QMINES Sustainable Australian Copper

12 MARCH 2025

ANNOUNCEMENT

DEVELIN CREEK RESOURCE UPGRADE IMPROVES GROWTH & DEVELOPMENT POTENTIAL

HIGHLIGHTS

- **Updated Resource Estimate for Develin Creek now totals 4.2Mt @ 1.07% Cu, 1.16% Zn, 0.15g/t Au & 6.0g/t Ag with resource increased by 1Mt.**
- **42% increase in Indicated resources, now accounting for 70% of the mineral resource, providing greater confidence for future mine planning.**
- Following this upgrade, open pit optimisation studies have now commenced for the Scorpion and Window deposits;
- A large 10,000m drilling program has also commenced which aims to grow and confirm the Sulphide City deposit and extend Scorpion and Window; and
- **Develin Creek is now a key part of QMines' growth, with potential integration into the Mt Chalmers mine plan to extend mine life and boost economics.**

Introduction

QMines Limited (**QMines** or **Company**)(**ASX:QML**) is a Queensland-focused copper and gold exploration and development Company, aiming to become Australia's next mid-tier copper and gold producer. The Company's portfolio includes the Mt Chalmers and Develin Creek projects, both of which host significant mineral resources with strong growth potential. Both projects are located withing approximately 90km of Rockhampton in central Queensland.

In September 2025, the Company commenced a 5,000m Reverse Circulation (**RC**) infill and step out drilling program which was completed in December 2024. The drill program was designed to improve the Develin Creek resource, ugrading the resource tonnes and importantly to improve the Mineral Resource Estimate (**MRE**) from the Inferred to the Indicated category. The Company's independent MRE reporting by Hyland Geological and Mining Consultants (HGMC) can be seen in Appendix A of this announcement.

Figure 1: Location and Infrastructure surrounding the Mt Chalmers and Develin Creek projects.

Project Overview

The Develin Creek copper-zinc project is located approximately 90km northwest of Rockhampton within the exploration licence EPM 17604 and comprises multiple volcanogenic massive sulphide (**VMS**) copper-zinc deposits within an underexplored region. QMines initially acquired a 51% interest in the project from Zenith Minerals in August 2023 and secured 100% ownership in the Develin Creek project in September 2024.

The project hosts three primary deposits, Sulphide City, Scorpion and Window, which exhibit strong geological continuity, making them highly prospective for future mining operations. The updated resource estimate confirms the presence of high-grade mineralisation within the Scorpion and Window deposits, further strengthening Develin Creek's potential as a significant contributor to QMines' development pipeline.

Resource Upgrade

In September 2023, the Company completed a maiden Mineral Resource Estimate (**MRE**) for the project. Consultant resource geologists, HGMC, estimated a combined resource of **3.2Mt @ 1.05% Cu, 1.22% Zn, 0.17g/t Au and 5.9g/t Ag** as shown in Table 1[1].

QMines is pleased to announce a significant resource upgrade to the Develin Creek project, following a successful drilling program and updated geological modelling. Develin Creek now hosts an upgraded JORC 2012 compliant MRE of **4.13Mt @ 1.08% Cu, 1.16% Zn, 0.15g/t Au and 6.0g/t Ag** at a 0.3% Cu cut-off grade (Table 2).

[1] *ASX Announcement:* https://wcsecure.weblink.com.au/pdf/QML/02712799.pdf

Table 1: Develin Creek Mineral Resource Estimate - September 2023 (0.5% CuEq lower cut-off).

Classification	Tonnes (Mt)	Grade(s)			
		Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)
Indicated	1.5	1.21	1.25	0.18	7.1
Inferred	1.7	0.92	1.20	0.16	4.8
Total	**3.2**	**1.05**	**1.22**	**0.17**	**5.9**

This 2025 MRE upgrade includes a substantial increase in the Indicated Resource category. The Indicated portion of the MRE now accounts for 70% (2.88 million tonnes) of the total resource. This reflects the improved drilling density and confidence in the new geological model, and supports the future open pit mining potential at the Scorpion and Window deposits.

Table 2: Updated March 2025 Mineral Resource Estimate (0.3% Cu cut-of wireframef) – Develin Creek project.

Classification	Tonnes (Mt)	Grade(s)				
		Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)	CuEq (%)
Indicated	2.90	1.09	0.98	0.15	6.04	1.40
Inferred	1.23	0.81	1.58	0.16	6.00	1.28
Total	**4.13**	**1.00**	**1.16**	**0.15**	**6.02**	**1.37**

- *Copper Equivalent (CuEq) calculated Develinn Creek MRE using: Cu = US$4.08/lb, Zn = US$1.28/lb, Au = US$2900/oz, Ag = US$32/oz; Recoveries: Cu (90%), Zn (70%), Au (90%), Ag (90%).*

The upgraded MRE includes a new geological model and confirmed the continuity of high-grade mineralisation at Scorpion and Window. Importantly, when combined with the Mt Chalmers resource, the global resource base of QMines has grown significantly, reinforcing the Company's potential to develop a larger-scale operation. The strong copper and zinc grades at Develin Creek position the project as a key asset in QMines' portfolio, complementing the Company's broader development plans.

Table 3: Combined Mt Chalmers and Develin Creek Mineral Resource Estimate March 2025.

Deposit	Tonnes (Mt)	Grade(s)			
		Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)
Mt Chalmers	11.3	0.75	0.22	0.42	4.50
Develin Creek	4.2	1.00	1.16	0.15	6.02
Total	**15.5**	**0.82**	**0.47**	**0.35**	**5.00**

Table 4: Combined Mt Chalmers and Develin Creek Mineral Resource Estimate (Contained Metal) March 2025.

Deposit	Contained Metal			
	Cu (t)	Zn (t)	Au (Oz)	Ag (Oz)
Mt Chalmers	84,750	24,860	152,588	1,634,869
Develin Creek	42,000	48,720	20,255	812,901
Total	**126,750**	**73,580**	**172,843**	**2,447,771**

Geology & Mineralisation

The Develin Creek deposit is hosted within the Rookwood Volcanics, a sequence of Cambrian-age mafic volcanic and volcaniclastic units that have undergone extensive hydrothermal alteration. The mineralisation is classified as Volcanic-Hosted Massive Sulphide (**VHMS**), which forms as a result of seafloor hydrothermal processes, leading to the deposition of copper-zinc-gold-silver sulphide minerals in brecciated and stratiform lenses.

The mineralisation occurs as distinct massive sulphide bodies, which range in thickness from several meters up to 30 meters and display sharp contacts with the surrounding altered basaltic sequences. These deposits are typically steeply dipping (25-30° WNW) and extend from surface to depths of 80m to 200m. The sulphide assemblage includes chalcopyrite, sphalerite, pyrite, and minor galena, with copper mineralisation occurring as finely disseminated chalcopyrite intergrown with sphalerite. Significant supergene enrichment zones are also noted in near-surface portions, enhancing copper grades due to weathering and remobilisation processes.

The primary mineralised zones identified within the project are Sulphide City, Scorpion, and Window, which represent structurally controlled accumulations of VHMS mineralisation. Structural analysis suggests that the deposits were subsequently deformed by regional folding and faulting events, leading to the observed dips and localised remobilisation of mineralisation along fractures and shear zones.

Drilling & Sampling

A total of 267 drillholes, comprising diamond, reverse circulation (**RC**), and percussion drilling, have been completed over the life of the project, amounting to 49,293m of drilling. The drilling campaigns have been undertaken by QMines (2024), Zenith (2014, 2021-22), Fitzroy (2011), and Queensland Mining Corporation (1992-93), with all programs contributing to the updated resource estimate.

Drill spacing within higher confidence areas (Indicated category) is typically 20m x 20m, increasing to 40m x 40m in inferred areas. Diamond drilling has been used extensively in recent campaigns to improve structural and metallurgical understanding of the deposit. All drill core and RC samples were systematically logged for lithology, alteration, and mineralisation characteristics to ensure consistency in geological interpretation.

Samples were subjected to industry-standard analytical methods, including ICP-AES (Inductively Coupled Plasma - Atomic Emission Spectroscopy), AAS (Atomic Absorption Spectroscopy), and fire assay for gold. Certified reference materials, blanks, and duplicates were inserted at a frequency of 5% for quality control, with external laboratory check assays undertaken at independent facilities. Density measurements, using the Archimedes method, were performed on a selection of representative drill core samples, with fresh / sulphide zones precursor default density of 3.00 t/m^3 and oxide material default of 2.60 t/m^3. Mineralized oxide material bulk densities locally ranged up to approximately ~3.6 t/m^3 and mineralized fresh / sulphide material typically averaged ~3.8 t/m^3.

Mining & Metallurgy

The updated Mineral Resource Estimate (MRE) is reported at a 0.3% Cu cut-off, deemed appropriate for open-pit mining scenarios. The shallow depth of mineralisation, with significant portions occurring within 80m of the surface, suggests that open-pit mining would be the primary extraction method, with potential for underground extensions at depth.

Metallurgical test-work conducted in 2015, 2021, and most recently in 2022 demonstrate recoveries in the order of 82% Zn and 72% Cu in flotation concentrates. The flotation process testing effectively separated chalcopyrite (copper mineral) from sphalerite (zinc mineral), producing clean, high-grade concentrates. Further metallurgical optimisation is ongoing to improve gold and silver recoveries, as some precious metal content is currently reporting to tailings.

The key metallurgical characteristics of the deposit include moderate sulphide liberation, limited deleterious elements, and favourable flotation performance, indicating that standard crushing, grinding, and flotation circuits will likely be suitable for processing. Additional studies are being conducted to explore alternative processing routes, including potential gravity separation for free gold recovery and hydrometallurgical leaching for improved metal extraction.

Resource Classification

The Indicated Resource category includes areas with high-density drilling (typically 20m x 20m spacing) where geological and grade continuity is well defined. These areas have sufficient geological confidence for detailed mine planning and economic studies.

The Inferred Resource category covers regions with lower drill density (typically 40m x 40m spacing) or areas requiring additional drilling to confirm mineralisation continuity. The interpretation of these zones is based on geological projections, geophysical data, and extrapolation from known mineralised trends.

The current resource model suggests that significant expansion potential exists, particularly in the Scorpion and Sulphide City zones, where mineralisation remains open along strike and at depth. Future drilling programs will focus on infill drilling to upgrade Inferred resources to Indicated status, as well as testing new step-out targets identified through geophysical surveys.

Next Steps

- Further infill and extensional drilling to improve confidence in inferred resources and test new exploration targets.
- Detailed mining studies to optimise open-pit and underground mining scenarios.
- Expanded metallurgical testwork to refine processing methods and improve gold and silver recoveries.
- Economic assessments to determine project feasibility and potential development pathways.

Future Work

QMines has recently commenced a large 10,000m drilling program at Develin Creek, with the initial 2,000m diamond drilling program already underway. This program is focused on testing down-plunge extensions to the Develin Creek deposits, aiming to identify additional high-grade mineralisation at depth. In parallel, an 8,000m Reverse Circulation (**RC**) drilling program is scheduled to commence later this month, targeting infill and step-out drilling at the Sulphide City deposit.

This RC program is specifically designed to expand the Sulphide City resource and aim to upgrade Inferred Resource into the Indicated category in preparation for mine planning. Additional exploration drilling will target extensions to known mineralisation, particularly at Window and Scorpion, which have demonstrated strong potential for expansion.

This large-scale drilling initiative is expected to generate a steady stream of news flow and pricing catalysts for shareholders over the coming quarters, as results from both diamond and RC drilling programs are progressively announced. Concurrently, initial economic studies will assess the feasibility of integrating Develin Creek into QMines' broader development strategy.

Mt Chalmers Strategic Alignment

Given its proximity to QMines' flagship Mt Chalmers project, Develin Creek is well positioned to play a critical role in the Company's long-term development plans. The Company is currently assessing the potential to integrate Develin Creek's copper and zinc resources into an updated Mt Chalmers mine plan, expected in 2H-2025, providing additional feedstock to extend operational life and improve project economics.

By consolidating resources across both assets, QMines aims to develop a multi-deposit mining hub, leveraging synergies in exploration, development and future processing infrastructure. The recent Pre-Feasibility Study (**PFS**) for Mt Chalmers, completed in April 2024, reported a JORC 2012 Mineral Resource Estimate of **11.3Mt @ 0.75% Cu, 0.22% Zn, 0.42g/t Au, and 4.5g/t Ag.**

The addition of Develin Creek's upgraded resource **4.2Mt @ 1.08% Cu, 1.16% Zn, 0.15g/t Au and 6.02g/t Ag** further strengthens the project's future potential economics and scalability.

The Mt Chalmers and Develin Creek combined MRE now stands at 15.5Mt @ 0.82% Cu, 0.47% Zn, 0.35g/t Au and 5g/t Ag.

The Mt Chalmers Ore Reserve represents a significant step toward commercialisation, reinforcing the viability of integrating Develin Creek's upgraded resource into a larger-scale mining operation.

Competent Person Statements

Mineral Resource Estimate

The information in this report that relates to mineral resource estimation is based on work completed by Mr. Stephen Hyland, a Competent Person and Fellow of the AusIMM. Mr. Hyland is Principal Consultant Geologist with Hyland Geological and Mining Consultants (HGMC), who is a Fellow of the Australian Institute of Mining and Metallurgy and holds relevant qualifications and experience as a qualified person for public reporting according to the JORC Code in Australia. Mr Hyland is also a Qualified Person under the rules and requirements of the Canadian Reporting Instrument NI 43-101. Mr Hyland consents to the inclusion in this report of the information in the form and context in which it appears.

Exploration

The information in this document that relates to mineral exploration and exploration targets is based on work compiled under the supervision of Mr. Glenn Whalan, a member of the Australian Institute of Geoscientists (AIG). Mr. Whalan is QMines' principal geologist and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking 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 2012 Mineral Code). Mr. Whalan consents to the inclusion in this document of the exploration information in the form and context in which it appears.

Ore Reserve Mt Chalmers

Deposit[2]	Reserve Category	Tonnes (Mt)	Cut Off (% Cu)	Cu (%)	Au (g/t)	Zn (%)	Ag (g/t)	S (%)
Mt Chalmers	Proven	5.1	0.3%	0.72	0.58	0.25	4.70	5.80
Mt Chalmers	Probable	4.5	0.3%	0.57	0.37	0.29	5.50	3.60
Total[1]		**9.6**	**0.3%**	**0.65**	**0.48**	**0.27**	**5.20**	**4.30**

Mineral Resource Estimate Mt Chalmers

Deposit[3]	Resource Category	Tonnes (Mt)	Cut Off (% Cu)	Cu (%)	Au (g/t)	Zn (%)	Ag (g/t)	S (%)
Mt Chalmers	Measured	4.2	0.3%	0.89	0.69	0.23	4.97	5.37
Mt Chalmers	Indicated	5.8	0.3%	0.69	0.28	0.19	3.99	3.77
Mt Chalmers	Inferred	1.3	0.3%	0.60	0.19	0.27	5.41	2.02
Total[2]		**11.3**	**0.3%**	**0.75**	**0.42**	**0.23**	**4.60**	**4.30**

Mineral Resource Estimate Develin Creek

Deposit	Resource Category	Tonnes (Mt)	Cut Off (% Cu)	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)	Not in Mine Plan
Develin Creek	Indicated	2.9	0.3%	1.09	0.98	0.15	6.04	
Develin Creek	Inferred	1.23	0.3%	0.81	1.58	0.16	6	
Total		**4.13**	**0.3%**	**1.07**	**1.16**	**0.15**	**6.02**	

Mineral Resource Estimate Woods Shaft

Deposit[4]	Resource Category	Tonnes (Mt)	Cut Off (% Cu)	Cu (%)	Au (g/t)	Zn (%)	Ag (g/t)	Not in Mine Plan
Woods Shaft	Inferred	0.54	0.3%	0.50	0.95	-	-	
Total[3]		**0.54**	**0.3%**	**0.50**	**0.95**	**-**	**-**	

Exploration Targets Mt Chalmers

Deposit[5]	Resource Category	Tonnes (Mt)	Cu (%)	Au (g/t)	Zn (%)	Ag (g/t)	Pb (%)	Not in Mine Plan
Botos	Exploration Target	1.5 - 2.5	0.1-0.2	0.5-0.8	1.1-1.4	30-50	0.5-0.7	
Mt Warminster	Exploration Target	1.5 - 1.8	0.1-0.2	-	0.5-0.7	8-12	0.25-0.35	
Total[4]		**3.0 - 4.3**						

[1] *ASX Announcement – Mt Chalmers PFS Supports Viable Copper & Gold Mine, 30 April 2024. Rounding errors may occur.*
[2] *ASX Announcement – Mt Chalmers PFS Supports Viable Copper & Gold Mine, 30 April 2024. Rounding errors may occur.*
[3] *ASX Announcement - Maiden Woods Shaft Resource, 22 November 2022.*
[4] *ASX Announcement - QMines IPO Prospectus (Botos & Mt Warminster Exploration Targets), 4 May 2021.*

About QMines

QMines Limited (**ASX:QML**) is a Queensland focused copper and gold exploration and development company. The Company owns rights to 100% of The Mt Chalmers (copper-gold) and Develin Creek (copper-zinc) deposits, located within 90km of Rockhampton in Queensland.

Mt Chalmers is a high-grade historic mine that produced 1.2Mt @ 2.0% Cu, 3.6g/t Au and 19g/t Ag between 1898-1982.

The Mt Chalmers and Develin Creek projects now have a Mineral Resource Estimate (JORC 2012) **consists of 15.5Mt @ 0.82 % Cu, 0.47 % Zn, 0.35 g/t Au and 5 g/t Ag for 127,000 tonne Cu, 74,000 tonne Zn, 173k oz Au and 2.4 M oz Ag.**

QMines' objective is to make new discoveries, commercialise existing deposits and transition the Company towards sustainable copper production.

Project & Ownership

Mt Chalmers	100%
Develin Creek	100%

QMines Limited

ACN 643 312 104

ASX:QML

Shares on Issue

428,902,886

Unlisted Options

5,750,000

Directors & Management

Andrew Sparke
Executive Chairman

Peter Caristo
Non-Executive Director (Technical)

Glenn Whalan
Geologist (Competent Person)

James Anderson
General Manager Operations

Elissa Hansen
Non-Executive Director & Company Secretary

Compliance Statement

With reference to previously reported Exploration results and mineral resources, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parametres underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

1. ASX Announcement - Mt Chalmers Develin Creek Resource Upgrade. March 2025.

Contacts

Registered Address
Suite J, 34 Suakin Drive,
Mosman NSW 2088

Postal Address
PO Box 36, Mosman NSW 2088

Telephone
+ 61 (2) 8915 6241

Email
info@qmines.com.au

Website
qmines.com.au

Peter Nesvada
Investor Relations
peter@qmines.com.au

Andrew Sparke
Executive Chairman
andrew@qmines.com.au

Appendix A – Mineral Resource Estimate Report

1. INTRODUCTION

1.1 Develin Creek Copper-Zinc Project – Upgrade Mineral Resource Estimate

This memorandum, prepared by Hyland Geological and Mining Consultants (**HGMC**) has been requested by QMines Limited (**QML**) for general descriptive purposes and concerns a set of Mineral Resource Estimates (**MRE**) for the Develin Creek – Copper-Zinc deposit area - as at February 2025. The MRE is considered a revised estimate reported in accordance with The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012), including JORC Table 1 (Appendix 1).

The Develin Creek Copper-Zinc-Gold-Silver Project area is located in Queensland approximately 90km northwest of Rockhampton within the exploration licence EPM 17604 (Figure 1 & Figure 2 below).

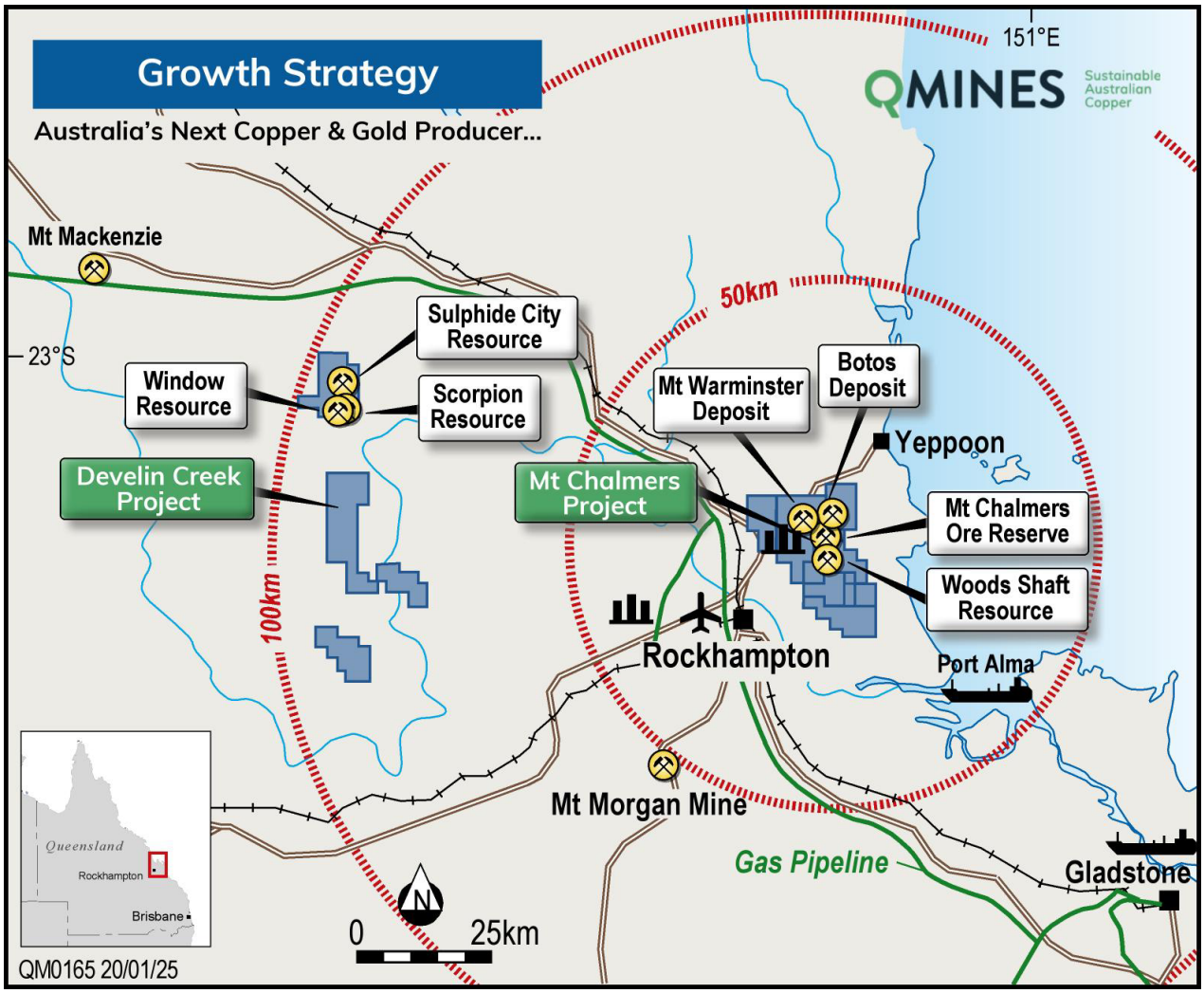

Figure 1. – Develin Creek project location.

Access to site is by means of an unsealed road via the town of Marlborough from the north or Glenroy from the south. The prospect is located within the Forrest Home Pastoral Lease and the tenement is in good standing with no known impediment to future grant of a mining lease. The deposit is located within EPM 17604 which is held 100% interest by QMines Limited and was granted in 2008 until 2026.

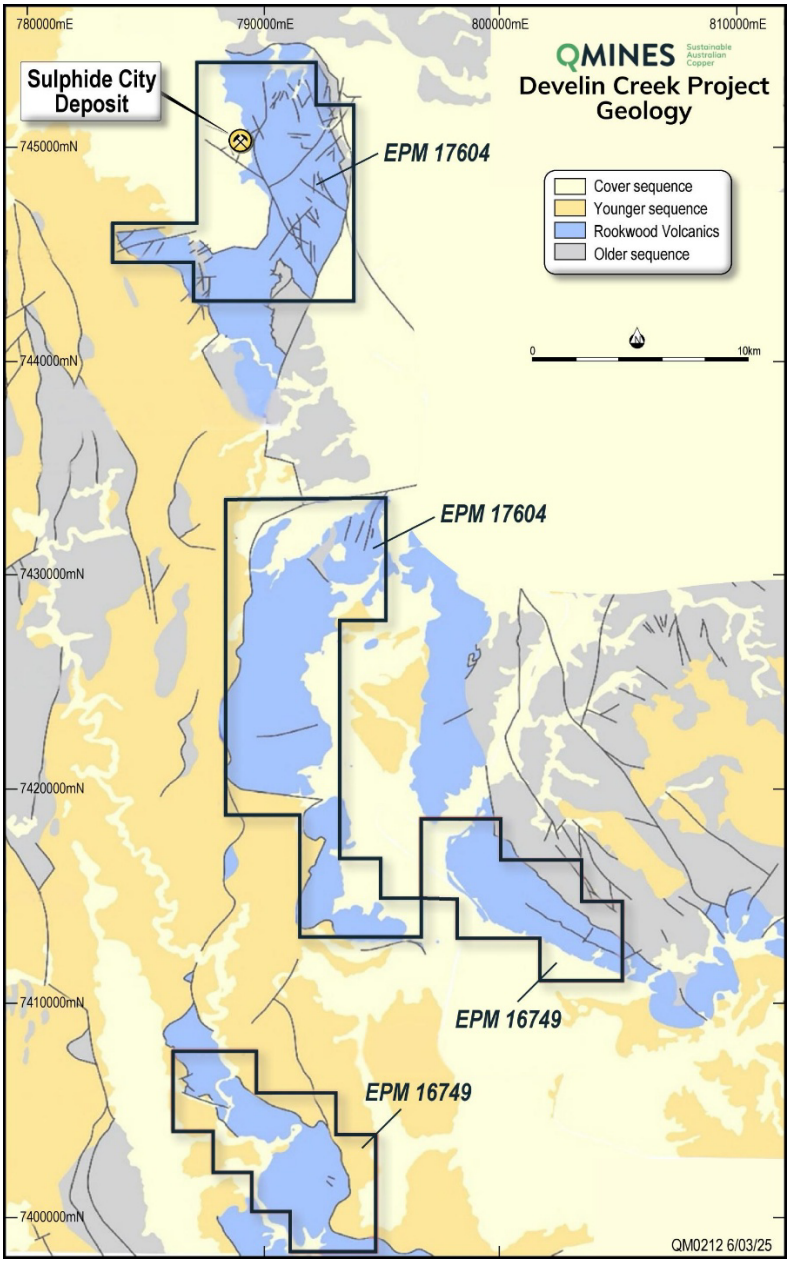

Figure 2. – Develin Creek Tenement Boundaries & Regional Geology.

On 28th August 2023, QMines announced the acquisition of an initial 51% of the Develin Creek project. The remaining 49% of the project was acquired in September 2024, approximately twelve months later. The Resource Estimate Update described here has been prepared by the Company's Independent Resource Geologist, Mr Stephen Hyland of Hyland Geological Mining Consultants.

The deposit area contains multiple copper-zinc deposits in a largely unexplored volcanogenic region and includes three internal mineralised areas referred to as the 'Sulphide City', 'Scorpion' and 'Window' zones.

Mineralisation is observed to take the form of massive sulphides, stringers, and breccias which are all situated within basalt rock formations.

To date no real consensus exists regarding the tectonic setting of the Rookwood Volcanics. The presence of VHMS (volcanic hosted massive sulphide) deposits, and thick basaltic sequences with only minimal sediment components suggests however that the Rookwood Volcanics were deposited in a relatively deep marine basin, and interpretation of the available litho-geochemical data may imply a back-arc or mid-ocean ridge setting.

The host volcanic sequence of the deposit is a thick pile of basaltic pillow lavas and hyaloclastite breccias with only minor massive basaltic feeder dykes and minor chemical chert, black mudstone containing magnetite, jasper, bedded sulphides, volcanic mudstone-sandstone and polymictic breccias. The

dominance of pillowed lava facies implies subaqueous deposition but gives no indication of relative water depth, although there is a general consensus that VHMS form at water depths of generally greater than 1,000m.

Mineralisation styles reported from the main prospect areas include massive and banded sea-floor sulphide deposits; reworked, polymictic breccia deposits; distal, graded sedimentary sulphide deposits; massive, sub-seafloor replacement deposits and stringer zone quartz-sulphide vein deposits. These styles of mineralisation are characteristic of VHMS deposits and conceptualised for Develin Creek in Figure 3.

The largest known mineralised zone within the deposit is referred to as the 'Sulphide City' zone. This zone's mineral makeup includes a combination of stockwork, disseminated and dense sulphide deposits. This zone containing the majority of significant mineralisation spans approximately 400m by 150m in a North-South orientation and has a variable thickness, ranging from 2.5m to 29m, and dips at 25-30° towards the west-northwest. Mineralisation extends to depths varying from 80m to 200m.

Drilling results within this zone showed various metal concentrations including one notable down dip intersection of **114m @ 1.64% copper, 0.86% zinc, 0.3g/t gold and 13g/t Ag.**

The main mineralisation zones for Develin Creek as modelled for resource estimation are shown in Figure 3 below. The drill-hole collars and traces are also shown for reference.

The 'Window' zone for the purposes of the new modelling and resource estimation has been incorporated into the 'Scorpion' zone mineralisation set but is retained as a separate zone for historic comparison purposes.

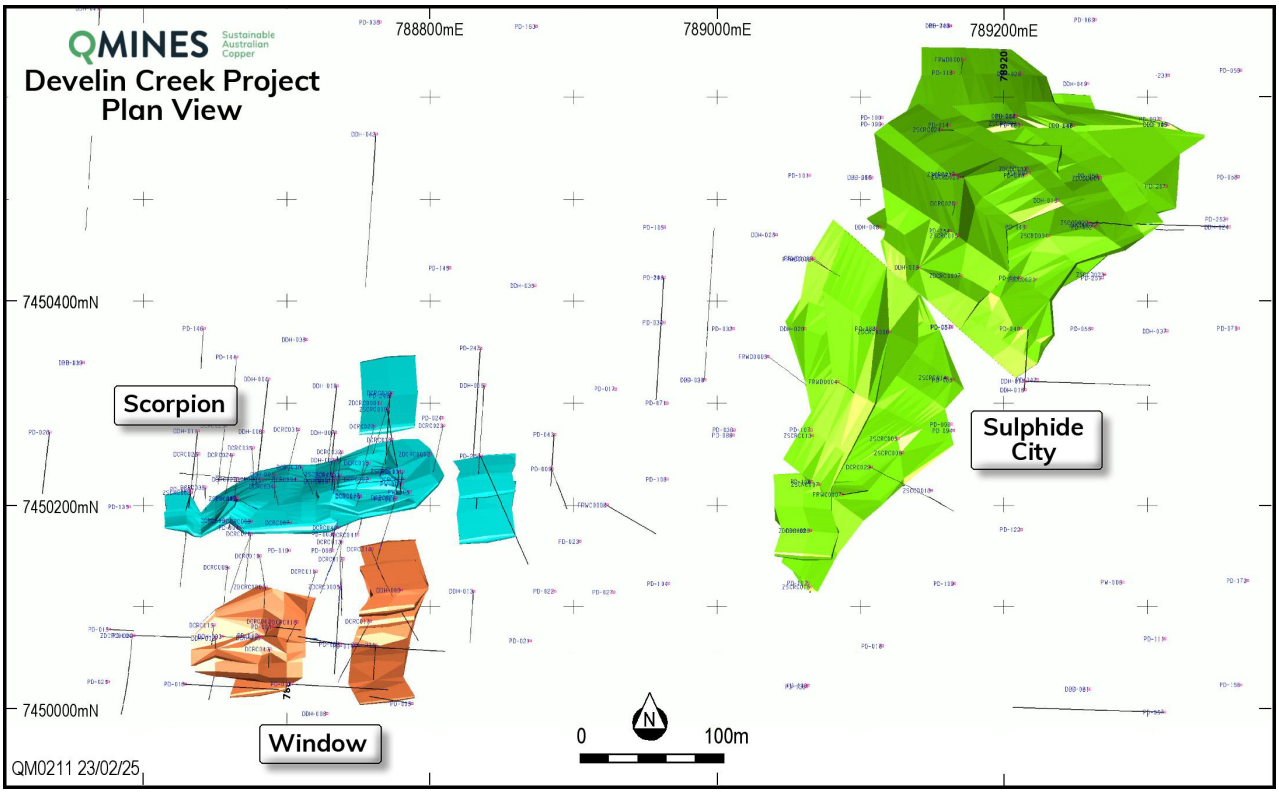

Figure 3. Develin Creek – Plan View of drilling and resource wireframes.

2. DRILLING

2.1 Historic Drilling and Current Drilling

Exploration drilling has been undertaken by three parties:

- Initial discovery and drill out to 50m centers by Queensland Mining Corporation (QMC) using percussion and diamond drilling between 1992 and 1993.
- Follow-up and extensional drilling by Fitzroy Resources (FR) using RC and diamond drilling in 2011
- Verification drilling by Zenith using RC and diamond drilling in 2014 and 2021 to 2022.
- QML verification and resource RC drilling in 2024.

Table 1 summarises the drilling in the Mineral Resource vicinity only and Figure 4 shows the spatial distribution of the drilling programs. The QMC drilling relates to early exploration activity and is therefore more widespread. Fitzroy and Zenith drilling was targeted to the known mineralisation and its extensions. Contribution of the drill programs to the Mineral Resource estimate can be summarised in terms of meters drilled within the resource domains as 62% 1990s QMC percussion drilling, 2% 2011 Fitzroy drilling and 36% Zenith drilling. Diamond drilling is typically HQ and NQ sized core and percussion and RC drilling 4½ or 5½ inch diameter hammer.

QMC percussion drilling was by open hole and was the focus of verification drilling by Zenith. The verification drilling was initially thought to result in higher grades but over the larger program the drilling indicates similar average results confirming the original QMC percussion results. All drilling has been used for the Mineral Resource estimation except for the exclusion of five holes due to incomplete sampling or poor orientation. In each case there are better sampled, nearby drilling available.

QMines drilled 43 RC drillholes for 5,065 metres drilled in 2024 as verification and resource extensional drillholes at the Scorpion and Window deposits.

Table 1. Sulphide City area drilling summary.

Company	Drill Type	Drill Holes	Hole Range	Drilled (m)	DD (m)	RC Percussion (m)	Average Depth (m)
QMC	DD	46	DDH-001 - DDH-049	14,384	14,384	0	313
1992-3	Percussion	129	PD-001 - PD-258	21,665		21,665	168
	Percussion	7	PW-001 - PW-007	529		529	76
Fitzroy	DD	6	FRWD0001 - FRWD0006	1,510	1,510	0	252
2011	RC	2	FRWC0007 - FRWC0008	362		362	181
Zenith	DD	3	ZDCDD001 - ZDCDD003	561	561	0	187
2014,	RC	8	ZDCRC0001 - ZDCRC0008	1,310		1,310	164
2021-22	RC	17	ZSCRC002 - ZSCRC024	2,491		2,491	147
	RC/DD	6	ZSCCD004 - ZSCCD023	1,417	681	736	236
QML 2024	RC	43	DCRC001-DCRC043	5,064		5,064	118
TOTAL		**267**		**49,293**	**17,136**	**32,157**	

**Note the meterage of diamond drilling (DD) is overated as QMC precollar depth are not currently identified*

2.2 Sampling

Industry standard practices for sampling techniques for the style of mineralisation were employed at the Develin Creek deposit.

QMC and Fitzroy diamond core within mineralisation was sampled at 1 to 2m intervals, and half core splits sent to the laboratory. Zenith drilling used regular 1 m intervals of half core with some subsampling

(some ¼ core when field duplicates were used). Diamond core was sawn in half, with half core (some ¼ core) on 1 to 2m intervals.

QMC percussion samples were obtained by compositing 1 m samples from the rig into 3 m samples unless sulphide mineralisation was noted then shorter 1 or 2m intervals were sampled. Samples from each percussion interval were collected in a cyclone and split using a 3-level riffle splitter.

Wet samples were grab sampled for assay and the residual sample left to dry for later resampling if necessary.

Fitzroy and Zenith RC samples (1m) were split with an on-rig riffle splitter and sampled with a sample spear for 3 or 4m composites in the hanging wall and foot wall. RC samples were generally not composited in mineralised zones.

QMines samples were split using on rig Cyclone and riffle splitter with samples taken at every metre drilled. Mineralised sections were sampled in each drillhole.

2.3 Sample Analysis

Sample preparation and assaying were undertaken by commercial laboratories for all programs using industry standard processes of the day. The analytical techniques used were:

- AAS by QMC (1990s).
- ICP-OES by Fitzroy (2011).
- ICP-AES by QMines (2014, 2021/22) and gold was by fire assay.
- QMines 2024 utilised four acid digest MEICP 61 and AA25 gold fire assay.
- QMines 2024 Samples assayed over grade >10,000 ppm assayed re-assayed to determine percentage base metal content.

From 2011 all grade intervals (> 1% base metals) were re-assayed with a 4-acid digestion level method.

3. INTERPRETATION

3.1 Geology and Mineralisation

There is a high level of confidence in the geological interpretation of massive sulphide horizons traceable over numerous drill holes and drill sections drilled by QMines in 2024. The previous interpretations have been refined and a new geological model for the Scorpion and Window deposits can be seen in Figure 4.

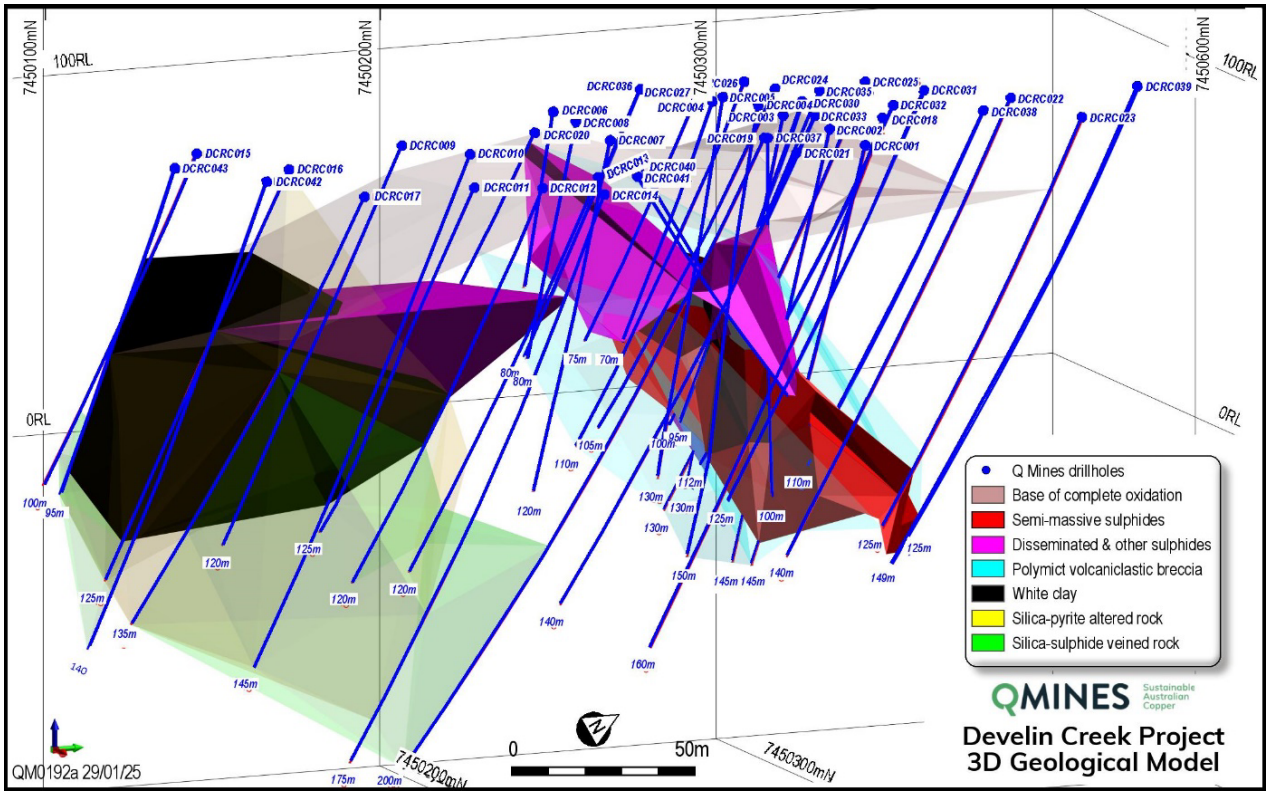

Figure 4: 3D geological modelling, Scorpion deposit and Window prospect (Looking downwards to ENE).

Surface mapping of outcrop, drill hole intercept logging and assay results as well as limited structural interpretations have formed the basis for the current geological interpretation. Very little surface expression of the massive sulphide exists.

At **Scorpion**, the mineralised body comprises semi-massive and massive sulphides currently measuring approximately 250m (L) x 100m (W) x 25m (D) and dips towards the north-north-east at ~60°. It is dominated by pyrite and contains visible chalcopyrite and sphalerite with assayed gold and silver. Recent petrographic examination of the massive and semi-massive sulphide, footwall and hanging wall fragments from RC drilling indicate that the sulphide mineralisation in the samples is considered to be a product of hydrothermal deposition in pre-existing rocks (e.g. polymict sedimentary breccia). Hydrothermal flux and sulphide deposition could have been facilitated by significant permeability and open space in the original rocks.

There is no evidence to infer that the sulphides are detrital. It is interpreted that the alteration-mineralisation system at the Scorpion prospect could be a variant of a volcanic-associated massive sulphide system, related to submarine basaltic volcanism. As such, the Cu-Zn mineralisation could have affinities to Cyprus and Besshi type deposits.

The breccia has a generally clast-supported texture, with fragments of altered basalt (most abundant), quartz-rich siltstone and chert/cherty argillite. A fine-grained matrix component was strongly overprinted by hydrothermal alteration/replacement. Breccia fragments have a strong propylitic alteration assemblage with varying amounts (depending on the original fragment compositions) of chlorite, sericite, quartz, epidote, albite and pyrite, with a little leucoxene, carbonate and sphalerite. Interstitial material was

replaced by locally abundant sulphides (Fe-poor sphalerite, chalcopyrite and paragenetically earlier pyrite), chlorite, sericite, quartz and epidote.

The **Window** prospect is marked by fine grained disseminated copper sulphides and carbonates within a white clay body similar to that at Scorpion. Limited assay data received by the Company to date suggest the Scorpion white clay is similarly mineralised to the Window clay. At Window, the mineralised clay body is also broadly tabular, measures 110m (L) x 80m (W) x 40m (D), trends NE-SW and is open along strike in both directions. Unlike Scorpion, the Window mineralisation contains copper without associated zinc, gold and silver. To the southwest a silica-pyrite body exists in sharp contact with this white clay. Variable silicification hosts disseminated pyrite but no known

The extents and geometry is better defined due to the current drill coverage at the Scorpion and Window deposits however further work is required to better define the geometry and extents of the mineralised sulphide horizons at the Sulphide City deposit.

QMines and HGMC used previous Zenith Minerals / ResEval mineralisation wireframes as guidance for an updated revision of the Develin Creek Resource model. HGMC developed new revised Copper mineralisation model wire frames to attain more mineralisation continuity by utilising new and slightly lower delineation cut-off grades for the main economic elements Copper. The initial mineralisation re-interpretation was done on an E-W and N-S section basis. The nominal mineralisation interpretation threshold level was at approximately 0.2 to 0.3% Cu.

These were modified locally to ensure incorporation of other anomalous and likely economically important elements including Gold and Silver. Modelling of the wireframes was aligned using certain guidelines such as mineralisation extrapolation should extend no further than approximately 25m and ‘half-way to the next section in the case of mineralisation observed to cease on any given section line. In some places mineralisation wireframes were extended further to describe expected continuity, however these zones were not necessarily classified or used for mineralisation reporting purposes. The newly developed revised wireframes have varying orientations and dips, following the upper contact of pepperites (ancient seafloor horizons).

One (1) mineralisation type (“ZON1 = 1 or 2”) domain code was designated for the wireframe ‘solid’ models located at the ‘Scorpion’ and ‘Sulphide City’ mineralisation areas. All material outside the mineralisation domains was designated as a default ‘waste’ zone’ (ZON1=’-1’). Wireframes when completed were then checked for geometric integrity before being used for reviewing contained sample composite geostatistics. Wireframe extents were generally limited by the drill spacing distance.QMines have reviewed and accepted the resulting mineralisation modelling wireframes. The general mineralisation zone models generated can be seen in Figure 5 below.

3.2 Weathering and Oxidation

QMines and HGMC reviewed the interpreted set of the weathering and oxidation state profile surfaces based on a re-interpretation of the geological logging from drilling. These surfaces were used to code an ‘oxidation state’ code in the block model (where OXID = 1 or 2 for ‘oxide’ & ‘fresh/sulphide’ material respectively). Both the mineralisation zones and waste zones were assigned according to the same overall OXID code regime in the block model.

The revision and establishment of a more rigorous weathering / Oxidation state surfaces has required a update of the relative bulk densities overall when compared to previous reporting (discusses further in 5.4 below). The resulting changes have resulted in comparatively less transitional material with inherent lower bulk densities and slightly more fresh / sulphide' material being defined.

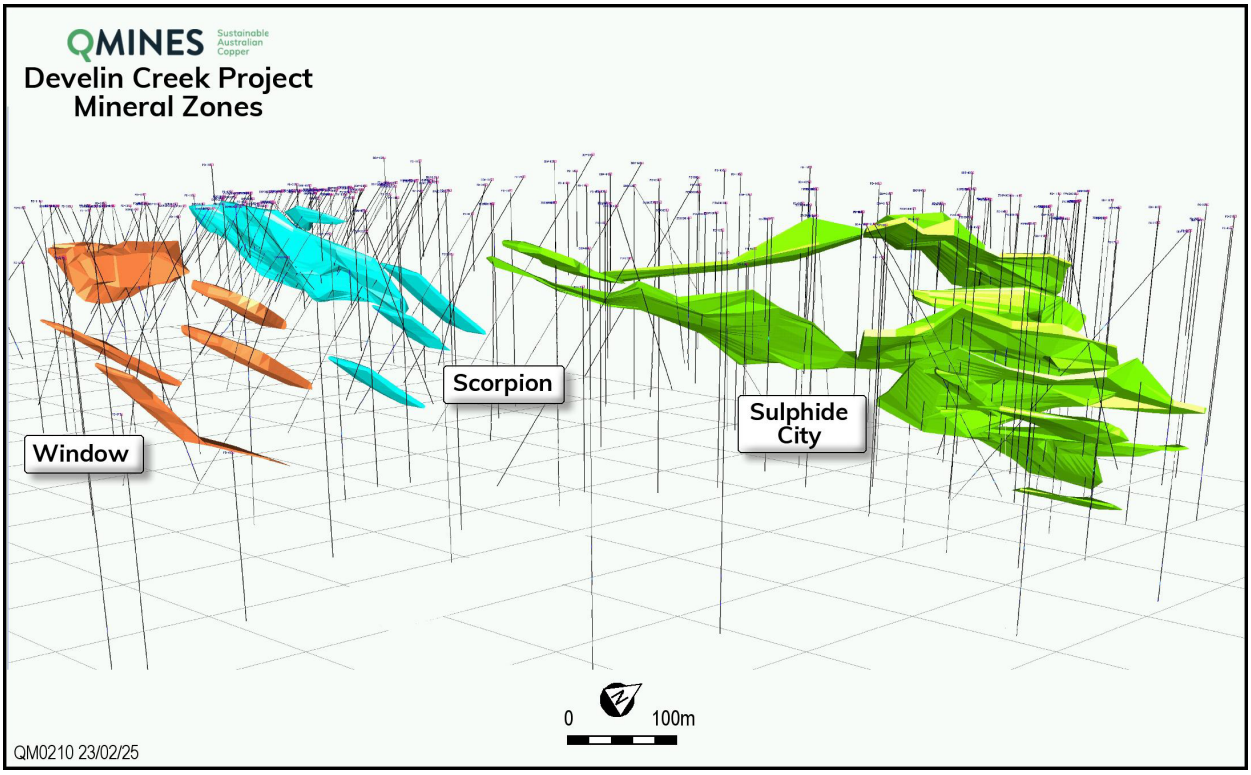

Figure 5. – Develin Creek resource wireframes & drilling 'Scorpion' Area (blue), Window area Orange and 'Sulphide City' Area (green) (Oblique view Azim 315 degrees, Dip -0 degrees – looking towards North-West).

Table 2 below shows the local average 1m composite grade values for the main analytical items within the mineralised zones in relation to the different weathering and oxidation state. These are also sub-divided into the different general AREA domains as described in previous reporting.

Table 2. Develin Creek - Average Grade of 1m Composites sub-divided by AREA domain ZONE Code and Weathering Oxidation state (OXID Code).

Domain	Weathering / Oxidation CODE	AREA	Number (n)	Grade Cu%	Grade Zn%	Grade Au g/t	Grade Au g/t
'Scorpion' - ZONE=1	OXID=1 (Oxidized)	6	246	0.828	0.480	0.15	4.93
	OXID=2 (Fresh)	6	799	1.499	1.487	0.32	13.67
'Window' - ZONE=1	OXID=1 (Oxidized)	7	23	1.404	0.003	0.02	0.30
	OXID=2 (Fresh)	7	442	0.740	0.014	0.02	0.20
'Sulphide City' - ZONE=2	OXID=1 (Oxidized)	1-5	140	0.323	0.951	0.04	2.30
	OXID=2 (Fresh)	1-5	979	0.789	1.152	0.13	5.22

Notes:
Default Oxide – Below Topographic Surface to base of complete oxidation (BOCO) down to top of fresh rock (TOFR) - OXID=1 – Bulk Density = 2.60 tonnes / cubic metre.
Default Fresh / Sulphide – From top of fresh rock (TOFR) to base of block model – OXID=2 – Bulk Density = 3.00 tonnes / cubic metre.

4. GEOSTATISTICS

4.1 Composites and Spatial Analysis

A brief review of optimal composite lengths was carried out as it pertained to observed population variances and coefficients of variation. After reviewing the population statistics of a test set of 1, 2, and 3 metre down-hole composites it was deemed that selection of a 1m down-hole composite length would serve as an optimal composite length for spatial analysis studies and later block model interpolation. The drill intervals were sampled at a range if interval lengths including 1m, 2m and 3m sample intervals.

The adoption of a 1m composite was considered suitable for preserving inherent grade distribution and variability. Copper (Cu) was the primary compositing item and compositing was carried out for the entire drill-hole length.

The contained composite population statistics were analysed when coded according to the main ZON1 mineralization domains and also the AREA (broad mineralization orientation domain). Table 3 below is a summary assessment of ZONE1=1-2 constrained 1m down-hole composite statistics on a length weighted basis for the Copper (Cu%) item for each of Develin Creek 'Scorpion' and 'Sulphide City' deposit areas respectively.

Analyses were carried out using classical statistical summaries and Log Probability plots. Spatial distribution maps for composites coded within the ZON1=1-2 domains were interrogated in 3D (on screen) in order to gauge both local and total ZON1 domain variability trends.

This statistical review assisted deposit understanding and provided the baseline for subsequent variogram modelling and derived interpolation parameters for the ZON1 domains.

Table 3. Develin Creek Deposit Areas - 1m Composite Statistics (Cu%).

ZON1	AREA	n	Min	Max	Mean	SD	CV
1 – 'Scorpion'	6	1045	0.003	14.35	1.341	1.459	1.088
1 – 'Window'	7	465	0.005	3.330	0.773	0.614	0.794
2 – 'Sulphide City'	1-5	1119	0.001	6.940	0.731	1.033	1.413

Notes:
AREA (3D wireframe) - 1-5 (Sulphide City), 6 (Scorpion) & 7 (Window).
Cu% Range = 0.001-100% Cu.
Length weighted 1m down-hole composites statistics - no lower cut applied (all areas domain)
SD = Standard deviation, CV = coefficient of variation

4.2 Composite statistics and 'Top Cut' Strategy.

Restricting the influence of high-grade outliers is considered appropriate at the block model interpolation stage. Hard cutting of high grades to a nominated top cut value is a common resource estimation method however a superior approach is to retain assayed values and restrict the influence of high-grade outliers over distance.

The Au population distributions, for each AREA domain within each of the ZON1 domain defined deposit zones, were interrogated to ascertain the relative numbers of high-grade outlier composites. Probability statistics for each domain generally show a distinct break in the population distribution curve around the 95th to 99th percentile. These observed probability distribution 'inflection' points were then used as the basis to assign outlier grade distance restrictions (Table 4 to and Table 6 below).

Outlier distance restrictions were based on the study of variograms adjusted on an AREA domain basis (below in section 4.0). Restriction distances are typically a multiple of 1 to 2 times the locally observed down-hole variogram range. Where necessary, the restriction distance was rounded to the nearest block length.

Table 4. Develin Creek 'Scorpion' Area - Outlier Grade and Distance Restrictions (Cu%)

Domain (ZON1)	AREA	Grade Restriction (Cu%)	Distance limit (m)
1	6	5.4	16

Table 5. Develin Creek 'Window' Area - Outlier Grade and Distance Restrictions (Cu%)

Domain (ZON1)	AREA	Grade Restriction (Cu%)	Distance limit (m)
1	7	3.0	16

Table 6. Develin Creek 'Sulphide City' Area - Outlier Grade and Distance Restrictions (Cu%).

Domain (ZON1)	AREA	Grade Restriction (Cu%)	Distance limit (m)
2	1	5.6	16
2	2	4.8	16
2	3	3.6	16
2	4	0.8	16
2	5	0.4	16

4.3 Semi-Variogram Modelling

The Cu and Zn mineralisation was interrogated using directional spatial analyses to generate representative semi-variogram models for selected parts of each deposit area. Analysis was concentrated on those zones and AREA domains containing most 1m composites in order to achieve reliable results. The nugget, sill and range parameters derived from the semi-variogram models were used to guide and assign settings for the Ordinary Kriging (OK) interpolation processing runs within in the resource block models. Semi-variograms were also generated for the Au and Ag element items where possible.

Using the previously derived Cu and Zn mineralization statistics as a starting basis, a series of directional spatial analyses were carried out in order to generate representative semi-variogram models for selected parts of each deposit area. Analysis was concentrated on those zones and AREA domains containing most 1m composites in order to achieve reliable results. The nugget, sill and range parameters derived from the semi-variogram models were used to guide and assign settings for the Ordinary Kriging (OK) interpolation processing runs within in the resource block models.

Figure 5 and Figure 6 below show the down-hole variogram models for Cu% (1m) composites within each deposit area. Composites were amalgamated for 'Scorpion' and 'Window' due to the relatively low number of composites within the 'Window' area. These models appear to be generally well structured, with 3 or more points being easily fitted to a spherical model curve e.g. The fitted model curves reveal that there is down-hole ranges of between 6.2m and 11.5m for Copper (CU1). These modelled down-hole ranges match drilling mineralisation variability observed during the ZON1 domain wire-framing process.

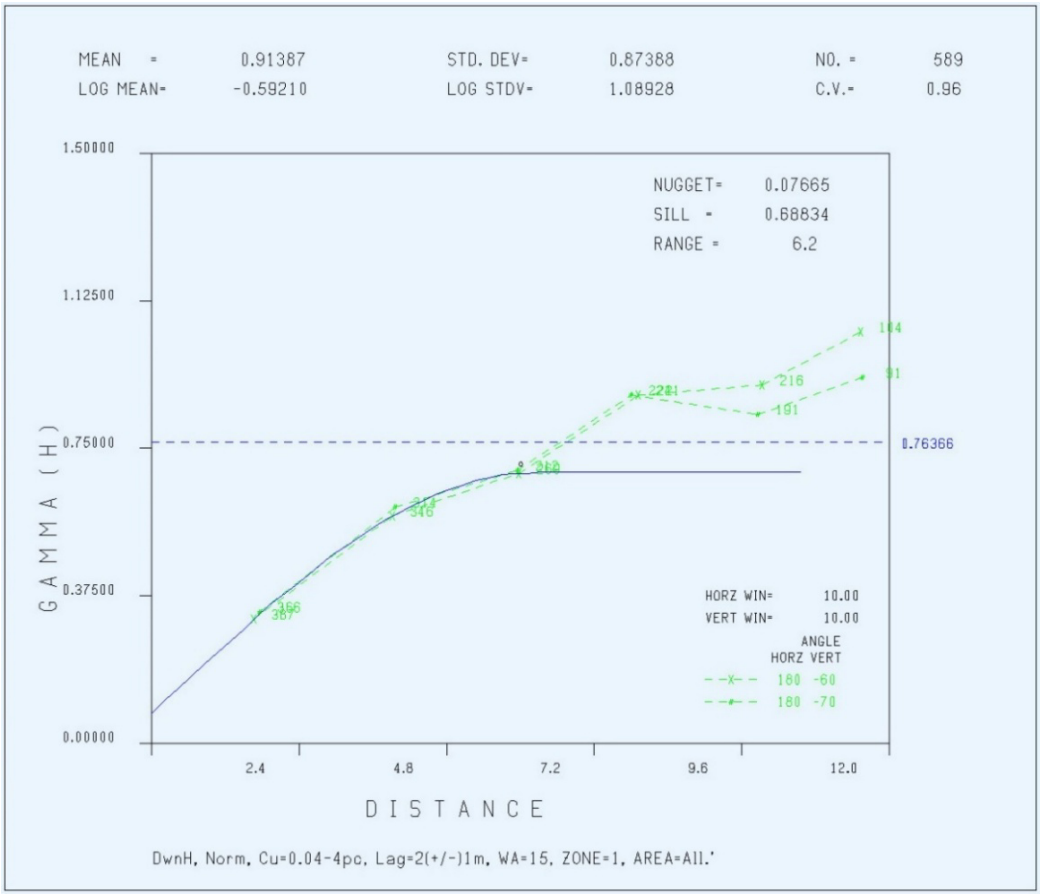

Figure 6. – Down-Hole Semi-Variogram - Develin Creek 'Scorpion+Window' Area.

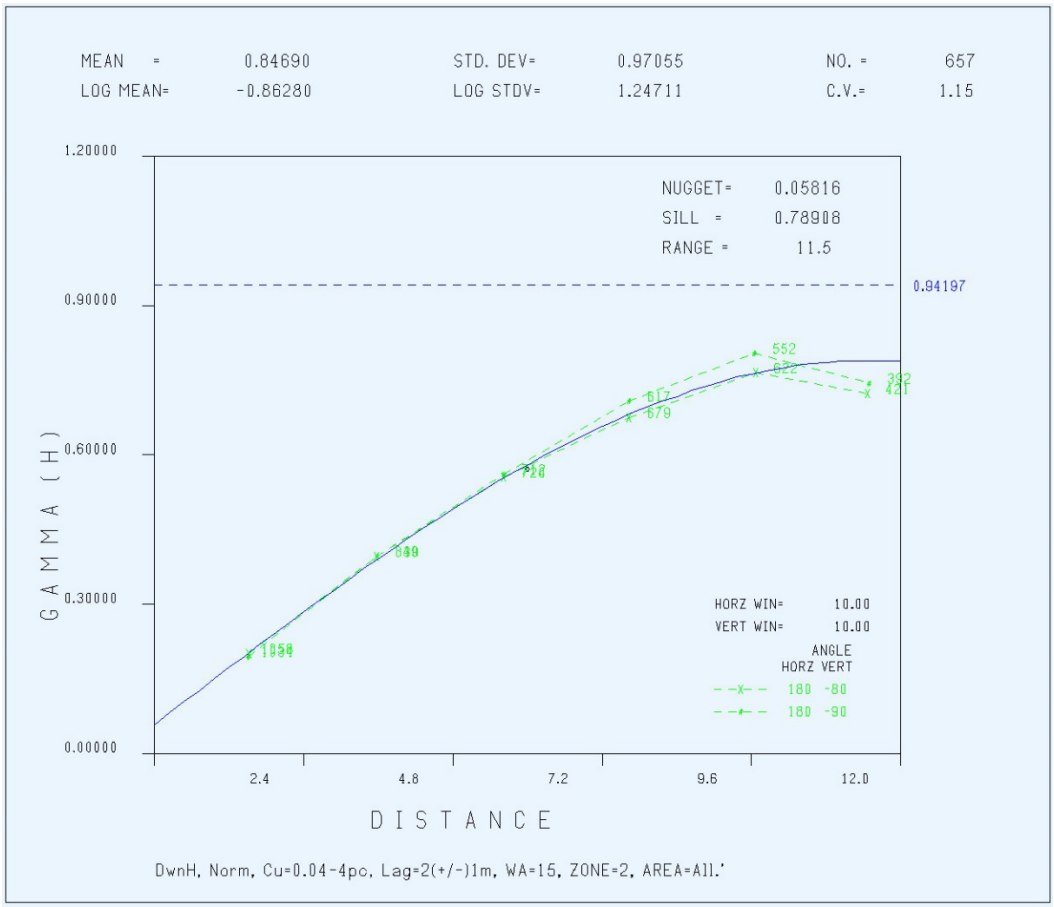

Figure 7. – Down-Hole Semi-Variogram - Develin Creek 'Sulphide City' Area.

5. BLOCK MODEL CONSTRUCTION

5.1 Topography.

A topographic DTM surfaces generated by HGMC using drill-hole collar elevations to generate a new 'complete' topographic surface for the two main Develin Creek mineralization areas (Scorpion, Window and Sulphide City deposits).

5.2 Mineralization Interpretation & Wire-Frame Modelling.

Using previous Zenith Minerals / ResEval mineralisation wireframes, and previous HGMC wire-frames a new revised set of Copper-Zinc mineralization model wire frames were generated used to code a new updated resource block model. This revision work was carried out by Stephen Hyland CP, resource modelling geologist at HGMC. The initial mineralization re-interpretation was done on an E-W and N-S section basis. The nominal mineralization interpretation threshold level was at approximately 0.2 to 0.3% Cu and was modified locally to ensure incorporation of all anomalous and likely economically important Zinc, Gold and Silver mineralisation beginning at or near topographic surface.

Modelling of the wire-frames was aligned along with certain rules such as mineralization extrapolation should extend no further than approximately 25m and 'half-way to the next section in the case of mineralization observed to cease on any given section line. In some places mineralization wire-frames were extended further to describe expected continuity, however these zones were not necessarily classified or used for mineralization reporting purposes. One (1) mineralization type ("ZON1 = 1 or 2") domain code was designated for the wireframe 'solid' models located at the 'Scorpion' and 'Sulphide City' mineralization areas (A sub-divided 'Scorpion' was re-Introduced as the 'Window' area for historical comparison purposes. All material outside the mineralization domains was designated as a default 'waste' zone' (ZON1='-1'). Wireframes when completed were then checked for geometric integrity before being used for reviewing contained sample composite geostatistics. Wireframe extents were generally limited by the drill spacing distance. QMines have reviewed and accepted the resulting mineralization modelling wireframes. A summary of the wire-frame volumes for the main mineralisation areas are shown in Table 7.

Figure 8 below show the general mineralization Geometry of the Develin Creek 'Scorpion' + 'Sulphide City' Areas.

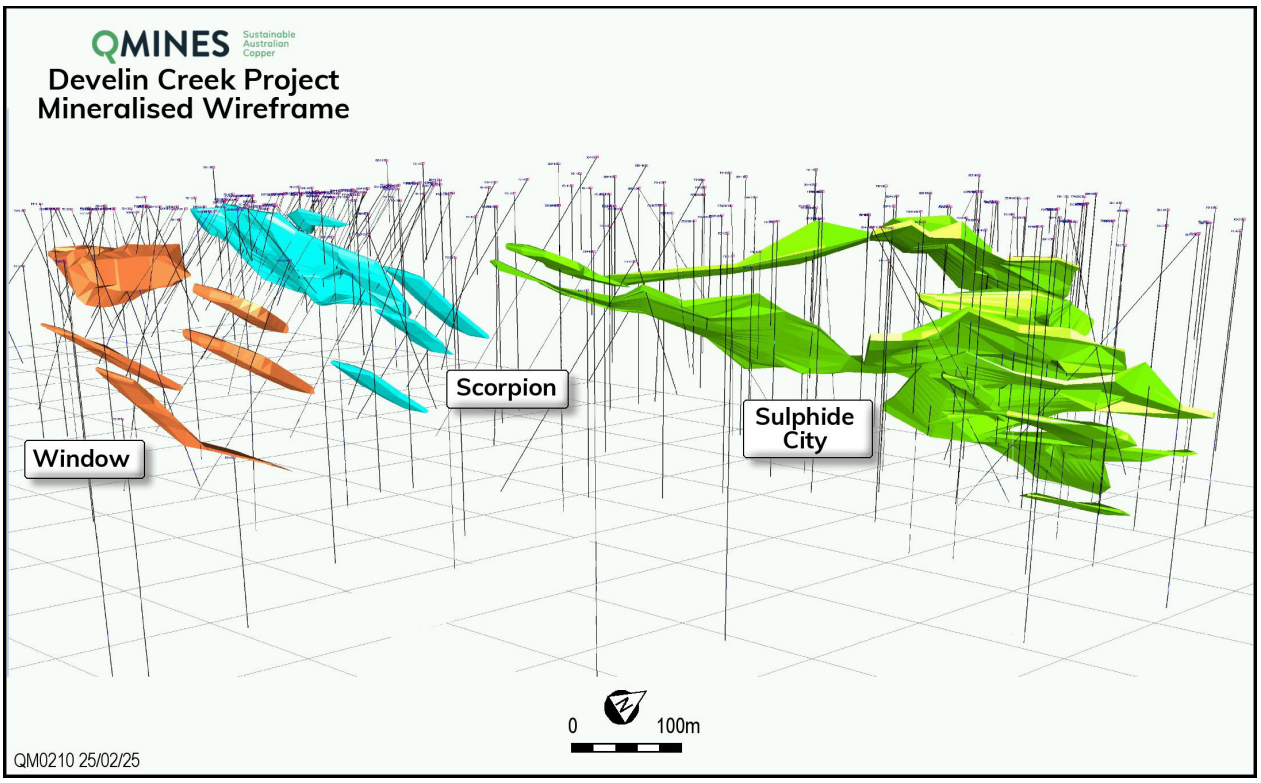

Figure 8. – Develin Creek 'Scorpion' (blue) + 'Window' (orange) + 'Sulphide City' Area (green) – Copper Mineralization Wire-Frame Model – (Oblique View). (shells = Nominal 0.30% Cu mineralization definition wireframe envelope – View Looking Azim=315 degrees – Dip = -0 degrees).

Table 7. Mineralization Zone Wireframe Volumes – Develin Creek Areas – (ZON1=1-2)

Mineralization (ZON1) Code Integer	AREA Domain	Mineralization Model Coding (Cu% Delineation Basis)	Mineralization Zone	Wireframe Vol. (m³)
1	6	All Material	Develin Creek 'Scorpion' Area	312,667
1	7	All Material	Develin Creek 'Window' Area	327,211
2	1-5	All Material	Develin Creek 'Sulphide City' Area	1,151,601
Total		**All Material**	**Combined**	**1,791,479**

5.3 Block Model AREA domains

To assisted with the definition of mineralization geometry for block model interpolation, a set of AREA domains were set up to encapsulate the 3D mineralization wire-frames. These AREA domains help designate the setting of search ellipsoid size and orientation in order to ensure the maximization of block interpolation 'optimization'. The AREA domains are also useful to help assess and characterize the various mineralization sub-domains which then further assists with the localized geostatistics and spatial analysis. A total of 4 AREA domains were used designate the mineralization orientation for the 'Sulphide City' deposit area and 3 AREA domains were used for the Scorpion mineralization area (A total of 7 AREA domains).

5.4 Bulk Density Assignment

Bulk densities at Develin Creek were based upon 1132 bulk density measurements done by Zenith Minerals Ltd from RC chip samples. Zenith also derived added other reliable bulk density measurements from 442 drill core samples of which 132 of these measurements were from inside resource domains. With the accumulated data acquired it was possible to assign representative variable bulk densities to oxide / transition / fresh material types at various depths from topographic surface.

A set of interpreted material type interface surfaces were generated from section strings generated by HGMC following a detailed re-interpretation of the weathering and oxidation state logging from drilling.

These surfaces were used to code an 'oxidation state' code in the block model (where OXID = 1 or 2 for 'oxide', & 'fresh/sulphide' material respectively). Both the mineralization zones and waste zones were assigned according to the same OXID code regime in the block model.

Zenith's previous use of slightly higher bulk density values comes from an assessment that the available Sulphur assays suffered from an upper detection limit of 10% and at this level when used in conjunction with Iron (Fe) values may have produced locally elevated bulk density values. Some High bulk density values previously derived of around 4 t/m3 or more should only reflect zones with very high sulphide content notwithstanding some of the high Fe-S content may only be pyrite within HMS style mineralisation.

With this interpretation in mind QMines has opted for using lower overall average bulk densities for tonnage estimation. QMines has assessed the long-range extent of high-density material as being relatively restricted but does accept that some localized high values are present as they are consistent with some of Zenith's observations of some of the high RC sample bag and core sample weights onsite. Table 8 below shows the bulk density values thus assigned for the Develin Creek block model.

Table 8. Develin Creek Resource Block Model - Dry Bulk Density Assigned (by OXID and ZONE Code).

OXID Code	Waste Zone Bulk Density	Mineralisation Zone = 1 "Scorpion" & "Window"	Mineralisation Zone = 2 "Sulphide City"
Oxidized OXID=1	2.60 tonnes / cubic metre	3.40 tonnes / cubic metre	3.85 tonnes / cubic metre
Fresh OXID=2	3.00 tonnes / cubic metre	3.40 tonnes / cubic metre	3.85 tonnes / cubic metre

Notes:
Default Oxide – Below Topographic Surface to base of complete oxidation (BOCO) down to top of fresh rock (TOFR) - OXID=1 – Bulk Density = 2.60 tonnes / cubic metre.
Default Fresh / Sulphide – From top of fresh rock (TOFR) to base of block model – OXID=2 – Bulk Density = 3.00 tonnes / cubic metre.

5.5 Block Model Construction

One (1) block model was constructed to cover the Develin Creek deposit. The block model contained a ZON1 item to designate mineralisation in the Scorpion Area (ZON1=1) and in the Sulphide City Area (ZON1=2).

These mineralization domain (ZON1) wireframes were used for the primary block model coding, followed by resource estimation and resource reporting. The current ZON1=1-2 mineralization domain boundaries are derived from updated 3D wire-frame modelling based on the recent QMines and HGMC revised mineralisation interpretation work. The wire-frame modelling has been constructed using a consistent standardized approach and has sufficiently resolved the detail related to the main mineralized structures and interpreted features such as faults 'off-sets'.

For Block Model construction purposes, the ZON1 wire-frames were treated as hard boundaries i.e. searches and interpolation did not extend beyond this limit.

For the OXID (oxidation state) item in the block model the zones of Oxide, Transition and Primary / Fresh material were coded using hard surface boundaries and coded according to a '50% block-In / block-out' basis of blocks in contact with the interface between two (2) different material types.

5.6 Block Model Structure and Coding

Similar sized deposits to that of the Develin Creek Cu-Zn deposit typically have relatively small selective mining unit ("SMU") ranges as a consequence of accommodating the relatively thin and small scale nature of the mineralized zones. Typically block sizes in the order of approximately 5m x 5m x 5m at the grade control stage (assuming future open pit mining) would be used to help provide accurate mineralization zone definition. For the Develin Creek deposit area, a block size of 8.0m(E) x 6m(N) x 2.5m(RL) was selected for the following reasons:

- This block size fairly represents deposit scale, geology and mineralisation;
- Will adequately capture sufficient numbers of the source 1m down-hole composites which will inherently preserve sample variability as a p[art of block model interpolation;
- Reasonably fits within the nominal drill section spacing of 25m to 50m;
- Will fairly represents the spatial continuity of observed higher grade zones as shown in Semi-Variogram Models;
- Is consistent with the short scale variability of Cu and Zn distribution in typical Copper deposits;
- Is fit for purpose i.e. blocks can be used as is (smallest SMU), combined (larger SMUs) or divided (e.g. 4.0 x 3.0 x 2.5m grade control 'sub-blocks').

5.7 Block Model Dimensions

A 'uniform block' size Block Model (no sub-blocks) was set up for the Develin Creek deposit areas.

1. Develin Creek (Scorpion & Sulphide City areas).

The Develin Creek 'Central' + 'North' Area block model comprises 138 rows, 126 columns and 150 benches of 2.5m height (Table 8). Row 1 begins at 788400mE. Column 1 begins at 7449940mN. Bench 1 is the uppermost bench (bench 1 – toe = 132.5m).

Table 9. Block Model Dimensions – Develin Creek 'Central' + 'North' (8 x 6 x 2.5 metre blocks XYZ).

XYZ Name	Type	Number	Min	Max
EAST	Rows	138	788400mE	789504mE
NORTH	Columns	126	7449940mN	7450696mN
ELEV	Benches	150	-230mRL	145mRL

5.8 Block Model Parameters and Coding

All block model parameters were associated with primary item CUPC1 (Cu%) and ZN1PC (Zn%). (See Table 10 below).

A +1% block-in/block-out precision was used for coding where mineralization was coded as the ZON1=1-2 for each of the Develin Creek deposit 'sub-areas'. Associated with this domain coding is an associated ZON1% item representing the contained block percentage for each block within the wireframe. The ZON1 wireframe domain coding integers (ZON1=1-2) was matched to similarly coded composites (ZONE=1-2) prior to interpolation. Other block model codes were assigned on a 50% block in/block out basis such as item SG1 (bulk density), OXID (weathering / oxidation state) and the AREA domain coding (AREA Item).

Where necessary the domain ZON1 designation in conjunction with the AREA designation was used to help assign mineralisation geometry orientations and / or interpolation limits.

The volume of the ZON1 wireframe domains, when coded into the block model, were verified with the true 3D analytical wire-frame volumes to ensure coded volume integrity match (See Table 5).

CuEq Grade Shell Block Model Copper Equivalent Assumptions

The grade shell block model is shown as an interim Copper Equivalent (CuEq) basis (Figure 9) using a 0.5% CuEq cut-off grade given the presence of additional precious metal likely to have favourable recoveries and value which was not reported in the historical Zenith and subsequent QMines METS reporting.

The CuEq calculations are based on rounded approximate metal prices as at February 2025 and rely on the Cu and Zn mineral wireframes which have an estimated process recovery value applied. It is expected that Develin Creek gold and silver will be recoverable as blended ore feed for the Mt Chalmers process plant mineral processing route and will provide some significant economic benefit.

Metallurgical testing to arrive at recovery values for Gold and Silver is based on extensive recovery data available from the QMines Prefeasibility Study (PFS) metallurgical testwork for the Mt Chalmers VMS deposit and has been based on an estimated composite ore material milling ratio of 85% Mt Chalmers ore and 15% Develin Creek ore.

Further testwork is yet to be carried out on the Develin Creek/Mt Chalmers composite ores however for for the present time it has been assumed metallurgical recovery will be similar to that of the Mt Chalmers testwork and is considered as a suitable for 'possible future value'.

Copper Equivalent Disclaimer

Copper metal equivalent calculations are subject to frequent change and the use of the recovery and metal prices described below are only for interpretation of the Scorpion/Window grade shell block model as seen in Figure 9 and the future potential value of the Develin Creek polymetallic deposit.

Metal Price Assumptions and Recovery Factors

- *Metal Prices Assumptions (Rounded as at February18th 2025) : Copper (Cu) = US$4.08/lb, Zinc (Zn) = US$1.28/lb, Gold (Au) = US$2900/troy oz & Silver (Ag) = US$32/troy oz.*
- *Recovery Factors : Copper (Cu): 90%, Zinc (Zn): 70%, Gold (Au): 90% & Silver (Ag): 90%*
- *Copper Equivalent Block Calculation (incl recoveries) Is CuEq% = (Cu% x 0.90) + (Zn% x 0.220) + (Au g/t x 0.935) + (Ag g/t} x 0.0104).*

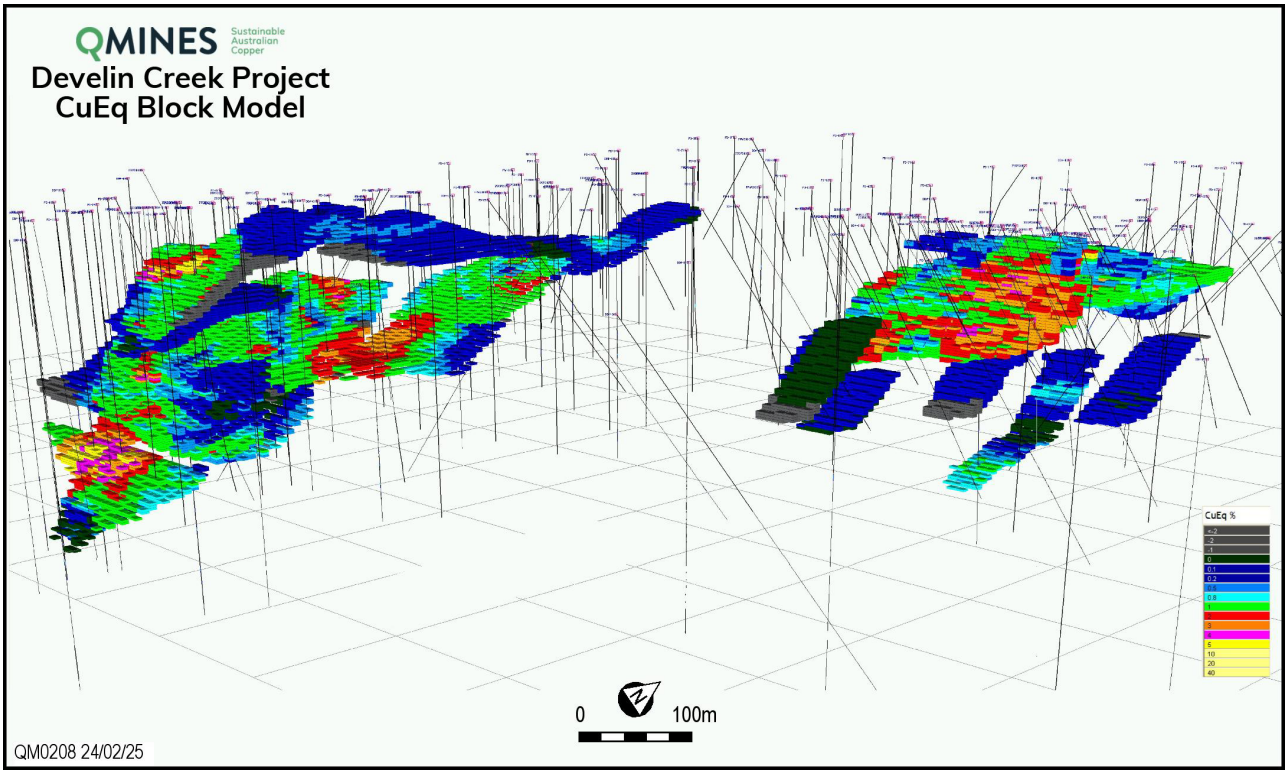

Figure 9: Model Blocks by Copper Equivalent 0.5% Cut-Off – View Looking Azim=135 degrees – Dip = -15 degrees.

Table 10 – Develin Creek CuEq Block Model – Main Items used/ coded/interpolated/calculated for entire block model.

Item	Min	Max	Precision	Explanation
E, N, Elev	-	-	-	*Block Centroid Coordinated used / Exported. Easting(mE), Northing(mN) & Elevation(mRL)
TOPO	0.00	100.00	0.01	Topographic % Item – Current Topo Surface - Defined by Surface DTM Topography - (TOPO = 1-100%).
ZON1	0.00	100.00	1.00	Mineralisation on combined Cu & Au Wireframe Basis – Material Code For All Blocks (ZON1 = 1) (1% Block In Coding). Material Type Integer Item Blocks – Main Mineralisation - (Defined By 3-D 'wireframe' shells) – ZON1=1 – 'Scorpion' (+ 'Window") and ZON1=2 – 'Sulpide City' Area.
ZON1%	0.00	100.00	0.010	Mineralisation Zone Block Percentage (%) item -Wireframe Basis - Block Percentage (Based on +1% Block In Coding). Percentage of Block Inside 3-D Wireframe Solid (Range = 0-100%). Relates to ZON1 Item.
CUPC1	0.00	100.00	0.001	Main Modelled 'Total' Copper Item (Cu%) – Inside ZON1 Mineralized Domains - 'Ordinary Kriging' – (Using~98-99.5th Percentile 'Grade Cut-Off / Dist-Restriction' Regime) Relates to ZON1=1 and ZON1% combined coded Cu(%), Zn(%) & Au(ppm) domains.
ZN1PC	0.00	100.00	0.001	Main Modelled 'Total' Zinc Item (Zn%) – Inside ZON1 Mineralized Domains - 'Ordinary Kriging' – (Using~98-99.5th Percentile 'Grade Cut-Off / Dist-Restriction' Regime) Relates to ZON1=1 and ZON1% combined coded Cu(%), Zn(%) & Au(ppm) domains.
AU1	0.00	1000.00	0.001	Main Modelled 'Total' Gold Item (Au g/t) – Inside ZON1 Mineralized Domains - 'Ordinary Kriging' – (Using~98-99.5th Percentile 'Grade Cut-Off / Dist-Restriction' Regime) Relates to ZON1=1 and ZON1% combined coded Cu(%), Zn(%) & Au(ppm) domains.
AG1	0.00	1000.00	0.001	Main Modelled 'Total' Silver Item (Ag g/t) – Inside ZON1 Mineralized Domains - 'Ordinary Kriging' – (Using~98-99.5th Percentile 'Grade Cut-Off / Dist-Restriction' Regime) Relates to ZON1=1 and ZON1% combined coded Cu(%), Zn(%) & Au(ppm) domains.
CUEQ1	0.00	100.00	0.001	Copper Equivalent Item (CuEq%) – Basesd on Cu, Zn, Au & Ag items. Copper Equivalent Block Calculation (incl recoveries) Is CuEq% = (Cu% x 0.90) + (Zn% x 0.220) + (Au g/t x 0.935) + (Ag x 0.0104). (Cu = US$4.08/lb, Zn = US$1.28/lb, Au = US$2900/oz & Ag = US$32/oz. Recovery Cu: 90%, Zn: 70%, Au: 90% & Ag: 90%
OXID	0.00	100	1.00	Weathering / Oxidation state code (wire-frame surface defined) OXID=1 Saprolite, OXID=2 Fresh / 'Sulphide'.
AREA	0.00	100.00	1.00	Broad area domain designation. Used to define search ellipsoid orientations and associated kriging interpolation Parameters. AREA=1→7.
SG1	0.00	10.00	0.01	Bulk Density Item – Assigned as an assumed average Bulk Density value according to underlying ROCK code as per the following material type: • 2.9 t/m3 for disseminated sulphide mineralisation or fresh rock and waste rock.
RCAT	0.00	10.00	1.00	Preliminary Resource Classification Item - Nominally designated as RCAT values: 1= Measured, 2= Indicated, 3= Inferred (& 4= 'unclassified' – not used). All mineralization at Develin Creek currently designated Inferred - RCAT=3.

5.9 Block Model Interpolation Parameters and Interpolation Technique

It was evident that higher grade Cu & Zn mineralisation is controlled by both depositional environment and structural constraints (e.g. fracture zones, geological contacts). HGMC's observations conclude the influence of all local breccia/fault zones along with contingent grade continuity changes cannot be always reliably defined given the current drill spacing.

The main interpolated elements were Cu(%) and Zn(%) followed by Au(g/t) and Ag(g/t). The interpolation of all these analytical element items was constrained by the ZON1 (ZON1=1-2) domain codes, and AREA domain codes. There were soft boundaries applied and used for the kriging interpolation within the ZON1 domains between and across the boundary of any given two adjacent AREA domains.

For the estimation of the Cu(%), the primary interpolation search was set at 40m (E-W), 60m (N-S) and 40m (Elevation). This primary search was applied to the main mineralised zone (ZON1). Internal to the primary search was a smaller specifically oriented and isotopically weighted search e.g. a secondary search ellipsoid of 50m (major), 40m (semi-major) and 20m (across strike) was typically used for ZON1=1-2 and for all AREA domains.

Search ellipsoid orientation parameters were tailored for each of the AREA domains based upon semi-variogram ranges modelled per element. The interpolation process treated each AREA domain discretely, however soft boundaries were permitted in order to allow the search ellipsoids to access composites across the boundary in the adjacent AREA domain.

Additional to the search ellipsoid definition the kriging interpolation runs also defined the number of composites to be used during interpolation. The Kriging runs typically utilised 1 to 24 composites to estimate each block with a restriction of a maximum of 3 composites per drill-hole applied to mitigate drill-hole bias.

Nugget, sill, range and associated interpolation parameters, as derived from variography, were used as the search ellipse dimension parameters in each interpolation run (Table 10 and Table 11). The nugget and sill values represent the best short-range description of variance changes across the mineralised zone. The associated azimuth (major), plunge (semi-major) and dip (minor) axis parameters were estimated as adequate based on some analysis of fairly weak between-hole variography – which was used to describe the trend of mineralisation characteristics.

Note that due to the relatively low number of composites in most areas, the between hole semi-variograms that were able to be generated were not considered reliable and therefore not retained for the Au or Ag element items at this time. Instead, it was necessary to assign generalized search ellipsoid parameters to ensure adequate mineralization zone coverage with reference to the drill-hole spacings present.

The Develin Creek block model interpolation parameters used during kriging interpolation for the Au (AUKR1) are shown in Table 10 and Table 11 below).

Table 11. Ordinary Kriging Parameters Develin Creek 'Scorpion' Area – Copper (Cu%) - (CUPC1).

Domains		Kriging Parameter		Search Ellipse Dimensions (m)			Search Ellipse Orientation (deg)		
ZON1	**AREA**	**Nugget**	**Sill (-N)**	**Major**	**Semi-M**	**Minor**	**Azim**	**Plunge**	**Dip(E)**
1	6	0.0767	0.6117	50	40	20	75	-28	+55

Notes:
Sill (-N) = Sill – Nugget as derived from variogram model
Azimuth, plunge and dip values are approximate values to describe general geometry orientation
ZON1 - (3D wireframe) – 1 & 2 (Main Au wire-frame defined mineralization domains) - AREA = 6 (3D wireframes)

Table 12. Ordinary Kriging Parameters Develin Creek 'Window' Area – Copper (Cu%) - (CUPC1).

Domains		Kriging Parameter		Search Ellipse Dimensions (m)			Search Ellipse Orientation (deg)		
ZON1	**AREA**	**Nugget**	**Sill (-N)**	**Major**	**Semi-M**	**Minor**	**Azim**	**Plunge**	**Dip(E)**
1	7	0.0767	0.6117	50	40	20	85	-8	+42

Notes:
Sill (-N) = Sill – Nugget as derived from variogram model
Azimuth, plunge and dip values are approximate values to describe general geometry orientation
ZON1 - (3D wireframe) – 1 & 2 (Main Au wire-frame defined mineralization domains) - AREA = 7 (3D wireframes)

Table 13. Ordinary Kriging Parameters Develin Creek 'Sulphide City' Area – Copper (Cu%) - (CUPC1).

Domains		Kriging Parameter		Search Ellipse Dimensions (m)			Search Ellipse Orientation (deg)		
ZON1	**AREA**	**Nugget**	**Sill (-N)**	**Major**	**Semi-M**	**Minor**	**Azim**	**Plunge**	**Dip(E)**
2	1	0.0582	0.7309	50	40	20	305	-30	-18
2	2	0.0582	0.7309	50	40	20	305	-15	-30
2	3	0.0582	0.7309	50	40	20	310	-30	-20
2	4	0.0582	0.7309	50	40	20	305	-20	+10
2	5	0.0582	0.7309	50	40	20	310	-15	-25

Notes:
Sill (-N) = Sill – Nugget as derived from variogram model
Azimuth, plunge and dip values are approximate values to describe general geometry orientation
ZON1 - (3D wireframe) – 3 (Main Au wire-frame defined mineralization domain) - AREA = 1-5 (3D wireframes)

6. BLOCK MODEL VALIDATION

Upon completion of all interpolation runs, the various block grade and ancillary block items assigned were interrogated in detail, firstly on-screen then using summary statistics to ensure the interpolated results honoured the input composite data.

6.1 Inputs vs Outputs

The spatial correlation between down-hole 1m composite grades and interpolated block grades was undertaken in 3D throughout the Mt. Chalmers block model. Block grades are locally valid and within expectations for the current drill density. Areas with lesser points of observation, which were particularly in the deeper zones and the outer end areas of the deposit were specifically checked to ensure the interpolated block model results were within a visually acceptable range. The distance restriction applied to high grade outliers was checked and determined to be locally appropriate also.

The interpolated block grades resulting from the volume variance effects incorporated during OK interpolation are observed to be below composite grades within an expected range.

6.2 Visual Checks – Develin Creek.

A visual inspection of the spatial correlation between down-hole 1m composite grades and interpolated block grades was undertaken in 3D throughout the Develin Creek block model. A representative set of 3D views od Copper and Zinc item grade distribution are presented in Figures 8 and Figure 9 below. This 'general view' demonstrates the visual validation process and shows the typical relationship between drill-hole / composite grades versus block grades.

There is a significant non-correlation between the Cu and Zn element items clearly visible in these views.

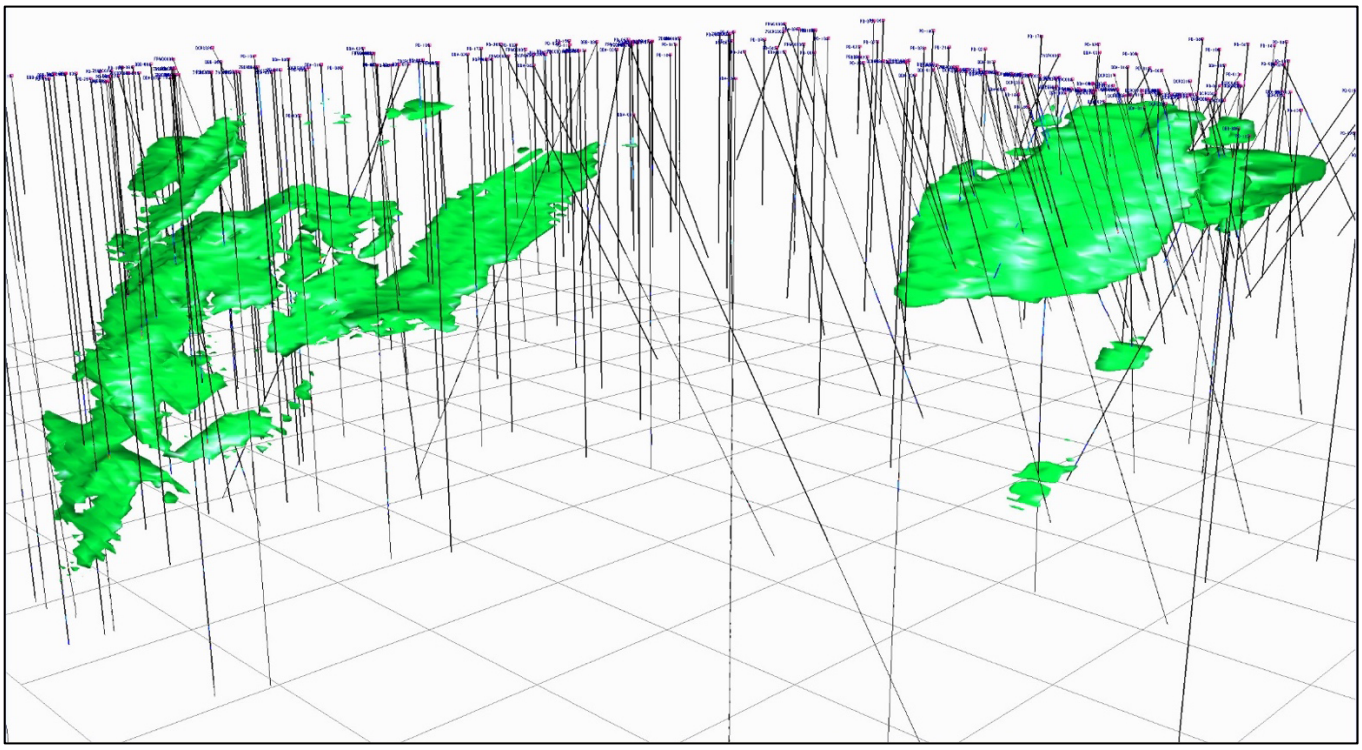

Figure 10: Copper Grade Distribution (>0.5% Cu) from Block Model - 'Sulphide City' Area (left) and Scorpion Area (right) – Oblique View (Azim 135 degrees, Dip -15 degrees – Looking South-East).

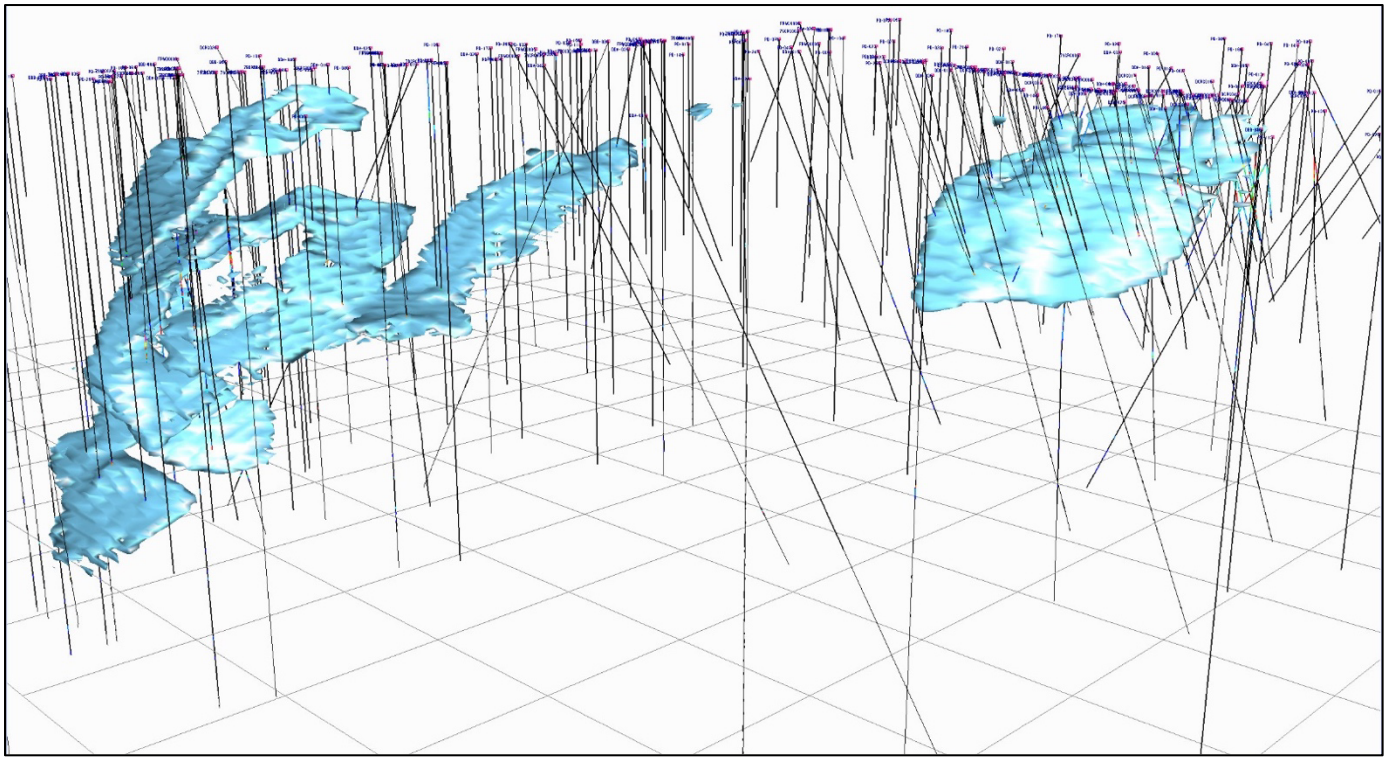

Figure 11: Copper Grade Distribution (>0.5% Zn) from Block Model - 'Sulphide City' Area (left) and Scorpion Area (right) – Oblique View (Azim 135 degrees, Dip -15 degrees – Looking South-East).

7. RESOURCE CLASSIFICATION

7.1 Classification Parameters and Resource Reporting

Resources at both Develin Creek 'Scorpion' and 'Sulphide City' Areas South have been classified into the 'Indicated' and 'Inferred' categories. Indicated category mineralisation is a requirement to help qualify reportable reserves following the running of (at least preliminary) pit optimization studies.

The classification used by HGMC at Develin Creek is based on ancillary block model items. The first is the DIST1 item (a record of the shortest distance of any given interpolated block to the nearest 1m composite within the anisotropic weighted search ellipsoid. Also used were the COMP (number of composites used in interpolation of a block) and the KERR item (the local kriging variance calculated for the interpolated block).

The DIST, COMP and KERR items were ultimately condensed into a RCAT (Resource Category) item for reporting purposes based on a set of 'estimation confidence level' thresholds and other classification 'modifying factors' that are appropriate for the deposit area being considered.

By way of example, all blocks with distances of less than 20m from block to composite (DIST<20) were designated as RCAT=2 or 'Indicated' resources. Similarly, all blocks between 20m and approximately 50m distance were designated as RCAT=3 or 'Inferred'. Distances for blocks greater than 50m from the nearest composite were designated as RCAT=4 of 'Unclassified'. These designations were additionally simultaneously modified by similar thresholds for the COMP and KERR item values.

Figure 10 below is AN image depicting graphically the relative distribution of material in the different resource classification categories (RCAT Item) from the two (2) Develin Creek mineralisation areas.

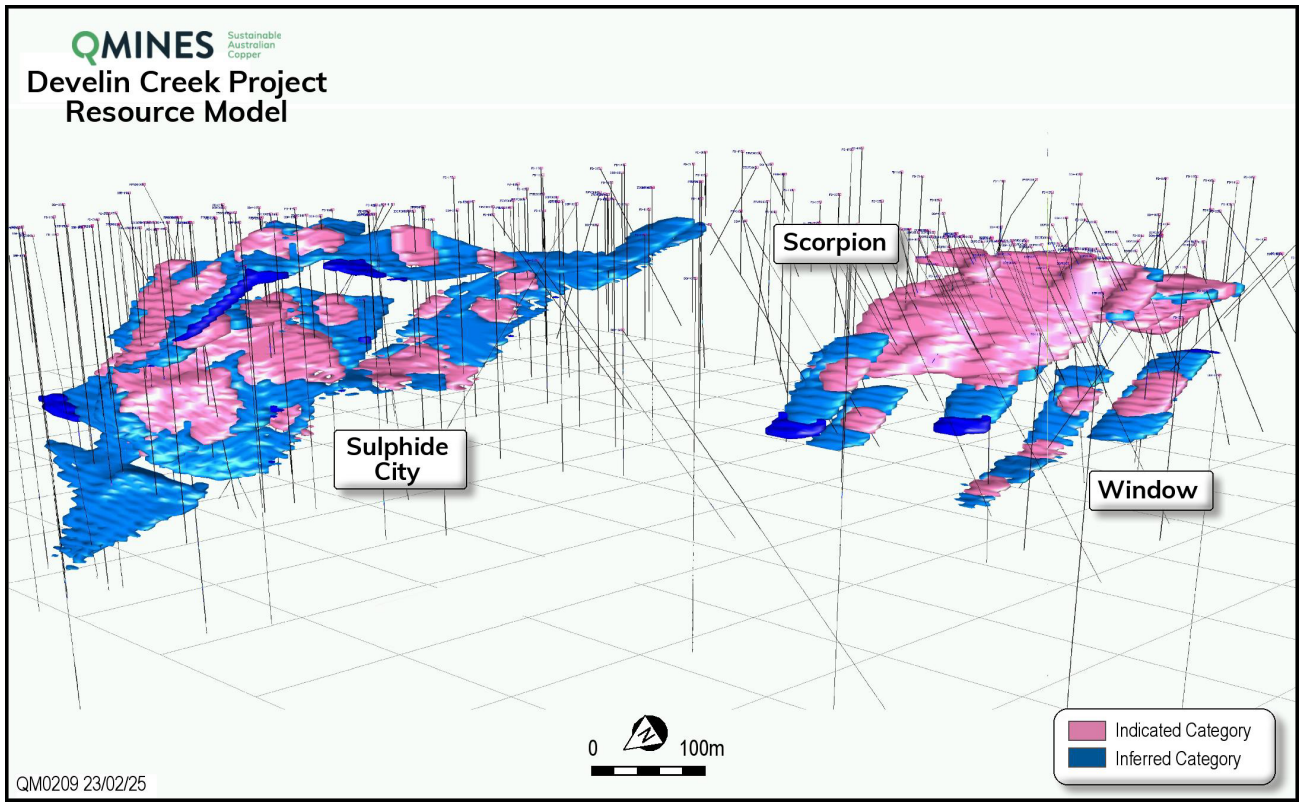

Figure 12: – Develin Creek 'Sulphide City' Area (left) and 'Scorpion' Area (right) – Relative RCAT Item Distribution – Pink shells are RCAT=2 'Indicated' and Light Blue shells are RCAT=3 'Inferred'. Dark Blue is RCAT=4 – 'Unclassified' – (Side View – looking roughly South-East).
View Looking Grid Azim=135 degrees – Dip = -15 degrees).

8. MINING AND CUT-OFF GRADE

8.1 Reporting Items

The copper wireframe (Figure 10) was used for interpreting and reporting the Mineral Resource which has similar quantities of copper and zinc sulphides. A 0.3% Cu cut-off was used for interpretation and reporting, and this is considered close to the likely economic cut off for bulk open pit mining at the Scorpion/Window deposit and processing by flotation at the Mt Chalmers process facility.

A higher grade 0.5% Cu cut-off is also provided to indicate the core of the Mineral Resource shown in Table 14. This cut-off would be more suited for potential underground mining if sufficient material were available to develop an underground mine. Many of the deeper portions of Sulphide City and Scorpion dip over 50˚ and could support potential underground mining using traditional stoping methods.

8.2 Metallurgy

Metallurgical test-work completed to date include:

- Preliminary rougher test work on RC chips in 2015 by Independent Metallurgical Operations Pty Ltd
- Additional flotation test-work on 190 kg of drill core in 2021 by Core Metallurgy Pty Ltd
- Follow-up mineralogy on the metallurgical sample in 2022 by Core Metallurgy Pty Ltd.

Both programs indicated the high sulphide samples from Develin Creek float easily and that copper and zinc are recoverable with over 90% reporting to a bulk concentrate. The work demonstrated iron sulphide is predominantly pyrite at a ratio of around 10 to 1 compared to compared to copper and zinc sulphides as chalcopyrite and sphalerite.

Some intergrowth of chalcopyrite with pyrite means significant regrinding will likely be required to adequately liberate the minerals and achieve a saleable grade concentrate. This will likely result in some additional metal loss with test-work indicating:

- For zinc initial rougher floatation recovers 82% of the Zn to a 32% Zn concentrate
- For copper initial rougher floatation with regrinding and processing recovers 92% of the Cu to a 21% Cu concentrate

This work has recently been completed and has preliminary findings, with further investigation required. The work did not summarise or review gold and silver recovery but concentrate analyses suggest both Au and Ag recoveries may be low at 10 to 20% via flotation. Further work is required to substantiate these results or determine if alternative recovery processes are available.

9. MINERAL RESOURCE ESTIMATE (MRE)

9.1 The MRE is utilising a 0.3% Copper cut-off grade wireframe for the Scorpion/Window deposit which is suitable for open pit mining. No open pit mining optimisation study work has been completed to date. Economic viability of the MRE at this stage has been accounted for by:

- Excluding material too distant from drilling interval 'points of observation'.
- Reclassifying deeper thin mineralisation where necessary as Inferred resources.

Table 14 Below is a summary of the Develin Creek Resources using the modelled copper wireframe at 0.3% copper cut-off grade (Cu%) as the reporting basis for this MRE.

Table 14 – Develin Creek Deposit – Updated Mineral Resource Estimate For all Zones Combined as at September 28th, 2023 (Selected Lower Cut-Off Range 0.20 → 0.50% Cu lower cut-off).

Develin Creek	Category	Cu %	Cubic M	Tonnes	(Cu%)	Zn(%)	(ppm)	(ppm)
Window	Ind	0.20	199,707	679,002	0.79	0.01	0.03	0.29
	Ind	**0.30**	**184,182**	**626,220**	**0.84**	**0.01**	**0.03**	**0.29**
	Ind	0.40	171,217	582,137	0.87	0.01	0.03	0.28
	Ind	0.50	154,665	525,863	0.92	0.01	0.04	0.29
	Inf	0.20	55,342	188,162	0.43	0.04	0.04	0.62
	Inf	0.30	35,166	119,566	0.53	0.04	0.05	0.74
	Inf	0.40	18,777	63,841	0.69	0.04	0.05	0.72
Scorpion	Ind	0.20	252,886	859,814	1.37	1.32	0.28	11.81
	Ind	**0.30**	**239,822**	**815,393**	**1.43**	**1.36**	**0.29**	**12.20**
	Ind	0.40	227,380	773,093	1.49	1.40	0.30	12.60
	Ind	0.50	213,379	725,490	1.56	1.43	0.31	13.07
	Inf	0.20	9,621	32,713	0.43	0.21	0.03	1.26
	Inf	0.30	4,664	15,857	0.59	0.31	0.06	2.60
	Inf	0.40	1,604	5,455	1.11	0.70	0.18	7.47
Sulphide City	Ind	0.20	462,586	1,780,957	0.87	1.04	0.11	4.42
	Ind	**0.30**	**378,032**	**1,455,423**	**1.01**	**1.18**	**0.13**	**5.05**
	Ind	0.40	321,054	1,236,058	1.13	1.28	0.14	5.52
	Ind	0.50	278,218	1,071,141	1.23	1.36	0.15	5.90
	Ind	0.60	244,763	942,338	1.33	1.43	0.16	6.20
	Inf	0.20	358,166	1,378,939	0.72	1.50	0.15	5.67
	Inf	**0.30**	**284,978**	**1,097,164**	**0.84**	**1.76**	**0.17**	**6.62**
	Inf	0.40	226,142	870,647	0.97	2.06	0.20	7.65
	Inf	0.50	183,478	706,391	1.09	2.32	0.23	8.49
Total	All	0.20	1,338,308	4,919,587	0.88	1.03	0.14	5.32
	All	**0.30**	**1,126,843**	**4,129,621**	**1.01**	**1.16**	**0.15**	**6.02**
	All	0.40	966,174	3,531,230	1.12	1.26	0.17	6.65
	All	0.50	841,272	3,068,088	1.22	1.35	0.19	7.18

Resource Summary Notes:
8 x 6 x 2.5m blocks within defined majority Cu wireframes above a nominal ~0.3% Cu cut-off and from surface down to -230mRL.
No rounding used.
Refer also to JORC Table 1 in Appendix 1.

The Mineral Resource for Develin Creek at the 0.3% Copper (Cu%) cut-off includes:

- **Indicated 2,897 Kt @ 1.01% Cu, 0.98% Zn, 0.15 g/t Au and 6.04 g/t Ag**
- **Inferred 1,233 Kt @ 0.81% Cu, 1.58% Zn, 0.16 g/t Au and 6.00 g/t Ag**
- **Total 4,130 Kt @ 1.07% Cu, 1.16% Zn, 0.15 g/t Au and 6.02 g/t Ag**

Table 15 Below is a summary of the Develin Creek Total contained metal using a 0.3% Copper (Cu%) item reporting basis.

Table 15 – Develin Creek Deposit – Updated Mineral Resource Estimate of total contained metal tonnes and Troy ounces as at February 25th, 2025 - Using Copper Only (Cu%) Lower Cut-Off of 0.30% Copper (Cu%).

Cu Tonnes	Zn Tonnes	Au Ounces	Ag Ounces
41,570	**47,720**	**20,450**	**799,810**

Assessment of the Mineral Resource against the JORC Table 1 criteria are provided in Appendix A. Table 16 below summaries of resources for Develin Creek using a range of CuEq (%) lower cutoffs.

Table 16. Develin Creek Mineral Resource estimate using 0.3% Copper (Cu%) lower cut-off.

Weathering	Classification	Kt	BD t/m^3	Cu %	Zn %	Au g/t	Ag g/t	CuEq* %
Oxide	Indicated	343	3.54	0.952	0.730	0.136	5.37	1.20
	Inferred	149	3.83	0.499	0.968	0.032	2.60	0.72
Fresh	Indicated	2554	3.62	1.110	1.010	0.154	6.12	1.43
	Inferred	1084	3.79	0.850	1.659	0.176	6.47	1.36
Total	Indicated	2897	3.61	1.091	0.977	0.152	6.04	1.40
	Inferred	1233	3.79	0.808	1.576	0.158	6.00	1.28
	Total	4130	3.66	1.07	1.16	0.15	6.02	1.37

9.2 Modifying Factors

HGMC has considered a range of modifying factors in view of the JORC Code (2012) to arrive at the current interim (not formally classified) resource estimates.

The quality of drill derived data, data management and interpreted mineralisation model for the Develin Creek deposit area is adequate for this stage of project development and associated Resource Reporting. The density of drilling is sufficient in some areas to define the Indicated and Inferred Resources within the Deposit areas. The Resource Estimate is therefore also suitable for conducting open pit mine planning work which is directed towards initial scoping studies and any later pre-feasibility study.

The Inferred resources in the deposit area is inherently defined by fewer points of observation when compared to the Indicated Resource zones and therefore do require further drilling in order to establish whether these zones are likely to contain minable material.

Following this block model revision, the CP is still satisfied that the geostatistically defined Ordinary Kriging interpolation process used for resource block model development Develin Creek has not unreasonably extrapolated either the grade or the number of mineralised blocks beyond the drill-hole sample points of observation.

Similarly, mineralisation volume has not been extrapolated unreasonably as the interpreted mineralisation wireframes were not extended beyond one typical drill section spacing and are by default a hard distance constraint.

The CP is of the opinion that the continuity of geology and mineralisation is best represented at a 0.50% Copper (Cu%) lower cut-off. This reporting lower cut-off is consistent with common industry practice with Resource Reporting for Copper resources with respect to the= current Copper Price. For consistency

QMines has reported the resource estimate using a Copper equivalent basis – however this is only valid for an instance in time with a given set of independently moving metal prices and differing assumed process metal recoveries. The basic Copper (CU %) reporting basis is easier to implement and should be adopted for future reporting. For the foreseeable future, Copper is likely to be the most valuable metal to be extracted and processed in conjunction with the Lead, Zinc, Gold and some Silver also likely to be produced as a valuable by-product.

There is an obligation under JORC for the CP to discuss "reasonable prospects for eventual economic extraction" for mineral resources estimated (JORC 2012, pp11-12). The CP is of the opinion that the Develin Creek – Main Deposit MRE as now reported is "a realistic inventory of mineralisation which, under assumed and justifiable technical, economic and development conditions, might, in whole or in part, become economically extractable" for the following reasons:

1. Scale and time. The Main deposit area has been mined historically and for a significant time prior to this latest resource estimate update has consistently been close to being put into production with economic circumstances prevailing at the project since say year 2000. The reasonable prospect for economic extraction is also reinforced due to the current favourable Copper and Gold prices in conjunction with the associated but lower value elements Zinc, Lead and Silver. The JORC Table 1 attached as an Appendix to this report is also guidance that includes discussion of the technical and economic cur-off grade assumptions supporting used in supporting the reasonable prospects for economic extraction criteria. It is therefore reasonable to assume that current or future mining feasibility studies would confirm a project is likely to have at least a short term period of economic viability. JORC guidelines suggest reasonable periods until "eventual economic extraction" out to 50 years (JORC 2012, pp12) however the Develin Creek deposit could be considered in time scales under 5 years.

2. Precedent proof. A large number of small to mid-tier companies are well advanced in the development of Copper and related base metals plus Gold 'polymetallic' resource projects with inherent low to high grades which require a relatively straight forward and relatively inexpensive process route. This MRE if used as the basis for Scoping Studies will be useful for defining important modifying factors and identifying any fatal flaws with respect to project development. A detailed Scoping Study should help provide recommendations for decisions makers towards identifying the appropriate progression of tasks towards a Pre-Feasibility Study (PFS).

3. Peer benchmarking. A global review of pre-development stage MRE's for predominantly Cu and Au deposits comparable to Develin Creek has not been rigorously undertaken here. This task would be market related and though would be beneficial is outside of the current HGMC scope of work. It would be easy to compare the Develin Creek Project with a large number of similar style Deposit in nearby regions in Queensland such as Mt. Chalmers or with Western Australian projects such as the Panorama VMS deposits in the Pilbara.

   The reporting of a Mineral Resources must satisfy the requirement that there are reasonable prospects for eventual economic extraction of at least part of the resources as classified. HGMC has excluded significant volumes of mineralized material that is informed by only relatively sparse drilling and consequently contains relatively low numbers of samples thereby reducing the confidence or estimation in those areas.

10. OBSERVATIONS AND CONCLUSIONS

10.1 Observations

In previous reporting the CP endorsed the continuance of infill drill programs at Develin Creek particularly within the areas then predominantly designated as Inferred Resources. Subsequent drilling programs were designed and carried out on a nominal offset 20m x 20m drill pattern to improve localised drilling density and confirm previous historic drilling results. This has in turn successfully addressed previously identified opportunities:

- The opportunity to define higher confidence resource categories, especially additional Indicated Resources In the Scorpion areas which has In turn provided further reliable Information for use In future Pre-Feasibility Studies;
- Converting some peripheral Inferred Resources and unclassified areas into the Inferred or higher reporting category, including in zones below -20m RL level where drilling density is lower;
- The consolidation and small extensions of some higher grade Cu and Zn ore zones structures;
- The better definition of localised high grade structures and better understanding of mineralisation distribution;
- Further updating of geological understanding including better information relating to more accurate bulk density assignment for tonnage estimation;

Additional work Is still required to :

- Collect additional structural mapping and interpretation data to help update and refine comprehensive 3D rock-mass and structural modelling.
- Consider the use of new generation Geo-Magnetics and similar Geophysics surveys to help locate high Copper (conductive) zones in the vicinity of the deposit area.

The CP recommends the continued adherence to Industry best practice standards for data acquisition and QA/QC including the regular use and verification of the performance of appropriate commercial standards and sample blanks in future drilling, sampling and assay streams.

11. REFERENCES

JORC, 2004. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code 2004 Edition). Prepared by: the Joint Ore Reserve Committee of the Australasian Institute of Mining and Metallurgy, Australia Institute of Geosciences and the Minerals Council of Australia (JORC). - Published December 2004.

JORC, 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code 2012 Edition). Prepared by: the Joint Ore Reserve Committee of the Australasian Institute of Mining and Metallurgy, Australia Institute of Geosciences and the Minerals Council of Australia (JORC). – Published December 2012.

Horton, J. (2022, August 4). Develin Creek Resource Update (Document No. 2156-01 R0). ResEval Pty. Ltd. for Zenith Mineral Limited. www.reseval.com.au

Muller, F. (2010, August). Develin Creek Project: Resource Estimate. Geostat Services Pty Ltd. Commissioned by Icon Resources Pty Ltd.

QMines Limited. (2023, August 24). Disclosure of Mineral Resource Estimate for Devlin Creek Copper-Gold Project. ASX Announcement. https://www.listcorp.com/asx/znc/zenith-minerals-limited/news/develin-creek-resource-upgrade-2744729.html.

Rowe, J. (2022, January). Flotation Testwork: Develin Creek. Core Metallurgy Report No. CM1333A-001. Core Metallurgy Pty Ltd.

Zenith Minerals Limited., (2015, February 5). Significant Resource Upgrade - Develin Creek Copper-Zinc-Gold-Silver Deposits. Fitzroy Resources. (01596650.pdf)

Zenith Minerals Limited., (2022, August 8). ASX Release - Develin Creek resource update. Zenith Minerals Limited. (ZNC_Develin_Creek_Resource_Upgrade.pdf)

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

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 information.*	• Industry standard practices for sampling techniques for the style of mineralisation were employed at the Develin Creek deposit. • QMC and Fitzroy diamond core within mineralisation was sampled at 1 to 2 m intervals, and half core splits sent to the laboratory. • Zenith drilling used regular 1 m intervals of half core with some subsampling (some ¼ core when field duplicates were used) • QMC PD samples were obtained by compositing 1 m samples from the rig into 3 m samples unless sulphide mineralisation was noted then shorter 1 or 2 m intervals were sampled. Samples from each percussion interval were collected in a cyclone and split using a 3-level riffle splitter. Wet samples were grab sampled for assay and the residual sample left to dry for later resampling if necessary. • Fitzroy RC samples (1 m) were split with an on-rig riffle splitter and sampled with a sample spear as 3 m composites in the hangingwall and footwall. RC samples were not composited in mineralized zones. • Zenith RC samples were collected on 1 m intervals from onboard cyclone and cone or riffle splitters aiming for 3 kg sub samples. RC samples were collected with a sample spear as 4 m composites in the hanging-wall and footwall. RC samples were not composited in mineralized zones. • Mineralized samples are high in sulphides and relatively dense. Zenith drilling used up to 500PSI air pressure (with 1,000PSI booster) and foam to improve ample return when needed.

Drilling techniques	• *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).*	• Exploration drilling has been completed over three main phases by different operators. The following subset the Develin Creek local area.
		• QMC completed drilling 1992 to1996 that included:
		  ○ 46 diamond holes,
		  ○ 129 PD holes (some HQ but mostly NQ)
		  ○ 7 water bores
		• Icon/Fitzroy completed extensional drilling 2011 that included:
		  ○ 2 RC holes

Criteria	JORC Code explanation	Commentary
		○ 6 diamond tails (some HQ but mostly NQ2) • Zenith completed verification and infill drilling in 2014 and 2021/22 including: ○ 31 RC holes, 6 with diamond tails ○ 3 diamond drill holes • Diamond drilling is mainly a diamond tails on pre-collared percussion of RC drilling through the Tertiary cap rock. • Core was generally not oriented with most being vertical holes. Some spear orientations were recorded in some angled holes. • QMC open hole PD drilling comprised a nominal 5 ½ inch diameter hammer with all holes cased with PVC to solid basement. Hole depths range from 21m to 310m. About 25% of the PD holes were abandoned prior to achieving their intended depth due to unfavourable drilling conditions and extreme difficulty in penetrating the tertiary cover. • Fitzroy RC drilling comprised a nominal 4 ½ or 5 ¼ inch diameter face sampling hammer. Hole depths range from 82m to 232m. • Zenith RC drilling comprised a nominal 5 or 5 ½ inch diameter face sampling hammer. Hole depths range from 60 to 289m.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Zenith's RC recovery was visually assessed and considered to be acceptable within the mineralized zones. • Diamond core recovery was logged with minimal core loss recorded in mineralised intervals. Zenith's core recovery is 99%. • PD and RC recovery was not measured or recorded but visually assessed and considered to be acceptable within the mineralized zones. • Diamond core was reconstructed into continuous runs, depths being checked against the depth marked on the core blocks. • PD and RC samples were visually checked for recovery, moisture and contamination. A cyclone and splitter were used to provide a uniform sample and these were routinely cleaned. • Sample recovery was generally very high within the mineralisation zones. No bias is expected to have occurred during sampling
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Diamond core, PD and RC drill chips were logged in detail through the entire hole, with records kept of lithology, degree of oxidation, etc. Diamond core was geotechnically logged for recovery. Diamond core was stored on site with key holes systematically re-logged and re-sampled (before 2011). A small representative sample of RC chips was collected for each interval sampled, and these have been retained for future reference. • Diamond core, PD and RC chip logging included records of lithology, mineralisation, and alteration. • Core was photographed and, pre-2011 magnetic susceptibility logged with selected samples submitted for petrography.

Criteria	JORC Code explanation	Commentary
		• All drill holes were logged in full apart from some percussion pre-collars through the cover sequence.

Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*
		• Diamond core was sawn in half, with half core (some ¼ core when field duplicates were used) on 1 to 2 m intervals.
		• All percussion and RC samples were collected on the rig using standard cyclone and riffle or cone splitters as described. Some samples were composited to generally 3 m by QMC and to 2 m by Fitzroy prior to lab submission.
		• Samples were recorded as dry or wet.
		• Exact sample preparation and QAQC for historic sampling is not described but sample preparation and analysis was undertaken by commercial laboratories.
		• Zenith's samples were dispatched to ALS Laboratories in Brisbane where RC and core samples were crushed and then riffle split before being pulverized to 70% passing -75 microns. A subsample of pulverized material was then submitted used analysis.
		• Zenith's field QAQC procedures included
		  • the insertion of certified reference materials covering copper, zinc, silver and gold grades.
		  • duplicates samples were collected of selected mineralised intervals and submitted for routine analysis.
		• Limited field duplicates of PD, RC and ¼ core were submitted during initial sampling. Both pulps and coarse rejects (and remaining core) were retained and subsequently resampled. Zenith's RC field duplicates returned satisfactory values. Zenith drilling targeted several twin or nearby drilling for verification purposes.
		• Sample sizes are considered to be appropriate to accurately represent the base metal mineralisation at Develin Creek based on the thickness and consistency of the intersections, the sampling methodology and the percent value assay ranges for the primary elements.

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision*
		• The analytical techniques used were by
		  • AAS by QMC (1990s)
		  • ICP-OES by Fitzroy (2011)
		  • ICP-AES by Zenith (2014, 2021/22) for base metals and fire assay for gold with re-analysis of all elevated (>1%) base metal samples supplemented by multi-element ICP analysis of selected mineralised intervals as considered appropriate (pre-2011). Gold was by fire assay.
		• In 2011 and 2014, all grade intervals (> 1% base metals) were re-assayed with a 4 acid digestion level.
		• No geophysical or hand-held tools were utilised for the drilling

Criteria	JORC Code explanation	Commentary
	have been established.	programmes (magnetic susceptibility was locally collected) pre-2011. • In 2011, handheld XRF readings were recorded over the whole length of two diamond holes. Magnetic susceptibility was recorded every metre during the 2014 campaign. • Limited duplicates were submitted and standards and blanks were included by the laboratory. Subsequent re-sampling and check analyses (and re- assay of mineralised samples) is acceptable. Zenith's field QAQC procedures included the insertion of duplicate samples and certified reference materials for copper, zinc, gold and silver covering a range of concentrations to match the mineralisation. QA/QC reviews indicated a good correlation between reference materials and analyses reported by the laboratory.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intersections have been verified by personnel of subsequent companies working on the project including a systematic program of re-sampling pulps and core by Outokumpu during the mid-1990's. Samples were visually inspected to confirm sulphide content and ¼ samples were re-submitted for re- analysis of selected portions of the mineralised intervals. • Zenith undertook a number of holes close to previous QMC percussions drilling to verify the deposit and previous results. These are not strict twin holes but provided sufficient verification of the previous work. Variations in results are noted but are within the expected short scale variance for the deposits. • Field data was all recorded on paper hardcopies (geological logging, sampling intervals, sample submission forms, density determinations etc on standardised templates). These data were transferred to a digital database. • No adjustments were made, other than industry standard approach for storing and managing below analytical detection limit values.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• QMC drill hole collar positions were surveyed by licenced surveyors with some crosschecking using conventional and differential GPS. • From 2011, drill hole collars were surveyed by handheld GPS. They were subsequently adjusted to available acute topographic surface. • QMC PD holes have no down hole surveys but are vertical in most cases. QMC diamond holes were surveyed at the end of hole with an Eastman survey camera. These displayed little variation • In 2011 and 2014, down hole surveys were completed every 50 m for both diamond and RC holes using a down hole Reflex camera. • A local grid was established by QMC in 1993 by a licenced surveyor and oriented AMG grid north, points on the baseline were subsequently picked up with differential GPS in 1995 to facilitate accurate grid conversions.

Criteria	JORC Code explanation	Commentary
		• The topography and drill collar locations and elevations were accurately surveyed by a licenced surveyor over the period 1993-94. • All recent work and reporting use GDA94 Zone 55 coordinates. • Accurate topography is available as an open-source Queensland Government LiDAR Survey. • Though recent drilling is only GPS surveyed it is adequate for the current study and classification and elevations corrected to the accurate topography survey.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drill holes were generally spaced 50 m along strike, and 50 m across-strike. • The data spacing and distribution is sufficient to demonstrate spatial and grade continuity of the mineralized horizon to support the definition of Inferred and in places Indicated Mineral Resource. • Percussion samples were composited to 3 m intervals and submitted for assay analysis however most mineralised intercepts incorporated in the resource model were sampled over 1 to 2 m intervals. • RC samples were collected at 1 m intervals within the mineralized zones and 3 m intervals in non-mineralized zones. • Zenith RC samples were collected at 1 m intervals within the mineralized zones and 4 m intervals in non-mineralized zones.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• In Sulphide City, drilling sections are orientated Northwest to Southeast with respect to grid north. • This orientation is perpendicular to the strike of the sulphide lenses. The majority of the drilling at Sulphide City is vertical, adequately testing the gently dipping sulphide lenses. • In Scorpion, drill sections are orientated North to South with respect to grid North. The majority of the drilling is drilled towards the South, with -60° dipping holes adequately testing the steeper lenses. • Drilling at Window is at various orientations aimed at testing the deposit orientation that appears to have a slightly horizontal stratification within a pod of broad disseminated style of mineralisation intersected. • The drillhole orientations detailed above were planned to intersect the mineralised lenses as close to a perpendicular angle as possible, and thus it is not believed any sampling bias was introduced regarding the orientation of main structures.
Sample security	• *The measures taken to ensure sample security.*	• QMC drill core was logged and sampled at the Marlborough exploration compound with bagged samples dispatched by road freight to the laboratory in Townsville. • QMC PD samples were sub-sampled and sealed in polyweave bags at the drill site for dispatch to the laboratory. • Icon RC samples were bagged on site, placed in bulka-bags and secured

Criteria	JORC Code explanation	Commentary
		for transport on pallets and then shipped directly using a 3rd party contractor to the laboratory. • Zenith RC samples were bagged on site, placed in bulka-bags and transported to a 3rd party contractor where samples were shipped to the laboratory. Core was logged and sampled on site. Samples were then delivered to a 3rd party contractor for dispatch to the laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• ResEval reviewed Zenith drilling in Nov 2011. Onsite recommendations were made to refine the ongoing drilling and included improvements to management surface disturbance, monitoring of RC sample split size and adjustment to the rotary RC sample splitter.

Section 2 Reporting of Exploration Results

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

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 at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The deposit is located within EPM 17604 the 100% Fitzroy Copper Pty Ltd owned exploration licence. Zenith has entered into an agreement with Fitzroy Resources, owner of Fitzroy Copper to purchase initial 51% equity with an option to purchase the remaining 49% within 24 months (Refer to ASX release dated 7 July 2014). • The prospect is located within the Forrest Home Pastoral Lease. • The tenement is in good standing with no known impediment to future grants of a mining lease
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Mineralisation was first identified in late 1992 by Queensland Metals Corporation (QMC) over what is now the Scorpion deposit. Between 1993 and 1995, QMC undertook an extensive geological and geophysical exploration program focused on the Develin Creek area and other prospects to the South. • In July 1995, QMC entered into a joint venture agreement with Outokumpu Mining Australia Pty Ltd (OMA) to continue exploration. OMA completed the first resource estimate for the Develin Creek deposits, then withdrew from the joint venture in 1996 and QMC (which later changed name to Australian Magnesium Corporation) maintained the tenements until relinquished 2002. • Icon Limited (Icon) acquired the tenement and in 2007 completed a resource estimate for Sulphide City, Scorpion and Window from historical drilling data.

Criteria	JORC Code explanation	Commentary
		• Fitzroy Resources acquired the project from Icon and listed via prospectus dated October 2010 and subsequently completed a HeliTEM survey, minor DHEM, some geochemical sampling and drilling of 12 holes. Of those 12 holes, 6 diamond holes were drilled to the south and east of the Develin Creek resource. Drill hole FRWD0002 collared near the southern edge of the resource intersected 13.5m grading 3.3%Cu, 4.0%Zn, 0.5g/t Au and 30g/t Ag in massive sulphide from 182m. The mineralisation was intersected in a position that extends the known limits of the resource by around 40 m to the south where it remains open to further upside. In addition, Fitzroy completed 3 RC holes at the Lygon Prospect and a further 2 south of the Develin Creek resource area.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Develin Creek base metal project hosts several copper-zinc-gold-silver volcanic hosted massive sulphide (VHMS) deposits and covers an extensive belt of underexplored prospective volcanic rocks. • Mineralisation comprises massive sulphide, stringer and breccia style copper-zinc-gold-silver deposits, hosted by basalts.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Exploration results completed by Zenith are documented in previous ASX announcements:
		  ○ 26 November 2014
		  ○ 5 July 2021
		  ○ 2 September 2021
		  ○ 16 December 2021
		  ○ 24 March 2022
		  ○ 7 June 2022
		• Five historic drill holes were excluded on the basis of incomplete drilling or assaying or poor sample orientations. The exclusion are not significant with other nearby drilling available for estimation. The domain contact information for the excluded drilling was still used to assist the interpretation.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*
	• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*
	• *The assumptions used for any reporting of metal equivalent values*
		• Exploration results and aggregates are not presented in this report.
		• Compositing for resource estimation used length weighting to regular 3 m intervals
		• Cueq (copper equivalent grade) used for this resource estimate is derived from the formula:
		  ○ Cueq = Cu% + (Zn% x 0.393) + (Au g/t x 0.69) + (Ag g/t x 0.0077)
		  ○ This is based on rounded metal prices as of June 2022 of $8400/tonne Cu, $3300/t Zn, $1800/oz Au and $20/oz Ag.
		• The only metallurgical work is some preliminary RC rougher test work that indicated similar > 90% recovery for both Cu and Zn. AT this stage equal

Criteria	JORC Code explanation	Commentary
	should be clearly stated.	recovery is assumed for all elements. • Lead grade is excluded as the grades are low enough to not present a significant economic value.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Exploration results are not presented in this report. • The deposits vary from flat to steep northly drip with the changes occurring in a regular manner recognized earlier in the project drilling. • Drilling is mostly vertical or at a steep angle and orientations adjusted to cross steeper dipping part of the deposit at the best possible angle.
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.*	• Diagrams are presented in body of text
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Exploration results are not presented in this report.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Surface sampling and mapping were completed over different field campaigns by QMC and subsequent companies. Several geophysical surveys were completed by different companies (aeromagnetics, induced polarisation, electromagnetics).
Further work	• *The nature and scale of planned further work (eg 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.*	• Additional drilling is required to test the south-western strike extent of the Sulphide City mineralised zone where mineralisation remains open ended. • Drill testing of geological, geochemical and geophysical targets in the area surrounding the Mineral Resources is a high priority. • Additional metallurgical testwork is required to expand upon the 2021 metallurgical testwork programs.

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.* • *Data validation procedures used.*	• QMines data is compiled and stored in Access Database format and is exported as DBF, Excel spreadsheets or other tabulated formats for review or use in geological and mineralisation interpretation and Resource Modelling. • Several Data validation approaches have been used by HGMC including cross validation of the database tables and checks for downhole interval integrity and a thorough completement of coordinate and grade ranges checks. • Some manual checking of the historic data against records has not been undertaken on selected representative drill holes.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• HGMC has not as yet carried out a site visit to the Develin Creek location. HGMC has some familiarity with the terrane and has previously carried out a site visit in October 2022 to the Mt. Chalmers Mine also operated by QMines in the same local region.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Following recent additional drilling carried out particularly in the Scorpion area during 2024, the level of confidence in the geological interpretation of massive sulphide horizons has improved. Most zones are easily traceable over numerous drill holes and drill sections. HGMC has updated the geological and mineralization interpretation using recent infill drilling by QMines. This additional drilling confirms and refines the historic interpretation work carried out by Zenith and also the previous work by Fitzroy. • Further infill drilling particularly in the Scorpion area has helped better define the local mineralisation geometry and variability and confirms the previous interpretation of mineralized horizons and the understood structural geological framework. • HGMC has carried out some review of surface mapping of outcrop, drill hole intercept logging and assay results. The structural interpretations has also been re-visited and confirms the basis for the current geological interpretation. Surface expression of the massive sulphide is not strong. • The extents and geometry mineralisation following recent QMines drilling is now better understood particularly in the Scorpion Area. There are still some limitations of the current drill coverage i other areas. Further work is still required to better define the geometry and extents of the mineralized sulphide horizons. Future work including additional; drilling is unlikely to

Criteria	JORC Code explanation	Commentary
		have any significant downside changes to the interpreted mineralized volume and contained grades. • HGMC has constructed new wireframes of varying orientations but are tending towards aligning with the upper contact of pepperites (ancient sea- floor horizons). A combination of assays and lithology were used to define these wireframe envelopes, with a cut-off of approximately 0.3% Cu was used for the pre-cursor underlying wire-frame development for use in resource domaining. Some adjustments to these wireframes were made locally depending on the presence of additional anomalous Zn, Au or Ag mineralisation • Base of weathering was interpreted from available logging of weathering, tertiary caprock logging and input from available sulphur assays. • There is evidence the mineralized unit is affected by faulting. The current understanding is limited where diamond drilling is available and further work is still required to better define the structural geological framework.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• There are two mineralized areas separated by a gap of 200 m. Both have variable dip and thickness but included some zones up to 30 m in vertical width. • The Window – Scorpion area is 200 m E by 480 mN by 220 m RL • Sulphide City area is 330 m E by 490 mN by 314 m RL and comprises a series of lenses some of which are stacked.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to*	• Three broad sets of wireframe envelopes (domains) representing the 'Scorpion', 'Window' and 'Sulphide City' areas. These were interpreted based on the 0.3% Cu delineation cut-off and adjusted according to localised anomalous Zn, Au or Ag distribution changes. • The spatial distribution of mineralisation within most wireframes is relatively predictable with relatively low coefficient of variation composite populations observed particularly for Copper. A small distance restriction to outlier grades for all analytical elements was applied to mitigate excessive extrapolation of high grades particularly in zones of low drilling density. • The outlier grade threshold used for the distance restriction was applied at approximately the 98th percentile level. The Distances of restriction applied were derived from observations of downhole variography and used an approximate tow time multiple of variogram range for the distance restriction. • Variograms were modelled using unfolding of the lenses for all the domains combined and indicate ranges of 70 to 90 m for Cu, Zn, Au and Ag. • A 3D block model was generated using uniform block sizes with an associated Block Percentage value (~1% precision) to account to

Criteria	JORC Code explanation	Commentary
	control the resource estimates. • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	contained wire-frame volumes. • The Block Size (SMU) selected Is 8 m x 6 m x 2.5 m size and represents a compromise to accommodate mineralisation zone size and complexity and also drilling / sampling density. • Interpolation was carried out separately for analytical items for Cu(%), Zn(%) Au(g/t) and Ag(g/t) and utilised 1m down-hole drill composites. • Block grades were estimated using Ordinary Kriging using a single pass searches approach and a primary oriented search ellipsoid of 50 x 40 x 20 m. • Interpolation used a maximum of 24 composites and a maximum of 3 composite per drill hole. • HGMC confirms that Copper and Zinc tend to be only weakly correlated and in places display different zonation. Similarly it is observed that Au and Ag are strongly associated Cu and less so with Zn. • Some anomalous Lead (Pb) grades are present and are not likely to hold any economic importance at this stage. Copper (Cu), zinc (Zn), gold (Au), and silver (Ag) are present at sufficient concentrations to be considered viable for economic extraction through flotation methods, assuming that Au and Ag will be recovered within the Cu or Zn concentrates. • The most recent previous resource estimate carried out by QMines used a nominal 0.5 % CuEq delineation cut-off for interpretation which can be considered a level that is appropriate for a particular 'instance' in time and is dependent upon any given set of metals process and mineral recoveries at that time. This difference in modelling approaches makes it difficult to carry out direct comparisons with the current resource estimate. Previously the total combined resource estimate using a 0.5% CuEq lower-cut-off reporting basis used by Qmines was : 3.2 Mt @ 1.05% Cu, 1.22% Zn, 0.17 g/t Au and 5.9 g/t Ag **The new HGMC estimate using a similar 0.3% Cu lower cut-off reporting basis Is :** **4.2 Mt @ 1.07% Cu, 1.16% Zn, 0.15 g/t Au and 6 g/t Ag** This Is an approximate ~24% increase in tonnage with similar Cu and Au grades and a small Increase In Zn and Ag grades being observed. Most of the tonnage increase is related to increased mineralisation volume changes following the addition of new drilling in the 'Scorpion' area. Some of the tonnage increase has been tempered by the use of a slightly more conservative set of inset bulk density values applied to the new block

Criteria	JORC Code explanation	Commentary
		model constructed by HGMC as the previously used values were deemed to be slightly too high when considering the available bulk density measurements. • No mining has been carried out within the Develin Creek deposit to date • A limited number of assumptions have been made with respect to the recovery of by-products or individual metal species Independently and it is expected that future refinement of these will follow metallurgical testing programs. • No acid mine drainage or deleterious element studies have yet been commissioned. • The Develin Creek block model was validated by several methods, including visual validations on-screen, global statistical comparisons, trend analysis and SWATH plots
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The tonnages are estimated on a dry basis. • There is as yet no direct in-situ measurement data used to assign a likely in-situ moisture content to any future mining production tonnages.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The classified Mineral Resource is reported beneath the current surface DTM topography consisting of tertiary cap surfaces. All reporting of Resources Is aligned using a Copper (Cu%) lower cut-off basis suitable for any future ore definition in an open pit mining and processing. This reasonably reflects the likely economic metal values and likely operating costs expected for processing from a flotation plant to produce copper and zinc concentrate products with contained beneficial gold and silver. • A higher value grade 0.50% Copper Equivalent (CuEq) reporting basis summary cut-off is also presented for historical comparison purposes and to assess the effect of an overall total metal conte value open pit of underground mining option is required. • **Metal Price Assumptions and Recovery Factors** • Metal Prices Assumptions (Rounded as at February18th 2025) : Copper (Cu) = US$4.08/lb, Zinc (Zn) = US$1.28/lb, Gold (Au) = US$2900/troy oz & Silver (Ag) = US$32/troy oz. • Recovery Factors : Copper (Cu): 90%, Zinc (Zn): 70%, Gold (Au): 90% & Silver (Ag): 90% • Copper Equivalent Block Calculation (incl recoveries) Is CuEq% = (Cu% x 0.90) + (Zn% x 0.220) + (Au g/t x 0.935) + (Ag g/t} x 0.0104).

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Develin Creek has been estimated and reported as principally an open pit target however it may also provide a more selective underground target for deeper and steeper mineralization. • No mining dilution ore ore loss factors have applied to the Mineral Resource. • The block model was developed on 8m x 6m x 2.5m (East, North, Bench) uniform block size assuming a 2.5m lbench height would be suitable for mining. • A minimum intercept with of 2m is used for modelling and estimation assuming open pit mining of ore could be undertaken on flitches down to 2.5m in height. • Domain boundaries are interpreted at a nominal 0.3% Copper (Cu%) cut-off and are used as hard boundaries for estimation.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical test-work has been carried out on two separate samples by Core Metallurgy In 2021 ad reported on In January 2022. Two representative samples were tested which Included High Copper -2.21% (Low Zinc -0.46%) composite sample of approximately 26kg and a High Copper - 2.64% (High Zinc - 3.90%) composite sample of approximately 102kg. • Both samples were put through a rod mill and analysed as oversize and undersize fractions over a 75um screen. • The samples were tested for separate Copper flotation and Zic floatation recovery. • The high Cu:Zn composite sample responded well to flotation, achieving 9.5% Cu in the rougher concentrate with 87% recovery. A low Cu:Zn composite with the same 2% Cu head grade reached a higher concentrate grade of 10.9% but with a lower 70% recovery. Attention was given to improving this lower-recovery composite, revealing that prefloat and gangue depression with CMC enhanced performance. Multiple cleaner flotation stages showed no clear benefit, with final grade likely influenced by regrind size and reagent choice. • Zinc Flotation - Initial Zn rougher flotation testing achieved good selectivity, with 85% Zn recovery from a 25% mass pull, with a subsequent test conducted under the same conditions achieving a slightly higher grade but lower recovery. A regrind and single-stage cleaner was found to be capable of increasing the grade further to 31.7% with very little loss of recovery, and so it is believed that further increases in grade may be possible through additional cleaner stages and/or a finer regrind. • Copper Flotation – rougher plus cleaner stages succeeded in producing a copper concentrate grade of 21% with an overall recovery of 72%. • Mineral liberation analysis of the two samples at the current target particle

Criteria	JORC Code explanation	Commentary
		size of P80 75 µm indicates that the concentrate can theoretically achieve a 10% copper grade and 90% copper recovery during the copper rougher flotation. However, to achieve a >20% copper grade and >80% copper recovery on the final concentrate, a significant regrinding (to a P80 of ~10-15 µm) on the rougher concentrate will be required. • For the current particle size, the low Cu:Zn ratio ore can theoretically achieve approximately 20% zinc grade and 90% zinc recovery. To achieve a final concentrate that has >40% zinc grade and >80% zinc recovery, significant regrinding is also required. • Some previous preliminary rougher test work on RC chips indicated a saleable copper and zinc concentrates were achievable and similar copper and zinc recovery was indicated at >90% (see ZNC ASX announcement dated 27 May 2015) • The sulphides appear consistent with other massive sulphide deposits in the region are have been or are currently in production.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• This project is only at an early stage of its life and no detailed assumption regarding possible waste and process residue disposal options have been made yet. • The high sulphide content of the deposit will require waste disposal engineering design and buffering but is considered manageable. The Rockhampton area has several sources of carbonate material suitable for dump buffering. Future work will need to investigate local carbonate sources. • No unusual flora or fauna was observed or expected at the project area however environmental surveys still remain to be done.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• A total of 442 density values from diamond drill core were derived from all the drilling programs with 1132 samples from the mineralized resource domains. • There is only a weak positive relationship of bulk density with Cu and Zn but a strong positive correlation with S and Fe. Since many sulphur assay suffer from an upper detection limit of 10% the region formulae of density with Fe was used to assign density to available Fe assays and estimate bulk density to the block model. • Trial estimates assigning average domain bulk density indicated only marginal differences to the global resource since the density Cu/Zn relationship is only weak. • High bulk density values of around 4 t/m^3 reflect the very high sulphide content drilled and the HMS style of deposit and is consistent with the weight of RC sample bags and core inspected onsite.

Criteria	JORC Code explanation	Commentary
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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 deposit.*	• The Mineral Resource for the Develin Creek has been classified as Indicated in areas where the drilling grid is in the order of 20x2om to 25x25m. • Most of the Inferred resources Is mineralised material outside of the Indicated resource zones where the drilling density Is nominally greater than 25m x 25m and out to approximately 50m spacing. • All classified resources are constrained by the Interpreted 3D mineralisation wire-frame. No resources have been extrapolated beyond the wire-frame boundaries. • Indicated excludes material below the main Sulphide City mineralization zone a below a depth of 250 beneath surface to account to the lower likelihood of economic viability.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No external audits of the Mineral Resource estimate have been undertaken at this time. The resource model has been partially audited by QMines personnel as apart of operational optimisations and continuous improvement protocols.
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.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The relative accuracy of the Mineral Resource estimate is reflected in the classification of the Mineral Resource as Inferred and indicated when sufficiently drilled to 20m x20m and out to 50m. • The Mineral Resource statement reflects the overall assessed completeness and accuracy of the underlying data and the confidence of the geological Interpretation as It affects the confidence of local and global scale estimation. • No production data is available.

ASX:QML

QMINES Sustainable Australian Copper

qmines.com.au