

# Selinsing an anchor to Monument's success

By John Miller, editor, *The ASIA Miner*



The open pit at Monument Mining's Selinsing Gold Project in Pahang state, Malaysia's largest gold producing state.

MONUMENT Mining has proved its credentials with the Selinsing Gold Project in Malaysia and is now set to reap the benefits at other projects. Selinsing served as an anchor for the company's expansion and the successful management team is using this experience as a springboard for development of the Mengapur Polymetallic Project in Malaysia and Murchison Gold Project in Australia.

The Canadian-based company acquired the Selinsing project in June 2007 and in just 30 months designed, funded, and built an open-pit gold mine and treatment plant which began commercial production in September 2010. Expansion of the processing plant to an annual capacity of 1 million tonnes was completed in June 2012 while the tailings storage facility was also enlarged during fiscal 2012 to accommodate 1 million tonnes annually for 10 years.

Selinsing is at Bukit Selinsing Koyan, about 65km north of Raub and 30km west of Kuala Lipis. It is in Malaysia's largest gold producing state, Pahang, and about a 2 hour drive from the capital Kuala Lumpur on a sealed highway.

Monument's president and CEO Robert Baldock says Selinsing was acquired as a brownfield site. "There was supposed to be a resource there but scant information that this was the case, and no NI 43-101 resource statement. We started from scratch doing confirmation drilling, metallurgical test work, preliminary engineering studies and the usual initial work to determine if it was economic, which turned out to be the case. Some time was spent getting the debt, creditors and court action out of the way, paving the way for construction and production decisions in 2008. This process also involved us raising money in the market so we could pay creditors, finance mine development and construction of processing facilities."

He says, "There was a last minute default during the 2008 credit crunch in relation to financing which left us \$10 million short and we had to cut the proposed plant in half, building just the crushing, grinding and gravity circuit as well as the gold room, while deciding to defer construction of the tank farm and leach circuit. We determined dore bars could be produced from gravity recovered gold with the cash from this enabling us to build the remainder of the processing facilities. Although we reached full production without raising extra funds, the shortfall delayed ramp-up by a year.

"Upon reaching this target we decided to expand plant capacity because we knew we would get to the end of the then known resource

for the project within 4 or 5 years and without exploration success we would need to process the low-grade ore that was being stockpiled. Processing this means putting through more volume to make up for grade deficiency. The phase 3 expansion was completed for about \$8.5 million in cash from our treasury and provided the equipment to process the entire resource other than the sulphide material which we hadn't yet got our heads around."

## New drilling success

Robert Baldock says production from Selinsing has been very good but is beginning to taper off because the company is at the tail-end of the original resource and grade is declining. "However, new drill results from the area and nearby Buffalo Reef show the ability to increase the resource. We are working on a new NI 43-101 report which is likely to add to the resource but will not include all assay results and information we have in the pipeline, including the most recent results. The new report, which serves as an annual resource update, is expected in March or April 2014 and will demonstrate our ongoing exploration success."

Best results from the most recent Buffalo Reef exploration and delineation drilling program are 33 metres @ 1.23 grams/tonne gold in oxide and 13.5 metres @ 3.83 grams/tonne in sulphide.

Chief managing geologist Ian Bruce says, "The local geology and drilling staff continues to work hard to identify additional near-mine mineralization at Buffalo Reef and Selinsing for potential development. We continue to streamline the logging and sampling process at site to help achieve a faster assay turnaround time from the primary certified commercial labs."

Drilling continues to expand mineralization at Buffalo Reef, Selinsing and the adjacent FELDA lands with two diamond drills owned and operated by Monument. The drilling is focused within and adjacent to the operating Buffalo Reef South open pit and north of the operating Selinsing open pit mine.

## Sulphide resources

Monument has recently addressed phase 4 of its plan at Selinsing, which deals with the sulphide resources. Robert Baldock says, "We have been looking at various alternatives including bacterial oxidation, roasting, pressure oxidation, halide-chloride leaching and fine grinding." The tests, which carefully considered the possible treatment methods



Peninsular Malaysia's gold belts and major deposits with Monument's projects highlighted.

and were carried out by independent laboratories, proved some of these options could achieve satisfactory recoveries in the high 80% and low 90% range, however, all were capital prohibitive, and presented technical and financial challenges.

In parallel, the company, at its on-site research and development facilities, has continued work on producing a flotation sulphide gold concentrate with the objective to produce a concentrate sufficiently high in gold grade to be acceptable to buyers in terms of contaminants and other quality issues. Potential buyers for such concentrate had also to be located regionally to minimize freight costs.

Efforts to float such a sulphide gold concentrate have been encouraging and a number of the samples were delivered to potential buyers in China and elsewhere for assessment. Initial verbal indications based on assays are that this concentrate would be acceptable to a number of prospective buyers in terms of gold content and contained contaminants and also from an environmental and regulatory point of view.

Robert Baldock says, "We estimate we could be able to continue producing gold at Selinsing for another 4 or 5 years with the sulphide resource we have now without adding to it through further exploration. The capex of this solution is likely to be closer to \$6 million than \$60 million."

"Selinsing's future looks promising," he says, "with the ongoing story being extended life using the infrastructure we have there as well as further exploration. We will continue to explore as we have an extensive land package with strong prospects for additional resources. We recently did a deal that has given us another 1600 hectares to the east and south of the mineralized trend and this bodes well because we are in this area now getting some good hits with our exploration."

**Similar approach at Mengapur**

Monument is adopting a similar approach at the Mengapur project. "We had to digest a big bullet when we bought it for cash," Robert Bal-



The Selinsing plant nearing completion of the expansion to an annual rate of 1 million tonnes.



Mining the iron-rich overburden at Mengapur.



Mining in the open pit at Selinsing.



An overview of the facilities at the Mengapur Polymetallic Project.

dock says, "and also had to overcome some acquisition issues, which tend to go with the territory in this industry. We purchased it in two bits - 70% for \$60 million and the other 30% for \$16 million cash, \$15 million of which we convinced the vendor to put back into the company in exchange for Monument shares at a premium to market.

"We were targeting access to the soil, which we didn't get when we first bought it and still only have access to Area C to the south of the 'harmonization agreement' line. We inherited a contractor with the acquisition who was working for the vendor who has rights to mine and remove oxide magnetite in soils. The contractor has a deal with Malaco to buy all the raw material it can take in terms of free digging, oxidized soils which contain magnetite and has been taking around 300,000 tonnes a month for several years, which is a good arrangement for Malaco and the contractor."

Monument has recently entered into a binding Oxide Magnetite Purchase and Profit-Sharing Agreement with Malaco for acquisition of certain overburden top soils on the project and the production of magnetite from these soils. Monument has been managing Malaco's top soil magnetite operation on Areas A and B since September 2012, and is responsible for grade control, a weighbridge operation and other administrative activities on Areas A and B, including collecting proceeds and paying royalties to the State Government.

Under the new agreement Malaco has confirmed Monument's right to access, extract, process and sell the oxide magnetite materials on the Area C overburden according to Monument's mine plan and has agreed on a profit-sharing arrangement for that material. Robert Baldock says, "This is in our interest because it enables us to follow our mine plan and remove these soils which are considered as overburden above the skarn we are seeking to exploit. This thick layer of up to 30 metres of overburden contains magnetite and we have to remove it to start the mine.

"Whatever we spend to remove it has to be spent and any contribution made from the sale of something we take out, offsets up-front costs to develop the mine. We will offset costs to such an extent that we believe we will make pretty good money from the overburden. We anticipate that the capex of this Phase 1 work will be under US\$10 million and that it will be operational by August.

"Surplus cash from Phase 1 will go towards development and construction of Phase 2 which involves a hard rock mine producing sul-



The processing facilities at the Murchison project in Western Australia.

phide magnetite as well as copper and precious metal concentrate. As soon as we recover our investment in Phase 2 we will be running for free. In the meantime, we have been making a modest investment in expanding the camp, building a new core shack, workshops and other facilities on the site.

"When we bought the project it came with 58,000 metres of core drilling with a positive feasibility study completed but which took no account of the iron and various other metals also in the deposit. Times have changed and China has an insatiable appetite for iron ore. This reflects positively on Mengapur because China is nearby and the project is close to the east coast of Malaysia, making shipping even easier.

"Mengapur is like Selinsing - it will be built in phases with no need to raise further capital and dilute the stake of shareholders or go into major debt," Robert Baldock says.

### Spreading wings

"We like Malaysia as a destination for our mining business and we have been treated well," he says. "However, good management of growing companies almost dictate that you should de-risk to the best extent because mining is a risky business. Having de-risked Monument by having no debt we have turned our attention to minimizing country risk. This is nothing to do with Malaysia as it doesn't matter which country you operate in, it is important to spread the risk. We also want to allevi-

ate the single project, cash flow risk because it is not good to have all your eggs in one basket, and we also want to diversify metal streams. Anything can happen in mining, we're not wizards of the future and we think it is prudent to minimize the risk moving forward.

"We have been shopping for about a year to find a project that helps achieve our de-risking aims and acquired the Murchison project in Western Australia for a very good price knowing we had a few pennies to spare. It has had a lot of money spent on it in the past and there is a good resource, processing plant and full infrastructure including workshops, laboratories, camp, power, water, etc.

"Previous owners had problems with the project and with financing owing to the drop in gold prices but we believe we can fix the problems and that Murchison can be profitable. The key for us is that we want to use Murchison as a hub to explore and possibly acquire in order to add to the resource as quickly as possible. We believe we can build the 540,000 ounce resource to at least 1 million ounces and are carrying out an NI 43-101 study on the existing resource.

"The engineering drawings and plans that came with the sale along with the plant and equipment shows they were planning for the operation but just didn't get there mainly owing to lack of finance due to the gold price downturn. They planned a 2 million tonne heap leach pad, and they bought a mixer, agglomerator and stacker but from initial tests we believe not much of the ore needs agglomerating.

"We will undertake the necessary test work to see if we can get a better handle on how to treat the ore on the heap and will do selective mining in the pits so that the low grade material goes on the heap and the medium to high grade material will go on the ROM next to the plant. When we have enough of that material accumulated and have overhauled the plant we will fire it up so that we get a combination of metal flow from the pad and the plant operations. We want to see how we can capitalize on the base we intend to establish at Murchison."

### Malaysia good for business

Robert Baldock says Malaysia is a good place to do business and the company employs 330 people in country. "However, a company still has to do the right thing and we are careful to obey Canadian mining regulations which stand us in good stead irrespective of whether Malaysian rules aren't quite as rigid.

"Another plank in our platform is that we focus on having good and constant dialogue with the community. We have regular meetings with the village chief, which is an historic position occupied by the head of the community at Selinsing. Through our Malay directors we have dialogue with him on a regular basis to find out what the needs and problems are, and together we try to address them. Sometimes it means donating money, other times it means making use of our equipment for community projects and we have also made the mine facilities available for emergency drills.

"These activities help get us recognized as a good corporate citizen and the governments at local, state and national levels know that we promote the area, region and nation as a good place and a safe place. We don't have to but we contribute to health schemes and although workplace contributions to retirement are compulsory, we go a bit further as a sign of goodwill. By and large the community and governments understand and recognize we are creating a sustainable business in the community that provides jobs for as long as the mine lasts with benefits to the community after the mine has gone."

He says Malaysia is not the mining centre of the world although some time ago it was the world's biggest tin producer until prices fell and then enforcement of environmental rules made mining tin much more expensive. "There is an historic mining culture and many miners gained skills from overseas educational sources such as Camborne in the UK and Kalgoorlie in Australia. When the tin industry collapsed these people had to leave the country to get jobs in mining but our start-up, together with Avocet when it operated in Malaysia, meant there were jobs for them and they came back.

"The company has established an excellent team in Malaysia with all members being locals, apart from three or four expats. We are very proud of them and of what they do, and the results show on the company's balance sheet.

"For us the future in Malaysia is very bright because we have unrestricted repatriation of our foreign investment; a five-year tax incentive at Selinsing; a good, low-cost skills base and supply of materials; and a good legal system that is British-based with many of the lawyers trained in the UK or Australia. There is also a strong interchange of students between Malaysian and Australian institutions, particularly those in Western Australia such as Curtin University and Kalgoorlie School of Mines while some Australian universities also have campuses in Malaysia."



New buildings at the Mengapur project, including laboratories, and core logging and storage facilities.



The ball mill at the Selinsing processing facilities.