



Spring 2007

# Picks n bits



**CSA Australia Pty Ltd**  
Geological, Mining & Management Consultants  
to the minerals industry worldwide

[www.csaaus.com](http://www.csaaus.com)

## Welcome

Welcome to the "late Spring" edition of Picks n bits.

All of a sudden it's that time of year again - time to put your feet up and spend some time enjoying life with family and friends.

Hasn't the year flown by! It certainly has here because it's been an extremely busy time for us, with a lot going on in the midst of the mining boom, as you can see from this issue of Picks n bits.

In fact we've been so busy that we're embarrassed to say that we've got a bit behind with our newsletter. Never mind, it's better late than never, and we promise to do better in 2008.

We hope you enjoy this edition of Picks n bits.

May I take this opportunity to give you and your family our best wishes for Christmas and a happy, safe and prosperous New Year.

**Jeff Elliott, Managing Director**

## Big new zinc mine to play crucial role in Russia's regional development

**CSA is playing an important role in developing one of the world's most significant undeveloped zinc deposits.**

The Ozernoe project in the Republic of Buryatia in the Russian Federation is estimated to contain 157 million tonnes grading 5.2% zinc and 1% lead as well as significant recoverable silver.

It is estimated to be the sixth largest undeveloped zinc deposit in the world. In full production it is planned to produce 300,000 to 350,000 tonnes of contained zinc each year plus significant volumes of lead.

CSA has reviewed the resource and economic potential of the oxide zone and carried out a review of previous geological work and data. It has also assessed drilling programs on the project.

CSA managing director Jeff Elliott has been closely involved in the project, completing his first visit in June.

This was followed by two visits from CSA geologist Nik Sergeev, who undertook a detailed assessment of the site's oxide mineralization.

Nik's Russian language skills, knowledge of mineralogy and extensive experience with other base metal projects have proved invaluable.

The project will deliver big social and economic benefits to the Republic of Buryatia throughout the mine's expected 20 year lifespan.

The Ozernoe Project is managed by Ozerny GOK a joint venture between Russia's IFC Metropol and Lundin Mining of Sweden.

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*The Republic of Buryatia in the Russian Federation will be home to one of the world's biggest zinc mines. CSA staff recently visited the project to assist with the assessment of the oxide portion of the resource.*



*Modern China is a fascinating combination of the ancient and the modern. Pic: Irvine Hay*

# Our man Irvine roughing it in the back blocks of China

**China may have the world's fastest growing economy, but life in the back blocks of this vast land can still be pretty challenging for a westerner, as our man in China, Irvine Hay, has discovered.**

Irvine's a Senior Geologist working in Heilongjiang Province, North Eastern China, in a remote town of about 10,000 people. Daily life can be daunting at times.

First there's the language problem. Irvine's faltering attempts at the language usually produce either gales of riotous laughter or "blank, blind incomprehension".

With all instructions being passed through interpreters, it's perhaps not surprising that everything seems to take twice as long as it does in Australia.

## *Taking in the experience*

Communication is one thing, but it's the living conditions that really raise his eyebrows.

Coal is everywhere - it's piled up in the streets, and the sulphurous taste of it fills the air.

Another taste that's taken some getting used to is the local food, with everything from stomach and kidneys to silkworms and canned almond milk on the menu. Most of it is pretty good, Irvine reports.

Life in the apartment is pretty basic, with blown fuses a regular feature - the rule is to never use the water heater and the kettle simultaneously.

Missing panes of glass create local flooding and the smell from the plumbing is pretty noxious.

On the up-side Irvine has his own private shower even if it is just a galvanized water tank with a shower nozzle bolted to the wall above the loo, it's more than the locals have.

One touch of luxury is "a proper porcelain dunny" rather than the traditional squat toilet.

But if the living conditions are a bit on the rough side, the sense of community he and his wife Kerry are enjoying makes up for it.

The local kids are everywhere, smiling and laughing and saying "hello" (the only word of English they know).

In a world where adventure is becoming a thing of the past, Irvine and Kerry seem to be relishing their Chinese adventure.

## International conferences and events help to keep us up-to-date

Africa Down Under was just one of many conference we've attended recently. Our people have been busy attending a variety of industry events (MEGWA and JORC meetings) and major conferences throughout Australia and the world in recent months:

- Malcolm Titley and Suzanne Simons attended the Australian Uranium conference in Fremantle (July)
- Gerry Fahey, Jeff Elliott, Stan Wholley and Mick Elias enjoyed Diggers and Dealers in Kalgoorlie (August)
- Jeff Elliott, Gerry Fahey, Mick Elias, Malcolm Titley, Simon Dorling and Stan Wholley all attended Africa Down Under
- Stan Wholley went to the AusIMM Iron Ore 2007 Conference in Perth (August)
- John MacIsaac attended AusIMM's Open Pit Mining Conference in Perth (September)
- Simon Dorling, Mike Morawa, Clive Hastings, Andrew Margereson, Peter Muhling and Suzanne Simons attended the AIG Uranium Seminar (October)
- Stan Wholley, David Williams and Paddy Reidy went to Mentoring in Mining in Perth (October)
- Mike Morawa and Clay Gordon enjoyed the New Gen Gold Conference in Perth (November)
- Jeff Elliott, Glenn Whalan, Irvine Hay and Cain Fogarty all attended China Mining 2007 in Beijing (November)
- Gerry Fahey went to the Mines and Money Conference in London (November)

## Meanwhile our Directors have given presentations at a variety of events:

- Neal Reynolds presented a paper titled 'Unrealised Potential in the Atlas zinc-lead province - analogies within the Tethyan zinc belt' at the 9th Biennial SGA Meeting in Dublin (August)
- Mick Elias presented a paper titled 'Characteristics of the Western Australian Nickel laterite resources' at the inaugural Australian Journal of Mining Kalgoorlie Nickel Fields Conference (October)
- Mick Elias also presented a paper titled Nickel laterites - Genesis and exploration criteria at the AIG's Kalgoorlie 07 conference
- Gerry Fahey gave a workshop on 'AIG JORC Workshop on Reporting' at the Kalgoorlie 07 conference.

**If you'd like copies of any of these papers please contact us on (61-8) 9355 1677 or email [csa@csaaus.com.au](mailto:csa@csaaus.com.au)**

## JORC Update

**Just recently two important issues have been dealt with by JORC for ASX listed companies. These are:**

*1. JOINT MARKET STATEMENT - ASX and JORC - Historical Estimates and Foreign Resource and Reserve Estimates.*

The ASX has released a companies update in a joint statement prepared by JORC. It sets out the minimum requirements for reporting historical pre-JORC Code estimates or foreign resource and reserve estimates, currently not in accordance with the Code. You can view the update at:

[http://www.asx.com.au/resources/newsletters/companies\\_update/archive/CompaniesUpdate\\_20071205\\_1107\\_HTML.htm](http://www.asx.com.au/resources/newsletters/companies_update/archive/CompaniesUpdate_20071205_1107_HTML.htm)

*2. Reporting Uranium Projects Under The Principles Based JORC Code: How to use the Guidelines in Table 1.*

This is an excellent paper presented by Peter Stoker and Gavin Yeates as part of a JORC Uranium reporting workshop in Adelaide Nov 2007 (soon to be posted onto [www.jorc.org](http://www.jorc.org)). JORC considers the current guidance to be adequate and to illustrate this has extracted Table 1 from the Code and added comments relating to uranium reporting, which helps the Competent Person apply Table 1 to such reporting.

For further information please contact Gerry Fahey at CSA on [gerry.fahey@csaaus.com.au](mailto:gerry.fahey@csaaus.com.au). Gerry is the AIG representative on JORC and provides high level advice to clients on matters relating to ASX compliance with news releases.

## CSA booth popular at Africa Down Under

Many of our important clients had booths at the Africa Down Under Conference, while others gave presentations, including Anvil Mining (DR Congo), Azumah Resources (Ghana), Braemore Resources (South Africa) and NGM Resources (Madagascar and Niger).

Africa Down Under is an important event for us, as Africa provides a large portion of our international work and we're keen to see further growth in this sector.

Our booth was manned by our senior management and was particularly well attended.

We have a big presence in Africa, having recently completed assignments in Botswana, Democratic Republic of Congo, Ghana, Madagascar, Mali, Mozambique, Niger, South Africa, Tanzania, Tunisia and Zambia.

The conference is on again in 2008 from the 4-5 September at the Sheraton Perth Hotel. It's an event not to be missed.



"OFFERING YOU MORE CSA Australia offers our clients complete solutions ranging from exploration to mining and an association with mining engineering consultants, LQS Australia Pty Ltd"

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# From the glistening domes of Moscow to the glittering stones of WA

**It's a long way from the historic streets of Moscow to Perth, WA, but Nik Sergeev seems to have taken it all in his stride.**

He's called Australia home for 11 years now since leaving his home town of Moscow behind.

Nik trained as a geologist back in the days when Russia was still part of the Soviet Union and has carried out research and exploration throughout the old empire, turning up gold, base metals, bauxite and nickel.

After migrating to Australia he worked for the CSIRO for 5 years, then did exploration for Consolidated Minerals before starting with us.

Having travelled all over the Soviet Union and put up with extremes of temperature, Australia's heat didn't worry him, but the

lifestyle and the language took a bit of getting used to.

But he's taken to it with gusto and particularly enjoys Aussie Rules Football, though he "hasn't got the time to follow cricket".

He travels back to Russia frequently and has worked for us on the Ozernoe Project (see cover story), the exciting new Zinc/Lead development near Lake Baikal.

In fact Nik's Russian language skills and geological know-how have frequently been an invaluable combination for a company with mining business scattered around the globe.

This year he's looking forward to spending his Christmas holidays with a particularly important Russian visitor - his brother. They'll be enjoying a traditional Aussie Christmas on the beach and visiting



**Nik Sergeev's experience and Russian background is invaluable to our work.**

Margaret River. Nik's really looking forward to showing him the splendours of Western Australia.

## Our team is growing and developing an international flavour

**The last quarter for us has seen an amazing growth in staff from very varied backgrounds.**

Our new and very multicultural mix of geologists is as follows:

- Irvine Hay from NSW, currently on a gold project in north east China
- Cedrick Gineste from New Caledonia is working on a nickel project in Madagascar
- Keith Hay from New Zealand, currently on a zinc project in northern China
- Dezso Benko, originally from Hungary, is managing a uranium project in Niger
- Chris Allen from Perth, has joined our Resources and Mining Division
- Dino Rai, who is Timorese, was seconded from our Dublin office, to complete training and assist with evaluation of lead-zinc projects
- Clive Hastings, an Australian living in Tanzania, has completed training in Perth and has been working on several exploration projects in Africa
- Emer Maher and Stella Burke from Ireland, both working on lead-zinc projects in the Kimberley

- Tim Cummins, from NSW, varies his time between a lignite project near Salmon Gums and a magnetite project near Port Hedland
- Alex Hewlett, a recent graduate from Perth, currently undergoing a traineeship with our Resources and Mining Division

Our GIS/Data Services division welcomed Inthava Sanouvang from Laos and Australians Maria Peranovic, Victor

Mifsud, Tarra Dodsworth and Albert Welmegeod (although originally from South Africa) to complement and double Alex Goulios's team on Level 2.

Last but not least, our Admin department also expanded to keep up with the growing numbers - Cassandra Lever (HR/Admin), Racquel Green (Accounts) and Denys Williams and Du Le (IT).

