

# **Coziron Resources Limited**

The Company Announcements Office ASX Limited via E-Lodgement

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# Yarraloola Project – Robe Mesa Iron Ore Deposit Review and Work Proposals

#### HIGHLIGHTS

- Resource block model completed for Robe Mesa Pisolitic Ironstone (CID) reporting a total resource of 84.5 Mt representing 65.7 Mt of Indicated Resource and 18.8 Mt of Inferred Resource @ 53.8% Fe (equivalent calcined iron, Fe<sub>Ca</sub> of 60.2%) + 8.3% SiO<sub>2</sub> + 3.4% Al<sub>2</sub>O<sub>3</sub> + 0.04% P + 10.6% LOI above a cut-off grade of 50% Fe has been reviewed.
- The higher grade resource which totals 24.7 Mt representing 19.5 Mt Indicated Resource + 5.2 Mt of Inferred Resource @ 56% Fe (equivalent calcined iron, Fe<sub>Ca</sub> of 62.7%) + 5.9% SiO<sub>2</sub> + 2.7% Al<sub>2</sub>O<sub>3</sub> + 0.04% P + 10.7% LOI above a cut-off grade of 55% Fe is contained in the upper parts of both the upper and lower zone mineralisation.
- Further work on the high-grade (+55% Fe) will focus on mapping the thickness, distribution and metallurgical properties.
- Work on the lower grade e (+50% Fe and the interval to +45% Fe) will determine whether it can be separately marketed or upgraded to a higher grade product.
- Potential extensions of the ore-resource model to the north, east and a new area to the west have been identified, ranked and a heritage clearance survey and RC drilling programme is being planned
- Drilling is being planned at other prospects which host pisolitic iron-stone (CID) mineralisation on the Yarraloola tenements to determine the extent, continuity and grade of mineralisation.

Adam Sierakowski the Company's chairman commented "This resource block model, in particular the high grade zones and potential for extensions, provides the company with the strong potential to be a low cost producer of higher grade iron-ore closer to port and infrastructure than any iron ore company in the region (excluding Rio's neighbouring Mesa A and J mines)."

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# Yarraloola Project – Robe Mesa Deposit

### Introduction and Background

The Robe Mesa Iron-Ore Deposit being evaluated by Coziron is hosted by an elevated region situated at the Southern end of the Yarraloola project area (Fig 6). The Mesa which is capped by pisolitic ironstone (CID-type iron-ore) has a total length of about 2.5 kilometres and a width of between 400 to 600 metres on the Company's tenements E08/1060 and E08/1686 (Fig 1). The deposit is located 5 km to the west of the corridor proposed for the BC Iron haul-road to Cape Preston and API rail corridor to Anketell. During 2014 and 2015, 78 vertical RC drill-holes for a total of 4,936 m were completed on an approximately 100m grid. All the holes were sampled on 1m intervals and assayed by XRF at Bureau Veritas Laboratories for the basic iron-ore suite of elements. The geological logging and geochemical results identified an upper and lower interval of pisolitic iron-stone separated by an interval of sandy iron-stone that has been summarised and fully reported to the ASX on 21-November-2014, 12-December-2014 and 23-September-2015.

Following the field and laboratory work, the geological model and the assay database was provided to Optiro Pty Ltd (Optiro). Using Surpac, Optiro has generated and then revised the tonnages within the ore-resource model at a cut-off grade of Fe (iron) > 50% and Fe > 55% that are summarised in Tables 1 and 2 and were fully reported to the ASX on 3<sup>th</sup> February 2015, 10<sup>th</sup> of December 2015 and 29<sup>th</sup> of January 2016 with an attached JORC table appendix. The CID in the Robe Mesa is a goethite-limonite ore-type containing about 10% water (LOI in Tables 1 and 2) in the crystal structure. This water is removed during the early stages of processing and effectively improves the Fe grade for smelting. As such, rather than a cut-off grade around 60% Fe used for anhydrous iron-ores, the hydrous CID-ores are typically evaluated above a cut-off of 50% Fe.

Table 1. Robe Mesa – Mineral Resource Estimate above a Fe (iron) cut-off grade of 50% as fully reported to the ASX on 29<sup>th</sup> of January 2016.

Category	Mt	Fe%	SiO₂%	Al <sub>2</sub> O <sub>3</sub> %	TiO₂%	LOI%	Р%	<b>S%</b>	Fe <sub>ca</sub> %
Indicated	65.7	53.8	8.3	3.4	0.14	10.6	0.04	0.02	60.2
Inferred	18.8	53.8	8.2	3.4	0.14	10.7	0.05	0.02	60.3
Total	84.5	53.8	8.3	3.4	0.14	10.6	0.04	0.02	60.2

Table 2. Robe Mesa – Updated Mineral Resource Estimate above a Fe (iron) cut-off grade of 55% asfully reported to the ASX on 29<sup>th</sup> of January 2016.

Category	Mt	Fe%	SiO₂%	Al <sub>2</sub> O <sub>3</sub> %	TiO₂%	LOI%	Р%	<b>S%</b>	Fe <sub>ca</sub> %
Indicated	19.5	56.0	6.0	2.7	0.10	10.7	0.04	0.02	62.7
Inferred	5.2	56.0	5.8	2.8	0.10	10.7	0.05	0.02	62.7
Total	24.7	56.0	5.9	2.7	0.10	10.7	0.04	0.02	62.7

Iron (Fe) is reported both as a total XRF value and also as a calculated calcined iron (Fe<sub>ca</sub>) that reflects the Fe-content after the loss of volatiles which occurs during smelting. The calcined-iron content is calculated using the formula (Fe%/(100-LOI))\*100.



### Robe Mesa – Block Model Review and Update

The block model produced by Optiro for the Robe Mesa high-lights the distribution of the Fe-grades >50% within the geological model. The review of the model by Coziron indicates the following.

- 1. The lower and upper zones of pisolitic ironstone, characterised by Fe > 50%, each have an upper high-grade interval with Fe > 55% (Figs 2 to 5).
- 2. The high-grade interval (>55% Fe) of the upper zone outcrops and shallowly subcrops on the mesa.
- 3. The high-grade interval (>55% Fe) of the lower zone which underlies the drilled-grid is projected to outcrop to the east and west of the mesa.
- 4. The eastern extension on the lower zone has been mapped and chip-sampled in places. It is proposed that drilling will be conducted on this area in 2016.
- 5. There is potential for further thick, high-grade mineralisation in the western zone. This potential was identified when the revised topographic model showed the base of the lower channel is probably 30m lower the adjacent plain and some cross-sections indicate that the lower zone of pisolitic iron-stone extends and thickens to the west of the drill-grid (Figs 2 and 3). The area of interest also has a spectral signature indicating Fe-rich debris on the surface that extends some 700m to the west of the current drill-grid and requires drilling.
- 6. There are areas within the current resource model where infill drilling has the potential to increase the resource confidence from *Inferred* to *Indicated*.
- Reducing the cut-off grade to Fe>45%, results in the global ore-grade being maintained at Fe@52%, but increases the volume of material in the model. The mineralogical and metallurgical characteristics of the material between the 45 and 50% cut-offs requires assessment.

### Robe Mesa – Proposed Work Programmes

The 2016 work programme for the Robe Mesa will be focussed on assessing both the potential to increase the volume of CID ore-material, better determine the extent and distribution of the high-grade (Fe>55%) material and look at whether the lower-grade material can be upgraded. The work will include the following.

- 1. RC drilling the potential extensions to the mineralisation.
- 2. Recovering drill-core to provide material for the measurement of physical properties for the ore-grade material.
- 3. Recovering lower-grade material to determine the mineralogical and metallurgical properties whether it can be upgraded by low-cost beneficiation.

## Yarraloola - CID Exploration Targets

In addition to opportunities to increase the confidence, size and quality of the ore-resource associated with the Robe Mesa deposit, the Yarraloola Project hosts a number of additional prospects with pisolitic iron-stone mineralisation that have yet to be drilled. These are being prioritised according to rock-chip results and dimensions for heritage clearance prior to RC drilling (Fig 6).

Further information about the progress and results of the 2016 proposed work programs for both the Robe Mesa and other exploration targets will be will released to the market as and when it becomes available.





Fig 1. Location of 2014 and 2015 RC drill-collars and cross-sections on the updated outcrop distribution of the upper (red) and lower (green, interpreted extensions) zones of pisolitic iron-stones associated with the Robe Mesa on tenements E08/1060 and E08/1686.



Fig 2. Interpreted cross-section on 75939200N (from Fig 1) showing the down-hole intervals with Fe>50% in the upper and lower zones at 5% Fe cut-offs. Upper Zone, Red – Fe>55% and orange Fe>50 to <55%; Lower Zone Green – Fe>55% and orange Fe>50 to <55%.



Fig 3. Interpreted cross-section on 7593630N (from fig 1) showing the down-hole intervals with Fe>50%. in the upper and lower zones at 5% Fe cut-offs. Upper Zone, Red – Fe>55% and Orange Fe>50 to <55%; Lower Zone Green – Fe>55% and Blue Fe>50 to <55%.





Fig 4. Interpreted cross-section on 7593210N (from fig 1) showing the down-hole intervals with Fe>50% in the upper and lower zones at 5% Fe cut-offs. Upper Zone, Red – Fe>55% and Orange Fe>50 to <55%; Lower Zone, Green – Fe>55% and Blue Fe>50 to <55%



Fig 5. Interpreted geological cross-section on 7592850N (from fig 1) showing the down-hole intervals with Fe>50% in the upper and lower zones at 5% Fe cut-offs. Upper Zone, Red – Fe>55% and Orange Fe>50 to <55%; Lower Zone, Green – Fe>55% and Blue Fe>50 to <55%.

For further information regarding this announcement please contact Adam Sierakowski on 08 6211 5099.

### **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 and 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.



**Background** – Prospect Locations and Iron Formation targets on the Coziron Resources, Yarraloola tenement package.



Fig 6. Distribution of banded iron-formations and targets for CID mineralisation on the Yarraloola Ironore project in the West Pilbara and highlighting the Robe Mesa deposit on E08/1060.

