JORC Code, 2012 Edition
Table 1

Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	Cut channel sampling was used within the Yerbas Buenas iron sand open pits, using a pick and calico sample bags. Sample intervals were marked out by tape measure and paint, and a 2kg sample taken per linear metre sampled using a geological pick. Analysis for Fe content was undertaken by a commercial laboratory using a Davis Tube instrument, giving a magnetically-recoverable iron estimate.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	N/A. No drilling is reported in the IGR.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	N/A. . No drilling is reported in the IGR.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	N/A. No drilling is reported in the IGR.
Sub-sampling techniques and	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube*	Each 2kg sample was dried and then riffle-split to 200g subsamples in the baboratory prior to Davis Tube testwork. This

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sample preparation	*sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	methodology is considered appropriate for the style of mineralisation and analytical method used.
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.* • *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.* • *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.*	Samples were submitted to the ALS Global laboratory in La Serena. Analysis for Fe has been completed by Davis Tube Tester. No Field duplicates were collected , and no Standard certified reference materials (CRM) were used.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	N/A No drilling is reported in the IGR.
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Test pit locations and sampling traverse locations in the open pit were positioned using a Garmin hand held GPS.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	Sampling within the open pit was undertaken on 1m intervals vertically and horizontally, with 5m or 10m between sample lines.
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.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to*	Sampling traverses are oriented vertically on open pit faces, corresponding to across strike of the iron sand mineralisation. The orientation of the sampling is suitable for the mineralisation style and orientation of the Yerbas Buenas mineralisation.

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	have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	• *The measures taken to ensure sample security.*	Calico sample bags are sealed into green bags/polyweave bags and cable tied. These bags were then delivered by company personnel to the La Serena laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	An audit of the La Serena laboratory was undertaken by the Independent Geologist.

Section 2 Reporting of Exploration Results

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Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Yerbas Buenas iron sand mineralisation is located on licences held through Chilean subsidiaries in which Freehill Investments Pty Ltd currently has a 50% interest. Licences are numbered 04102-2723-1, 04102-2714-2, 04102-2755-0, 04102-2755-K, 04102-2937-4. Freehill Investments Pty Ltd has the right to acquire the remaining 50% interests in these subsidiaries. These licences allow for extraction of up to 5000 tonnes per month.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	N/A. All previous known exploration has been acknowledged and detailed in the IGR.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The basement rocks are volcanic (dacite) rocks of Cretaceous age, which are strongly altered by veinlets of magnetite. These rocks form hills immediately North of, and outcrop sporadically within the project area. The magnetite-rich rocks extend northwards and eastwards for tens of kilometres, and host some significant magnetite deposits. Surrounding the volcanics are granitic, intrusive rocks. Draped over the volcanic rocks in the project area are relatively recently formed Quaternary aged beach sands, which contain significant levels of fine-grained magnetite which has been sorted by beach wave action and formed the iron sands deposit. The source of the magnetite grains within these sands are the green volcanic rocks, within a large drainage basin. Uplift of the basement rocks over time caused erosion of the volcanic rocks, and deposition of sands where a large river system met the coast. These sands are described as "Quaternary unconsolidated" material in geological mapping. Continued land uplift due to active faults and earthquakes has lifted the sand dunes to 50-100m above current sealevel, and protected most of the deposits from further erosion. Minor development of a calcrete layer has more recently formed in the topmost 4 metres of the sand dunes.
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:*	N/A No drilling is reported in the IGR.

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	○ *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.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.*	N/A No data involving averaging, aggregation, cut-offs or metal equivalents is used in the IGR.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	N/A No drilling or intercepts are reported in the IGR.
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.*	N/A No drilling or intercepts are reported in the IGR.
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.*	The accompanying document is considered to be a balanced report with a suitable cautionary note.
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*	The commercial mining of the Yerbas Buenas iron sands over several months including at the time of report compilation provides significant confidence in the makeup of the iron sands and the likely metallurgical recoveries possible.

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	substances.	
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	A drilling programme is recommended in the accompanying report to allow for the estimation of resources.