22nd June 2020

High Grade Gold & Copper Confirmed in Surface Sampling at Flanagans Project, QLD

- **Initial reconnaissance sampling by Zenith confirms high-grade gold, silver and copper at surface at the Flanagans prospect and nearby Great Blackall copper prospect. Rock sample results included:**
  - **Flanagans – gold to 5.3 g/t Au, silver to 100 g/t Ag and copper to 8.0% Cu**
  - **Great Blackall – gold to 3.4 g/t Au, silver to 273 g/t Ag and copper to 13.9% Cu**
- **Surface sampling confirms the historically reported local high tenor of gold, silver and copper mineralisation at both the Flanagans and Great Blackall prospects and endorses requirement for further exploration activity.**
- **Follow-up sampling to commence next week in conjunction with field preparation for upcoming major follow up drill campaign at Zenith's nearby Red Mountain gold project where recent drilling returned 14m @ 5.5 g/t Au incl 6m @ 12.3 g/t Au from surface.**
- **Drilling is also planned to commence at Zenith's 100% owned Split Rocks Project (WA) in early July, testing a series of high-order targets.**

Zenith Minerals Limited ("Zenith" or "the Company") is pleased to advise Initial reconnaissance sampling by Zenith confirms high-grade gold, silver and copper at surface at two prospects within the Company's 100% owned Flanagans gold project in Queensland (Figure 1).

The Flanagans project is situated within approximately 100km of operating gold mines at Cracow and Mount Rawdon and approximately 70km northeast of Zenith's 100% owned Red Mountain Gold project where recent drilling returned 14m @ 5.5 g/t Au incl 6m @ 12.3 g/t Au from surface (ZNC ASX Release 17th June 2020).

A short field reconnaissance program undertaken by Zenith has confirmed the historically reported high tenor of surface gold, silver and copper mineralisation at both the Flanagans and Great Blackall prospects (Figures 2 – 4).

CEO COMMENTS

CEO Mick Clifford said *"These are very early stage soil and rock-based results at the Flanagans Project. We are however encouraged by them particularly given that we were following up on some historical positive third-party results.*

This work follows on from some more advanced positive drill results at our nearby 100% owned Red Mountain Project. This geological region in Queensland has a history of commercial gold and base metal discoveries and we feel that we have given ourselves a good shot at success. Both Projects (Flanagans and Red Mountain) require a significant amount of follow up work to test and validate.

Our multi project strategy is starting to yield and we believe that expenditure to date has been a good use of shareholder funds"

Flanagans Prospect Background

Based on historical exploration activity the target is defined as a poorly exposed 1.5km long by 180m wide zone of sporadic quartz veining hosted in diorite. Individual quartz veins range in size from 1cm to 1m in width with common goethite boxwork after sulphides. The quartz veins have been mapped in outcrop and in 6 shallow trenches and described as flat lying to shallow NE dipping providing potential for a vertically

Corporate Details

ASX: ZNC

Issued Shares (ZNC)	243.4M
Unlisted options	5.6M
Mkt. Cap. ($0.1)	A$24M
Cash (31st Mar 19)	A$1.28M
Debt	Nil

Directors

Mike Joyce:
Non-Exec Chairman

Michael Clifford:
Managing Director

Stan Macdonald:
Non-Exec Director

Julian Goldsworthy:
Non-Exec Director

Graham Riley:
Non-Exec Director

Peter Bird:
Non-Exec Director

Major Shareholders

Directors	~16%
HSBC Custody. Nom.	12%
J P Morgan	6.1%
Miquilini	4.4%
Abingdon	4.2%

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stacked quartz vein hosted gold mineralised system. Within this overall zone is a smaller area of historic copper workings.

Previous sampling reported strong gold in rock chips results including: 20 g/t Au, 12.0 g/t Au, 11.5 g/t Au, 5.25 g/t Au, 3.3 g/t Au, 3.2 g/t Au, 2.6 g/t Au and silver to 70 g/t Ag (QLD Mines Department open file reports cr12556, cr17773 & cr30978). In addition, very high gold in soils were reported in 3 zones over the 1.5km of strike, peaking at 8.69g/t Au with one area 180m x 40m containing six results above 1 g/t Au.

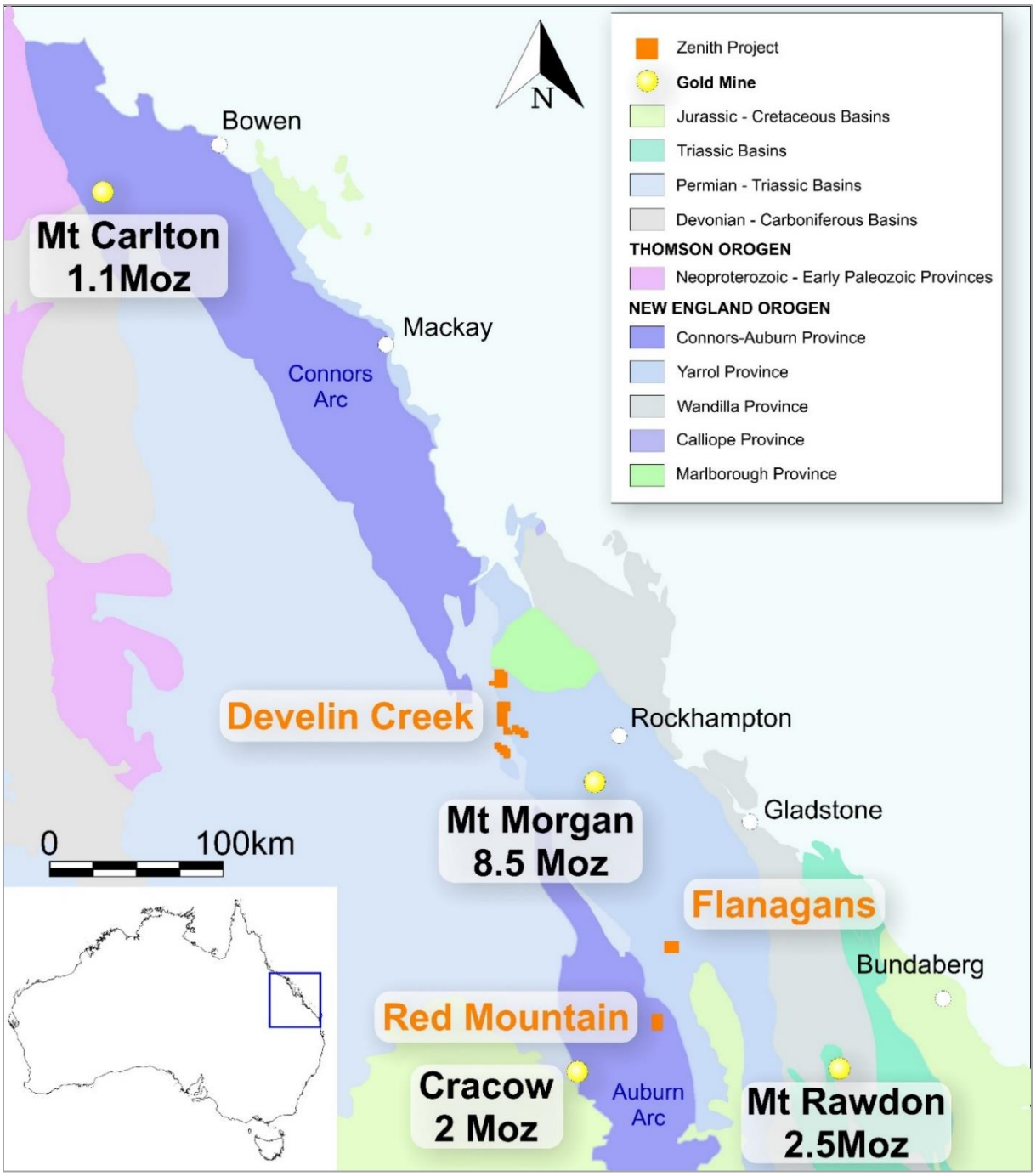

Figure 1: Red Mountain Project – Location Map

Rock sampling by Zenith confirms the previously reported presence of high levels of gold-silver and copper in quartz veins at surface with **gold results up to 5.3 g/t Au, silver to 100 g/t Ag and copper to 8.0% Cu** hosted within diorite. Mapping showed sporadic outcrop of individual quartz veins at surface whilst veins observed in a poorly exposed historic 1m deep prospecting pit appear as a carbonate-quartz stockwork returning 1.15 g/t Au. The previously recorded shallow trenches dug in the 1980s were not located. In addition, two trial lines of soil

sampling were completed along the strike of the Flanagans prospect area, with samples returning a maximum value of 1.5 g/t Au (1500ppb Au). Although returning several highly anomalous results, Zenith's soil sampling correlates poorly spatially with very high historic soil sample results reported by White Industries. Rock samples also confirmed a strong multi-element signature with bismuth values up to 560ppm, arsenic to 105ppm, tellurium to 323ppm and antimony to 6ppm.

Further work including additional sampling, geological mapping and possible geophysical surveys is required to determine the significance of the surface geochemical samples at Flanagans. The mineralised zone is poorly exposed with outcrop dominated by surrounding relatively unaltered diorite. Follow-up field work will commence next week.

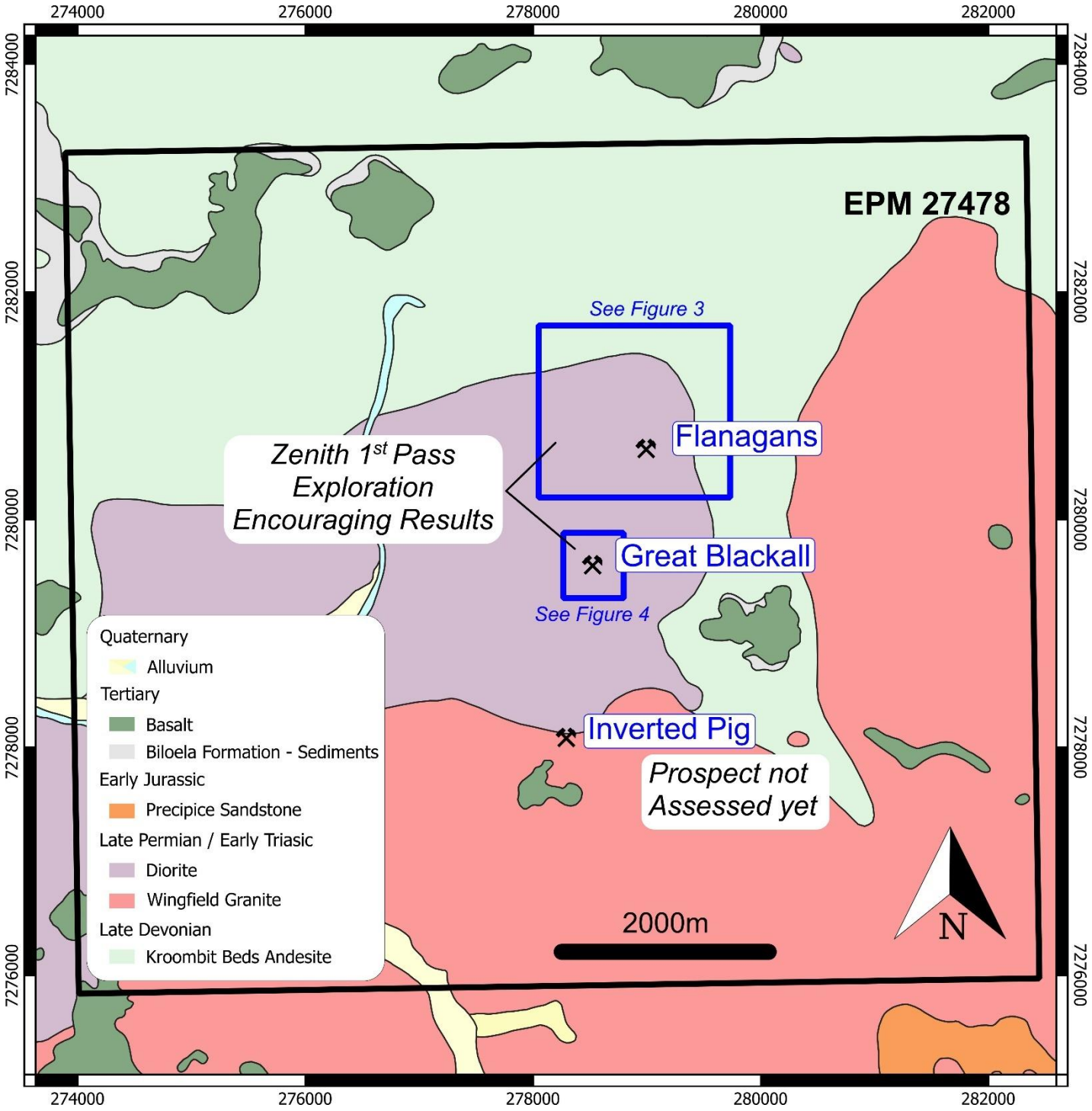

Figure 2: Flanagans Project – Prospect Location Map

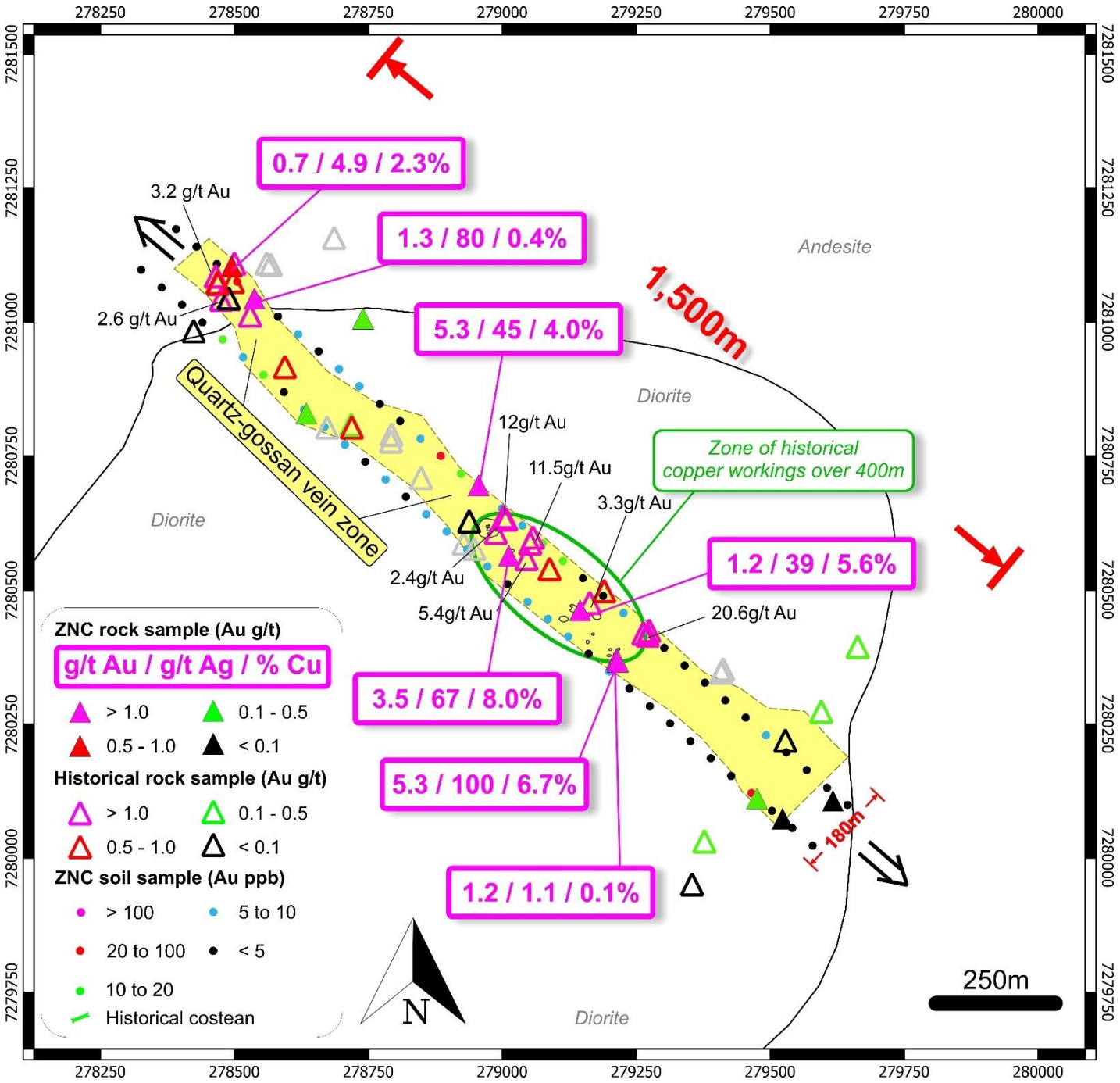

Figure 3: Flanagans Prospect – Geochemical Sampling Results

Great Blackall Prospect Background

Historic exploration activity at the Great Blackall prospect about 2km south of Flanagans identified a surface zone of strongly anomalous copper and gold extending over some 200m of strike. Rock sample results included: 5.6 g/t Au, 4.8 g/t Au and 4.6 g/t Au (QLD Mines Department open file reports cr17773).

RC drill testing (917m in 10 holes) indicated fissure veins at Great Blackall dip to the north at approximately 40 degrees containing significant gold, silver and copper, best historic results include:

- Hole SCRC3: **6m** @ **3.5% copper** & **0.8 g/t gold** including **2m** @ **9.4% Cu, 2.10g/t Au & 60 g/t Ag** (QLD Mines Department open file report cr184566).

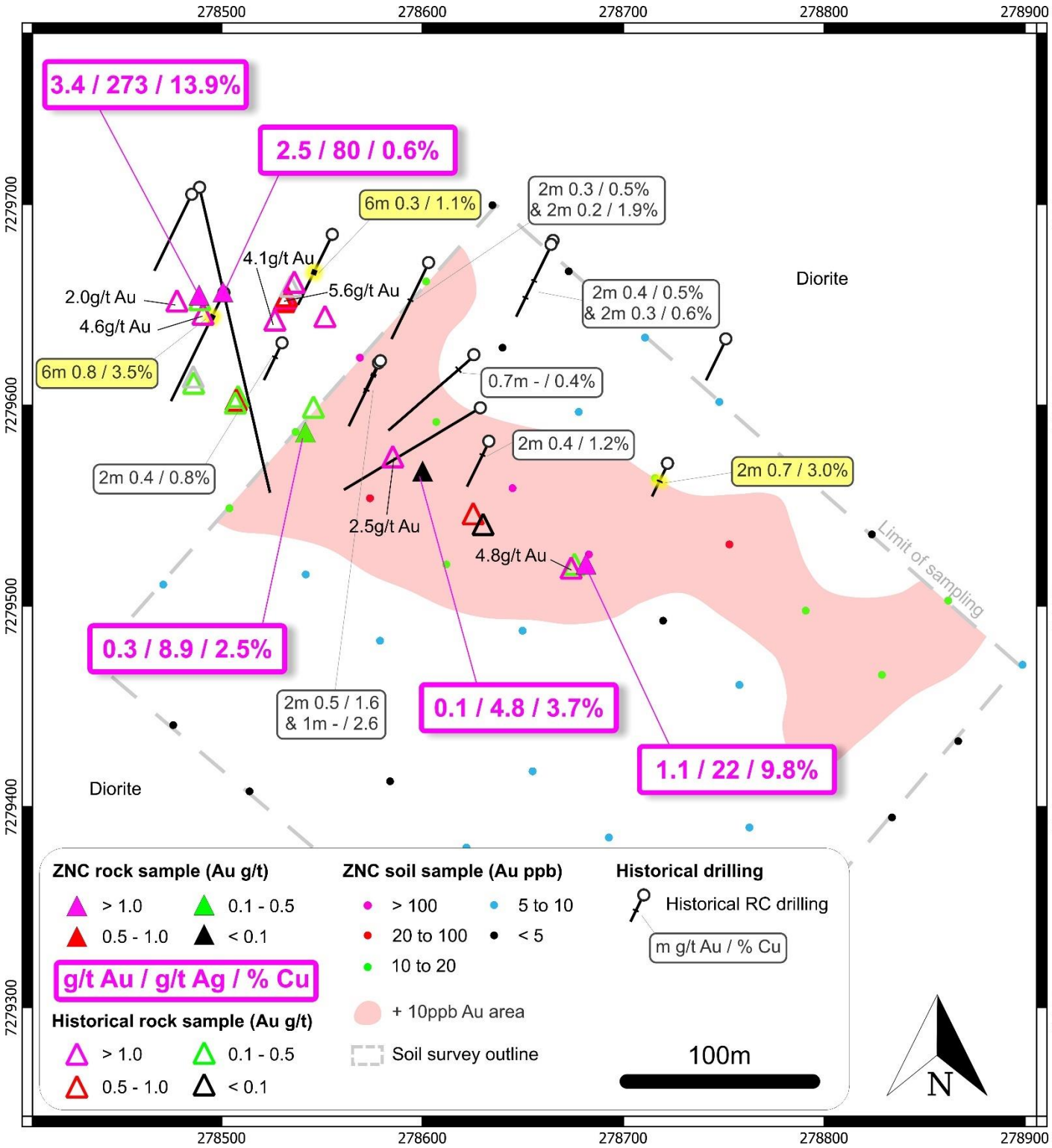

Figure 4: Great Blackall Prospect – Geochemical Sampling Results

Further work was recommended to test the down dip and down-plunge potential of the copper-gold zones but at the time did not proceed as the operator did not have mineral rights to the area covered by that down dip potential, now held in Zenith's tenure.

Sampling by Zenith has confirmed the tenor of surface mineralisation at Great Blackall, rock samples returned **gold to 3.4 g/t Au, silver to 273 g/t Ag and copper to 13.9% Cu** (Figure 4). A strong multi-element signature was noted with bismuth values up to 28ppm, arsenic to 349ppm, tellurium to 18ppm and antimony to 13ppm.

A small trial soil sampling survey (gold analyses only) was undertaken to cover the eastern extents of the Great Blackall prospect where gold -copper remains open along strike in historic drilling **(2m @ 0.7 g/t Au and 3.0% Cu).** Zenith's sampling shows gold anomalism remains open to the east with further sampling required to define the limits of the prospective target area at Great Blackall.

Further work including additional sampling, geological mapping and possible geophysical surveys is required to determine the significance of the surface geochemical samples at Great Blackall. Follow up field work will commence next week.

Geology

The Late Permian to Early Triassic Kariboe Gabbro, formerly known as the Spring Creek Diorite covers much of the target area with andesites of the Lochenbar Beds cropping out to the north-west and north-east (Figure 2). Veins of quartz and calcite are hosted in the diorite and contain limonitic boxworks and local copper staining. Propylitic alteration with pervasive carbonate occurs in association with veining.

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.

Authorised for release by the Zenith Minerals Limited Board of Directors – 22nd June 2020

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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.*	Zenith: - Systematic grid-based soil sampling - Selective rock chip sampling. Historical drilling: - 3 diamond holes by Pechiney (CR_4956) - 10 RC holes by AUR (CR_18456)
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Zenith: - Systematic soil sampling no calibration of tools required. - Selective rock chip sampling, representative of material sampled only. Historical drilling: - CR_4956 – limited data - CR_18456 – Generally 2m drill samples (Except one hole sampled at 1m intervals); limited data
	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.	Zenith: - Soil samples (were sieved to -1.6mm fraction) on 50 x 100m (Flanagans) and 50m x 50m (Great Blackall) spaced grid lines. - Selective rock chip sampling. Historical drilling: - CR_4956 – Diamond drilling; limited data - CR_18456 – RC drilling used to obtain 1 to 2m samples from which 2kg was pulverised to produce a 50g charge for fire assay (gold) and a charge for AAS analysis (copper and silver)
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.).*	Historical drilling: - CR_4956 – Diamond drilling - CR_18456 – RC drilling
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Historical drilling: - CR_4956 – drill holes logged by a qualified geologist, data recorded on paper logs - CR_18456 – drill holes logged by a qualified geologist, data recorded on paper logs

	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Historical drilling: - CR_4956 – Diamond drilling; limited data - CR_18456 – Drilling produced satisfactory, uncontaminated samples. The majority of the samples were dry.
	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.	Historical drilling: - CR_4956 – Diamond drilling; limited data - CR_18456 – limited data
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.*	Zenith: - Rock samples were geologically described Historical drilling: - CR_4956 – Core logged by a qualified geologist - CR_18456 – RC chips logged by a qualified geologist
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Zenith: - Rocks qualitatively logged Historical drilling: - CR_4956 – Core logging was qualitative; limited data - CR_18456 – Drill chip logging was qualitative, at 2m intervals
	The total length and percentage of the relevant intersections logged.	Historical drilling: - CR_4956 – All intervals logged - CR_18456 – All intervals logged at 2m intervals
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Historical drilling: - CR_4956 – limited data - CR_18456 – NA
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Historical drilling: - CR_4956 – NA - CR_18456 – not reported
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Zenith: - Soil samples were analysed at ALS laboratories in Townsville. Samples were pulverised and assayed for gold using aqua regia - Rock samples were analysed at ALS Laboratories in Townsville. Samples were crushed, pulverised and assayed by Au-AA25 (30g Fire Assay, AA finish) for gold and ME-MS61 (ICP-MS after 4 acid digest) for trace elements. Over range gold was assayed by Au-AROR43. Over range silver and copper were assayed by Ag-OG62 and Cu-OG62 (ICP-AES after 4 acid digest). Historical drilling: - CR_4956 – Samples analysed at Quantum laboratories; limited data - CR_18456 – Samples were analysed at Classic Comlabs in Townsville. Samples were crushed, pulverised and assayed by A7/1 (50g fire assay) for gold and A1/1-2 (AAS) for

		copper and silver.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Zenith: - ~2kg of rock was crushed and pulverised and a sub-sample was taken in the laboratory and sent for analysis. - ~100g soil samples and pulverised and a sub-sample was taken in the laboratory and sent for analysis. Historical drilling: - CR_4956 – limited data - CR_18456 – limited data
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.*	Zenith: - Rock sampling was selective and based on geological observations. - Soil sampling on designated grid basis Historical drilling: - CR_4956 – limited data - CR_18456 – limited data
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Zenith: - Each rock sample was 1kg to 2kg in weight which is appropriate to test for the grain size of material. Historical drilling: - CR_4956 – limited data - CR_18456 – Each sample was approximately 2kg in weight
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.*	Zenith: - Soil samples were assayed after aqua regia digest which is considered a partial technique - Rock samples were crushed and assayed for trace elements using 4 acid digest and gold using fire assay which are considered near total techniques Historical drilling: - CR_4956 – no method reported - CR_18456 – the samples were crushed and assayed for gold by fire assay, which is considered a near total technique. Copper and silver were assayed by AAS after an unknown digestion method.
	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 during this sampling 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.	Zenith: - Certified reference material was included in the soil sample batch. Historical drilling: - CR_4956 – limited data - CR_18456 – No historic reporting of certified

		reference material has been provided in the historic report
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Zenith: - Company personnel have observed the assayed samples Historical drilling: - CR_4956 – limited data - CR_18456 – limited data
	The use of twinned holes.	No twinning
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Zenith: - Field data recorded into a Zenith database Historical drilling: - CR_4956 – data reported in open file reports; limited data - CR_18456 – data reported in open file reports; limited data
	Discuss any adjustment to assay data.	No adjustments were made.
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.*	Zenith: - Sample location is based on GPS coordinates +/- 5m accuracy Historical drilling: - CR_4956 – Sample location is based on georeferenced historic maps with accuracy of +-25m - CR_18456 – Sample location is based on georeferenced historic maps with accuracy of +-25m; some drill hole collars were found in the field and GPS coordinates were taken
	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 +/- 10m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	All samples are shown on Figure 3 and 4.
	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.	Zenith: - No compositing Historical drilling: - CR_4956 – Results are reported as length weighted average composites at a minimum cut-off grade of 0.4% Cu - CR_18456 – Results are reported as length weighted average composites at a minimum cut-off grade of 0.4% Cu

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.*	Zenith: - Rock samples were taken by a geologist of specific rock types in attempt to characterise mineralisation style. - All soil samples on systematic grid lines. Historical drilling: - CR_4956 – Drilling is considered to be perpendicular to main mineralised structures; it is thus considered to have introduced no sampling bias. - CR_18456 – Drilling is considered to be perpendicular to main mineralised structures; it is thus considered to have introduced no sampling bias.
	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.*	Zenith: - Samples were kept in numbered and secured bags until delivered to the laboratory Historical drilling: - CR_4956 – Unknown, not reported in historical open file reports - CR_18456 – Unknown, not reported in historical open file reports
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Zenith: - Sampling techniques are consistent with industry standards Historical drilling: - CR_4956 – Sampling techniques appear to be consistent with industry standards - CR_8456 – Sampling techniques appear to be consistent with industry standards

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 Flanagans Project is located within the 100% Zenith owned exploration permit for minerals EPM 27478. The project is located within private grazing properties.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is 100% held by a wholly owned Zenith subsidiary and is 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.*	Queensland Mines Department open file reports: CR_4956 Pechiney Great Blackall – 3 diamond drill holes reported in figures of this release CR_12556 White Industries Flanagans & Great Blackall – Rock results reported in figures of this release CR_17773 AUR Flanagans & Great Blackall - Rock samples & dump samples reported in figures of this release CR_18456 AUR Great Blackall – 10 RC drill holes reported in figures of this release.
Geology	*Deposit type, geological setting and style of mineralisation.*	Based on rock styles and precious metal and trace element geochemical signatures the mineralisation style appears to be a magmatic related hydrothermal system. Mineralisation is hosted within the Late Permian to Early Triassic Kariboe Gabbro, formerly known as the Spring Creek Diorite
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 Figure 4. Local Grid locations reported in CR_4956 and CR_18456 (approximate locations on Figure 4)
	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 high-grade cutting

	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 aggregation used
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.*	Historical drilling: - CR_4956 – Drilling is considered to be perpendicular to main mineralised structures - CR_18456 - Drilling is considered to be perpendicular to main mineralised structures
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Historical drilling: - CR_4956 – Drilling is considered to be perpendicular to main mineralised structures - CR_18456 - Drilling is considered to be perpendicular to main mineralised structures
	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.*	Refer to descriptions and diagrams in body of text
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results reported on Figure 3 & 4.
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).*	Further geological mapping and surface sampling (rock and soil samples) required prior to drill testing.
	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.