

7th June 2022



Corporate Details

Zenith Minerals Limited (ASX:ZNC)

ABN: 96 119 397 938

Issued Shares	343.9M
Unlisted options	14.3M
Mkt. Cap. (\$0.37)	A\$127M
Cash (31 st Mar 22)	A\$9.3M
Equities (31 st Mar 22)	A\$14.2M
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.	8.7%
Citicorp Nom	8.3%
BNP Paribas Nom	6.2%
EV Metals Group	2.9%

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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FURTHER HIGH-GRADE COPPER-ZINC DRILL RESULTS FROM DEVELIN CREEK

The Board of Zenith Minerals Limited (ASX: ZNC) ("Zenith" or "the Company") is pleased to advise that it has received further high-grade copper-zinc drill results from the Company's 100% owned, Develin Creek project located in Queensland.

- New results from resource update drilling at the Sulphide City deposit include the highest-grade zinc intersection ever for the project:
 - **9m @ 1.8% Cu, 18.1% Zn, 0.6 g/t Au and 28.4 g/t Ag** (ZSCCD020) within a wider zone of:
 - **19m @ 1.2% Cu, 11.9% Zn, 0.4 g/t Au and 20.4 g/t Ag** (reported intersection is downhole width and the orientation of this very high-grade zone is uncertain and may not represent true width. Further drilling is required).
- A further 5 drill holes were completed around the margins of the Sulphide City deposit, returning 3 additional massive sulphide intersections consistent with previous results (holes ZSCCD018, ZSCCD021 and ZSCRC024).
- Massive copper-zinc sulphide mineralisation remains open to the south of the new intersection in hole ZSCCD018.
- Assays are in addition to those previously reported from the Sulphide City resource program (ASX Release 7-Jan-22), that returned wide high-grade massive copper-zinc sulphides, including:
 - 12m @ 2.6% Cu, 5.2% Zn, 1.4 g/t Au and 73 g/t Ag (ZSCRC003)
 - 12m @ 1.5% Cu, 0.5% Zn, 0.2 g/t Au and 3.6 g/t Ag and
 - 16m @ 1.7% Cu, 0.1 g/t Au and 3.4 g/t Ag (ZSCRC004)
- Resource update drilling at the adjoining Scorpion deposit also returned thick high-grade copper zones (ASX Release 7-Jan-22), including:
 - 21m @ 2.5% Cu, 1.6% Zn, 0.4 g/t Au and 18.0 g/t Ag
 - 20m @ 2.3% Cu, 0.3% Zn, 0.4 g/t Au and 16.2 g/t Ag
 - 18m @ 1.7% Cu, 0.6% Zn, 0.6 g/t Au and 26.3 g/t Ag
- New results are to be incorporated in an updated mineral resource estimate for the Scorpion and Sulphide City deposits, anticipated for delivery early in the 3rd calendar quarter 2022.

Commenting on the new drill results Zenith's Managing Director, Michael Clifford said: "The very high-grade zinc results from hole ZSCCD020 are a pleasant surprise. Future drilling will assess if the 9m @ 1.8% Cu and 18.1% Zn intercept is an isolated patch or potentially a significant high-grade mineralised vertical fault zone. This new strongly zinc mineralised intersection along with the southern strike extensions indicated by ZSCCD018, demonstrates the remaining upside to the Sulphide City resource area".

Develin Creek Project Background

The Develin 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.

A three rig drilling campaign commenced at Develin Creek in September 2021 to test copper-zinc targets at Wilsons North, Snook and four targets surrounding the existing Sulphide City JORC massive copper-zinc sulphide deposits (Figure 1) as detailed in ASX Release 2-Sep-21. This drilling program is part of a broader plan to build upon the existing JORC resource and add potential tonnage to the Develin Creek copper-zinc volcanogenic massive sulphide (VMS) inventory.

Only one target surrounding the existing Sulphide City deposit has been tested to date, returning no significant results, with 3 targets remaining to be tested.

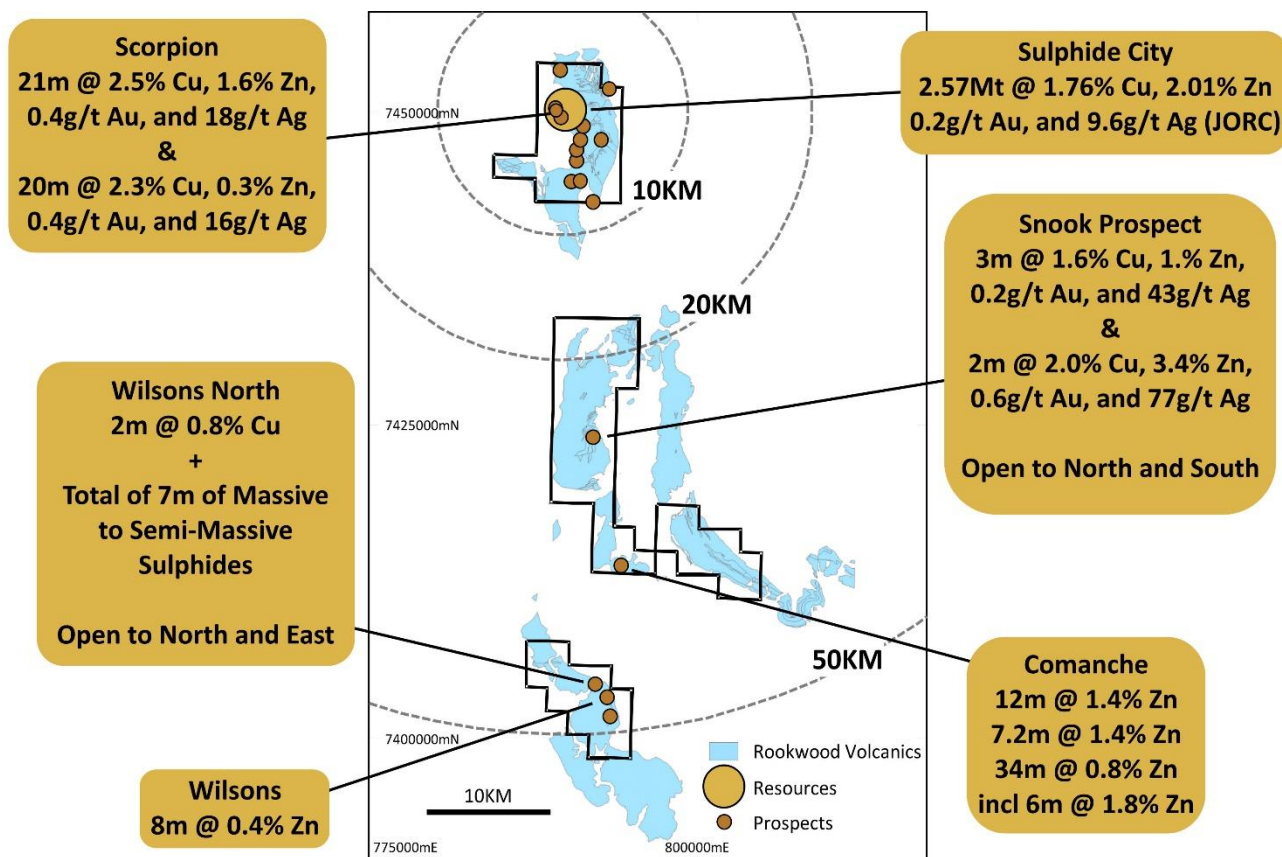


Figure 1: Develin Creek Project Outline and Areas Subject to Drill Testing in 2021

Details of Sulphide City Drilling

Results have now been received from a further 7 drill holes that form part of a program that was undertaken to replace historic percussion drilling, and provide new data that will be used in an updated Mineral Resource Estimate (Figures 2 and 3) at the Sulphide City copper-zinc massive sulphide deposit.

New results include the highest-grade zinc intersection ever for the project, with hole ZSCCD020 returning:

- **9m @ 1.8% Cu, 18.1% Zn, 0.6 g/t Au and 28.4 g/t Ag** within a wider mineralised zone of:
- **19m @ 1.2% Cu, 11.9% Zn, 0.4 g/t Au and 20.4 g/t Ag** (reported intersection is downhole width and the orientation of this very high-grade zone is uncertain and may not represent true width. Further drilling is required to assess if this is potentially a high-grade mineralised vertical fault zone).

A further 5 drill holes were completed around the margins of the Sulphide City deposit, returning 3 additional massive sulphide intersections consistent with previous results (holes ZSCDC018, ZSCDC021 and ZSCRC024). The intersection in drill hole ZSCCD018 is particularly significant indicating that massive copper-zinc sulphide mineralisation remains open to the south.

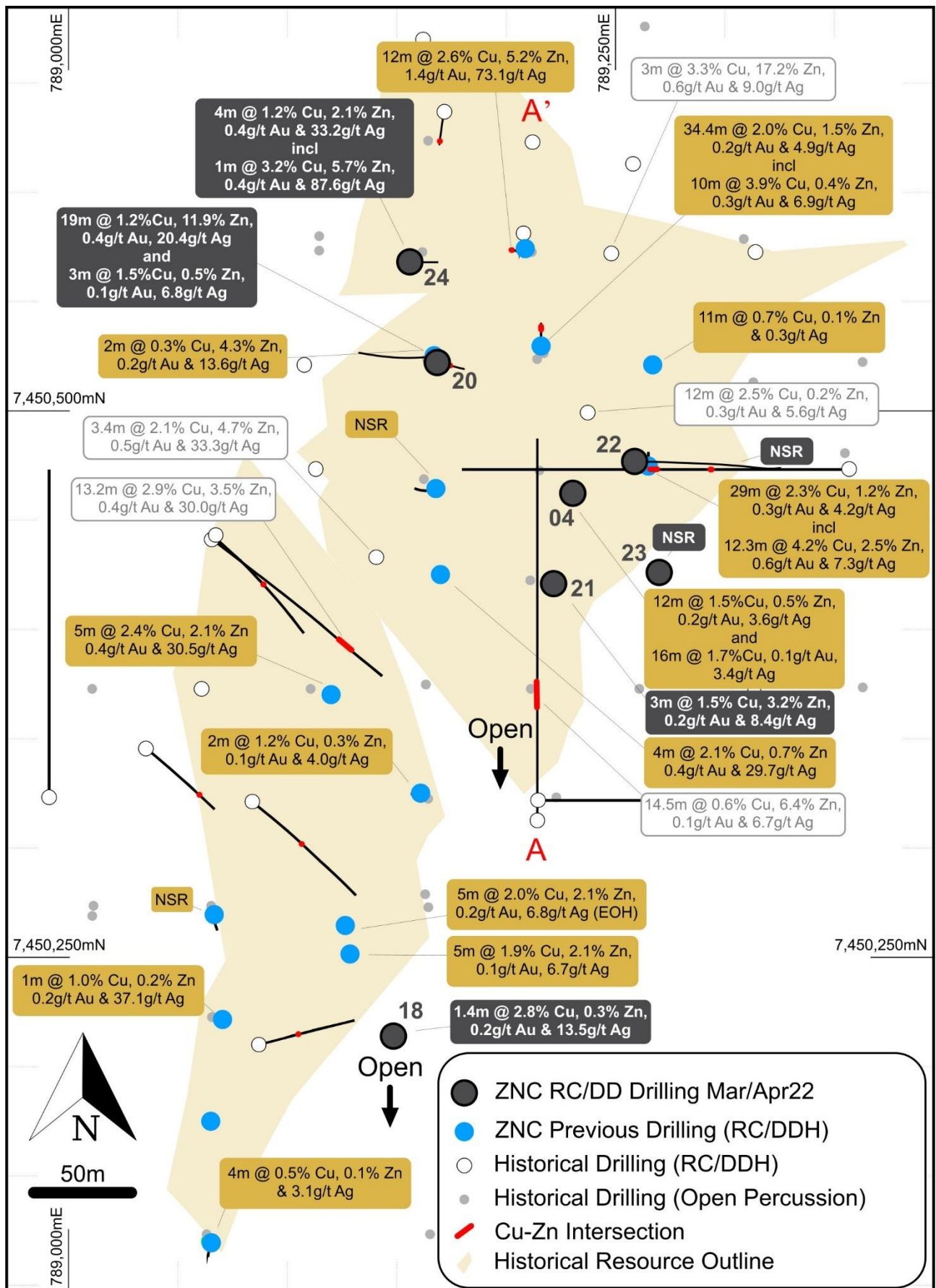


Figure 2: Sulphide City Deposit – Drill Hole Location Map showing Significant Intersections

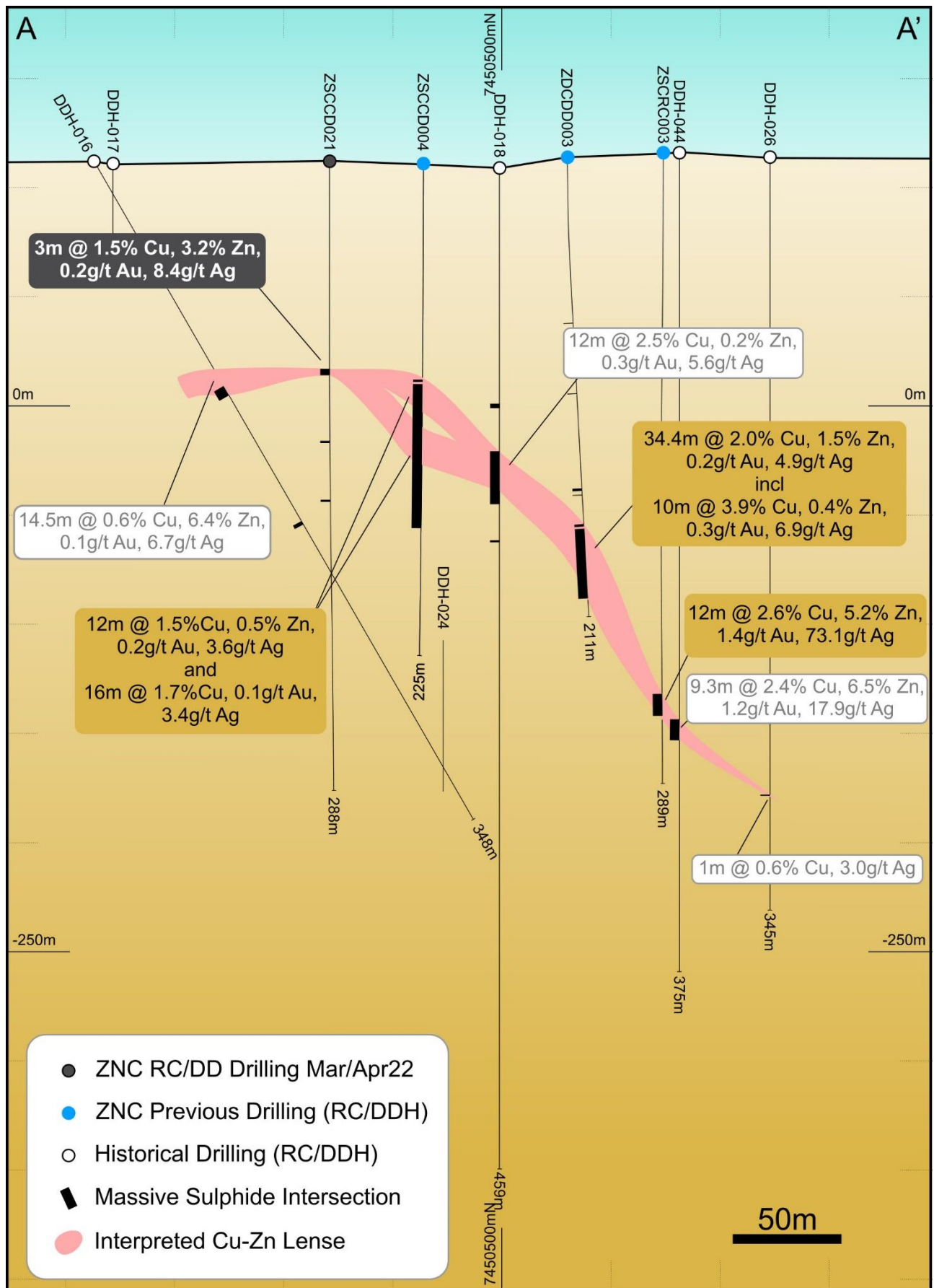


Figure 3: Sulphide City Deposit – Drill Hole Cross Section A-A' showing Significant Copper-Zinc Intersections

Snook Prospect

Zenith's technical team outlined the Snook target located 30km south of the existing JORC resources (Sulphide City, Scorpion and Window). An initial maiden drill test of 7 shallow RC holes has been a success, with hole 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 0.2 g/t Au, including 2m of massive sulphide grading: 1.95% Cu, 1.34% Zn, 0.48% Pb, 55 g/t Ag and 0.3 g/t Au (ASX Release 7-Dec-20).

Subsequent follow-up drilling extended the footprint of massive sulphides to a length of 150m (ASX Release 16-Dec-21 and 24-Mar-22), with the zone remaining open along strike to the south (Figure 4).

The Snook drill program and that completed at the nearby Wilsons North prospect now confirm a cluster of massive sulphides is present within the Company's landholdings, reaffirming the highly prospective nature of the Develin Creek project.

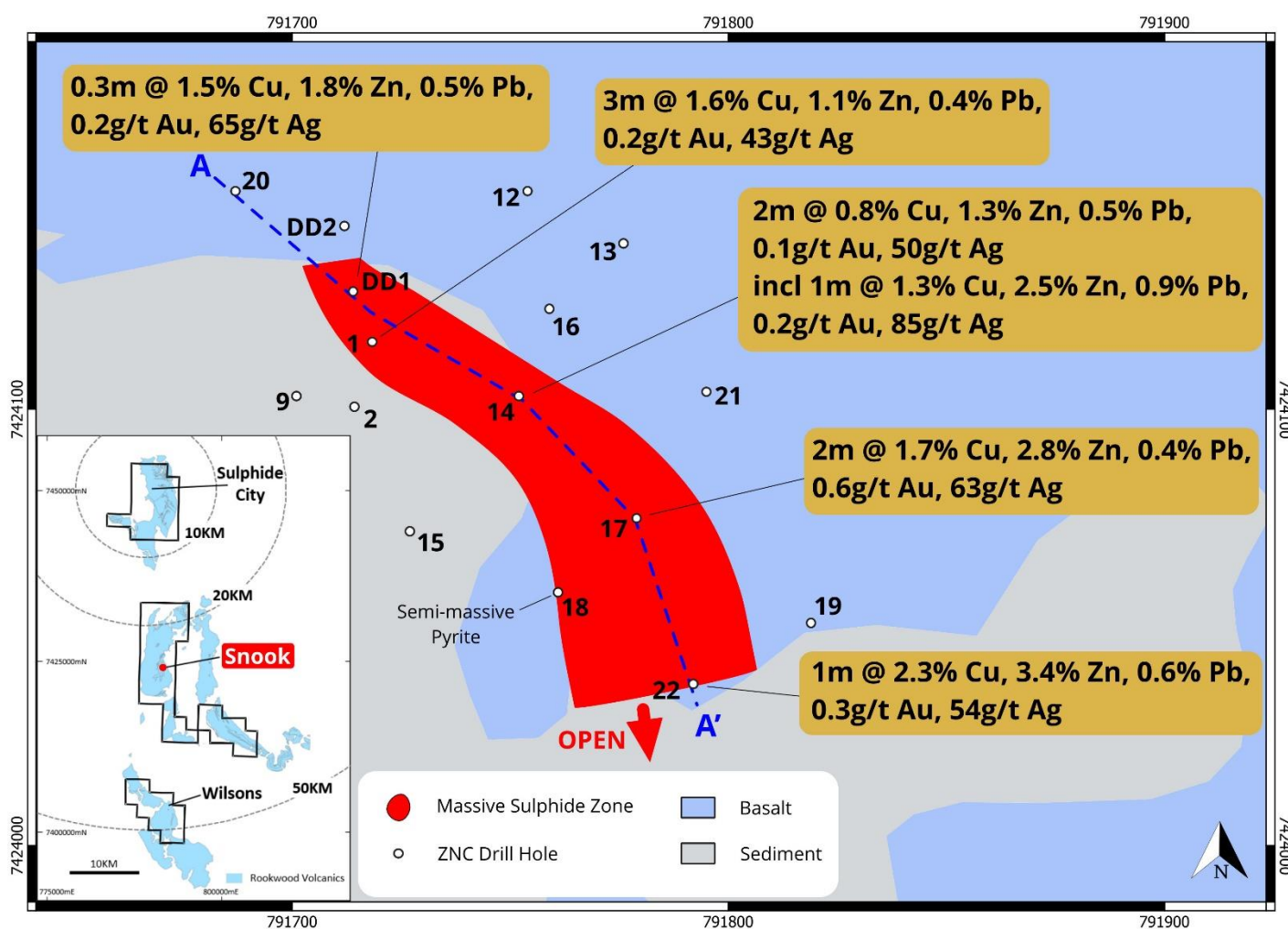


Figure 4: Snook Prospect – Drill Hole Location Map showing Significant Intersections

Wilsons North

Drilling at the Wilsons Prospect in 2021 returned multiple intersections of massive pyrite which commonly occurs in association with the base metal rich massive sulphides at the Sulphide City deposit. Further work is required to vector towards the base metal rich portion of this system at Wilsons.

Table 1: Significant Drill Results

Prospect	Hole ID	From (m)	To (m)	Interval (m)	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)
Sulphide City	ZSCCD004	NSR						
	ZSCCD018	92	93.4	1.4	2.8	0.3	0.2	13.5
	ZSCCD020	54	73	19	1.2	11.9	0.4	20.4
	incl	55	64	9	1.8	18.1	0.6	28.4
	and	97.7	98	0.3	0.6	0.2	0.0	8.5
	and	163.8	166.8	3	1.5	0.5	0.1	6.8
	ZSCCD021	95	98	3	1.5	3.2	0.2	8.4
	ZSCCD022	NSR						
	ZSCCD023	NSR						
	ZSRC024*	110	114	4	1.2	2.1	0.4	33.2
	Incl*	113	114	1	3.2	5.7	0.4	87.6

Results reported as downhole, length weighted arithmetic average grades. Low-grade intercepts with a minimum cut-off grade of 0.4% Cu and including no more than 2m of consecutive internal waste. High-grade intercepts with a minimum cut-off grade of 1.0% Cu and including no more than 1m of consecutive internal waste. * Results from ZSCRC024 are preliminary – subject to final assays.

Table 2: Drill Collars

Prospect	Hole ID	Hole Type	Easting	Northing	RL	Depth (m)	Azimuth	Dip
Sulphide City	ZSCCD004	RC/DD	789231	7450464	106	225.4	0	-90
	ZSCCD018	RC/DD	789149	7450214	119	140	0	-90
	ZSCCD020	RC/DD	789169	7450522	119	233.3	90	-86
	ZSCCD021	RC/DD	789222	7450421	108	288.1	0	-90
	ZSCCD022	RC/DD	789259	7450477	108	251.3	90	-77
	ZSCCD023	RC/DD	789270	7450426	108	278.5	0	-90
	ZSCRC024	RC	789156	7450568	112	150	90	-87

*RC/DD indicates reverse circulation pre-collar with diamond drill hole tail

ABOUT ZENITH

Zenith Lithium Joint Venture

Zenith is being developed as a pure lithium company to refocus on minerals containing lithium and related metals required for rechargeable lithium-ion batteries for electric vehicles and renewable energy storage (“Battery Minerals”), backed by a new alliance with the EV Metals Group (EVM), as detailed in ASX Release 13-Jan-22. Key commercial terms of the Zenith Lithium Joint Venture with EVM include:

- EVM may earn a 60% interest in the lithium rights in two initial 100% owned Zenith projects, namely Waratah Well and Split Rocks (Figure 1), by sole funding the completion of a feasibility study within 24 months, with Zenith retaining a 40% project share.
- On and from completion of a feasibility study, Zenith and EVM will form a joint venture in respect of the project lithium rights. EVM will sole fund expenditure to a decision to mine, following which the parties will be required to fund future joint venture expenditure in accordance with their respective percentage shares.
- EVM must arrange all financing for the development, construction and commissioning of any future mine including Zenith’s share. Zenith must repay its proportionate share of the project finance including interest from the sale of its proportionate share of minerals produced.
- EVM to spend a minimum of A\$7M on exploration on the projects, in 24 months, before being able to voluntarily withdraw provided that if EVM does not complete a feasibility study within 24 months it will be deemed to have withdrawn and will not earn an interest in the project lithium rights.
- The agreement includes a joint venture over Zenith’s Split Rocks and Waratah Well projects in Western Australia, as well as a non-exclusive right to bring additional projects to the joint venture by either party, to explore for lithium/EV metals.
- In addition, EVM or its nominees subscribed for 20,000,000 ordinary ZNC shares @ \$0.30 cents per share (representing a premium of 20% above the then VWAP for ZNC shares for the preceding 10 Business Days) raising A\$6M (Placement), with funds applied to source new lithium opportunities, near term advancement of its gold and base metals portfolio and working capital (ASX Release 19-Jan-22).

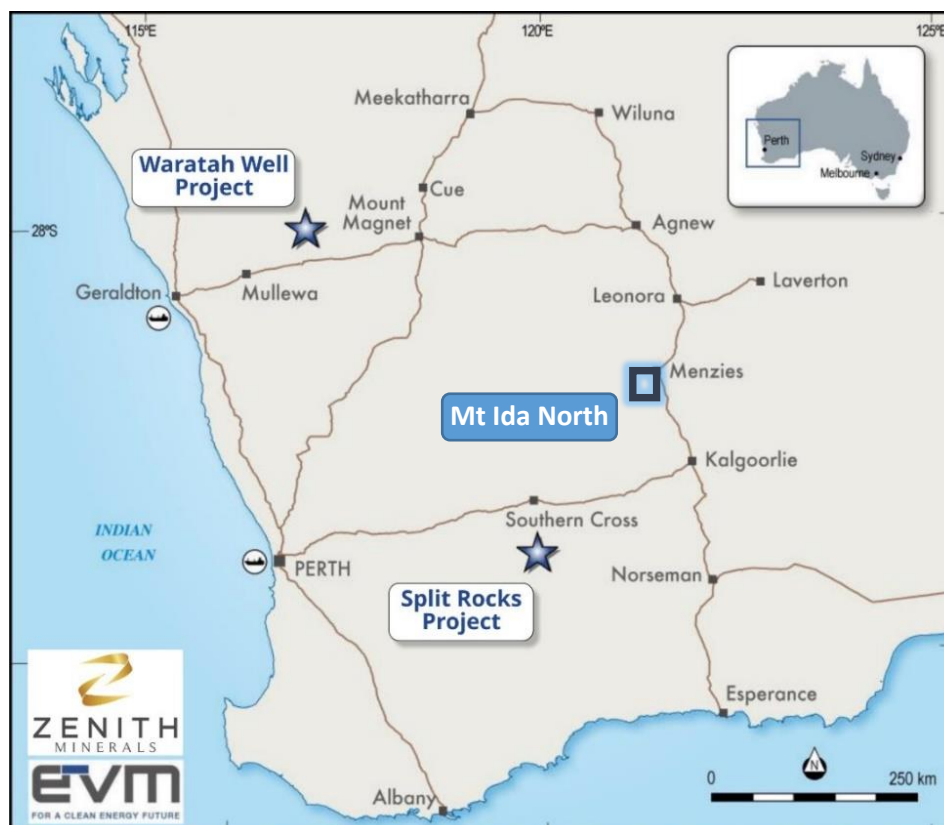


Figure 1: Zenith Lithium Joint Venture - Project Locations (stars) and Alliance Project (square)

Australian Lithium Alliance

Zenith and EV Metals Group have also agreed to work together on a non-exclusive basis to assess lithium opportunities in Australia under a strategic initiative referred to herein as the Australian Lithium Alliance (ALA). Zenith and EV Metals Group will each fund their respective share of costs on assessing, exploring and any future development capital on a 40% - 60% basis respectively, with EV Metals Group owning marketing rights to any offtake. Each party will bring to the arrangement their respective technical, financial and management skills to assess lithium opportunities. The Mt Ida North option agreement announced to the ASX on 23-May-22 is being pursued under the ALA partnership.

The ALA is a separate arrangement to the existing Zenith Lithium Joint Venture with EV Metals Group that is detailed below and in ZNC ASX Release dated 13-Jan-22.

Demerger of Gold and Base Metals Assets

To allow the Zenith team to focus on activities to generate Battery Minerals projects, ZNC is planning to demerge the non-Battery Minerals projects, including base metals and gold assets into a new Company 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 to 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.

Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources 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.

Authorised for release by the Zenith Minerals Limited Board of Directors – 7th June 2022

For further information contact Zenith Minerals Limited:

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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
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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
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Inferred Mineral Resource 2.57Mt @ 1.76% Cu, 2.01% Zn, 0.24g/t Au & 9.6g/t Ag (ASX Release 15-Feb-15). Massive sulphides intersected at 2 new prospects Wilsons North & Snook.

Sulphide City (ASX Release 5-Jul-21).	34m @ 3.5% Cu+Zn incl 10m @ 6.0% Cu+Zn	29m @ 3.5% Cu+Zn incl 12.3m @ 6.7% Cu+Zn
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Red Mountain	Gold	Queensland	100% Owned
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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 5m @ 10.4 g/t Au	15m @ 3.5 g/t Au 12m @ 4.9 g/t Au
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Split Rocks	Gold	Western Australia	100% Owned
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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 14m @ 3.5 g/t Au	18m @ 2.0 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



43.9M shares in Bradda Head Holdings Limited (AIM)



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



2.5M shares in American Rare Earths (ASX:ARR)



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

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	<p>Assays received for reverse circulation and diamond drill holes.</p> <p>Zenith previous drilling was completed in 2014 (RC; see ASX Release 26 November 2014) and 2021 (diamond; see ASX Release 05 July 2021, RC drilling 16 December 2021).</p> <p>Historical drilling: Diamond holes were drilled over a period of 3 ½ years by QMC (Dec 1992 to July 1996), and historical RC over two periods in 2011 by Fitzroy Resources. Diamond drillholes were generally sampled at 1 to 2m intervals and half core splits (some ¼ core when field duplicates were used) sent to the laboratory. RC chips were sampled at 1m intervals within the mineralised zones and 3m intervals in non-mineralised zones.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<p>1m RC drill samples collected via a cyclone were split through cone or riffle splitter. Routine sampling on 4m composites via spear sampling of the 1m intervals. Selected 1m intervals were assayed as 1m samples based on visual logging of alteration and sulphide content.</p> <p>Diamond core was selectively sampled based on geological observations at intervals no less than 0.3m and no greater than 1m.</p> <p>Historical drilling: Diamond sample representativity was ensured by a combination of company procedures regarding quality controls (QC) and quality assurance (QA). Standard procedures and templates used for logging, sampling, sample submission and data entry. Mineralised intervals (generally massive sulphides) were geologically distinct from volcanic host rocks and sampled accordingly (generally 1-2 m in diamond core and 1m in RC holes). Higher grade samples re-assayed and sample pulps retained. Limited field duplicates submitted (¼ core). Blanks and standards included by laboratory but not submitted with sample dispatches. Assays of key intervals checked by subsequent re-sampling / multi-element analysis.</p>

	<p><i>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.</i></p>	<p>Reverse circulation drilling was used to obtain 1 m to 4m samples from which 2 to 3 kg was pulverised to produce a 30 g charge for fire assay & ICP-AES analysis of base metal & trace elements.</p> <p>Diamond core drilling was used to obtain samples ranging from 0.3m to 1.3m. After cutting with a diamond saw, ½ core samples produced 3 to 5 kg which was pulverised to produce a 30 g charge for fire assay and ICP-AES multi-element assays.</p> <p>Historical drilling: Industry standard practices for sampling techniques for the style of mineralisation were employed at the Develin Creek deposit. Diamond core within mineralisation zones (some HQ, generally NQ in pre-2011 core, NQ2 in 2011) was sampled at 1-2 m intervals, and half core splits (some ¼ core when field duplicates were used) sent to the laboratory. RC samples (1m) were split with an on rig riffle splitter and sampled with a sample spear as 3m composites in the hangingwall and footwall. RC samples were not composited in mineralized zones. Diamond samples were assayed for base metals using AAS and gold using fire assay. All grade intervals (> 1% base metals) were re-assayed by higher precision techniques and selected intercepts subsequently submitted for multi-element analysis by ICP. RC samples were assayed for base metals using ICP-OES after 4 acid digest and for gold using fire assay. All grade intervals (> 1% base metals) were re-assayed with a stronger digestion level.</p>
Drilling techniques	<p><i>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.).</i></p>	<p>Reverse circulation drill holes all tailed with diamond core except one.</p> <p>Historical drilling: Diamond drilling comprises HQ or more generally NQ/NQ2 sized core. This drilling generally involved open hole percussion pre-collar through tertiary cover; then HQ or NQ to end of hole. Drill hole depths range from 90.7m to 507.5m. Core was generally un-oriented (vertical holes) although spear orientations were recorded in some angled holes. RC drilling comprised a nominal 4 ½ or 5 ¼ inch diameter face sampling hammer. Hole depths range from 82m to 232m.</p>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p>	<p>Diamond core and RC chips were logged by a qualified geologist on site, data recorded in field on laptop and transferred to database.</p> <p>Historical drilling: Diamond core recovery was logged with minimal core loss recorded in mineralised intervals. RC recovery was visually assessed and considered to be acceptable within the mineralized zones.</p>
	<p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p>	<p>RC was generally drilled dry to achieve maximum recoveries, DD core recoveries were high throughout with very limited zones of loss noted.</p>

		<p>Historical drilling: Diamond core was reconstructed into continuous runs, depths being checked against the depth marked on the core blocks. 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.</p>
	<p><i>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.</i></p>	<p>No indications of sample bias based on results to date.</p> <p>Historical drilling: Sample recovery was generally very high within the mineralisation zones. No bias is expected to have occurred during sampling.</p>
Logging	<p><i>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.</i></p>	<p>Drill core and chips were logged by a qualified geologist on site. No reporting of resources.</p> <p>Historical drilling: Diamond core 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.</p>
	<p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p>	<p>Drill core logging is qualitative, all core and RC chip trays have been photographed.</p> <p>Historical drilling: Diamond core 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.</p>
	<p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>All intervals logged and sampled.</p> <p>Historical drilling: All drill holes were logged in full.</p>
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p>	<p>Diamond drill core sawn with half core taken for assay.</p> <p>Historical drilling: Diamond core was sawn in half, with half core (some ¼ core when field duplicates were used) samples submitted for assay analysis.</p>
	<p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p>	<p>RC Samples were either cone of riffle split and taken for assay.</p> <p>Historical drilling: RC samples were riffle split and sampled. Zenith's samples were recorded as dry or wet.</p>
	<p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p>	<p>Samples analysed at ALS Laboratories in Brisbane or Townsville, the samples were crushed, pulverised and assayed by gold using fire assay and silver & base metals by ICP-AES.</p> <p>Historical drilling: For core, the 1–2m sawn samples are considered appropriate and sample recovery and contamination were monitored for the RC holes.</p>

	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	<p>~2 to 3kg of drill sample was crushed and pulverised and a sub-sample was taken in the laboratory and analysed.</p> <p>Historical drilling: Standardised procedures were used for sample collection, recording and submission.</p>
<i>Sub-sampling techniques and sample preparation - continued</i>	<i>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.</i>	<p>Field duplicates were collected during drilling and sampling.</p> <p>Historical drilling: Limited field duplicates of RC and ¼ core were submitted during initial sampling. Both pulps and coarse rejects (and remaining core) were retained and subsequently resampled.</p>
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<p>Each sample was 2kg to 3kg in weight which is appropriate to test for the grain size of material.</p> <p>Historical drilling: Sample sizes are considered to be appropriate to accurately represent the base metal mineralisation at Develin Creek based on the thickness and consistency of the intersections, the sampling methodology and the percent value assay ranges for the primary elements.</p>
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>The samples were crushed and assayed for gold using fire assay and 4 acid ICP-AES for base metals and trace elements, over range copper & zinc analysis which are considered near total techniques. Assay results for ZSCRC024 are preliminary and subject to final assays.</p> <p>Historical drilling: The analytical techniques used were AAS (pre-2011) and ICP-OES (2011) 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). In 2011 all grade intervals (> 1% base metals) were re-assayed with the strongest digestion level.</p>
	<i>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.</i>	<p>Magnetic susceptibility was recorded every metre downhole for all the drill holes using a KT-10 magnetic susceptibility meter.</p> <p>Historical drilling: 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.</p>
	<i>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.</i>	<p>Certified reference material, blanks and duplicates samples were included in each sample batch and appropriate levels of precision and accuracy were confirmed in QA/QC review.</p> <p>Historical drilling: 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.</p>
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<p>Company personnel have observed the samples</p> <p>Historical drilling: Significant intersections have been verified by personnel of subsequent companies working on the project including a</p>

		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.
	<i>The use of twinned holes.</i>	One historical percussion drill hole was twinned during the 2014 program. The corresponding 2014 RC hole returned higher Cu, Zn, Au, Ag values.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Field data were all recorded in field laptops and sample record books and then entered into a database. Historical drilling: Field data was all recorded on paper hardcopies (geological logging, sampling intervals, sample submission forms, density determinations etc on standardised templates). These data have been transferred to a digital database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments were made. Historical drilling: No adjustments were made, other than for values below the assay detection limit which were entered into the assay database as the negative of the detection limit.
<i>Location of data points</i>	<i>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.</i>	Hole location is based on GPS coordinates +/-5m accuracy. Historical drilling: Pre-2011, 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 existing topographic surface. Pre-2011, down hole surveys for some diamond holes at the end of hole using an Eastman survey camera showed minimal deviation. No survey was completed for PD holes. In 2011, down hole surveys were completed every 50m for both diamond and RC holes using a down hole Reflex camera.
	<i>Specification of the grid system used.</i>	The grid system used to compile data was MGA94 Zone 55. Historical drilling: A local grid was established 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. All references in this report now refer to GDA94 Zone 55.
<i>Location of data points - continued</i>	<i>Quality and adequacy of topographic control.</i>	Topography control is +/- 10m when using GPS. However, a public LIDAR DEM (1m) was used to adjust RLs. Historical drilling: The topography and drill collar locations and elevations were accurately surveyed by a licenced surveyor over the period 1993-94 and a topography surface generated from these data.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Drill hole location shown in Figures and collar table. Historical drilling: Drill holes were generally spaced 50m along strike, and 50m across-strike.

	<p><i>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.</i></p>	<p>The completed data spacing and distribution will be sufficient (once all pending assays are received) to demonstrate spatial and grade continuity of the mineralised horizon to support the definition of Inferred Mineral Resources under the 2020 JORC code.</p>
	<p><i>Whether sample compositing has been applied.</i></p>	<p>Results are reported as length weighted average composites at a minimum cut-off grade of 0.4 % Cu and 1% Cu and 2% Zn (refer to Table 1).</p> <p>Historical drilling: RC samples were collected at 1m intervals within the mineralized zones and 3m intervals in non-mineralised zones.</p>
<p><i>Orientation of data in relation to geological structure</i></p>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p>	<p>Orientation of mineralisation based on initial observations from previous drill holes.</p>
	<p><i>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.</i></p>	<p>As above</p>
<p><i>Sample security</i></p>	<p><i>The measures taken to ensure sample security.</i></p>	<p>Samples are kept in numbered and secured bags until delivered to the laboratory.</p> <p>Historical drilling: Drill core was logged and sampled at the Marlborough exploration compound with bagged samples dispatched by road freight to the laboratory in Townsville. RC samples were bagged on site, placed in bulka-bags and secured for transport on pallets and then shipped directly using a 3rd party contractor to the laboratory.</p>
<p><i>Audits or reviews</i></p>	<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p>Drilling and sampling technique at Sulphide City was observed by a consultant (ResEval Pty Ltd) in October 2021.</p> <p>Historical drilling: Sampling techniques are consistent with industry standards. Consistency of data was validated upon import into the database (eg overlapping/missing intervals, intervals exceeding maximum depth, missing assays etc). Any data which failed the database constraints was assessed for validation and fixed. Global consistency was also checked subsequently by plotting sections and reconciling assays against geology and drill orientations.</p>