

# Mine revamp paves way for drilling

By Tania Winter

GOLD EXPLORER MORNING Star Gold NL is looking to release an initial resource statement for its historical namesake project in Victoria by the middle of the year.

Also on the drawing board is a proposal to establish a small, underground modular plant at Morning Star for trial mining purposes initially.

The Sydney-based company has commissioned Gekko Systems to investigate further and has sent the minerals processing group a bulk sample extracted recently from the mine for assessment.

Morning Star managing director Nick Garling is hopeful the cost of the plant will come in under \$10 million, but this is yet to be confirmed.

Another option is toll milling the ore at either Maldon or Bendigo, both of which are underutilised at present and are not a prohibitive distance away.

## Progress made

The junior has spent over \$11 million at the Morning Star mine since 1999, totally rebuilding all aspects of infrastructure, including the headframe, the shaft and mine buildings.

This overhaul was implemented so the company could gain greater access to the mine and begin a diamond drilling program to test multiple underground targets, including the Morning Star's major 'Gap Zone'.

The Gap is an area estimated to host over 65 million tonnes of diorite dyke material, which was developed for mining but never extracted by WMC, the mine's prior owners.

Morning Star also purchased its own drilling fleet (a combination of new and used equipment) for around \$500,000 last year, which has led to savings of up to \$100/metre on drilling to date.

The company spent most of the previous three years dewatering, refurbishing and re-accessing the mine and is now moving into a full time exploration drilling and resource delineation stage.

Current mine access is to the 10 level (305m below surface), but the

mine was actually developed to the 26 level by WMC, producing between 2,000 and 5,000 ounces/vertical metre for total production of 883,000 oz at close to an oz/t.

"We have done studies looking at the resource potential of the mine based on WMC production records and extensive development assay records kept by them, and we believe that in terms of resource there is potential for 1-2 million oz, just in the Gap Zone alone," Garling claimed.

Last year the group carried out a significant amount of channel and reconnaissance sampling, taking 250 reef samples in total, which returned an average grade of 80 grams/tonne.

Since then, dewatering to the 10 level has allowed drilling to take place from two positions on the 9 level, targeting areas of possible "low hanging fruit" left over from earlier mining campaigns.

"We are currently doing a resource drill out on the northern end of the 9 level drive into an area dubbed the 7 sub-level, which was developed by WMC but never mined," Garling explained.

"We sampled it in the third quarter last year and believed that because it had only been partially developed that the reefs could extend.

"Since then we have been drilling out past the historically known areas of reef.

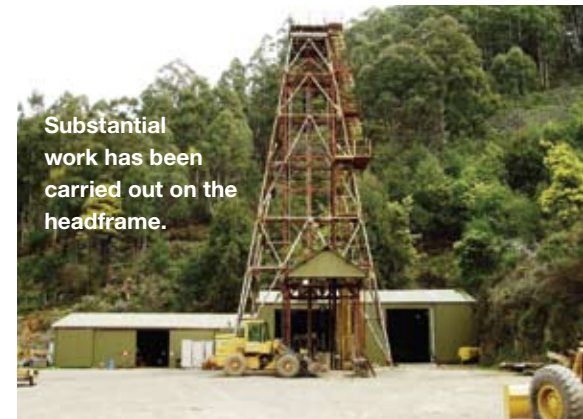
"So far we have drilled six holes and all of them are showing it is continuous with results of 0.8m at 135 g/t gold and 0.6m at 35-40 g/t.

"The background grades either side of these were 5-6 g/t, so there is a wide reef there that is heavily mineralised at high grade."

Exploration encouragement has also come in the form of the location of two parallel reefs in the area – Whitelaws and Kenny.

"Whitelaws was an historical reef that was mined and produced 200,000 oz at a grade of 40 g/t, and the Kenny Reef, which was previously unknown, sits just above it," Garling said.

Both reefs remain open along strike. Drilling is also concentrating on the



Substantial work has been carried out on the headframe.

above mentioned Gap Zone, a wedge shaped area that runs underneath the Whitelaws Reef.

Here, the company is looking for multiple targets between the 9 and 15 levels.

"There wasn't a lot of mining underneath the Whitelaws Reef until you got to the 16 level, but WMC did drill six holes which all struck mineralisation," Garling noted.

## Consistent grades

Metallurgical testwork last year on three different areas of the mine determined a grind rate of 250 microns returned free milling gold recoveries of 88%, increasing to 99% after leaching.

Each of the 150 kilogram samples used in the metallurgical testwork had a head grade of more than 1 oz, while a composite of the three samples combined with some lower grade 2 g/t material returned a mining grade of 17-18 g/t.

"We have found from the work that we've done that the grade is consistent," Garling said.

"Even though it is classic Victorian nuggetty gold, it is different to Bendigo, which is nuggetty gold in sediments.

"Around Woods Point and at the Morning Star mine, the quartz reefs are contained in iron rich 'dykes', or tabular bodies of igneous rock, which are clearly distinct from the surrounding sediments.

"We get much stronger pointers to where the grade is through visual interpretation of dyke bleaching and the presence of fuchsite, galena and arsenopyrite in core."