



## PRESS RELEASE

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JAG – TSX

### **Jaguar Mining Provides Update of Operations, Licensing, Exploration and Corporate Initiatives**

*Commercial Operations Declared for Q3 at Turmalina; Measured, Indicated Resources Increase by 10%; Jaguar Shares to Begin Trading on NYSE Arca Exchange*

**Jaguar Mining Inc. (“Jaguar” or “the Company”)** (JAG-TSX) provided an update today of the progress it has made at its newly commissioned Turmalina facility and announced newly estimated resources at Turmalina and Caeté Projects. The Company also provided an update on the status of the feasibility study for the Caeté Project, construction at the Paciência Project and announced that it has completed its application to list its common shares on the NYSE Arca Exchange and expects to begin trading in the latter part of July.

Recent operating highlights include:

- Completion of commissioning phase at Turmalina after optimizing the recovery circuit;
- Third mineralized zone at Turmalina delineated adding 68,400 oz of measured and indicated resources and 207,700 oz of inferred resources;
- Nearing completion of cross-cut from Turmalina’s level two ramp over to third mineralized zone where diamond core drilling will begin;
- Initiated drilling Phase III to convert Turmalina’s resources to reserves and expand production from 70,000 oz/year to 100,000 oz/year by early 2009;
- Estimated 661,200 oz of measured and indicated gold resources and 119,450 oz of inferred resources at the Caeté Project in conjunction with mine planning for the on-going bankable feasibility study;
- Construction progress at Paciência Project on budget and on schedule;
- Total measured resources of 932,250 oz and indicated resources of 1,962,600 oz. The Company has inferred resources of 850,210 oz. All totaled the latest resource calculations reflect an increase of approximately 10% from the level Jaguar previously reported.

Daniel Titcomb, Jaguar’s President and CEO stated, “We continue to execute on the plan to reach 300,000 oz of gold production in 2009 and these latest developments are further proof that we have the necessary assets to achieve that goal, including substantial mineral resources, an experienced and highly-skilled operating team in Brazil and the necessary financial capital. Our latest exploration results are further evidence of the sizeable potential in this unique greenstone belt, which has an excellent infrastructure. These results clearly demonstrate Jaguar’s opportunity to significantly increase our resources in Brazil and further expand shareholder value.”

### **Turmalina Operation**

#### *Operations, Production and Cash Costs*

During the second quarter, operations at Turmalina were optimized to increase the overall metallurgical recovery. By the end of July, Turmalina is expected to sustain the design rate of 1,200 tpd of ore processing with an average gold recovery of 90%. Based on the current throughput levels and overall performance, the Turmalina operation has been declared ‘commercial’ by Jaguar. Mining rates of 1,200 tpd have been consistently achieved at Turmalina and are expected to remain at this level through the end of 2007.

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During the first half of 2007 ramp up, Turmalina produced approximately 18,000 ounces of gold at an estimated total cash cost of approximately \$235 to \$240 per ounce. The Company currently estimates Turmalina will produce approximately 36,000 ounces of gold during the second half of 2007. Based on an exchange rate between R\$1.90-2.00 (Brazilian reais) per US\$1.00 during the second half of 2007, Turmalina's total cash costs of production are expected to range between \$240 to \$260/oz. The Company has in-place forward exchange contracts to cushion the impact of a stronger Brazilian real. The net cash benefit the Company will receive from these financial instruments, will, in effect, reduce the Company's overall costs of production. The Company estimates the net pro rata impact from the foreign currency (hedge) will effectively reduce Turmalina's cash production costs between \$20-25/oz during the second half of the year using the same exchange rate assumption of R\$1.90-2.00 per US\$1.00.

### *Phase II Expansion to 100,000 oz per year*

The Company has recently completed the initial evaluation of a third mineralized zone (Satinoco) located approximately 300 meters away from the main ore body at the Turmalina complex. Phase II included a total of 10,363 meters drilled in 68 holes on surface. Results from the most recent drilling program resulted in the addition of approximately 68,400 oz of measured and indicated resources and 207,700 oz of inferred resources to Jaguar's resource base. Note these resources are only to a depth of 250 meters from surface and the mineralization remains open at depth. Highlights of these drill results are presented in the following table:

Satinoco Main Drilling Results										
Hole	Coordinate		Elevation (m)	Width (m)	Azimuth Degree	Dip Degree	Mineralized Intervals			
	N	E					From	To	Gade	Thick.
FSN-02	7,817,279	512,336	705.5	182.86	Vertical	-90	164.15	166.16	6.08	2.01
FSN-05	7,817,163	512,414	705.8	197.53	Vertical	-90	118.45	120.10	4.56	1.65
FSN-06	7,817,028	512,553	742.8	141.08	245	-70	56.00	58.91	24.76	2.91
FSN-09	7,817,264	512,280	712.0	109.08	Vertical	-90	89.00	94.96	12.32	5.96
FSN-10	7,816,820	512,858	747.7	111.00	250	-50	57.55	68.90	1.11	11.35
FSN-11	7,816,902	512,960	726.9	261.15	250	-85	208.45	212.25	5.70	3.80
							215.30	217.70	3.27	2.40
FSN-16	7,816,979	512,644	741.9	110.25	250	-50	59.35	61.50	8.74	2.15
FSN-18	7,817,195	512,591	718.9	241.90	250	-50	167.70	171.00	2.40	3.30
FSN-20	7,817,155	512,596	720.80	204.25	250	-50	146.80	149.35	2.67	2.55
FSN-23	7,817,007	512,637	738.4	97.15	250	-50	83.40	86.80	3.01	3.40
FSN-24	7,816,914	512,931	724.7	222.65	250	-50	136.85	141.70	2.41	4.85
FSN-27	7,816,797	512,914	749.8	88.75	250	-70	92.90	95.90	3.65	3.00
FSN-28	7,816,800	513,020	736.4	234.40	250	-70	85.20	88.45	4.31	3.25
FSN-43	7,817,013	512,734	726.3	171.40	250	-60	39.80	42.00	4.46	2.20
FSN-44	7,817,066	512,707	725.2	205.70	250	-60	160.90	163.90	4.47	3.00
FSN-47	7,816,830	512,766	754.3	44.75	250	-70	21.25	29.25	3.31	8.00
FSN-53	7,817,060	512,508	727.8	47.50	250	-60	40.40	46.75	12.37	6.35
FSN-54	7,817,224	512,321	697.9	35.15	250	-60	17.40	23.10	11.25	5.70
							27.05	27.90	35.70	0.85
FSN-56	7,817,048	512,528	730.3	46.65	250	-60	41.60	46.65	6.32	5.05
FSN-59	7,817,031	512,541	733.5	47.30	250	-50	36.80	38.85	4.64	2.05
FSN-62	7,816,973	512,577	747.1	64.80	250	-50	22.10	26.20	5.80	4.10
FSN-63	7,817,168	512,801	709.5	412.25	250	-87	312.30	315.90	2.40	3.60
							353.00	358.00	6.80	5.00
FSN-64	7,816,894	513,104	716.4	403.10	270	-87	255.00	258.10	4.30	3.10

The complete table of drill results for Turmalina's third zone can be found at:

[http://www.jaguarmining.com/i/pdf/2007-07-18\\_NRT.pdf](http://www.jaguarmining.com/i/pdf/2007-07-18_NRT.pdf)

Geological modeling of these drill results at the Satinoco ore body led to the following additional NI 43-101 compliant resources for the Turmalina operation:

Category	Tonnage Tonnes (t)	Grade g/t	Ounces oz Au
Measured (M)	178,200	5.04	28,900
Indicated (I)	272,500	4.51	39,500
(M + I)	450,700	4.72	<b>68,400</b>
Inferred	1,856,000	3.48	<b>207,700</b>

Work continues to excavate a cross-cut over to the third ore zone from the second level ramp, which is utilized to mine ore from the primary Turmalina ore body. A cross-section view of the three ore bodies at Turmalina can be found in the Corporate Presentation under the Investor Relations tab on the Company's web site at [www.jaguarmining.com](http://www.jaguarmining.com).

The company has initiated a feasibility study to increase production by developing this new zone. Preliminary engineering to expand the processing circuits above ground at Turmalina has begun with a target completion and start-up date of Q1 2009. The feasibility study for the expansion of Turmalina is expected to be completed within the next six months.

Through the end of June, approximately 235 meters have been excavated over to the third zone and this effort is expected to be completed at the end of the current quarter. Once completed, the Company will implement a 10,000-m in-fill diamond drill program as part of the feasibility work to convert resources to reserves. The Company expects these new resources will boost Turmalina's production from approximately 70,000 oz/yr to 100,000 oz/yr.

### Sabar Project

Operations during the second quarter at Jaguar's Sabar mining complex were on target and met management's expectations. During the first half of 2007, Sabar has processed 214,300 tonnes of ore containing an average grade of 2.39 g/t and produced slightly over 11,300 oz of gold. Preliminary cash operating costs for the first half of 2007 were consistent with previous expectations of between \$415 and \$420 per ounce. The Company is currently evaluating a new higher grade zone at Sabar to possibly bring into the mine plan during the latter part of 2007 or in early 2008, which could help reduce cash operating costs at this operation.

### Caet Project

#### *Exploration and Feasibility Study*

Geological modeling of the exploration campaigns carried out to-date gave rise to the following NI 43- 101 compliant resources:

<b>Caet Project – Resource Estimate</b>									
	<b>Pilar</b>			<b>Roa Grande</b>			<b>Total</b>		
	Tonnes	Grade	Cont. Au	Tonnes	Grade	Cont. Au	Tonnes	Grade	Cont. Au
	(t)	(g/t)	(oz)	(t)	(g/t)	(oz)	(t)	(g/t)	(oz)
Measured (M)	713,800	5.99	137,400	727,700	5.38	125,800	1,441,500	5.68	263,200
Indicated (I)	978,400	5.91	186,000	1,270,500	5.19	212,000	2,248,900	5.50	398,000
(M + I)	1,692,200	5.94	323,400	1,998,200	5.26	337,800	3,690,400	5.57	<b>661,200</b>
Inferred	168,600	7.41	40,150	558,000	4.42	79,300	726,600	5.11	<b>119,450</b>

The Company was able to successfully delineate the mineralized bodies at the Roça Grande target and confirm NI 43-101 compliant measured and indicated resources amounting to 337,800 oz of gold. Prior to this work, Jaguar only had non-NI 43-101 compliant estimates provided by the previous owner of the concession. At the Pilar target, Jaguar upgraded previous NI 43-101 compliant historical figures to model-based estimates based on more stringent criteria as required by NI 43-101 and has further identified new gold-bearing zones within the overall structure that may give rise to additional mineralized bodies.

The new drill holes detailed below indicate a significant possibility of consistent continuity at depth within the new ore bearing zone at Pilar, between two previously identified and measured zones.

<b>Pilar Target - Phase III Drilling Results</b>										
Hole	Coordinate		Elevation (m)	Length (m)	Azimuth degree	Dip degree	Intervals			
	N	E					From (m)	To (m)	Grade	Thickness
PMS-76	7,788,923	662,680	887.8	315.60	315	-77	246.05	248.05	8.12	2.00
							255.05	258.05	1.92	3.00
							261.05	264.05	3.51	3.00
PMS-77	7,788,898	662,660	894.5	314.35	315	-81	196.60	202.60	1.35	6.00
							250.20	251.20	2.56	1.00
							253.20	257.20	2.30	4.00
							264.15	265.15	1.20	1.00
PMS-78	7,788,859	662,643	888.4	313.70	315	-82	277.15	280.15	1.43	3.00
							81.45	82.45	4.45	1.00
							90.45	93.45	2.74	3.00
							96.45	102.45	1.66	6.00
							133.45	136.45	18.53	3.00
							256.70	258.70	1.72	2.00
							260.70	261.70	2.30	1.00
264.70	269.70	1.30	5.00							
PMS-79	7,788,802	662,623	868.0	301.95	325	-85	no significant intervals			
							285.70	291.70	26.34	6.00
PMS-80	7,788,905	662,776	891.2	530.80	267	-82	293.70	298.70	2.59	5.00
							444.65	454.65	4.39	10.00
							452.65	454.65	2.96	2.00
							467.65	468.65	29.00	1.00
							474.65	484.65	10.98	10.00
PMS-81	7,788,765	662,650	867.4	519.20	267	-73	502.00	505.00	1.48	3.00
							318.60	319.60	3.12	1.00
							323.35	324.35	1.11	1.00
							332.00	338.00	2.06	6.00
							348.60	349.60	1.37	1.00
							356.60	357.60	6.35	1.00
PMS-82	7,788,756	662,669	867.6	464.35	300	-77	375.15	376.80	1.67	1.65
							no significant intervals			

Jaguar's management continues to believe the feasibility study for this project will be completed during the current quarter. Based on the feasibility studies previously completed for Turmalina and Paciência, Jaguar has successfully converted an average 91% of measured and indicated resources into proven and probable reserves. Jaguar's management believes that the conversion of resources into reserves for the Caeté Project should be similar. From preliminary testing, Jaguar's technical team expects recovery rates to be approximately 90%, similar to Jaguar's other sulfide projects.

The Company anticipates receiving the Implementation License (LI) during the current quarter for the Caeté Project. A production decision for this project is slated for the fourth quarter.

## **Paciência Project**

### *Construction Progress Update*

Excavation and civil work for this new 70,000 oz/yr facility was advanced during the second quarter and foundations for the crushers, mills, leaching & CIP circuits are expected to be in-place by the end of July, August and September, respectively. Mine development at the Santa Isabel mine also progressed at Levels 1 and 2 of the

ore bodies with 609 meters excavated in the second quarter. The Company expects to open approximately 1,320 meters of drifts and drill approximately 900 meters underground at Paciência during the second half of the year.

The opening of a second mine-entrance, located approximately two kilometers from the Santa Isabel mine entrance, will be completed by the end of July and excavation work from this new entrance will begin in August. The Paciência Project is on schedule with nearly 40% of plant and mine construction work completed through June. The Company has been granted all of the necessary permits and licenses through the construction and commissioning phase.

Photos illustrating the construction progress for the Paciência processing plant can be found at:

<http://www.jaguarmining.com/s/PacienciaPhotos.asp>

### **Evaluation of Gold Hedge Position**

The Company is currently evaluating the possibility of eliminating its forward sales derivative, which involves the forward sale of gold representing approximately 63,000 oz at a price of \$527.10 over the next 9 quarters. The Company anticipates a decision to possibly reduce or completely eliminate the hedge position will be made during the third quarter of this year.

### **U.S. Listing**

#### *NYSE Arca Exchange*

Jaguar has completed its application to list on the NYSE Euronext's NYSE Arca Exchange. The Company has received notice that the NYSE Group's Listing and Compliance Committee has cleared the Company to file the application and the Company will move quickly to finalize the process to have its common shares listed on the NYSE Arca Exchange and to begin trading. Trading on the NYSE Arca is expected to start in late-July. Jaguar will trade under the ticker symbol "JAG" on NYSE Arca, as well as on the Toronto Stock Exchange where Jaguar shares currently trade. Jaguar Mining will be the first gold mining equity to be listed on NYSE Arca since the NYSE and Arca Exchange merger in 2006.

### **Analyst Meeting and Tour: October 16-19**

Jaguar will hold an analyst meeting and tour of the Company's operations in Minas Gerais, Brazil, beginning October 16, 2007. The Company is coordinating this trip with Aquiline Resources, which will conduct a tour at its properties in Argentina the following week. Qualified individuals interested in taking a tour of either Jaguar's operations or Aquiline's properties should contact Valéria DioDato for additional information.

### **About Jaguar**

Jaguar is one of the fastest growing gold producers in Brazil with operations in a prolific greenstone belt in the state of Minas Gerais. Jaguar is actively exploring and developing additional mineral resources at its 72,000 acre land base in Minas Gerais and on an additional 159,000 acres in the state of Ceará in the Northeast of Brazil through a joint venture. Additional information is available on the Company's website at [www.jaguarmining.com](http://www.jaguarmining.com).

#### **For Information:**

##### **Investors and analysts:**

Bob Zwerneman  
Director of Investor Relations  
603-224-4800  
[bobz@jaguarmining.com](mailto:bobz@jaguarmining.com)

##### **Media inquiries:**

Valéria Rezende DioDato  
Director of Communication  
603-224-4800  
[valeria@jaguarmining.com](mailto:valeria@jaguarmining.com)

Drill results and resource estimation were reviewed by Ivan C. Machado, M.Sc., P.E., P.Eng., Principal of Salt Lake City based TechnoMine Services, LLC. Mr. Machado serves as Jaguar's independent Qualified Person in accordance with NI 43-101. SGS Geosol Laboratories of Belo Horizonte, Minas Gerais provided independent sample preparation and assay services, using standard industry practices

**Forward Looking Statements**

This press release contains forward-looking statements concerning Jaguar's objectives in the years ahead, 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 labor and equipment, the possibility of labor 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, 2006 filed on System for Electronic Document Analysis and Retrieval ("SEDAR") and available at <http://www.sedar.com>.