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ASX ANNOUNCEMENT

Hawsons set sights on high value processed iron products after successful test work results

Highlights

- Hawsons test work shows project can produce highest quality pellet feed at competitive costs, satisfying premium end of processed iron market
- Results support cost targets being within first quartile of global processed iron costs
- Hawsons competitive advantages magnified at premium end of market
- Processing work boosts Hawsons' investment attractiveness, with all project elements set for bankable feasibility study (BFS)

Emerging iron producer Carpentaria Exploration Limited (ASX:CAP) announced today test work results for the Hawsons Iron Project which demonstrate the project's potential to produce highest quality pellet feed at very competitive costs, satisfying the premium end of the processed iron market.

High value processed iron products such as high grade pellet feed and pellets are a significant and irreplaceable component of modern and efficient steel making. The pellet feed and pellet market differs to the unprocessed iron ore fines and lump market, attracting significant premiums to reflect the value of such products to the steelmaker.

Importantly, the latest results support the Company's cost targets as being within the first quartile of global processed iron costs (Figure 1).

Located just 60 kilometres from Broken Hill, Hawsons is a world-class ore body with a unique soft ore and favourable access to existing rail, road, port and power infrastructure, offering the potential to become a long lasting source of premium iron.

Table 1 Hawsons Iron Project flotation upgrade test work results

Mass Recovery (%)	Fe (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	SiO ₂ + Al ₂ O ₃ (%)
85.0	71.0	0.46	0.14	0.60

(Refer Tables 2-3 for further details)

Commenting on the results, Hawsons Technical Director and experienced magnetite processor Ray Koenig, said: "The latest test work yet again demonstrates that the Hawsons material is unique, with unusually low energy usage returned repeatedly in grinding test work, and that a product of unusually high purity can be produced."

Carpentaria's Managing Director, Quentin Hill added: "High value processed iron products are generally expensive to produce and are currently sourced from Brazil, Canada and northern Europe. In contrast, Hawsons has significant cost advantages due to its unique characteristics, as well as being located closer to customers in China, South-East Asia, India and the Middle East.

"Combined with the product's relative scarcity and growing demand from steelmakers, these features further boost the attractiveness of the Hawsons project to investors."

Carpentaria is gathering market feedback from customers concerning the final product mix, including the potential for producing Direction Reduction (DR) pellet and pellet feed (<2.00% SiO₂ and Al₂O₃ combined) and/or high grade blast furnace pellet and pellet feed.

These results largely complete the current phase of highly successful processing test work at the ALS Iron Ore Technical Centre in Perth.

Test Work Results

The test work program at the ALS Iron Ore Technical Centre, Perth has included a pilot plant program testing magnetic separation, ball milling and elutriation (refer ASX announcement, 22 October 2014).

A recently completed product upgrade program investigated recovery and high grade potential using flotation and higher velocity elutriation (water washing) and subsequent regrinding of the upgrading rejects. Bulk sample test work parameters were identified by initial sighter tests on the product from the earlier pilot plant program.

The results are very encouraging and demonstrate the unique benefits of the Hawsons material. Key outcomes of the test work were:

- Product upgrading using flotation and elutriation can both produce a range of product quality including high value DR grade (Tables 2 and 3);
- Regrinding of the rejects demonstrated that upgrading will not affect recoveries, as over 60-86% of the reject is able to be recovered as >68% Fe concentrate and over 98% of magnetite recovery is achievable through the circuit (Table 4).



Elutriation Column with Hawsons material, Iron Ore Technical Centre, WA

The Company expects the test work will support improvement in the project economics as the increased revenue from a higher grade product is more than the expected small increase in costs.

"The regrind mass would be fed back into the ball mill circuit adding between 3-4% of total milling load, providing negligible impact on milling costs and the elutriation costs will be within existing cost targets. Flotation is expected not to materially change the cost target range of USD39-47/t concentrate," Koenig said.

The final circuit and costing will be determined once a product mix has been finalised, based on feedback from the marketing program. However the results clearly demonstrate a number of options are available to produce highest quality iron products.

Table 2 ELUTRIATION TESTWORK RESULTS						
	Wash Rate (L/min)	Mass Recovery (%)	Fe (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	SiO ₂ + Al ₂ O ₃ (%)
Bulk sample 1	9	98.2	70.0	2.03	0.29	2.32
Bulk sample 1	11	90.7	70.0	1.82	0.28	2.10
Bulk sample 1	13	80.5	70.2	1.61	0.23	1.84
Bulk sample 2	9	96.1	69.7	2.35	0.32	2.67
Bulk sample 2	11	90.7	69.7	2.37	0.31	2.68
Bulk sample 2	13	81.3	69.9	2.11	0.28	2.39

Table 3 FLOTATION TESTWORK RESULTS					
	Mass Recovery (%)	Fe (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	SiO ₂ + Al ₂ O ₃ (%)
Bulk sample 1	85.0	71.0	0.46	0.14	0.60
Bulk sample 1	90.9	70.5	0.87	0.20	1.07
Bulk sample 1	95.0	70.0	1.50	0.26	1.76
Bulk sample 2	86.3	70.4	0.88	0.19	1.07
Bulk sample 2	89.4	70.1	1.16	0.22	1.38
Bulk sample 2	94.0	69.5	1.90	0.28	2.18

Table 4 DAVIS TUBE WASH TESTWORK RESULTS ON REGRIND REJECTS		
	Mass Recovery (%)	Fe (%)
Bulk sample 1 Flotation	61.1	67.9
Bulk sample 2 Flotation	64.6	68.7
Bulk Sample 1 Elutriation	79.0	70.8
Bulk Sample 2 Elutriation	86.0	71.5

High value processed iron product costs

Production of high value processed iron products is generally high cost, however Hawsons has a number of competitive advantages allowing a cost target within the first quartile. The pellet production cost curve from *Metal Bulletin Research* (Figure 1) clearly illustrates the Hawsons cost advantages.

Components of the processing and pelletising costs

Grinding

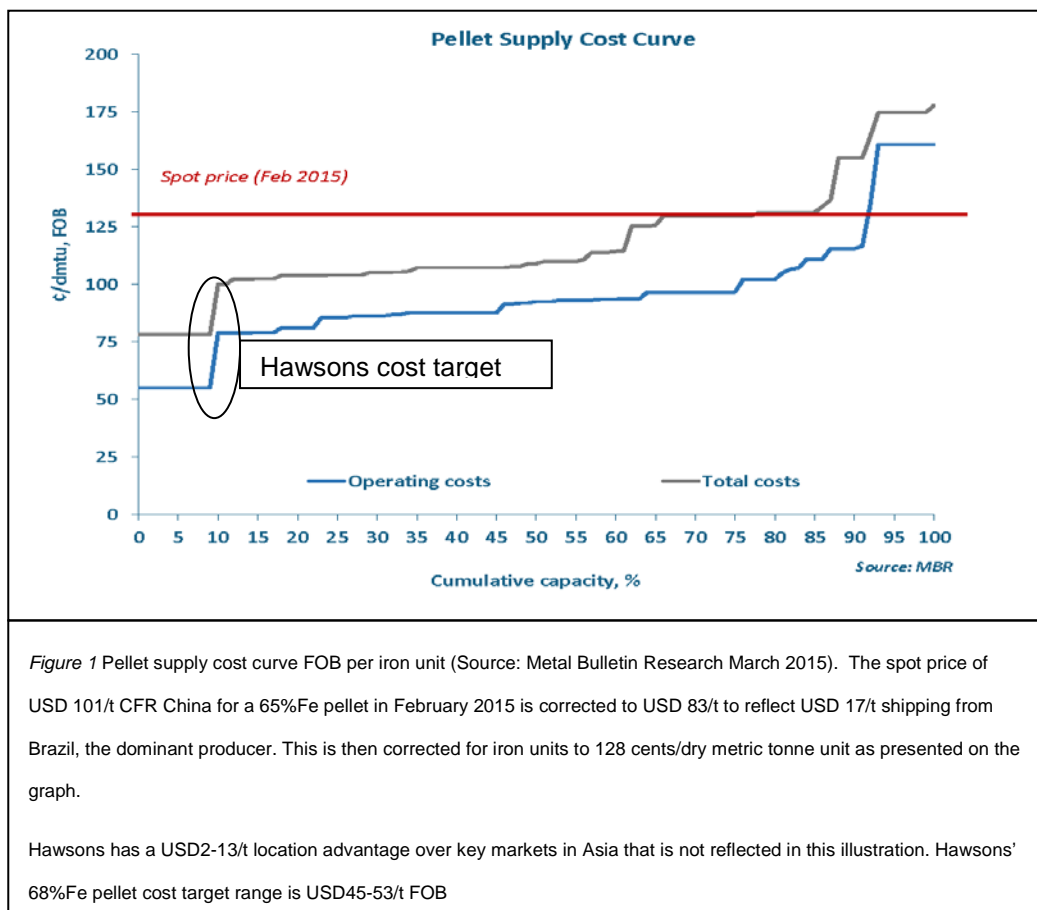
Hawsons has repeated test work results demonstrating its unusually low grinding energy and costs. Typical iron ores use large amounts of energy, many times more than at Hawsons, to reduce the material to the required grind size of approximately 50 microns.

Upgrading

Hawsons geology allows for exceptional quality as the pure magnetite is easily separated from gangue minerals. Hematite ores, being non-magnetic, are unable to be easily upgraded meaning very high grade products from hematite are rare. Magnetite ores are strongly magnetic and are upgradeable and Brazilian itabirite ores are weakly magnetic and also upgradeable.

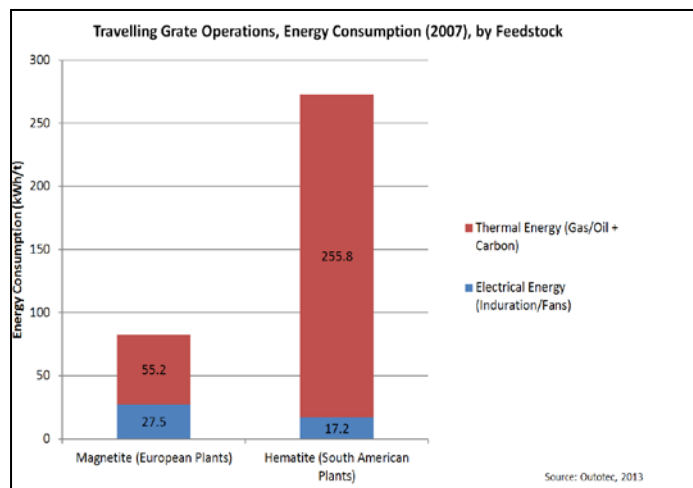
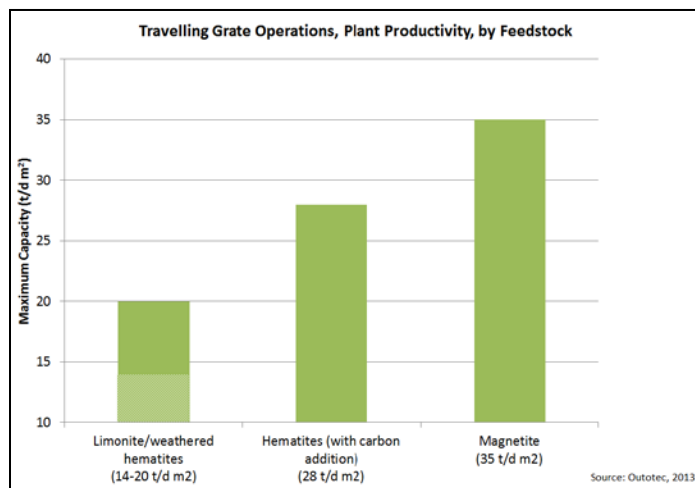
In all cases mineral characteristics determine the final quality able to be achieved. It is rare that products near to pure (>69% Fe Hematite/Itabarite, or >71.5% Fe Magnetite) can be produced economically from a given ore.

Grinding and upgrading costs are typically between USD15-35/t, but at Hawsons engineering estimates based on repeated test work are less than USD8/t product. Hawsons is also typically higher grade than average products, adding further to the price differential, conservatively around USD3 per iron unit (1%Fe) per tonne.



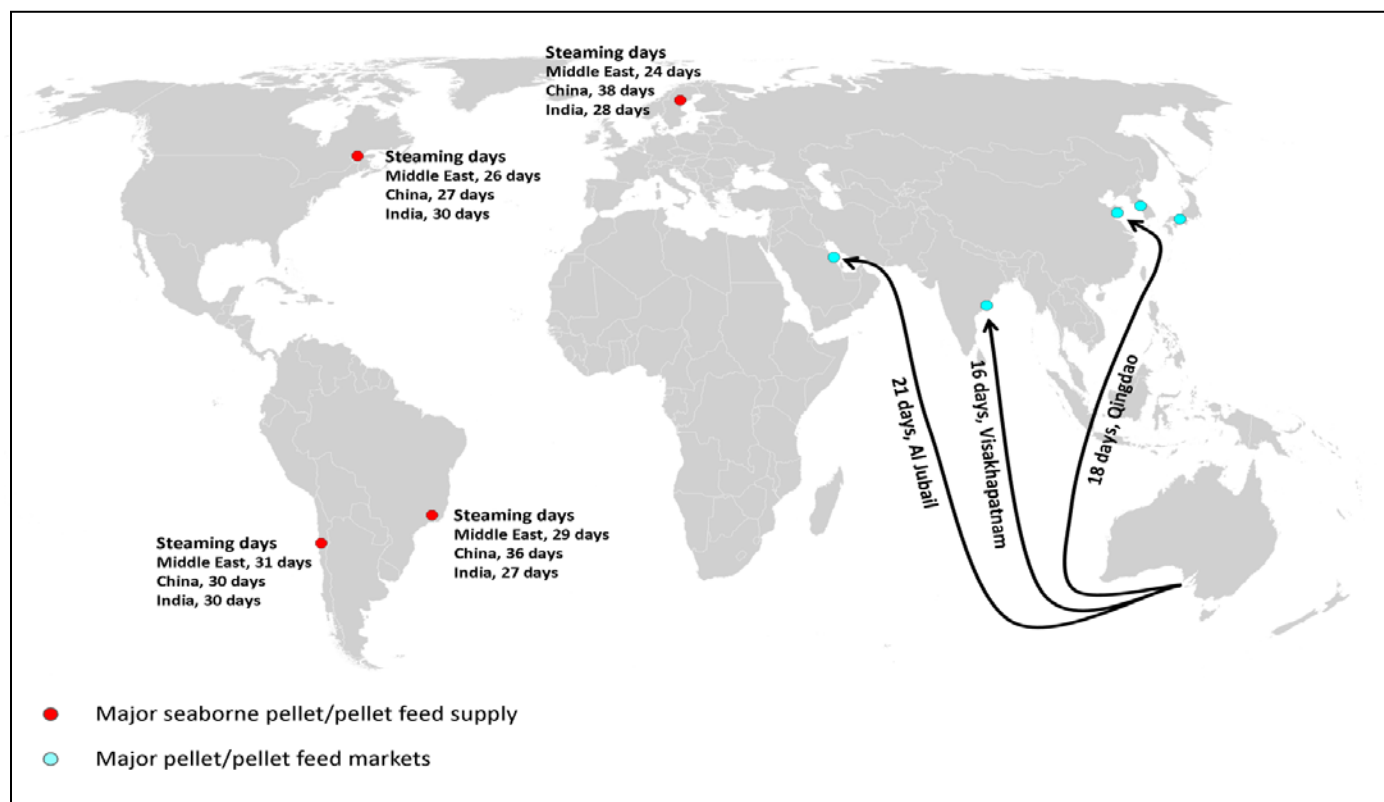
Pelletising

Data from pellet plant manufacturer Outotec shows that pelletising hematite and itabarite consumes about three times the energy as pelletising magnetite. At current coal prices this converts to over USD3/t in operating costs. In addition, productivity per square metre is between 75% and 150% greater for magnetite vs weathered non-magnetite ores providing a significantly greater return on capital.



Sea freight

Traded pellets and feed for traded pellets is produced primarily in Brazil, Canada and northern Europe (over 75%).
Hawsons is over 18 days closer to key markets in China and 4-14 days closer to other key markets resulting in
resulting in 2-13/t benefits over the competitors depending on fuel prices and shipping rates.



Market

In China, domestic pellet feed supply for blast furnaces is increasingly in short supply as high cost domestic suppliers are forced to close. The Chinese market has over 100mtpa of unused pelletising capacity and significant productivity and pollution benefits can be realised using pellets in blast furnaces.

It can be assumed that the productivity benefits of high grade pellets to blast furnace steel mills are largely reflected in the pellet feed and pellet premiums, currently at approximately USD20 and USD35/t respectively.

The electric arc furnace steel makers in India, Middle East and other South-East Asian countries require consistent DRI feed to balance mixed scrap input. DRI plants source iron from DR pellet feed.

Significant pellet producers from Canada and northern Europe representing just under a quarter of the traded pellet market are struggling for profitability, starkly illustrating the high cost of producing high quality pellet feed and pellets and Hawsons' comparative advantages.

Due to the high production costs of high value processed iron products and that only some deposits can be upgraded, there is relative scarcity of product. Hawsons therefore has the potential to become a new, low cost, source of supply of processed iron products. These products are an irreplaceable component of steel making, and providing increased diversification of supply for buyers increases the project's investment attractiveness.

"These latest test work results add to recent port and power studies showing the Hawsons project has significant advantages, with a clear and achievable project pathway. Medium term market dynamics remain favourable for new low cost entrants targeting the growing premium pellet and pellet feed market, with the potential for a significant price premium," Mr Hill said.

"Hawsons is now well placed to attract further investment for the bankable feasibility study, which is expected to reaffirm the project's potential as a long term and low cost source of valuable premium iron products."

About Hawsons Iron Project

The Hawsons Iron Project joint venture (Carpentaria 60%, Pure Metals P/L 40%) 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 that 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 1).

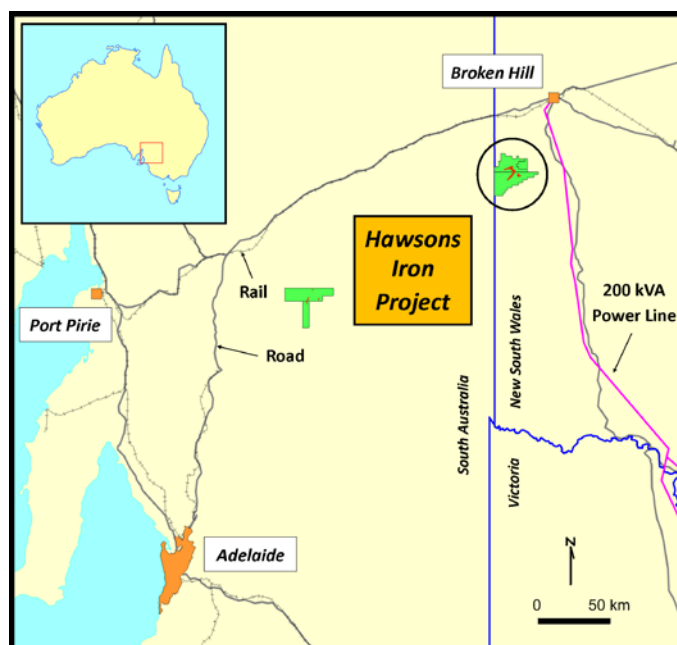


Figure 5 Location of Hawsons Iron Project and Port Pirie

Category	Billion Tonnes (cut off 12% mass recovery)	Magnetite mass recovery (%)	concentrate grades					Contained Concentrate million tonnes
			Fe%	SiO ₂ %	Al ₂ O ₃ %	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
Total	1.77	14.9	69.7	2.9	0.20	0.004	-3.0	263

Table 1 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.