# **ASX ANNOUNCEMENT**

(ASX: TG1) 16 June 2022



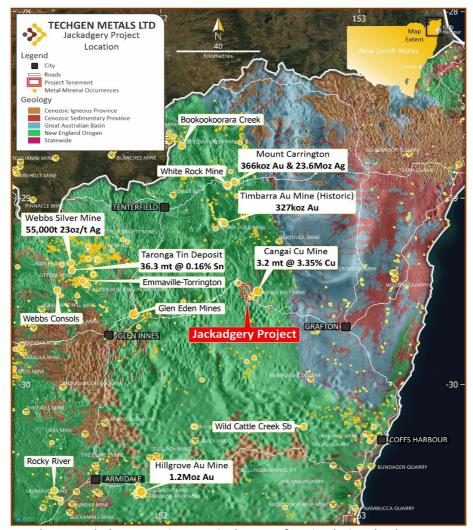
## IP TARGET STRENGTHENS JACKADGERY PROJECT

**TechGen Metals Limited** (ACN 624 721 035) ("**TechGen**" or the "**Company**") is pleased to provide an update on activities at the Jackadgery Project in NSW.

#### STRATEGIC HIGHLIGHTS

- Processing of data from a previous IP survey has highlighted an untested chargeability anomaly.
- A historic surface trench at the project contains a mineralised interval of 160m @ 1.2 g/t Au.
- The IP chargeability anomaly favourably sits directly beneath the mineralised trench area.
- > Jackadgery represents a possible Intrusion Related Gold System (IRGS) style of mineralisation.
- The project has never been drilled yet contains high priority "walk-up & fully permitted" drill targets and TechGen will be the first to drill test beneath the surface trench areas with a maiden RC drilling campaign planned to commence in mid-2022.

The Jackadgery Project is located between Glen Innes and Grafton in northern New South Wales within the New England Orogen (Figure 1).



 $\textbf{Figure 1:} \ \, \textbf{Jackadgery - Location Map, Geology Base \& Regional Mineral Endowment.} \\$ 







Data from a **dipole-dipole induced polarisation (DDIP) geophysical survey** completed by the Jackadgery Project holders in 2017 has been processed and evaluated by Fender Geophysics (a 10% retained partner in EL 8389). Three, 1.5km long east — west lines were surveyed at northings 6733200mN, 6733400mN and 6733550mN. The northern line, line 6733550mN, is parallel to the mineralised trench dug by Kennecott Exploration (Australia) in 1983.

### Historic surface trench at the project contains a mineralised interval of 160m @ 1.2 g/t Au.

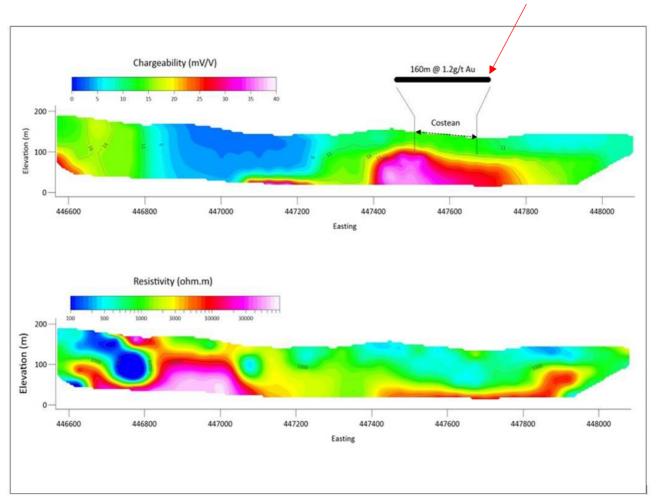


Figure 2: Dipole-Dipole Induced Polarisation profile along line 6733550mN (Chargeability & Resistivity).

The cross-section view of the northern DDIP line is presented as Figure 2 with the mineralised 160m @ 1.2g/t Au zone in previous trenching (costean) also shown. A distinct chargeability high occurs beneath the trench area with readings up to 40mV/V. The chargeability high may indicate the presence of disseminated sulphides beneath the trench. The New England Orogen forms the eastern margin of the Australian continent and extends for over 1,700km from central NSW through to northern QLD. The rock units that form the New England Orogen range in age from Neoproterozoic through to Mesozoic.

Numerous mineral deposit styles are known within the New England Orogen including deposits of the Intrusion Related Gold System (IRGS) style. In IRGS style deposits the gold mineralisation is sourced from an intrusion and gold mineralisation can occur either in the intrusive body or in the country rocks which are intruded. Gold can occur in veins, breccia zones or disseminated within the intrusion or as a combination of the three.

Historic gold workings at the Jackadgery Project consist of several shallow shafts sunk in the 1870's and two later, large areas of surface gold sluicing (Figure 3). Creeks below the colluvial workings have also been worked for alluvial gold. These historic gold workings occur in a sequence of Carboniferous-Permian greywacke and siltstone intruded by small intermediate sub-volcanic trachyte to micro-monzonite of likely



Permian or Triassic age. Sheeted and stockwork quartz veining is widespread over the area of the sluiced colluvial workings, with veins dipping generally eastward. Sulphides identified previously associated with veining consist almost entirely of pyrite - arsenopyrite ± pyrrhotite.

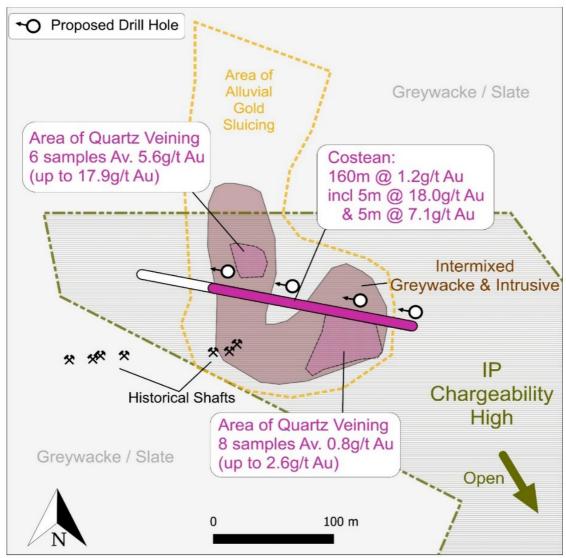


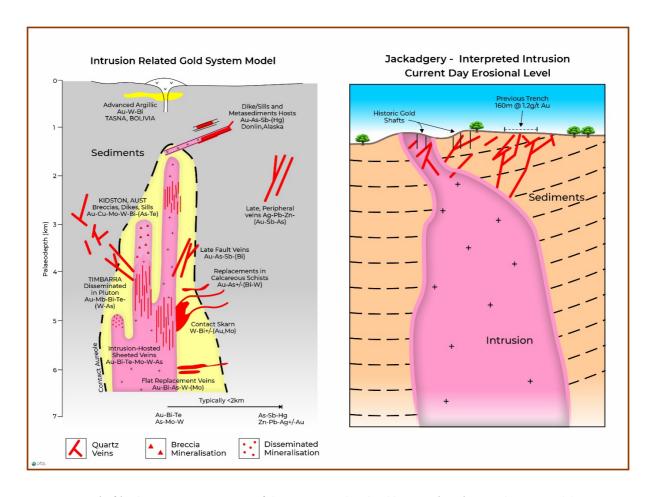
Figure 3: Jackadgery Project – Target Summary.

The last significant exploration activity was carried out between 1983 to 1985 by Kennecott Exploration (Australia) and Southern Goldfields Ltd. Activity included a 220m long backhoe dug trench into weathered quartz veined bedrock across the main (northern) area of alluvial gold sluicing. The trench averaged 1.2 g/t Au across the interval 0 - 160m (with 5m composite assay intervals ranging up to 18.0 g/t and 7.1 g/t Au; (refer to ASX announcement 16<sup>th</sup> May 2022).

Several features of the geology and mineralisation at the Jackadgery Project, including the presence of intermediate sub-volcanic trachyte to micro-monzonite bodies and sheeted and stockwork quartz veins with associated sulphides support the Company's interpretation of a possible Intrusion Related Gold System model for gold mineralisation at Jackadgery. In addition, IRGS gold deposits are known in the Jackadgery area with the previously mined Timbarra Gold Mine (Identified Mineral Resource now mined of 417,000 oz Au), located 40km north of Jackadgery.



Figure 4 represents a schematic cross section showing, on the left side, the Intrusion Related Gold System Model and how gold mineralisation can occur in relation to an intrusive body. The right-hand side of Figure 4 shows the interpreted position of the Jackadgery Project within the IRGS model.

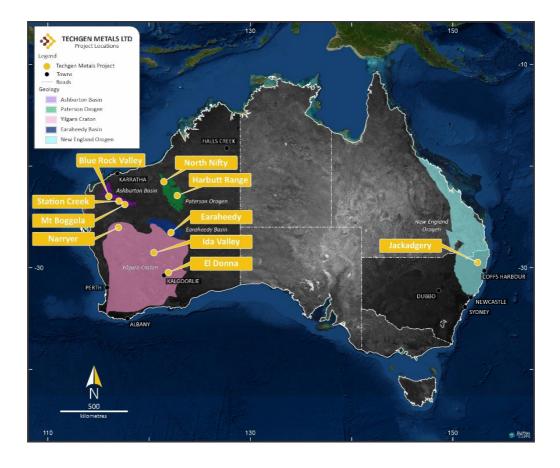


**Figure 4:** (Left) Schematic representation of the Intrusion Related Gold System (IRGS) mineralisation model. (Right) The interpreted position of the Jackadgery Project within the IRGS model.

An existing drill permit and access agreement allows for an initial fence of drill holes to effectively test beneath the wide zone of near surface gold mineralisation outlined by the historic trench (160m @ 1.2g/t Au) and the surface rock chip channel samples (Figure 4). The inaugural drilling program is anticipated to commence in mid-2022 and will be the first drilling program to be undertaken in the project area.

#### **ENDS**





TechGen is an Australian registered exploration Company with a primary focus on exploring and developing its gold and base metal projects across Australia. TechGen holds a portfolio of twenty-three exploration licences strategically located in five highly prospective geological regions in WA, and one in NSW.

For more information, please visit our website: www.techgenmetals.com.au

#### **Authorisation**

For the purpose of Listing Rule 15.5, this announcement has been authorised for release by the Board of Directors of TechGen Metals Limited.

#### **Competent Person Statement**

The information in this announcement that relates to Exploration Results is based on and fairly represents information compiled and reviewed by Andrew Jones, a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Andrew Jones is employed as a Director of TechGen Metals Limited. Andrew Jones has sufficient experience that is relevant to to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves. Andrew Jones consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

### For further information, please contact:

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# JORC Code, 2012 Edition – Table 1 report template

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

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>	<ul> <li>Historic sub-horizontal trench sampling by Kennecott Exploration (Australia) Ltd in 1983 and reported in NSW Mines Department Report GS1986-200.</li> <li>5m hand channel samples of excavator dug trench. Sample assay repeats using both AAS and fire assay analysis.</li> <li>Sample assay repeats of higher-grade zones of individual 5m trench samples of Kennecott Exploration (Australia) Ltd sampling reported by Southern Goldfields (GS 1986/200) indicate some degree of variability in results which is commonly associated with the presence of coarse gold. Note in addition to the standard fire assay and AAS analyses, Kennecott re-assayed 12 of the 5m trench sample intervals using a screen fire assay technique the results from which also seem to confirm the presence of coarse gold.</li> <li>Trench results average 160m @ 1.15 g/t Au, with (0.1 g/t Au cut-off and maximum dilution of 5m, no top cut) or 160m @ 0.68 g/t Au (0.1 g/t Au cut-off and maximum dilution of 5m and 5 g/t Au top cut applied). Details of individual 5m samples are shown in Table 1 in text.</li> <li>Ground IP survey (Time domain Induced Polarisation / Resistivity).</li> <li>Array: Dipole-Dipole Array (DDIP).</li> <li>Station spacing: 100m.</li> <li>Line spacing: 200m apart and 150m apart.</li> <li>Line length: 1.5km.</li> <li>Line direction: East - West.</li> </ul>
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.
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.
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 drilling.     No logs reported in historic reports, general rock descriptions only
Sub-sampling techniques and sample preparation	<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, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>No drilling.</li> <li>No details on historic sampling method, assumed to be industry standard, method of hand channel chip along trench wall.</li> <li>5m channel samples are appropriate for the type of sampling and style of mineralisation observed.</li> </ul>
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> </ul>	<ul> <li>No details of QA/QC documented in historic reports, although repeat assay has been performed and in addition to the original Kennecott sampling a second company Southern Goldfields also reported results of their own sampling of outcropping quartz veins located near the trench, returning similar gold assay results.</li> </ul>

Criteria	JORC Code explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are deemed appropriate for this early stage of exploration activity. Note comments at the beginning of this JORC Table discussing the likely presence of coarse gold.
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>	<ul> <li>Both aqua regia (AAS) &amp; screen fire (Screen FAS) assay techniques have been used, the former is near total digestion and the latter is consider a total digestion technique.</li> <li>No geophysical tools used during this sampling program.</li> <li>No details of QA/QC documented in historic reports, although repeat assay has been performed and in addition to the original Kennecott sampling a second company Southern Goldfields also reported results of their own sampling of outcropping quartz veins located near the trench, returning similar gold assay results.</li> <li>Ground IP survey (Time domain Induced Polarisation / Resistivity).</li> <li>Array: Dipole-Dipole Array (DDIP).</li> <li>Station spacing: 100m.</li> <li>Line spacing: 200m apart and 150m apart.</li> <li>Line length: 1.5km.</li> <li>Line direction: East - West.</li> </ul>
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>	<ul> <li>Activities carried out for Southern Goldfields Limited by independent consulting group Peter Goldner &amp; Associates.</li> <li>No drilling.</li> <li>Historical sampling: GS1986-200 – data reported in open file reports; limited data.</li> <li>Uncut and top cut results have been presented in the body of this report and as per below. Trench results average 160m @ 1.15 g/t Au, with (0.1 g/t Au cut-off and maximum dilution of 5m, no top cut) or 160m @ 0.68 g/t Au (0.1 g/t Au cut-off and maximum dilution of 5m and 5 g/t Au top cut applied). Details of individual 5m samples are shown in Table 1 in text.</li> </ul>
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>	<ul> <li>Trench location re-surveyed with GPS coordinates +/- 5m accuracy.</li> <li>The grid system used to compile data was MGA94 - Zone 56.</li> <li>Topography control is +/- 10m.</li> <li>IP locations were obtained using 12 Channel GPS receivers.</li> </ul>
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> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Results shown in Figure 1 and reported in Table 1 in body of this report.</li> <li>The data alone will not be used to estimate mineral resource or ore reserve.</li> <li>5m trench samples reported in mineralised composites.</li> <li>Uncut and top cut results have been presented in the body of this report and as per below. Trench results average 160m @ 1.15 g/t Au, with (0.1 g/t Au cut-off and maximum dilution of 5m, no top cut) or 160m @ 0.68 g/t Au (0.1 g/t Au cut-off and maximum dilution of 5m and 5 g/t Au top cut applied). Details of individual 5m samples are shown in Table 1 in text.</li> </ul>
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>	<ul> <li>Mineralised quartz veins are orientated roughly north-south dipping at 40 to 60 degrees east and are orthogonal to the trench.</li> <li>As above, based on observations to date, historic sampling is considered unbiased.</li> <li>No drilling was undertaken or reported.</li> <li>IP lines as three separate traverse lines oriented east-west. Data was collected on east-west lines 200m and 150m apart with station spacings at 100m along 1.5km long lines.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Unknown, not reported in historical open file reports.</li> <li>IP data is previous and was collected by Fender Geophysics.</li> </ul>

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Sampling techniques appears to be consistent with industry standards.</li> <li>No formal audit has been completed on the data being reported.</li> </ul>

## **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

Criteria	preceding section also apply to this section.)  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>The Jackadgery Gold Project is located within EL 8389 and EL 9121 in NSW.</li> <li>EL 8389 is owned by Ms McClatchie and Mr Sloot.</li> <li>EL 9121 is owned by Black Dragon Energy (Aus) Pty Ltd a subsidiary of Zenith Minerals Limited.</li> <li>Zenith has an option to purchase a 90% interest in EL 8389.</li> <li>Under the option agreement Zenith has made an option payment of \$10,000, and is required to complete a minimum of a 300m drill program within 12 months and at its sole election may then elect to acquire a 90% interest in the project for a one-off cash payment of \$100,000 to one of two private vendors. Zenith (90%) will then free carry the remaining private vendor (10%) to the completion of a prefeasibility study on the project. Post completion of a prefeasibility study the remaining vendor must either contribute their respective share of ongoing project costs or dilute in accordance with standard industry formula. Should the second vendors interest fall below 2.5% then they will automatically revert to a 0.5% net smelter royalty.</li> <li>The project is located within private grazing properties.</li> <li>The tenement EL 8389 is 100% held by private vendors and is in good standing with no known impediment to future granting of a mining lease.</li> <li>TechGen has entered into a binding term sheet to acquire 100% of EL 91921 and to acquire Zenith's option to acquire a 90% interest in EL 8389.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	New South Wales Mines Department open file reports: GS1986-200 documents work by Kennecott & Southern Goldfields Limited including stream sediment sampling, mapping, trenching & rock chip sampling.     Private vendors conducted rock sampling, petrographic studies and an IP geophysical survey.     No drilling to date.
Geology	Deposit type, geological setting and style of mineralisation.	Based on host rock and quartz vein style, comparable projects in the region the mineralisation style appears to be an intrusion gold related system.
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:  a 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.	No drilling. Refer to Figures in text for trench location.     No information has been excluded.
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.</li> </ul>	<ul> <li>Uncut and top cut results have been presented in the body of this report and as per below. Trench results average 160m @ 1.15 g/t Au, with (0.1 g/t Au cut-off and maximum dilution of 5m, no top cut) or 160m @ 0.68 g/t Au (0.1 g/t Au cut-off and maximum dilution of 5m and 5 g/t Au top cut applied). Details of individual 5m samples are shown in Table 1 in text.</li> <li>No aggregation used.</li> </ul>

Criteria	JORC Code explanation	Commentary
	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	<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>	<ul> <li>Trenching is considered to be perpendicular to main mineralised structures.</li> <li>No drilling.</li> <li>No drilling.</li> </ul>
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.	Suitable maps and diagrams have been included in the body of the report.
Balanced reporting	<ul> <li>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.</li> </ul>	All results have been included.
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.	All relevant exploration data is shown on diagrams within the text.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work anticipated:     RC drilling.
	<ul> <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>	Suitable maps and diagrams have been included in the body of the report.