

500km

**Greenstone Belts** 

#### **ASX RELEASE**

28 March 2023

# FURTHER ENCOURAGING SOIL GEOCHMISTRY RESULTS AT MENZIES

#### Highlights:

- Promising soil geochemistry anomalies defined at the Menzies Project.
- Geochemical sampling completed at the Company's Zuleika project area.
- Field validation completed and drill planning well progressed for previously identified gold anomalies.
- Geochemical soil sampling aimed at defining new targets to continue over the Goongarrie tenements.

Zuleika Gold Limited (**Zuleika Gold**, **ZAG** or **Company**); (ASX:ZAG), is pleased to provide an update on recent exploration activity, including soil geochemistry results from Menzies and Goongarrie (see Figure 1).

Geochemical soil sampling has been completed at prospects in the Kalgoorlie area and encouraging results from the program at Menzies returned. The remaining soil sampling at Goongarrie is scheduled to recommence in late March after vehicular access to the more isolated parts of the tenements was re-established.

Field validation and drill hole planning has been completed for the encouraging soil geochemistry anomalies identified at Zuleika North and Grants Patch prospects. Drilling is scheduled for the second quarter after the remaining geochemical results are received so that the most prospective targets can be prioritised.

The soil results at Menzies define several gold anomalies in areas with encouraging structural preparation and prospective greenstone lithologies. In-field review will be completed, and possibly in-fill geochemistry completed, prior to drill planning. One anomaly is 2km long and coincides with a line of poorly tested historical workings.





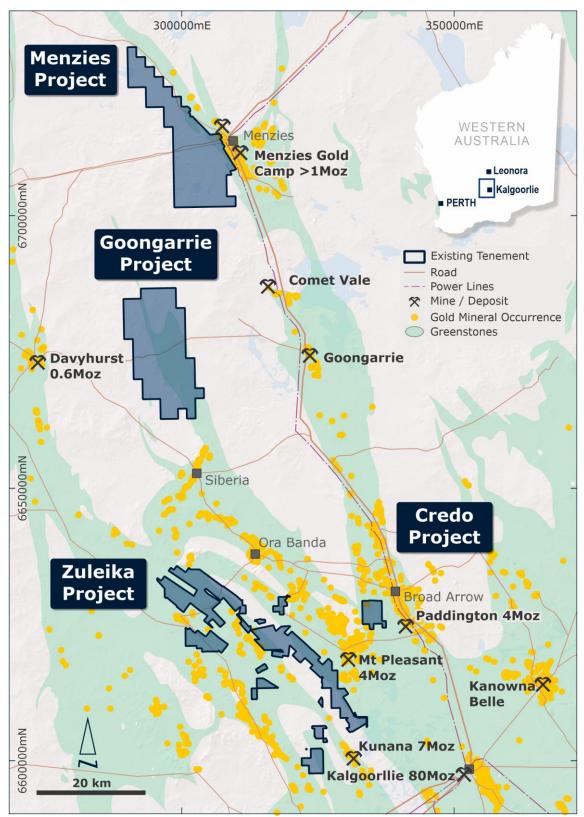


Figure 1 – Zuleika Gold's tenements and Prospects, Eastern Goldfields



#### **Menzies**

503 soil samples were collected at the Company's Menzies Project in late 2022 and early 2023.

The samples were recovered on a 200m-by-200m staggered grid (nominally weighing 250 grams) and collected manually from a depth of about 10-20cm below surface. Previous work in the area had focussed on the Exploration License in the western part of the tenement package. This recent sampling focussed on the prospective and structurally prepared greenstone-granite contact (see Figure 2).

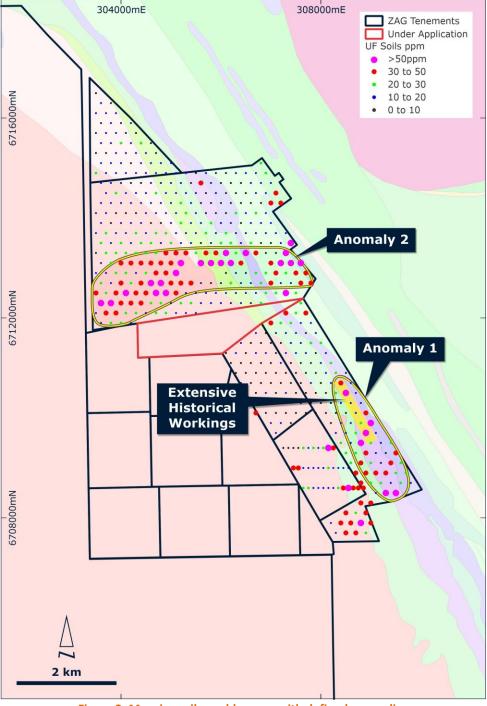


Figure 2: Menzies soils - gold assays with defined anomalies



Assaying was completed at Labwest, using the Ultrafine™ assay technique developed by the CSIRO to better detect subtle anomalies under transported cover. Samples were assayed for 52 elements. The best gold result returned from this campaign was 154 ppb, with an average background of 11 ppb (Figure 2). Two distinct anomalies were defined.

- Anomaly 1 coincides with a sheared lithological contact alongside an extensive zone of historical underground workings. Only shallow and limited historical drilling exists at this zone and potential remains to define extensive mineralisation. The drill approval process has commenced with drilling planned for the coming quarter.
- 2. Anomaly 2 has a 4km east-west strike orientation but appears to be largely associated with a transported alluvial regolith. The eastern end of the area overlies greenstone and potentially represents in-situ anomalism. Field validation will be completed prior to any further work.

The soil sampling results are considered highly encouraging for Anomaly 1 and subject to field validation and approvals, drilling is anticipated in the coming quarter.

#### Goongarrie

A soil sampling program commenced at Goongarrie late in 2022 and was partially completed. Access to the more remote parts of the tenement package reduced sampling productivity and hence the remaining program was deferred until clearance of existing overgrown tracks was completed. With access now available, the crew is re-mobilising and should complete the program in coming weeks.

Samples were and are being recovered on both 400m by 400m and 200m by 200m staggered grid spacing (nominally weighing 250 grams) and collected manually from a depth of about 10-20cm below surface. Previous work in the area had involved several phases of auger sampling and a number of extensive nickel and gold anomalies have been outlined (see Figures 3 and 4). This program is aimed at better defining these zones and extending the coverage to all prospective areas, prior to future drill testing.

Assays for 492 samples have been received with around 250 samples remaining to complete the program. The remaining areas to be sampled cover the central zone of E29/1010 that has the most significant previously defined in-soil anomalism for both gold and nickel (see ASX Ann. Nov 28, 2022 – Goongarrie Geochemical Soil Sampling Underway).

Assaying was completed at Labwest, using the Ultrafine™ assay technique developed by the CSIRO to better detect subtle anomalies under transported cover. Samples were assayed for 52 elements.

Results to date have confirmed the tenor and extent of the western, central, and eastern gold anomalies, particularly to the south of E29/1010. These results provide initial support and more confidence in the anomalous trends, and it is anticipated that drill targets will be generated upon completion of this program.

A small orientation Ultrafine™ survey in the north of E29/1051 with extensive aeolian sand cover also returned coherent anomalous gold where previous auger gold anomalism was sporadic. Further UF sampling will be considered here to evaluate the broader area to define drill targets.



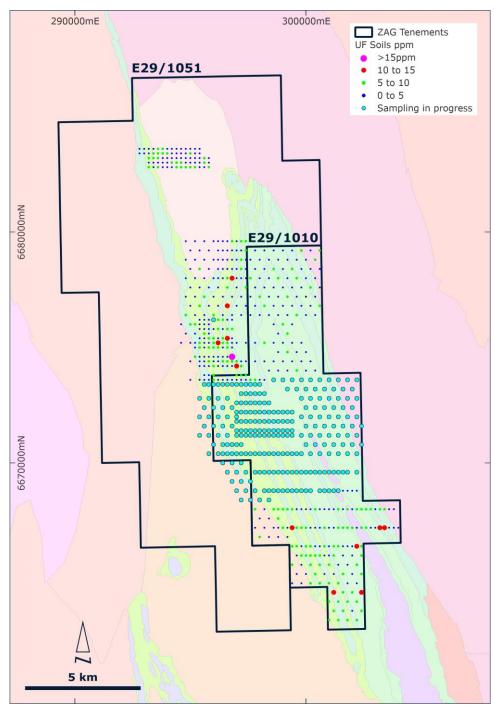


Figure 3: Goongarrie soils - gold assays and remaining sample locations



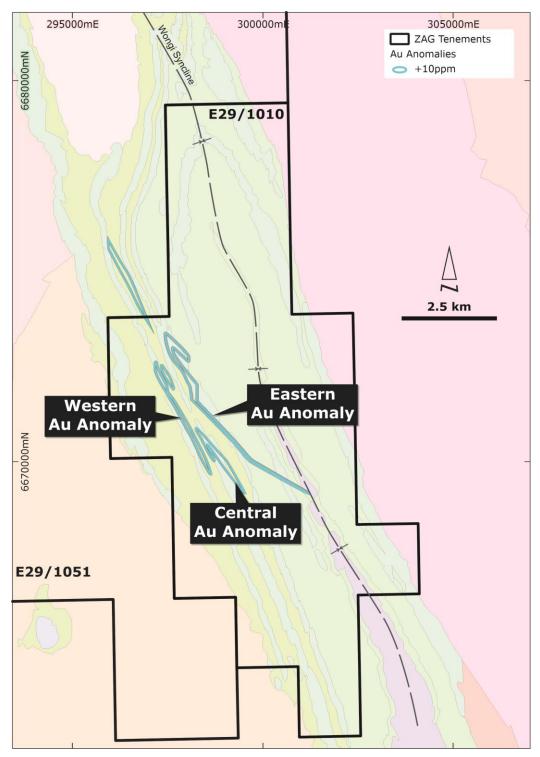


Figure 4: Goongarrie previously defined gold anomalies



#### Zuleika Project

Over 1,000 soil samples have been taken in 2023 in the Zuleika Project area. All assaying is being completed at Labwest, using the Ultrafine™ assay technique. As much of the area is shrouded by recent transported cover previous sampling has not responded consistently to less sensitive assaying methods and hence an excellent opportunity exists to define un-tested gold zones. The prospects sampled were Browns Dam, Breakaway Dam, Castle East, Little T and Star Well (see Figure 5).

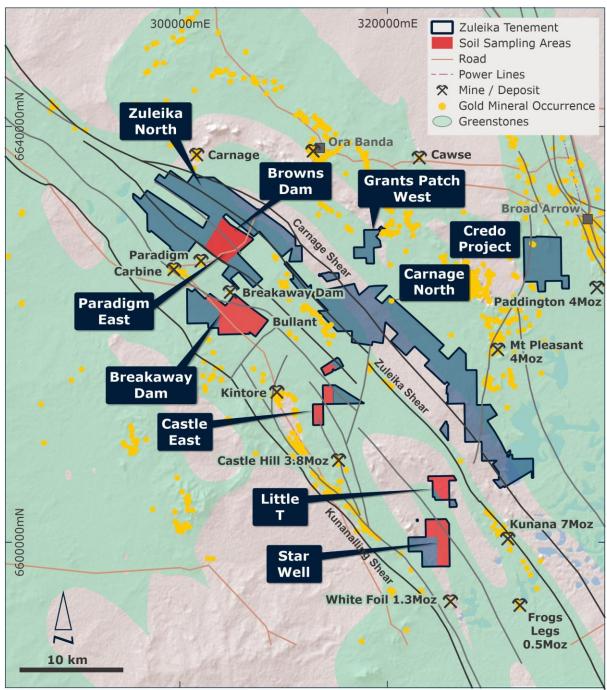


Figure 5 – Zuleika Project with Prospects and recent soil sampling coverage.



The sampling was designed to extend previous sampling programs that returned encouraging results and in high priority areas that have favourable lithological and structural settings. Sampling was completed at various spacings from 80m by 80m to 320m by 320m. Results are expected to be returned progressively from April and following validation are expected to generate new drill targets in this highly prospective area.

The previously identified geochemical anomaly identified at Zuleika North (Figure 6) and Grants Patch (Figure 7), (ASX Ann. Jan 30, 2023 – 3km long gold anomaly defined, coinciding with the highly prospective Zuleika Shear Zone) have been validated in the field and compelling drill targets have been identified. Drill approvals are received for Grants Patch and are pending for Zuleika North.

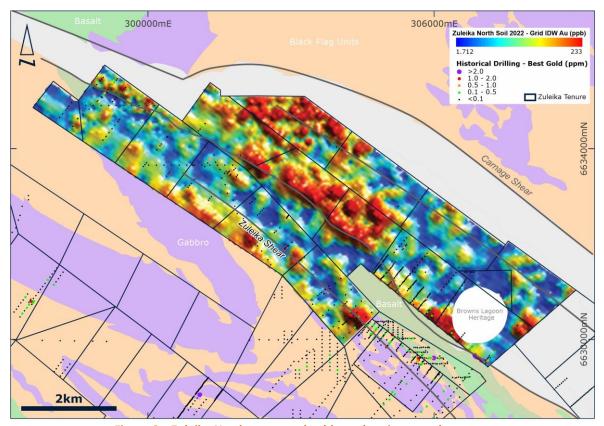


Figure 6 – Zuleika North contoured gold geochemistry results

Field investigation has suggested the main anomaly at Grants Patch is related to a drainage channel. A more subtle anomaly on the western part of the tenement package is related to a gabbroic unit that is mineralised along strike to the northwest (with numerous historical workings present). Future drilling will focus on this gabbro unit (Figure 7).



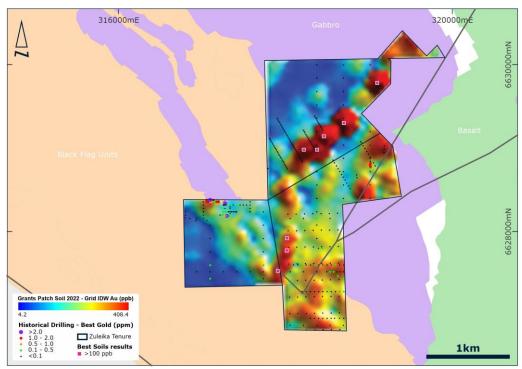


Figure 7- Grants Patch contoured soil geochemistry results.

#### Background on Zuleika and its key projects

Zuleika is a Western Australian focused gold explorer with a large and highly prospective tenement holding in the Kalgoorlie to Menzies region of the Eastern Goldfields. Zuleika has four exploration projects and equity in the K2 deposit:

- Zuleika Project large landholding immediately northwest of Kalgoorlie in an area richly endowed with gold mineralisation (e.g., near Kundana) and well structurally prepared, yet ineffectually explored owing to recent transported cover. Geological interpretation and highly sensitive soil geochemistry followed by drilling are the main tools to identify new prospects.
- 2. Credo Project north of Kalgoorlie and close to the Paddington operation. Several drill phases resulted in a JORC compliant Mineral Resource estimate at Credo being released in June 2020 of an Inferred Mineral Resource of 87kt @ 4.41g/t for 12.3koz of contained gold. More recent drilling indicates the resource could increase in size and separate zones, representing repetitions along the mineralised corridor, are being evaluated. The potential for toll treated at nearby plants is being assessed.
- 3. **Goongarrie Project** large landholding covering a major greenstone belt (20km long) with a favourable structural setting around 90km north of Kalgoorlie. Soil geochemistry supports the potential for gold and nickel mineralisation and no drilling has been recorded on the tenements. Further geochemistry targeting is planned followed by drilling in 2023.
- 4. **Menzies Project** large tenement holding immediately west of the major gold producing centre at Menzies considered to have significant potential to host high grade Menzies style lode mineralisation and possibly granite hosted stockworks. Geochemical soil sampling is planned followed by drilling in 2023.
- 5. **K2 Project** Zuleika owns 4.1% of the K2 Project that is located 35km north of the Plutonic Mine in WA. Originally Zuleika had the right to earn 50% of the project through a binding agreement but following the vendor repudiating the farm-in process a legal action saw the



Supreme Court of WA finding in Zuleika's favour. Further legal action is planned in which Zuleika will claim significant damages for breach of contract.

Zuleika aims to identify and prove up mineral resources through the diligent application of shareholder funds with an aim of becoming a gold producer in the medium term. Zuleika is well funded and focused on successful and efficient gold exploration.

Authorised for release by the Board

Jonathan Lea Managing Director

#### **Competent Person's Statement**

The information contained in this announcement that relates to Exploration Results is based on information compiled or reviewed by Mr Jonathan Lea, who is an employee and security holder of the Company. Mr Lea is a member of the AusIMM and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken 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 Lea has given consent to the inclusion in the announcement of the matters based on this information in the form and context in which it appears.

#### **Forward-Looking Statements**

This announcement might contain forward-looking statements with known and unknown risks and uncertainties. Factors outside of Zuleika Gold's control, may cause the actual results, performance, and achievements of Zuleika Gold to differ materially from those expressed or implied in this report. To the maximum extent permitted by law, Zuleika Gold does not warrant the accuracy, currency, or completeness of the information in this announcement, nor the future performance of Zuleika Gold, and will not be responsible for any loss or damage arising from the use of the information. The information contained in this report is not a substitute for detailed investigation or analysis of any particular issue. Current and potential investors and shareholders should seek independent advice before making any investment decision in regard to Zuleika Gold or its activities.



### JORC Code, 2012 Edition:

## **Section 1: Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	Soil Sampling:  Soil Samples at Menzies. Goongarrie and Zuleika Projects: For each site, 250g of material was collected using a -2mm sieve from B horizon, 15cm below surface.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	No drilling reported.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	No drilling reported.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	No logging completed.  Collegendations
Sub-sampling techniques and	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split,</li> </ul>	Soil samples not further split prior to



Criteria	JORC Code explanation	Commentary
sample preparation	<ul> <li>etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise samples representivity</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/secondhalf sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	assay
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	Soil sampling:  Samples analysed at Labwest using ICPMS from a <2 µm fraction representing a total assaying technique
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Results are consistent with previous work in the area.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Location of soil sample locations defined using handheld GPS
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> </ul>	400m*400m,     200m*200m,     160*160m and     80*80m staggered soil     grid as specified in the     text.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Surface point samples



Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	Samples submitted directly to Lab
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques are industry standard.

## **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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Located in the Norseman - Wiluna Greenstone Belt ~35km northwest of Kalgoorlie in the Eastern Goldfields mining district in WA</li> <li>All granted tenements managed by Zuleika Gold Ltd under various joint venture or farm-in arrangements.</li> <li>Zuleika Gold Ltd is earning an 75% interest in the Zuleika Tenements and owns 100% of the gold rights for the Menzies tenements and is earning 80% of the Goongarrie tenements.</li> </ul>
Exploration done by other parties.	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Several stages of exploration have been completed at the project areas. These are recorded in WAMEX.
Geology	<ul> <li>Deposit type, geological setting, and style of mineralisation.</li> </ul>	The geological target is typical structurally hosted orogenic gold mineralisation structurally favourable lithological contacts.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill</li> </ul>	<ul> <li>Location of sample points via handheld GPS.</li> <li>Northing and easting data generally within 3m accuracy</li> </ul>



Criteria	JORC Code explanation	Commentary
	holes:      easting and northing of the drill     hole collar      elevation or RL (Reduced Level -     elevation above sea level in     metres) of the drill hole collar      dip and azimuth of the hole     down hole length and     interception depth     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.	• RL data +/-5m
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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. The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No intercepts reported
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Soil geochemical point data reported
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should	The data has been presented using appropriate scales and using standard aggregating techniques for the display



Criteria	JORC Code explanation	Commentary
	include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	of regional data. Geological and mineralisation interpretations are based on current knowledge and will change with further exploration.
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.	This announcement details all gold results retuned from recent sampling programs
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.	Noted geological observations have been completed by fully qualified project and supervising geologists.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Additional work including geological mapping and interpretation, geochemical sampling and potentially drilling is expected to be planned in the areas to further evaluate the project relevant project areas