



# Strong framework in place for development

As its hunt for new mineral horizons continues, junior Avalon Resources Ltd has opted to invest in a region with a long mining history, but which is relatively new to foreign development.

The company began its foray into Sweden two years ago with the acquisition of the historic Viscaria mine in the country's north, and has since been working towards production and advancing exploration to extend the copper resource, with a quick start-up from its high grade resource now anticipated.

Project manager Grant Brock believes the swag of mineral riches and knowledge in Sweden will provide a strong framework for the emerging copper project.

"It's a very prospective and mine-active region in Europe," he said during the recent RIU Explorers Conference in Western Australia.

"It's number one in iron ore, it's second in gold and copper production, second in silver, and it also has Europe's largest open pit copper mine Aitik, which produces nearly 20 million tonnes a year.

"There has always been a lot of mining, but it has only been recently that foreign companies have been coming in."

## Right address

With an iron ore mine at Kiruna only four kilometres away, and with Aitik in close proximity, the expectation of rich mineralisation at Viscaria seems well supported.

"Viscaria was discovered in the 1970s by a geologist who was working for LKAB at Kiruna, who found a copper project close to the iron ore operation," Brock explained said.

"Production started in 1982 and, after five years, the project was passed on to the steel company Outokumpu, which retired it in 1997.

"Avalon purchased it in March 2008, and set about trying to find out what and where the remaining copper resources were in the project, and we found about 12 Mt of ore that were unmined from the original resource."

After quickly delineating three zones of interest (A, B and D), the junior focused on A as the best start-up option, while it used last year's extensive exploration to develop a plan for the other two sites.

"The D zone we've established has about 2.5 Mt at 2.5%, and that hasn't been mined at all, while A Zone was the principal mine area for LKAB and Outokumpu, and B Zone has had virtually no mining at all because of its lower grade," Brock said.

"With an early start-up option, we would be looking at surface resources in the A and D, and from that we've come up with 2.3 Mt at about 1.6%.

"So we could begin an operation on that with two types of scenarios – one is having a process plant and mining it at about 1.5 Mt per annum, and the other is we team up with another company in Sweden close by and toll treat the material.

"Since our head grade would be about 1.6% copper, that would give us an 8,000 tpa production, with estimated production costs at about US\$1.30/lb, which would give us an early cash flow to increase our exploration into other areas."

Avalon kicked off its field season last year, targeting a number of electromagnetic drill holes to decipher the geology of the area.

"One of our first targets last year was to drill a hole to see if we have a southerly down-plunge extension to the ore body, and the major drill hole which tested the extension at depth was drilled down to about 800 metres, and we drilled a couple more holes off that," Brock explained.

"We did find that the ore zone extended, although we didn't get the large intersections that we were hoping for ... but it did prove that the resource extends in that area.

"In the middle, we found intersections of copper there which prove that the two are joined together."

## Obvious synergies

As the junior streamlines its feasibility work to get production underway in 2012, Brock agrees that strong local connections and infrastructure will present real benefits to the development of the project.

"We have several people who have worked in the original mine on the team now living in Kiruna, and our exploration manager flits between here and Sweden, and speaks the language, so she's a great asset to us," he said.

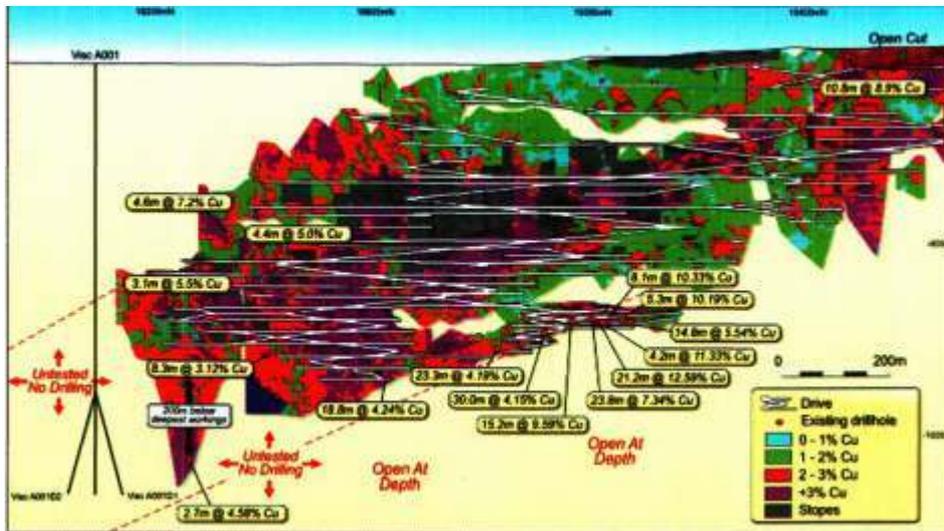
"We don't have to deal with accommodation, because we have a major township there, we've already established offices and a house in Kiruna, we've got hydro-grid power at very competitive costs, and we have major road and rail access.

"There's a copper smelter in the country which is 300 km away by rail, we have the opportunity for early cash flows to help exploration."

By Caroline Smith



Grant Brock



A cross section of the deposit