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DRILLING DEEPER FOR THE NEWS

G O L D

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Dust to dollars

Richard Roberts, 26 May 2010



One of the old pits at Bullabulling in Western Australia.

DRILL rods are about to start turning again at Bullabulling in Western Australia, in many ways a forgotten relic of a previous gold boom. New resource modelling, new thinking, but most important of all higher metal prices, could underpin the re-emergence of another Australian gold field.

While Tanami Gold, Catalpa Resources and others like the trail blazed by the likes of Equigold – turning large, low-grade gold deposits into profitable producers – Bullabulling seems, on the surface, to be a stiff test. Auzex Resources managing director John Lawton doesn't think so, but concedes competition for the asset hasn't exactly been frantic.

"It has been poorly explored," he told *HighGrade*.

"One of the big [mining] consultancies did a whole new mapping program which significantly changed the geological understanding of the area. And I'm pretty sure the interpretation is going to change several times in the future.

"It's certainly been sampled; there's been a lot of geochemistry. There's also been a lot of drilling – we've got 32km of drilling from within the Bullabulling area, but the average depth of that was 34m, which is very shallow. So we've got a massive database [from exploration over more than 20 years]. We're working our way through that. But I guess it's lack of understanding; the perception that there wasn't much [gold] left perhaps. It's hard to know.

"Really where we came at it was looking at Resolute's history. It wasn't a big focus for them. And then Jervois Mining, it hasn't been their primary business either. It just hasn't received the attention we thought it should. And I guess it's like all these things, it's in the eye of the beholder. We see it as an excellent opportunity."

For what it's worth, so did Jervois, which retains a royalty on future production after offloading Bullabulling to Auzex and AIM-listed Central China Goldfields (CCG). The latter, whose directors have connections to their Auzex counterparts going back to Shell Metals in the early 1980s, has paid \$A1.9 million to Auzex for 50% of the joint venture.

Jervois believed Bullabulling's remaining JORC resource of more than 400,000oz could ultimately grow to 1Moz "if deeper drilling is undertaken in the future".

The future starts next month for Auzex and CCG, with about 1400m of RC/diamond drilling planned to be wrapped up in July. The drilling is targeting mineralisation, and possible extensions to known mineralisation, between the Phoenix pit, the deepest of nine existing openpits, and Bacchus South: about 2.5km of strike. Meanwhile, an independent structural geologist's report on Bullabulling structural controls and resource potential is said to be imminent.

"All we've done to date is reprocess the Resolute data, so it's all based on their drill-hole data, and we focused in on the area between Phoenix pit and Bacchus pit because that's where the greatest drilling density is," Lawton said. "That's a distance of roughly 2.5km.

"What it's shown is you've got consistent mineralisation over 300m width and it's open both along strike and at depth, and it's only the drill-hole depth that terminates the interpretation so our intention, and we're working on it right now, is to take the current resource of 440,000oz and increase that just by remodelling the data.

"We [Lawton and fellow Auzex directors Eugene Iliescu and Paul Frederiks] started Ross Mining around about the time they [Resolute] were coming up with the resource here, in the late 1980s, and I can tell you that at that time we thought a fax machine was a pretty scintillating piece of equipment. Technology – software – is a lot more developed now than when they did their resource. We can put the entire resource into one database, which just wouldn't have been possible then, and we can do things with the data that just weren't being done back then."

The combination of geospatial modelling and re-optimisation of pit shells using gold prices 2-3 times higher than those used previously has apparently already had a dramatic effect on Bullabulling's resource base. The drilling will help, in part, to re-JORC the numbers.

Lawton said the structural interpretation was new work that improved the understanding of the mineralisation controls and distribution of gold, and was being used to site the drill holes in the upcoming program.

"The view when we first looked at the project was that we could increase the 430,000oz [existing resource] to 800,000oz, to 1Moz – our view is significantly higher than that at the moment because even though we've focused on 2.5km of strike length it's within a 12km zone where there is shallow mining and that is again part of a 33km shear zone that's mineralised. It's got gold shows, whether through geochemistry or whatever, throughout its length.

"We don't have any reason to believe the style of mineralisation seen to date doesn't continue. So it's potentially a very large deposit."

The Bullabulling project area straddles the Great Eastern Highway east of Bullabulling and about 70km south-west of Kalgoorlie. The site of some early mining in 1890s, it yielded 7.9 million tonnes grading an average 1.45 grams per tonne, or 371,474oz, from 1988 to recently with most of the ore laterite material from pits up to 20m deep. Some supergene and primary material was mined from the deeper pits, such as Phoenix, which finished at about 80m vertical depth.

"We think we could ultimately get, and it's just a view without statistical basis at this stage, pits going to 150m here," Lawton said.

"The big thing for us, as it always is with orebodies, is the continuity and increase in grade with depth, but that's exactly what we're seeing.

"So even though there was remaining laterite and supergene material there, and there's more likely to be found, that was never our target. We acquired the project as an advanced exploration project. To be frank I don't know the dynamics of the [existing Jervois] dump leach operation and whether that can be improved or what not. We're looking at a much bigger scale project than that operation."

In fact Auzex presentations have put forward the concept for a 10-year, 100,000ozpa mainly hard-rock mining operation, with a new plant, and "excellent potential for high margins with strong financials".

Lawton was unable to go into more detail on this plan, other than to say getting the operational scale right, and maximising returns from all material mined, were crucial to the economics of low-grade deposits.

"In our initial assessment of the project we assumed we could double the resource to approximately 1Moz," he said. "Our scenario used a strip ratio of 5, which we now understand will be conservative. We also considered the average grade could be increased – up to 1.8-2gpt – because of the high grade mineralisation which had never been incorporated in the JORC resource estimate. However, it is possible the tonnes will increase dramatically which will tend to drop the average overall grade, but will mean that a heap leach/dump leach (HL/DL) option could be considered in addition to a carbon-in-pulp milling operation.

"A HL/DL operation would complement a CIP operation on higher grade ore – say, 2gpt. We could envisage a 1.5-2Mtpa CIP operation producing 100,000ozpa with an additional HL/DL operation of, say, 2-4Mtpa producing 50,000oz a year.

"The original scenario assumed \$A550 cash costs, which should reduce with a complementary HL/DL operation."

A basic capex estimate was \$A100-120 million.

Auzex and CCG will look to sell plant and equipment from the existing operation. They are aiming to complete a bankable feasibility study on a new project within 12-18 months, at a cost of \$A2-3 million, while an updated resource is due in July.

That could bring the first real recognition of what Lawton and his team (and joint venture partner) are trying to do at Bullabulling. Auzex's market capitalisation was this week at about \$A9 million.

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