



# ASX Release

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## Iron-Rich Mineralisation at Coolybring

### Highlights

- Two diamond drill holes confirm iron rich magnetite over wide intervals in the large, under cover Coolybring magnetic anomaly in the Tarcoola Iron District.
- These drillholes were part PACE funded under the SA Government initiative.
- Assays of 114m @ 39% Fe and 54m @ 35% Fe were returned. Significantly, both holes ended in mineralization, giving higher tonnage potential.
- Preliminary beneficiation tests returned mixed but encouraging results. Iron beneficiation was satisfactory but silica levels were elevated. Further exploration and testwork is certainly warranted.
- Analysis of results, combined with further geophysical interpretation, highlights the potential for development of haematite rich iron mineralisation.
- Interesting base metal values were also received, which indicate potential for metal rich hydrothermal systems.

### Detail

Stellar Resources is pleased to report assays and preliminary beneficiation tests from the two vertical diamond drill holes on the Coolybring magnetic anomaly. Holes DDH-WIL04 and DDH-WIL05 were completed approx 750m apart to test part of the aeromagnetic anomaly.

**WIL04 intersected 114 m @ 39.2% Fe** in a strongly magnetic jaspilite from 108 metres to 222 metres (EOH). **WIL05 intersected** a more variable sequence of ironstone and meta-sediments, with high magnetite content of **54m @ 35.0% Fe** from 108m to 162m (EOH).

**These holes confirm the presence of the inferred large body of magnetite mineralization, under cover.** The true width of the iron-mineralised zone has yet to be established, as both holes ended in mineralisation and most of the intense magnetic anomaly area remains undrilled.

Stellar is mindful that, given the indicated depth of cover (clay and shale) a large body of mineralization would be required to enable a viable stripping ratio in a potential open pit. The drilling results to date give positive encouragement in this regard.

## **Testwork**

Very limited preliminary testwork was conducted by Amdel Laboratories to test the magnetic beneficiation characteristics of the magnetite bearing material, using Davis Tube Recovery (DTR) testing – a magnetic separation technique. Seven samples from the magnetite jaspilite zone in hole WIL04, and two samples from the high magnetite interval in hole WIL05 were processed. In addition, two samples from the lower magnetite zones in WIL05 were analyzed for comparative purposes.

Samples from hole WIL004 showed encouraging beneficiation characteristics for the magnetite content in the sampled interval – these seven samples averaged over 94% Fe recovery into a concentrate grade of 63.4% Fe, at a grind size of 75 microns. However, the silica content at this grind size was high, averaging at 12%.

The two high magnetite samples from WIL005 showed recoveries of 87.7% Fe, into a concentrate grade of 67.1% Fe, with a much lower silica content (6.4%) for the same 75 micron grind size.

Concentrate levels for phosphorus ( $P_2O_5$  @<0.01%) and aluminium ( $Al_2O_3$  @<0.1%) were acceptable for all samples, however further DTR sampling of the high magnetite interval in this hole (108m – 162m) is required to confirm the consistency of results over the interval.

## **Haematite Potential**

DTR results for the two low magnetite samples from WIL05 returned low Fe recoveries (36% and 25%) which was as anticipated. However, as the head grade Fe assays for these samples are comparable to the magnetite rich samples, it implies that some iron is occurring as haematite. This has implications for Stellar's geological model, which is presently styled on the Middleback Range iron district.

In the Middleback Range, ore grade haematite development exists in close proximity to magnetite (both as magnetite carbonate and magnetite silicate and where a new \$325m magnetite development project is underway). An opportunity for the development of high-grade haematite in the vicinity of the Coolybring magnetic zone is supported by these results.

## **Base Metal Mineralisation**

Significant base metal mineralisation levels were also returned over narrow intervals within both WIL04 and WIL05, associated with more sulphide rich zones within magnetite and indicative of a mineralized hydrothermal event over-printing earlier magnetite development. In WIL04 a single interval of 2 metres returned 760ppb Au (or 0.7g/t Au), 300ppm Cu, 0.33% Pb and 0.21% Zn from 112m to 114m.

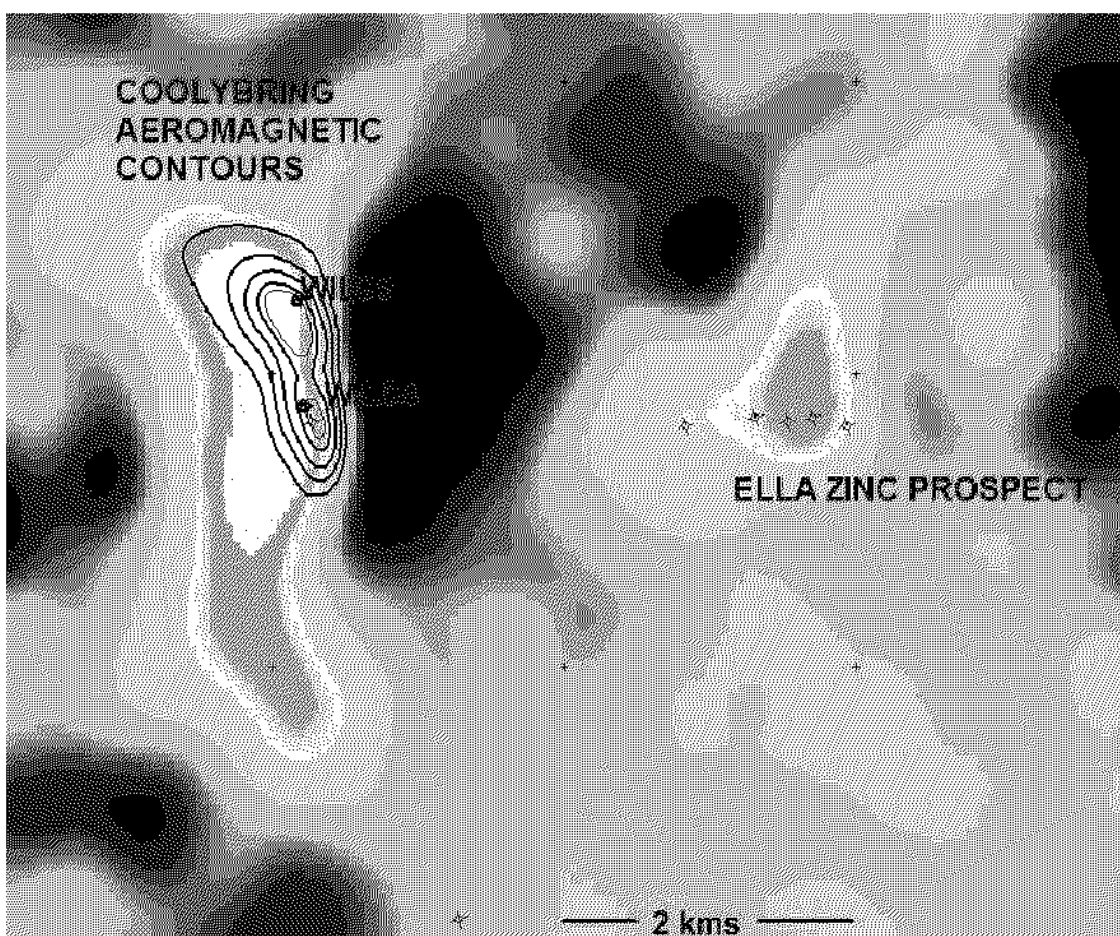
In hole WIL05, two intervals returned similar levels - 4m @ 60ppb Au and 0.44%Pb from 118m to 122m and 2m @ 790ppb Au, 0.13% Pb and 0.24% Zn (from 144m to 146m). These results require further follow up work.

## Exploration Opportunities

Drilling results from the Coolybring magnetic anomaly, coupled with ongoing regional survey, work are showing similarities between the Tarcoola District and the Middleback Range iron ore region on the northern Eyre Peninsula. Significant base metal mineralisation also occurs in the Eyre Peninsula region in association with pre-cursor magnetic BIF horizons (e.g. the Menninnie Dam prospect held by Terramin Australia Ltd).

These exploration opportunities are likely to present as areas of local elevated gravity response in close proximity to magnetic anomalies. Stellar has acquired detailed airborne gravity across the Tarcoola region, using the proprietary Falcon ® system, and the Board is now reviewing the detailed gravity data for both potential haematite and base metal targets, with a view to the next round of drill testing. Further drill evaluation of the Coolybring magnetite is being considered.

The image below shows Vertical Gravity Gradient data (white-high, blue-low) with drill hole locations and aeromagnetic contours superimposed. Note that the strongest magnetic response and peak gravity response are not coincident, suggesting the existence of a haematite-rich zone immediately west of the magnetic zone.



## Conclusion

The Coolybring magnetic anomaly has substantial dimensions and is shown – from only these two drill holes – to contain potentially ore grade magnetite. The very preliminary testwork is showing that metallurgical characteristics vary somewhat and are suggestive of different styles of magnetite development with different beneficiation characteristics. Further drilling is required to evaluate the distribution of iron mineralisation types, in conjunction with metallurgical testwork.

**Importantly, these results also highlight the potential for the development of haematite iron in addition to magnetite. Drill testing of gravity targets adjacent to the main aeromagnetic features is now under priority consideration to assess this potential.**

These gravity targets may also be prospective for **base metal mineralisation** associated with late-stage hydrothermal alteration and their assessment is a priority for continued exploration in the Tarcoola region.

*The drill results reported herein insofar as they relate to mineralization are based on information compiled by Mr. C.G. Anderson (Fellow of the Australasian Institute of Mining and Metallurgy) who is a full time employee of the Company with more than twenty years experience in the field of activity being reported. Mr. Anderson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears*

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