

New gold results enhance Avalon

Gold project becomes immediate priority for near-term copper developer

SCANDINAVIAN-FOCUSED Avalon Minerals (ASX: AVI; Frankfurt: AL9) has added a golden third string to its bow – in addition to a near-term copper development and lithium discovery, it has just identified a significant gold system in Finland.

Australia-based junior Avalon Minerals is on target for both its short- and long-term investors.

The company is in the final permitting stages for its 100%-owned Viscaria copper project in northern Sweden, which it intends to bring into production in 2019-2020 at 20,000 tonnes per annum, to coincide with an expected uplift in the red metal price.

Avalon also recently revealed high-grade lithium results at its Kietymäki lithium pegmatite in joint venture in southern Finland, including 24.2m at 1.44% lithium oxide.

However, the spectacular drilling results this month from the Satulinmäki gold prospect, coupled with a gold price that's risen close to 20% so far this year, have made the project Avalon's immediate priority.

The assay results from the first three holes at Satulinmäki, announced on October 17, indicate a significant gold system with both narrow, high-grade intervals and wide lower-grade



intervals, all within 150m of surface.

Assay highlights include 2m at 10.5g/t gold from 7m; and 83m at 1.24g/t gold from 137m, including 9m at 7.3g/t gold from 147m. The highest individual assay was 45.6g/t gold over a 1m sample from 150m.

Avalon managing director and CEO Malcolm Norris walked around the mineralised gold zone a day before speaking with *Mining Journal* from Finland, and said seeing visible gold in the drill core was fantastic.

"These are outstanding results and we've only drilled seven holes," he said.

The system is open in all directions and while the drilling area measured 400m by 250m, Norris said the geophysical anomaly was at least 750m long.

"The high grades are fantastic," Norris said, "because grade is king when it comes to a gold deposit – and having the lower grade gold is also a wonderful prospect for an open-cut mine."

The project, 100km from Helsinki, sits within the same joint venture area as the Kietymäki lithium prospect. Under the deal with Canadian company Nortec Minerals, Avalon can earn up to 80% interest.

The joint venture is benefiting from previous drilling by the Finnish Geological Survey (GTK), which identified lithium and gold potential in the project area.

The company is also following up on further potential indicated by the GTK at the Riukka gold prospect, 4km to the southeast of Satulinmäki.

Norris said data availability, mineral prospectivity, clear mining legislation and excellent infrastructure, all made Scandinavia a near-ideal destination

for mining companies.

"It can get a bit cold," he said, but added that all of Avalon's project areas were accessible year-round.

Avalon is not the only ASX-listed company exploring in Scandinavia – so is S2 Resources, led by Mark Bennett who was responsible for the world-class Nova nickel discovery in Western Australia; and Dragon Mining, which operates two gold mines and a gold plant just 60km northwest of Avalon's Satulinmäki project.

Norris was quick to point out that while it seemed Avalon had a lot on its plate, the junior had an experienced team and was clearly focused on gaining the best value possible from its gold, lithium and copper projects.

He expected geophysical work and mapping to be undertaken within the coming months to help delineate the next phase of drilling at Satulinmäki.

"We're taking the gold project through the drilling phase as quickly as we can," Norris said.

"But it's important not to lose sight of the fact that we hold 100% of the copper project and that's in the permitting stage.

"Copper, without a doubt, will be more loved over the next 3-4 years based simply on the fundamentals of diminishing supply and rising demand.

"As a long-term investment, copper makes sense so we're comfortable with that.

"Meanwhile, gold and lithium are hot at the moment so it makes sense for all our effort to go into those.

"We're very focused."

He emphasised that lithium was not on the backburner and said Avalon was considering the best path to progress its lithium projects.



The company is working to establish the extent of lithium mineralisation at Kietymäki and will continue to test a possible thickened pegmatite trend southeast of earlier drilling.

Avalon has further added to its lithium portfolio with early-stage projects in both Sweden and Finland, including through a deal with a private company held by well-known Australian geologist and analyst David Ransom.

"We need to decide whether Avalon can advance the lithium projects on its own or if it's better done with partners," Norris said.

A growing use for lithium is in electric vehicle batteries and Norris noted that Europe had embraced electric vehicles faster than Australia.

And as a boon to Avalon's near-term Viscaria copper project, Norris also pointed out that electric cars could contain up to four times the copper of a conventional vehicle.

"We're confident of the copper price improving," he said.

Supply is also likely to be constrained by news out of Chile this month of delayed expansion plans at both the Collahuasi copper mine and the state-owned Codelco's operations.

Avalon's Viscaria project contains a mineral resource of 52.4 million tonnes at 1.2% copper, but step-out drilling in the D Zone is targeting material to generate an updated resource and scoping study in 2017. According to the copper-only scoping study released in December 2015 and updated in April 2016, the project will have site capital costs of US\$130 million and a payback period of less than 4 years, with a 2 million tonne per annum processing plant fed by three openpits and an underground mine.

"We're aiming for all-in sustaining costs of less than US\$2 a pound and in our modelling we used a copper price of \$3/lb," Norris said.

"That's the price most projects assuming to be in production in future are using, if not higher.

"Luckily we're essentially opening

an old mine and the stakeholders we've spoken with are supportive of the project."

Viscaria lies 5km from the mining town of Kiruna in northern Sweden, which is home to the world's largest underground iron mine, the state-owned Kiirunavaara, and has associated skills and infrastructure.

Interestingly, Viscaria also contains iron and Avalon has established a 25.6Mt resource at 32.1% iron, however the company wanted to ensure the project was viable purely on its copper merit.

The iron content was left out of the 2015 scoping study, but Norris said the iron would be kept in mind as the project neared production.

"But we don't need it, Viscaria can stand alone as a copper project," he said.

The team has a strong track record in discovery, feasibility and development and Norris said the four-man executive team put its geological, mining engineering and financial skills to use.

"These guys don't just sit in the office, they roll their sleeves up," he said.

"And the team we've built in Finland has achieved a huge amount – we signed the deal (with Nortec) in May, were drilling in August and we're releasing great gold results in October.

"We've got a great team, it would be impossible without them."

Avalon has also enjoyed strong support from its major shareholders and in July completed a placement raising almost A\$2 million (US\$1.5m).

"They're very comfortable with what we're doing," Norris said.

"They have a bullish view on copper and are also very supportive of us in the short-term to pursue our gold and lithium opportunities, we're very lucky.

"We definitely see ourselves as a developer as much as an explorer, and this is reflected in the fact that we have advanced-stage projects like Viscaria and we're quickly moving to develop our gold proposition as well."

The Avalon team at Satulinmäki. Left to right: Matti Kinnunen, Dr Bruce Rohrlach, Jani Jäsberg and Ray Robinson



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– AVALON MINERALS MD AND CEO MALCOLM NORRIS

Above: Visible gold in drill core from Satulinmäki

Below: Avalon's general manager geology Dr Bruce Rohrlach, with project geologist Jani Jäsberg inspecting quartz vein outcrops at Satulinmäki



AT A GLANCE



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QUOTED SHARES ON ISSUE

520.4 million

MARKET CAP

A\$15.1 million

MAJOR SHAREHOLDERS

Valbonne II (12.4%), Marilei International (8.1%), Potezna Gromadka (7.1%), Tan Sri Abu Sahid Bin Mohamed (6.4%), Wyntor SA (4.0%), Directors and Management hold 3.4%