

AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

20 JANUARY 2020

Pernatty IOCG* Project Electromagnetic (EM) Survey Update: Five EM Targets Identified

(* IOCG - Iron/Oxide-Copper-Gold)

Tasman's 100% owned Pernatty IOCG project is located on the Gawler Craton approx. 20km south east of the Carrapateena deposit in South Australia (refer Figure 1).

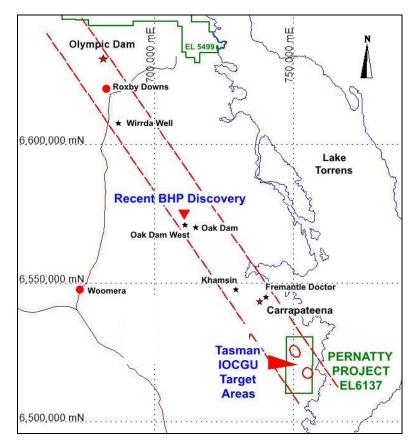


Figure 1: Pernatty Project Location Plan (grid GDA 94, Z53).

EM surveying over priority gravity and magnetic targets (refer ASX announcement 7 January 2019) identified within the Pernatty IOCG project, was completed, including follow up surveys, in December last year. A total of 54.7 line km were surveyed over the two target areas (refer Figures 1&2). The aim of the survey was to locate anomalous areas of electrical conductivity in the basement that could be due to sulphide mineralisation, as well as give information about depth to basement.

Geophysical modelling of the EM data in conjunction with the available gravity and magnetic data has recently been completed by Tasman's consultant geophysicist.

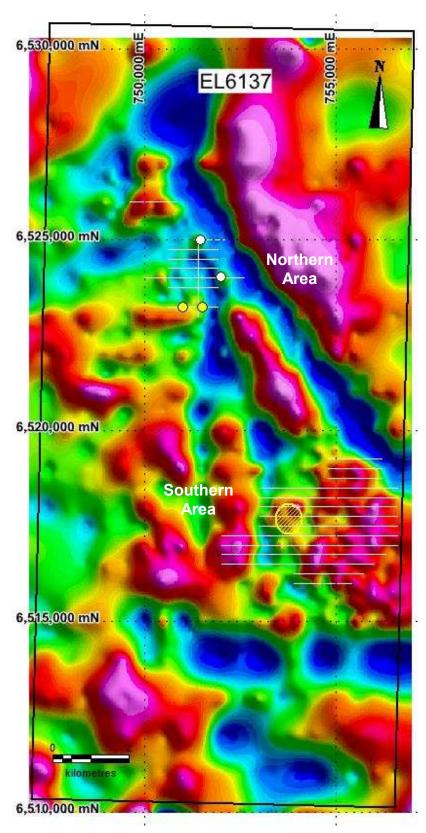


Figure 2: EL 6137. Residual gravity image showing EM survey lines (white) and location of modelled TEM conductor in southern area (yellow hatch). Yellow circles in north area are approx. locations of modelled steeply dipping conductive plates. White circles are locations of small coincident gravity-magnetic-TEM anomalies. Overall dimensions of EM anomalies in north area unknown. Grid GDA 94 Z53.

Southern Area

Geophysical modelling has highlighted an EM conductor in the southern area coincident with a gravity and magnetic anomaly (Figures 2 and 3) bounded by interpreted N and NE trending faults (Figure 3). Although all components of the coincident magnetic-gravity-conductivity anomaly are weak, the modelling suggests that elevated concentrations of sulphides may occur between about 250 and 500m depth.

Conductivity depth images (CDI's, Figure 4a) suggest that conductive rocks occur at around 300m and are separate from shallow highly conductive material, probably saline aquifers, in the cover. The EM conductor is shown as Plate 07 in the TEM model (Figure 4b). Modelled dimensions are around 800m long and 700m wide, similar to that of the gravity anomaly. The gravity and magnetic components of the coincident anomaly are interpreted to represent felsic rocks with about 5% dense non-magnetic minerals such as hematite and sulphides with less than 0.1% magnetite. The data suggests that it is not likely to be an iron rich IOCG system.

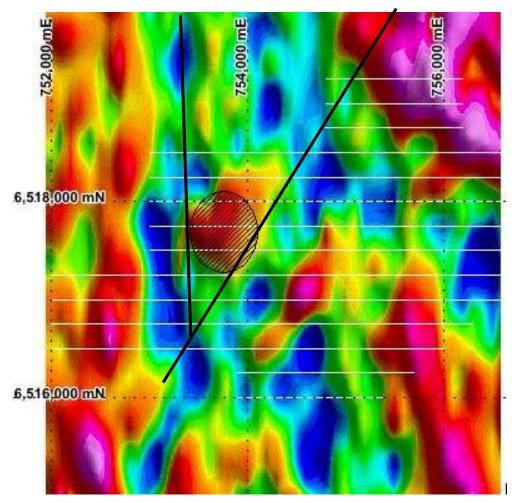


Figure 3: Southern Area. Modelled EM conductor (black hatch) and EM survey lines over residual magnetic image and interpreted faults (black lines).

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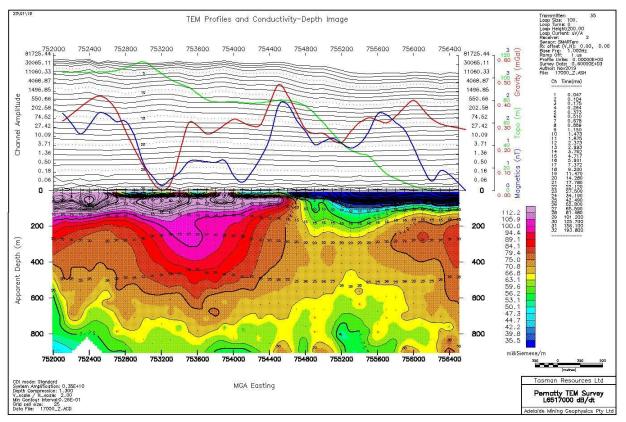


Figure 4a: Southern Area Line 6517000N. TEM, residual gravity (red) and magnetic (blue) profiles and conductivity depth image.

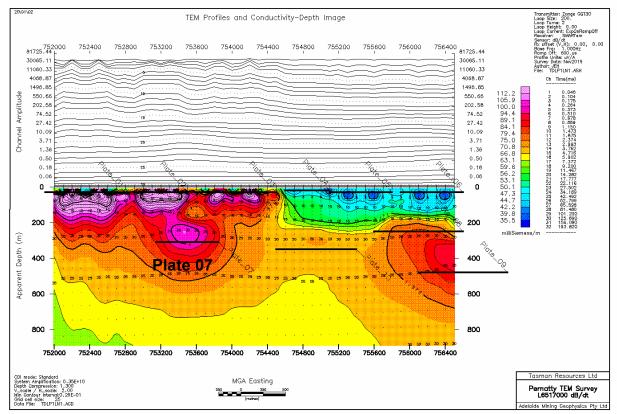


Figure 4b: Southern Area Line 6517000N. Response (profiles) and CDI generated from the response of a model comprising a half-space model (58 mS/m) with ten horizontal conductive plates.

Northern Area

Two steeply dipping conductive sheets (Figures 2, 5 a&b) have been interpreted on the southern most line in the northern area. Their high conductances suggest that they might represent sulphides in steeply dipping faults or fractures, presumably within the cover rocks, however graphite as a source of the conductivity cannot be ruled out. The top centre of Plate 1 in the model is at (751010E, 6523250N) at 53m depth and is very close to vertical. The top of Plate 2 in the model is at (751540E, 6523250N) and 103 metres depth. While these TEM anomalies appear on either flank of a northsouth gravity high there are no gravity data points within 200m of this southernmost TEM line. The gravity high is inferred by interpolation.

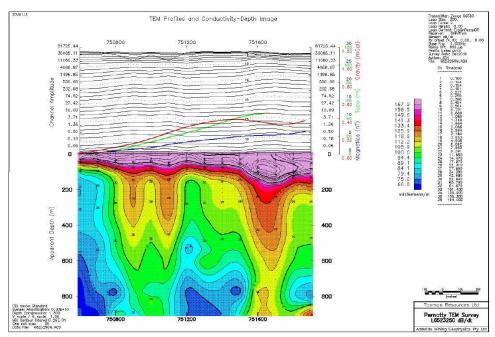


Figure 5a: Northern Area Line 652350N. TEM, magnetic (blue) and gravity (red) profiles and conductivity depth image.

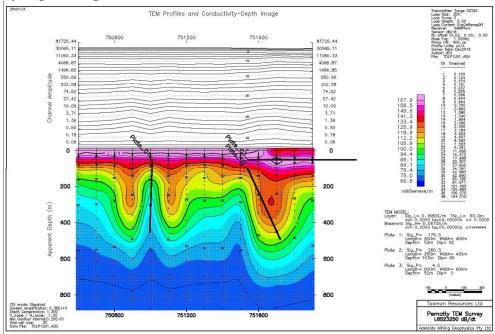


Figure 5b: Northern Area Line 65233250N. Plate-in-host model simulation for data in Figure 5a. showing steeply dipping modelled conductive plates 01 and 02.

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Two small coincident magnetic -gravity -TEM highs have also been identified in the northern area at approx. 370 and 400m depth:

Body 1

Just enough of this feature is seen at the north end of north-south TEM line 751400E to permit construction of a plate-in-host TEM model whose profiles and CDI response, shown in Figure 6a&b, suggest that the maximum conductivity occurs at about 370m depth (Plate 01). This is associated with weak but coincident magnetic (2 nT) and gravity (0.2 mGal) highs. Modelling suggests less than 0.1% magnetite and 15% of a dense non-magnetic component such as hematite and sulphides. Due to the associated electrical conductivity the 15 percent estimate for the hematite and sulphide conponent may represent more sulphides than hematite.

Body 2

A residual gravity high at (752000E, 6524000N) coincides with a residual magnetic high, and both anomalies occur barely 150m west of a conductivity anomaly seen in the eastern end of the CDI for line 6524000N (Figure 7). The residual magnetic and gravity high can be simulated using a body with the properties of felsic rock with 5.5% percent hematite and sulphides and less than 1% magnetite.

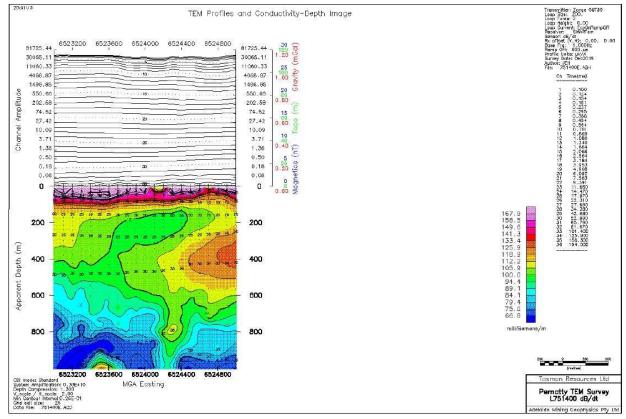


Figure 6a: Northern Area Line 751400E. TEM profiles and conductivity depth image.



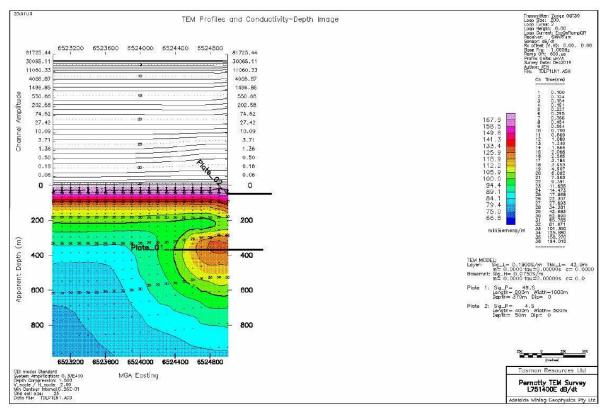


Figure 6b: Northern Area Line 751400E. Plate-in-host model simulation for the north-south CDI in Figure 6a. Maximum conductivity is interpreted to be near 370m depth.

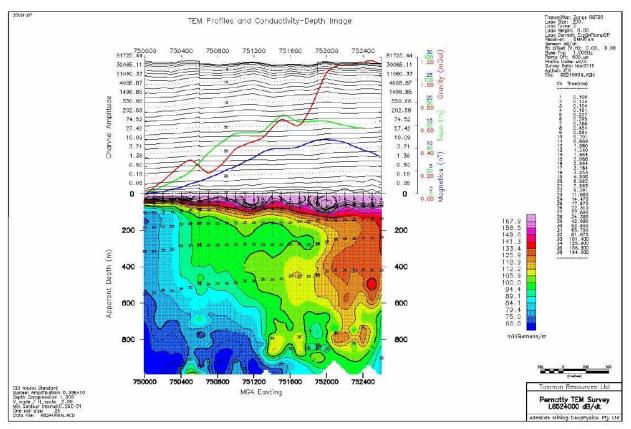


Figure 7: Northern Area Line 6524000N. TEM, magnetics (blue) and gravity (red) profiles and conductivity depth image.

Followup Work

A number of drill holes are proposed to test the coincident gravity-magnetic-EM anomalies in both areas and the steeply dipping conductors in the northern area for any economic sulphide accumulations at depth. Significant copper mineralization occurs in cover rocks at Mt Gunson, 40km to the west and at the Carrapateena IOCG deposit 20km to the northwest however applicable mineralisation models for the Pernatty anomalies are uncertain at this stage. As there has been no drilling in the area the local depth to basement us unknown, and the conductivity contrast between the cover rocks and basement is insufficient to determine a clear interface in the CDIs.

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Greg Solomon Executive Chairman

Disclaimer

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.

It should not be assumed that the reported Exploration Results will result, with further exploration, in the definition of a Mineral Resource.

Competent Persons Statement

The information in this announcement that relates to Exploration Results is based on and fairly represents information compiled by Michael J. Glasson, a Competent Person who is a member of the Australian Institute of Geoscientists.

Mr Glasson is an employee of the company. Mr Glasson is a share and option holder.

Mr Glasson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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 Glasson consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.



THE FOLLOWING TABLES ARE PROVIDED TO ENSURE COMPLIANCE WITH THE JORC CODE (2012 EDITION) FOR THE REPORTING OF EXPLORATION RESULTS. PERNATTY PROJECT

Section 1 Sampling techniques and data			
<u> </u>	(criteria in this group apply to all succeeding groups)		
Criteria	JORC Code explanation	Commentary	
Sampling techniques.	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	No drilling or sampling is reported. A moving loop ground EM survey wa carried out. An EMIT SMARTem 2. receiver was used to take all of the EM data. Data were sensed using a 3 component RVR coil. Transmitted field were generated with a Zonge GGT3 geophysical transmitter powered b aZMG-30 genset. MLEM output current/ramp times were around 38A/640µs at 1Hz for most of the survey. An EMIT transmitter controlle was used to control transmitter wav form and was synchronised via GPS The double-turn, 200x200m transmittet loop was constructed using insulated 4mm ² multistrand copper wire.	
	 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 (eg "reverse circulation drilling was used to obtain 1m samples from which 3 kg was pulverised to produce a 30g 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. 	 For each station at least three blocks o stacks of data were acquired (more blocks or stacks if there was a nois decay) to allow editing and assessmen of data repeatability. Not Applicable (NA) – no drilling or sampling is reported. 	
Drilling techniques.	 Drill type (eg. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka 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.). 	 Not Applicable (NA) – no drilling or sampling is reported. 	
Drill sample recovery.	• Whether core and chip sample recoveries have been properly recorded and results assessed.	 Not Applicable (NA) – no drilling or sampling is reported. 	
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	 Not Applicable (NA) – no drilling or sampling is reported. 	
	 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. 	 Not Applicable (NA) – no drilling or sampling is reported. 	
Logging.	 Whether core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	 Not Applicable (NA) – no drilling or sampling is reported. 	
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography. 	 Not Applicable (NA) – no drilling or sampling is reported. 	
	 The total length and percentage of the relevant intersections logged. 	 Not Applicable (NA) – no drilling or sampling is reported. 	

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Sub sampling	• If core whether cut or sawn and whether	 Not Applicable (NA) – no drilling or
Sub-sampling techniques and sample preparation.	 If core, whether cut or sawn and whether quarter, half or all core taken. 	sampling is reported.
	• If non-core, whether riffled, tube sampled, rotary split etc. and whether sampled wet or dry.	 Not Applicable (NA) – no drilling or sampling is reported.
	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	 Not Applicable (NA) – no drilling or sampling is reported.
	 Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. 	 Not Applicable (NA) – no drilling or sampling is reported.
	 Measures taken to ensure that the sampling is representative of the in situ material collected. 	 Not Applicable (NA) – no drilling or sampling is reported.
	 Whether sample sizes are appropriate to the grainsize of the material being sampled. 	 Not Applicable (NA) – no drilling or sampling is reported.
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. 	 Not Applicable (NA) – no drilling or sampling is reported.
	• For geophysical tools, spectrometer, 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.	 Not Applicable (NA) – no drilling or sampling is reported.
	 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. 	 Not Applicable (NA) – no drilling or sampling is reported.
Verification of sampling and assaying.	 The verification of significant intersections by either independent or alternative company personnel. 	 Not Applicable (NA) – no drilling or sampling is reported.
	• The use of twinned holes.	 Not Applicable (NA) – no drilling or sampling is reported.
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	 Not Applicable (NA) – no drilling or sampling is reported.
	 Discuss any adjustment to assay data. 	 Not Applicable (NA) – no drilling or sampling is reported.
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. 	 Not Applicable (NA) – no drilling or sampling is reported.
	 Specification of the grid system used. 	 The grid system used is Geodetic Datum of Australia 1994; MGA Zone 53.
	• Quality and adequacy of topographic control.	 Topography based on good quality data from previous gravity survey



Data spacing and distribution.	 Data spacing for reporting of Exploration Results. 	 EM surveying was conducted on 250m line spacings in the southern area and 250 to 1000m spacings in the norhern area. Station spacing along the lines was 100m.
	 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. 	 Not Applicable (NA) – no drilling or sampling is reported.
	 Whether sample compositing has been applied. 	 Not Applicable (NA) – no drilling or sampling is reported.
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.	 Not Applicable (NA) – no drilling or sampling is reported.
	 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. 	 Not Applicable (NA) – no drilling or sampling is reported.
Sample security	• The measures taken to ensure sample security.	 Not Applicable (NA) – no drilling or sampling is reported.
Audits or reviews.	• The results of any audits or reviews of sampling techniques and data.	 Not Applicable (NA) – no drilling or sampling is reported.

Section 2 Reporting of Exploration Results (criteria listed in the preceding group apply also to this group)		
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. 	 Exploration Licence No 6137 is located approximately 80km ESE of Woomera in South Australia and is owned 100% by Tasman Resources Ltd. There are no joint ventures, partnerships or royalties involved. The EL is covered by the Kokatha Native Title Claim Settlement ILUA S12014/011 and agreements between the claimants and Tasman designed to protect Aboriginal heritage sites. There are no historical or wilderness sites or national parks or known environmental settings.
	 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. 	 Tasman has secure tenure over the EL at the time of reporting and there are no known impediments to obtaining a licence to operate in the area.
Exploration done by other parties.	 Acknowledgment and appraisal of exploration by other parties. 	 Very little previous exploration has been carried out within the tenement area. This work appears to have been confined to government gravity and magnetic surveys and some limited infill gravity surveying by a previous explorer.
Geology.	 Deposit type, geological setting and style of mineralisation. 	 The type of deposit sought is an iron-oxide, copper gold type system (IOCG), similar to the Carrapateena deposit, about 20km to the NW. Carrapateena occurs within basement rocks beneath approximately 400m of younger, flat-lying sedimentary cover rocks. No drilling has been completed within Tasman's EL6137 and hence subsurface geology and depth to older basement in the transment and upper the statement.
Drill hole informa tion.	 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: 	 tenement are uncertain at this stage. Not Applicable (NA) – no drilling or sampling is reported.
	 Easting and northing of the drill hole collar 	 Not Applicable (NA) – no drilling or sampling is reported.
	 Elevation or RL (Reduced Level- elevation above sea level in metres) of the drill hole collar 	 Not Applicable (NA) – no drilling or sampling is reported. Not Applicable (NA) – no drilling or sampling
	• Dip and azimuth of the hole	 Not Applicable (NA) – no drilling or sampling
	Down hole length and interception depthHole length	 is reported. Not Applicable (NA) – no drilling or sampling is reported.



Data aggregation	 In reporting Exploration Results, weighting avanaging techniques, maximum and/or 	 Not Applicable (NA) – no drilling or sampling is reported.
methods.	averaging techniques, maximum and/or minimum grade truncations (eg. cutting of high grades) and cut-off grades are usually material and should be stated.	
	• 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.	 Not Applicable (NA) – no drilling or sampling is reported.
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Not Applicable (NA) – no drilling or sampling is reported.
Relationship between mineralisation	 These relationships are particularly important in the reporting of Exploration Results. 	 Not Applicable (NA) – no drilling or sampling is reported.
widths and intercept lengths.	 If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	 Not Applicable (NA) – no drilling or sampling is reported.
	 If it is not known and only the down-hole lengths are reported, there should be a clear statement to this effect (eg. 'downhole length, true width not known'). 	 Not Applicable (NA) – no drilling or sampling is reported.
Diagrams.	 Where possible, maps and sections (with scales) and tabulations of intercepts should be included for any material discovery being reported if such diagrams significantly clarify the report. 	 Appropriate geophysical maps are included in the report.
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. 	 Not Applicable (NA) – no drilling or sampling is reported.
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. 	Geophysical results are reported in the report. No other substantive exploration data is reported.
Further work.	 The nature and scale of planned further work (eg. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive 	 The nature of planned further work is included in the report. Please refer to information in the report.