

28 JULY 2025

ASX: ANNOUNCEMENT

## SULPHIDE CITY DRILLING RESULTS CONFIRM HIGH-GRADE MINERALISATION



### Highlights

- Maiden 8,000m RC drilling program at the Sulphide City deposit at Develin Creek progressing well with two rigs onsite and drilling contuning;
- Initial 27 holes for 5,861 metres now complete with high-grade intersections returned from the first 13 holes including:
  - 9m @ 2.63% Cu, 4.2% Zn, 0.12g/t Au and 5.6g/t Ag from 178m; within
    - 21m @ 1.2% Cu, 2.3% Zn from 167m;
  - 6m @ 2.2% Cu, 3.0% Zn, 0.34g/t Au and 36.9g/t Ag from 239m; and
  - 11m @ 1.6% Cu, 3.2% Zn, 0.15g/t Au and 4.1g/t Ag from 158m; within
    - o 54m @ 0.54%, Cu, 1.5% Zn from 134m.
- Drilling continues unabated with the addition of several diamond tails planned to gain a better understanding of the mineralised zone;
- Samples from 14 additional drill holes at ALS laboratory with assay results pending; and
- Diamond rig to commence coring the mineralised massive and semi massive sulphides.

#### **Overview**

QMines Limited (**QMines** or **Company**) (**ASX:QML**) is pleased to announce the latest results from its maiden Reverse Circulation (**RC**) drilling program at the Sulphide City deposit which forms part of the Develin Creek project located approximately 90km northwest of Rockhampton in Queensland (Figure 1).

The planned 8,000 metre drilling program at Sulphide City is designed to validate the tenor and continuity of the high-grade massive sulphide mineralisation in historic drilling, and expand and infill the Sulphide City resource with a view to move more of the resource into the Indicated category. Planned step out drilling will also test for extensions of the mineralisation.

The Company has added diamond tails to selected drill holes to better understand the geometry of the semi and massive sulphide mineralisation in the deposit. The diamond rig is currently mobilising and expected to be onsite by Thursday 31<sup>st</sup> July and will continue along side the current RC drilling program.



#### **Management Comment**

Commenting on the drilling program, QMines Executive Chairman, Andrew Sparke, said:

"These early drilling results from Sulphide City are highly encouraging and provide further confidence in the scale and quality of the Develin Creek project. We're particularly pleased with the continuity and grade of the mineralisation encountered, including multiple thick, high-grade copper-zinc intersections that align with and extend historic results.

Importantly, the presence of stacked mineralised zones and broad intercepts supports our view that Sulphide City may host a much larger VMS system. With drilling continuing and further assay results pending, we look forward to building momentum towards an upgraded resource, informing future mine planning and our broader regional development strategy."



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

#### **Develin Creek Project**

The Develin Creek project comprises several Volcanic Associated Massive Sulphide (**VMS**) copper-zinc deposits within the Rookwood Volcanics. Petrological examination of the massive sulphide, associated footwall and hanging wall material has confirmed the mineralisation style of the system is an overprinted hydrothermally altered sedimentary breccia where Cu-Zn massive and semi massive sulphide mineralisation is associated with submarine basaltic volcanism with potential affinities to Besshi and Cyprus style VMS mineral deposits.

In March 2025, the Company delivered an updated Mineral Resource Estimate (**MRE**) for the project. Consultant resource geologists HGMC, estimated a combined MRE for the Scorpion and Sulphide City deposits of **4.13Mt** (**a**) **1.01% Cu**, **1.16% Zn**, **0.15g/t Au and 6.0g/t Ag** with 56% in the Inferred and 44% in the Indicated categories (Table 1)<sup>1</sup>.

<sup>1</sup>https://wcsecure.weblink.com.au/pdf/QML/02923731.pdff



The Company completed its maiden 5,000 metre RC drilling program at the Scorpion/Window deposit in December 2024. The updated Scorpion/Window MRE is undergoing open-pit optimisation with the results of the optimisation expected to be delivered in August 2025.

Resource Category	Tonnes (Mt)	Cut Off (% Cu)	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)
Indicated	2.9	0.30%	1.09	0.98	0.15	6.04
Inferred	1.3	0.30%	0.81	1.58	0.16	6
Total <sup>2</sup>	4.13	0.30%	1.01	1.16	0.15	6

Table 1: Develin Creek current Mineral Resource Estimate – March 2025 at 0.3% lower cut-off grade.

#### Drilling Program

At the Sulphide City prospect, the Company's maiden RC drilling program commenced in May 2025 and has completed 27 holes for 5,861 metres drilled with the initial assays from holes DCRC044-DCRC056 reported in this announcement. Drilling has successfully intersected massive and semi-massive sulphide mineralisation consistent with historical drilling results by previous workers.

The Sulphide City drilling program has been designed to test the potential for shallow oxide mineralisation, and confirm the deeper semi-massive and massive sulphide mineralisation as infill and resource drilling. The program also designed holes to confirm the boundaries of the known deposit and possible extensions to mineralistion. The current drilling program will enhance existing data and be used to upgrade the current MRE with the view to improve the resource from the Inferred to the Indicated and or Measured categories.

Table 2: Develin Creek drilling results reported in this announcement.

Hole ID	MGA East (m)	MGA North (m)	RL (m)	Dip	Mag Azi	Depth	From	То	Int (m)	Cu %	Zn %	Au g/t	Ag g/t	Comment
DCRC044	789247	7450655	111	-70	125	278				NSI				
DCRC045	789100	7450232	112	-73	127	80				NSI				
DCRC046	789077	7450262	112	-75	126	100	74	78	4	0.2	1.7	0.3	5.1	Diamond Tail
and							99	100	1	1.2	0.3	0.27	3.8	EOH Redrill
DCRC047	789128	7450252	112	-74	126	100				NSI				
DCRC048	789180	7450633	120	-72	140	319	239	245	6	2.2	3	0.34	37	
DCRC049	789177	7450594	120	-65	125	162	115	119	4	0.17	1.8	0.07	3.9	Diamond Tail
DCRC050	789206	7450585	120	-65	135	288	167	188	21	1.2	2.3	0.07	2.5	
inccluding							178	187	9	2.63	4.2	0.12	5.6	
and							234	248	14	0.43	1.1	0.3	9.1	
including							246	247	1	1.7	5.6	2.76	97	
DCRC051	789185	7450470	126	-60	130	100				NSI				Diamond Tail
DCRC052	789036	7450314	126	-64	130	100				Redrill				EOH Redrill
DCRC053	789216	7450409	112	-65	130	150				NSI				
DCRC054	789218	7450563	112	-74	128	319	134	188	54	0.54	1.5	0.07	2.3	
including							158	188	30	0.86	1.3	0.08	2.5	
and including							158	169	11	1.6	3.2	0.15	4.1	
DCRC055	789217	7450436	112	-70	126	240				NSI				
DCRC056	789222	7450471	114	-65	320	209	63	68	5	0.17	1.2	0.04	2	Diamond Tail
and						168	139	159	20	0.14	0.58	0.07	3	Diamond Tail
DCRC057	789170	7450658	119	-65	321	261				Pending				
DCRC058	789206	7450618	119	-65	140	240				Pending				
DCRC059	789158	7450595	123	-67	130	196				Pending				
DCRC060	789169	7450538	116	-65	135	276				Pending				
DCRC061	789164	7450465	121	-75	130	150				Pending				
DCRC062	789168	7450511	123	-75	128	154				Pending				
DCRC063	789111	7450492	129	-60	140	245				Pending				
DCRC064	789192	7450543	79	-75	130	264				Pending				
DCRC065	789279	7450492	79	-65	135	252				Pending				
DCRC066	789168	7450412	140	-75	115	189				Pending				
DCRC067	789165	7450331	117	-70	130	241				Pending				
DCRC068	789260	7450473	109	-70	119	270				Pending				
DCRC069	789277	7450557	107	-65	140	240				Pending				
DCRC070	789168	7450437	115	-75	142	270				Pending				



Early stage RC drilling testing shallow oxide mineralisation in drillholes DCRC045-DCRC047, DCRC051 and DCRC053 proved to be unsuccessful with no significant economic mineralisation being intersected in the oxide material.

Drillholes DCRC048, DCRC050 and DCRC054 have yielded significant intersections, confirming the presence and continuity of mineralisation which exhibits a tenor and style consistent with previous historical drilling and aligns with the current geological model developed for the prospect.

The intersections reported here are downhole widths and provide insights into the continuity of the mineralisation. Significant intersections reported in this announcement are shown in Table 2.

Highlights from the initial drilling at Sulphide City prospect include:

- DCRC048: Intersected 6m @ 2.2% Cu, 3.0% Zn, 0.34g/t Au, and 37g/t Ag from 239m.
- DCRC050: Intersected a high-grade zone of **9m** @ **2.63% Cu**, **4.2% Zn 0.12g/t Au and 5.6g/t Ag** from 178m within a broader intersection of **21m** @ **1.2% Cu**, **2.3% Zn**, **0.07g/t Au and 2.5g/t Ag**
- DCRC050: Intersected a second zone of mineralisation of 14m @ 0.43% Cu, 1.1% Zn, 0.30g/t Au and 9.1g/t
   Ag from 234m demonstrating multiple zones of mineralisation.
- DCRC054: Intersected **11m** @ **1.6% Cu**, **3.2% Zn**, **0.15g/t Au and 4.1g/t Ag** from 158m within a broader zone grading at **30m 0.86% Cu**, **1.3% Zn 0.08g/t Au and 2.5g/t Ag**.

RC and diamond drilling remains ongoing with the results from 14 of the holes drilled awaiting assay. The Company will report assayed results as they come to hand with several drilling announcements expected over the coming months.



Figure 2: Plan view showing drillhole collar locations completed and planned drillholes at Shulphide City, and Section 'A-A'.





Figure 3: Drillhole cross section, Sulphide City deposit 'A-A' (Looking WNW).

#### Sulphide City Geology

The Sulphide City deposit geology appears to be somewhat different in style than that found at the Scorpion and Window deposit. At Sulphide City, the prospect is characterised by a complex primary depositional environment, exhibiting not only distinct massive and semi-massive sulphide bodies but also stockwork and disseminated sulphide. The massive sulphide bodies themselves currently reach up to a thicknesses of 30m and display brecciated and stratiform textures, typically exhibiting sharp contacts with the surrounding altered basaltic sequences.

The primary sulphide assemblage includes chalcopyrite, sphalerite, pyrite, and minor galena, with copper mineralisation often observed as finely disseminated chalcopyrite intergrown with sphalerite. Geologically, Sulphide City is underlain by extensive chlorite-pyrite alteration, a characteristic footwall alteration signature common to VHMS systems, indicating intense hydrothermal interaction.

There appears to be quite a disctinct zonation pattern in recent drilling where the zinc/sphaleraite mineralisation sequence has greater abundance than that of chalcopyrite. The copper sulphide suggests a deep-water depositional setting, likely exceeding 700 meters, during the deposit's formation. This complex primary architecture encountered to date in drilling suggests that a combination of seafloor precipitation (forming massive sulphide mounds/sheets) and sub-seafloor replacement processes contributed to its genesis.

In contrast, at the Scorpion prospect, the mineralised body comprises semi-massive and massive sulphides, currently measuring approximately 250m (L)  $\times$  100m (W)  $\times$  25m (D) and dipping towards the north-north-east at approximately 60°. This mineralisation is predominantly pyrite with visible chalcopyrite and sphalerite, along with assayed gold and silver. Recent petrographic examination of massive and semi-massive sulphide, footwall, and hanging wall fragments from RC drilling indicates that the sulphide mineralisation in the samples is considered a product of hydrothermal deposition within pre-existing rocks, such as polymictic sedimentary breccia.



Conceptually hydrothermal flux and sulphide deposition were likely facilitated by significant permeability and open space in the original rocks, with no evidence to suggest the sulphides are detrital. The alteration-mineralisation system at Scorpion is interpreted as a variant of a volcanic-associated massive sulphide system related to submarine basaltic volcanism, with Cu-Zn mineralisation potentially having affinities to Cyprus and Besshi type deposits.

The breccia at Scorpion generally exhibits a clast-supported texture, with fragments predominantly of altered basalt, along with quartz-rich siltstone and chert/cherty argillite. A fine-grained matrix component was strongly overprinted by hydrothermal alteration/replacement, resulting in a strong propylitic alteration assemblage in the breccia fragments, with varying amounts of chlorite, sericite, quartz, epidote, albite, and pyrite, and minor 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 mineralisation at Sulphide City appears variously impacted by post-depositional deformation indicating the deposit is a structurally controlled accumulation of VMS mineralisation. Regional folding and faulting events indicate the massive sulphides at Sulphide City are more steeply dipping typically 25-30° WNW than that found at the Scorpion deposit.

This deformation resulted in localised remobilisation of sulphides along fractures and shear zones, potentially enhancing metal concentration with recrystallisation and grain coarsening. Due to the structural complexity apparent in the recent drilling, the Company will undertake several diamond tails in some key drillholes to view the semi and massive sulphide mineralisation providing a greater understanding of the local geology particularly in complex and high-grade sulphide zones.

#### **Upcoming Milestones**

**Develin Creek Drilling Results (Sulphide City Deposit):** Ongoing drilling results at the Sulphide City as they come to hand aimed at resource growth and improved geological confidence.

**Develin Creek Pit Optimisation (Scorpion Deposit):** A new open pit optimisation study is underway following the recent Scorpion/Window resource upgrade. Results are expected in August and will inform initial mine planning assumptions.

**Metallurgical Testwork (Mt Chalmers / Develin Creek):** PFS-level testwork is continuing and will inform processing route selection and integration into the broader flowsheet.

**Scoping Study (Mt Chalmers / Develin Creek / Mt Mackenzie):** A standalone scoping study is in development to evaluate the combined project's initial economic parameters and the logistical, metallurgical and economic suitability of combining feed from three regional projects into a larger integrated operation.

**Underground Optimisation (Sulphide City Deposit):** A separate underground study will assess the potential to access mineralisation at Sulphide City via underground mining, targeting higher-grade material, reducing waste movement and strip ratio.

**Updated Pre-Feasibility Study:** Workstreams from Develin Creek, Mt Mackenzie and Mt Chalmers will be integrated into an updated Pre-Feasibility Study planned for the first half of 2026. The revised study will reflect an expanded mine plan (2Mtpa), incorporating blended material from the three projects and updated capital and operating cost estimates.

#### **Competent Person Statement**

The information in this document that relates to mineral exploration and exploration targets is based on work compiled under the supervision of Mr. Thomas Bartschi, a member of the Australian Institute of Geoscientists (AIG). Mr Bartschi 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). 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 <sup>2</sup>	Reserve Category	Tonnes (Mt)	Cut Off (% Cu)	Cu (%)	Au (g/t)	Zn (%)	Ag (g/t)	S (%)
Mt Chalmers	Proved	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 <sup>1</sup>		9.6	0.3%	0.65	0.48	0.27	5.20	4.30

#### **Mineral Resource Estimate - Mt Chalmers**

Deposit <sup>3</sup>	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 <sup>1</sup>		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)	
Develin Creek	Indicated	2.9	0.3%	1.09	0.98	0.15	6.04	Not in Mine
Develin Creek	Inferred	1.3	0.3%	0.81	1.58	0.16	6	Plan
Total <sup>2</sup>		4.2	0.3%	1.01	1.16	0.15	6	

#### Mineral Resource Estimate – Mt Mackenzie

Deposit⁴	Resource Category	Tonnes (Mt)	Cut Off (g/t Au) *	Cu (%)	Au (g/t)	Zn (%)	Ag (g/t)	
Mt Mackenzie	Indicated	2.3	0.5 / 0.7g/t	-	1.38	-	9.6	Not in Mine
Mt Mackenzie	Inferred	1.1	0.5 / 0.7g/t	-	1.45	-	5.8	Plan
Total⁴		3.2	0.5 / 0.7g/t	-	1.40	-	8.4	

#### **Mineral Resource Estimate - Woods Shaft**

Deposit⁵	Resource Category	Tonnes (Mt)	Cut Off (% Cu)	Cu (%)	Au (g/t)	Zn (%)	Ag (g/t)	Not in
Woods Shaft	Inferred	0.54	0.3%	0.50	0.95	-	-	Mine Plan
Total <sup>3</sup>		0.54	0.3%	0.50	0.95	-	-	

<sup>3</sup> ASX Announcement - <u>Maiden Woods Shaft Resource</u>, 22 November 2022.
<sup>4</sup> ASX Announcement - <u>Resource Upgrade At Mount Mackenzie Gold & Silver Project</u>, 9 July 2025.

<sup>&</sup>lt;sup>1</sup> ASX Announcement – <u>Mt Chalmers PFS Supports Viable Copper & Gold Mine</u>, 30 April 2024. <sup>2</sup> ASX Announcement – <u>Develin Creek Resource Upgrade Improves Growth & Development Potential</u>, 12 March 2025.



#### COMPANY OVERVIEW

#### **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), Develin Creek (copperzinc), and Mt MacKenzie (gold-silver) deposits, located within 100km 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.

#### **Project & Ownership**



### **QMines Limited**

ACN 643 312 104 ASX: QML

> Shares on Issue

Unlisted **Options** 

464,779,762

10,750,000

Following several resource updates, Mt Chalmers and Develin Creek now have Measured, Indicated and Inferred Resources (JORC 2012) of 15.5Mt @ 0.82% Cu, 0.35g/t Au, 0.47% Zn & 5g/t Ag.1

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

#### **Directors & Management**

Andrew Sparke **Executive Chairman** 

Peter Caristo Non-Executive Director (Technical)

Thomas Bartschi Principal Geologist (Competent Person)

#### **Compliance Statement**

General Manager Operations Elissa Hansen Non-Executive Director & Company Secretary

**James Anderson** 

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 – Develin Creek Resource Upgrade. 12 March 2025

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### Section 1 Sampling Techniques and Data

QMINES Sustainable Australian Copper

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The Company has carried out the RC drilling to industry best practice standards and techniques. QMines considers the drilling and sampling methods used at Develin Creek to be appropriate for the mineralisation style as observed and interpreted.</li> <li>Samples were collected at 1m intervals, with samples sent to the lab for analysis.</li> <li>Sample intervals were partly determined by preliminary estimation of base metal content in RC chips by a handheld Niton XL3 pXRF unit.</li> <li>Mineralisation at Develin Creek is associated with the presence of sulphide minerals. Samples were sent to the lab where sulphides were detected during geological logging carried out while drilling.</li> <li>Samples were collected through a cyclone and passed through cone splitter to produce a sample size of 2-3kg. No wet mineralised samples were encountered.</li> <li>Each sample is believed to be representative of the interval drilled.</li> <li>No composite samples were collected.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	<ul> <li>Results presented in this release refer to reverse circulation (RC) percussion drilling.</li> <li>Drilling utilized a 5 ½ inch hammer bit</li> <li>The upper parts of the holes through the weathered profile were cased with PVC-cased to prevent the collar collapsing and possible contamination</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul> <li>RC recovery was visually assessed and deemed acceptable.</li> <li>The Company's RC rig has sufficient air pressure to maintain dry samples.</li> <li>RC samples were passed through a cyclone before splitting</li> </ul>

<b>QMINES</b>	Sustainable Australian Copper	
Criteria	JORC Code explanation	Commentary
	• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	<ul><li>to maximise the sample recoveries.</li><li>Sample recoveries were good, with no obvious sampling bias.</li><li>Where excessive water was intersepted, holes were stopped.</li></ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>RC drill chips were carefully logged, noting lithology, oxidation levels, mineralisation, veining and alteration.</li> <li>Logging was qualitative in nature and all metres were logged.</li> </ul>
Sub- sampling techniques and sample preparatio n	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>RC samples were collected on the rig using standard cyclone and a cone splitter.</li> <li>Samples were recorded as dry or wet.</li> <li>Details of QAQC were noted on the sampling sheet during the drilling of the hole.</li> <li>Commercial assay laboratories were used for sample preparation and analysis.</li> <li>Samples were sent to ALS Laboratories in Brisbane where they were crushed, riffle split, and pulverised then analysed.</li> <li>QAQC measures included: <ul> <li>Insertion of certified reference materials for copper, zinc, silver, and gold.</li> <li>Duplicate samples from selected mineralised intervals for routine testing.</li> </ul> </li> <li>Given the consistency and thickness of observed intersections, the sampling approach, and assay ranges, the sample sizes were considered to adequate to provide representative sampling of the main base metal mineralisation types at Develin Creek.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> </ul>	<ul> <li>The Analytical techniques for Develin Creek employed were:         <ul> <li>ICP-AES for base metals (Laboratory code ME-ICP61).</li> <li>Gold was analysed via fire assay (AU-AA25). Re-analysis of elevated (&gt;1%) base metal samples was done, with additional multi-element ICP analysis on select mineralised intervals (Laboratory code Cu-OG62 and Zn-OG62).</li> <li>During the drilling program, some intervals with &gt;1% base</li> </ul> </li> </ul>

<b>QMINES</b>	Sustainable Australian Copper	
Criteria	JORC Code explanation	Commentary
	<ul> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>metals underwent re-assay with a 4-acid digestion.</li> <li>Limited duplicate samples were sent. The lab included standards and blanks. QAQC entailed inserting duplicates and certified reference materials for copper, zinc, gold, and silver. QA/QC results showed good correlation between reference materials and lab-reported analyses.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Selected twin holes were drilled by previous explorers to validate earlier intersections. Some results variations were observed but were considered to generally align with short-scale deposit variances.</li> <li>All field data, including geological logging and sampling details, were recorded on paper logs using standard templates which were later computerised.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drillholes were surveyed with a handheld GPS, and will be surveyed by licensed surveyors and cross-checked using conventional and differential GPS.</li> <li>Handheld GPS devices have an accuracy of approximately 3m.</li> <li>All holes were surveyed downhole via a gyroscopic survey tool. Readings were taken every 30m.</li> <li>A local grid, oriented to AMG grid north, was set up by QMC in 1993 with known survey points being verified with differential GPS in 1995.</li> <li>Between 1993-94, a licensed surveyor accurately surveyed topography, drill collar locations, and elevations.</li> <li>Recent drilling utilises GDA94 Zone 55 coordinates.</li> <li>Precise topography information was sourced from the Queensland Government LiDAR Survey.</li> <li>Current GPS-surveyed drilling is sufficient for present modelling and resource estimation studies, with elevations adjusted to accurate topographic survey elevations.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill holes were spaced at approximately 25 m both along and across strike.</li> <li>Data spacing and distribution confirm spatial and grade continuity, supporting both Inferred and Indicated Mineral Resource classification definitions.</li> <li>No compositing has been carried out.</li> <li>RC samples were taken every 1 m in mineralised zones.</li> </ul>

# QMINES Sustainable Australian Copper

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Most drill sections were oriented north-south with holes inclined towards the south at -65°, effectively intersecting the deposit at reasonably optimal angles. Some sections were drilled east-west to test continuity across strike.</li> <li>The drilling orientations used to intersect mineralised zones were close to perpendicular with respect to the majority of observed mineralisation. This minimised some of the potential sampling bias associated with the main known structural orientations.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>RC samples were bagged on site by company personnel, moved to bulka-bags, and transported to a 3rd party contractor for shipment to the lab.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>The current program has not been subject to audits or reviews.</li> </ul>

### 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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The drill results released in this announcement are from holes drilled on EPM 17604. The Develin Creek project comprises EPM 17604 and EPM 16749.</li> <li>The Develin Creek Project is 100% owned by QMines Limited after acquiring 51% equity in the project from Zenith Minerals Ltd subsidiary Mackerel Copper Pty. Ltd on 28 August 2023 and acquiring the remaining interest to 100% ownership on 30<sup>th</sup> September 2024.</li> <li>The resources and some prospects lie within the Forrest Home Pastoral Lease. Other prospects lie within the leases of Coorumburra and Develin Creek.</li> <li>The tenement is well-maintained with no foreseeable obstacles to securing a future mining lease.</li> </ul>

#### **QMINES**Sustainable Australian Copper Criteria **JORC Code explanation** Commentary **Exploration** • Acknowledgment and appraisal of exploration by other • Mineralisation at the Scorpion deposit was first identified by done by Queensland Metals Corporation (QMC) in late 1992. parties. other From 1993 to 1995, QMC conducted comprehensive parties exploration at Develin Creek and southern prospects. By July 1995, QMC and Outokumpu Mining Australia Pty Ltd (OMA) initiated a joint venture. OMA determined the Develin Creek deposits' initial resource estimate but exited the joint venture in 1996. QMC, later rebranded as Australian Magnesium Corporation, retained the tenements until 2002. • Icon Limited procured the tenement and by 2007, established a resource estimate for Sulphide City, Scorpion, and Window using prior drilling data. • Fitzroy Resources took over the project from Icon, conducted varied explorations, and drilled 12 holes post their October 2010 listing. One noteworthy drillhole, FRWD0002 unveiled significant mineralisation, expanding the resource's known boundary to the south. • Zenith Minerals Ltd carried out additional drilling and project development work with a new resource estimate carried out by ResEval geological Consultants and reported in August 2022.

Geology

Drill hole

n

Informatio

in metres) of the drill hole collar

o down hole length and interception depth

• If the exclusion of this information is justified on the basis

not detract from the understanding of the report, the

that the information is not Material and this exclusion does

o dip and azimuth of the hole

o hole length.

- Deposit type, geological setting and style of mineralisation. • The Develin Creek project contains numerous copper-zincgold-silver volcanic hosted massive sulphide (VHMS) deposits within a largely unexplored volcanic belt.
  - Mineralisation includes copper-zinc-gold-silver deposits in massive sulphide, stringer, and breccia styles, rooted in basalts.
- A summary of all information material to the understanding • Drill collar details are presented in the main body of the of the exploration results including a tabulation of the release together with a plan showing their location. following information for all Material drill holes: • Zenith's exploration findings are recorded in prior ASX • easting and northing of the drill hole collar announcements on these dates: • elevation or RL (Reduced Level – elevation above sea level
  - + 26 November 2014
    - + 5 July 2021
    - + 2 September 2021
    - + 16 December 2021
    - + 24 March 2022
    - + 7 June 2022

# QMINES Sustainable Australian Copper

Criteria	JORC Code explanation	Commentary
	Competent Person should clearly explain why this is the case.	
Data aggregatio n methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Length weighted drill intercepts are reported (this equates to a simple average in this instance as all samples lengths are 1 m)</li> <li>No metal-equivalents are reported here</li> <li>No grade-cuts have been applied.</li> <li>Interval composites are based on copper grades ≥ 0.5% with a maximum internal dilution of 3 m.</li> <li>This method is appropriate for reporting exploration drill results.</li> </ul>
Relationshi p between mineralisat ion widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Deposits shift from flat to a steep northerly dip, as previously identified in project drilling.</li> <li>Drilling is primarily steeply angled, adjusted to best intersect the steeper portions of the deposit.</li> <li>Drill intercepts reported here are approximately true-width with the exception of holes DCRC040 and DCRC041 drilled down-dip).</li> </ul>
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	<ul> <li>Location diagrams, cross-section, and tables are presented in body of text</li> </ul>
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.	<ul> <li>Relevant historical exploration results are presented in previous announcements.</li> <li>Results from all holes drilled to date and assays received are presented in the main body of the release.</li> <li>Drilling is infill drilling and is in line with previous results</li> </ul>
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.	<ul> <li>Previous explorers conducted surface sampling and mapping across various field campaigns.</li> <li>Multiple geophysical surveys, including aeromagnetics, induced polarisation, and electromagnetics, were performed by different entities.</li> </ul>

# QMINES Sustainable Australian Copper

Criteria	JORC Code explanation	Commentary
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Updated mineral resource estimate incorporating new drilling.</li> <li>Pit optimisation and shell design</li> <li>Geotechnical and further metallurgical diamond drilling is scheduled for January 2025.</li> <li>Regional exploration at other known prospects is required to test their potential.</li> <li>Additional prospect generation through geophysics and geochemical interpretation as necessary.</li> </ul>





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