



# CAPUNEARTHED

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## HAWSONS RESOURCE TRIPLES: NOW FOR THE PFS

**Good things come in threes and it's certainly the case for Carpentaria Exploration, after recent successful drilling delivered a resource upgrade for our Hawsons Iron Project, soon to be followed by a new prefeasibility study (PFS).**

A drilling programme conducted at the Broken Hill project in late 2016 resulted in the Indicated Resource being expanded by 3.6 times to 810 million tonnes (Mt) at a 14.6% Davis Tube Recovery (DTR), for 119Mt of concentrate at 69.9% Fe (iron).\*

The total resource also increased by 6% to nearly 2.4 billion tonnes at 14.1% DTR for 336Mt of concentrate\*.

Significantly, 96% of the resource converted from "Inferred" to "Indicated" status, increasing confidence in the project's economic potential.

### GLOBALLY SIGNIFICANT

For Carpentaria and Broken Hill, the upgraded resource demonstrates the project's potential to become a mining operation generating wealth for decades to come.

*"At 2.4 billion tonnes, the size of the total resource is globally significant, and the 96% conversion rate from Inferred to Indicated status is an outstanding result. This increases confidence that similar conversion rates to higher categories of confidence can be achieved in future drilling,"* said Carpentaria's Managing Director, Quentin Hill.

*"Carpentaria believes the current resource, with potentially over 11 years' worth of Indicated Resources, is capable of supporting a new PFS and the company is committed to delivering this, in line with our plans for a major new mine."*

Independent consultants GHD are currently progressing the PFS, which is expected before the end of June 2017. The study will re-examine mining, power, water and labour costs for a project producing 10 Mt per annum of Supergrade concentrate.

*"The completion of the PFS will be another major step towards demonstrating the project's value and attracting the necessary investment to take this project through to mining,"* Mr Hill said.

*"We are positioning ourselves to be first in the queue for development and the timing is right for Carpentaria."*



A successful drilling programme helped pave the way for a resource upgrade at the Hawsons Iron Project

\* 10% DTR cut-off grade

## WINNER'S LIST



PLATTS GLOBAL METALS AWARDS

In a boost for the company's international standing, Carpentaria has been selected as a finalist in the prestigious Platts Global Metals Awards for 2017.

Carpentaria has been nominated in two categories:

- **Industry Leadership Award - Raw Materials & Mining**  
- Nominees: Carpentaria Exploration, Fortescue Metals, IRC, Vedanta, Sesa Goa Iron Ore
- **Rising Star Award**  
- Nominees: Carpentaria Exploration, Big River Steel, Citi, JSW International, Mitmark, Mtlexs, Roy Hill, Smart Recycling

The winners will be announced on May 18, with the Metals Company of the Year also to be selected.

"We are listed with some very high achievers and these nominations are a recognition of the work done to date and a credit to everyone at Carpentaria. We wish all the finalists the very best of luck!" said Carpentaria's Mr Hill.

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CARPENTARIA EXPLORATION LIMITED VOLUME 10 / APRIL 2017

HAWSONS IRON PROJECT



**Dr Neil Williams**  
Chairman

# NEIL'S NOTES

## MAGNETITE'S TIME HAS ARRIVED

**The headline from a recent article published by commodity news service Platts on Carpentaria says it all. As long stated by Carpentaria, Chinese steel makers are increasingly demanding higher-grade ore, and that is exactly what Hawsons Supergrade will deliver.**

### SUPPLY SHORTFALL

The market's problem is there are few proposed projects capable of producing high-grade ore profitably at forecast long-term iron prices of US\$55 to \$65 per tonne.

As analysts Wood Mackenzie stated in a recent note about the need for pellet feed (February 2017), the premiums paid for this material are sufficient for most incumbents, but are too low for new entrants to earn an acceptable return unless they have a technological advantage or a product with specific properties that can command a substantial premium.

This precisely explains the opportunity presented by the Hawsons project. Hawsons has an exceptional product with proven pelletising and chemical attributes, and its uniquely soft ore is equivalent to a technological advantage.

### SUPERIOR MARGINS

The impact of the demand shift on Hawsons Supergrade pricing is positive. According to Platts, the direct reduction (DR) pellet premium is currently at US\$54.50, or US\$67.70 above the benchmark 62% Fe price. This translates to margins of more than US\$87/t if Hawsons were producing a DR pellet at its current cost target.

In the blast furnace market, higher-grade ore has enjoyed a growing premium over its lower-grade counterpart as more efficient Chinese producers turn to higher quality raw materials to lift productivity.

In 2017, the lower quality 58% Fe fines discount to the 62% Fe benchmark has been at historic highs, averaging around 38%. It is currently trading at nearly half the US\$93/t paid for 65% Fe fines at US\$47/t, underscoring the shift in Chinese mills' operating philosophy.

Based on Hawsons cost targets and the current pricing formula, Supergrade pellet feed has a target margin in China today of US\$58-67/t.

### STEEL PRICES RISING

Confounding analyst predictions, iron ore prices have rallied in 2017, reaching as high as US\$94.50 on the back of improved demand from China and elsewhere as the global economy strengthens.

Steel prices have reached 2.5 year highs on the back of increased demand and China's success in reducing overcapacity. In late 2016, China announced it had successfully shed 65Mt of crude steel capacity, well above the year's 45Mt target, and ANZ Research expects another 50Mt to be slashed in 2017.

With global steel capacity utilisation on the rise, prices are unlikely to plunge anytime soon. According to the World Steel Association, global steel capacity utilisation was at 70.3% in February, up from last February's 66.3%.

In the first two months of this year, world steel production has risen by 7% year-on-year, with the volume increase already exceeding the growth from the whole of last year.

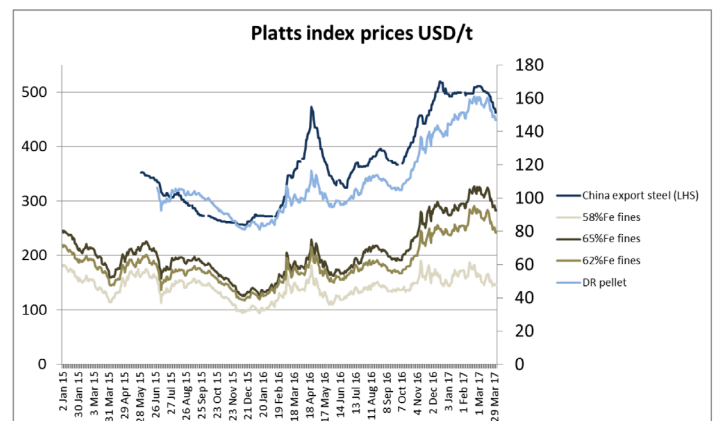
Longer-term analyst projections expect a compound annual growth rate of 1.9 to 2.1% in steel production through to 2030, amounting to around 35 to 40Mtpa of new production. Assuming 33% scrap usage, this would amount to additional iron ore demand of 30 to 40 Mtpa a year through to the end of the next decade.

### HAWSONS ADVANTAGE

In summary, our PFS results are aimed at positioning Hawsons as one of the few projects that can meet high-grade demand in the current environment. Steelmakers that have access to this scarce material will have a competitive advantage and this will add to the project's strategic value and its development prospects.

Fortunately too, Hawsons has a low development risk, given its advantageous position near existing infrastructure, potentially highly competitive cost structure and low market risk due its location near Broken Hill.

Having the right project, the right product and the right strategy is crucial to our success. And with the market seemingly agreeing too, the timing looks perfect for Hawsons to become Broken Hill's next major mine.



# FLYING FURTHER

Carpentaria has continued to engage with the local community concerning our flagship Hawsons project, having met in recent months a range of stakeholders in Broken Hill, Port Pirie and Whyalla.

However, while it is vital to continue this communication to earn trust and receive a 'social licence' to operate, direct community support is also significant.

In this regard, it was pleasing to recently receive a certificate of appreciation from the Royal Flying Doctor Service (RFDS), South Eastern Section, for Carpentaria's support over the past five years.

*"Your ongoing commitment is enabling us to fly further, helping to close the gap between country and city healthcare,"* said RFDS chief executive Greg Sam.

One of the largest and most comprehensive aeromedical organisations in the world, the RFDS provides extensive primary healthcare and 24-hour emergency services to Australians spanning an area of 7.3 million square kilometres.

Awarded Australia's most reputable charity six years in a row, the RFDS performs a vital function for those living, working and travelling in rural and remote Australia, including Broken Hill.

*"For a mining company with operations near the Silver City, we feel it is right to help the RFDS to fly further and support the local community where we can,"* said Carpentaria's Managing Director, Quentin Hill.

*"We're proud to play a small part in supporting this important organisation's efforts as part of our commitment to being a socially responsible corporation."*



### Certificate of Appreciation *Carpentaria Exploration*

Thank you for your support over the last 5 years

Your ongoing commitment is enabling us to fly further, helping to close the gap between country and city healthcare.

With your support we will continue to bring the finest care to the furthest corners of Australia.

  
Greg Sam  
Chief Executive Officer

  
Royal Flying Doctor Service  
SOUTH EASTERN SECTION



## PROFILE: SENIOR GEOLOGIST, MICK TSCHABAN

Carpentaria's Senior Geologist, Mick Tschaban, played a vital role in the company's recent successful drilling programme and resulting resource upgrade.

According to Mick, who has worked with Carpentaria since 2010, getting out into the field is all part of a geologist's life - and something to be savoured, particularly when the results exceed expectations.

*"There's a lot involved in being a successful geologist - it requires creative 3D thinking, detailed data analysis and project planning. However, there's nothing better than getting out to site with the drilling crew to get a first-hand view of the resource as it comes out of the ground,"* he said.

Conducted before Christmas 2016, the drilling program produced excellent results, highlighting the potential for low-cost mining and processing methods at Hawsons.

At over 600m thick and around 3,000m long, the deposit has been revealed to be large and consistent in both mining and metallurgical characteristics, setting it apart from other deposits.

Mick hopes to be back drilling again before too much longer. But in the meantime, he has enjoyed helping deliver the necessary environmental impact statement (EIS) and supporting the PFS, as Hawsons further advances towards mining.



Carpentaria's Senior Geologist, Mick Tschaban checks samples during drilling at the Hawsons Iron Project

## INVESTOR CONFIDENCE ON THE RISE

**Rising iron ore and other commodity prices have buoyed investor confidence in the resource sector in 2017, with Carpentaria also seeing an uptick in its market value and trading activity.**

In February, the benchmark iron ore price hit a two-and-a-half year high of US\$94.50 per tonne on the back of stronger Chinese steel demand. While prices subsequently eased back below US\$80 a tonne in late March, analysts expect the price of Australia's key export to hold firm in 2017.

Upgrading its iron ore price forecasts, on March 31, ANZ Research said "a combination of further supply-side reforms in China and relatively stable domestic demand, especially from the infrastructure sectors, should continue to support steel demand." The bank's economists expect the price to average US\$80 a tonne in the year to June 2017, remaining above US\$70 by year-end.

For Carpentaria, increasing confidence in the exploration sector was shown by the company's successful rights issue and placement conducted in late 2016, which raised more than \$2 million from investors.

And with Carpentaria's shares doubling in value from a year earlier, it appears investors are paying more attention to the prospects for Australia's next iron ore miner.

### GROWING RETURNS, CAPEX

Evidence of a broader improvement in the mining sector was shown by a recent report by Boston Consulting Group, which revealed a significant upturn over the past year. It reported a one-year total shareholder return of nearly 23% in 2016, due to the recovery in commodity prices, particularly iron ore and coal.

The increasing confidence is expected to result in higher capital expenditure (capex) by the global mining sector this year, for the first time since 2012, according to investment bank Goldman Sachs.

"After four years of continued capex cuts, we now see 2017 shaping up as a year where sector capex grows on a year-on-year basis," Goldman Sachs said, pointing to higher commodity prices and stronger balance sheets.

The bank's analysts expect global mining capex to grow by 8% this year to exceed \$60 billion. It noted that 35% of the companies it covers increased their

capex in the recent reporting period.

"We believe a continued period of robust Chinese demand and strong commodity prices will likely drive a recommitment to project development over the next one to three years," it said.

Carpentaria's year-high of 9.5 cents a share followed the company's February 28 announcement of a significant resource upgrade at Hawsons, spurring increased investor interest.

"With a PFS announcement due before the end of June, there is potential for another market re-rating as investors renew their focus on the resource sector and its next wave of successfully producing miners," Carpentaria's Mr Hill said.

## Hawsons Supergrade – it's official

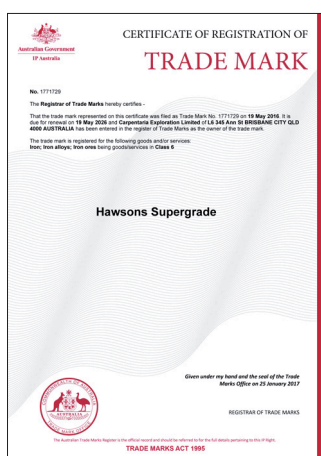
**Hawsons has a Supergrade product – and now we have the trademark to prove it.**

In January, official recognition was granted when the Australian Trade Marks Register awarded "Hawsons Supergrade" trademark no. 1771729, in the Class 6 category of iron, iron alloys and iron ores.

According to IP Australia, a trademark can be a company's "most valuable marketing tool."

"The more successful your business, the more valuable your trademark becomes," it states.

Hawsons Supergrade has already been shown to match the highest grades available in the seaborne market. And after the latest project results, the value of this trademark is certainly set for a boost.



## Carpentaria in the news

Carpentaria continues to attract media interest in its activities. Here's some of the latest coverage:

### ABC Broken Hill

Interview with Quentin Hill (January 30, 2017)

### Australian

"SA spots a new mining market" (February 24, 2017)

### Australian Mining

"Digging more for iron ore" (February 2017)

### S&P Global Platts

**Steel Raw Materials Monthly**  
"Carpentaria believes magnetite's time has arrived" (March 2017)

### Southern Cross GTS/BKN Broken Hill

Interview with Quentin Hill (March 8, 2017)

### Whyalla News

"New ore export hope for Whyalla" (February 23, 2017)

## Investor calendar

Key upcoming dates for shareholders include:

### April

March 2017 quarterly report (due April 28)

### June quarter

Hawsons prefeasibility study (due end June)

### July

June 2017 quarterly report (due July 31)

## Company updates

Keep updated on Carpentaria's activities by joining the mailing list.

To subscribe, visit the website, [www.carpentariaex.com.au](http://www.carpentariaex.com.au) and click on the link "Subscribe" on the homepage.

Don't forget to follow us on Facebook, Twitter (@CARPEXPLORE) and YouTube!

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