

Minjng Journal

Copper focus

Profits plummet on rising Aussie dollar

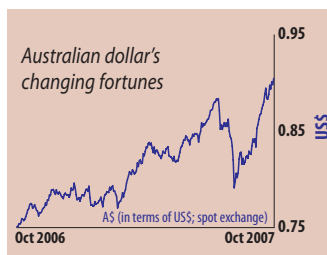


BY AINSLIE CHANDLER

MINING companies with exposure to Australia face higher costs and tighter profit margins as the Australian dollar surges towards parity with the weakening US dollar.

The Australian dollar hit a 23-year record high of more than US\$0.90 this week with some economists tipping it could achieve parity during 2008.

Australian company Alumina Ltd,



which co-owns with Alcoa, the world's biggest alumina business, predicted this week that it would not hit its

Continued on page 3

Gem Diamonds positions for global leadership

BY MICHELLE GIGLIO

GEM Diamonds Ltd is set to challenge industry leader De Beers, announcing a trial to sell six polished stones that will move the rapidly-growing diamond miner into upstream production.

The new strategy comes after Gem Diamonds spent US\$106 million buying assets around the world since raising US\$600 million in a London Stock Exchange listing in February.

Shareholders of Australia's Kimberly Diamond Co have until November to accept a US\$263 million takeover.

Gem Diamonds, established two years ago, said it still has another US\$188 million for further acquisitions this year.

Chief executive Clifford Elphick told *Mining Journal* that selling polished diamonds was an attempt to capture a "margin in the market".

While Gem had found success with its high quality, large D-colour stones from its Letseng mine in Lesotho, Mr Clifford said there was a margin the company was not capturing "after the mine gate".

"Early indications are good that this is

"Polished diamonds to capture a margin in the market"



Gem CEO Clifford Elphick with the 493 ct diamond

something we should be doing, and this is predicated on the unique nature of the Letseng production," he said.

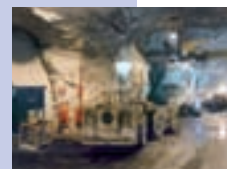
The company would not want to compete "completely" with its customers and Mr Clifford ruled out following De Beers' path into jewellery manufacture.

"We don't have the skills. And the capital which was provided to us at the time of listing was not based on a business plan of that sort."

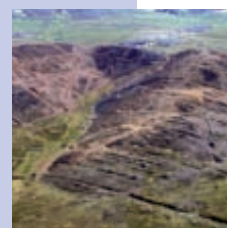
By the end of the 2008 first quarter, Gem would have sufficient information to discuss the matter with shareholders,

INSIDE

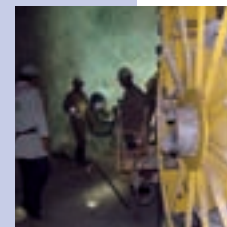
Expansion plans for Lundin page 7



Highland gets Mayskoye extension page 9



Nikanor pursues Katanga? page 15



Mr Clifford said.

The most recent tender of Letseng stones sold for US\$16.2 million in Antwerp this week. Gem received an average price of \$2,937/ct, with an 80 ct stone selling for \$3.3 million. In what is

Continued on page 4



Gem's 493 ct diamond is the 18th-largest ever found

LME week: strong copper demand forecast

BY MICHELLE WIESE BOCKMANN

GLOBAL copper demand will grow by 4% in 2008 or 800,000 t, according to analysis presented by Macquarie Bank Ltd at the London Metal Exchange seminar this week.

"Supply is growing but not quickly enough to swamp the copper market," executive director of commodities

and mining, Adam Rowley, said.

Hundreds of metals traders, analysts and chief executives gathered in London for the annual LME week dinner and associated seminars and private functions, confident that China-driven demand would continue a commodities boom in the global mining sector.

Mr Rowley said Chinese net

imports of refined copper should be about 1.3 Mt in 2007. Supplies remained so tight that the LME copper inventory remained at less than three weeks.

He highlighted the "chronically tight" copper concentrates market, where there was "too much smelter capacity chasing too little feed".

Continued on page 3

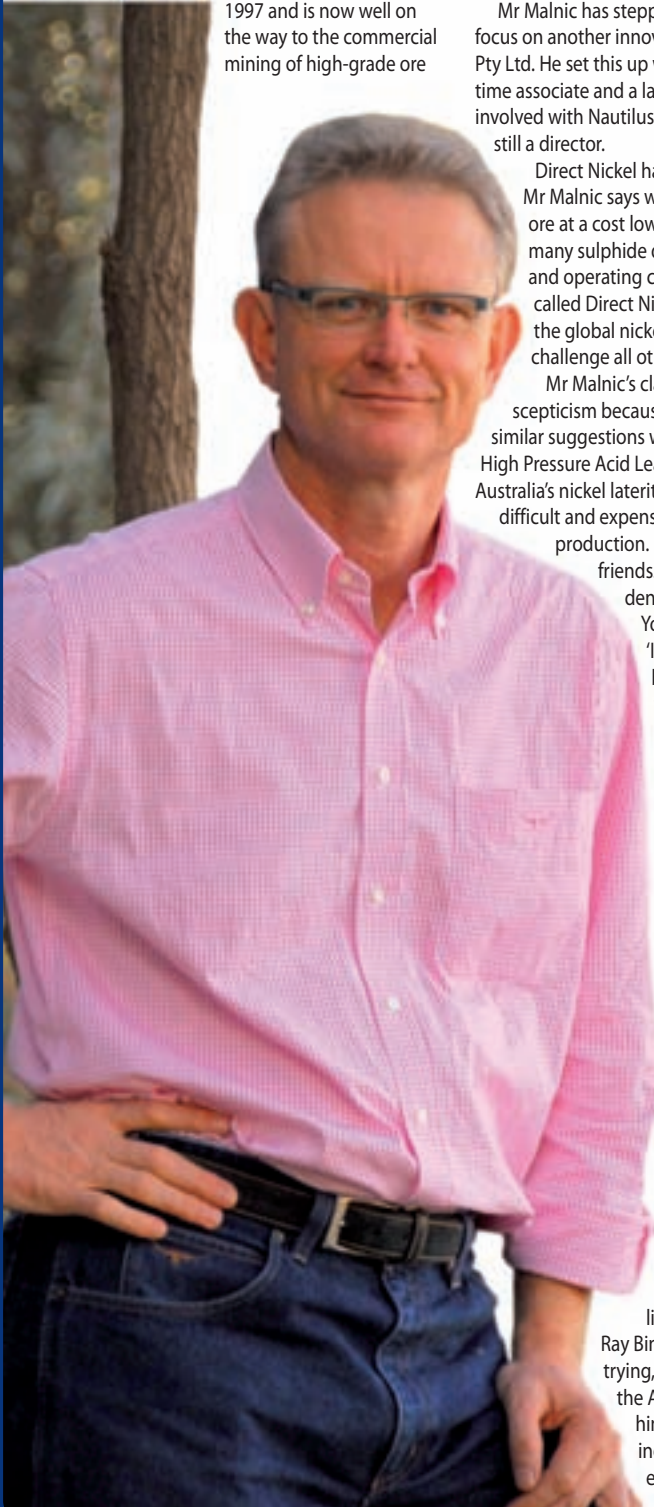


"Sceptics are my friends. That's why we get independent studies to verify and cut risk"

Doubly impressive

IF JULIAN Malnic's latest venture lives up to his expectations he will have made an indelible impression on the mining industry not just once, but twice.

His first breakthrough was with Nautilus Minerals Inc, which he set up in 1997 and is now well on the way to the commercial mining of high-grade ore



from the sea bed. Nautilus shows so much promise that Anglo American plc, Barrick Gold Corp, Teck Cominco Ltd and Russian steel billionaire Alisher Usmanov, have paid millions of dollars for ringside seats at the undersea action.

Mr Malnic has stepped away from Nautilus to focus on another innovative company, Direct Nickel Pty Ltd. He set this up with Russell Debney, a long time associate and a lawyer who has also been involved with Nautilus since the early days – and is still a director.

Direct Nickel has a metallurgical process that Mr Malnic says will produce nickel from laterite ore at a cost lower than nickel produced from many sulphide deposits. He says both capital and operating costs will be lower. The so-called Direct Nickel (DNi) process could solve the global nickel shortage he insists, and "will challenge all other nickel processes".

Mr Malnic's claim is being met with some scepticism because it's not so long ago that similar suggestions were being made about the High Pressure Acid Leach process (HPAL) to treat Australia's nickel laterite ores. HPAL proved extremely difficult and expensive to bring into commercial production. He says: "Sceptics are my

friends. That's why we get independent studies to verify and cut risk.

You can't just walk in and say 'I have something new and believe me it works.' You have to persuade and offer quality science to the people you are trying to influence."

And Aker Kvaerner of Toronto has already completed a pre-feasibility study for the DNi process.

Mr Malnic says his association with Nautilus, another highly innovative venture, helps open doors and dampen scepticism about DNi.

Mr Malnic can thank one of those inevitable troughs in the industry's economic cycle for his crack at the Nautilus opportunity. A geologist by training, he had turned to resource journalism to earn a living.

In March 1993, while editor of *The Miner*, an Australian monthly, he interviewed Ray Binns, a geologist who had been trying, unsuccessfully, to persuade the Australian government to let him expand his work exploring the sea bed. Dr Binns was employed by the Common-

wealth Scientific and Industrial Research Organisation (CSIRO), searching for Black Smokers. These are chimney-like structures formed when mineral-rich, magma-heated fluid shoots up through the earth's crust and is then quickly cooled by sea water.

The first rocks Dr Binns recovered from an extinct smoker 1,600 m deep off the southern tip of Papua New Guinea, contained 20% copper, several percent zinc and 10 parts per million of gold. Dr Binns thought a way could surely be found to mine such high-grade material.

But Australian officials were interested in his work only as a way of providing a guide for finding land-based mineral deposits.

Mr Malnic listened to Dr Binns' story and made a note of the location of the smoker. After lengthy research into law and technology – which convinced him that mineral rich deposits formed mainly in deep water – in 1995 he posted exploration licence claims to the Papua New Guinea government – which in December 1997 awarded him its first-ever underwater exploration claims. These very areas contain the Solwara projects in PNG's Bismarck Sea which Nautilus hopes to start mining in 2010.

But Mr Malnic met as much resistance to the idea of undersea mining as Dr Binns before him. It was pointed out that in the 1970s about US\$700 million had been spent in an attempt to mine manganese from deep below the sea's surface – but these ultra-deep deposits didn't offer high enough metal grades to be commercial.

In response, Mr Malnic argued that technology had raced ahead since the 1970s – the oil industry, for example, now had remotely-operated vehicles able to view, dig and drill material at depths down to 3,000 m below surface.

NEW PARTNERS

Mr Malnic owned 100% of Nautilus until 1997 when he was able to convince two seasoned industry people to join the board – Mr Debney and Geoff Loudon, who, among other things, was founder and chairman of Niugini Mining, discoverer of the Lihir gold deposit in PNG. Mr Loudon is still Nautilus' chairman.

In memoriam: Doug

DOUG Yearly, who played a key role in developing the mining industry's sustainable development initiatives, has died of cancer at the age of 71.

Born in Illinois, Mr Yearly had a degree in metallurgical engineering from Cornell University. He joined Phelps Dodge in 1960 and completed 40 years with the US copper company, working his way up to become chairman and chief executive in 1989 – a role he continued to play until retirement in 2000.

He was one of the industry's highest paid executives during the 1990s and frequently was



Mr Malnic recalls that, because there was limited money available: "I did research, I worked with other researchers, sailed on the ships with the researchers and staked new areas in PNG, Fiji and Tonga."

In 2002, Mr Malnic brought in David Heydon, another geologist-turned-entrepreneur, to be Nautilus' chief executive. Mr Malnic says of Mr Heydon: "He has achieved what I hoped he would achieve [with Nautilus]." Having brought together the key people to take Nautilus forward, Mr Malnic left the company in April last year when it listed in Toronto.

He has sold some of his original stake – partly to help set up Direct Nickel, but also because his family home in Sydney was burnt to the ground in January this year, "a harrowing experience," he says. But he still owns about 3% of Nautilus, shares currently worth about C\$14.5 million.

Mr Malnic, now aged 51, was born in Sydney. After graduating, he deliberately steered clear of starting a long-term career with one of the major mining groups – "I have always been unimpressed by the attitude of big companies." He preferred "to survive drilling escapades in wild country," drilling mainly for gold in Fiji as well as the Torres Straits and the Great Dividing Range in Australia.

For a time, he ran his own consultancy and in the mid-1980s staked a big magnetite deposit near Munduberra which he sold "not for a fortune but enough to buy me a house". The deal also "established in my mind that enterprise was the place for me".

REFORM IN THE SPOTLIGHT

In 1996, he gained attention in his home town by drafting a paper suggesting how the Australian Institute of Mining and Metallurgy should be reformed. "So many people had been complaining about the Institute that I decided to do something about it."

He first showed his work to *The Australian* newspaper instead of the Institute. The headline said 'Institute Gets Dinosaur Warning' and consequently "that made me the most unpopular man on Earth".

He says that at that time there was a demand among Australia's mining professionals for more debate about cultural and current affairs but the archaic AusIMM outlook and constitution could not cope with this. So Mr Malnic set up the Sydney Mining Club where industry people could meet every month to hear speakers on a wide range of issues. He says: "We have a unique 'come once and be a member for life' philosophy, recognising that mining industry people belong together no matter what."

Following the success in Sydney, where Mr Malnic is chairman, he assisted in the creation of the present Melbourne and Brisbane Mining Clubs. And two years after he wrote his 'Blueprint for Reform of the AusIMM', the Institute made the first changes to its constitution in 102 years.

Mr Malnic's involvement with Direct Nickel started when a metallurgist contact put him in touch with an industrial chemist in the US who had been working on the technology for some time – the DNI Process has been 15 years in development to the present pilot plant stage.

It is claimed that DNI is an environmentally friendly, hydrometallurgical process for treating nickel bearing laterite ores at a moderate temperature and atmospheric pressure. Mr Malnic claims the economics are "far superior" to those of HPAL, the Caron Process and ferro-nickel smelting. A 5,000 t/y DNI plant, using readily available equipment, would cost US\$150-170 million, and US\$350-400 million for a 20,000 t/y plant.

Mr Malnic says: "I can hardly believe I have an opportunity of this magnitude following an opportunity as big as Nautilus."

Black Angel to restart in 2008

While the ice continues to retreat in Greenland the Black Angel project makes significant advances. The old Cominco zinc/lead mine now owned by the AIM-listed Angus & Ross plc is expected to ship its first production in the last quarter of 2008. The mine has a 1.7Mt proven reserve, averaging 10% Zn and 3% Pb, and further discoveries of 2Mt have been made in the vicinity in 2006. The results of 8200m core drilling programme undertaken in 2007 are eagerly expected. They include 5.5m at nearly 30% Zn+Pb.

All-year camp for 32 workers has been built in 2007 together with various elements of infrastructure. The mine will be accessible by a cable car, which is currently in transit from Switzerland. A&R have recently appointed a new CEO and a Technical Project Manager.

The A&R team find that Greenland is a great place to do business and look forward to significant progress in 2008.

www.angusandross.com



Zincore will invest \$8 million in 2007 on exploration and development on the ACCHA-YANQUE project to complete 30,000 metres of diamond drilling and a pre-feasibility study

**Invest in Zinc
Invest in Peru**

ZINCORE METALS INC

ZNC

OUR STRATEGY IS TO BECOME ONE OF THE WORLD'S LEADING LOW-COST ZINC PRODUCERS

WANDA ARELLA MINASCASSA SAYANI NIEVES CONDORINI JV TAMARU

ACCHA-YANQUE ZINC BELT ACCHA YANQUE

Luzumbao Project

Meghan Brown
tel: 604 685 4644
investorrelations@zincoremotals.com

TSX: ZNC
www.zincoremotals.com

Yearly

on *Forbes* list of 'Corporate America's Most Powerful People'.

Mr Yearly produced an internal report in 1984 for Phelps Dodge that concluded its high production costs eventually would put it out of business if there was a time of sustained low copper prices.

He then became a member of a five-strong board that supervised a reorganisation of the 150-year-old company and its 1987 move from New York to Phoenix, Arizona.

He was in the forefront of moves leading to the creation of the US National Mining Association in 1995.

Three years later, he worked with Sir Robert Wilson, then chairman of Rio Tinto, and Hugh Morgan, then chief executive of AMC, on the sustainable development initiative which ultimately resulted in the setting-up of the industry's International Council on Mining and Metals.