

## ZENITH MINERALS ADVANCES DULCIE FAR NORTH (DFN) TOWARDS NEXT GROWTH PHASE

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### Investment highlights

- **Pathway to Development:** *With the **Program of Work (POW)** approval secured, Zenith Minerals is set to launch a **new drilling campaign** at Dulcie Far North (DFN) gold project in WA, while also commencing a **Scoping Study** to assess **standalone development and toll treatment options**.*
- **Exploration Upside:** *A **review of historical surface sampling, drilling and geophysical data** has identified multiple **new gold targets** within Zenith's **100%-owned Exploration Licences** surrounding DFN. A **surface sampling program** will commence shortly to test these opportunities.*
- **Strategic Regional Growth:** *Zenith has completed **detailed due diligence** on multiple surrounding gold projects, evaluating additional ore sources to **achieve the critical scale necessary for a standalone development** at DFN.*
- **Resource Expansion:** *Following the **recently completed drilling program**, which increased the **DFN Inferred Mineral Resource by 40% (from 150,000 to 210,000 ounces of gold)**, Zenith is now launching a **new 32-hole RC and 5 diamond hole drilling campaign** to classify known mineralisation, test **footwall lodes**, and explore **high-potential northern and down-dip extensions** of the shear zone.<sup>1</sup>*

### Advancing Dulcie Far North: A Growth-Focused Strategy

Zenith Minerals is executing a dual-track strategy at Dulcie Far North (DFN), expanding the resource base through targeted exploration while progressing project development studies to evaluate potential production pathways.

With **POW approval secured**, Zenith will launch a **new drilling campaign in late February**, targeting key mineralised zones to **further define and classify the resource**. This work will directly support the **ongoing Scoping Study**, which is assessing both **standalone mine development** and **toll treatment options** as potential processing pathways.

Beyond drilling, Zenith is **actively expanding its regional footprint**, having identified **multiple new gold targets** on its **100%-owned Exploration Licences** (see Figure 2). These targets, identified through a **review of historical surface sampling, drilling and geophysical data**, have the potential to **enhance the Dulcie Far North project** by increasing the probability of identifying similar deposits proximal to the **DFN resource**.

Located within Zenith's **extensive Split Rocks tenure**, these targets will undergo **field mapping** and **surface sampling in the coming weeks** to refine their potential.

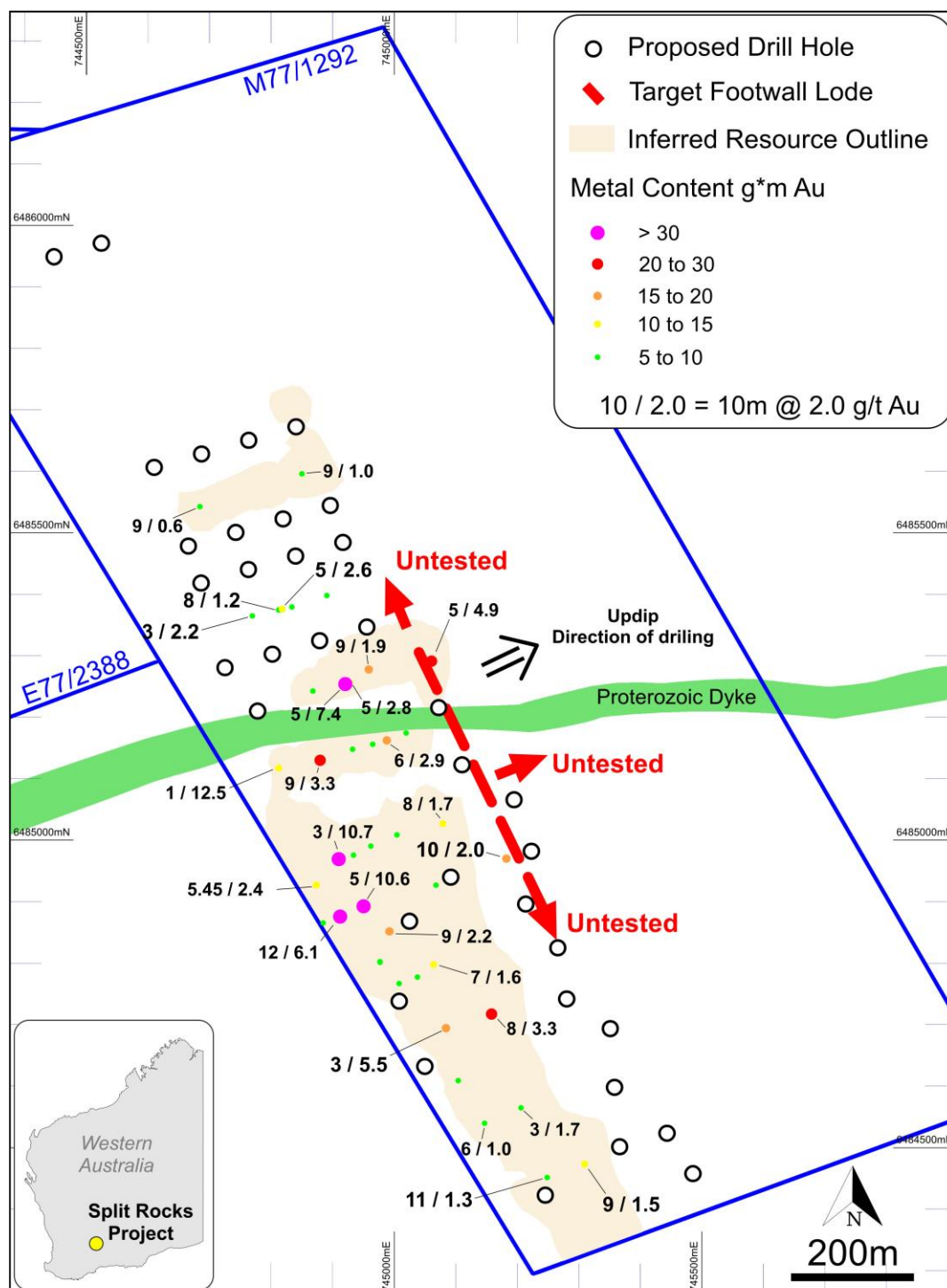
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<sup>1</sup> ASX: ZNC Announcement 17th Dec 2024 Resource Upgrade

Additionally, **pulps from previous lithium-focused surface and auger samples** are currently being evaluated for **gold prospectivity**, providing further **exploration upside**.

Zenith has also **completed due diligence on multiple surrounding gold projects**, evaluating additional ore sources to **build the critical mass required for a standalone mining and processing operation at DFN**. By **consolidating regional resources**, Zenith aims to establish DFN as a **long-term, economically viable gold development hub**.

This **multi-faceted approach** reinforces **DFN's strategic importance within Zenith's portfolio**, positioning it as a **cornerstone asset with strong growth potential** and the ability to scale into a **future mining operation**.



**Figure 1: Dulcie Far North Project – Tenement Boundaries, Mineralisation**

## Drilling Strategy & Exploration Focus

Following the **recently completed drilling program**, which resulted in a **40% increase in the Inferred Mineral Resource from 150,000 ounces to 210,000 ounces**, Zenith Minerals is now launching a **new drilling campaign** aimed at further classifying known mineralisation, testing extensions, and gathering key data to support the **ongoing Scoping Study**.

Zenith's **dual-pronged strategy** focuses on **expanding the resource base** and **progressing towards development**, ensuring Dulcie Far North continues to grow as a potential **standalone mining operation**.

- **Scope of Drilling:**
  - The program includes **32 Reverse Circulation (RC) drill holes** to classify **previously modelled mineralisation** across a **1,200m strike** and test extensions of mineralised zones along the Dulcie Gold Trend, a regionally extensive structure that hosts multiple stacked gold lodes.
  - An additional **5 diamond drill holes (two from surface; three with RC pre-collars)** will refine geological models, provide density data, and generate samples for metallurgical test work to optimise gold recovery and processing flowsheets. These holes will also provide structural data to enhance the understanding of mineralisation controls.
- **Expansion Targets:**
  - **Step-out drilling** will test **extensions of newly identified footwall lodes** and **high-potential northern extents to known mineralisation**, and **down-dip mineralisation potential** to determine the possibility for additional resource growth.
  - **Deeper structural targets**, identified through **geological modelling**, will be drilled to assess the **vertical extent of the mineralised system** and evaluate its continuity at depth.
- **Strengthening Development Pathways:**
  - **Diamond drilling** will improve geological confidence, providing critical **lithological density data** for resource estimation and future mine planning.
  - Collected samples will support **metallurgical test work**, ensuring **optimal gold recovery strategies** in potential processing scenarios.
- **Preparations in Progress:**
  - **Site access, drill pad clearing, and a detailed topographic survey** are underway, ensuring **precision in drill hole placement** and **accurate resource modelling**.
  - **Special measures to mitigate extreme heat conditions** are in place, including **adjusted work schedules, shaded rest areas, and additional hydration protocols** to prioritise **crew safety and operational efficiency**.

This **drilling campaign directly supports Zenith's broader development strategy**, ensuring that Dulcie Far North is well-positioned for the next phase of resource evaluation and project advancement.

## Exploration Upside

With the refocus on gold as part of corporate strategy, a historical surface sampling, drill hole and geophysical data review has identified multiple new gold targets within Zenith's 100%-owned Exploration Licences surrounding DFN.

The gold targets in Figure 2 below were generated by reviewing existing surface sample data (soils, rock chips and auger) in terms of gold anomalism, and/or classic gold pathfinders where available. This was combined with regolith mapping of the area, together with a review of the existing drill hole data. A significant amount of historic drilling was shallow (3-15m), apparently designed to test for surficial laterite mineralisation. A 40m depth filter was placed on the drill hole data where appropriate, assuming holes shallower than 40m are ineffective based on the observed gold distribution at DFN:

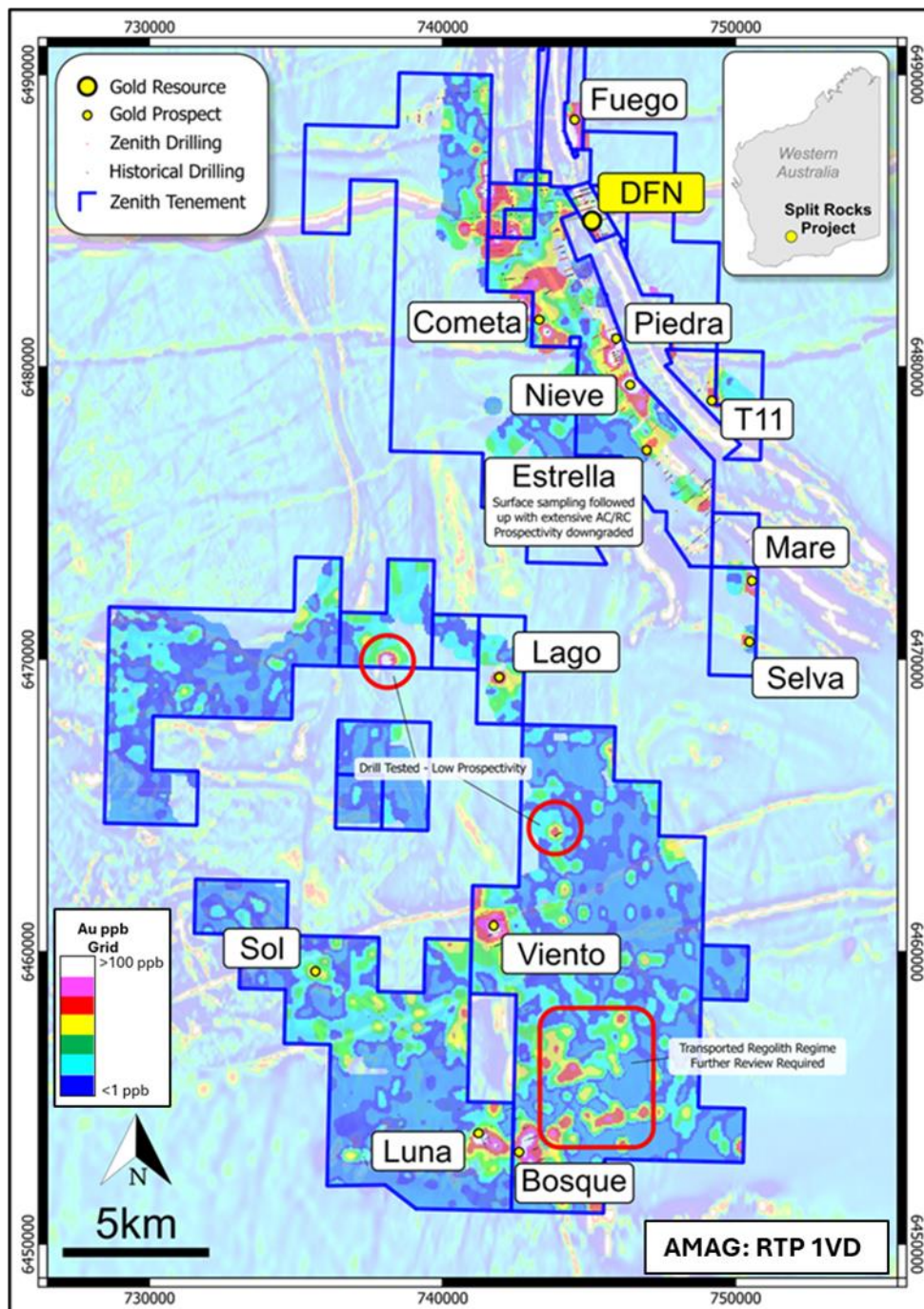


Figure 2: Spilt Rocks Regional Gold Targets; gridded gold values from surface sampling, clipped to ZNC tenure over AMAG RTP 1VD image (historic holes filtered to display only depths greater than 40m).



Zenith will soon undertake additional field mapping, rock chip sampling and where appropriate, soil sampling to refine these opportunities, focusing on underexplored areas with strong gold prospectivity that have the potential to add further scale to DFN, as well as testing the rest of the Split Rocks tenure.

### About Dulcie Far North

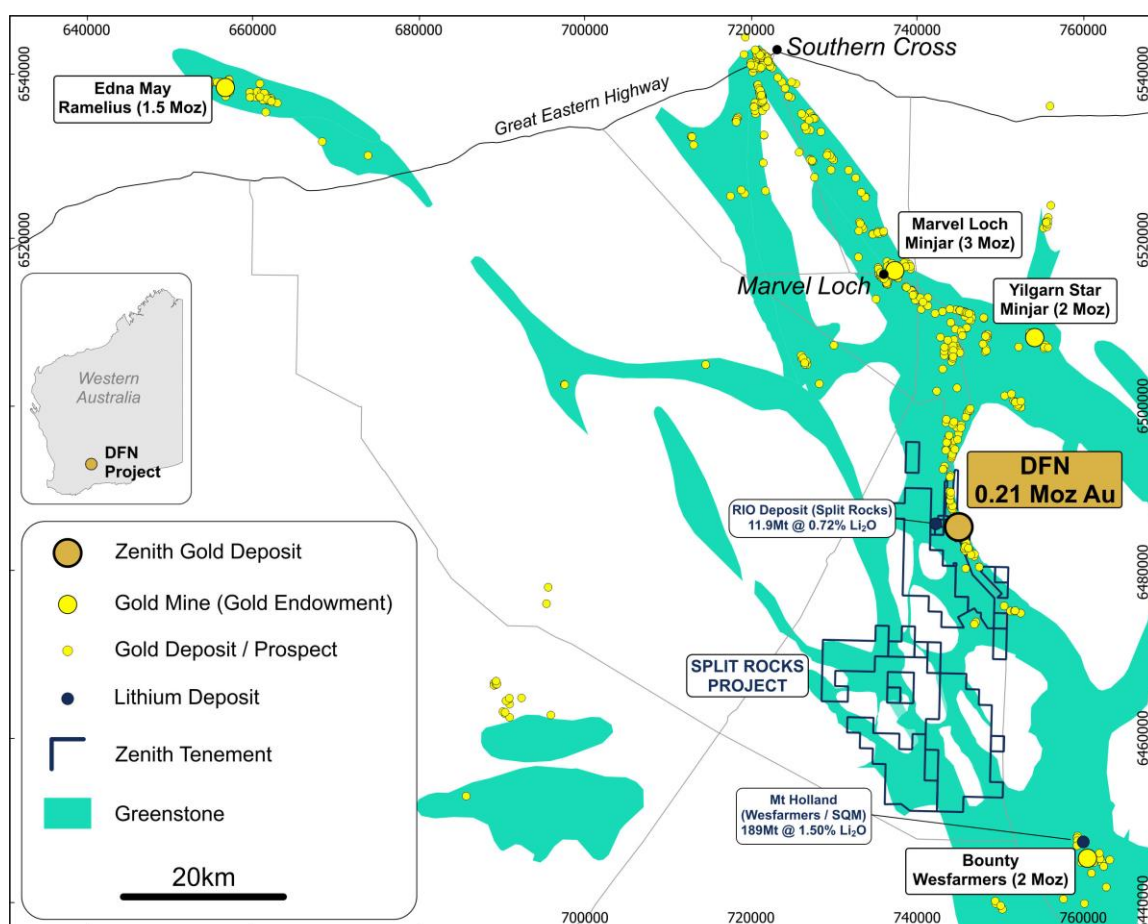
The **Dulcie Far North Gold Project** forms part of **Zenith Minerals' 364 km<sup>2</sup> Split Rocks tenure** located **400 km east of Perth** and approximately **80 km south of Southern Cross** within the **highly prospective Yilgarn Craton of Western Australia**.

The project is **strategically positioned near existing infrastructure**, including the **Barto Gold Processing Plant** at Marvel Loch, providing potential toll treatment opportunities.

The recent **sealing of Forrestania Road** by Covalent provides direct access to sealed-road infrastructure, improving project logistics and enhancing the potential development scenario for DFN.

Zenith **owns 100% of the Dulcie Far North Mining Lease (M77/1292)**, which was acquired in **January 2023 from a private syndicate**. The agreement includes:

- A **2% Net Smelter Royalty (NSR)** on any **gold or lithium** mined below **6 metres**.
- A **0.125% Net Profit Royalty** on gold mined below this depth.



**Figure 3: Split Rocks Gold Project and Dulcie Far North regional location and geology**

Zenith is actively assessing options to **scale production**, either through **standalone development or toll treatment agreements**, as part of its **broader growth strategy**.

**Previous mining studies** (undertaken by an independent mining engineer in 2024 for internal management purposes only) have shown that **Dulcie Far North is amenable to open-pit mining**, supporting its potential for near-term development.

A recent review of available data including **geophysical surveys and surface sampling** has identified multiple **new regional gold targets**, and additional **surface sampling is scheduled to commence shortly** to refine these exploration opportunities.

### DFN Geology

The geology at Dulcie Far North is dominated by a deeply weathered (30-40 m below surface) preserved Tertiary lateritic profile overprinting Archaean bedrock, including tholeiitic metabasalts (amphibolites) and a series of narrow (<10 m thick) interflow sedimentary banded iron formation (BIF) units. The stratigraphy dips consistently 30° to the west and strikes between 330°-345° north-westwards.

Structurally, Dulcie Far North lies along the regionally extensive (7 km strike) Dulcie Gold Trend. The shear zone, where drilled, is at least 100 m wide and the foliation parallels the 30° west dip of the stratigraphic sequence. Multiple stacked lodes are recorded within the shear zone. The shear zone is ductile and exhibits extensive boudinaging of the host amphibolites and BIF units.

Hydrothermal alteration including replacement of magnetite by pyrrhotite sees banded to wispy and massive pyrrhotite occupying the boudin necks and vein fractures in the amphibolites and BIF respectively as well as being more pervasively distributed on or near the amphibolite-BIF contacts. Extensive calc-silicate alteration is noted, with calcic green hornblende plus red almandine (garnet) dominating.

Feldspar-phyric porphyries show rotation of the (plagioclase) porphyroblasts displaying consistent sinistral displacements, indicating (normal) top block west movement.

Limited late-stage vertical sinistral faulting and broader carbonate healed breccia fault zones are occasionally noted but they are not dominant in the otherwise extremely competent (100% core recovery) west-dipping host rocks.

The most recent RC drilling program confirmed significant gold mineralisation in multiple holes, with notable intersections, including:<sup>2</sup>

- **SRRC035:** 10 m @ 2.00 g/t Au from 75 m (20.0 g\*m), inc. 4m @ 4.58 g/t Au from 78 m
- **SRRC033:** 3 m @ 5.51 g/t Au from 104 m (16.5 g\*m), inc. 2m @ 8.07 g/t Au from 105 m
- **SRRC030:** 11 m @ 1.30 g/t Au from 77 m (14.3 g\*m)

Previous drilling has confirmed high-grade gold intersections, including:

- **SRRC018:** 12m @ 6.1 g/t Au from 108 m, inc. 5 m @ 10.5 g/t Au from 113 m
- **ZDRC090:** 5m @ 10.6 g/t Au from 91m
- **ZDRC095:** 5m @ 7.4 g/t Au from 47 m
- **ZDRC098:** 3m @ 10.7 g/t Au from 103 m<sup>3</sup>

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<sup>2</sup> ASX ZNC -Releases on 28<sup>th</sup> November 2024

<sup>3</sup> ASX ZNC -Releases on 13<sup>th</sup> June 2023, 5<sup>th</sup> April 2023, 25<sup>th</sup> Jan 2023, 14<sup>th</sup> June 2022 and 18<sup>th</sup> Jan 2022

### Next Steps:

- Commencement of the upcoming 32-hole RC and 5-hole diamond drilling campaign to further classify mineralisation and expand the resource.
- Completion of the field mapping and surface sampling program across newly identified gold targets to refine regional exploration opportunities.
- Progression of the Dulcie Far North Scoping Study, incorporating new drill results to assess development options, including standalone processing and toll treatment.
- Ongoing assessment of regional consolidation opportunities to build scale and strengthen the project's development pathway.
- Re-assays of existing pulps for gold to assess additional prospectivity.
- Evaluation of initial metallurgical test work and mining scenarios to further de-risk project development.

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**This ASX announcement has been authorised by the Board of Zenith Minerals Limited.**

### **About Zenith Minerals Limited**

Zenith Minerals Limited (ASX: ZNC) is an Australian exploration company focused on advancing a diverse portfolio of gold and lithium projects in Western Australia and Queensland. The company is strategically positioned to capitalise on the growing demand for both precious metals and battery minerals. Key gold assets include the Red Mountain project in Queensland, which has returned high-grade results, and the Dulcie Far North project in Western Australia, located within the highly prospective Southern Cross/Forrestania Greenstone Belt. On the lithium front, Zenith's Split Rocks project has established a maiden resource, while the Waratah Well project presents further exploration potential. In addition to its core projects, Zenith holds a 25% interest in the Earraheedy Zinc Deposit, free carried through to a bankable feasibility study with Rumble Resources Limited.

### **Competent Persons Statement**

The information in this report that relates to Exploration Results and Exploration Activities is based on information compiled by Mr. Christopher Shanley, who is a Member of the Australian Institute of Geoscientists and full-time employee of Zenith Minerals Limited. Mr. Shanley 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. Shanley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to 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.



## JORC TABLES

### 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>	Systematic auger and soil sampling program on 200-400m x 50-100m spacing; collection of selective rock chip samples.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Samples are considered to be representative of the material sampled. Soil sampling was conducted over areas deemed to be residual soils or regolith whilst auger was completed over areas interpreted to be transported or having surface colluvium or alluvium.
	<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>	200g of -2mm sieved soil or 200g of auger sample was collected in the field. Samples were analysed at either SGS, Nagrom, or Jinning laboratories in Perth, 0.2kg was pulverised and a representative subsample was analysed for gold by Fire Assay with ICP-OES Finish. Multielement analysis was by Four-Acid digest with ICP-OES/MS finish.
Drilling techniques	<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>	No new drilling reported in this ASX Release.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	No new drilling reported in this ASX Release.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	No new drilling reported in this ASX Release.
	<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>	No new drilling reported in this ASX Release.

Logging	<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>	No new drilling reported in this ASX Release.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Qualitative logging of soil samples was completed by field crew.
	<i>The total length and percentage of the relevant intersections logged.</i>	No new drilling reported in this ASX Release.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No new drilling reported in this ASX Release.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	No new drilling reported in this ASX Release.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples were analysed at either SGS, Nagrom, or Jinning laboratories in Perth, 0.2kg was pulverised and a representative subsample was analysed for gold by Fire Assay with ICP-OES Finish. Multielement analysis was by Four-Acid digest with ICP-OES/MS finish.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	~200g of sample was pulverised and a sub-sample was taken in the laboratory and analysed.
Sub-sampling techniques and sample preparation - continued	<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>	Duplicate samples were taken in the field and analysed as part of the QA/QC process.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Each sample was approximately 0.2kg in weight which is appropriate to test for the grain size of material sampled.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples were analysed at either SGS, Nagrom, or Jinning laboratories in Perth, 0.2kg was pulverised and a representative subsample was analysed for gold by Fire Assay with ICP-OES Finish. Multielement analysis was by Four-Acid digest with ICP-OES/MS finish.
	<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>	Pre-competitive regional aeromagnetic data was used in the targeting process.  No other geophysical results reported and or tools used relevant to this ASX release.
	<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>	Blanks, certified reference material for gold, and duplicate samples were included in the analytical batches and indicate acceptable levels of accuracy and precision.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	No new drilling reported in this ASX Release.

	<i>The use of twinned holes.</i>	Nil.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Field data were recorded in a field laptop and then entered into a database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments were made.
<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>	Sample location is based on GPS coordinates +/- 5m accuracy.
	<i>Specification of the grid system used.</i>	The grid system used to compile data was MGA94 Zone 50.
<i>Location of data points – continued</i>	<i>Quality and adequacy of topographic control.</i>	Topography control is +/- 10m.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Auger & soil samples on 200-400m spaced lines with samples at 50-100m spacing; rock samples were taken where outcrop was encountered.
	<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>	There is insufficient information to calculate a mineral resource.
	<i>Whether sample compositing has been applied.</i>	No sample compositing.
<i>Orientation of data in relation to geological structure</i>	<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>	Grid lines are generally orientated perpendicular to inferred geology strike.
	<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>	No bias based on current interpretation.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	All samples were taken by Zenith personnel or contractor on site and retained in a secure location until delivered directly to the laboratory.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	The sampling techniques and data have been reviewed by two company personnel who are qualified as Competent Persons.

## 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.	Split Rocks mining, exploration and prospecting licences are 100% held by a wholly owned subsidiary of Zenith Minerals Limited.
	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.	Currently the Tenements are in good standing. There are no known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Refer to ASX release 21st March 2019 for details on the background of historic exploration activity.
Geology	Deposit type, geological setting and style of mineralisation.	The targeted mineralisation is typical of orogenic structurally controlled Archaean gold lode systems. The mineralisation is controlled by anastomosing shear zones/fault zones passing through competent rock units; brittle fracture and stockwork mineralisation is common within the mafic/ultramafic and BIF host rocks. Some mineralisation is observed as laterite at surface and/or enriched along the Base Of Complete Oxidation (BOCO) above the primary ore bodies.
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:	No new drilling reported in this ASX Release.
	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.	No new drilling reported in this ASX Release.

	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.	No new drilling reported in this ASX Release.
Data aggregation methods - continued	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	No new drilling reported in this ASX Release.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	No new drilling reported in this ASX Release.
	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').	No new drilling reported in this ASX Release.
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.	Refer to Figures and in body of text of this ASX release.
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.	Refer to Figures and in body of text of this ASX release.
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.	No other meaningful or material exploration data to be reported at this stage.
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).	Drill testing of the gold geochemical targets planned.
	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 and in body of text of this ASX release.