3 May 2021

DEVELIN CREEK COPPER-ZINC PROJECT – DRILLING COMMENCED

- **Initial diamond drill hole program now underway at the Sulphide City JORC Mineral Resource part of the Develin Creek copper-zinc project (100% owned) located in Queensland. The objective is to assess potential copper-zinc grade "under-call" associated with historic open hole percussion drilling. If this program is successful it may result in higher mineral resource grades.**

- **First drill hole intersected massive copper – zinc and iron sulphides over a 16.5 metre interval (see example photo - right).**

- **In addition to the copper- zinc grade study, diamond core will provide material suitable for further metallurgical testwork programs.**

- **The core drilling is part of a larger exploration initiative planned for the Develin Creek copper-zinc project encompassing:**

  - **Near resource RC drilling to test geophysical (EM), geological and geochemical targets.**
  - **Airborne aeromagnetic and ground IP geophysical surveys over the ground surrounding the new Snook copper-zinc target, prior to RC drill testing.**
  - **Systematic regional geochemical soil sampling as part of the project wide screening program.**

- **Diamond drilling at Develin Creek is anticipated to take a further 3 weeks, with laboratory assay results returned thereafter. It is planned to relocate the diamond drill rig back to the Company's Red Mountain gold project on completion of the Develin Creek drilling program. Follow-up drilling will continue at Develin Creek post receipt of the assay results.**

Commenting on the drill program Executive Chairman Peter Bird said: *"This initial drill program at the Develin Creek project kicks off an acceleration of the Company's copper exploration strategy. Our objective here is to build upon the current JORC compliant resource at Develin Creek during the rest of the 2021 year. As illustrated in Figure 2 in this release the host rock sequence extends for approximately 50km from the Sulphide City region in*

ZENITH MINERALS

Corporate Details

Zenith Minerals Limited (ASX:ZNC)
ABN: 96 119 397 938

Issued Shares	294.4M
Unlisted options	16.55M
Mkt. Cap. ($0.30)	A$88M
Cash (31-Mar-21)	A$3.1M
Debt	Nil

Directors

Peter Bird	Exec Chair
Michael Clifford	Director-CEO
Stan Macdonald	Non-Exec Director
Julian Goldsworthy	Non-Exec Director
Graham Riley	Non-Exec Director
Nicholas Ong	CFO & Co Sec

Major Shareholders

Directors	~7%
HSBC Custody. Nom.	10.4%
BNP Paribas. Nom.	5.0%
Granich	4.6%
Citicorp Nom	4.3%

Our Vision

Zenith has a vision to build a gold and base metals business with a team of proven project finders.

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

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the north down to the Wilsons Prospect to the south. We have been active with both geological mapping and drone magnetic surveying since Christmas to assist with our ongoing drill targeting. VMS systems such as that at Develin Creek tend to occur in clusters and we are keen to build upon the current metal inventory we currently have.

Copper is the ultimate "green metal" and remains essential in the ongoing development of quality infrastructure and transport around the world. The copper market is estimated to be very supply constrained over the next few years. We are very excited to be in this sector and hence Develin Creek remains a strong pillar of our base and precious metals portfolio.

The portfolio includes a 25% holding in the Earaheedy Zinc discovery (RTR 75%), The Red Mountain Gold Project (100%) and the Split Rocks Gold Project (100%)".

Diamond Drilling Rationale

The key aim is to assess potential copper-zinc grade "under-call" associated with historical open hole percussion drilling. Upside to resource grades are considered likely with a previous Zenith RC hole twinning an earlier 1993 percussion hole returning significantly higher copper, zinc, gold and silver grades (300% to 700% higher).

The first drill hole of this new diamond core program at Sulphide City (ZDCD001) intersected 16.5m of massive copper-zinc-iron sulphides from 170.4m to 186.9m (Table 1). Mineralisation is visually consistent with copper-zinc mineralised zones previously intersected within the Sulphide City resource area. Core will be cut and sent for analysis with results expected in late May early June. No pXRF analysis are available currently.

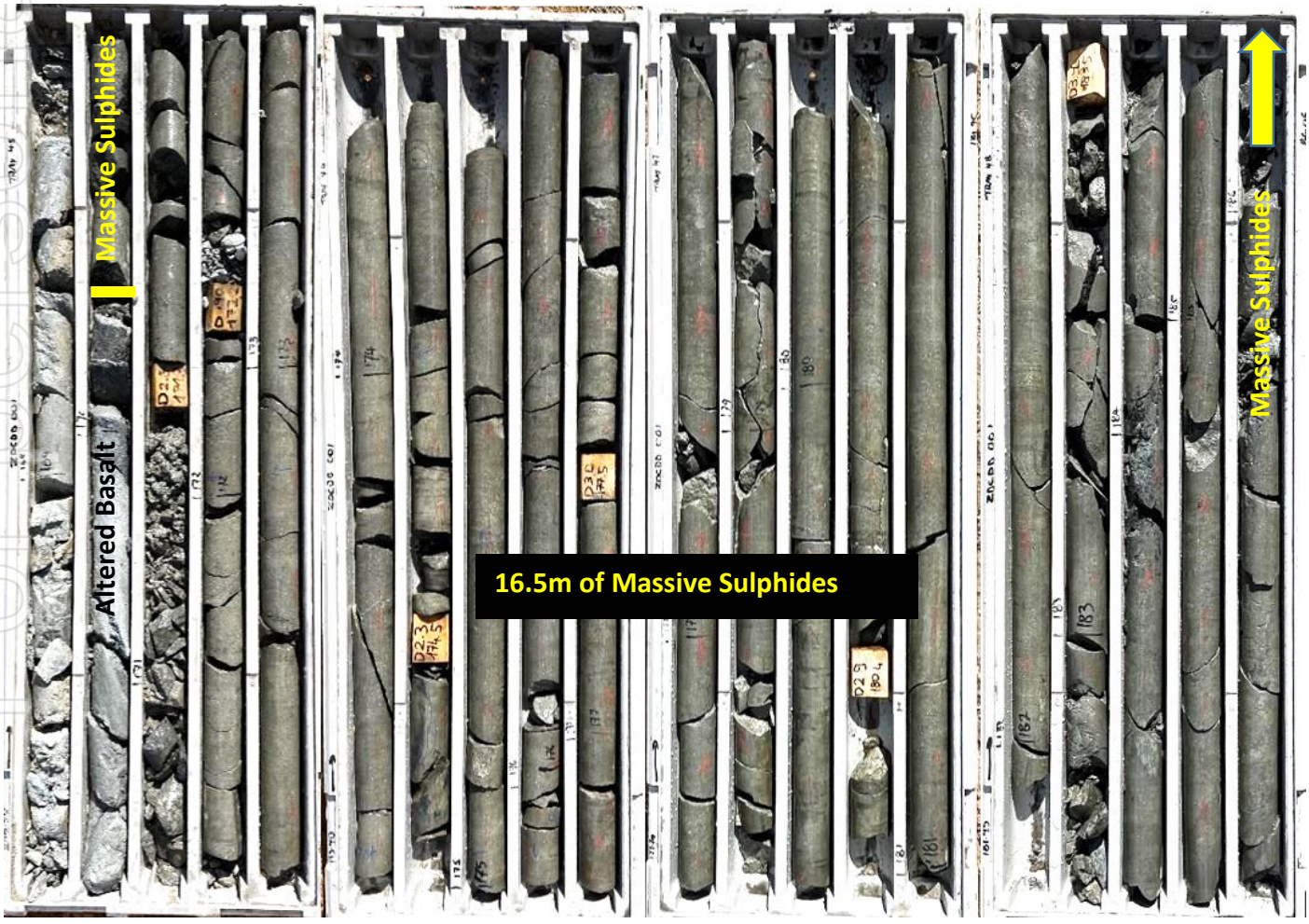

Figure 1: Photograph of 16.5m of Copper-Zinc-Iron Massive Sulphides (170.4m to 186.9m) in Zenith Diamond Hole ZDCDD001 Develin Creek Copper-Zinc Project – QLD (4 core trays approx. 4.5m per tray)

Photograph of the Diamond Drill Rig at the Develin Creek Copper-Zinc Project - QLD

Develin Creek Project Background

The Devein Creek project contains a VMS copper-zinc deposit with an Inferred Mineral Resource (JORC 2012) of: 2.57Mt @ 1.76% copper, 2.01% zinc, 0.24g/t gold and 9.6g/t silver (2.62% CuEq) released to ASX on 15-Feb-2015. Upside to resource grades are considered likely with Zenith RC hole twinning previous 1993 percussion hole returning significantly higher copper, zinc, gold and silver grades (300% to 700% higher). Initial metallurgical testwork results show positive first stage “rougher” recoveries of 90%. The Company holds exploration permits that cover the highly prospective host rocks over 50km north – south.

Geological reconnaissance mapping and soil sampling by Zenith’s technical team earlier this year outlined a 25m wide zone of gossanous sedimentary (bleached and sheared) rocks over 150m of strike that occur as discrete units enclosed within basalt that are part of the prospective Rookwood Volcanics host sequence, at the Snook target located 30km south of the existing JORC resources (Figure 2).

An initial program of 7 shallow RC holes was completed to test 200m of strike of the Snook copper-zinc target (see ASX release 7-Dec-20).

This maiden program has been a success, with the first hole drilled, ZSRC001 intersecting 3m of massive and semi-massive sulphides close to surface, at a depth of only 20m downhole. This zone returned: **3m @ 1.57% Cu, 1.07% Zn, 0.37% Pb, 43 g/t Ag and 0.2g/t Au, including 2m of massive sulphide grading: 1.95% Cu, 1.34% Zn, 0.48% Pb, 55 g/t Ag and 0.3g/t Au, within a broader interval of** disseminated and stockwork sulphides assaying **12m @ 0.81% Cu, 0.56% Zn. 0.19% Pb, 22g/t Ag & 0.1 g/t Au** (Figures 3 & 4).

The second hole ZSRC002 drilled below hole ZSRC001 was designed to test for a sub-vertical zone of sulphides but intersected a similar near surface broad zone of zinc mineralisation from 20 to 40m depth including 20m @ 0.11% Zn (incl 4m @ 0.3% Zn) observations suggesting a near surface, flat lying zone of mineralisation is present. This is further supported by the initial interpretation that the sedimentary host sequence is most likely flat lying.

Drill holes ZSRC003 through to ZSRC007 all intersected anomalous levels of copper, zinc and lead as well as precious metals and trace elements, **including 1m @ 0.63 g/t Au, 21 g/t Ag, 0.08% Cu, 0.34% Pb, 0.01% Zn in ZSRC005 from 3m below surface**. The geology of these holes also appears to indicate that the host rock sequence is flat lying, and that further drilling is required to properly test the Snook target area and confirm these initial geological observations.

Follow-up geophysical, geochemical and geological surveying and further drilling is planned for early 2021.

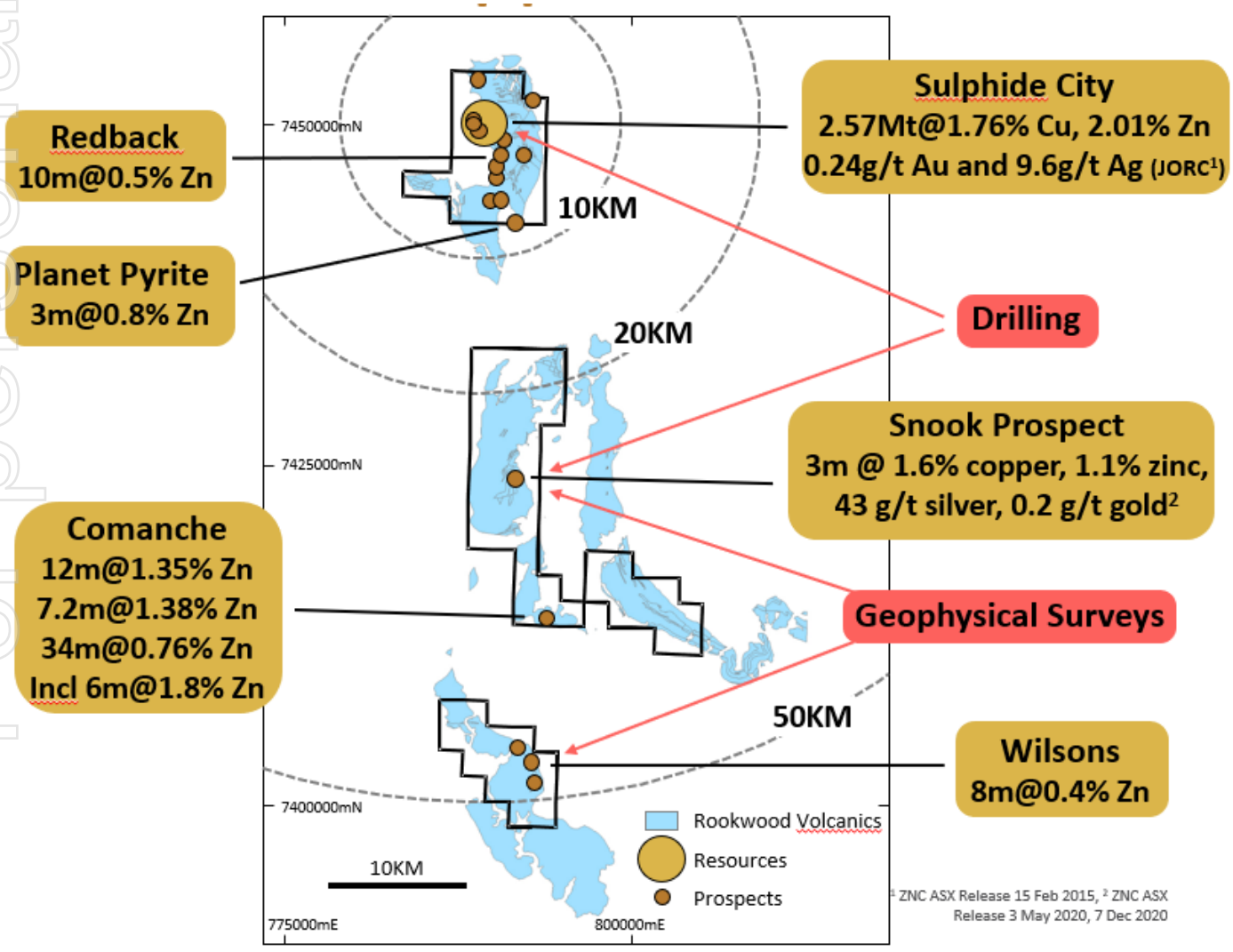

Figure 2: Develin Creek Prospects and Geochemical Anomalies

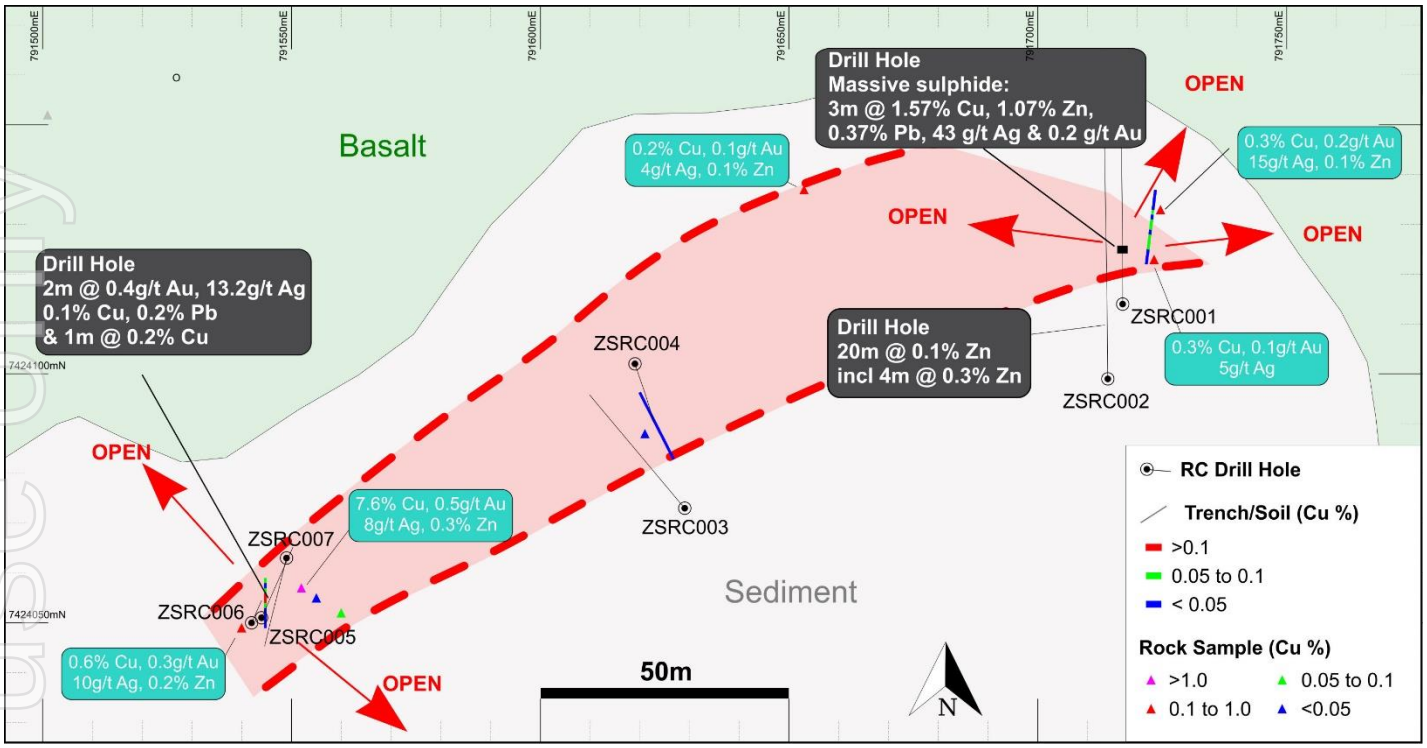

Figure 3: Plan of Snook Prospect with Drill Hole Locations and Geology

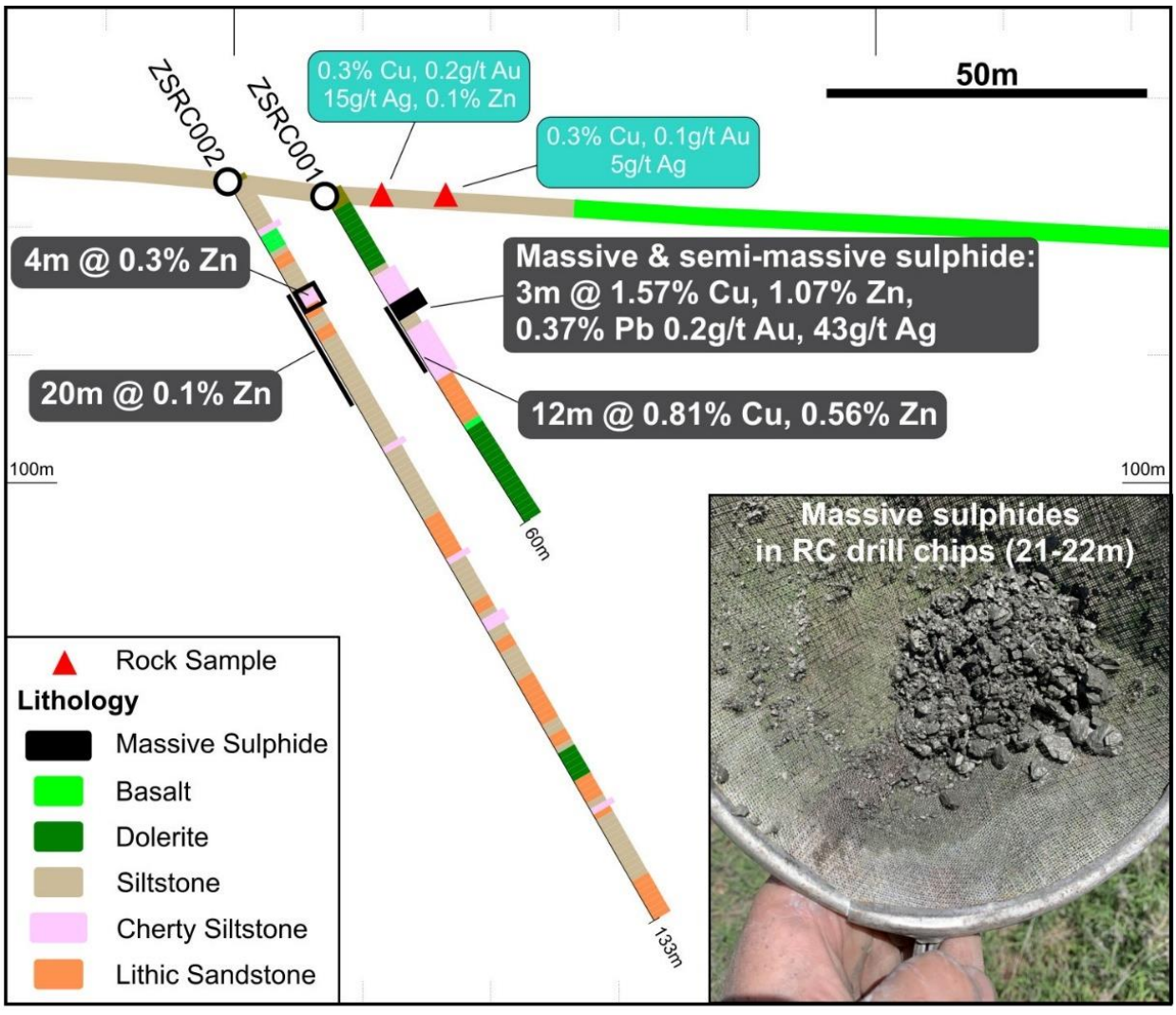

Figure 4: Cross Section of Snook Prospect Drill Hole ZSRC001 & 2

Table 1: Drill Hole Collar Locations

Hole_ID	Hole_Type	Easting	Northing	RL	Depth (m)	Azimuth	Dip
ZDCDD001	DD	789267	7450521	99	195.5	na	-90

For further information please refer to the Company's website or contact the Company directly.

Authorised for release by the Zenith Minerals Limited Board of Directors – 3 May 2021

For further information contact Zenith Minerals Limited:

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Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Michael Clifford, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith Minerals Limited. Mr Clifford 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 Clifford 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.

About Zenith

Zenith has a vision to build a gold and base metals business with a team of proven project finders. Focus is on 100% owned Zenith projects, whilst partners progress multiple additional opportunities using third party funds.

Zenith is continuing to focus on its core Australian gold and copper projects including:

- **Red Mountain Gold Project** in Queensland (100% owned) where ongoing 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), including:
  - 13m @ 8.0 g/t Au & 3.2 g/t Ag from surface
  - 15m @ 3.5 g/t Au, incl. 2m @ 22.4 g/t Au
  - 5m @ 10.4 g/t Au, and
  - 12m @ 4.9 g/t Au

- **Split Rocks Gold Project** in Western Australia (100% owned), where recent 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), including:
  - Dulcie North: 32m @ 9.4 g/t Au, incl 9m @ 31.4 g/t Au
  - Dulcie Laterite Pit:
    - 2m @ 14.5 g/t Au, incl. 1m @ 20.8 g/t Au,

    - 18m @ 2.0 g/t Au (EOH) incl. 1m @ 23.7 g/t Au
    - 14m @ 3.5 g/t Au
  - Estrela Prospect: 2m @ 9.8 g/t Au (open to north & south)
  - Dulcie Far North: 5m @ 5.6 g/t Au incl. 4m @ 6.8 g/t Au
  - Water Bore: 3m @ 6.6 g/t Au

- **Develin Creek Copper-Zinc Project** in Queensland (100% owned) – maiden drill test of the new Snook copper target located 30km south of Zenith's JORC resources discovers massive copper-zinc sulphides (ASX Release 17-Dec-20).

- **Jackadgery Gold Project** in New South Wales (option to earn initial 90%), historic trenching returned 160m @ 1.2 g/t Au. No drilling to date. Zenith planning maiden drill test (ASX Release 10-Sep-20).

- **Earaheedy Zinc Project in Western Australia (25% free carry to end 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 Release 28-Apr-21).**

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (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.*	Massive sulphide visually logged by geologist in first DD hole.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Visual observations only, no assays, no pXRF measurements.
	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 (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.	Massive-copper-zinc-iron sulphides logged in first twin hole at Develin Creek, Sulphide City deposit. No visual estimates provided of copper-zinc grades at this stage. Mineralisation is visually consistent with previous copper-zinc mineralised intervals.

Drilling techniques	*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.).*	Diamond drilling.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Drill core was logged by a qualified geologist on site, data recorded in field on paper logs and transferred to digital database
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Drilling produced excellent recoveries. Sampling of ¼ and ½ core in progress.
	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.	Not applicable – not yet sampled, no assays received
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.*	Drill core was logged by a qualified geologist on site. No reporting of resources.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Drill core logging is qualitative. All core is photographed.
	The total length and percentage of the relevant intersections logged.	All intervals logged and sampled
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Not applicable – not yet sampled, no assays received
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Drill core
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Not applicable – not yet sampled, no assays received
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Not applicable – not yet sampled, no assays received
Sub-sampling techniques and sample preparation - continued	*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.*	Not applicable – not yet sampled, no assays received
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Not applicable – not yet sampled, no assays received
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.*	Not applicable – not yet sampled, no assays received

	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.	No geophysical tools used in this drilling program
	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.	Not applicable – not yet sampled, no assays received
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Company personnel have observed the drill core
	The use of twinned holes.	Twin hole program in progress
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Field data were all recorded in field laptops and sample record books and then entered into a database.
	Discuss any adjustment to assay data.	Not applicable – not yet sampled, no assays received
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.*	Sample location is based on GPS coordinates +/-5m accuracy
	Specification of the grid system used.	The grid system used to compile data was MGA94 Zone 56
Location of data points - continued	*Quality and adequacy of topographic control.*	Topography control is +/- 5m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drill hole cordinates refer to Table 1
	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.	The data alone will not be used to estimate mineral resource or ore reserve
	Whether sample compositing has been applied.	Not applicable – not yet sampled, no assays received
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.*	Not applicable – not yet sampled, no assays received
	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.	As above
Sample security	*The measures taken to ensure sample security.*	Not applicable – not yet sampled, no assays received

Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Not applicable – not yet sampled, no assays received

Section 2 Reporting of Exploration Results

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

Criteria	*JORC Code explanation*	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Sulphide City Copper-Zinc Prospect is part of the Develin Creek VMS project, that lies on EPM17604. The project is 100% owned by a wholly owned subsidiary of Zenith Minerals Limited. The prospect area is on private grazing lands with access subject to a land access agreement between Zenith & the landholder.
	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.	All tenements are 100% held by Zenith and are in good standing with no known impediment to future granting of a mining lease.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• Mineralisation was first identified in late 1992 by Queensland Metals Corporation (QMC) over what is now the Scorpion deposit. Between 1993 and mid-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 (later changed names to Australian Magnesium Corporation) maintained the tenements until relinquishment in 2002. • Icon Limited (Icon) acquired the tenement and in 2007 completed this 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 40m to the south where it remains open to further upside. • In addition, Fitzroy completed 3 RC holes at the Lygon Prospect and a further 2 south of the Develin Creek resource area.
Geology	*Deposit type, geological setting and style of mineralisation.*	Sulphide City, Scorpion and Window are later Permian age volcanogenic massive sulphide deposits hosted with the Rookwood Volcanics basaltic sequence. Mineralisation observed at the Snook Copper prospect is consistent with this style of mineralisation. Copper observed at surface occurs within bleached and altered sedimentary rocks that are interbeds within the basalt sequence.

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:*	Refer to Table 1
	o easting and northing of the drill hole collar	
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	o dip and azimuth of the hole	
	o down hole length and interception depth	
	o 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.	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	Not applicable – not yet sampled, no assays received
	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.	Not applicable – not yet sampled, no assays received
Data aggregation methods - continued	*The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Not applicable – not yet sampled, no assays received
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Not applicable – not yet sampled, no assays received
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The intersections in drill holes are interpreted to be close to true widths.
	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').	As above
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.*	Single drill hole reported, appropriate maps & sections will be provided in follow-up release once assay results are recived
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.*	Not applicable – not yet sampled, no assays received
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;*	The Devein Creek project contains a VMS copper-zinc deposit with an Inferred Mineral Resource (JORC 2012) of: 2.57Mt @ 1.76% copper, 2.01% zinc, 0.24g/t gold and 9.6g/t silver (2.62% CuEq) released to ASX on 15- -Feb-2015. Upside to resource grades are considered likely with Zenith RC hole twinning previous 1993 percussion hole returning significantly higher copper, zinc, gold and

	potential deleterious or contaminating substances.	silver grades (300% to 700% higher). Initial metallurgical testwork results show positive first stage “rougher” recoveries of 90%. The Company holds exploration permits that cover the highly prospective host rocks over 50km north – south.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Down hole geophysical EM surveys planned. Follow-up drill planning in progress.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to figures in body of report.