**ASX Code: CZR**

## Contact Details

Level 24, 44 St Georges Tce
Perth WA 6000

PO Box Z5183
Perth WA 6831

**T** +61 (0) 8 6211 5099
**F** +61 (0) 8 9218 8875
**E** info@coziron.com.au
**W** www.coziron.com

ABN 91 112 866 869

## Board of Directors

**Adam Sierakowski**
Non-Executive Chairman

**Dr Rob Ramsay**
Non-Executive Director
Senior Geologist

**Steve Lowe**
Non-Executive Director

# *Coziron Resources Limited*

The Company Announcements Office
ASX Limited via E-Lodgement

15 March 2017

## Ashburton Magnetite Drilling Update – Unique Geological Setting Reveals Magnetite in Carbonate.

---

**Highlights**

- **Pre-Christmas drilling program completed 10 holes for 2000 metres on the Ashburton magnetite project at the Rossi, Spinifex Hill and Walrus Ridge areas.**
- **The Ashburton magnetite project is located in the West Pilbara and is adjacent to existing and proposed transportation, mining and port infrastructure.**
- **RC drill-rates of up to 300m per 10 hour shift and relatively low bit-abrasion have been a feature of drilling the schistose magnetite-rich rocks over the entire project.**
- **Mineralogical on diamond drill-core indicating the presence of detrital carbonate continues to confirm that the Ashburton magnetite project is a unique geological setting for magnetite mineralisation in the West Pilbara.**
- **Near-term exploration will be focussed on delineating fresh, near-surface material totalling at least 1 billion tonnes, with a mass magnetite-yield of at least 30% with low impurity levels that is free of blue asbestos.**

**ASHBURTON MAGNETITE DIAMOND CORE RESULTS**

**Introduction**

The Ashburton magnetite project on the Coziron tenements in the West Pilbara (Fig 1) is located 60km south of the Sino magnetite mine operated by Citic Pacific Mining and is immediately adjacent to bitumen road access from the Pannawonica road and Great Northern Highway. In addition, the magnetite project is only 1-2 kilometres east of two gas pipelines and BC Iron Limited's proposed haul road to the port at Cape Preston east.

This transport infrastructure provides potential access to Cape Preston and the proposed Cape Preston East ports.

In 2015, Coziron completed three inclined (-60°) holes to a depth of approximately 500m to provide representative drill-core for mineralogical, geochemical and metallurgical studies from the total 12km long and 1 km wide area of the Ashburton magnetite project (Fig 1). The magnetite is a priority target as to date, no blue asbestos has been detected and processing of RC-drill chips resulted in a high proportion of 5 metre Davis Tube samples reporting a magnetite mass-yield greater than 30% and producing concentrates having Fe > 67% and $SiO_2$ < 5% and low impurity levels (ASX: CZR 28-April-2016).

The company followed up the 2015 program in late 2016 by completing a RC-drilling program consisting of 10 holes inclined at -060° towards 050° for a total of 2,000 metres (Fig 2). Results from this drilling will be released when they are available.

This announcement reports a new mineralogical result from the 2015 diamond drill-core that is relevant to future metallurgical studies on the magnetite mineralisation.

Summary details of the project history and sampling methods are reported in Appendix 1.

**Results and Discussion**

*Iron Formation Mineralogy*

Sections through the magnetite-rich diamond-core in YARDDH002 include samples with up to 50% carbonate (Fig 3). In parts of the samples, the carbonate has a spherical outline and is associated with very fine grains of detrital quartz. The texture suggests a "primary origin" for the carbonate and this is the first indication of carbonate-facies iron formation in the Ashburton magnetite project.

The carbonate, which is soft, is also associated with fine-grained chloritic and sericitic mica and this mineralogy may be producing the excellent drill-rates and relatively low bit-abrasion that has been reported during each of the three RC drilling programmes completed to date. The presence of the carbonate also provides new data that can be used to examine the efficiency of different types of crushing and grinding equipment that might be available for the magnetite liberation test-work programme.

**Future Work**

Mineralogical studies are continuing to provide data that has relevance to the design and development of a magnetite recovery circuit. Additional diamond drilling and sampling of the core will be required to map the extent and distribution of the carbonate-facies iron formation in the Ashburton system.

## Competent Persons Statement

The information in this report that relates to exploration results is based on information compiled by Dr Rob Ramsay (BSc Hons, MSc, PhD) who is a Member of the Australian Institute of Geoscientists. Dr Ramsay is a full-time Consultant Geologist for Coziron. Dr Ramsay has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activities which they have undertaken to qualify as a Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Ramsay has given his consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

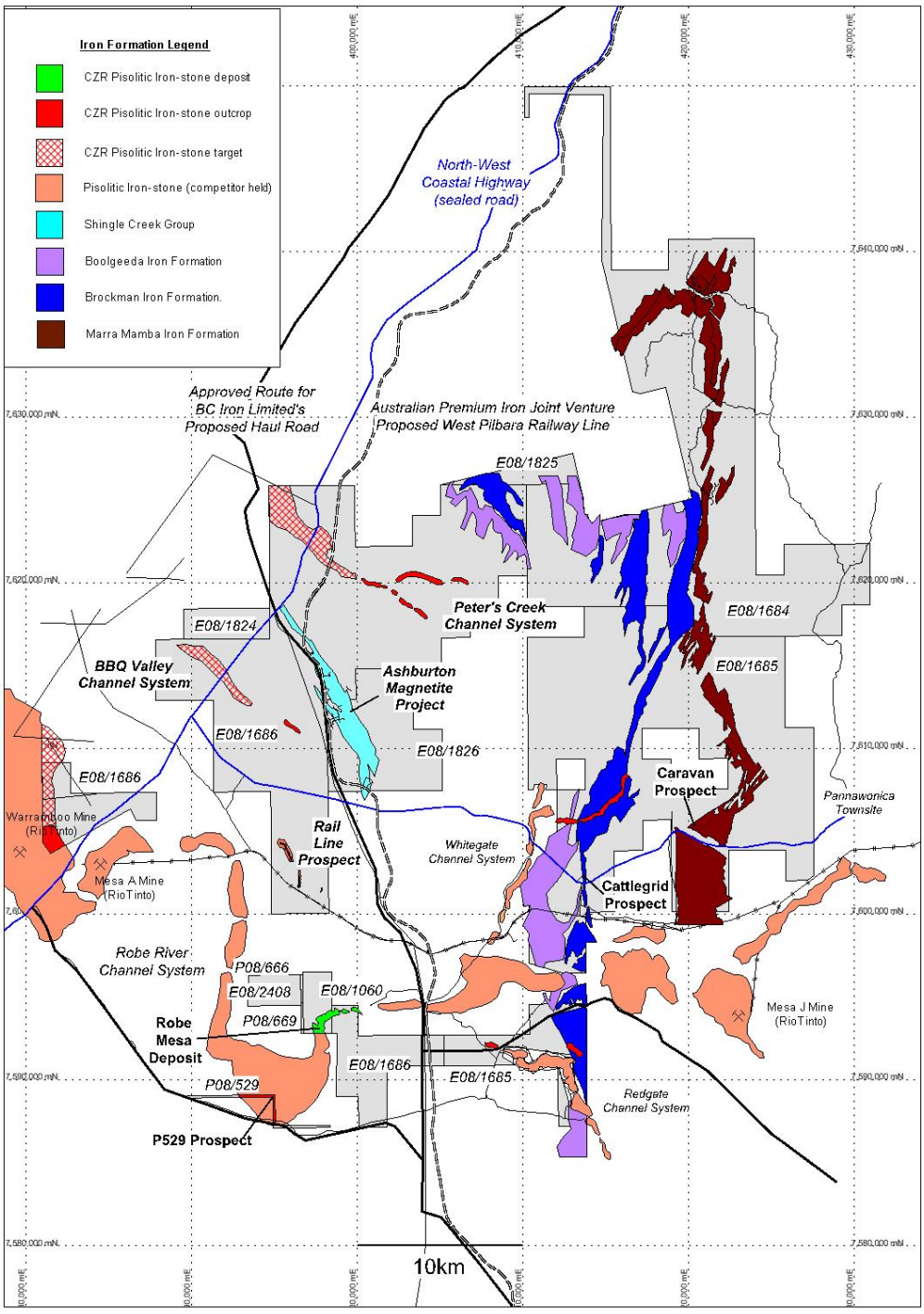


Fig 1. Location of Ashburton magnetite project on the Coziron tenements in the West Pilbara of Western Australia.

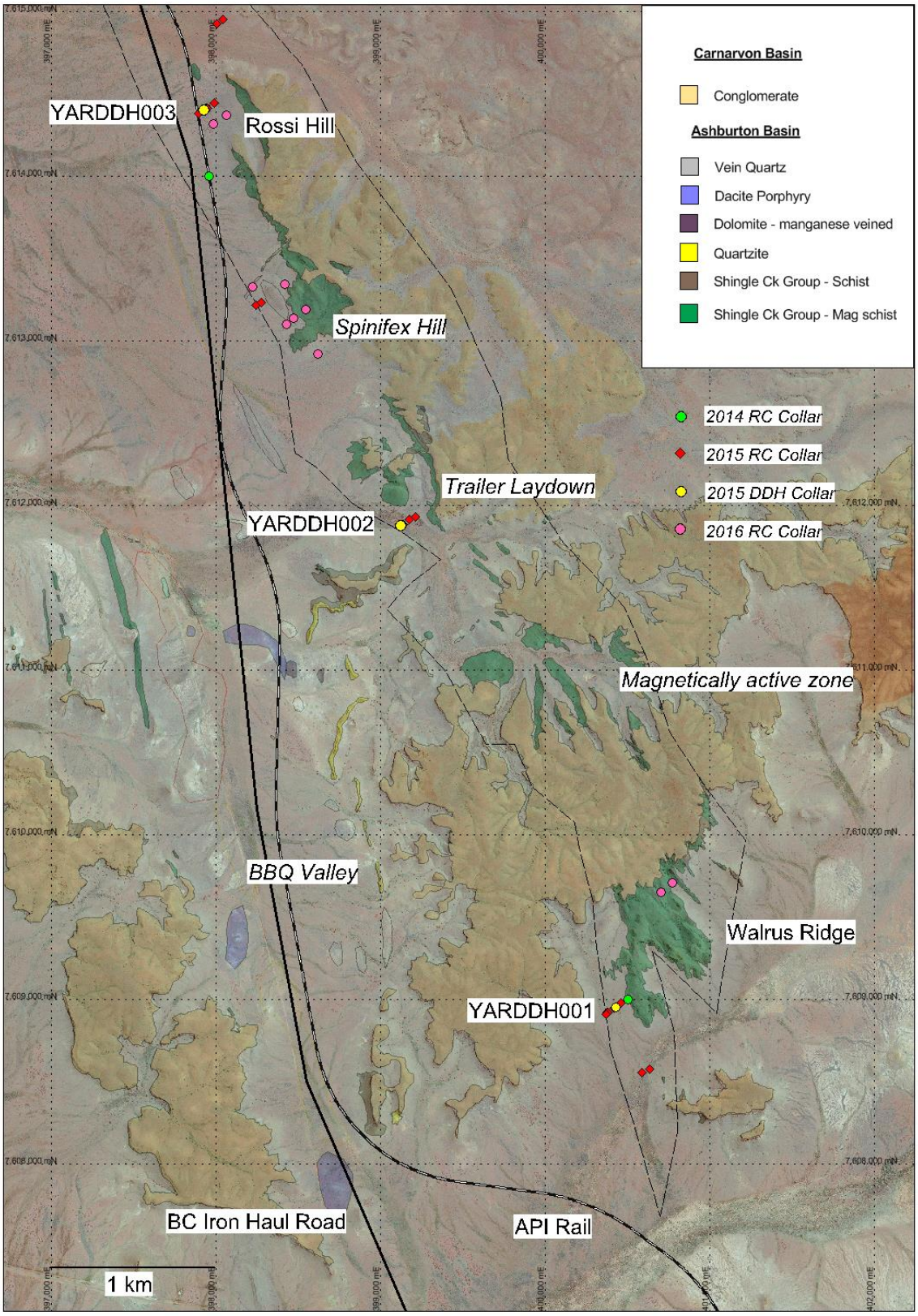


Fig 2. Prospect areas, location of the diamond and RC drill-collars and proposed infrastructure corridors within the Ashburton magnetite project overlain on the mapped geology.

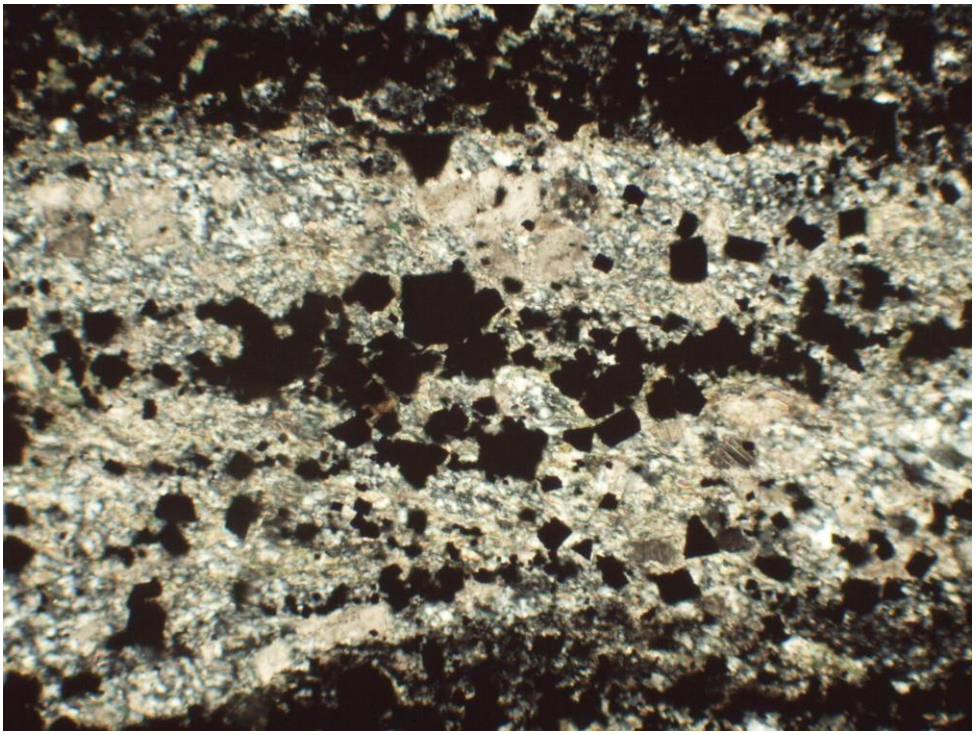

Fig 3. Photomicrograph of YARDDH002 398.7m at showing the textures and mineralogy of the carbonate-rich (light pink) magnetite-poor (opaque) laminae within the iron formation (field of view is approximately 2mm).

Appendix 1 – Reporting of exploration results from the Ashburton Prospect in the Yarraloola Project - JORC 2012 requirements.

| **Section 1 Sampling Techniques and Data** | | |
|---|---|---|
| **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.* | RC samples are derived from 5.5" (140mm) reverse circulation drilling holes with continuous down-hole sampling and HQ and NQ diamond drill-core is available for future work. |
| | • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* | All RC drill cuttings pass through a cone splitter and samples are collected on 1m intervals. During the drilling of each meter, 2-3kg of drill chips were split off and collected in a labelled calico sample bag. Diamond core is continuous. After logging representative 10cm lengths of core were cut along their length with a fragment dispatched for thin-section preparation and the remainder used for geochemical analysis. |
| | • *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 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.* | The entire 2-3kg RC drill-chip sample was dried and pulverized at Bureau Veritas Laboratories in Perth. Western Australia. A sub sample was fused with a lithium carbonate flux and the "extended iron-ore suite" of major oxide and selected trace-element analysis obtained by XRF Spectrometry on the disk. Au, Pt Pd has also been obtained by fire assay on a 50g sample charge.<br><br>Diamond-core samples were pulverised at Bureau Veritas Laboratories in Perth. A sub-sample was fused with a lithium carbonate flux and analysed for major elements by XRF and a full suite of trace-elements from the same disk by LASER ablation ICP-MS. |

| Section 1 Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code explanation** | **Commentary** |
| *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).* | Reverse circulation (RC) holes using a 5.5" (140mm) face-sampling percussion hammer. Diamond drilling uses HQ to approximately 200m and NQ recovery to the end of hole. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.* | RC sample size was monitored by Geologists during the drilling programme. The volume of sample derived from each meter drilled was approximately equal.<br><br>Diamond-core is measured between the depth markers reported by the drillers to establish the percentage recovery. In the interval below the base of oxidation, there is rarely less than 100% recovery from the intercepts of the Shingle Creek Group. |
| | • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* | Standard RC sampling techniques were employed and deemed adequate for sample recovery. Some water was injected into the sample stream during drilling to minimise the loss of fine particles.<br><br>Diamond core provides a continuous record of the rocks. |
| | • *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.* | The loss of fine material has been minimized during drilling. Sample recovery is regarded as being representative. Measurements indicate diamond core recovery beneath the uppermost interval of intense weathering is excellent. |
| *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.* | Each metre of reverse circulation chips is described geologically for mineralogy, colour and texture and magnetic susceptibility measured by hand held MagRock metre. No mineral resource estimates are included in this report. |
| | • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* | Logging is qualitative. |
| | • *The total length and percentage of the relevant intersections logged.* | All RC drill holes are logged at 1m intervals, for the entire length of each hole. All diamond core is measured to check the recovery and the entire hole is described for geology |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.* | For geochemical sampling of representative rock-types, 10cm intervals of diamond core were ¼ cut along their length by a diamond bladed core-saw. Geological and physical properties are reported on whole core. |
| | • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | Reverse circulation drill chip samples were collected dry and split by a continuously operating rotary cone splitter during drilling. |
| | • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | Reverse circulation drilling is an appropriate method of recovering representative samples though the interval of mineralization. The drilling contractor used suitable sample collection and handling procedures to maintain sample integrity. |
| | • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* | Duplicate samples were simultaneously collected in mineralized intervals, using the cone splitter attached to the drill rig. Approximately 1 in 20 duplicate samples were analysed to ensure representivity. |
| | • *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.* | The reverse circulation method samples continuously and the cone-splitter selects a representative proportion of the sample, providing an indication of compositional variations associated with each lithology or mineralized interval.<br><br>Intervals of diamond-core samples are selected according to rock-type based on texture and rock-type. |

| Section 1 Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code explanation** | **Commentary** |
| | • *Whether sample sizes are appropriate to the grain size of the material being sampled.* | The 2-3kg of homogenized drill chips that was recovered for each sample is sufficient to provide a representative indication of the material being sampled. |
| *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.* | The geochemical data being reported is whole rock XRF and LASER ablation ICP-MS on a fused disk and is a total assay method for major element oxide analysis. |
| | • *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.* | A hand-held magnetic susceptibility meter was used to record the response from the drill-chips and the response highlights the highly magnetic intercepts of magnetite schist in drill-holes. |
| | • *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.* | Coziron introduces field-collected duplicates at a ratio of about 1:20. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.* | No independent of alternative company personnel were used to verify the intersections. |
| | • *The use of twinned holes.* | The drill intercepts reported are from an early stage exploratory drill programme. |
| | • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | Data is delivered as both an electronic file and in pdf format by Bureau Veritas and the data is loaded into a Microsoft access database. The loaded data is regularly checked by a competent person against the pdf file to ensure all the oxides and elements are loaded into the correct fields. |
| | • *Discuss any adjustment to assay data.* | Assay data is not adjusted. |
| *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.* | Drill hole locations were derived from a hand held Garmin 72h GPS units, with an average accuracy of ±3m. |
| | • *Specification of the grid system used.* | The grid system is MGA GDA94, zone 50, all easting's and northing's are reported in MGA co-ordinates |
| | • *Quality and adequacy of topographic control.* | SRTM90 data is used to provide topographic control and is regarded as being adequate for early stage exploration. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.* | The drill holes are located to examine the sub-surface geology associated with a series of different magnetic targets within the Ashburton Trough sequence. |
| | • *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.* | No Mineral Resources or Ore Reserve estimations are being presented in this report. |
| | • *Whether sample compositing has been applied.* | All geochemical data from RC samples is derived from the 1m interval samples. Diamond-drill orientation geochemistry for the characterisation of rock-types is obtained from 10cm intervals showing representative texture of ¼ core cut along its length. |

| Section 1 Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code explanation** | **Commentary** |
| *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.* | Mineralization is contained within a sequence that dips at about 70 to the south-west |
| | • *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.* | The drill orientation was selected to minimise any sampling bias. |
| *Sample security* | • *The measures taken to ensure sample security.* | Samples are collected, labelled, packed in bulka bags and transported by RGR Transport from site directly to Bureau Veritas laboratories in Perth. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | No audits or reviews of the sampling techniques and data have been obtained. |
| **Section 2 Reporting of Exploration Results** | | |
| **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.* | All exploration licenses and prospecting licenses owned 85% by Zanthus Resources Ltd and 15% by ZanF Pty Ltd. The tenements are covered by the Kuruma Marthudunera Native Title Claim and relevant heritage agreements are in place. |
| | • *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 tenements are in good standing and no known impediments exist. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | In 1990-1991, Aberfoyle Resources held tenements covering the Ashburton Trough which partially overlapped Yarraloola. They collected 26 rock-chip and 73 stream sediment samples for gold and base-metal exploration but encountered no significant results and surrendered the ground. |
| | | In 1991-1992, Poseidon Exploration Ltd held exploration tenements covering the Ashburton Trough which partially overlapped Yarraloola for base-metals, gold and iron-ore. They collected 54 rock-chips, 236 soil samples, 492 stream sediment samples and completed 159 RAB holes for 2410m but encountered no significant mineralisation and surrendered the tenements. |
| | | In 1997-1998, Sipa Resources NL held tenements over the Ashburton Trough that partially covered Yarraloola for gold and base-metals. A field trip after the interpretation of LANDSAT and air-photos collected six rock-chip samples which failed to detect mineralisation and the tenements were surrendered. |
| | | In 2005-2009, Red Hill Iron Ltd held a tenement 15km northwest of Pannawonica which partially overlapped Yarraloola for gold and base-metal prospectivity. Following and aeromagnetic survey and air-photo interpretation, 16 rock-chips and 207 soil samples were collected but no targets were generated and the ground was surrendered. |

| Section 1 Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code explanation** | **Commentary** |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | The eastern section of the Yarraloola tenements covers Archaean-age chemical and clastic sediments overlying basalts in the Hamersley Basin. The western part of the tenements covers deformed Palaeoproterozoic mostly clastic sediments of the Ashburton Basin which are overlain by more recent undeformed detritus associated with the Carnarvon Basin. Sediments of the Hamersley and Carnarvon Basins are known to host economic deposits of iron-ore.<br><br>The magnetite mineralization described in this report is hosted within graphitic and chloritized volcanic schists of the attributed by the Geological Survey of Western Australia to the Shingle Creek Group.. |
| *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:* | |
| | ○ *easting and northing of the drill hole collar* | Drill hole collar Eastings and Northings are reported using map projection GDA Zone50, entered into an Access database and the map locations have been checked by the competent person. |
| | ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* | The area has only minor relief and a nominal RL of 140m above sea level from the SRTM90 is used for results in this report. A differential GPS survey will provide future surface control. |
| | ○ *dip and azimuth of the hole* | All holes in the Ashburton are -60 to 050. |
| | ○ *down hole length and interception depth* | Down hole lengths and intercept depths are calculated from 1m interval samples that are progressively collected as the holes are drilled. |
| | ○ *hole length.* | Hole lengths are reported both on the geological and driller logs, entered into the access database and have been checked by a competent person. |
| *Data aggregation methods* | • *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.* | Reported down-hole intercepts have magnetic susceptibility greater than 5000 times the host-rock sequence. The reported intervals provide guidance for future drilling to determine true thickness. No upper cut has been applied. |
| | • *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 aggregate intercepts reported are calculated averages of 1m interval samples. |
| | • *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | No metal equivalents are presented |
| *Relationship between mineralisation widths and intercept lengths* | • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* | The -60 inclined drill-holes are designed to intercept the moderately to steeply dipping geology and obtain sections across the geological units. |
| | • *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').* | The relationship of the down-hole widths and the true thickness is yet to be determined. |

| Section 1 Sampling Techniques and Data | | |
|---|---|---|
| **Criteria** | **JORC Code explanation** | **Commentary** |
| | • *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.* | A map of the drill-hole locations is included. |
| *Diagrams* | • *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 intervals reported represent the down-hole intercepts of magnetite rich rocks which are the focus zones for future work |
| *Balanced reporting* | • *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.* | Intervals of samples with elevated magnetic susceptibility. |
| *Other substantive exploration data* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* | DGPS surveying over the mineralized area, geochemical analysis, quantitative mineralogical studies, along with infill and extensional drilling are being planned. |
| *Further work* | • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | Areas with high magnetic responses have been identified on the tenement locality map. |