Super Pit's potential mined

ELENA MORABITO

Kalgoorlie-Boulder resident Kyle Ward has won a State Government scholarship to examine the potential for the production of tellurium at KCGM's Super Pit.

The Odwyn Jones PhD scholarship was awarded through the WA Minerals Research Institute to help keep WA at the forefront of minerals research and technology development.

"(I'm) looking at potentially producing tellurium from the ore in Kalgoorlie, so looking at ways we can separate the tellurites out from the rest of the material and plant," Ms Ward said.

She said this had been achieved in the 1970s in Fiji, but in a different circuit and mineralogy.

Ms Ward said Super Pit ores already had tellurites, but they were just going back into the tailings dam.

"We're looking at trying to extract that out so, essentially, we'll be recovering something extra without any additional mining cost," she said.

Ms Ward said tellurium had now become "very popular" because it was used to build solar panels, and demand was expected to exceed supply.

She said competition for the scholarships was fierce, with anyone working on a project in WA as a PhD student being eligible.

Ms Ward said she started her mining career in Mt Isa in Queensland where she worked in base minerals, before working at the University of South Australia on a year-long project.

She moved to Tasmania for a few years and worked in tin, before taking 10 years off work to have children.

Ms Ward said she was working at a Kambalda smelter when she decided to start her PhD, which she had planned to do part-time.

"But then I got made redundant from the smelter (and) at the same time I got accepted into university," she said.

"And then I found out I was getting a scholarship, which I could only get if I was full-time, so that's how I ended up at university full-time."

She said the Curtin University WA School of Mines already had a project in tellurites that immediately appealed to her because it was "new and different".

Ms Ward said she was grateful the scholarship came with an equipment fund, and she was looking at potentially buying a small mill for the university to carry out ultra-fine grinding in the lab.

It was her second year of research, with the project expected to finish in 2½ years.

She said if it was successful, it could be piloted in a plant and scaled up from there, but even if the tellurium extraction process did not work, Northern Star Resources could still learn from the project's outcomes.

Kalgoorlie-Boulder's Super Pit could yield even more riches as a result of a State Government scholarship. Picture: Tori O'Connor