3 mm, before being cone split into a 600g subsample. The 600 g sample was then pulverised to 90% passing 80um and simultaneously leached for 60 minutes in a PAL machine using 2kg of grinding media, 1 Litre of water and 2 x 10g cyanide tablets (75% NaCN). The leached solution was separated by centrifuge and analysed by AAS.</li> <li>No information is available for the historic holes.</li> <li>For Dacian exploration DD drilling field duplicates were not taken.</li> <li>FOR Dacian RC drilling, field duplicates are generally taken a 1 in 25 samples.</li> </ul>
Quality assay data and paproprioteness of the assaying and laboratory procedures used and whether the technique is considered partial or total.• For Dacian drilling prior to December 2020, the analytical technique used was a 40g or 50g lead collection fire assay and analysed by Atomic Absorption Spectrometry (AAS). This is a full digestion technique. Samples were analysed at Bureau Veritas in Perth or Kalgoorlie, Western Australia. This is a commonly used method for gold analysis and is considered appropriate for this project.• For in-pit RC GC drilling after December 2020, samples were analysed at the onsite SGS laboratory, using a Pulverise and Leach (PAL) technique which analyses a 600g subsample. The leached solution is analysed by AAS. PAL is a partial digestion method.• Most of the Dominon holes were analysed at their onsite lab using fire assay (50g). The remaining 19 holes were analysed standards (1 in 20) and blanks (1 in 20) and blanks (1 in 20) and blanks (1 in 20).• For Dacian trilling analysed at are submitted around observed mineralisation.• For Dacian drilling, QAQC procedures involved the use of certified reference materials, standards (1 in 20) and blanks (1 in 20) and blanks (1 in 20).• Results were assessed as each laboratory batch was received and were acceptable in all cases.• No QAQC chicludes the use of internal standards using certified reference material, blanks, splits and replicates.• No QAQC tack has been reviewed for historic drilling, atthough mine production and twinned drill holes have validated drilling results. The historic drilling that informs the MKE has been almost entirely mined or represents an insignificant proportion of the informing data.• For geophysical tools, spectrometers, handheld XRF parameters used in dt		Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>Sample sizes are considered appropriate to correctly represent the gold mineralisation based on the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and assay value ranges for gold.</li> </ul>
reading times, calibrations determined by the density caliper arm. The data were further adjusted by total paracity determined by the density caliper arm.	Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<ul> <li>For Dacian drilling prior to December 2020, the analytical technique used was a 40g or 50g lead collection fire assay and analysed by Atomic Absorption Spectrometry (AAS). This is a full digestion technique. Samples were analysed at Bureau Veritas in Perth or Kalgoorlie, Western Australia. This is a commonly used method for gold analysis and is considered appropriate for this project.</li> <li>For in-pit RC GC drilling after December 2020, samples were analysed at the onsite SGS laboratory, using a Pulverise and Leach (PAL) technique which analyses a 600g subsample. The leached solution is analysed by AAS. PAL is a partial digestion method.</li> <li>Most of the Dominion holes were analysed at their onsite lab using fire assay (50g). The remaining 19 holes were assayed using fire assay at Analabs.</li> <li>No information regarding the analysis of the historic holes is known.</li> <li>For Dacian drilling analysed at Bureau Veritas, sieve analysis was carried out by the laboratory to ensure the grind size of 85% passing 75µm was being attained.</li> <li>For Dacian surface RC and diamond drilling, QAQC procedures involved the use of certified reference materials, standards (1 in 20) and blanks (1 in 50). For diamond drilling additional coarse blanks and standards are submitted around observed mineralisation.</li> <li>For Dacian in-pit RC drilling, QAQC procedures involved the use of certified reference materials, standards (1 in 20).</li> <li>Results were assessed as each laboratory batch was received and were acceptable in all cases.</li> <li>Laboratory QAQC includes the use of internal standards using certified reference material, blanks, splits and replicates.</li> <li>No QAQC data has been reviewed for historic drilling, although mine production and twinned drill holes have validated drilling results. The historic drilling that informs the MRE has been almost entirely mined or represents an insignificant proportion of the informing data.</li> <li>Quantitative</li></ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>and fresh materials respectively.</li> <li>Geophysical sondes used in the wireline data capture were calibrated against known density standards and repeat logging of a calibration hole at Mt Morgans.</li> <li>Single and three arm calipers were used in-hole to identify areas where blowouts and significant aberrations in the hole rugosity were encountered; any deviations from within 20% of the nominal hole diameter were removed from the analysis.</li> <li>The wireline gamma-density data were compared to the core density for transitional material, which showed that acceptable correlations existed for inclusion of either dataset in the MRE.</li> </ul>
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	<ul> <li>Certified reference materials demonstrate that sample assay values are accurate.</li> <li>Laboratory QAQC includes the use of internal standards using certified reference material, blanks, splits and replicates.</li> <li>Commercial laboratories used by Dacian were audited in April 2021 by the Competent Person. The laboratory is monitored regularly by Dacian through QAQC practices, and strong communication channels are in place for data quality.</li> <li>The on-site laboratory visited by the Competent Person twice in December 2020, is monitored regularly by Dacian through QAQC practices, and strong communication channels are in place for data quality.</li> </ul>
		<ul> <li>Umpire laboratory test work was completed in 2019 over mineralised intersections with good correlation of results.</li> <li>Umpire testwork of grade control pulp duplicate samples from December 2020 through June 2021 between PAL/LW_AAS and FA40AAS methods showed high correlation.</li> <li>QAQC of gamma-density showed a strong positive correlation (r<sup>2</sup> = 0.88), although significant scatter was evident in the scatter plot below, indicating potential error for local gamma-density determinations. This justifies the averaging of values as opposed to estimating the density, which may result in locally inaccurate estimates due to the low number of holes (six) from which the density were determined.</li> <li>Geophysical sondes used in the wireline data capture were calibrated against known density standards and repeat logging of a calibration hole at Mt Morgans.</li> </ul>
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	<ul> <li>Significant intersections were visually field verified by company geologists.</li> </ul>
	The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<ul> <li>Twin holes have not been specifically drilled.</li> <li>In areas of grade control, the drill spacing is at 10 m by 10 m and 10 m by 8 m (X by Y), and numerous examples exist of mineralisation showing repeated visual continuity for the estimated volumes.</li> <li>Variogram models for the grade continuity incorporate a low to moderate nugget and a short-range first structure that accounts for a high proportion of the variance. Therefore, for statistical confidence, twin drilling at spacings closer than 5 m are unlikely to be valuable for informing the repeatability of the grade mineralisation, and instead the high visual continuity and density of the drill spacing has informed the confidence in the estimate.</li> <li>Prior to 2021, primary data was collected into a custom logging Excel spreadsheet and then imported into a DataShed drillhole database. The logging spreadsheet included validation processes to ensure the entry of correct data.</li> <li>From January 2021, primary data was collected into LogChief logging</li> </ul>
		software by MaxGeo and then imported into a Data Shed drillhole database. Logchief has internal data validation.

Criteria	JORC Code explanation	Commentary
	Discuss any adjustment to assay data.	<ul> <li>Assay values that were below detection limit are stored in the database in this form but are adjusted to equal half of the detection limit value for grade estimates. The following records were set to half detection limit:</li> </ul>
		<ul> <li>Negative below detection limit assays</li> <li>Zeros</li> <li>Nulls</li> </ul>
		<ul> <li>Unsampled intervals</li> <li>Any negatives below -1 were set to null, as these represent lab error codes such as samples not received, samples destroyed in sample preparation, insufficient sample volume/weight etc.</li> </ul>
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	<ul> <li>All hole collars and down-hole surveys were captured in MGA94 Zone 51 grid using differential GPS to 3 cm accuracy.</li> <li>Mine workings support the locations of historic drilling.</li> <li>Dacian RC holes were down hole surveyed with a north seeking gyro tool at 30m intervals down the hole.</li> <li>Dacian in-pit RC holes were down hole surveyed with a north seeking gyro tool, where the depth was greater than 30m.</li> <li>Dacian DD holes were down hole surveyed with a north seeking gyro tool at 12m intervals down the hole.</li> <li>Historic holes have no down hole survey information recorded</li> </ul>
	Specification of the grid system used.	<ul> <li>The grid system used is MGA94 Zone 51 grid.</li> </ul>
	Quality and adequacy of topographic control.	<ul> <li>Topographic surfaces were prepared from detailed ground, mine and aerial surveys.</li> <li>Material above all surfaces was coded in the model as depleted to ensure no mineralisation above these surfaces was included in the MRE.</li> <li>The Competent Person is satisfied that the topographic control provides the quality required to report the Mineral Resources in accordance with the JORC Code.</li> </ul>
Data spacing and distribution	Data spacing for reporting of Exploration Results.	<ul> <li>For the Dacian RC exploration drilling, the nominal hole spacing of surface drilling is approximately 40 m x 40 m in the core of the mineralisation. Surrounding this is 80 m x 120 m.</li> <li>Surface Diamond (DD) and Reverse Circulation (RC) drilling was carried out over the Jupiter prospect with holes angled to intersect the targeted mineralised zones at optimal angles.</li> <li>In-pit RC holes were dominantly angled to the west to intersect the prevailing east dip and plunge of the mineralisation, but also vertical to target mineralisation zones at optimal angles.</li> </ul>
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	<ul> <li>In areas of grade control, the drill spacing is at 10 m by 10 m and 10 m by 8 m (X by Y), which has informed the MRE.</li> <li>The mineralised domains have sufficient continuity in both geology and grade to be considered appropriate for the Mineral Resource estimation procedures and classification applied under the JORC Code, and mining has further supported this.</li> <li>The data spacing in the Exploration Target areas is insufficient to support Mineral Resource estimation. Additional drilling and geological studies are required to establish appropriate geological and grade continuity.</li> </ul>
	Whether sample compositing has been applied.	<ul> <li>Samples have been composited to 1m lengths in mineralised lodes for statistics and estimation.</li> <li>Compositing was completed using a 'best-fit' method in Datamine software, which forces all samples to be included in one of the composites by adjusting composite lengths, while keeping it as close as possible to 1m.</li> </ul>
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	<ul> <li>Dacian RC holes were drilled at a planned bearing of 270° (azimuth) relative to MGA94 grid north at a planned dip of -60° which is approximately perpendicular to orientation of mineralised lodes within the open pit, and favourable for the sub-vertical syenite dykes and pipes.</li> <li>The majority of surface and in-pit RC holes have been drilled to</li> </ul>

Criteria	JORC Code explanation	Commentary
		approximately 270 <sup>o</sup> relative to MGA94 grid north, although due to the location of the historic pit, it was necessary to drill some holes in variable directions due to access and operational restrictions, deeper targets, and some minor variable lode orientations.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>No orientation-based sampling bias has been identified in the data.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Chain of custody is managed by Dacian. Samples were stored on site until collected for transport to the sample preparation laboratory in Kalgoorlie. Dacian personnel had no contact with the samples once they are picked up for transport. Tracking spreadsheets were used by Dacian personnel to track the progress of samples.</li> </ul>
Audits o reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>Regular reviews of RC and DD sampling techniques are completed by the Dacian Senior Geologists and the Principal Resource Geologist, which concluded that sampling techniques are satisfactory.</li> <li>Commercial laboratories used by Dacian were audited in April 2021 and November 2022 by the Competent Person.</li> <li>The Competent Person visited the on-site contract laboratory twice in December 2020 and again in 2021 to review processes. The laboratory was performing at and producing results for a standard required to report a MRE in accordance with the JORC Code.</li> <li>Review of Dacian QAQC data has been carried out by company geologists.</li> </ul>

## SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held	<ul> <li>Jupiter is an active open pit mine which started in December 2017. The Jupiter deposit is located within Mining Lease 39/236, which is wholly owned by Mt Morgans WA Mining Pty Ltd, a wholly owned subsidiary of Dacian Gold Ltd and subject to a tonnage-based royalty.</li> <li>The above tenements are all in good standing</li> </ul>
	at the time of reporting along with any known impediments to obtaining a license to operate in the area.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Open pit mining occurred at Jupiter (Doublejay – Jenny, Joanne and Potato Patch open pits) in the 1990's.</li> <li>Other companies to have explored the deposit area include Whim Creek Consolidated NL, Dominion Mining, Plutonic Resources, Homestake Gold, Placer Pty Ltd, Barrick Gold Corporation, Croesus Mining NL, Metex Resources NL, Delta Gold, and Range River Gold.</li> <li>175,000 ounces of gold was mined from two open pits called the Jenny and Joanne pits (collectively now termed the Doublejay pits) during the period 1994-1996.</li> <li>High-grade ore was trucked to the Westralia plant, while the Dump Leach was established from low-grade mineralisation claiming to have a grade range of 0.4 g/t – 1.5g /t. The ore blocks were defined by grade control drilling, and the mining of ore was supervised by production geologists.</li> <li>Since then, Dacian solely has drilled and sampled the Jupiter deposit.</li> <li>A high proportion of the historical data is confirmed by recent drilling and is of a quality that, in the Competent Person's view, supports the</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Jupiter is an Archean syenite related, lode gold style deposit. The material mined incorporates stacked, gently east-dipping mafic lodes, syenite stocks, and felsic porphyry intrusives.</li> <li>The Jupiter deposit is interpreted to comprise structurally controlled mesothermal gold mineralisation related to syenite intrusions within altered basalt. Most mineralisation is associated with large, shallow, east-dipping shears, most significantly developed where these shears crosscut syenite intrusions or the altered basalt proximal to the syenite intrusions. Within and partially projecting only a short distance out of the Joanne syenite pipe, three carbonatite dykes have been modelled. These are weakly mineralised compared with the Joanne syenite pipe.</li> <li>On the north side of the Heffernans pipe, a skin-like syenite dyke or radial intrusion has formed with a distinct, relatively consistent band of sericite-hematite-altered basalt separating it from the main pipe by approximately 5 m - 10 m. The skin syenite is interpreted to have intruded in a halo of weakness from prolonged alteration and fluid movement from the multiple pulses or extend intrusive timeframe of Heffernans syenite, which caused an alternate intrusive plane to form and provide a favourable intrusive split from the main pipe at depth.</li> <li>A deposit-scale, shallow east-dipping structure known as the Cornwall Shear Zone (CSZ) transects all geology, which is most highly mineralised in its intersection of the major syenite pipes. Although the tenor decreases distally from the syenite pipes, the CSZ still presents itself as a higher-grade feature and mineralisation target. Several CSZ-parallel mineralisation lodes in the hanging wall above the CSZ have been mined with some success, although these are largely depleted through mining. The CSZ is clearly defined in the Joanne, Jenny, and Heffernans pipes, and through some Saddle Zone dykes, but becomes gradually less</li> </ul>

Criteria	JORC Code explanation	Commentary
Drill hole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should	<ul> <li>distinct elsewhere, with no clear boundary to its extinction.</li> <li>The intersection of the structures controlling the lodes with the major syenite pipes has provided shallow- to moderate dipping- planes for deposition, around which fuzzy halos of elevated gold grades have disseminated. However, no clear boundaries or grade cut-offs are evident, and placing such boundaries has been shown to cause high-grade biases.</li> <li>The footwall lodes previously modelled have been shown through the updated drilling to be very short-range extensions of mineralisation projecting from the intersection of the syenite features. Comparison between numerous estimation techniques in the Doublejay area above the existing final design, showed little departure from total metal balance, and the potential to high-grade bias the grades estimated when hard-boundary wireframes are employed. Additionally, some lodes are shown with grade control to be west-dipping, and in places easily mistaken for a shallow-dip when instead the mineralisation is a skin around the syenite bodies.</li> <li>Porphyry dykes intruding the earlier basalt and syenites display complex geometries, particularly around and in the intrusions of the Heffernans and Ganymede pipes, and their chiefly east-west strike paralleling the prevailing drilling orientation to the west hampers their interpretation. These are partly mineralised at the boundaries and where they include wall rock, but when present as thicker and more massive porphyry, they are mineralisation depleting features.</li> <li>Exploration results are not being reported.</li> </ul>
	case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated	<ul> <li>Exploration results are not being reported.</li> <li>Data are composited prior to statistics and estimation to provide closer to equal-length, unbiased grades. Otherwise, no aggregation of data has been undertaken.</li> <li>Exploration results are not being reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been used.
Relationship between mineralisation widths and	These relationships are particularly important in the reporting of Exploration Results.	<ul> <li>Dacian RC holes were dominantly drilled at a bearing of 270° (azimuth) relative to MGA94 51 grid north at a dip of -60°.</li> </ul>
intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	<ul> <li>The holes are drilled approximately perpendicular to the orientation of the expected trend of mineralisation</li> </ul>
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	<ul> <li>It is interpreted that true width is typically 60% - 100% of down hole intersections depending on the orientation of the target which varies along strike and down dip.</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views	<ul> <li>Relevant diagrams have been included within the main body this ASX release.</li> </ul>
Balanced Reporting	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Besource estimation	<ul> <li>All Dacian hole collars were surveyed in MGA94 Zone 51 grid using differential GPS to within 3cm.</li> <li>Dacian holes were down-hole surveyed with a north seeking gyroscopic tool at 30m intervals to 20cm accuracy.</li> </ul>
	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Exploration results are not being reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>In February 2020, downhole/wireline logging was undertaken by Surtech Systems to achieve gamma-density values at 10 cm spacing downhole for two grade control holes.</li> <li>The logging in counts-per-second (c/s) used a compensated density logging tool equipped with a Cs137 radioactive source.</li> <li>The CPS values were then converted to physical property values using calibrations determined specifically for each physical property parameter.</li> <li>The final data were supplied in a Logging ASCII Standard (CSV) file format.</li> <li>The type of instrument used was a 9239 Dual Density Instrument.</li> <li>Single and three arm callipers were used in-hole to identify areas where blowouts and significant aberrations in the hole rugosity were encountered; any deviations from within 20% of the nominal hole diameter (1,460 mm for RC) were removed from the analysis.</li> <li>The internal consistency of the downhole gamma-density data was</li> </ul>

Criteria	JORC Code explanation	Commentary
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step- out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<ul> <li>demonstrated by repeat logging of against a calibration hole at Mt Morgans.</li> <li>Prior to mobilisation to site, the instrument was calibrated immediately against standard materials for density.</li> <li>Calliper-filtered gamma density readings related to transitional mineralisation, were compared against dry water immersion/Archimedes method core density samples from the diamond drill core.</li> <li>A high correlation was shown between the gamma-density and core density determinations.</li> <li>The wireline geophysical logging for a nearby deposit, Ganymede, also included borehole magnetic resonance (BMR) data, which quantitatively assesses the porosity of the material logged. The BRM logs were used to adjust the gamma-density values to a dry density.</li> <li>Mining studies for open-pit potential.</li> <li>Concept Study on the potential for an underground bulk mining opportunity below the reasonable prospects for eventual economic extraction (RPEEE) shell.</li> <li>If the UG Bulk Mining concept study is favourable, then additional drilling into the UG target area of the Exploration Target to upgrade to mineral resource.</li> <li>Where required, infill drilling to test the volumes defined for mining potential to increase Mineral Resource confidence.</li> </ul>

## SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

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

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	<ul> <li>The data base has been systematically audited by a Dacian geologist. Original drilling records were compared to the equivalent records in the data base (where original records were available). Any discrepancies were noted and rectified by the data base manager.</li> <li>Data were loaded into DataShed back-end SQL Server DB on a related data schema, providing a referentially integral database with primary key relations and look-up validation fields.</li> <li>Additional validation has been completed in Surpac, Leapfrog and Datamine by Dacian geologists, with any validation issues relayed to DB administrator.</li> </ul>
	Data validation procedures used.	<ul> <li>Historic logs were located and additional logging information, particularly relating to weathering, was input into the database.</li> <li>Ongoing database (DB) validation has been undertaken by a dedicated DB administrator communicating with geologists as the primary data sources and labs.</li> <li>Extensive validation was undertaken by the database administrator.</li> <li>All Dacian drilling data has been verified as part of a continuous validation procedure. Once a drill hole is imported into the data base reports of the collar, down-hole survey, geology, and assay data are produced. These are then checked by a Dacian geologist in geological software and any corrections are sent to the data base administrator to complete.</li> <li>All data were checked for the following errors:         <ul> <li>Duplicate drillhole IDs</li> <li>Missing collar coordinates</li> </ul> </li> </ul>
		<ul> <li>Mis-matched or missing FROM or TO fields in the interval tables (assays, logging etc)</li> <li>FROM value greater than TO value in interval tables</li> <li>Non-contiguous sampling intervals</li> <li>Sampling interval overlap in the assay table</li> <li>The first sample in the interval file not starting at 0 m</li> <li>Interval tables with depths greater than the collar table EOH depth.</li> <li>Survey data were checked for large deviations in azimuth and dip between consecutive records, with none found.</li> </ul>
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<ul> <li>The Competent Person has made several site visits during 2020 through 2023 and has worked with the site-based geologists and mining engineers on the MRE and reconciliation processes relevant to this estimate.</li> <li>Inspection of the equipment used by Dacian's drilling contractor at the time of the visits found all operators working to a standard required to report a MRE in accordance with the JORC Code.</li> <li>The Competent Person visited the on-site laboratory twice in 2020 and 2021 to review processes, and each of the two National Association of Testing Authorities (NATA) accredited offsite contract laboratories in 2021, then the primary NATA laboratory in Kalgoorlie in November 2022. Frequent monitoring of the laboratory performance and communication has ensured that all laboratories were performing at and producing results at a standard required to prepare in and report a MRE in accordance with the JORC Code.</li> </ul>
	undertaken indicate why this is the case.	
Geological interpretatio n	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	<ul> <li>The confidence in the geological interpretation around the GC and resource development drilling areas is very high where the drilling density is at 10 m by 10 m out to 20 m by 20 m and is based on mining exposure as well as a high drilling density. Visual confirmation of geological domain and lode position and orientations has been observed and mapped in the operating open pit.</li> <li>Ongoing infill drilling has confirmed geological and grade continuity of the syenite features and Cornwall Shear Zone objects.</li> <li>The geological model supporting the Jupiter Mineral Resource estimate comprises the major syenite pipes of Doublejay (including Joanne and Jenny), Heffernans, and Ganymede from south to north, which drilling has not closed out at depth, nor the mineralisation hosted by them.</li> <li>The geological model also includes 27 syenite dykes of varying orientation,</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>although typically north-striking, with several converging into a complex breccia/stockwork pipe in the Saddle Zone between the Jenny and Heffernans pipes. The syenites are all mineralised, although more weakly with increasing depth within the syenite dykes. The model also includes three carbonatite dykes or sills within and proximal to the Joanne pipe, 18 porphyry dykes, the Cornwall Shear Zone (CSZ), and mafic mineralisation and waste in the remainder of the geological model's volume.</li> <li>The mafic mineralisation was previously modelled at a cut-off of 0.3 g/t Au. This has been shown to have poor continuity below the CSZ through mining, despite some visual continuity. Therefore, in several estimation approaches all of which confirmed a immaterial metal balance in the Doublejay area above the existing final design, the unconstrained ID<sup>3</sup> approach to estimate grade in the mafic was selected. Below 0.3 g/t was set to waste, as above this provided the best continuity visually for all types – east-dipping, west-dipping, and syenite skin mineralisation. It also provides visually more continuous average grades above the previous mining cut-off of 0.5 g/t. Above this cut-off causes low continuity, while below causes sub grade smearing of significant, geologically unreasonable volumes.</li> <li>Although the metal balance in the unconstrained mafic mineralisation is stable across many estimation approaches for the critical Doublejay zone of the</li> </ul>
		current pit design, the confidence is only high in grade control areas.
	Nature of the data used and of any assumptions made.	<ul> <li>Geological and structural logging and pit mapping have been used to assist identification and delineation of lithology and mineralisation.</li> <li>All lithological domains were treated as hard-boundaries for statistics and estimation, as it is assumed the lithological variability plays a significant part in gold tenor, which has been determined through visually distinct differences in gold grade continuity between domains, and statistics that show changes in average grades across boundaries in contact analysis are dependent on the geological contacts, despite statistical thresholds that indicate no hard boundaries. This assumption has been confirmed in mining reconciliation.</li> </ul>
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	<ul> <li>Alternate interpretations of the mafic mineralisation may consider a different gold grade cut-off for the modelling of mineralisation and estimation approach, which may increase the tonnages and lower the grade for a reduced grade cut-off or vice-versa. Review of multiple estimation approaches in critical zones where drilling supports more accurate estimates has shown a similar balance of metal is achieved.</li> <li>The approach used, together with the estimate within the comprehensive lithological model as the mineralisation control, provide the suitable framework to support a low-grade, bulk mining scenario.</li> </ul>
	The use of geology in guiding and controlling Mineral Resource estimation.	<ul> <li>The modelling of mineralisation described above has reflected the observations.</li> <li>No mineralisation cut-off is statistically supported and was previously introduced to delineate zones of higher grades for ore markouts of a selective mining operation. Therefore, modelling of these lodes has not been incorporated into the MRE update, and instead a highly localised estimate using ID<sup>3</sup> was employed after confirmation that this provided the best continuity for all mafic mineralisation types – east-dipping, west-dipping, and syenite skin mineralisation.</li> <li>The approach used, together with estimation within the comprehensive lithological model as the mineralisation control, provide the suitable framework to support a low-grade, bulk mining scenario.</li> </ul>
	The factors affecting continuity both of grade and geology.	<ul> <li>The lithological units modelled show clear grade boundaries visually, although are statistically more gradational. The orientation of mineralisation is confirmed by variography to be moderately shallow dipping to the east across all major syenite bodies and which parallels the CSZ.</li> <li>Within the minor syenite units, this is also confirmed where the minor structures (w.r.t the CSZ) cross-cut the syenites and offset them with irregularity and very low continuity. These are small zones within a larger, subvertical syenite dyke that is overall a similar but marginally lower grade, and therefore the estimate has preferenced the CSZ</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and	<ul> <li>The Jupiter Mineral Resource area extends over a strike length of 2,080m (from 6,811,400mN – 6,813,480mN) and includes the 800m vertical interval from 500mRL to -300mRL, but the constraint within the pit optimisation leaves the depth of the reported MRE to be variable, and no more than ~0 m RL.</li> </ul>

Criteria	JORC Code explanation	Commentary
	depth below surface to the upper and lower limits of the Mineral Resource.	
Estimation and modelling techniques	Mineral Resource. The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	<ul> <li>Samples were composited to 1 m intervals ("composites") based on assessment of the raw drillhole sample intervals. Statistics were weighted by composite lengt in Supervisor".</li> <li>Statistical top-cut review was undertaken for each domain individually.</li> <li>To model the spatial continuity of gold grades, variography was conducted in Supervisor" 8.12. Statistics were length-weighted.</li> <li>Composite samples were declustered prior to variography for the statistical domains that contained lodes. A normal-score transform was applied to all data.</li> <li>After variograms were modelled, a back-transform model was exported with Surpac rotations for use in Surpac estimation parameter files.</li> <li>Variograms were modelled for the major syenite pipes first, and then syenite dykes. Many domains showed good experimental variograms. Other variograms were coerced into the plane of the geological object orientations, and then variograms were constructed with reasonable structures evident for most, although some required variograms to be informed entirely by the orientations and geometries of the object, which was also guided by modelling of other, better informed domains.</li> <li>The estimate of gold grades was undertaken using the 1 m composite samples. Kriging neighbourhood analysis (KNA) was used to determine the optimal estimation parameters for the Joane syenite pipe, and then these parameters were confirmed as optimal for several other major domains with sufficient data for analysis.</li> <li>An unrotated block model was created in MGA Zone 51 grid to cover the extent of the deposit. A parent block size of 10 m x 10 m x 5 m (X x Y x Z) was chosen subcelled to an eighth in each direction, which was supported by drill hole spacing in X and Y directions. This block size was also selected for planning of a bulk scale deposit, and to reduce the file size for such a large deposit. The deposit has been drilled at a density of 20 m by 20 m in the resource development areas between the pits, and 10 m by 1</li></ul>
		<ul> <li>Ordinary kriging was adopted to interpolate grades into cells for the mineralised domains. The technique is considered appropriate to allow the geostatistical continuity determined from variography to weight samples during estimation.</li> <li>The estimate employed OK within a 3-pass expanding search ellipse strategy.</li> </ul>
		<ul> <li>A the estimate employed of within a spass expanding search empse strategy, honouring the anisotropic ratios orthogonally, which was based on KNA results to improve the local grade estimate without potentially material error, while ensuring a globally unbiased estimate per domain. All blocks were estimated within the first two passes, hence no grade assignment was necessary.</li> <li>For the unconstrainted mafic mineralisation, the most reasonable continuity</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>was visualised from the estimated blocks at 0.3 g/t, and therefore blocks below 0.3 g/t were set to 0 g/t.</li> <li>An inverse distance squared (ID<sup>2</sup>) grade estimate was also ran as a check against the OK estimate, which employed the same parameters.</li> <li>Grades have been interpolated into the porphyries, as they are partly mineralised at the boundaries and where they include wall rock, but when present as thicker and more massive porphyry, they are mineralisation depleting features. Therefore, they have been treated with a conservative top-cut of 4 g/t Au.</li> </ul>
		<ul> <li>Samples were length-weighted for the estimate.</li> <li>Dynamic anisotropy in the first estomatpass only was employed for 20 of the 55 domains that displayed geologically reasonable, broad curvatures. Low resolution Leapfrog model centreplanes were exported to Surpac to calculate the dip and dip direction of the triangle polygons for assignment of blocks within the polygons. The major-semimajor ratio was set to 1 to avoid the logical error in the Surpac process where changes in dip from sub-vertical across 90° from the original angle causes the plunge to be invalid. Also, Surpac does not dynamically alter the angle of the variogram model.</li> <li>Mafic mineralisation was unconstrained within the remainder of the rock volume. The estimate used inverse distance (ID) cubed (ID3) with a single isotropic search ellipse of 40 m, a minimum of 8 and maximum of 16 samples, and a maximum of 4 samples per drill hole, providing a localised that still smooths across high-grade anomalies. The most reasonable continuity was visualised at 0.3 g/t, and therefore blocks below 0.3 g/t were set to 0 g/t.</li> </ul>
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	<ul> <li>The estimation technique is appropriate to allow mining studies of a bulk, low-grade system, which exploration has identified.</li> <li>Previous and various other check estimates, including CIK, ID<sup>2</sup>, and a bulk grade wireframing approach at a nominal 0.3 g/t – 0.5 g/t Au cut-off ignoring the geological boundaries, all provided similar overall tonnages with similar grades within the same estimated volumes for the critical undepleted zone within the existing pit design.</li> <li>An inverse distance squared (ID<sup>2</sup>) grade estimate was also run as a check against the OK estimate, which employed the same parameters.</li> <li>Production figures are not able to be reconciled with confidence, as the estimate of the unconstrained mafic mineralisation does not adhere to the same selectivity constraints required for the previous MRE that used thin, hardboundary wireframes to provide ore markouts on a smaller mining scale.</li> </ul>
	Theassumptionsmaderegardingrecoveryofby-products.Estimationofdeleteriouselementsorothernon-gradevariablesofeconomicsignificance(eg sulphur for acidminedrainagecharacterisation).	<ul> <li>No assumptions have been made regarding the recovery of by-products.</li> <li>Analysis of the assays from the Pulp-and-Leach (Leachwell<sup>™</sup>) sample preparation method used by the site-based laboratory (provides an estimate of the cyanide-soluble portion of gold) against duplicate fire assays has shown a very high correlation, indicating that copper oxides are either not present or are in a form that has limited and manageable impact on gold recovery.</li> </ul>
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	<ul> <li>A parent block size of 5 m by 5 m by 5 m (X by Y by Z) was chosen to allow the Mt Marven block model outside of the Marven South lodes to be combined with the updated Marven South MRE update.</li> <li>In the mine area, most of the deposit has been sampled at a density of 5 m x 10 m (on a rotated drilling grid to enable drilling perpendicular to the mineralisation direction)</li> <li>The block size is not appropriate for the drill spacing density less than 20 m by 20 m, but the classification for these volumes is appropriately considered.</li> <li>Sub-celling to 1/5 of parent cell in all directions has provided appropriate resolution for volume control to account for the moderately thin lode wireframer.</li> </ul>
	Any assumptions behind modelling of selective mining units. Any assumptions about	<ul> <li>An assumption has been made that the SMU will be 5 m by 5 m by 5 m in keeping with the SMU of the Mt Marven pit. The estimate for the Mt Marven MRE has been undertaken on a block size matching the SMU, which was required to be combined with the Marven South MRE update into one model for the Mt Marven MRE.</li> <li>While some copper assays have been taken, the dataset is not sufficient to</li> </ul>
	correlation between variables.	enable correlation analysis.

Criteria	JORC Code explanation	Commentary
	Description of how the geological interpretation was used to control the resource estimates.	• Geology and grade are used to define the mineralisation lodes at Mount Marven. Within each lode, whose modelling is outlined above, the estimate was constrained to blocks within the lode wireframe using only top-cut composited samples from the corresponding lode.
	Discussion of basis for using or not using grade cutting or capping.	<ul> <li>High-grade top-caps were applied to limit the influence of extreme outliers on the grade estimate. The top-caps were applied to the mineralisation domains following statistical analysis.</li> <li>The top-cuts were kept at around 1% – 2% of the grade distribution for each lode. Top cuts applied varied depending on the lithological feature:</li> <li>Syenite pipes: Joanne = 19 g/t; Jenny = 21 g/t; Heffernans = 50 g/t; Heffernans skin = 4 g/t; Ganymede 21 g/t.</li> <li>CSZ: 26 g/t</li> <li>Syenite pipe intersection volume with CSZ: 30 g/t</li> <li>Syenite dykes: from 8 g/t to 14 g/t</li> <li>Carbonatite dykes/sills: 4 g/t</li> <li>Porphyry dykes:4 g/t</li> <li>Unconstrained mafic mineralisation: 10 g/t</li> </ul>
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	<ul> <li>Validation of the estimate was completed for the resource block models using numerical methods (histograms, CDFs and swath plots) and validated visually against the input raw drillhole data, declustered data, composites and blocks.</li> </ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>Tonnages and grades have been estimated on a dry in situ basis.</li> </ul>
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>The reporting cut-off parameters were selected based on known open pit economic cut-off grades.</li> <li>The potential to extract mineralisation via underground mining methods has not been considered due to the depth of drilling and mineralisation.</li> <li>The MRE has been reported above a lower cut-off of 0.5 g/t Au and within a pit optimisation shell that allows the test of reasonable prospects of eventual economic extraction (RPEEE) for the undepleted MRE which has included the parameters and assumptions below derived from independent technical studies to target a bulk, low-grade open-pit mining scenario, and without the inclusion of dilution and ore loss, as the Competent Person considers these excessive economic modifying factors, whereas the other parameters are based on in-situ material parameters or fixed costs:</li> </ul>
		<ul> <li>Gold price of A\$2,400/oz.</li> <li>Bit overall slope angles: evide 42° transitional 45° freeh 55°</li> </ul>
		<ul> <li>No ore loss or dilution.</li> </ul>
		<ul> <li>Processing recovery of 92% for all material types.</li> <li>Gold royalty of 2.5%.</li> <li>Processing costs of \$23.43/t, derived from:</li> <li>The current cost processing of 4.24/t and \$2.48/t G&amp;A for 2.5 Mt/a</li> <li>An independent scoping study in 2019 to expand the mill throughput by 1 Mt/a to support the mining of a low-grade, expanded bulk mining open pit opportunity, was costed at \$11.70/t, which has been increased by 30% to reflect the inflationary pressure on supply and construction.</li> <li>The weighted average processing cost for 3.5 Mt is ~\$21.66 and \$1.77/t G&amp;A for \$23.43/t.</li> <li>Mining costs: \$4.21/t average across the variable costs for depth and material type.</li> <li>Gold royalty of 2.5%</li> <li>Discount rate: 5%</li> </ul>
factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is	<ul> <li>Dacian mined the Jupiter deposit from 2017 through June 2022. It is assumed that the same mining methods will be applicable for extraction of in-situ material included in this MRE update.</li> </ul>
	process of determining	

Criteria	JORC Code explanation	Commentary			
	reasonable prospects for				
	eventual economic extraction to				
	consider potential mining				
	methods, but the assumptions				
	made regarding mining				
	methods and parameters when				
	estimating Mineral Resources				
	may not always be rigorous.				
	where this is the case, this				
	should be reported with an				
	mining assumptions made				
Metalluraical	The basis for assumptions or	• The ore is r	processed at the provima	al Juniter Processing Faci	lity part of the
factors or	predictions regarding	MMGO Rec	overies achieved to date	are 92%	inty, part of the
assumptions	metallurgical amenability. It is				
	always necessary as part of the				
	process of determining				
	reasonable prospects for				
	eventual economic extraction to				
	consider potential metallurgical				
	methods, but the assumptions				
	regarding metallurgical				
	treatment processes and				
	reporting Mineral Resources				
	may not always be rigorous				
	Where this is the case this				
	should be reported with an				
	explanation of the basis of the				
	metallurgical assumptions				
	made.				
Environment	Assumptions made regarding	<ul> <li>Jupiter was a</li> </ul>	an active open pit mine at	the Mount Morgans Gold	Operation until
al factors or	possible waste and process	June 2022.	All requisite environment	al approvals remain in pla	ace.
assumptions	residue disposal options. It is	Waste rock	will be stored in a conven	tional waste dump.	
	process of determining				
	reasonable prospects for				
	eventual economic extraction to				
	consider the potential				
	environmental impacts of the				
	mining and processing				
	operation. While at this stage				
	the determination of potential				
	environmental impacts,				
	particularly for a greenfields				
	advanced the status of early				
	consideration of these notential				
	environmental impacts should				
	be reported. Where these				
	aspects have not been				
	considered this should be				
	reported with an explanation of				
	the environmental assumptions				
	made.				
Bulk density	Whether assumed or	• The core-in	nmersion method dete	rminations from Jupiter	diamond core
	basis for the assumed, the	number 21	,910 on a variety of who	le, half and quarter core	, approximately
	determined the method used	10% of whi	cn are from the top 50 m	of the hole, although sor	ne of these may
	whether wet or dry the	density det	erminations by coro diam	other in-pit platforms.	me number of
	frequency of the measurements.	density det	contractoris by core uldifi	CCCT IS SHOWIT DEIUW.	
	the nature, size and	Density determi	nations by core diameter.		
	representativeness of the		Hole Diameter	Count	
	samples.		HQ3	5.679	

Criteria	JORC Code explanation	Commentary			
			NO2	14 254	
			NQZ	7	
			PQ	7	_
			PQ2	/18	_
			PQ3	685	_
			TOTAL	21,910	
		<ul> <li>Quantitative gamma-density measurements were captured on six Ganymede GC holes and four Doublejay resource development holes in February 2021 by Surtech to mitigate the risk of the lack of density determinations in oxide and transitional material.</li> <li>Densities assigned to the Jupiter MRE by material type are shown in the table below.</li> </ul>			
		Densities assign	Densities assigned to the Jupiter MRE by oxidation and litholoav		
		Oxidation	Lithology	Density	
		oxide	Basalt unmineralised	1.8	
		oxide	Basalt	1.8	
		oxide		2	
		ovide	CS7	18	
		oxide		1.0	
		oxide	Co2-IST Rosalt	1.0	
		oxide	Dasahura	1.0	
		oxide	Porpnyry	1.0	
		oxide	Carbonatite	1.4	
		transitional	Basalt unmineralised	2.2	
		transitional	ISY	2	
		transitional	CSZ	2.2	
		transitional	CSZ-ISY	2	
		transitional	Basalt	2.2	
		transitional	Porphyry	2	
		transitional	Carbonatite	1.8	
		fresh	Basalt unmineralised	2.85	
		fresh	ISY	2.75	
		fresh	CSZ	2.85	
		fresh	CSZ-ISY	2.75	
		fresh	Basalt	2.85	
		fresh	Porphyry	2.75	
		fresh	Carbonatite	2.6	
	The bulk density for bulk	Void space	has been accounted fo	r in the industry-stan	dard, immersion
	material must have been	method core density determination process.			
	measured by methods that	<ul> <li>Void space</li> </ul>	• Void space has been accounted for in the industry-standard, immersion		
	adequately account for void	method core	e density determination pr	rocess.	
	spaces (vuas, porosity, etc),	• The data w	vere adjusted for measu	ired norosity in fresh	Ganymede and
	moisture and differences	- The data w	esterial utilizing house		(DAD) data Tha
	indistate and affectives	Doublejay n	naterial utilising porenole	e magnetic resonance	(BIVIR) data. The
	between rock and alteration	BMR data c	juantitatively assesses the	e porosity of the mate	rial logged, from
	zones within the deposit.	which the p	ercentage of porosity was	removed to provide a	n in-situ. drv bulk
		density Ar	prosity of 5% and 3% was	applied to the density	of fresh material
		uensity. Ap			of fresh material
		respectively	for Ganymede and Double	ејау.	
		<ul> <li>Porosity value</li> </ul>	ues of 10% for oxide and 7	.5% for transitional we	re assumed.
	Discuss assumptions for bulk	For gamma	density, the data are ou	antitative and indepe	ndent of sample
	density estimates used in the	weight and	have been analyzed by m	odelled material types	
	ovaluation areases of the		nave been analysed by mi	sta na sel ti si si si	
	evaluation process of the	• For core immersion-method density data, no relationship to sample weight has			
	different materials.	been deterr	nined, and is expected to	be unrelated, as the o	core density data
		show little v	ariation with lithological t	vpes.	
Classification	The basis for the classification of		s been classified based of	on the guidelines speci	fied in The IOPC
clussification	the Missel Deserves inte			on the guidennes speci	neu in me joke
	the Mineral Resources into	Code. Classi	fication level is based on:		
	varying confidence categories.	<ul> <li>Drill sam</li> </ul>	ple density data		
		<ul> <li>Geologic</li> </ul>	cal understanding		
		o Ouplity	of density samples		
			a density samples		
		<ul> <li>Reliabili</li> </ul>	ty of the density estimate		
		<ul> <li>Quality</li> </ul>	of gold assay grades		
		o Continui	ty of gold grades		
		e Economi	ic notontial for mining		
		o Econom			
		<ul> <li>For Measure</li> </ul>	red Mineral Resources	(rescat = 1), the foll	owing statistical
		consideratio	ons for the quality of the gr	ade estimate were use	d to classify large.
		contiguous	and coherent zones of blo	icks:	, • 0•7
		e Della	and concrete zones of blu	15 m	
		<ul> <li>Drill hole</li> </ul>	e spacing reaches 10 m to	15 M.	
		<ul> <li>Estimati</li> </ul>	on was undertaken in seai	rch pass 1.	
		<ul> <li>Slope of</li> </ul>	regression formed large v	olumes of > 0.7.	

Criteria	JORC Code explanation	Commentary
		<ul> <li>For Indicated Mineral Resources (rescat = 2), the following statistical considerations for the quality of the grade estimate were used to classify large, contiguous, and coherent zones of blocks:         <ul> <li>Drill hole spacing reaches 20 m to 30 m.</li> <li>Estimation was chiefly undertaken in search passes of 1 and 2.</li> <li>Number of samples neared the optimum rather than the minimum for each pass.</li> <li>Slope of regression formed large volumes of &gt; 0.4 with cores of 0.6 and above.</li> </ul> </li> <li>Mineralisation was classified below the topographic and pit surfaces, except below 250 m RL for lodes with poorly informed deeper volumes, which were set to unclassified.</li> </ul>
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the denosit	<ul> <li>All factors the Competent Person has deemed relevant to the MRE have been incorporated into the classification of Mineral Resources.</li> <li>The result appropriately reflects the Competent Person's view of the deposit.</li> </ul>
Audits or	The results of any audits or	Internal audits were completed by Dacian, which verified the technical inputs,
reviews	reviews of Mineral Resource estimates.	methodology, parameters, and results of the estimate.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	<ul> <li>The accuracy of the MRE is communicated through the classification assigned to the deposit. The MRE has been classified in accordance with the JORC Code (2012 Edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this table.</li> </ul>
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	• The MRE statement relates to a global estimate of in-situ tonnes and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• Production figures are not able to be reconciled with confidence, as the estimate of the unconstrained mafic mineralisation does not adhere to the same selectivity constraints required for the previous MRE that used thin, hard-boundary wireframes to provide ore markouts on a smaller mining scale.