8th August 2022

DEVELIN CREEK

RESOURCE UPDATE

The Board of Zenith Minerals Limited (ASX: ZNC) ("Zenith" or "the Company") is pleased to advise that following Zenith drilling at Develin Creek in 2014, 2021 and 2022 an updated Mineral Resource estimate has been completed for the Company's 100% owned, Develin Creek project located in Queensland.

The Zenith drilling verified the past results that extended and improved the geological interpretation. The Mineral Resource is interpreted and reported at a 0.5% Cueq (copper equivalent) cut-off suitable for open pit assessment.

The updated Mineral Resource for the Sulphide City – Scorpion – Window copper – zinc deposits at the 0.5% Cueq cut-off includes:

Indicated	2.2 Mt @ 1.3% Cu, 1.3% Zn, 0.2 g/t Au and 8 g/t Ag
Inferred	2.7 Mt @ 1.1% Cu, 1.4% Zn, 0.2 g/t Au and 7 g/t Ag
Total	**4.9 Mt @ 1.2% Cu, 1.4% Zn, 0.2 g/t Au and 7 g/t Ag**

*Copper equivalence Cueq = (Cu + 0.45*Zn) and based on current rounded metal prices in June 2022 of A$8400/tonne Cu, A$3300/t Zn and preliminary recoveries for Cu of 72% and Zn or 82%.,*

This update represents a 90% increase in tonnage and a 30% increase in overall contained metal from the previous estimate announced on 15-Feb-2015. This difference is attributed in part to a lower cut-off grade for reporting but is also the result of some resource extensions from recent Zenith drilling as well as a more robust interpretation that captures more or the mineralisation.

The estimate does not include the massive copper-zinc sulphide mineralisation identified at Snook and other prospects to the south, also within the Develin Creek project.

Commenting on the updated Mineral Resource Zenith's Managing Director, Michael Clifford said: "*I am pleased to report an updated Mineral Resource estimate for the Develin Creek project that represents a 90% increase in tonnage and a 30% increase in overall contained metal from the previous 2015 estimate. Mineralisation at the main Sulphide City lens remains open to the southwest. Multiple additional geological, geochemical and geophysical targets remain to be tested in both proximity to the deposit as well as along strike in the extensive project landholdings. There remains much to do on this project and our confidence in further discoveries remains high.".*

Develin Creek Project

The Mineral Resource updated for Develin Creek includes the Sulphide City Scorpion and Window deposit and are located within the exploration licence EPM 17604 (Figure 1), 80 km northwest of Rockhampton, Queensland.

Access to site is by means of an unsealed road via the town of Marlborough from the north or Glenroy from the south.

ZENITH MINERALS

Corporate Details

Zenith Minerals Limited (ASX:ZNC)

ABN: 96 119 397 938

Issued Shares	343.9M
Unlisted options	14.3M
Mkt. Cap. ($0.30)	A$103M
Cash (30th Jun 22)	A$7.9M
Equities (30th Jun 22)	A$7.3M
Debt	Nil

Directors

David Ledger	Executive Chairman
Michael Clifford	Managing Director
Stan Macdonald	Non-Exec Director
Julian Goldsworthy	Non-Exec Director
Emma Scotney	Non-Exec Director
Nic Ong	Co Sec
Nick Bishop	CFO

Major Shareholders

Directors	3.4%
HSBC Custody Nom.	9.5%
Citicorp Nom	8.3%
BNP Paribas Nom	7.8%

Our Vision

Zenith has a vision to maximise shareholder value through superior project generation and exploration activities.

Focus is on 100% owned Zenith projects, whilst partners progress multiple additional opportunities.

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The deposit is located within EPM 17604 which is held by Mackerel Metals and was granted in 2008 until 2025. Mackerel Metals is a 100% subsidiary of Zenith.

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.

EPM 17604 contains several other prospects and known mineralisation, mostly further to the south of Sulphide City.

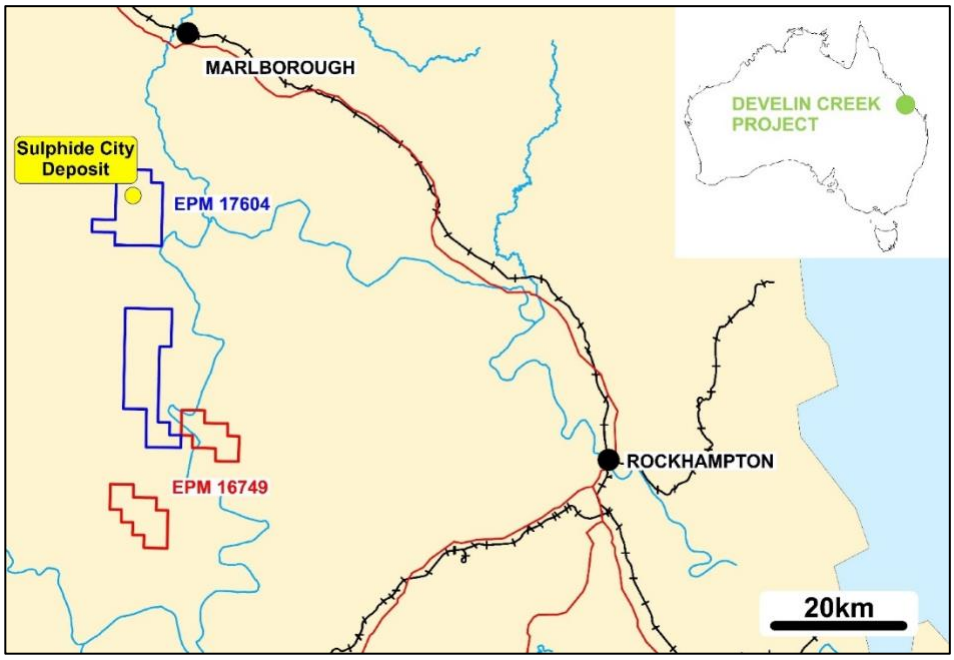

Figure 1: Develin Creek project location

Project Background

The Develin Creek project contains a volcanic hosted massive sulphide (VHMS) copper-zinc deposit.

Mineralisation at Scorpion, Window and Sulphide City were discovered and initially drilled to 50 m spacing by QMC in the early 1990s. Eventually the project was relinquished, and the current tenement granted to Icon and floated off Fitzroy Resources ("Fitzroy") in 2008. Fitzroy undertook a small drilling program to extend the known resource area in 2011. In 2014 Zenith entered into an agreement to earn in and acquire the project and completed some initial verification drilling in 2014, acquiring 100% of the project in September 2016.

A three rig drilling campaign commenced at Develin Creek in September 2021 to test copper-zinc targets at several targets in the region as well as complete a broader verification and extension driling program at Sulphide City and Scorpion and upgrade the Mineral Resource.

Geology

The Develin Creek Project is geologically dominated by the Rookwood Volcanics which form a narrow, discontinuous north-south orientated belt that extends the length of the Project and hosts the known base metals mineralisation (Figure 2). There are three main areas of known mineralisation within the project area: the Develin Creek area in the north, Snook 18 km south and the Comanche area in the south, all within EPM 17604.

The Rookwood Volcanics which comprise the predominant basement lithology within EPM 17604 and are variably exposed and concealed by lateritised Tertiary sediments, and younger Quaternary deposits (Figure 2).

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 lithogeochemical 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 1000 m.

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.

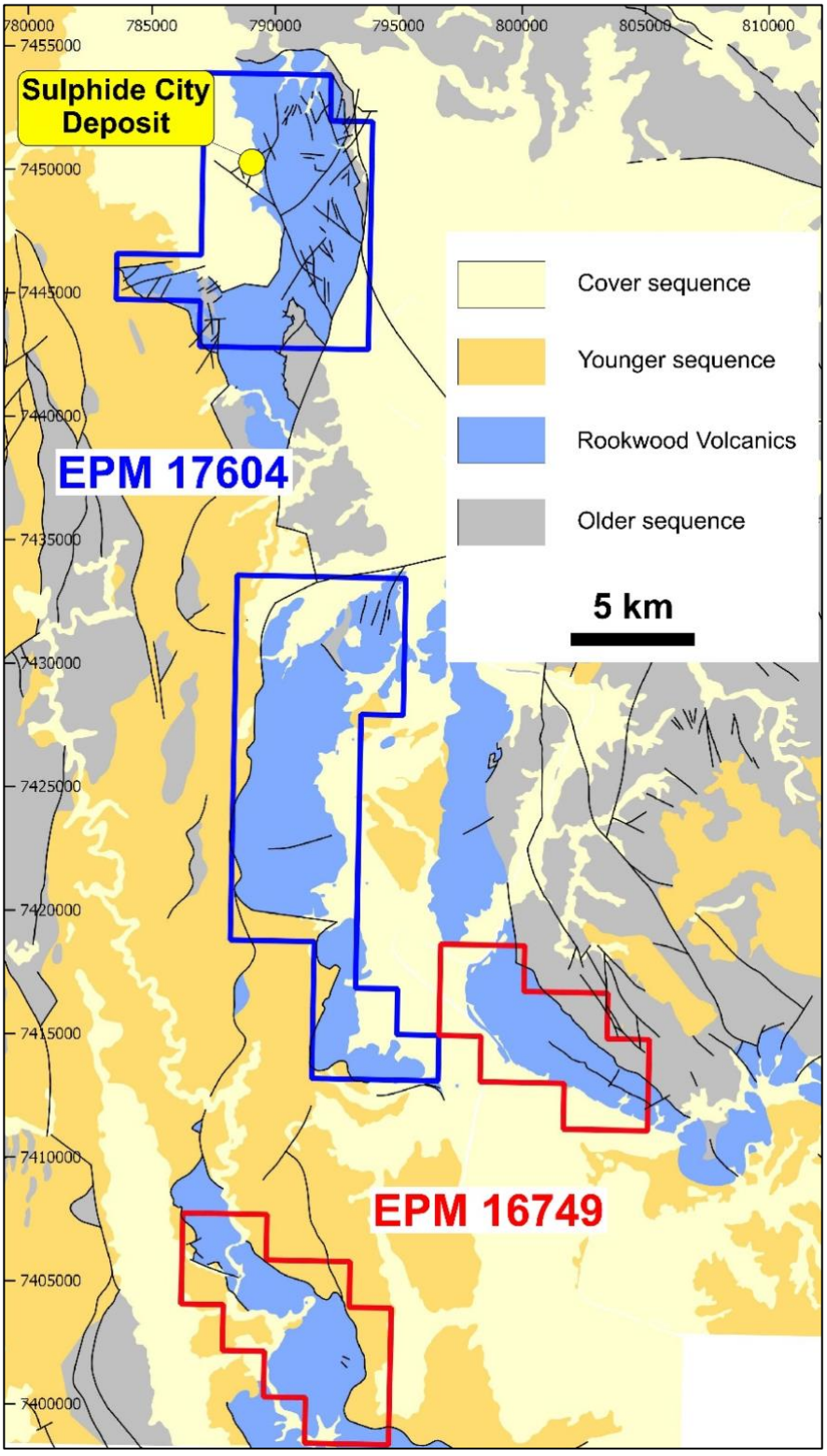

Figure 2: Develin Creek project location

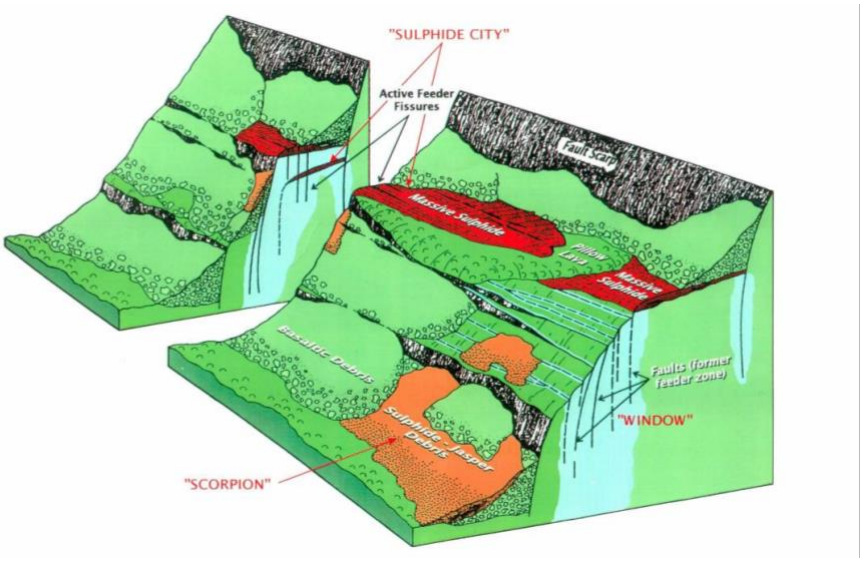

Figure 3: Develin Creek conceptual depositional environments for sulphides

Drilling

Exploration drilling has been undertaken by three parties:

- Initial discovery and drill out to 50 m centres by Queensland Mining Corporation (QMC) using percussion and diamond drilling in 1992 to 1993
- Follow-up and extensional drilling by Fitzroy using RC and diamond drilling in 2011
- Verification drilling by Zenith using RC and diamond drilling in 2014 and 2021 to 2022.

Table 1 summaries 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 is 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% recent 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 has been 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.

Table 1 Sulphide City area drilling summary

Company	Drill Type	Drill Holes	Hole Range	Drilled (m)	DD (m)	RC/ Percussion (m)	Avg Depth (m)
QMC 1992-3	DD	46	DDH-001 - DDH-049	14384	14384*	0	313
	Percussion	129	PD-001 - PD-258	21665		21665	168
	Percussion	7	PW-001 - PW-007	529		529	76
Fitzroy 2011	DD	6	FRWD0001 - FRWD0006	1510	1510	0	252
	RC	2	FRWC0007 - FRWC0008	362		362	181
Zenith 2014, 2021-22	DD	3	ZDCDD001 - ZDCDD003	561	561	0	187
	RC	8	ZDCRC0001 - ZDCRC0008	1310		1310	164
	RC	17	ZSCRC002 - ZSCRC024	2491		2491	147
	RC/DD	6	ZSCCD004 - ZSCCD023	1417	681	736	236
QMC Total		**182**		**36578**	**14384**	**22194**	
Fitzroy Total		**8**		**1872**	**1510**	**362**	
Zenith Total		**34**		**5778**	**1241**	**4537**	

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

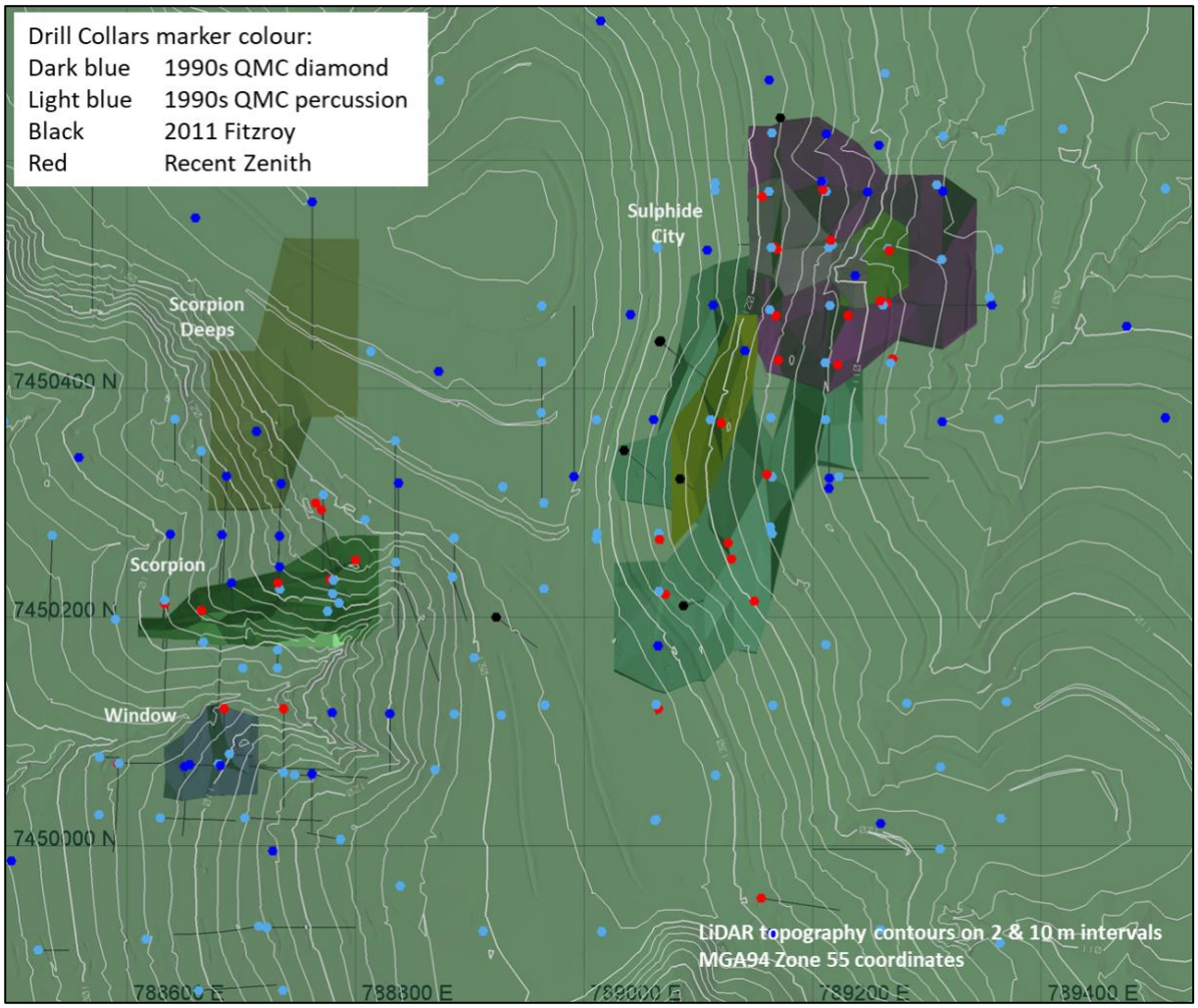

Figure 4: Develin Creek drilling, resource wireframes and topography

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 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). Diamond core was sawn in half, with half core (some ¼ core) on 1 to 2 m 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 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 and Zenith RC samples (1m) were split with an on-rig riffle splitter and sampled with a sample spear for 3 or 4 m composites in the hangingwall and footwall. RC samples were generally not composited in mineralized zones.

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 Zenith (2014, 2021/22) and gold was by fire assay.

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

Interpretation

There is a reasonable level of confidence in the geological interpretation of massive sulphide horizons traceable over numerous drill holes and drill sections. The previous interpretation has been refined but was largely demonstrated by the recent infill drilling by Zenith and was extended by drilling previous drilling by Fitzroy and Zenith.

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.

The precise extents and geometry cannot be defined due to the limitations of the current drill coverage. Further work is required to better define the geometry and extents of the mineralized sulphide horizons but no significant downside changes to the interpreted mineralized volume are anticipated.

All wireframes have varying orientations and dips, following the upper contact of pepperites (ancient seafloor horizons). A combination of assays and lithology were used to define these wireframe envelopes, with a cut-off of approximately 0.5% Cueq used for resource domaining.

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 structural understanding is limited where diamond drilling is available and further work is required to better define the structural geological framework.

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/depth.

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.

A total of 10 wireframe envelopes (domains) were interpreted based on the 0.5% Cueq cut-off. The wireframes demonstrate low variance. Top-cuts were applied to elements only to manage extreme grades.

To aid estimation and geostatistical analysis an unfolding surface was developed along the base of the principal domains for Scorpion and Sulphide City (Figure 5). Only the flatter Window and the upper Sulphide City domains were managed separately.

Variograms were modelled using unfolding of the lenses for all the domains combined and indicate well defined structure with total ranges of 70 to 90 m for Cu, Zn, Au and Ag.

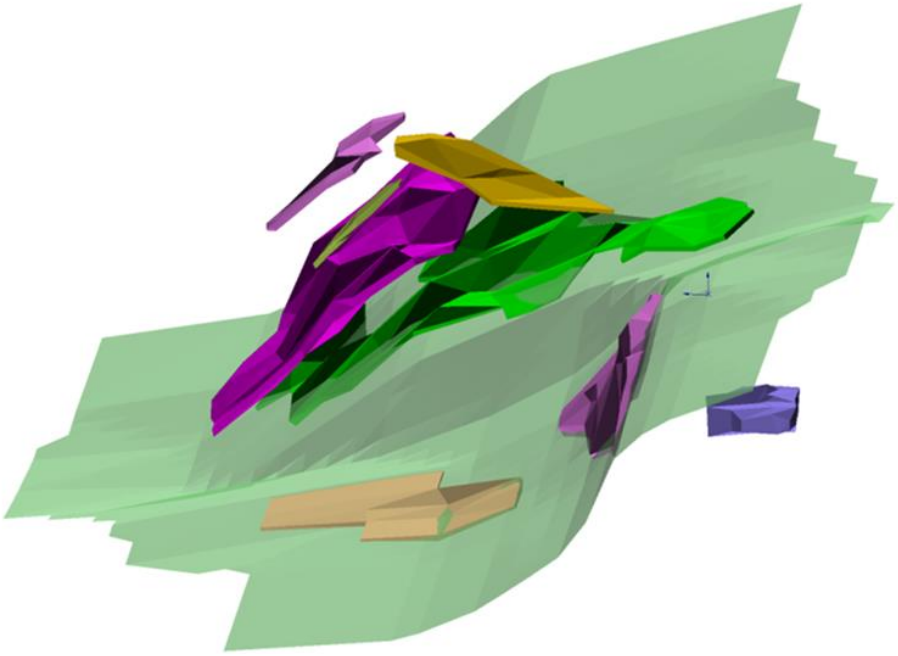

Figure 5: Unfolding surface (pale green) and resource wireframes (perspective view from the west)

Estimation

A 3D block model was generated with parent blocks of 10m by 5m by 5m size with sub-blocking down to 5m by 2.5 m by 1.25 m. Estimation used 3 m drill composites.

Block grades were estimated using Ordinary Kriging on single pass searches with radii of 120 m by 120 m by 30 m and maximum of 15 composites, 3 composites per drill hole and maximum 5 drill holes.

Figures 6 to 9 demonstrate three example cross sections for the four main elements Cu, Zn, Au and Ag. The changes in ratio, particularly between Cu and Zn, are evident.

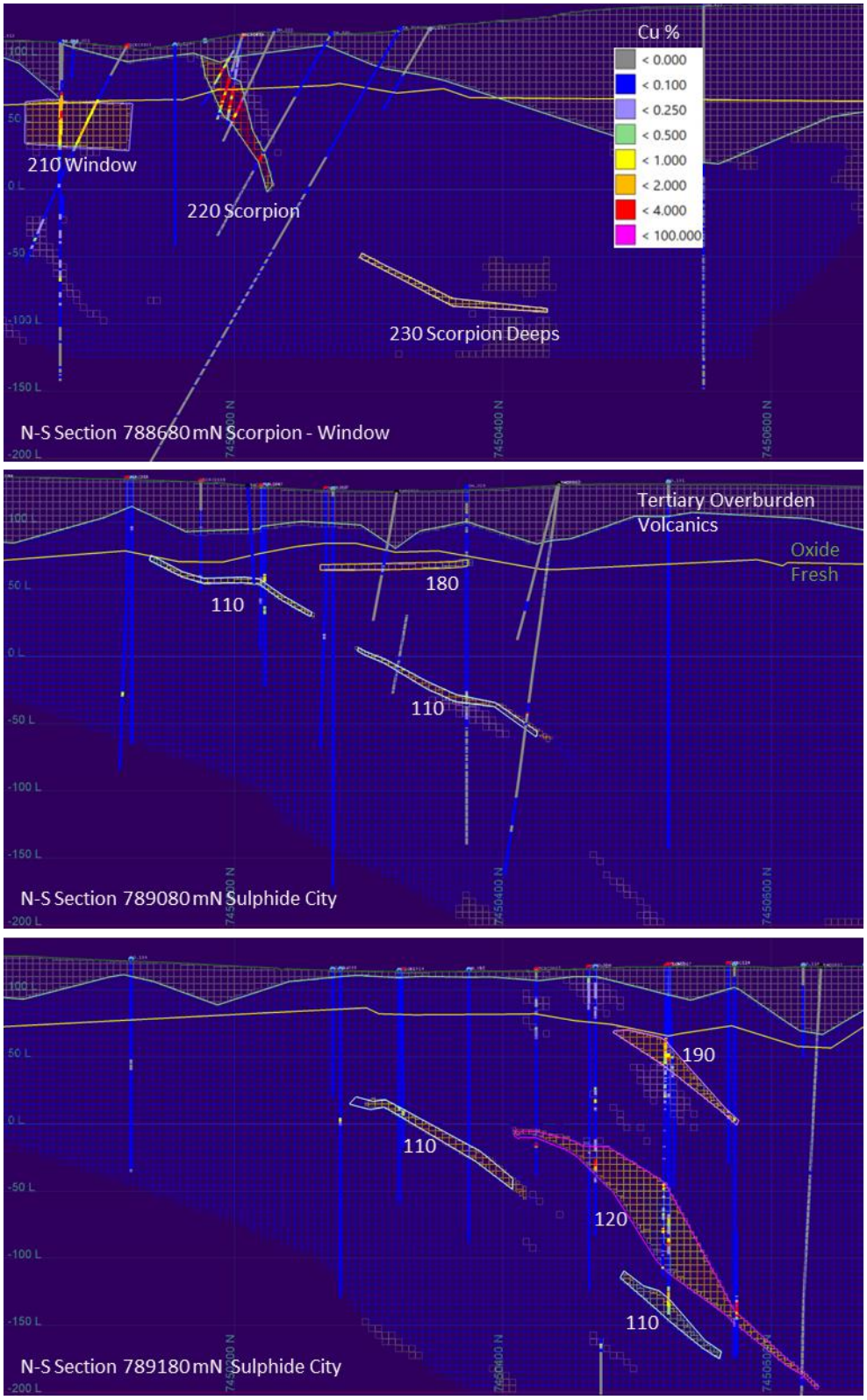

Figure 6: Example north-south section for copper

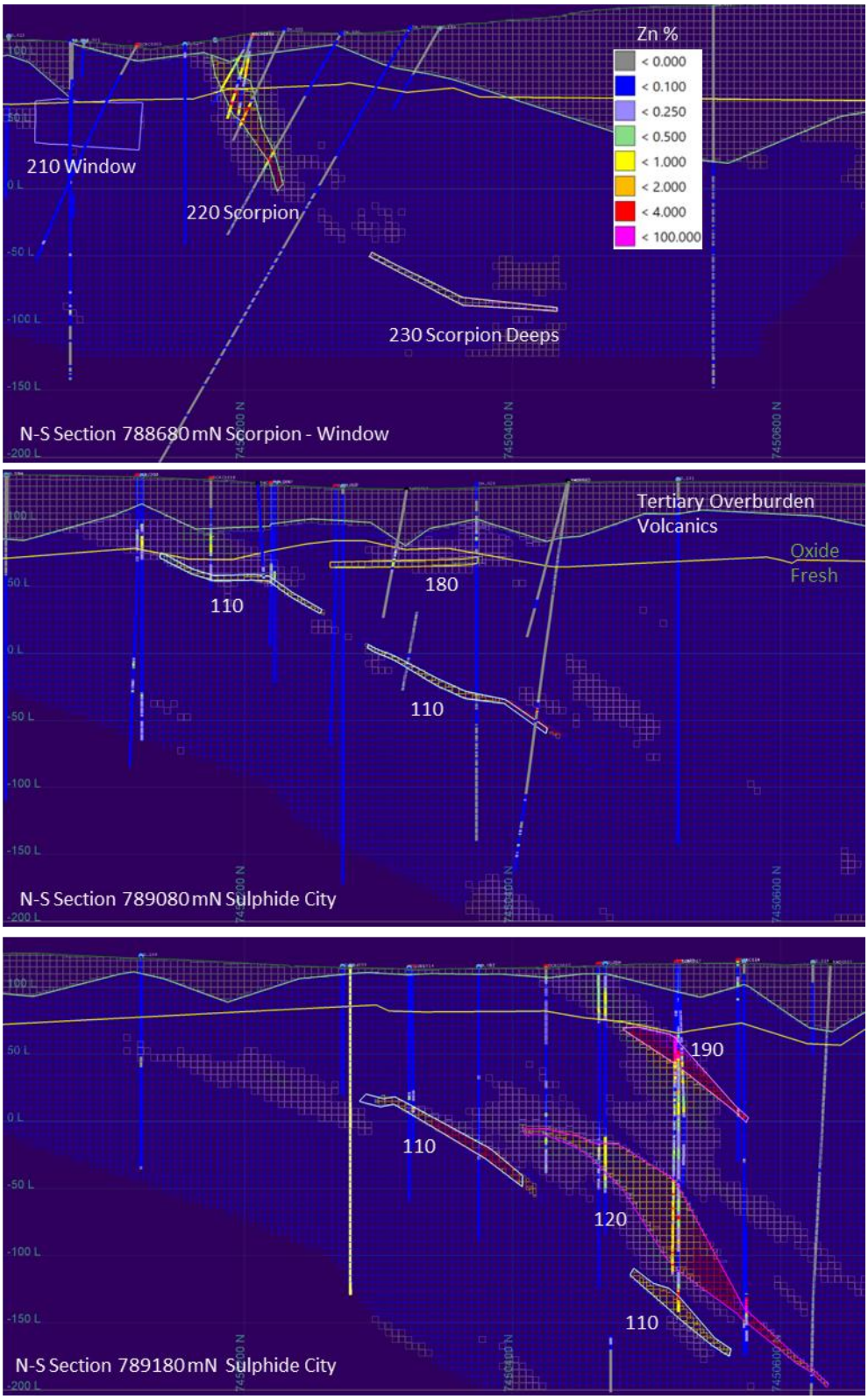

Figure 7: Example north-south section for zinc

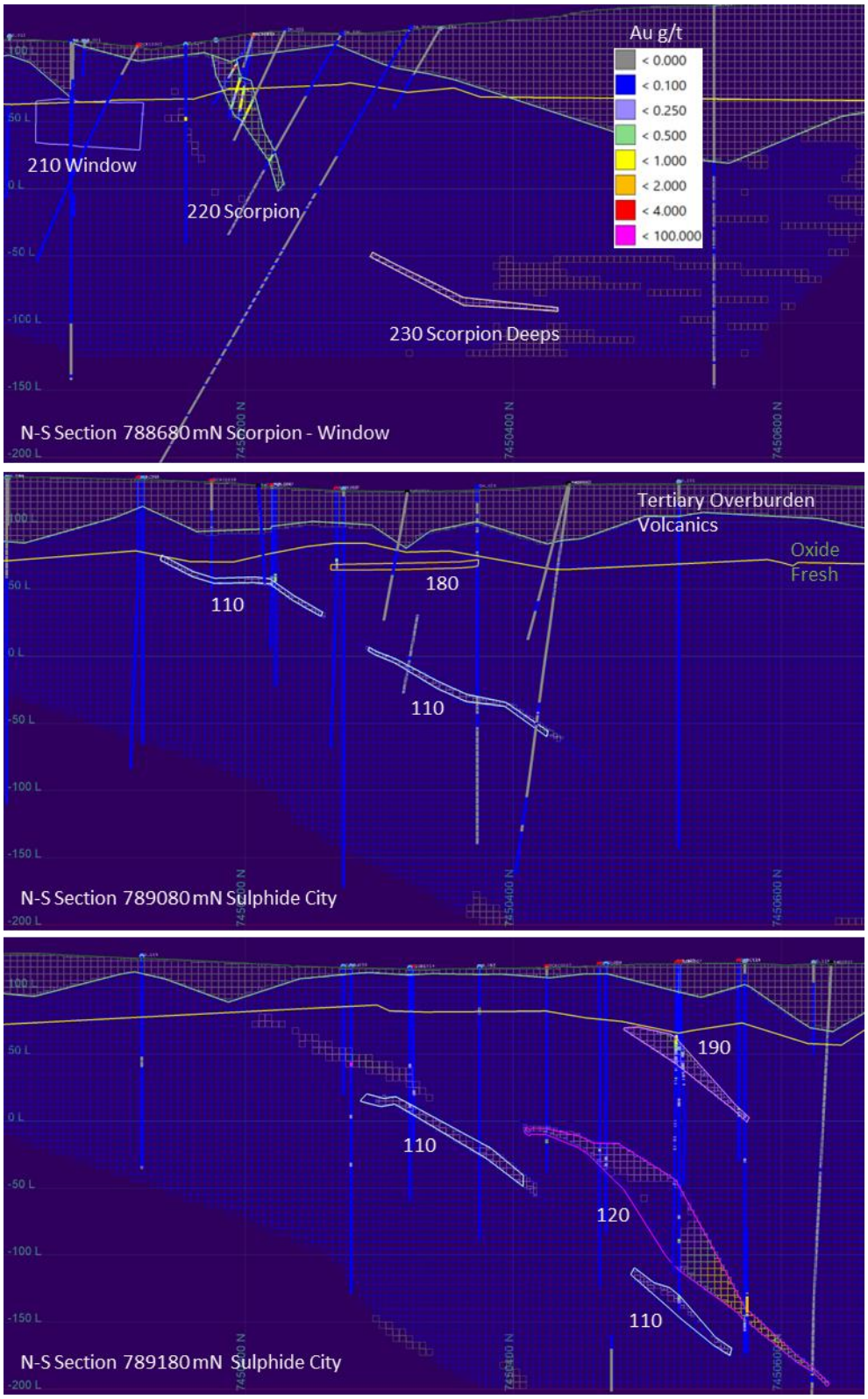

Figure 8: Example north-south section for gold

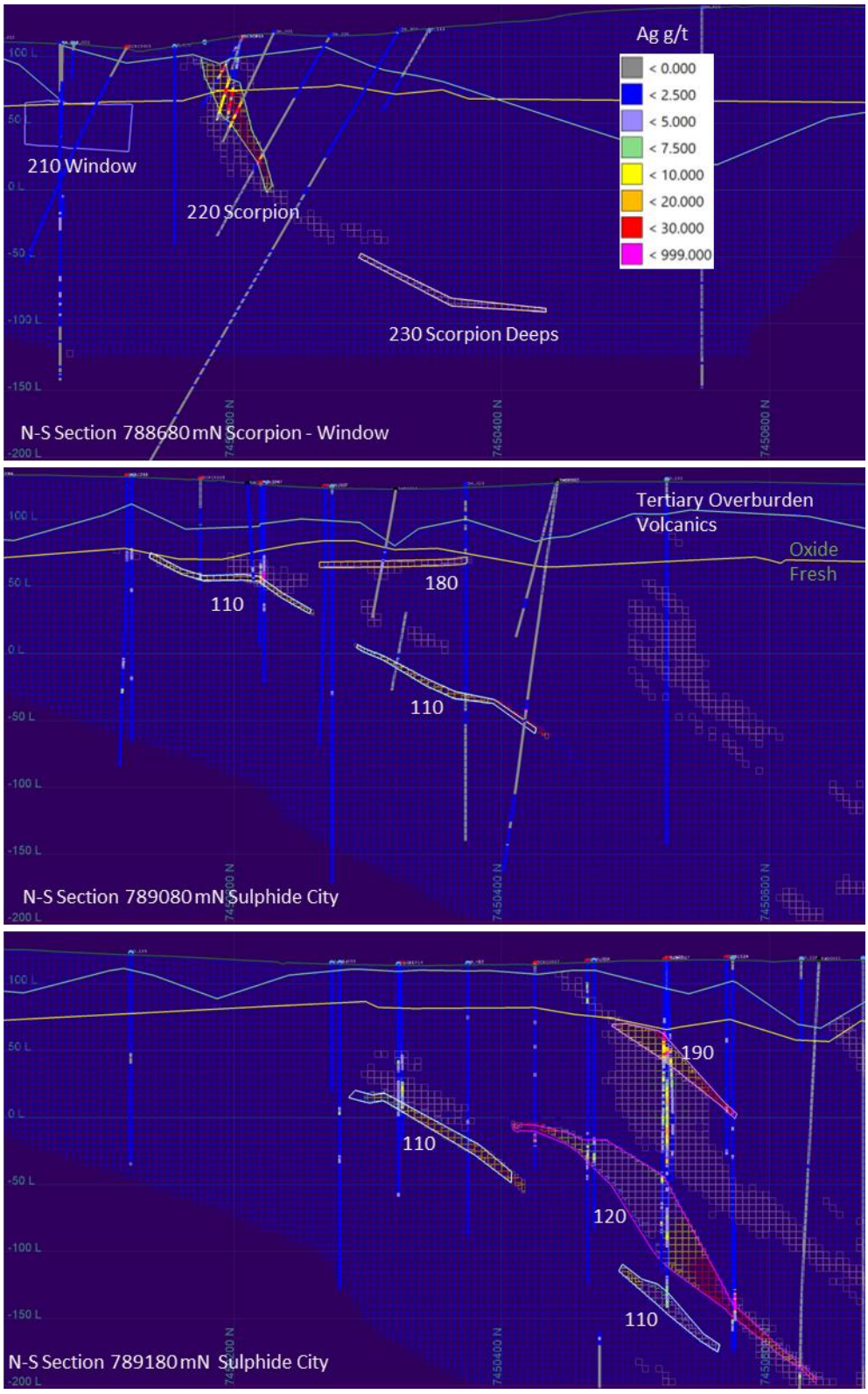

Figure 9: Example north-south section for silver

Bulk density was measured for 442 drill core samples with 132 measurements inside the 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 owing to the high pyrite content. Fe assaying is more robust and the relationship between Fe and bulk density was used to assign bulk density to drill samples for estimation along with Fe by Ordinary Kriging. This mirrors the occurrence of pyrite as the predominant sulphide and main contributor to the high bulk densities as Develin Creek.

The block model estimates were validated by several methods, including visual validations on-screen, global statistical comparisons, SWATH plots and comparison to previous block model estimates.

Classification

The deposits are largely drilled on a 50 m gid pattern of predominantly vertical and some inclined drill holes. Zenith drilling has targeted verification of some locations resulting in additional drilling and a slightly higher drilling density than 50 m. Unfolded variograms for all four primary elements Cu, Zn, Au and Ag indicated total ranges of 70 to 90 m.

All interpreted domains are considered suitable for Inferred Mineral Resource classification with extrapolation generally 25 m or less as a result of the reasonably regular drilling pattern and extrapolation to half distance between drill holes.

Variograms indicate drilling completed to 50 m spacing should be adequate to define Indicated Mineral Resource classification. However, the lateral margins of the resource domains are sharp and the extrapolation of Indicated beyond the drilling is limited to 10 m to account for this uncertainty. Indicated classification was applied using the criteria of 3 drill holes within 50 m with a 10 m extrapolation and manually interpreted and applied for each domain in plan view but accounting for down dip distances. Other modifications include:

- One domain Scorpion Deeps (Domain 230) is too low grade and is not classified or reported.
- Domains 180 and 130 are too small and inconsistent to be classified as Indicated.
- Oxide is only classified as Inferred since there are limited oxide bulk density measurements.
- Indicated was restricted to blocks above -135 mRL, or about 250 m below surface since open pit viability further below the main Sulphide City lens is less certain.

Classification is displayed in Figure 10 noting that some Indicated is partially obscured by the upper sulphide lens when in plan view.

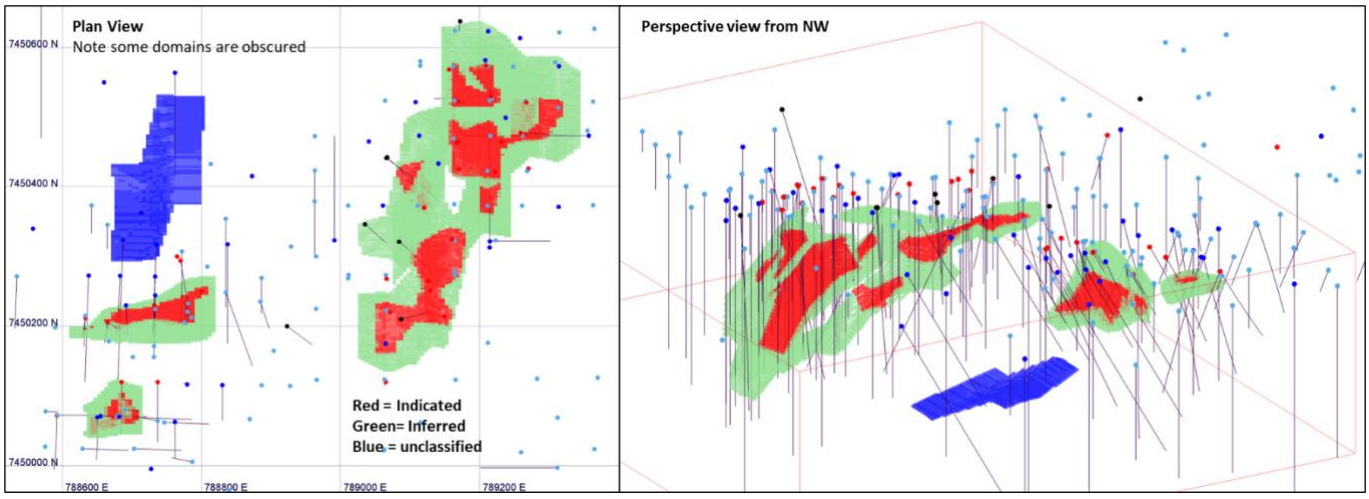

Figure 10: Classification for domained blocks

Mining and cut-off grade

Copper equivalence (Cueq) was used for interpreting and reporting since the Mineral Resource has similar quantities of copper and zinc sulphides. A 0.5% Cueq cut-off was used for interpretation and reporting and this is considered close to the likely economic cut off for bulk open pit mining and processing by flotation.

A higher grade 1.0% Cueq cut-off is also provided to indicate the core of the Mineral Resource. 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 stoping methods.

Metallurgy

Metallurgical testwork completed to date include:

- Preliminary rougher test work on RC chips in 2015 by Independent Metallurgical Operations Pty Ltd
- Additional flotation testwork on 190 kg of drill core in 2021 by Core Metallurgy Pty Ltd
- Follow-up minerlaogy 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 low grade concentrate. The work demonstrated iron sulpide 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 chalcoprite 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 testwork indicating:

- For zinc initial rougher flotation recovers 82% of the Zn to a 32% Zn concentrate
- For copper initial rougher flotation with regininding and processing recovers 72% 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.

Mineral Resource

The Mineral Resource is reported at a cut-off suitable for open pit mining. No open pit mining study work has been completed to date. Economic viability of the Mineral Resource at this stage has been accounted for by:

- Excluding Scorpion Deeps (Domain 230) as too deep, thin and low grade.
- Reclassifying deeper thin mineralisation as Inferred.

Copper equivalence is based on rounded current metal prices, which are subject to change with time, and use prices only for interpretation of the resource domains and reporting cut-off to account for the potential value of the polymetallic deposit. Lead grades are included in the resource tabulation but of sufficiently low in content they may not present an economic value. The copper equivalent calculation is based on the preliminary metallurgical recovery results for Cu and Zn. Potential value for gold and silver are not included at this stage. Reporting using copper equivalence was found to be insensitive to higher copper recovery or inclusion of gold and silver.

Copper equivalence is only used for reporting purposes to account for the significant occurrence of zinc. The function Cueq = (Cu + 0.45*Zn) is based on current rounded metal prices in June 2022 of A$8400/tonne Cu, A$3300/t Zn and preliminary recoveries for Cu of 72% and Zn or 82%.

The Mineral Resource for Develin Creek at the 0.5% Cueq cut-off includes:

Indicated	2.2 Mt @ 1.3% Cu, 1.3% Zn, 0.2 g/t Au and 8 g/t Ag
Inferred	2.7 Mt @ 1.1% Cu, 1.4% Zn, 0.2 g/t Au and 7 g/t Ag
Total	**4.9 Mt @ 1.2% Cu, 1.4% Zn, 0.2 g/t Au and 7 g/t Ag**

Additional details are provided in Table 2 and a higher-grade cut-off in Table 3. Iron is included in the detailed tables only as it relates largely to pyrite content and the bulk density calculated for most domains.

This update represents a 90% increase in tonnage and a 30% increase in overall contained metal from the previous estimate announced on 15-Feb-2015. This difference is attributed in part to a lower cut-off grade for reporting but is also a result of some resource extensions from recent Zenith drilling as well as a more robust interpretation that captures more or the mineralisation.

Assessment of the Mineral Resource against the JORC Table 1 criteria are provided in Appendix A

Table 2 Mineral Resource estimate at a 0.5% Cueq cut-off

Weathering	Classification	Mt	BD t/m³	Cueq* %	Cu %	Zn %	Pb %	Au g/t	Ag g/t	Fe %
Oxide	Inferred	0.38	2.40	1.53	1.32	0.46	0.02	0.21	6.0	15.4
Fresh	Indicated	2.20	3.58	1.88	1.29	1.31	0.03	0.21	7.7	21.3
	Inferred	2.30	3.53	1.75	1.04	1.58	0.03	0.19	7.3	17.9
Total	Indicated	2.20	3.58	1.88	1.29	1.31	0.03	0.21	7.7	21.3
	Inferred	2.68	3.31	1.72	1.08	1.42	0.03	0.19	7.1	17.6

	Total	**4.87**	**3.43**	**1.79**	**1.18**	**1.37**	**0.03**	**0.20**	**7.4**	**19.3**

** Copper equivalence Cueq = (Cu + 0.45*Zn) and based on current rounded metal prices in June 2022 of A$8400/tonne Cu, A$3300/t Zn and preliminary recoveries for Cu of 72% and Zn or 82%,*

Table 3 Mineral Resource estimate at a 1.0% Cueq cut-off

Weathering	Classification	Mt	BD t/m³	Cueq* %	Cu %	Zn %	Pb %	Au g/t	Ag g/t	Fe %
Oxide	Inferred	0.28	2.40	1.82	1.61	0.45	0.03	0.27	7.7	17.3
Fresh	Indicated	1.98	3.59	1.99	1.37	1.39	0.03	0.23	8.1	21.8
	Inferred	1.90	3.50	1.97	1.17	1.77	0.03	0.21	8.0	18.2
Total	Indicated	1.98	3.59	1.99	1.37	1.39	0.03	0.23	8.1	21.8
	Inferred	2.18	3.31	1.95	1.23	1.60	0.03	0.22	7.9	18.1
	Total	**4.16**	**3.44**	**1.97**	**1.29**	**1.50**	**0.03**	**0.22**	**8.0**	**19.8**

** Copper equivalence Cueq = (Cu + 0.45*Zn) and based on current rounded metal prices in June 2022 of A$8400/tonne Cu, A$3300/t Zn and preliminary recoveries for Cu of 72% and Zn or 82%,*

Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr John Horton, who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and a full time employee of ResEval Pty Ltd. Mr Horton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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'. Mr Horton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Material ASX Releases Previously Released

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Company's Projects on a continuous basis to the ASX and in compliance with JORC 2012. The Company confirms that it is not aware of any new information that materially affects the content of this ASX release and that the material assumptions and technical parameters remain unchanged.

Demerger of Gold and Base Metals Assets

To allow the Zenith team to focus on activities that generate Battery Minerals projects, ZNC is planning to demerge the non-Battery Minerals projects, including base metals and gold assets into a new Company called Mackerel Metals Limited to be listed on ASX. Any such demerger will be subject to ZNC Board approval, tax advice favourable to ZNC, as well as shareholder, ASX, ASIC and other regulatory approvals. ZNC shareholders will benefit by way of an in-specie distribution of the shares in the new listed Company. Further updates and information on the Demerger will be provided by Zenith in due course.

Authorised for release by the Zenith Minerals Limited Board of Directors – 8th August 2022

For further information contact Zenith Minerals Limited:

Executive Chairman: David Ledger or Managing Director: Michael Clifford
E: info@zenithminerals.com.au Phone +61 8 9226 1110

Zenith Minerals Limited (ASX:ZNC)

Zenith has a vision to maximise shareholder value through superior project generation and exploration activities.

Key Australian gold and base metal projects include:

Earaheedy	Zinc	Western Australia	25% free carry to BFS

New major zinc discovery to be fast tracked with extensive accelerated exploration program underpinned by a recent $40M capital raising by partner Rumble Resources Limited (ASX:RTR) (ASX Releases 28-Apr-21, 2-Jun-21, 8-Jun-21, 18-Oct-21, 13-Dec-21, 21-Dec-21, 31-Jan-22, 7-Feb-22, 21-Feb-22, 9-Mar-22, 26-May22).

Develin Creek	Copper - Zinc	Queensland	100% Owned

Indicated and Inferred Mineral Resource 4.87Mt @ 1.18% Cu, 1.37% Zn, 0.20g/t Au & 7.4g/t Ag (ASX Release 8-Aug-22). Massive sulphides intersected at 2 new prospects Wilsons North & Snook.

Sulphide City (ASX Release 5-Jul-21).	**34m @ 3.5% Cu+Zn**	**29m @ 3.5% Cu+Zn**
	incl 10m @ 6.0% Cu+Zn	**incl 12.3m @ 6.7% Cu+Zn**

Red Mountain	Gold	Queensland	100% Owned

Drilling is following-up the high-grade near surface gold and silver intersected in the maiden & subsequent drill programs (ASX Releases 3-Aug-20 & 13-Oct-20, 9-Nov-20, 21-Jan-21, 19-May-21).

Results incl:	**13m @ 8.0 g/t Au**	**15m @ 3.5 g/t Au**
	5m @ 10.4 g/t Au	**12m @ 4.9 g/t Au**

Split Rocks	Gold	Western Australia	100% Owned

Zenith drilling returned - high-grade near surface gold mineralisation at multiple targets (ASX Release 5-Aug-20, 2-Sep-20, 19-Oct-20, 28-Oct-20, 15-Jan-21, 11-Mar-21, 21-Apr-21, 24-Jun-21, 30-Sep-21, 18-Jan-22). Results include:

Dulcie North	**32m @ 9.4 g/t Au, incl 9m @ 31.4 g/t Au**	**16m @ 1.3 g/t Au**
Dulcie Laterite Pit	**2m @ 14.5 g/t Au**	**18m @ 2.0 g/t Au**
	14m @ 3.5 g/t Au	
Estrella	**2m @ 9.8 g/t Au**	
Dulcie Far North	**5m @ 5.6 g/t Au**	**3m @ 70 g/t Au**
Water Bore	**3m @ 6.6 g/t Au**	
Scotts Grey	**8m @ 4.1 g/t Au**	**4m @ 4.8 g/t Au**

Investments

BRADDA HEAD — **43.9M shares in Bradda Head Holdings Limited (AIM)**

RUMBLE — **3.88M shares in Rumble Resources Limited (ASX:RTR)**

AMERICAN RARE EARTHS — **2.5M shares in American Rare Earths (ASX:ARR)**

NICKEL X — **0.5M shares in Nickel-X Limited (ASX:NKL)**

APPENDIX A DEVELIN CREEK JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed 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 hangingwall 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 1000 PSI 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
		  ◦ 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 precollared 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

Criteria	JORC Code explanation	Commentary
		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. • 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

Criteria	JORC Code explanation	Commentary
		duplicates returned satisfactory values. Zenith drilling targeted several twin or nearby drilling for verification purposes. • Sample sizes are 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 have been established.*
		• 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 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 several 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.*	• 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

Criteria	JORC Code explanation	Commentary
	• *Quality and adequacy of topographic control.*	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. • 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. Most 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. Most of the drilling is drilled towards the South, with -60º 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

Criteria	JORC Code explanation	Commentary
		bulka-bags and secured 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	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 which is held by Mackerel Metals and was granted in 2008 until 2025.Mackerel Metals is a 100% subsidiary of Zenith. • The prospect is located within the Forrest Home Pastoral Lease. • The tenement is in good standing with no known impediment to future grant 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 1992 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. • 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,

Criteria	JORC Code explanation	Commentary
		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 based on 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 should be clearly stated.*	• 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 0.45) and is based on • rounded metal prices as of June 2022 of $8400/tonne Cu and $3300/t Zn. • preliminary recovery of 72% for Cu,82% for Zn • Lead is low grade and excluded • Gold and silver potential have low recovery and not included
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*	• 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.

Criteria	JORC Code explanation	Commentary
	down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
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	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.*	• Zenith data is stored on a server as Excel spreadsheets • Data validation included cross validation of the database table and checks for downhole interval integrity ad completement and grade ranges checks. • Physical checking of the historic data against records has not been undertaken at this stage.
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.*	• John Horton from ResEval visited site and inspected previous core and two RC drill rigs in the process of drilling at Sulphide City deposit on 21-22 Oct 2021.

Criteria	JORC Code explanation	Commentary
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.*	• There is a reasonable level of confidence in the geological interpretation of massive sulphide horizons traceable over numerous drill holes and drill sections. The interpretation has been refined but was largely demonstrated by the recent infill drilling by Zenith and was extended by drilling previous drilling by Fitzroy. • Further infill drilling is required to better define exact geometry of the interpreted mineralized horizons and the structural geological framework. • 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. • The precise extents and geometry cannot be defined due to the limitations of the current drill coverage. Further work is required to better define the geometry and extents of the mineralized sulphide horizons but no significant downside changes to the interpreted mineralized volume are anticipated. • All wireframes have varying orientations and dips, following 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 0.5% Cueq was used to for resource domaining. • 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 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*	• A total of 10 wireframe envelopes (domains) were interpreted based on the 0.5 Cueq cut-off. • Most wireframes comprised a low variance, and a low coefficient of variation. Top-cuts were applied to elements only to manage extreme grades. • 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 Maptek Vulcan software. Parent blocks were 10 m x 5 m x 5 m size with sub-blocking to 5 m x 2.5 m x 1.25 m. • Estimation used 3 m drill composites. • Block grades were estimated using Ordinary Kriging on single pass searches with radii of 120 by 120 by 30 m and maximum of 15 composites, 3 composite per drill hole and maximum 5 drill holes. • Zn and cu are only weakly associated and in places display zonation. Au and Ag are associated with both Zn and more strongly with Cu. • Pb grades are reported but are of minor economic significance. Cu, Zn, AU and Ag all are of sufficient grade to be considered as viable economic targets

Criteria	JORC Code explanation	Commentary
	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 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.*	for extraction using flotation methods and assuming Au and Ag will report to the Cu or Zn concentrates. • Previous estimates by Geostats in 2014usea higher 1% Cueq cut-off for interpretation. Comparison with the current estimate indicates an additional 45% tonnages with 5% lower density and 15% lower grade. The lower density is due to a more conservative approach as core density determinations are often slightly biased high. The lower tonnage and additional metal is both a result of the lower grade used for interpretation but also the additional extension of the resources from Zenith drilling. • Outokumpu also modelled the Develin Creek deposit in 1995, using a manual sectional non-JORC compliant estimate. Three Cu-Zn mineralized bodies were interpreted, these being Sulphide City, Scorpion and Window. The easternmost bodies, the Sulphide City and the Sulphide Heights are lenses of massive sulphides with 0.6 Mt @ 2.28% Cu and 4.01% Zn, while the Scorpion body 500m southwest is a reworked breccia mineralisation with 0.3 Mt @ 2.52% Cu and 1.79% Zn. The Outokumpu geological interpretations based on detailed drill core logging were used as a guide to creating the resource wireframes of the current estimate. • No mining to date • No assumptions have been made with respect to the recovery of by- products or individual metals. • 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 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 yet no data to infer the in-situ moisture content.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The classified Mineral Resource is reported beneath the topography and tertiary cap surfaces using principally a 0.5% cut-off suitable for open pit mining and processing. This reasonably reflects the likely costs expected for processing from a flotation plant to produce copper and zinc concentrate products with contained gold and silver. • A higher grade 1% Cueq cut-off is also presented to indicate the effect if a more selective open pit of underground mining option is required.
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 or ore loss factors have applied to the Mineral Resource. • The block model was developed on 10 by 5 by 5 m parent blocks assuming a 5 m likely bench height for mining. • A minimum intercept with of 3 m was used for estimation assuming open pit mining of ore could be undertaken on flitches down to 2.5m in height. • Domain boundaries are interpreted at a 0.5% Cueq cut-off and are used as hard boundaries for estimation.

Criteria	JORC Code explanation	Commentary

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.*	• Some 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)
		• Additional flotation testwork was completed at Core Metallurgy Pty Ltd in Queensland in 2021.
		  • 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 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.
		• The sulphides appear consistent with other massive sulphide deposits of a similar nature that 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 on the project however environmental surveys still remain to be done.
Bulk density	• *Whether assumed or determined. If*	• A total of 442 density values from diamond drill core

Criteria	JORC Code explanation	Commentary
	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.*	were derived from all the drilling programs with 132 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 VMS style of deposit and is consistent with the weight of RC sample bags and core inspected onsite.
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 Inferred wherever interpreted which is typically on a 50 m drilling grid. Exploration of the domain and Inferred is based on half the drill spacing towards waste or unmineralized drilling. • Areas of Indicated are assigned where drilling intersects three or more drill holes within a 50 m radius. This spacing is support by well-structured variograms with ranges of 70 to 90 m. Extrapolation of indicates limited to 10 m to account for the risk of a more abrupt edge to the domains. • 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 audits of the Mineral Resource estimate have been undertaken at this time.
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 50 m or less. • The Mineral Resource statement reflects the assumed accuracy and confidence as a global estimate. • No production data is available.