

PRESS RELEASE

August 1, 2006 Concord, New Hampshire 2006-16 JAG – TSX

of

JAGUAR MINING INCREASES TURMALINA GOLD RESERVES BY 58.6%

Jaguar Mining Inc. ("**Jaguar**") (**JAG - TSX**) completed a revision of the feasibility study on the Turmalina Project in Minas Gerais, Brazil. The revised study, based on the results of Phase 3 of the exploration program, increased Turmalina's gold reserves by 58.6% to 587,000 oz and extended the mine life for an additional three years to 8.6 years.

The feasibility study was prepared by Jaguar under the coordination of TechnoMine Services, LLC and audited by Scott Wilson Roscoe Postle Associates Inc. ("Scott Wilson RPA"). Jaguar has filed an independent National Instrument 43-101 technical report on SEDAR for Turmalina. The report was written by Mr. Graham G. Clow, P.Eng. and Mr. Wayne W. Valliant, P.Geo. of Scott Wilson RPA, each of whom is certified under NI 43-101 as a Qualified Person.

The technical report confirms Turmalina is a robust project. The following are the key points of the report, which includes Turmalina's Principal and Northeast Zones:

| Mineral Reserves: | 2,916,000 tonnes @ 6.3 g/t Au containing 587,000 oz |
|----------------------------|--|
| Total Feed to Plant: | 2,916,000 tonnes @ 6.1 g/t Au containing 572,000 oz |
| Mining Rate: | 360,000 tonnes per year |
| Process Recovery: | 90% |
| Annual Average Production: | 60,000 oz per year |
| Mine Life: | 8.6 years |
| Capital Cost: | US\$31.5 million |
| Average Operating Cost: | US\$33.23 per milled tonne |
| Total Cash Cost: | US\$214 per oz |
| Total Production Cost: | US\$275 per oz, including CAPEX |
| Pre-tax IRR: | 47.5% |
| Gold Price: | US\$450/oz |
| Exchange Rate: | US\$1.00 = R\$2.19 for CAPEX expenditures reverting to long-term rate of |
| - | US\$1.00 = R\$2.50 |
| | |

Jaguar began construction of the Turmalina 1,000 tpd underground gold mine and processing plant in January 2006, with operations scheduled to begin in October 2006. The plant is scheduled to ramp up to full production of 30,000 tonnes per month by mid-2007.

The original Turmalina report was published in September 2005, with capital costs of US\$19.4 million and IRR of 31.8% at a US\$375/oz gold price and R\$2.75/US\$ exchange rate. Despite the capital cost increase in the revised report, the IRR increased to 47.5%. The following are the primary reasons for the increased capital costs:

- Stronger Brazilian real against the U.S. dollar
- Reduced availability of used equipment in Brazil due to increased mining activity
- Construction of a tailings pond facility for the excess capacity not previously contemplated

Proven and probable reserves at Turmalina have increased by 58.6% to 587,000 oz from the original feasibility study estimate of 370,000 oz. The updated reserve table is shown below.

| | Principal Zone | | NE Zone | | TOTAL | | |
|----------|----------------|-------|---------|-------|-----------|-------|----------|
| | Tonnes | Grade | Tonnes | Grade | Tonnes | Grade | Cont. Au |
| | (t) | (g/t) | (t) | (g/t) | (t) | (g/t) | (oz) |
| Proven | 234,000 | 5.5 | | | 234,000 | 5.5 | 41,000 |
| Probable | 2,017,000 | 6.8 | 665,000 | 4.9 | 2,682,000 | 6.3 | 546,000 |
| Total | 2,252,000 | 6.7 | 665,000 | 4.9 | 2,916,000 | 6.3 | 587,000 |

TURMALINA MINERAL RESERVES – JULY 2006

Notes:

Based on a gold price of \$450 per ounce 1.

2. Cutoff grade = 1.0 g/t

3. Dilution overall = 15%

4. Extraction = 89%

5. Reserves estimated according to CIM definitions and standards

Jaguar had previously announced a measured and indicated mineral resource estimate of 732,848 oz (3,326,363 tonnes grading 6.85 g/t) at Turmalina. Upon further review by Scott Wilson RPA, measured and indicated resources were revised to 644,000 oz (2,854,000 tonnes grading 7.0 g/t, inclusive of mineral reserves), which have now been upgraded to the above reserves. Inferred resources at Turmalina are estimated at 211,000 oz (1,027,000 tonnes grading 6.4 g/t) in the revised study.

Exploration work to date confirms that the geology at Turnalina is consistent with major gold mines elsewhere in the Iron Quadrangle.

Active Growth and Development Program

Jaguar produces gold in the Iron Quadrangle region of Brazil and projects a production profile of over 200,000 ounces per year by 2008. Using its experience and strong local relationships, Jaguar continues to acquire quality gold resources from senior mining companies and is preparing feasibility studies targeting the conversion of the acquired resources to reserves. It controls 72,000 acres of gold concessions, which is the second largest gold property portfolio in the district, and continues to aggressively explore its assets in Brazil's most prolific gold region. Jaguar has 45,833,100 common shares outstanding.

For further information, please contact Daniel Titcomb, President on (603) 224-4800 or Robert Jackson, EVP, Corporate Development on (416) 725-4343.

This press release contains forward-looking statements concerning Jaguar's 2006 objectives, the measured and indicated resources, their average grade, the commencement period of production, cash operating costs and completion dates of feasibility studies, gold production and sales targets, capital expenditure costs, future profitability and growth in reserves. Forward-looking statements can be identified by the use of words, such as "are expected", "is forecast", approximately or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the actual results, or performance to be materially different from any future results or performance expressed or implied by the forward-looking statements.

These factors include the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drilling results and other ecological data, fluctuating gold prices and monetary exchange rates, the possibility of project cost delays and overruns or unanticipated costs and expenses, uncertainties relating to the availability and costs of financing needed in the future, uncertainties related to production rates, timing of production and the cash and total costs of production, changes in applicable laws including laws related to mining development, environmental protection, and the protection of the health and safety of mine workers, the availability of labour and equipment, the possibility of labour strikes and work stoppages and changes in general economic conditions.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended.

These forward-looking statements represent our views as of the date of discussion. The Company anticipates that subsequent events and developments may cause the Company's views to change. The Company does not undertake to update any forward-looking statements, either written or oral, that may be made from time to time by or on behalf of the Company subsequent to the date of this discussion. For a discussion of important factors affecting the Company, including fluctuations in the price of gold and exchange rates, uncertainty in the calculation of mineral resources, competition, uncertainty concerning geological conditions and governmental regulations and assumptions underlying the Company's forward-looking statements, see the "CAUTIONARY NOTE" regarding forward-looking statements and "RISK FACTORS" in the Company's Annual Information Form for the year ended December 31, 2005 filed on System for Electronic Document Analysis and Retrieval ("SEDAR") and available at http://www.sedar.com.

-30-