



2350 - 1177 West Hastings Street  
Vancouver, B.C.  
V6E 2K3  
Phone: 604-685-2323  
Fax: 604-629-5228  
www.bajamining.com

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## **PRESS RELEASE**

### **BAJA ANNOUNCES PRELIMINARY ECONOMIC ASSESSMENT FOR THE EL BOLEO PROJECT**

John Greenslade, President of Baja Mining Corp. ("Baja" or the "Company") is pleased to announce the results of a Preliminary Economic Assessment ("PEA") for the 100% owned El Boleo copper cobalt zinc project located at Santa Rosalia, Baja California Sur, Mexico. All figures are in US and metric measure unless otherwise stated.

The PEA of the El Boleo project indicates that the project is sufficiently robust that it warrants continuing development to completion of the Definitive Feasibility Study ("DFS"), currently scheduled for completion by June 2006.

The PEA of the El Boleo project is based upon the following:

- the Mineral Resource Estimate for copper, cobalt and zinc prepared by independent geological consultants Hellman and Schofield Pty Ltd of Sydney, Australia (see page 3 hereof);
- the process flowsheet developed by independent consultants Bateman Engineering Pty Ltd., of Brisbane, Australia, and recoveries of copper, cobalt and zinc achieved during the Phase 1 pilot plant testing program at SGS Lakefield Research Ltd., Lakefield, Ontario, conducted under the guidance of Bateman and factored plant capital and operating costs developed by Bateman;
- the Mine Design and Preliminary Production Schedule (utilizing base case metal prices) and mine capital and operating costs developed by independent mining consultants Australian Mine Design and Development ("AMDAD") of Sydney, Australia; and
- Base case metal prices of copper - US\$0.95 per pound, cobalt – US\$12.00 per pound and zinc - US\$0.45 per pound .

#### ***Preliminary Economic Assessment***

Financial modeling based on the current, un-optimized preliminary mine schedule indicates that the project is potentially attractive at base case metal prices. Modeling at base case metal prices shows that the project could generate net after tax profit of

US\$761.3 million, with a discounted present value of US\$307.6 million at a 6% discount rate, over an initial projected 20 year mine life.

The current base case is for annual mine production to deliver 3.5 million wet tonnes (2.6 million dry tonnes) of run-of mine ore per year to the process facility; with maximum annual metal production of 50,000 tonnes of copper, 2000 tonnes of cobalt and 23,000 tonnes of zinc sulfate. Capital cost of the construction of the mine and mill complex is currently estimated at US\$292 million and total operating costs (including general and administrative expenses) at US\$19.90 per dry tonne of ore feed.

A financial model was created utilizing the current mine production schedule over an initial 20 years, the associated diluted metal grades based on the H&S geological resource and AMDAD mine schedule, metal recoveries from the Phase I pilot plant, capital and operating costs as set out herein and base case metal prices of copper US\$ 0.95/lb, cobalt US\$ 12.00/lb and zinc US\$ 0.45/ lb. In addition, sensitivity analysis was also conducted at various increased metal prices. The effective sensitivity of the project to metal price is summarized in the following sensitivity table.

<b>SENSITIVITY TO METAL PRICES</b>						
<b>Metal price US\$/pound</b>			<b>IRR (%)</b>	<b>Net Present Value Million US\$</b>		
<b>Copper</b>	<b>Cobalt</b>	<b>Zinc</b>		<b>6% discount</b>	<b>8% discount</b>	<b>10% discount</b>
\$0.95	\$12.00	\$0.45	21.2	\$307.6	\$226.2	\$164.3
\$1.05	\$14.00	\$0.55	25.6	\$418.1	\$317.0	\$239.9
\$1.15	\$16.00	\$0.65	29.7	\$528.0	\$407.3	\$314.9
\$1.64*	\$13.10	\$0.54	37.6	\$715.1	\$564.1	\$448.4

\*Note : Current cash prices as of July 13, 2005 – Copper US\$ 1.64/lb, Cobalt US\$ 13.10/lb, Zinc US\$ 0.54/lb.

The potential revenue stream from cobalt and zinc sulfate (based upon contained zinc metal content), at base-case metal prices, generates sufficient revenue to cover all operating costs resulting in net annual copper metal production cost of zero cents (\$0.00) per pound of LME grade copper produced. The following table provides base case highlights of the PEA.

<b>Preliminary Economic Assessments – Base Case Highlights</b>	
Preliminary Mine Production Schedule	2,600,000 dry tonnes per year (7,246 dry tonnes per day)
Cut-off grade (with dilution)	1.1% copper equivalent
Average grade	2.5% copper equivalent
Capital Cost	US\$292 million
Operating Cost	US\$19.90/tonne of ore
Metal Prices	Copper – US\$0.95/lb. Cobalt – US\$12.00/lb Zinc - US\$0.45/lb
(After tax) Internal rate of return (IRR)	21.2%

(After tax) Present Value (Millions)	US\$307.6 @6% discount rate
	US\$226.2 @8% discount rate
	US\$164.3 @10% discount rate

**The Preliminary Economic Assessment includes the use of inferred resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. Thus there is no certainty that the preliminary assessment will be realized.**

The PEA is contained within a National Instrument 43-101 report dated August 12, 2005 entitled “A Preliminary Assessment of the El Boleo Copper Cobalt Project” (“The Preliminary Assessment Report”), Baja California South, Mexico, prepared for Baja Mining Corp. by Qualified persons, William Yeo, MAusIMM, PhD., and Phillip Hellman, FAIG, PhD., of Hellman & Schofield, John Wyche, MAusIMM, MMICA, CPMin, of AMDAD, Michael Richard Holmes, BSc(Eng), BComm, MBA, MSAIMM, Pr.Eng, of Bateman, John Greenslade, BAsC, M.Eng, LLB., P.Eng, and Don Hunter, FAusIMM, C.P. (Mining). The PEA was prepared under the supervision of John Greenslade, President of the Company and reviewed by Independent Qualified person Don Hunter to provide the necessary independence required under N.I. 43-101. The Preliminary Assessment Report will be filed under the Company’s profile on SEDAR within the next 30 days, as specified by TSX-Venture Exchange guidelines. The Preliminary Assessment Report will also be available on the Company’s website at [www.bajamining.com](http://www.bajamining.com) at that time.

### **Cost Estimates**

Capital costs utilized in the PEA were developed by Bateman from:

- In-house historical data, where costs of similar projects are available to it, in conjunction with;
- Pricing for the acid plant and wharf facilities supplied by the Company; and
- Limited budget pricing from vendors for specific major item of equipment.

Bateman developed a factored estimate using the mechanical equipment cost as the basis of the direct field cost. An analysis of the major flowsheet areas was conducted by Bateman and, on the basis of their recent project experience, factors were applied for each major process facility. In this way a unique profile of factors was built up for each main process area, increasing the accuracy and reliability of the estimate. The overall factored capital cost of US\$292 million is considered to have an accuracy of -10%+30% and includes the capital components of both the Process Plant and the Mining Operation.

In addition, the economic model for the PEA includes US\$12 million for working capital, spares and first fill and US\$10 million to complete the DFS, and other studies. It also includes US\$3 million per year in sustaining capital.

Operating costs (loaded to include general and administrative expenses) were developed by Bateman from the following sources and factors. These are:

- Metallurgical and pilot plant testwork in combination with;
- Estimated prices for reagents and consumables;
- Appropriate labour costs for Expatriates and Mexican nationals;
- Maintenance costs based on other plant operations of a similar nature;
- Remuneration experience from the local Gypsum operation, adjacent to the Property on the Baja Peninsula;
- Estimates of mining costs from AMDAD; and
- Estimates of freight delivery costs based on budget quotes from freight and shipping agents.

The site operating costs vary on a year by year basis as a function of the plant feed rate. For the first 3 years of operations, based on a plant feed rate of 2.6 million dry tonnes per annum, the operating costs average US\$51.75 million per annum excluding contingency and all marketing costs. This amounts to a cost of US\$19.90 per tonne of plant feed ore.

### Resource Model

In 2004 geological Consultants, Hellman & Schofield Pty. Ltd. (H&S) of Sydney, Australia, produced a 3-dimensional resource block model of the El Boleo Deposit. In producing this model H&S utilized the existing geological interpretation of the deposit and used analytical data that was obtained from exploration and evaluation programs carried out on the project between 1993 and 1998. It was assumed that mining would initially be by open pit method, hence the model has block dimensions of 50 metres (east) by 100 metres (north) by 1 m vertically. Grade estimates of Copper, Cobalt and Zinc were determined using Ordinary Kriging, parameters used in the grade estimation are tabulated below:

Parameter	Manto 2, 3aa, 3a, 3, 4			Manto 0 & 1		
	Meas	Ind	Inf	Meas	Ind	Inf
<b>Search Radii (m)</b>						
X -direction	250	350	500	500	750	1000
Y - direction	200	280	400	500	750	1000
Z - direction	2	2	4	2	2	4
<b>Data Criteria</b>						
Min data	18	8	6	18	8	6
Max data	32	32	32	32	32	32

The results of this resource model for Mantos 1, 2, 3aa, 3a, 3, & 4 were reported on in a report dated March 2005, prepared by Qualified persons, William Yeo, MAusIMM, PhD., and Phillip Hellman, FAIG, PhD., of Hellman & Schofield (the "H&S Report"), in accordance with national instrument 43-101, Hellman & Schofield reported a Measured and Indicated resource estimates based on copper equivalent cut-off grades utilizing

metal prices of copper (Cu) US \$0.95 per pound, cobalt (Co) US \$12 per pound, and zinc (Zn) US \$0.45 per pound, and defined as Cu Equiv = Cu + Co\*12/0.95 + Zn\*0.45/0.95. The H&S Report is available for review under the Company's profile at [www.sedar.com](http://www.sedar.com) or on the Company's website, [www.bajamining.com](http://www.bajamining.com). The results were reported in a news release dated April 7, 2005.

To provide a model more relevant to underground mine design a new block model was built by H&S with a block height of 0.2 meters ("m"). The methodology used in building these models was exactly the same as that used for the 1m block model. The only difference being the assay data was composited into 0.2 m intervals rather than 1m and the search radii used in the grade estimation was constrained in the vertical direction to be consistent with the reduced composite interval. The resources are presented in the Preliminary Assessment Report at a 1.5% and 2.0% Cu Equivalent for Mantos 1, 2, 3a and 3 only. A summary of these resources are set out below:

		Manto				0.2m Model
Cueq cut-off	1.5%	1	2	3a	3	Total
<b>Measured &amp; Indicated</b>	<b>Tonnes (10<sup>6</sup>)</b>		15.2	17.8	53.1	86.1
	<b>CuEq%</b>		2.30	2.47	2.67	2.57
	<b>Cu%</b>		0.65	0.75	1.34	1.09
	<b>Co%</b>		0.072	0.108	0.090	0.090
	<b>Zn%</b>		1.57	0.77	0.42	0.70
<b>Inferred</b>	<b>Tonnes (10<sup>6</sup>)</b>	34.6	26.1	7.8	39.4	107.9
	<b>CuEq%</b>	3.01	2.33	2.25	2.59	2.64
	<b>Cu%</b>	1.38	0.59	0.90	1.45	1.18
	<b>Co%</b>	0.079	0.086	0.079	0.065	0.075
	<b>Zn%</b>	1.36	1.37	0.75	0.67	1.07

		Manto				0.2m Model
Cueq cut-off	2.0%	1	2	3a	3	Total
<b>Measured &amp; Indicated</b>	<b>Tonnes (10<sup>6</sup>)</b>		7.5	9.9	36.5	53.9
	<b>CuEq%</b>		2.89	3.06	3.09	3.06
	<b>Cu%</b>		0.97	0.99	1.62	1.41

	<b>Co%</b>		<b>0.086</b>	<b>0.134</b>	<b>0.100</b>	<b>0.104</b>
	<b>Zn%</b>		<b>1.75</b>	<b>0.79</b>	<b>0.46</b>	<b>0.70</b>
<b>Inferred</b>	<b>Tonnes (10<sup>6</sup>)</b>	<b>24.9</b>	<b>14.5</b>	<b>3.6</b>	<b>26.0</b>	<b>69.0</b>
	<b>CuEq%</b>	<b>3.50</b>	<b>2.81</b>	<b>2.86</b>	<b>3.04</b>	<b>3.15</b>
	<b>Cu%</b>	<b>1.67</b>	<b>0.76</b>	<b>1.33</b>	<b>1.81</b>	<b>1.51</b>
	<b>Co%</b>	<b>0.089</b>	<b>0.106</b>	<b>0.093</b>	<b>0.069</b>	<b>0.085</b>
	<b>Zn%</b>	<b>1.49</b>	<b>1.50</b>	<b>0.77</b>	<b>0.75</b>	<b>1.18</b>

## Mining

The seam-like structure and low material strength of the mantos suggested some form of continuous mining similar to underground coal, potash or salt mining. AMDAD examined three alternative methods, longwall mining, bord and pillar mining and shortwall mining. Longwall was discounted as a large enough tonnage of suitable manto could not be defined to justify the large capital cost. Bord and pillar mining uses continuous miners to drive a series of roadways through the manto to form a pattern of wide pillars. The miners then split the pillars in an order designed to provide maximum roof support. The miner retreats through the pillars splitting them to a point where they support the roof just long enough for the miner to be a safe distance back from the collapsing roof. Shortwall uses hydraulic shields to provide roof support for a continuous miner working backwards and forwards across a face.

For the purpose of preliminary production and cost estimation, AMDAD developed a mine plan which could be worked by either shortwall or bord and pillar mining. Preliminary production schedules assume shortwall mining with some bord and pillar to develop access roadways and to mine areas where the manto structures do not allow shortwall panels to be laid out.

Having selected a continuous miner based mining system, the resource block model developed by H&S was queried to define the areas of each manto that could be economically mined. The criteria used were:

- Minimum mining height of 1.8 m to allow working room for the machines and for roof bolt installation. If the economic thickness of the manto was less than this it was diluted by the lower grade blocks above up to 1.8 m height.
- Maximum mining height of 4.2 m to match the reach of the continuous miner. Economic blocks above this height were ignored.
- The composited copper equivalent grade of the manto over the mining height must exceed a cut off grade of 1.0% Cu. Copper Equivalent for mining purposes was calculated based upon base case metal prices and process recovery of 89.2% for copper and 80.5% for cobalt. Such that

each 1% cobalt equals 80.5% cobalt recovery x \$12 per pound divided by 89.2% copper recovery x \$0.95 per pound = 11.4% copper

After applying an allowance for voids in old workings and extraction percentages (based upon ore left in pillars), 47 million dry tonnes remained inside the underground mining target boundaries. A further 4 million dry tonnes was added from small open cut pits designed to mine areas of manto to shallow for underground mining. The total resource available for the conceptual mine plan is thus 51 million tonnes at an average grade of 1.6% copper and 0.08% cobalt, or 2.5% copper equivalent. At completion of the preliminary schedule there is still 1.4 million tonnes remaining in underground targets and 2.0 million tonnes remaining in preliminary opencuts.

In addition to the currently defined preliminary underground and opencut targets, Mantos 1 and 3 contain a further 48 million tonnes at a cut-off grade of 1% copper equivalent within the defined mining height limits. These potential targets average 0.95% copper and 0.07% cobalt.

### **Data Verification**

Drill data utilized by H&S in the calculation of resources was primarily based on drilling by International Curator Resources Limited during the period 1993-97. Assay quality control data and assessment is mainly based on the work of Peatfield (1997,1998) and Peatfield and Smee (1997), which is reviewed and commented on in the Preliminary Assessment Report by H&S.

### **Mining Trial**

The next phase of the DFS is an underground mining trial utilizing a 58 tonne Dosco Roadheader (a type of continuous mining machine) purchased by the Company. The trial is scheduled to commence between the 15<sup>th</sup> and 20<sup>th</sup> of September and will operate for 4-5 weeks.

John W. Greenslade, P.Eng., President of the Company and a Qualified Person has reviewed the technical disclosure contained herein and accepts responsibility for such disclosure.

**ON BEHALF OF THE BOARD OF DIRECTORS OF  
BAJA MINING CORP.**

*“John W. Greenslade”*

**JOHN W. GREENSLADE, PRESIDENT**

For further information please contact John Greenslade, President, at (604) 685-2323

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