### **ASX ANNOUNCEMENT**

Tuesday, 3 December 2024

# Gossan Valley investment decision

29Metals Limited ('**29Metals**' or, the '**Company**') today announced Feasibility Study outcomes and Final Investment Decision ('**FID**') for the Gossan Valley project at its Golden Grove mine in Western Australia. Currency amounts in this release are in Australian dollars unless otherwise stated.

### Highlights:

- Viability of Gossan Valley as a third mining front at Golden Grove confirmed, with IRR 34%<sup>1</sup>.
- Independent and relatively shallow mining front to enhance production flexibility at Golden Grove
- Higher grade, replacement ore source for declining Scuddles ore production, extending and optimising the Golden Grove life-of-mine plan.
- Potential to extend Gossan Valley Mineral Resources, which remain open at depth.
- Finalisation of tender packages for civil earth works and surface infrastructure to progress during the Dec-Qtr-2024.

Table 1: Key Gossan Valley 2024 Feasibility Study outcomes

Metric	Units	2024 Feasibility Study
Production summary		
Initial mine life <sup>2,3</sup>	Years	7
Project mineral inventory <sup>4</sup>	Mt	2.7
Production (average) <sup>3</sup>	kt per annum	Cu: 4, Zn: 20
Financial summary		
Copper price <sup>1</sup>	US\$/lb	4.11
Zinc price <sup>1</sup>	US\$/lb	1.36
AUDUSD <sup>1</sup>	AUD:USD	0.65
Capital (establishment) <sup>5</sup>	\$m	112
LOM free cashflow	\$m	209
Discount rate	%	9
NPV (pre-tax)	\$m	110
IRR (pre-tax)	%	34

Cautionary statement: The production targets (and forecast financial information derived from productions targets) in this release include all of the reported 2023 Ore Reserves estimates for Gossan Valley Deposits Project Area, with the remainder of the project mineral inventory consisting of reported 2023 Mineral Resource estimates. The production target includes 28% Inferred Mineral Resources. The Company is satisfied that the proportion of Inferred Mineral

Resources is not the determining factor in project viability (as the project demonstrates positive economic outcomes with the Inferred Mineral Resources excluded) and that the Inferred Mineral Resources do not feature as a significant proportion early in the mine plan. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production targets outlined in this release will be realised.

#### Commenting on the investment decision, Chief Executive Officer, James Palmer, said:

"With enabling investment for Xantho Extended largely complete, Gossan Valley is the next logical development option to optimise long-term value at Golden Grove.

As the second highest grade Ore Reserve behind Xantho Extended, development of Gossan Valley optimises Golden Grove's life-of-mine production profile and enhances overall production flexibility as a relatively shallow and independent mining front."

- ENDS -

Authorised for release by the Board of Directors

#### **Enquiries**

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#### **Competent Persons Statements**

#### **Exploration results**

The information regarding exploration results in this release are based on and fairly represents information and supporting documentation compiled by Mr Lucas Williams.

Mr Williams is Group Executive, Geology & Exploration and a full-time employee of 29Metals Limited. Mr Williams is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralisation and type of deposit under consideration, and to the activity being reported on, in this release to qualify as a Competent Person as defined in the JORC Code.

Mr Williams has consented to the inclusion in this release of the information regarding exploration results in the form and context in which it appears.

#### **Golden Grove 2023 Mineral Resources Estimates**

The information regarding the 31 December 2023 Mineral Resources estimates for Golden Grove set out in this report are based on and fairly represent information and supporting documentation compiled by Luke Ashford-Hodges, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AuslMM Membership No. 328075). Mr Ashford-Hodges was a full-time employee of Golden Grove Operations Pty Ltd (a wholly owned subsidiary of 29Metals Limited) at the time of completion of the Mineral Resource estimates, Mr Ashford-Hodges ceased to be an employee of Golden Grove Operations Pty Ltd in October 2023. In January 2024 Mr Ashford-Hodges assisted by overseeing the depletion and reporting of the 2023 Mineral Resources up to the 31st of December 2023. Mr Ashford-Hodges 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 JORC Code. Mr Ashford-Hodges consents to the inclusion of the information regarding the 31 December 2023 Mineral Resources estimates for Golden Grove in the form and context in which the estimates appear.

#### **Golden Grove 2023 Ore Reserves Estimates**

The information regarding the 31 December 2023 Ore Reserves estimates for Golden Grove set out in this report are based on and fairly represent information and supporting documentation compiled by Nyasha Gwatimba, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AUSIMM Membership No. 312232). Mr Gwatimba is a full-time employee of Golden Grove Operations Pty Ltd (a wholly owned subsidiary of 29Metals Limited) and 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 JORC Code. Mr Gwatimba consents to the inclusion of the information regarding the 31 December 2023 Ore Reserves for Golden Grove in the form and context in which the estimates appear.

#### **Forward-looking statements**

This document contains certain forward-looking statements and comments about future events, including in relation to 29Metals' businesses, plans and strategies and expected trends in the industry in which 29Metals currently operates. Forward-looking statements can generally be identified by the use of words such as, "expect", "anticipate", "likely", "intend", "should", "could", "may", "plan", "predict", "propose", "will", "believe", "forecast", "outlook", "estimate", "target" and other similar words. Indications of, and guidance or outlook on future earnings or financial position or performance are also forward-looking statements.

Forward-looking statements involve inherent risks, assumptions and uncertainties, both general and specific, and there is a risk that predictions, forecasts, projections and other forward-looking statements will not be achieved. A number of important factors could cause 29Metals' actual results to differ materially from the



plans, objectives, expectations, estimates, targets and intentions expressed in such forward-looking statements, and many of these factors are beyond 29Metals' control. Statements or assumptions in this document may prove to be incorrect, and circumstances may change, and the contents of this document may become outdated as a result.

Without limiting the generality of the foregoing, 29Metals notes that instances of escalating COVID-19 infection and hospitalisation rates continue to be reported publicly. 29Metals' guidance and other forward-looking statements assume that restrictions on movement and other government intervention will not return or escalate.

Forward-looking statements are based on 29Metals' good faith assumptions as to the financial, market, regulatory and other relevant environments that will exist and affect 29Metals' business and operations in the future. 29Metals does not give any assurance that the assumptions will prove to be correct. There may be other factors that could cause actual results or events not to be as anticipated, many of which are beyond 29Metals' reasonable control.

Readers are cautioned not to place undue reliance on forward-looking statements. Forward-looking statements speak only as of the date of this document, and except where required by law, 29Metals does not intend to update or revise any forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this document.

Nothing in this document is a promise or representation as to the future, and past performance is not a guarantee of future performance. 29Metals nor its Directors make any representation or warranty as to the accuracy of such statements or assumptions.

#### ASX information – production target and forecast financial information derived from a production target

This release contains information that constitutes a production target for the Gossan Valley Project (and forecast financial information derived from that production target) for the purposes of the ASX Listing Rules. Ore Reserve and Mineral Resource estimates underpinning the production targets for the Gossan Valley Project referred to in this release were prepared by, or under the supervision of, a Competent Person in accordance with the JORC Code. Competent Person's statements are set out on page 3.

The production target for the Gossan Valley Project includes all the reported 2023 Probable Ore Reserves estimates for Gossan Valley Deposits Project Area. The production target includes relative portions of ore by category of Probable Ore Reserve (59%), Indicated Mineral Resources (13%) and Inferred Mineral Resources (28%).

The material assumptions applied in the estimation of the production target for the Gossan Valley project and forecast financial information derived from that production target are set out in the summaries of the study outcomes accompanying this release.

All Mineral Resource estimates in this presentation are reported inclusive of Ore Reserve estimates.



## **Gossan Valley Feasibility Study: Key Outcomes**

### 1. Scope

29Metals commenced Feasibility Studies for Gossan Valley in 2021, with results of an optimised study released in November 2022<sup>6</sup> (the '2022 Feasibility Study'), which assessed a higher-grade, lower tonnage operation and the use of pillars and cemented rock fill ('CRF').

This latest update to the Feasibility Study (the '2024 Feasibility Study') is a progression and optimisation of the 2022 Feasibility Study and supports a FID for the project. Specifically, the 2024 Feasibility Study incorporates: detailed design outcomes for supporting infrastructure, competitive tendering processes for the major works and underground mining contract; geotechnical assessment of box-cut and raise bore locations; mine plan optimisations; and progress on submission of applications for regulatory approvals. Unless otherwise stated, level of accuracy for capital cost and operating costs in the 2024 Feasibility Study is +/- 15%.

#### 2. Introduction

Golden Grove mine is located approximately 450 kilometres north-east of Perth and 250 kilometres east of Geraldton in Western Australia. It is an established mining operation that commenced production in 1990 and is owned and operated by 29Metals.

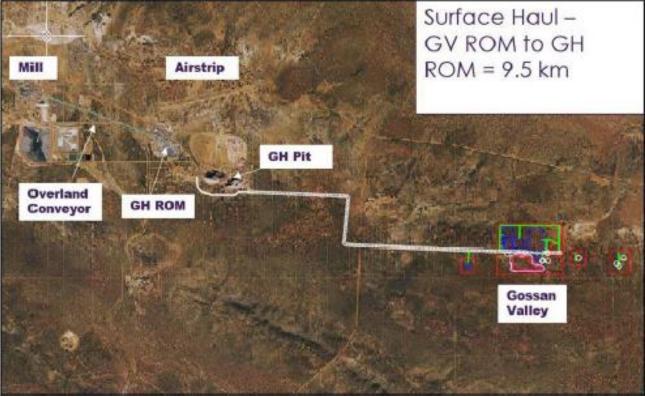
Figure 1: Golden Grove location



Gossan Hill and Scuddles are two separate underground mining fronts currently in production at Golden Grove. Gossan Valley is located south of the existing Gossan Hill mine, with ore to be hauled approximately 9.5 kilometres from the Gossan Valley Run of Mine ('ROM') to the Gossan Hill ROM where it will be stockpiled, blended and crushed before being transported to the existing mill at Golden Grove via the existing overland conveyor.



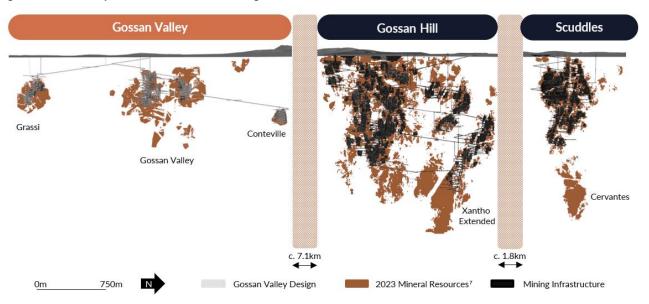
Figure 2: Site layout



Note: GH = 'Gossan Hill', Scuddles mine is located adjacent to the processing plant (Mill).

Upon development, Gossan Valley is expected to enhance overall ore production and scheduling flexibility by providing an additional independent, and relatively shallow, production front at Golden Grove.

Figure 3: Gossan Valley, Gossan Hill and Scuddles long sections





### 3. Geology

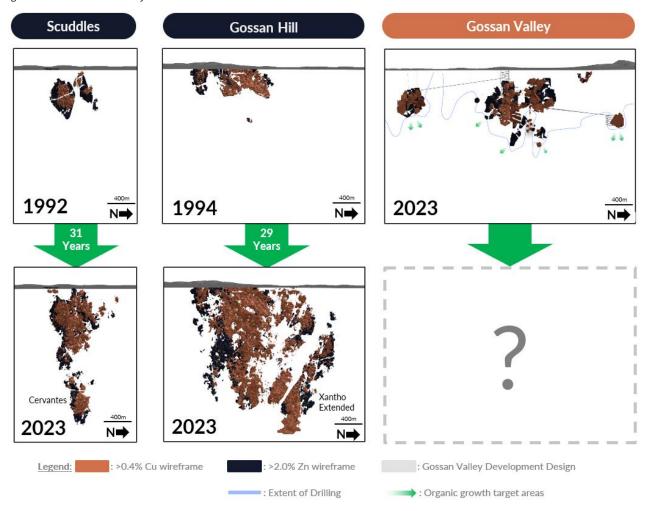
Gossan Valley is hosted in the Golden Grove Formation. Similar to Gossan Hill, the mineralisation at the Gossan Valley deposit has locally replaced sub-massive to massive magnetite in what is traditionally seen as a chalcopyrite-dominant footwall for the Gossan Hill deposit. However, at Gossan Valley the mineralisation is a combination of sphalerite and chalcopyrite.

At Gossan Valley, stringer chalcopyrite and pyrite also occur further in footwall sediments, and small lenses of sphalerite and chalcopyrite occur in the hangingwall to the main mineralised position. A number of post mineralisation dolerite intrusives crosscut the stratigraphy and mineralisation at the Gossan Valley Deposits in several generations and orientations. In turn, the dolerites are crosscut by later small rhyolite intrusions.

The Gossan Valley deposits are made up of multiple lenses within a 3.4 kilometre portion of prospective stratigraphy, extending from Grassi in the south to Conteville in the north. Some of the lenses that make up the Gossan Valley and Grassi deposits are open down plunge. The Conteville deposit remains open down plunge.

Sufficient drilling has been undertaken from surface to establish the current Mineral Resources and Ore Reserves at Gossan Valley to support an investment decision for development. Additional exploration drilling is planned from underground development levels to test potential to extend Gossan Valley Mineral Resources estimates, and potentially build on Golden Grove's long history of Mineral Resource extensions, as outlined in Figure 4.

Figure 4: Golden Grove history of extensions to Mineral Resources<sup>7</sup>





#### 4. Mineral Resources and Ore Reserves

Mineral Resources and Ore Reserve estimates for the Gossan Valley Deposits are a subset of the Golden Grove Mineral Resources estimates at 31 December 2023<sup>7</sup>. The production target for the Gossan Valley Project includes all the reported 2023 Ore Reserves estimates for Gossan Valley Deposits Project Area, with the remainder of the project mineral inventory consisting of reported 2023 Mineral Resource estimates in the Indicated or Inferred category. The production target includes 28% Inferred Mineral Resources. Refer to page 3 of this release for the Competent Person's statements.

Table 2: Gossan Valley Deposits Mineral Resources

						Grade		Contained Metal							
Project			Tonnes	Cu	Zn	Au	Ag	Pb	Cu	Zn	Au	Ag	Pb		
Area	Deposit	Category	Mt	%	%	g/t	g/t	%	kt	kt	koz	koz	kt		
		Measured	0.0	0.2	5.2	0.3	10	0.0	0	0	0	0	0		
	Gossan Valley,	Indicated	2.8	1.0	6.5	0.7	13	0.1	28	180	64	1,19 6	3		
Gossan	Felix, & Conteville	Inferred	2.6	1.1	4.8	0.5	24	0.2	29	128	42	2,00 6	5		
Valley Deposits		Total	5.4	1.1	5.7	0.6	18	0.1	57	308	107	3,20 2	8		
		Measured	-	-	-	-	-	-	-	-	-	-	-		
	Grassi	Indicated	1.4	1.1	7.2	0.5	15	0.2	15	103	21	675	3		
	GIdSSI	Inferred	0.2	1.2	2.8	0.5	19	0.1	3	6	4	138	0		
		Total	1.7	1.1	6.6	0.5	15	0.2	18	109	24	813	3		

Table 3: Gossan Valley Deposits Ore Reserves

				Grade						Contained Metal					
Project			Tonnes	Cu	Zn	Au	Ag	Pb		Cu	Zn	Au	Ag	Pb	
Area	Deposit		Mt	%	%	g/t	g/t	%		kt	kt	koz	koz	kt	
	Gossan Valley, Felix & Conteville	Proved	-	-	-	-	-	-		-	-	-	-	-	
Gossan Valley		Probable	1.0	1.2	6.7	1.0	11	0.1		12	64	31	350	1	
		Total	1.0	1.2	6.7	1.0	11	0.1		12	64	31	350	1	
Deposits		Proved	-	-	-	-	-	-		-	-	-	-	-	
Борооно	Grassi	Probable	0.6	1.1	8.2	0.5	13	0.2		6	47	8	233	1	
	_	Total	0.6	1.1	8.2	0.5	13	0.2		6	47	8	233	1	

Gossan Valley ranks as the second highest grade Ore Reserve on a copper equivalent basis at Golden Grove, second to Xantho Extended.

Figure 5: Golden Grove Ore Reserves - Cu-eq8 5.0% Xantho Extended ramping-up Grade - %Cu-eq Xantho Extended and Europa 4.5% Next logical development option Gossan Valley Deposits 4.0% Cervantes Surface 3.5% Stockpiles Hougoumont Extended & Oizon Scuddles 3.0% Gossan Hill Main 2.5% 1 2 4 Tonnes (Mt) Current ore sources Undeveloped ore sources Bubble Size (width) = Contained Cu-eq Ore Reserves (kt)



### 5. Mining

Access to Gossan Valley will be from a central boxcut located near the Gossan Valley deposit with a decline to access Grassi deposit, and a separate decline accessing Gossan Valley deposit and Conteville deposit.

The mining method will be conventional long hole open stoping with CRF, and rockfill where possible to minimise waste brought to surface. Production levels will be at 30 metres floor to floor with stope strike of 10-30 metres. Stope strategy will maintain a combination of crown, rib and sill pillars with lower grade material remaining in pillars.

The stope sequence will be top-down longitudinal retreat with each production level being accessed from the decline. Diamond drill platforms have been strategically located to cover extensive areas for both grade control and further exploration at lower depths to test for extensions to existing Mineral Resources.

All ore will be handled at Gossan Valley mine ore pad. Road trains will be used to haul ore to Gossan Hill ROM which is 9.5 kilometres (one-way) on mine lease roads.

Gossan Valley Mine design was based on mineable stopes that were generated using Deswik Stope Optimiser evaluating the June 2023 Mineral Resources Block Model using a Net Smelter Return ('NSR') cutoff assumption of \$135/t. Dilution skins of 1 metre were applied to design shapes during stope optimisation, with the associated tonnes and grade reported from the resource model. In addition, a mining recovery factor of 92% was applied for the Gossan Valley orebodies. The mine design was used to generate a mining schedule with 2.74Mt of mill feed derived from Probable Ore Reserves and, Indicated and Inferred Mineral Resource mineralisation with an average grade of 5.8% Zn, 1.0% Cu, 0.1% Pb, 0.7g/t Au and 16.3t/t Ag. A total of 29.9 kilometres of Capital decline and lateral development and an additional 8.8 kilometres of Operating development is expected to be required to achieve the schedule.

Figure 6 shows the current 2024 Feasibility Study and mine design from the 2022 Feasibility Study for reference.

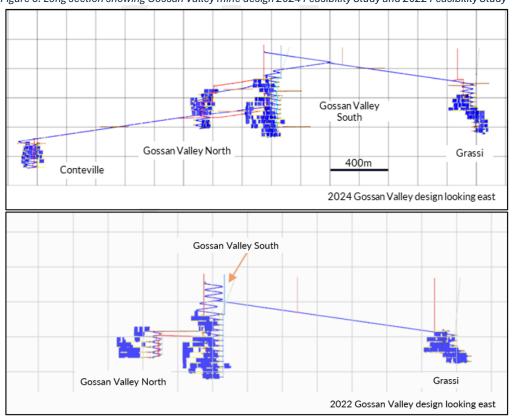


Figure 6: Long section showing Gossan Valley mine design 2024 Feasibility Study and 2022 Feasibility Study



Figure 7, Figure 8 and Figure 9 show the mining profile (tonnes mined and contained metal mined) determined in the 2024 Feasibility Study.

The mining inventory includes all the reported 2023 Ore Reserves estimates for Gossan Valley Deposits Project Area, with the remainder of the project mineral inventory consisting of reported 2023 Mineral Resource estimates in the Indicated or Inferred category. The mining inventory includes 28% Inferred Mineral Resources. The Company is satisfied that the proportion of Inferred Mineral Resources is not the determining factor in project viability (as the project demonstrates positive economic outcomes with the Inferred Mineral Resources excluded) and that the Inferred Mineral Resources do not feature as a significant proportion early in the mine plan.

In particular, as noted in Figure 7 below, the Inferred Mineral Resource Estimates are predominately in Year 7 and Year 8 of the mine plan, which is attributable to the mine plan moving into the Conteville deposit, which is currently only estimated in the Inferred Mineral Resource category. It is also noted that the Company's economic assessment of the Gossan Valley project contemplates a payback period of 5 years (during which the mine plan predominately comprises Indicated Mineral Resource estimates, as outlined in Figure 7 below).

During the initial years of the mine plan, it is intended that further in-fill drilling would be undertaken in relation to the Conteville deposit, to increase the Company's level of geological confidence in the Conteville deposit. It is intended that this further exploration drilling would be funded from the free-cash flow generated from mining operations and has been accounted for in the Company's economic assessment of the Gossan Valley project. The Company notes that the Conteville deposit is located within the broader Golden Grove mining complex, which commenced operations in 1990 and has a strong history of converting mineral resource estimates into ore reserve estimates.

Figure 7: Ore mined by Mineral Resources classification (Mt)

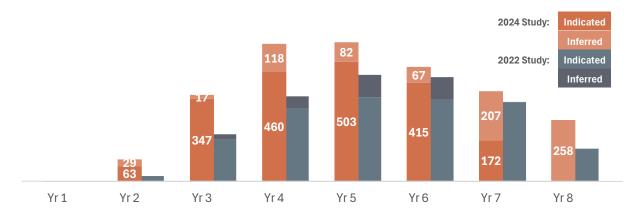


Figure 8: Copper metal mined (kt)

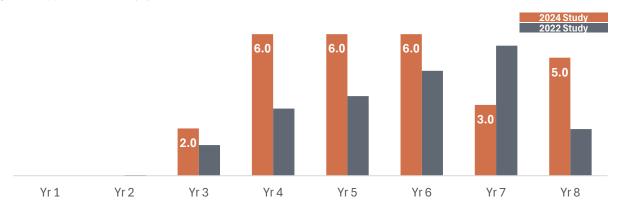
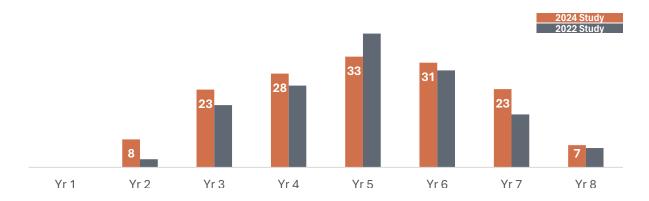




Figure 9: Zinc metal mined (kt)



### 6. Processing and metallurgical assessment

Informed by flotation test work and mineralogical investigations, the 2024 Feasibility Study assumes copper and zinc metal recoveries of 90% and 92% from Gossan Valley deposits, respectively.

Flotation test work and mineralogical investigations indicate minimal production risks in treating Gossan Valley ore. Laboratory test work was compared against metallurgical performance models for Gossan Hill ores. Performance was either in line with or exceeded current production models.

Grinding characterisation, flotation response and mineralogical evaluation work indicates ore-feed from the Gossan Valley deposits is suitable for processing in the existing Golden Grove processing facilities to produce saleable concentrate where ore-feed from the Gossan Valley deposits are used as blended or stand-alone feed.

Tailings Storage Facility ('**TSF**') 4 is due to be commissioned in Q1-2025 to support life of mine tailings storage at Golden Grove, including the processing of Gossan Valley ore.

Detailed design for processing modifications to allow the Gossan Hill paste plant to accept wet tailings in 2026 has commenced. This conversion will result in a decrease of tailings to storage of approximately 50% and further adds to the life of mine tailings capacity across Golden Grove Operations.

Figure 10: Ore milled by year (kt)

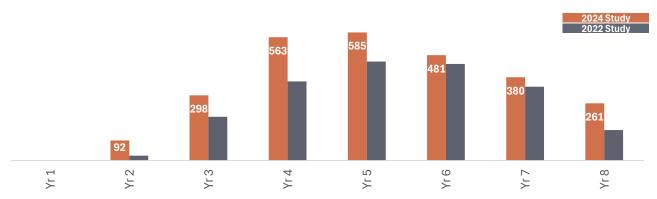


Figure 11: Copper production by year (kt)

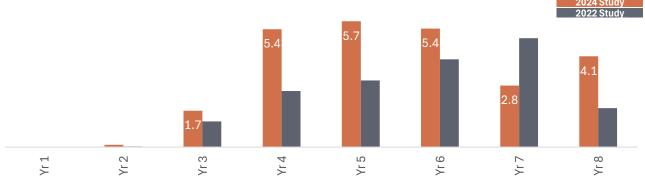
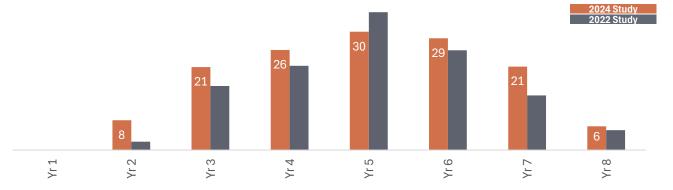


Figure 12: Zinc production by year (kt)



### 7. Infrastructure and capital expenditures

The existing Golden Grove village will be expanded to house the additional Gossan Valley workforce.

Surface infrastructure requirements incorporate extension and reticulation of services from existing operations and establishment of sufficient facilities to support the Gossan Valley operation. Specifically, this includes:

- Site roads, laydown and access control;
- Surface water management;
- Mobile equipment maintenance workshop;
- Administration building, muster room, changerooms and first aid room;
- Fuel facility;
- Explosives magazine;



- Hydrocarbon storage and bioremediation area;
- Landfill;
- Boxcut;
- Mine ore stockpile;
- Waste rock dump;
- Surface water dams; and
- High voltage power supply (extended from Gossan Hill operations).

Golden Grove is connected to grid power via the southern distribution centre at Three Springs.

Gossan Valley will be supplied via a surface 11 kV high voltage line from the substation located at Gossan Hill. To facilitate the construction of the powerline, the initial power supply for Gossan Valley during Year 1 and Year 2 will be via portable diesel generators located at Gossan Valley. This will include two hired 500 kVA diesel generators to supply the offices, workshop and other surface infrastructure and two owned 1,250 kVA generators to feed underground infrastructure. Once the operation is switched to a mains power supply system, the two 1,250 kVA diesel generators will be maintained as a backup power supply.

The surface site layout for the Gossan Valley mining services area is shown in Figure 13. Mining infrastructure is located above the Gossan Valley deposit. The topography in the area is generally flat with a gentle fall to the east. The layout is based around the existing road access from Gossan Hill, with the boxcut located at the southern end of the mining infrastructure.



Figure 13: Site layout and infrastructure

Table 4 outlines life of mine capital expenditures, including capital for the above referenced infrastructure, owners sustaining capital and capitalised development.



Table 4: Gossan Capital expenditures by line item

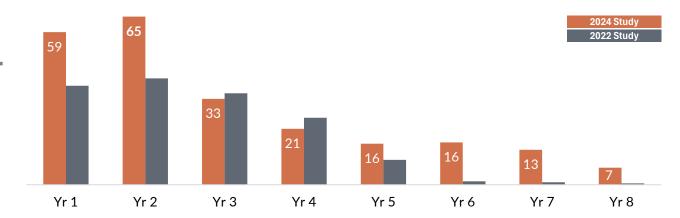
2024 Study: Life of Mine Capital	\$ million
Electrical	16
Civil Earthworks	15
Ventilation	11
Boxcut	7
Surface Infrastructure	6
Power for Capital Development	6
GV Office & Accommodation	5
Waste Rock Dump / Ore Pad	4
Underground Infrastructure	3
Other	12
Sub-total <sup>9</sup>	84
Resource Conversion Drilling	6
Capitalised Development <sup>9</sup>	140
Total Capital (LOM) <sup>10</sup>	230

Capital (establishment) of \$112 million (as referenced in Table 1, and elsewhere in this document) includes all expenditures to first ore from Gossan Valley, expected during H2-2026.

Capital costs have been based on a variety of tenders and quotations from 2023/2024 supplemented by estimates based on previous experience at Golden Grove.

Closure/rehabilitation costs are not included in the cost estimate on the basis that extensions of mining inventory over time are expected to extend mine life beyond the 2024 Feasibility Study schedule.

Figure 14: Capital expenditures by year (\$ million)



## 8. Operating Costs

Site Costs have been estimated based on tenders and quotations received during 2024, supplemented by estimates based on previous experience at Golden Grove.

Site Costs include Mining (excluding Capitalised Development costs), Processing and Maintenance costs. General and Administrative costs are considered a fixed cost of operations for the Golden Grove site and are not allocated to individual ore sources.



Unit Mining Costs are informed by market tender rates for the underground Mining works for the period Q4-2025 to Q3-2029 (Yr 1 to Yr 5). Other mining costs include costs in relation to geology and grade control, ore haulage, power, box-holing and general allowance for other ancillary costs. From end 2029 (Yr 5), a flat unit rate for the underground mining contractor and other mining costs was applied.

Unit processing and maintenance costs per tonne of ore milled were derived as the estimated incremental cost for processing of Gossan Valley ore. Incremental costs were estimated with reference to the most recent 2024 forecasts for processing and maintenance costs.

Treatment Charges and Refining Charges ('TCRC's') terms for concentrate sales, including payabilities, deductions and penalties, are informed by terms previously contracted for sales of Golden Grove Copper and Zinc concentrates.

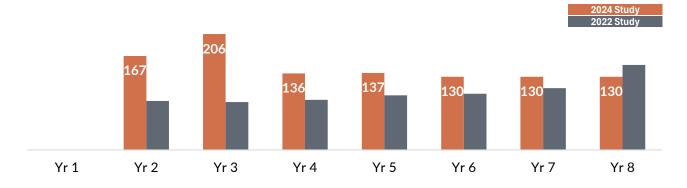
Concentrate transport charges include domestic costs inclusive of road transport from Golden Grove to the Port of Geraldton and port and loading costs, and export freight charges.

Royalties have been applied in line with currently observed rates for Golden Grove.

Table 5: Operating Costs

	Units	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8			
C1 Costs												
Mining (excl. CapDev)	\$m	0	13	54	63	66	51	40	28			
Processing & Maintenance	\$m	0	2	7	14	14	12	9	6			
TCRC's and Concentrate transport	\$m	0	8	23	33	38	36	25	12			
Physicals												
Ore Mined	kt	0	92	364	578	585	481	380	261			
Ore Processed	kt	0	92	298	563	585	481	380	261			
Unit Costs												
Mining	\$/t mined	0	143	149	109	113	106	106	106			
Processing & Maintenance	\$/t milled	0	24	24	24	24	24	24	24			

Figure 15: Site Costs<sup>11</sup> by year (\$ per tonne milled)



### 9. Revenue and marketing

The project's economic outcomes apply spot metal prices and AUD:USD exchange rate as at 15-November 2024, as set out in the table below:

	<u> </u>	
Metric	Units	Spot (15-Nov-2024)
Copper Price	US\$/lb	4.11
Zinc Price	US\$/lb	1.36
Gold Price	US\$/oz	2,572
Silver Price	US\$/oz	30
AUDUSD	AUD:USD	0.65

Table 6: 2024 Feasibility Study metal price and exchange rate assumptions

Golden Grove has been in continuous operation for over 30 years. The mine produces three concentrates comprising zinc, copper and High Precious Metal ('**HPM**').

- Zinc concentrate: is sold under long-term contract. The level of deleterious element in the product is low and thus attractive from a marketing and demand perspective.
- Low precious metal copper concentrate: this is a relatively low-grade copper concentrate with gold and silver. The concentrate does not have any deleterious elements at levels that would incur a penalty.
- HPM concentrate: This is sold on shipment-by-shipment, based on the concentrate specifications and to maximise the value of the contained metals.

Pricing is based on the value of contained metals and by-product credits.

The prices for the metals contained are set based predominantly on LME pricing, which is a mature, well established and publicly traded exchange.

Golden Grove produces concentrates that are reasonably clean with limited penalties applied which assists in the marketing and pricing achieved, the bulk of these concentrates sold to traders who then on-sell to various custom smelters, mainly in China, South Korea, and Malaysia.

The 2024 Feasibility Study economic model includes free-on-board ('**FOB**') sales of gold ore to a third-party for offsite processing. Multiple gold concentrators within trucking distance of Golden Grove have been identified as potential purchasers. Third party gold sales total \$34m revenue (based on the Company's expected share of the gold sales proceeds) over a 12-month period from Q2-2027 to Q1-2028 (based on a gold price of US\$2,250 per oz).

#### 10. Project Economics

Key operating and financial metrics for the 2024 Feasibility study are summarised in Table 7 and Table 8. The 2024 Feasibility Study outcomes have been shown against the 2022 Feasibility study outcomes for reference.

Valuation outcomes are pre-tax. Gossan Valley forms part of the 29Metals consolidated tax base which includes group tax losses at 30-June 2024 of \$140m (tax effected). Allowances for royalties has been accounted for in the site operating budgets and financial models.

Table 7: Summary of key operating and financial metrics

Metric	Units	2022 Feasibility Study	2024 Feasibility Study
Average mining rate <sup>12</sup>	ktpa	326	392
Initial mine life <sup>2, 3</sup>	Years	6	7
Project mineral inventory <sup>4</sup>	Mt	2.0	2.7
Recovery	%	Cu: 90, Zn: 89	Cu: 90, Zn: 92
Production (average) <sup>3</sup>	ktpa (metal in concentrate)	Cu: 2.9, Zn: 20	Cu: 4, Zn: 20
Site Costs <sup>11</sup>	\$/tonne milled	101	143
Capital (establishment) <sup>5</sup>	\$m	88	112
Capital (LOM) <sup>10</sup>	\$m	161	230

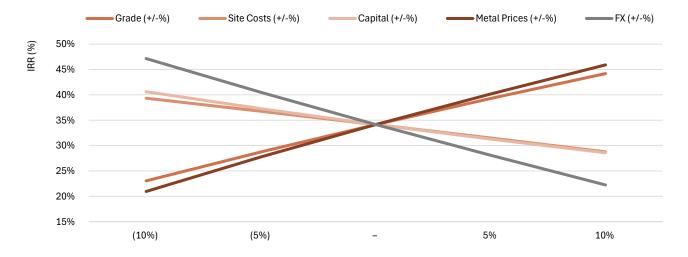
The 2024 Feasibility Study financial and economic outcomes apply spot metal prices and AUD:USD exchange rate as at 15-November 2024, as shown in Table 8.

Table 8: Gossan Valley financial and economic highlights

Metric	Units	<b>2022</b> Feasi	bility Study	2024 Feasibility Study			
ментс	Onits	Base Prices <sup>13</sup>	2022 Spot <sup>14</sup>	2022 Spot <sup>14</sup>	2024 Spot <sup>1</sup>		
Copper price	US\$/lb	3.30	3.83	3.83	4.11		
Zinc price	US\$/lb	1.10	1.36	1.36	1.36		
AUSUSD	AUD:USD	0.73	0.67	0.67	0.65		
LOM free cashflow	\$m	46	191	127	209		
Discount rate	%	8	6	9	9		
NPV	\$m	8	129	55	110		
IRR	%	10	34	23	34		

Sensitivities to the grade, Site Costs, capital, metal prices, and FX were tested across a range of  $\pm 10\%$ , as shown below:

Figure 16: Sensitivity chart of IRR to inputs





It is intended that the establishment capital expenditure will be funded from the Company's underwritten equity capital raising announced concurrently with this release. Capital expenditure and operating expenditure following first ore production from Gossan Valley are intended to be funded from Golden Grove cash-flows.

### 11. Project approvals and regulatory framework

Gossan Valley's mining tenure is a mining lease granted under the *Mining Act 1978* (WA), being M59/195, which is 100% owned by Golden Grove Operations Pty Ltd (a wholly owned subsidiary of the Company).

The approvals process is well advanced to support the development of the Gossan Valley mine.

A Mining Proposal and Mine Closure Plan, in accordance with the *Mining Act 1978* (WA), was submitted to the Department of Energy, Mines, Industry Regulation and Safety ('**DEMIRS**') in April 2024. Both the Mining Proposal and Mine Closure Plan are currently being assessed by DEMIRS with approval anticipated in late Mar-Qtr-2025.

In addition, an amendment for the Ground Water Licences has been submitted to Department of Water and Environmental Regulation ('**DWER**') and an amendment to the Native Vegetation Clearing permit has been submitted to DEMIRS, approvals are anticipated by end of 2024.

A Native Vegetation Clearing Permit approval was received in late 2020 for 110 ha, an amendment for an additional 15 ha submitted in June 2024. This is currently processing through the approval process and is expected to be granted by end 2024.

All other mining and environmental approvals have been obtained, including: Works Approvals and an Environmental Licence; and Dangerous Goods licences.

### 12. Environment, heritage and social impacts

The broader Golden Grove complex is already established, having been continually operated for over 30 years. As such, all social licences to operate are already in place.

A site wide water balance for Golden Grove operations was completed in early 2024. As part of this study, optionality for the inclusion of Gossan Valley was included in the model, including underground dewatering inputs to the whole site water balance. The model showed no impacts to the site wide water balance as part of the Gossan Valley Project.

A surface water study was undertaken in 2020 to assess the impacts of Gossan Valley on the surrounding environment and to recommend any mitigation measures required. As part of these recommendations, surface water management structures are to be included as part of the Gossan Valley project.

Gossan Valley ore will be treated at the Golden Grove processing plant with tailings from the feed pumped to existing tailings storage facilities located at Golden Grove.

Cultural heritage survey was last conducted in the Gossan Valley project area during the Jun-Qtr-2023, with no areas of heritage significance or historic conservation sites found.

### 13. Project development schedule

Figure 17 outlines a summary of the project development schedule for Gossan Valley. Noting the portal firing will be dependent on receipt of Mining Proposal approval, which is expected in Mar-Qtr-2025.



Figure 17: Project development schedule

		2024	20	)25	20	026	20	027
		Q4-24	H1-25	H2-25	H1-26	H2-26	H1-27	H2-27
Approvals	Final Investment Decision (internal)							
Approvats	Mining Proposal approval (expected)							
	Long lead commitments							
Construction	Civil earthworks / Surface infrastructure							
Operational	Portal firing							
milestones	Ore production					First ore		

## 14. Risks & opportunities

Key risks identified relating to the Gossan Valley Project include:

- Gossan Valley will require regulatory approvals for a new mine. The project timetable (refer Figure 17) assumes that key regulatory approvals are obtained in Mar-Qtr-2025.
- The ore mined in the 2024 Feasibility Study is 72% and 28% of material classified as Indicated Mineral Resources and Inferred Mineral Resources, respectively. Conversion of Inferred or Indicated Mineral Resource to Measured will be required in a timely manner to support the production plan. As noted above, the Golden Grove mining complex commenced operations in 1990 and has a strong history of converting Mineral Resource estimates into Ore Reserve estimates.
- Capital and operating costs have been based on a variety of tenders and quotations from 2023/2024 supplemented by estimates based on previous experience at Golden Grove. Contingency has been applied to cost estimates. However, factors such as (but not limited to) delays in approvals, availability of funding, availability of personnel/labour could result in an increase in these costs.

A qualitative assessment of project opportunities include:

- Additional exploration drilling from underground development levels has potential to extend existing Mineral Resources and extend Gossan Valley mine life.
- Potential for adoption of enabling technology (e.g. further advances in semi-autonomous/autonomous) and equipment to improve productivity and lower operating costs.
- Potential for shared management and equipment across other Golden Grove mining fronts.

## **Appendix 1**

#### 2023 Golden Grove 2023 Mineral Resource Estimates<sup>7</sup>

The 31 December 2023 Mineral Resources estimates for Golden Grove are set out in the table below and incorporate the results of resource conversion, resource extension and grade control drilling completed since the cut-off for the previous Mineral Resources estimates for Golden Grove (31 May 2022 to 31 May 2023 for estimates other than Scuddles & Cervantes, or 31 May 2023 to 31 August 2023 for Scuddles, or 31 December 2022 to 31 August 2023 for Cervantes), depletion from production, updated resource modelling and geological interpretation, updates to the metallurgical and economic assumptions, and changes to cut-off values.

JORC Code *Table 1* disclosures for these estimates are set out in 29Metals' December 2023 Mineral Resources and Ore Reserves estimates ASX release dated 23 February 2024. All Mineral Resource estimates are reported inclusive of Ore Reserve estimates. Competent Person statements are set out on page 3 of this release.

Table 9: Golden Grove Mineral Resources

				Grade					_	Contained Metal							
Project			Tonnes	Cu	Zn	Au	Ag	Pb		Cu	Zn	Au	Ag	Pb			
Area	Deposit	Category	Mt	%	%	g/t	g/t	%		kt	kt	koz	koz	kt			
		Measured	14.2	1.7	2.4	0.7	25	0.2		245	343	336	11,431	29			
	Gossan Hill	Indicated	6.6	1.5	2.3	0.5	25	0.2		98	155	108	5,403	13			
	Main	Inferred	0.9	1.3	2.4	0.3	23	0.2		12	23	10	687	2			
		Total	21.8	1.6	2.4	0.6	25	0.2		355	521	455	17,521	44			
		Measured	2.2	2.1	5.7	0.6	24	0.2		47	128	43	1,692	4			
Gossan	Xantho Extended &	Indicated	5.8	2.0	7.5	0.9	35	0.4		119	434	165	6,498	21			
Hill Mine	Extended & Europa	Inferred	1.5	1.9	5.0	0.7	31	0.2		29	78	34	1,534	4			
	20.000	Total	9.6	2.0	6.7	0.8	32	0.3		195	640	241	9,724	29			
		Measured	0.0	2.2	0.1	0.3	17	0.0		0	0	0	1	0			
	Hougoumont	Indicated	4.7	2.1	2.4	0.5	22	0.2		98	111	76	3,241	8			
	Extended & Oizon	Inferred	1.0	2.3	1.2	0.2	10	0.1		24	12	7	329	1			
	012011	Total	5.7	2.1	2.2	0.5	20	0.2	_	121	123	83	3,571	9			
		Measured	6.7	1.7	4.0	0.6	35	0.3	_	114	272	139	7,551	20			
	Conddiae	Indicated	0.8	1.6	3.0	0.4	23	0.2		13	25	10	621	2			
Scuddles	Scuddles	Inferred	0.1	0.9	4.0	0.1	9	0.0		1	4	0	26	0			
		Total	7.7	1.7	3.9	0.6	33	0.3	_	128	302	149	8,198	22			
Mine		Measured	-	-	-	-	-	-	_	-	-	-	-	-			
	Cervantes	Indicated	4.2	1.8	5.0	0.7	34	0.3		73	208	88	4,576	14			
		Inferred	0.9	1.5	5.2	0.7	34	0.2		14	48	21	1,023	2			
		Total	5.1	1.7	5.0	0.7	34	0.3		87	256	109	5,599	16			
		Measured	0.0	0.2	5.2	0.3	10	0.0	_	0	0	0	0	0			
	Gossan Valley,	Indicated	2.8	1.0	6.5	0.7	13	0.1		28	180	64	1,196	3			
	Felix, & Conteville	Inferred	2.6	1.1	4.8	0.5	24	0.2		29	128	42	2,006	5			
Gossan	Contovato	Total	5.4	1.1	5.7	0.6	18	0.1		57	308	107	3,202	8			
Valley Deposits		Measured	-	-	-	-	-	-		-	-	-	-	-			
Deposits		Indicated	1.4	1.1	7.2	0.5	15	0.2	_	15	103	21	675	3			
	Grassi	Inferred	0.2	1.2	2.8	0.5	19	0.1		3	6	4	138	0			
		Total	1.7	1.1	6.6	0.5	15	0.2	_	18	109	24	813	3			
		Measured	0.2	4.5	2.3	1.4	91	0.9	-	9	5	9	585	2			
		Indicated	0.7	1.6	2.1	1.5	81	0.5	-	11	14	31	1,700	4			
	Oxide	Inferred	0.3	0.5	3.2	1.5	81	0.5	_	1	8	12	653	1			
Other		Total	1.1	1.9	2.4	1.5	83	0.6	-	21	26	52	2,939	7			
		Measured	-	_	_	_	_		_	-	_	-	-	-			
	Flying Hi	Indicated	-	-	_	_	_	_	_	-	-	-	-	-			
	Flying Hi	Inferred	1.0	1.8	2.0	0.5	17	0.0	_	18	20	17	526	0			



	Total	1.0	1.8	2.0	0.5	17	0.0	18	20	17	526	0
	Measured	0.2	0.7	2.0	2.2	97	0.4	2	4	15	653	1
Surface	Indicated	-	-	-	-	-	-	-	-	-	-	-
Stockpiles	Inferred	-	-	-	-	-	-	-	-	-	-	-
	Total	0.2	0.7	2.0	2.2	97	0.4	2	4	15	653	1
	Measured	23.6	1.8	3.2	0.7	29	0.2	417	753	542	21,913	57
Total	Indicated	27.0	1.7	4.6	0.6	28	0.3	455	1,229	563	23,910	68
Total	Inferred	8.6	1.5	3.8	0.5	25	0.2	131	326	147	6,922	15
	Total	59.2	1.7	3.9	0.7	28	0.2	1,002	2,309	1,252	52,745	139

Note, estimates reported in the table above, other than silver, are rounded to one decimal place. Estimates for silver are rounded to zero decimal places.

### 2023 Golden Grove Ore Reserves Estimates7

The 31 December 2023 Ore Reserves estimates for Golden Grove are set out below and incorporate changes to the Golden Grove Mineral Resources estimates (refer above), the inclusion of Cervantes below the existing Scuddles Mine, depletion for production, and changes to cut-off values and other economic assumptions (including commodity price and foreign exchange assumptions).

JORC Code *Table 1* disclosures for these estimates are set out in 29Metals' December 2023 Mineral Resources and Ore Reserves estimates ASX release dated 23 February 2024. Competent Person statements are set out on page 3 of this release.

Table 10: Golden Grove Ore Reserves

						Grade	;			Contained Metal							
Project			Tonnes	Cu	Zn	Au	Ag	Pb		Cu Metal	Zn Metal	Au Metal	Ag Metal	Pb Metal			
Area	Deposit	Asset	Mt	%	%	g/t	g/t	%		kt	kt	koz	koz	kt			
		Proved	2.5	2.0	1.5	0.7	18	0.1		50	37	51	1,440	3			
	Gossan Hill Main	Probable	0.4	1.5	2.9	0.6	26	0.1		6	12	7	340	0			
	Plani	Total	2.9	1.9	1.7	0.6	19	0.1		56	49	59	1,780	3			
	Xantho	Proved	2.5	1.7	4.8	0.5	19	0.2		42	120	39	1,532	4			
Gossan Hill Mine	Extended &	Probable	4.2	1.7	6.9	0.8	31	0.4		70	286	106	4,114	15			
Thu Phile	Europa	Total	6.7	1.7	6.1	0.7	26	0.3		112	406	146	5,646	19			
	Hougoumont	Proved	-	-	-	-	-	-		-	-	-	-	-			
	Extended &	Probable	1.7	2.1	2.3	0.5	23	0.2		35	39	27	1,261	3			
	Oizon	Total	1.7	2.1	2.3	0.5	23	0.2		35	39	27	1,261	3			
		Proved	-	-	-	-	-	-		-	-	-	-	-			
	Scuddles	Probable	0.8	1.3	3.6	0.8	32	0.3		11	30	21	851	2			
Scuddles		Total	0.8	1.3	3.6	0.8	32	0.3		11	30	21	851	2			
Mine		Proved	-	-	-	-	-	-		-	-	-	-	-			
	Cervantes	Probable	2.9	1.5	4.8	0.6	33	0.4		43	141	60	3,070	11			
		Total	2.9	1.5	4.8	0.6	33	0.4		43	141	60	3,070	11			
	Gossan	Proved	-	-	-	-	-	-		-	-	-	-	-			
Gossan	Valley, Felix &	Probable	1.0	1.2	6.7	1.0	11	0.1		12	64	31	350	1			
Valley	Conteville	Total	1.0	1.2	6.7	1.0	11	0.1		12	64	31	350	1			
Deposits	0	Proved	-	-	-	-	-	-		-	-	-	-	-			
	Grassi	Probable	0.6	1.1	8.2	0.5	13	0.2		6	47	8	233	1			
		Total	0.6	1.1	8.2	0.5	13	0.2		6	47	8	233	1			
		Proved	0.2	0.7	2.0	2.2	97	0.4		2	4	15	653	1			
Other	Surface Stockpiles	Probable	-	-	-	-	-	-		-	-	-	-	-			
	Stockpites	Total	0.2	0.7	2.0	2.2	97	0.4		2	4	15	653	1			
		Proved	5.2	1.8	3.1	0.6	22	0.2		93	161	106	3,625	8			
	Total	Probable	11.6	1.6	5.3	0.7	27	0.3		184	619	262	10,219	33			
		Total	16.7	1.7	4.7	0.7	26	0.2	_	277	780	368	13,844	41			

Note, estimates reported in the table above, other than silver, are rounded to one decimal place. Estimates for silver are rounded to zero decimal places.



### **Endnotes:**

- <sup>5</sup> Capital (establishment) of \$112 million includes all expenditures to first ore from Gossan Valley, expected during H2-2026, subject to receipt of requisite approvals and delivery on the construction and operational milestones within the timeframes as outlined in Figure 17. Level of accuracy for capital costs is +/- 15% (unless otherwise stated).
- <sup>6</sup> Refer 29Metals release to the ASX announcements platform on 22 November 2022 entitled "Golden Grove Studies".
- <sup>7</sup> Full details of 29Metals' Ore Reserves estimates for Golden Grove at 31 December 2023, including Competent Persons' statements and JORC Cote Table 1 disclosures, are set out in 29Metals' December 2023 Minerals Resources & Ore Reserves estimates released to the ASX announcement platform on 23 February 2024 (a copy of which is available on 29Metals' website at: <a href="https://www.29metals.com/investors/asx-announcements">https://www.29metals.com/investors/asx-announcements</a>).
- <sup>8</sup> The copper equivalent equation used is: Cu-eq (%) = (Cu grade (%) x Cu recovery x Cu price (\$/t) + metal grade x metal recovery x metal price (\$/t)) / (Cu price (\$/t) x Cu recovery). Metal grades as per 2023 Mineral Reserve & Ore Reserve estimates (see Appendix 1). Metal prices applied (US\$3.6/lb Cu, US\$1.2/lb Zn, US\$1,700/oz Au, US\$22/oz Ag, US\$1.0 Pb). Metal recoveries applied as per 2023 Golden Grove actuals (86.1% Cu, 85.3% Zn, 62.2% Au, 66.9% Ag, and 28% Pb). It is the opinion of 29Metals that all the elements included in the metals equivalent calculation have a reasonable potential to be recovered and sold.
- <sup>9</sup> \$84m Project Capital includes \$8m contingency, comprising contingency ranging from 0 30% for individual capital scope items. \$140m Capitalised Development include \$13m (10%) contingency.
- <sup>10</sup> Capital comprises all establishment capital, capitalised development and sustaining capital (inclusive of contingency).
- <sup>11</sup> Site Costs (2024 Feasibility Study) is the sum of mining costs (excluding capitalised development) and processing costs.
- <sup>12</sup> Average mining rate cited is Project mineral inventory divided by mine life.
- <sup>13</sup> 2022 Feasibility Study applied 'Base prices' in line with prices applied to 29Metals applied for the purposes of the Golden Grove 31 December 2021 Ore Reserves estimates. Specifically: copper price US\$3.30/lb, zinc price \$1.10/lb, gold price US\$1,446/oz, silver price US\$21/oz, AUDUSD 0.73. Full details of 29Metals' Ore Reserves estimates for Golden Grove at 31 December 2021, including Competent Persons' statements and JORC Cote Table 1 disclosures, are set out in 29Metals' December 2021 Minerals Resources & Ore Reserves estimates released to the ASX announcement platform on 11 March 2022 (a copy of which is available on 29Metals' website at: <a href="https://www.29metals.com/investors/asx-announcements">https://www.29metals.com/investors/asx-announcements</a>).
- <sup>14</sup>Spot metal and AUDUSD prices at 11 November 2022. Discount rate 6% applied to 2022 Feasibility Study (2022 Spot) for consistency with disclosures the release to the ASX announcements platform on 22 November 2022 entitled "Golden Grove Studies".



<sup>&</sup>lt;sup>1</sup> Metal prices and AUDUSD value used in the 2024 Feasibility Study are spot prices as at 15 November 2024. Specifically, copper price US\$4.11/lb, zinc price \$1.36/lb, gold price US\$2,572/oz, silver price US\$30/oz, AUDUSD 0.65.

<sup>&</sup>lt;sup>2</sup> Mine life is the number of years with metal production for the Gossan Valley 2024 Feasibility Study.

<sup>&</sup>lt;sup>3</sup> Mine life and production cited includes material classified as Inferred Mineral Resources in 29Metals Mineral Resources estimates. Refer to important information in the Cautionary statement on page 1 regarding Inferred Mineral Resources and production targets that are based in part on Inferred Mineral Resources. Average mining rate cited is Project mineral inventory divided by mine life.

<sup>&</sup>lt;sup>4</sup> Project mineral inventory refers to the material included in the 2024 Feasibility Study production profile. All material in the Project mineral inventory is wholly comprised within 29Metals' Ore Reserves and Mineral Resources estimates for Gossan Valley.