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CARPENTARIA EXPLORATION LIMITED

www.carpentariaex.net.au

## Bulk tests confirm Hawsons product matches world's best

### Highlights

- Bulk upgrade test shows Hawsons Iron Project is capable of producing over 70% Fe (iron) and below 2% silica at commercial scale, at low processing costs
- Results confirm Hawsons as a potential new independent supplier for direct reduction (DR) and premium blast furnace (BF) markets in Asia and the Middle East
- Results also supportive of current product marketing programme, with feedback indicating major participants in DR and BF markets seeking high quality iron products to boost productivity
- Bulk samples to be sent to China Iron and Steel Research Institute Group (CISRI) for pelletising and steel making performance tests

Emerging iron producer Carpentaria Exploration Limited (ASX:CAP) announced today the results of a bulk scale upgrade of concentrate that confirm the Company's flagship Hawsons Iron Project as a potential new independent supplier to the direct reduction and premium blast furnace markets.

Bulk scale test work has produced over 500kg of pellet feed at >70%Fe and <2% silica without complex processing, demonstrating the potential to achieve top quality "Supergrade" results at a commercial scale in line with the Company's earlier cost estimates.

Located near Broken Hill, NSW, the Hawsons project has access to existing rail, road, port and power infrastructure, with its unique soft ore allowing for simple liberation of a premium magnetite product without expensive processing methods.

Managing Director Quentin Hill said: "These new results set the Hawsons project apart globally, they show how it can produce the world's highest quality traded ore at competitive costs. It is very rare that projects can reach this quality and those few that can, require complex processing and often increased iron losses."


The results support the current product marketing programme which has identified that Supergrade iron-ore products, especially from new suppliers, are in strong demand in all regional markets including the Middle East, China and other Asian countries because they allow steel works to increase productivity and also serve to balance costly, rising impurity levels in other ores.


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Importantly, end users are responsive to genuine new iron-ore producers in the highest quality markets to promote competition and diversification of supply.

Mr Hill said early feedback from market participants on the Hawsons product quality, recent results and market dynamics had been very encouraging. “The product’s quality should lead to significant competition for offtake as the project progresses, and this will provide support for the project’s ultimate development,” he said.

A bulk sample of the current forecast shipping ore (70.3% Fe and 1.99% silica) is being sent to the China Iron and Steel Research Institute (CISRI) for a series of pelletising and steel making performance tests, including product performance when blended with current Chinese ores. These tests are expected to take three months to complete.

In addition, representative samples of the forecast shipping ore are being sent to other Asian and Middle Eastern countries following customer requests, reflecting the high level of interest in the Hawsons product.

### Bulk Upgrade Test Work

The bulk scale upgrade test work was designed based on lab scale upgrade results (refer ASX announcement 20 April 2015) and carried out by the ALS Iron Ore Technical Centre in Perth.

A bulk concentrate (500kg) was produced demonstrating how the project can produce DR grade feed at commercial scale without chemicals, using gravity and magnets.

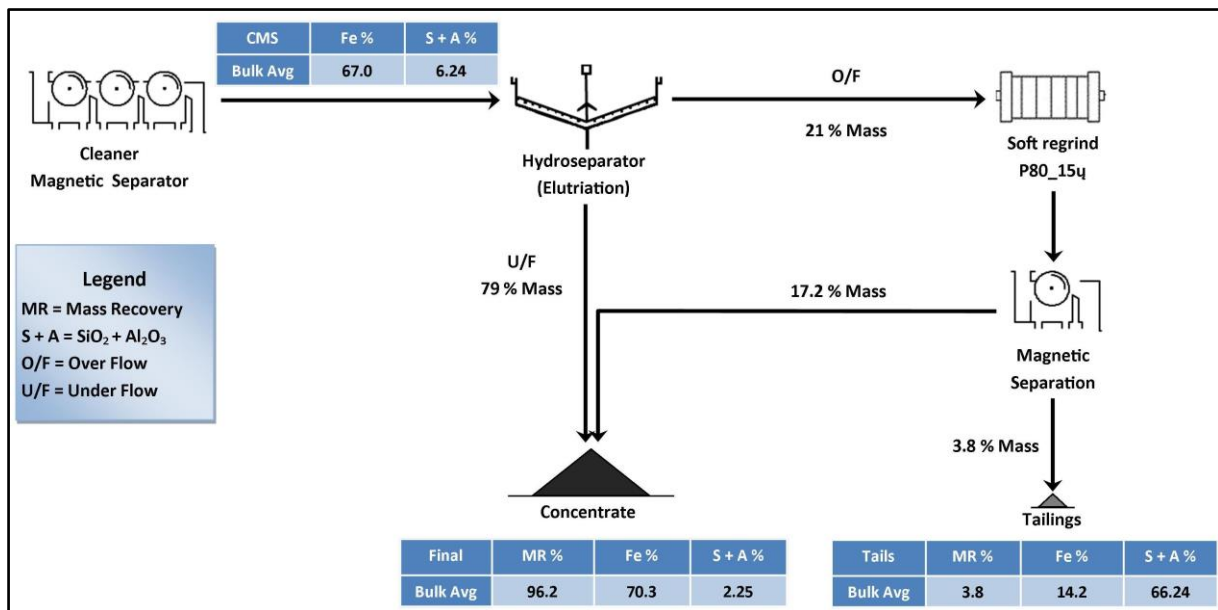


Figure 1. Possible high grade cleaning circuit based on the test work results after rougher magnetic separation and grinding.

Hawsons Technical Director Ray Koenig said the results showed the benefit of a flexible circuit where the velocity of elutriation current controls the amount of material entering the soft regrind, and ultimately, the grade produced. In addition, magnetic losses were very small due to the near full liberation of magnetite.

Based on this test work, earlier processing cost estimates are not expected to change materially, and optimisation of the processing flow sheet will be undertaken following customer feedback on quality during the feasibility study. The results also confirmed that the product will meet the higher value DR market specifications (Table 1).

Table 1 Hawson’s potential product vs typical DR Pellet specification

	Hawsons magnetite pellet feed	Hawsons calcined**	Typical DR pellet specification*
Fe%	70.3	68.3	67.00
SiO <sub>2</sub> +Al <sub>2</sub> O <sub>3</sub> %	2.28	2.21	3.0
SiO <sub>2</sub>	1.99	1.93	na
Al <sub>2</sub> O <sub>3</sub> %	0.29	0.28	na
S %	0.001	0.001	0.008
P %	0.007	0.007	0.030
TiO <sub>2</sub> %	0.11	0.11	0.15

\*P8 The Midrex Process by Midrex 2015.

\*\* final grades when the magnetite is reduced to hematite during pelletising based on an LOI of -3.0%

Carpentaria’s Mr Hill said: “These latest results have reaffirmed Hawsons’ potential to become a long term, low cost source of valuable premium iron-ore products. With a super grade, super location and super competitive costs, Hawsons continues to deliver the results required to be competitive in the changed iron-ore market and is well placed to attract further investment as we progress the bankable feasibility study.”

**About Hawsons Iron Project**

The Hawsons Iron Project joint venture (Carpentaria 62%, Pure Metals P/L 38%) is currently undertaking a bankable feasibility study based on the low cost, long term supply of a high grade, ultra-low impurity iron concentrate to a growing premium iron market.

The project has a clear technical and permitting pathway. It is located 60km southwest of Broken Hill, an ideal position for mining operations with existing power, rail and port infrastructure available for a conceptual 10 Mtpa start-up operation. A mining lease application has been lodged.

The project’s soft rock is different from traditional hard rock magnetite and allows a very different approach to the typical magnetite mining and processing challenges (both technical and cost-related). The soft rock enables simple liberation of a premium magnetite product without complex and expensive processing methods.

The Company is targeting the growing premium high grade product market, which is separate to the bulk fines market, and believes its targeted cost structure is very competitive and profitable at consensus long-term price forecasts for this sector.

The project is underpinned by Inferred and Indicated Resources totalling 1.8 billion tonnes at 15% mass recovery for 263 million tonnes of concentrate grading at 69.7% Fe. The Company confirms that it is not aware of any new data that materially affects this resource statement since the first public announcement and that all material assumptions and technical parameters underpinning the resource estimates continue to apply and have not materially changed since first reported (ASX Announcement 26 March 2014 and Table 2).

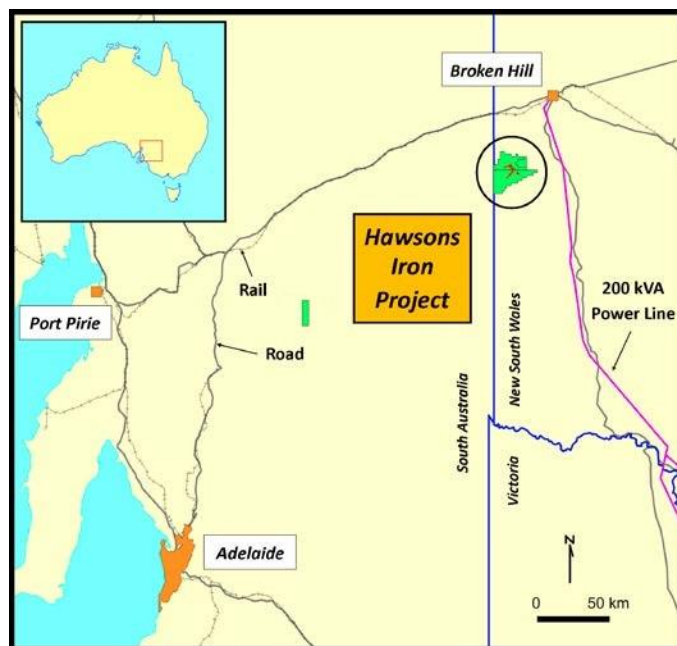


Figure 2 Location of Hawsons Iron Project and Port Pirie

Category	Billion Tonnes (cut off 12% mass recovery)	Magnetite mass recovery (%)	concentrate grades					Contained Concentrate million tonnes
			Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI%	
Inferred	1.55	14.7	69.6	2.9	0.20	0.004	-3.0	228
Indicated	0.22	16.2	69.8	2.8	0.20	0.005	-3.0	35
<b>Total</b>	<b>1.77</b>	<b>14.9</b>	<b>69.7</b>	<b>2.9</b>	<b>0.20</b>	<b>0.004</b>	<b>-3.0</b>	<b>263</b>

Table 2 JORC compliant resources- Hawsons Iron Project

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The information in this report that relates to Exploration Results, Exploration Targets and Resources is based on information evaluated by Mr Q.S. Hill who is a member of the Australian Institute of Geoscientists (MAIG) and who has sufficient experience 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 (the "JORC Code"). Mr Hill is a Director of Carpentaria Exploration Ltd and he consents to the inclusion in the report of the Exploration Results in the form and context in which they appear.