

**METALLURGICAL RECOVERY PROCESS DETERMINED
FOR OXIDE AND TRANSITIONAL MATERIAL FOR
DEFLECTOR GOLD-COPPER PROJECT**

**PRELIMINARY MINING AND PROJECT ECONOMIC
STUDIES TO COMMENCE IMMEDIATELY**

12 January 2006

- ✦ **Flotation flowsheet determined for processing of Deflector oxide and transitional material**
- ✦ **Gold recovery of 80% and saleable copper concentrate grading 25% produced from West Lode oxide and transitional material**
- ✦ **Previously announced flowsheet for primary material produced copper concentrate with copper and gold recoveries at 92% and 89% respectively**
- ✦ **Flotation process flowsheet suitable for oxide, transitional and primary material, minimising complexity and capital expenditure**
- ✦ **Process and infrastructure capital costs estimated at A\$13.8m**
- ✦ **Preliminary mining and project economic studies to commence immediately on Deflector Gold-Copper Project**

METALLURGICAL SUMMARY

Batavia Mining Limited (ASX:BTV) today (Thursday) announced that a flotation process flowsheet has now been determined that will enable the processing of all three ore types at the Deflector Gold-Copper Project, ie oxide, transitional and primary material. The metallurgical testwork programme for all ore types was completed at Independent Metallurgical Laboratories in Perth.

Batavia announced the determination of the flotation flowsheet for the primary material in June 2005. Those results are reproduced below:

Primary Material

In general terms, the flotation tests have been carried out as follows:

- ✦ Rougher float using sodium ethyl xanthate as collector. Ore grind of ~80% passing 106 μm was used throughout. Both natural and elevated pH was tested.
- ✦ Rougher float using sodium Cleaner flotation (ie upgrading the rougher concentrate) using sodium cyanide, at an elevated pH (~10 to 11), to depress pyrite, which was liberated at the grind size tested. Best results were achieved using an elevated pH in the rougher stage.

Copper Flotation Performance					
Ore \blacklozenge	Assay Head (%)	Calculated Head (%)	Results	Recovery (%)	Concentrate Grade (% Cu)
West	0.93	0.89	Best	93	23
		0.92	Average	90	20
Central	1.40	1.44	Best	93	28
		1.43	Average	90	28
Blend \square	1.05	1.05	Best	91	26
		1.07	Average	92	23

Gold recovery data is summarised in the table below. This includes:

- ✦ Gold recovered by a laboratory scale gravity test (3" Knelson, mercury amalgamation of concentrate);
- ✦ Gold recovered to final cleaner concentrate
- ✦ Gold recovered by cyanidation of the cleaner tailings product
- ✦ Overall gold in tailings (combination of gold in rougher tailings and cyanide leach residue).

GOLD RECOVERY DATA							
Ore ♦	Assay Head (g/t)	Calculated Head (g/t)	% Gold Distribution			Overall Gold in Leach	Overall Gold Recovery – gravity/float/leach
			Gravity	Float Concentrate	Cleaner Tailings Cyanide Leach		
West	12.5	12.5	12.6	58.5	21.0	7.8	92.2
Central	11.6	11.0	23.1	56.9	11.7	8.3	91.7
Blend □	12.3	12.1	15.0	55.2	19.0	10.8	89.2

- ♦ Tests conducted on ore zone diamond core with no waste dilution
- Blend is a composite comprising 75% west and 25% central which represents the resource split

Within West and Central Lodes the primary material is the major component comprising 73% of the mineral resource with the balance, oxide and transitional material totalling 27%.

Oxide and Transitional Material

Past metallurgical testwork on the oxide and transitional material produced inconsistent gold and copper recoveries and below specification copper concentrate grades. Fresh oxide and transitional material was collected through a drilling campaign conducted in February 2005 specifically to conduct a new metallurgical testwork programme.

The objective of the testwork programme was to:

- ✦ Develop a simple flowsheet to process all three ore types
- ✦ Target gold recovery by gravity and by flotation techniques into a saleable copper concentrate, as gold is the major value component, copper recovery secondary.
- ✦ The oxide and transitional material to pay its way on being able to access the primary material, the major component of the mineral resource.

The testwork programme commenced in June 2005, with a significant quantity of tests completed. It was confirmed that Controlled Potential Sulphidisation (CPS) flotation could not produce consistent gold and copper recoveries and a saleable copper concentrate on oxide material, reflecting the previous work. A relatively new flotation reagent specifically designed to enhance the recovery of copper oxides and associated gold values was then tested on West Lode composites. Gold recovery into the flotation concentrate was improved and copper recovery improved significantly, producing a saleable concentrate.

In general terms, the tests have been carried out as follows:

1. Ore samples were first subject to gravity separation, at a grind size of 212 μm , using a laboratory scale Knelson concentrator, followed by mercury amalgamation of the concentrate.
2. Gravity tails were then subjected to flotation tests, where various parameters were investigated, which included grind size and reagent schemes (collectors, promoters, sulphidising agents etc.)
3. Mineralogical studies were also conducted on selected samples, which indicated a predominance of Malachite and secondary sulphides such as Digenite, Covellite and Chalcocite.
4. Initial flotation tests were focused on more conventional approaches using Xanthates and CPS (controlled potential sulphidisation). From this work, optimum grind size was determined to around 80% passing 90 μm , however, a significant amount of liberated Malachite was still reporting to flotation tailings.
5. Tests were recently completed using a 'copper oxide' specific collector in combination with conventional collectors. Results were significantly better, in terms of gold and copper recovery, for the oxide material, with smaller gains achieved with the transitional material. In all cases final copper concentrate grades exceeded 20%, with an overall average of 25% achieved. These results are summarised below.

Sample	IML Test No	Head Assay		Au Gravity Rec. %	Float Recovery		Concentrate Grade		Total Au Rec. %
		Au g/t	Cu %		Cu %	Au %	Cu%	Au g/t	
West Oxide - North	46	5.77	1.47	39.4	49.8	73.7	20.3	77	84.1
West Oxide - South	42	4.32	2.62	25.3	43.5	66.3	34.6	75	74.9
West Transitional South	44	1.23	0.79	37.5	19.1	49.9	22.4	73	68.7
West Transitional North	45	4.39	3.19	64.4	61.6	74.1	21.4	38	90.8
Average		3.93	2.02	41.7	43.5	66.0	24.7	66	79.6

Testing of a blend composite 75% West Lode and 25% Central Lode is currently in progress.

The objective of producing a saleable copper concentrate with high overall gold recovery through gravity and flotation processes has been met.

PROCESS AND INFRASTRUCTURE

The current infrastructure at the Gullewa Project comprises a 300,000 tpa CIL plant, associated infrastructure and 40 man camp. A first draft Scoping Study prepared by Metplant Engineering Services has now been received with major items as follows:

- Refurbishment of existing crushing and milling circuit
- Installation of copper flotation circuit
- Upgrade of selected site infrastructure
- Increase camp by 48 rooms and associated infrastructure services

Capital costs have been estimated at \$13.8M.

MINING STUDY

A preliminary Mining Study will now be commenced by Snowden Mining Industry Consultants, the process and infrastructure reviewed and economic studies undertaken. These preliminary studies are expected to be completed by the end of the March quarter.

For further information, please contact Mr Greg Durack at our Perth Office on + 61 (0)8 9327 0980.

Yours faithfully

BATAVIA MINING LIMITED



Greg Durack
Managing Director

The information in this report that relates to Metallurgical testing results and associated Concentrate grades is based on information compiled by Greg Durack of Batavia Mining Ltd and Craig Kenna of Independent Metallurgical Laboratories (IML- an accredited organisation). Both Greg Durack and IML are Corporate Members of the Australasian Institute of Mining and Metallurgy. Greg Durack is the Managing Director of Batavia Mining Limited and Craig Kenna is the Technical Director of IML. Both Greg Durack and Craig Kenna have sufficient experience in this area of Metallurgical testing to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Greg Durack and Independent Metallurgical Laboratories consent to the inclusion in the report of the matters based on their information in the form and context in which they appear.