



15th April 2020

New Highly Prospective Gold Project Secured in South East Queensland

◆ This new project, Flanagans (100% Equity), is located only 70 km NE of Zenith's 100% owned Red Mountain Gold Project

◆ Both projects are located within a proven gold producing area of South East Queensland.

◆ Based on historical exploration activity the target at Flanagans offers a very positive framework to build upon including:

○ Scale - 1.5km long by 180m wide gold rich quartz vein zone hosted by diorite

○ Defined Grade vectors:

- Strong gold 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
- Very high gold in soils (3 zones over the 1.5km of strike, peaking at 8.69g/t Au with one area 180m x 40m at >1 g/t Au)

○ Depth Potential - Flat lying gold bearing quartz veins providing potential for a vertically stacked quartz vein hosted gold system

○ Growth - The mineralised zone currently appears to be not closed off in multiple directions

○ Other mineralisation - Flanagans also has historic copper workings over 400m of strike with multi-element geochemical signatures indicative of a magmatic system (Bi, As Sb) thus also potentially providing support for a large-scale/base metal target

◆ No drilling has been undertaken despite the high-grade gold results, with the last meaningful field work conducted on this area primarily targeting copper, 32 years ago.

◆ Subject to Zenith field staff and contractors being able to comply with current COVID-19 travel restrictions, confirmatory mapping and sampling is planned to commence at Flanagans as soon as is practical. The Company is also committed to completing the postponed maiden drill test of the nearby Red Mountain gold target, as soon as is practicable.

Corporate Details

ASX: ZNC

Issued Shares (ZNC)	243.4M
Unlisted options	5.6M
Mkt. Cap. (\$0.03)	A\$7M
Cash (31 st Dec 19)	A\$1.6M
Debt	Nil

Directors

Michael Clifford:
Managing Director

Mike Joyce:
Non-Exec Chairman

Stan Macdonald:
Non-Exec Director

Julian Goldsworthy:
Non-Exec Director

Graham Riley:
Non-Exec Director

Peter Bird:
Non-Exec Director

Major Shareholders

HSBC Custody. Nom.	12%
J P Morgan	6.1%
Nada Granich	5.5%
Miquilini	4.4%
Abingdon	4.2%

Contact Details

Level 2/33 Ord Street
West Perth, WA, 6005

Mail: PO Box 1426
West Perth, WA, 6872
T: +61 8 9226 1110
E: info@zenithminerals.com.au
W: www.zenithminerals.com.au

Zenith Minerals Limited ("Zenith" or "the Company") is very pleased to advise that it has secured another new 100% owned gold project in Queensland, with the grant of a new exploration permit for minerals. Based on a detailed review of historical exploration activity the Flanagans project contains a compelling high-order gold target that requires





immediate validation sampling (Figures 1 & 3).

The project is located 70 km NE of Zenith's 100% owned Red Mountain Gold Project, which is fully permitted for drilling (refer ZNC ASX release 25th Nov 2019). Both Zenith gold projects are situated within ~100km of Evolution's operating gold mines at Cracow and Mount Rawdon (Figure 2).

Based on historical exploration activity the target is defined as a 1.5km long by 180m wide gold-rich quartz vein zone 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 stacked quartz vein hosted gold mineralised system.

Previous sampling reported strong gold 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). In addition, very high gold in soils occur 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.

Historic samples also provide insight into the multi-element signature of the alteration zone which appears indicative of a magmatic system, providing support to Zenith's large target scale (rocks chips returned bismuth values up to 760ppm, arsenic to 220ppm and antimony to 10ppm).

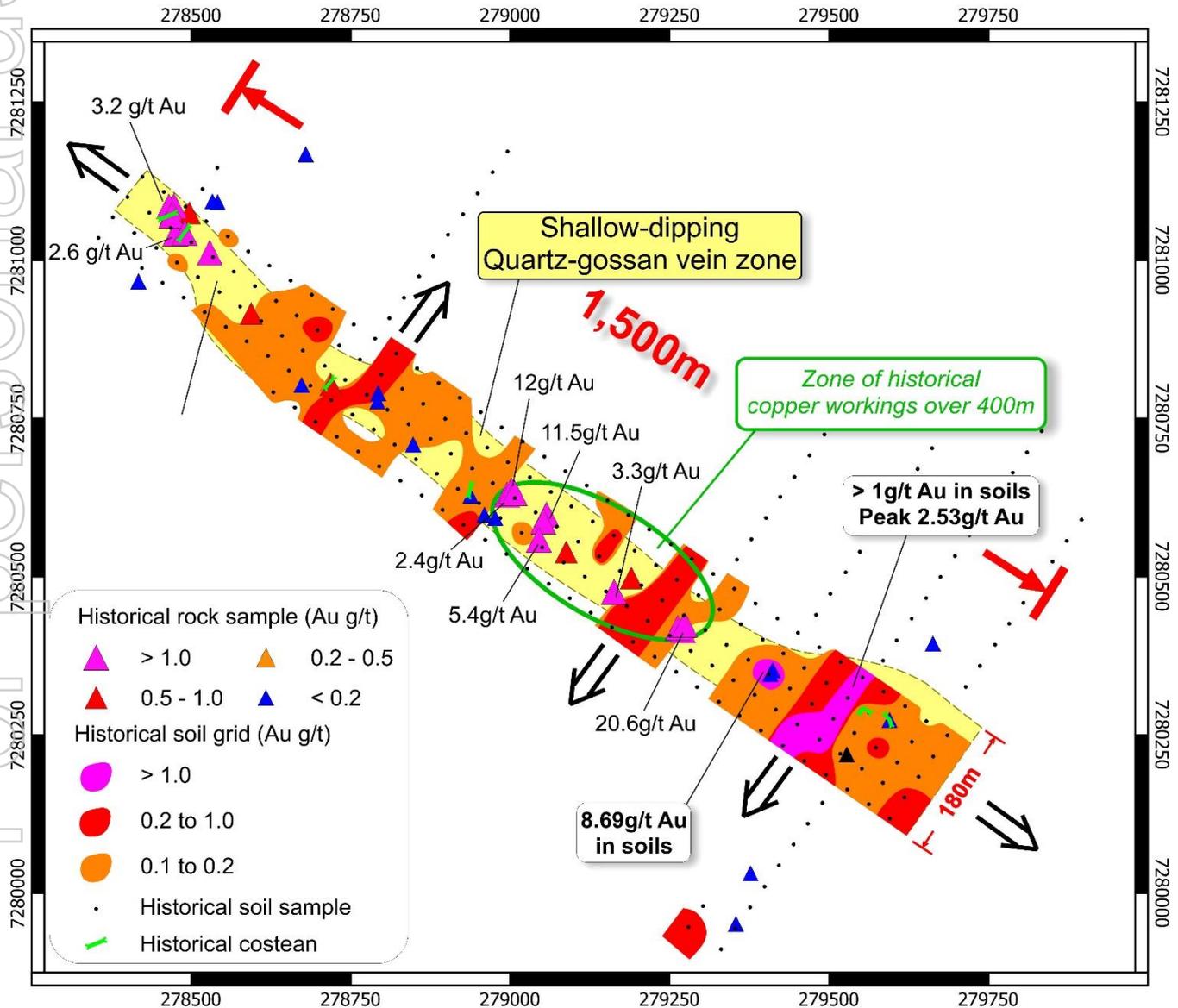


Figure 1: Flanagans Gold Target – Geochemical & Geology Summary



The target zone appears open ended in multiple directions based on soil & rock results with no drill testing to date.

A localised geophysical survey (induced polarisation electrical survey) along the strike of the target area defined a chargeability low coincident with the quartz vein zone.

Central to the target area is a zone of minor historic copper workings that extend over 400m of strike. Most of the exploration to date has focused on the copper potential of the area. Zenith believes Flanagans gold potential has not been tested and will be followed up as a Company priority.

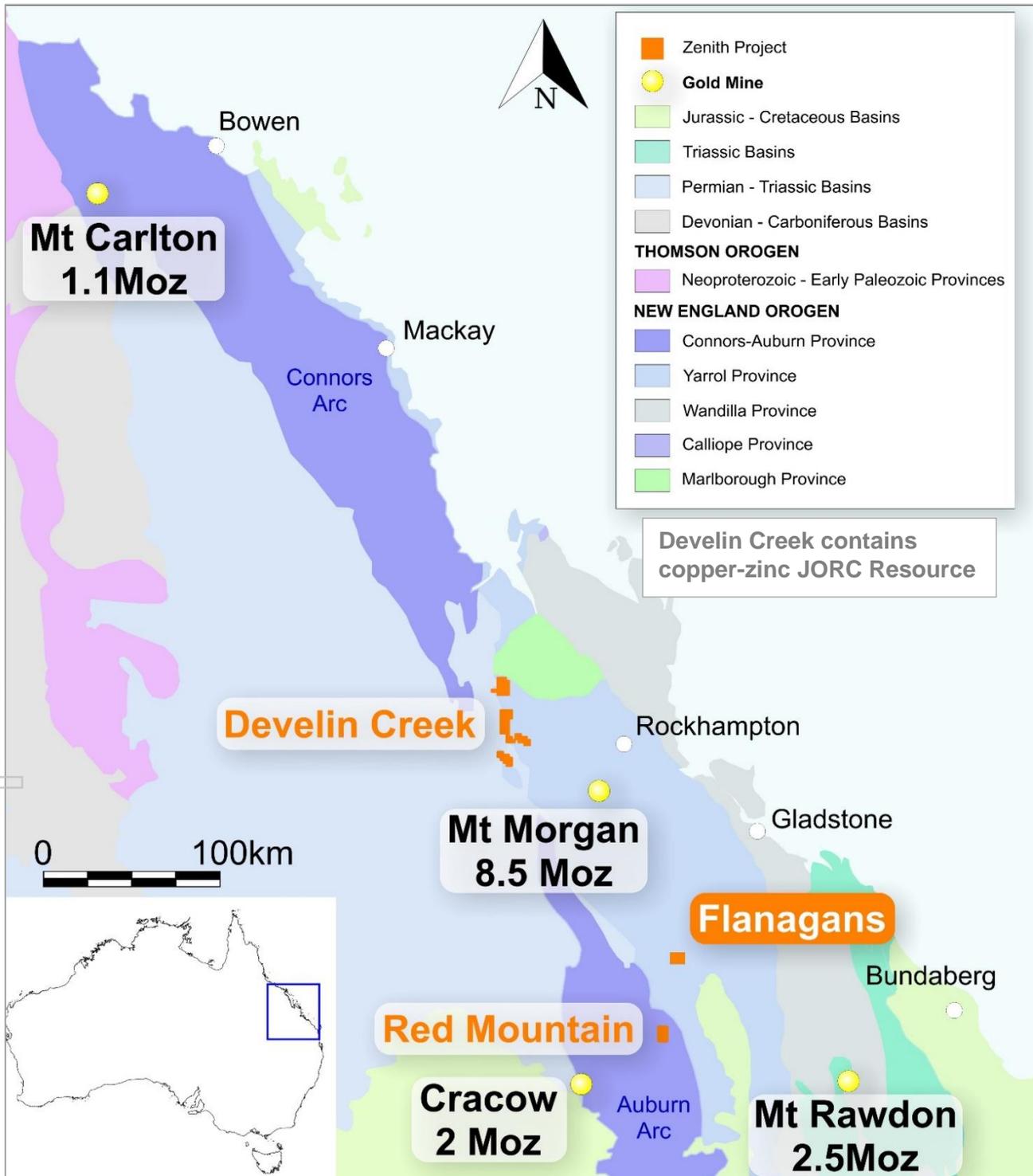


Figure 2: Flanagans Project – Location Map



Background on Historical Soil Results

Much of the key previous work for gold at Flanagans was completed by White Industries in the early 1980s. During this period White Industries mapped the area and recognised a 1.5km x 180m zone of shallow-dipping quartz gossan veins striking NW-SE (QLD Mines Department open file report cr12556). This zone was covered by a soil grid (249 samples) which returned high grade gold values:

- Number of samples 100ppb Au or over: 116 (47%)
- Number of samples 200ppb Au or over: 33
- Number of samples over 1g/t Au: 7, Peak Au: 8.69g/t

It is believed these results have been mostly overlooked during more recent exploration work because White Industries reports included a map showing the gold values contoured using non-industry standard nomenclature, as ppm (parts per hundred million), albeit the original assay sheets appended to their report were in ppb. For example, AUR NL in subsequent reports in the late 1980s (cr17773) included a map on which contours of the White Industries gold soil results are noted as ppb (10x less than originally reported by White Industries). This seems to have resulted in an erroneous downgrading of these high-grade Flanagans soil anomalies, and the prospectivity of this target area by subsequent explorers.

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 3). 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.

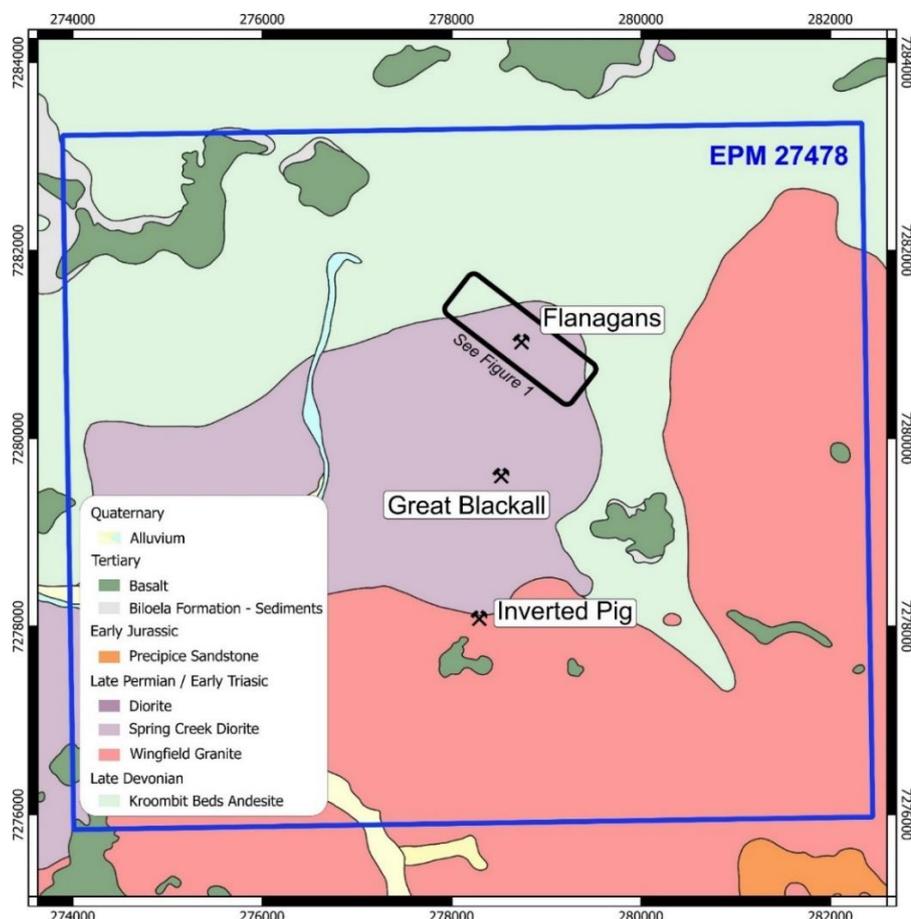


Figure 3: Flanagans Project – Local Geology



COVID-19 Impact Update

In relation to COVID-19 Zenith's Board is mindful of the significant impact the virus is having on the community and is continuing to assess the potential risks associated with its activities. The project area is located on a remote grazing property where Zenith's crew will be isolated. The Company will continue to act on advice provided by the Federal and State Government with the health and safety of Zenith's crew, contractors and local stakeholders a priority.

Planned Programs

Subject to Zenith fields staff being able to comply with current COVID-19 travel restrictions, confirmatory mapping and sampling is planned to commence at Flanagans later this month, whilst the Board is committed to completing the maiden drill test of the Red Mountain gold target, the exact timing of which remains uncertain.

Further surface geochemical sampling was completed at Zenith's 100% owned Develin Creek copper zinc project during the 1st calendar quarter of 2020. Samples are in the process of being freighted to Perth for analysis.

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 – 15th April 2020

For further information contact:

Zenith Minerals Limited

Directors Michael Clifford or Mike Joyce

E: mick@zenithminerals.com.au

Phone +61 8 9226 1110

Media and Broker Enquiries

Andrew Rowell

E: arowell@canningspurple.com.au

Phone +61 8 6314 6300



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 grid-based soil sampling and selective rock chip sampling.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Systematic soil sampling no calibration of tools required.
	<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>	Soil samples were sieved to (-1.18mm fraction) on 40m x 40m spaced grid lines. Selective rock chip sampling.
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 Drilling
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	No Drilling
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	No Drilling
	<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 Drilling



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>	Rock samples were geologically described
	<p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p>	Qualitative logging
	<p><i>The total length and percentage of the relevant intersections logged.</i></p>	No Drilling
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p>	No Drilling
	<p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p>	No Drilling
	<p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p>	<p>Rocks samples were analysed at ALS Laboratories in Everton Park QLD, the samples were crushed, pulverised and assayed by PM203 (fire assay with AAS finish) for trace elements and gold using fire assay.</p> <p>Soil samples were analysed by Sampling Analytical and Management Services of Kensington South Australia, by PM2.</p>
	<p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p>	<p>~2kg of rock was crushed and pulverised and a sub-sample was taken in the laboratory and sent for analysis.</p> <p>~100g soil samples and pulverised and a sub-sample was taken in the laboratory and sent for analysis.</p>
Sub-sampling techniques and sample preparation - continued	<p><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>	<p>Rock sampling was selective and based on geological observations.</p> <p>Soil sampling on designated grid basis</p>
	<p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	Each rock sample was 1kg to 2kg in weight which is appropriate to test for the grain size of material.
Quality of assay data and laboratory tests	<p><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 by for trace elements and gold using fire assay
	<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>	No geophysical tools used during this sampling program

For personal use only



	<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>	No historic reporting of certified reference material has been provided in the historic reports
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Validation sampling planned by Zenith, rock sampling confirmed by two separate companies.
	<i>The use of twinned holes.</i>	No drilling
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Field data were all recorded in field note books and reported in open file reports
	<i>Discuss any adjustment to assay data.</i>	No adjustments were made.
Location of data points	<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 georeferenced historic maps with accuracy of +/-25mm
	<i>Specification of the grid system used.</i>	The grid system used to compile data was MGA94 Zone 56
Location of data points - continued	<i>Quality and adequacy of topographic control.</i>	Topography control is +/- 10m.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	All samples are shown on Figure 1.
	<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>	The data alone will not be used to estimate mineral resource or ore reserve
	<i>Whether sample compositing has been applied.</i>	No compositing applied
Orientation of data in relation to geological structure	<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>	Rock samples were taken by a geologist of specific rock types in attempt to characterise mineralisation style. All soil samples on systematic grid lines.
	<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 drilling
Sample security	<i>The measures taken to ensure sample security.</i>	Unknown, not reported in historic open file reports
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	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	<i>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.</i>	The Flanagans Project is located within the 100% Zenith owned exploration permit for minerals EPM 27478. The project is located within private grazing properties.
	<i>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.</i>	All tenements are 100% held by a wholly owned Zenith subsidiary and are in good standing with no known impediment to future granting of a mining lease.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Queensland Mines Department open file reports: CR_17773 AUR Flanagans - 9 rock samples dump sample 12.0g/t Au & 11.5, 1.3, 5.35, 0.1, 0.55, 0.6 (assoc high Ag to 45ppm & high Bi 760ppm, mod As to 220ppm, max 10ppm Sb). CR_12556 White Industries Flanagans – soil sampling & rock results reported in the text of this release.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	Based on the open file reports describing host rock, alteration, vein style and orientation, base metal, 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	<i>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:</i>	No drilling
	<i>o easting and northing of the drill hole collar</i>	
	<i>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>	
	<i>o dip and azimuth of the hole</i>	
	<i>o down hole length and interception depth</i>	
	<i>o hole length.</i>	
	<i>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.</i>	
Data aggregation methods	<i>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.</i>	No high-grade cutting



	<p>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.</p>	No aggregation used
Data aggregation methods - continued	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No metal equivalents used.
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p>	No drilling
	<p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p>	No drilling
	<p>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').</p>	No drilling
Diagrams	<p>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.</p>	Refer to descriptions and diagrams in body of text
Balanced reporting	<p>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.</p>	All results reported on Figure 1.
Other substantive exploration data	<p>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.</p>	No other meaningful or material exploration data to be reported at this stage
Further work	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</p>	Validation sampling required prior to drill testing.
	<p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	Refer to figures in body of report.