ASX ANNOUNCEMENT

Positive study confirms new start-up case can significantly reduce capital costs at Hawsons

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Highlights

- **Detailed study confirms a robust "go forward" case that matches existing infrastructure**
- **Existing infrastructure provides significant advantages for Hawsons compared to other projects**
  - **Significantly lower capital costs**
  - **Shorter project development timeframes**
- **Targeted free on board (FOB) costs to be very competitive reflecting low power demand, low strip ratio and cheap power from the eastern states grid**
- **Joint venture (JV) partners to plan next phase of development with confidence and direction**

Carpentaria Exploration (ASX:CAP) is pleased to announce positive results were received from a detailed study using a smaller start-up case that matches existing infrastructure at the Company's flagship Hawsons magnetite iron project, 60km south west of Broken Hill, New South Wales (Figure 1). The project is held by a joint venture (JV) between Carpentaria Exploration 60% and Pure Metals Pty Ltd 40%.

The study, completed by GHD, has demonstrated that by matching project size to the existing spare port, rail and power infrastructure capacity, significant savings in capital costs with only small increases in operating costs could be achieved compared to larger scale cases studied previously.

Managing Director Quentin Hill said, "This is a very exciting result; we know a large scale case has great potential. However, given current very competitive capital markets, to be able to demonstrate the potential of a smaller, cheaper option that matches available infrastructure and still allows for future scale up is a real boost for the project. It gives us increased confidence to continue with the feasibility works."

"Matching the existing infrastructure not only allows for much lower capital costs, it also allows for much faster development timeframes, a major advantage over many similar projects that rely on permitting and construction of extensive, major capital cost, conceptual infrastructure," he added.

Based on the results of this infrastructure matching case, the JV will be aiming to exploit the soft rock, cheaper grid power and low strip ratio to deliver FOB prices lower than comparable South Australian magnetite projects.

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In addition, the use of existing infrastructure allows the JV partners to aim for capital costs just over half of the larger scale study, which assumed third party infrastructure provision, and similar to hematite projects rather than other comparable magnetite projects. This would be very competitive in terms of capital service and the result is broadly in line with the Company's expectations.

The result gives the Company increased confidence and the JV partners are continuing with value adding work based on this "go-forward" case and look forward to establishing the project's economic credentials and unlocking it's value.

It is important to note that due to the recent adoption of JORC 2012 and new complementary ASX listing rules, there is now no doubt that when reporting studies based entirely on Inferred Resources, such as this one, companies are not permitted to include any forecast financial information such as production targets, forecast operating costs and capital costs.

Carpentaria will need to upgrade the confidence level of the resource to at least Indicated Resource before making those statements and this will be done as part of the ongoing feasibility study. The Company is not implying economic viability based on these results.

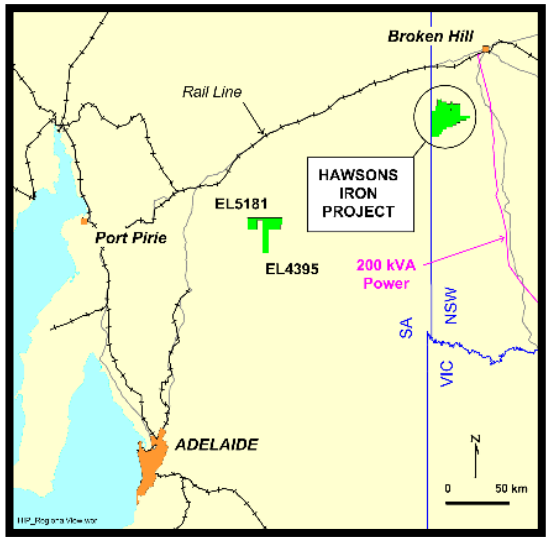

Figure 1. Location of Hawsons Iron Project

Study Details

The new study evaluates a smaller start up model that utilises the existing infrastructure and also other improvements including the simplification of the processing flow sheet and reduced water requirements, which has contributed to very competitive cost targets for the project. Details are listed below.

- Over 15,000m of drilling
- Inferred Resource estimate by H&S Consultants
- Assumed initial 20 year project life
- Earlier larger scale study by GHD, audited by Behre Dolbear Australia Pty Ltd
- Detailed plant, slurry pipeline, mine and other ancillary design by GHD
- Small scale pilot mineral processing plant test work by HRLTesting
- Other mineral processing test work from CSIRO, Metso, ALS, JK Tech
- Thickening and hydro-separation test work by Outotec
- Ground water supply modelling by Geo-Eng Consultants
- Consultation with Flinders Ports and Genesee and Wyoming Australia regarding concentrate transport
- Consultation with various potential equipment suppliers and operators

Project Development Concept

The project is located 60km south west of Broken Hill and includes i) an Inferred magnetite Resource of 1.4Bt at a davis tube recovery (DTR) of 15.5% (12% cut off) containing 220 million tonnes of high grade (69.9% Fe) concentrate and ii) an exploration target[1] of 6-11Bt at 14-17% DTR. The term "target" should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2012), and therefore the terms have not been used in this context. It is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Mining Reserve.

The Inferred Resource is supported by 15,000m of drilling and detailed ground and airborne magnetic surveys, while the exploration target is supported by 5,000 m of drilling and an airborne magnetic survey.

Key advantages that provide a competitive edge for the project are i) the project's location is exceptional, with up to 13 Mtpa spare existing power, water, rail and port infrastructure capacity available; and ii) the project has a

comparatively low power requirement, (a major cost for magnetite producers), because of the unique characteristic of the rock.

Mining

It is proposed that mining will initially be via conventional truck and shovel, switching to in-pit crush and convey consistent with a larger scale study. The large volume and shape of the mineralisation provides potential to use these low cost bulk mining methods.

A very low strip ratio of 0.47 waste to ore resulted from this study. This strip ratio is slightly higher than the larger scale study, which increases the comparative potential mining cost per tonne (Figure 2).

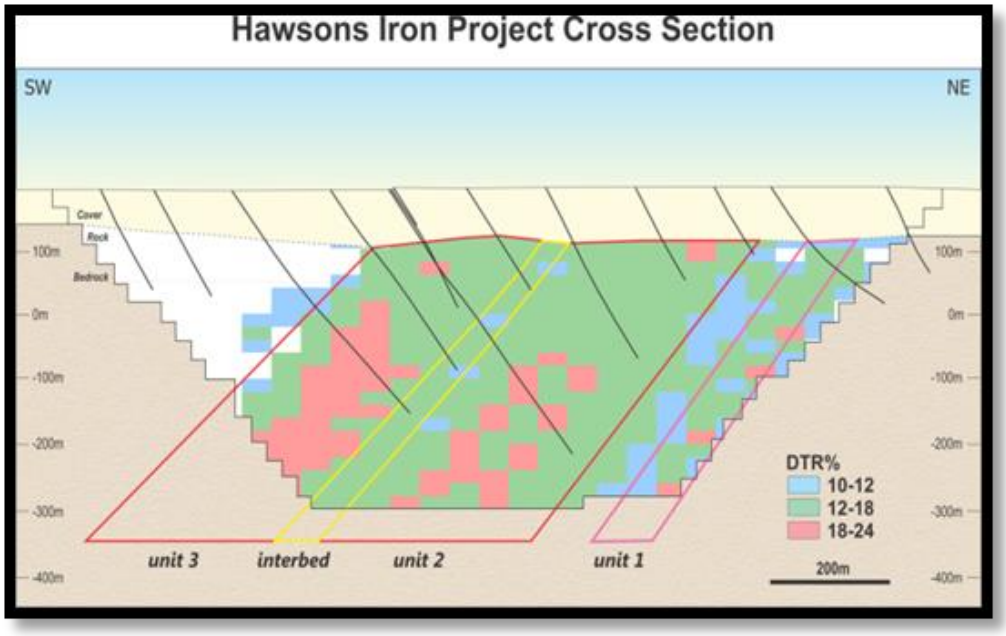

Figure 2. Hawsons cross section with conceptual pit profile and modelled DTR grades

Mineral Processing

A simple flow sheet based on pilot ball mill testing, magnetic and hydro-separator test work reported in March and June 2013 is used in the study (Figure 3). This has dramatically decreased the targeted processing costs, removing several high cost capital items that were included in the larger scale study.

Therefore, the Company is now aiming for a plant capital cost of better than half of the larger scale study, with incremental improvements in targeted processing costs based on a lower power demand.

This excellent result highlights one of the project's key advantages. The bond work index at Hawsons, a measure of the energy required to grind the material to a predetermined grain size, is 6-7Kwh/t, a quarter of typical magnetite deposits, which facilitates much lower processing costs. This is because of the unique character of the Hawsons material, in that it breaks along grain boundaries not through the middle of hard crystals

The improved flow sheet was the subject of a detailed announcement on 29 November 2013.

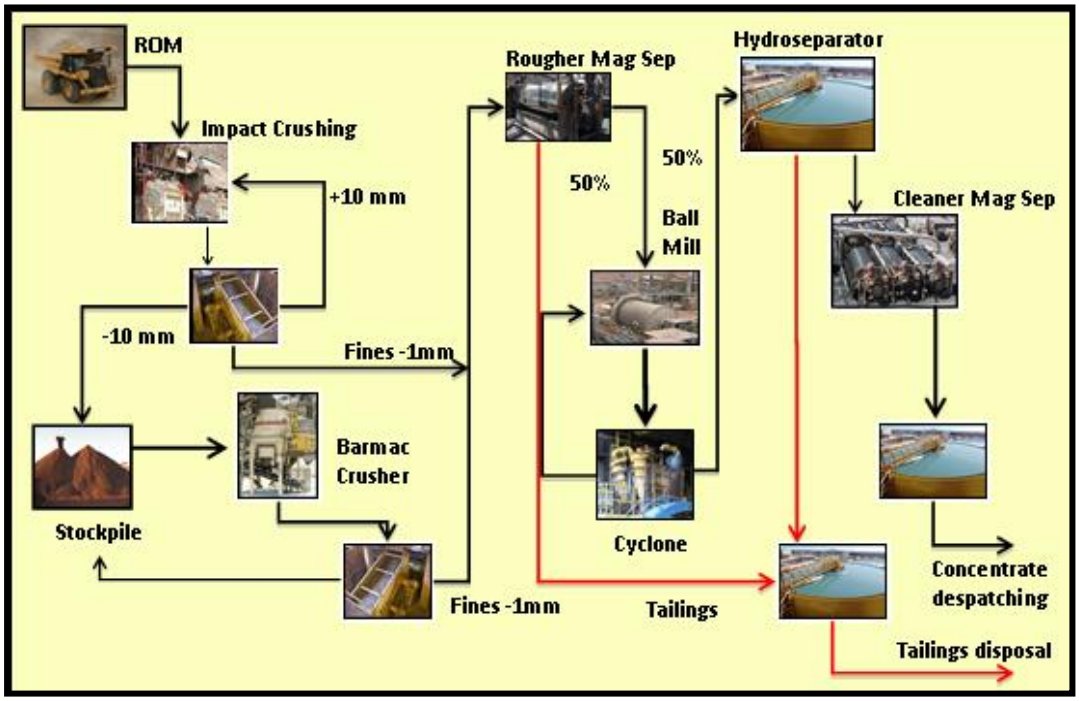

Figure 3. Simplified process flow sheet, Hawsons Iron Project

Product transport

This smaller scale study uses slurry pipeline transport of the concentrate 50km to the existing rail line, where it is dewatered, loaded onto rail wagons and transported 360km to Port Pirie. Carpentaria has established that the rail line has existing spare capacity of up to 13 Mtpa (Figures 1 and 4).

The concentrate would be stockpiled at a new stockpile facility at Port Pirie before being transported via conveyor to loading.

Concentrate would then be transported using self-propelled barges into the Spencer Gulf, where it would be loaded into Cape-sized bulk cargo ships for export.

The new study includes capital for the slurry pipeline and assumes that existing rail and port operators will supply the other modest transport requirements. Carpentaria has existing memoranda of understanding with Flinders Ports, owners of the port at Port Pirie, and Genesee and Wyoming Australia, an existing rail operator.

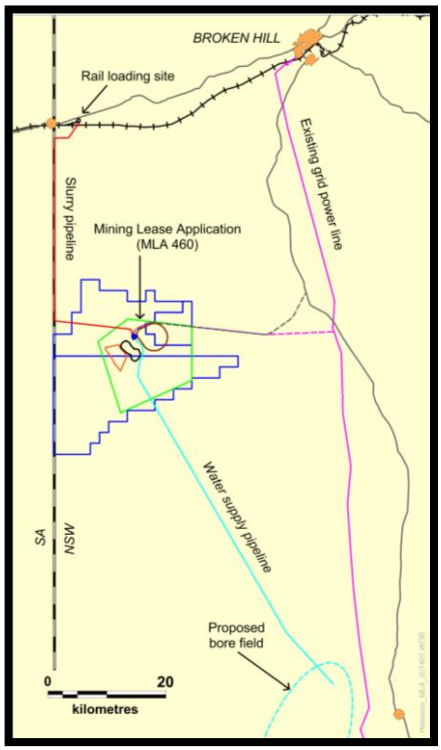

Figure 4. Hawsons location plan and proposed and existing site infrastructure

Power

The new study assumes electricity is supplied by the eastern states power grid via a new 35km transmission spur to an existing 220kV power line (Figure 4).

The new study reported that the main power consumers are the processing plant (44%) and the mining operations because of the use of in-pit crush and convey (38%), with water delivery, slurry transport and desalination making up the remainder.

The total power usage is within the reported spare capacity of the existing transmission line, and the joint venture is currently in consultation with Transgrid, the owners of the line.

Power usage is a major cost in magnetite production. Hawsons, at an estimated 9-12 MW per tonne of annual concentrate capacity, compares favourably with existing magnetite operations in Australia, where 15-19 MW per annual tonne of capacity has been reported. Additionally, wholesale electricity costs for grid connected projects in eastern Australia are likely to be materially lower than those in Western Australia and those that are reliant on self-generated power.

Project Water Supply

It is assumed that process and transport water is sourced from a deep saline aquifer located 80km to the south of the deposit, which would be transported via an underground pipeline with approximately one third requiring desalination. Recently announced preliminary results from exploratory water bore drilling have identified the presence of thick aquifers validating prior modelling that indicated more than sufficient water for the project would be available. These preliminary results significantly increase the confidence that process water will be available for the project (ASX Announcement 29 November, 2013) (Figure 4).

Workforce

The workforce will be sourced from, and accommodated in, the large mining centre of Broken Hill, where existing housing and associated infrastructure are available less than one hour's drive from site.

Permitting

Carpentaria received requirements for the environmental impact study (EIS) from the NSW government in November 2012, and environmental work was accelerated. A mining lease application was lodged in October 2013. The EIS must be accepted before development consent can be given and a mining lease granted.

The EIS is in progress and is expected to be submitted for assessment early 2015. The EIS is still being completed on the basis of a 20 Mtpa production case, consistent with the project Preliminary Environmental Assessment and Development Application submitted to the New South Wales government, which will provide capacity for future scale-ups.

Product Marketing

Small scale pilot plant test work has shown that a very high grade, low impurity magnetite iron ore concentrate suitable for iron ore pellet feed can be produced from the Hawsons mineralisation. The potential quality of the concentrate is shown in Table 3.

Potential product specifications			
69.5% Fe	3.1% SiO_2	0.001% P_2O_5	0.22% Al_2O_3

Table 3.Potential product specification based on small scale pilot scale testing

The potential product is premium quality and can be blended with less pure, lower iron products. The premium quality facilitates consistent demand and a price of 11% more than the 62% index price.

Conclusion and Next Steps

The new study results confirm that a smaller, cheaper start-up case that utilises existing infrastructure at Hawsons has potential to be a robust project with very competitive capital costs due to proximity to existing infrastructure. In addition, there is also potential for very competitive FOB costs because of the low strip ratio, low power demand and proximity to the eastern states power grid.

Following delivery of this study, the JV will continue with increased confidence the ongoing feasibility study works and plan additional development work based on this infrastructure matching "go-forward" start-up case. Work programs are designed to maximise value, minimise risk and maintain acceptable development timeframes.

Managing Director Quentin Hill said, "This study positions Hawsons very well in the market. Previously Hawsons studied a larger scale case. However, this smaller, cheaper option is better suited to the current financial markets and utilises existing infrastructure allowing for potentially faster development."

"Whilst it is important to note that the Company is not implying economic viability, further development on this infrastructure matching case has the potential to unlock great shareholder value," he added.

For further information please contact:

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The information in this announcement that relates to Exploration Results, Exploration Targets and Resources is based on information compiled by Q.S. Hill, who is a Member of the Australian Institute of Geoscientists and has had sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Q.S. Hill is an employee of Carpentaria and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.