

PRESS RELEASE

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JAG – TSX/NYSE Arca

Jaguar Mining Provides Update of Operations, Exploration and Certain Corporate Initiatives

2008 Gold Output Estimated at 160,000 oz, Up 128%; Paciência Project to Begin Commissioning in March

Jaguar Mining Inc. (“Jaguar” or “the Company”) (JAG: TSX/NYSE Arca, JAG.NT: TSX) provided a summary today of its year-end and Q4 2007 operating performance, as well as information about its current exploration program and certain corporate developments.

Recent operating highlights include:

- For the full year 2007, gold production totaled 70,114 oz at an average cash cost of \$346/oz compared to 37,876 oz at an average cash cost of \$370/oz for 2006. During Q4 2007, the Company produced 20,463 oz of gold at an average cash cost of \$405/oz compared to 9,303 oz at an average cash cost of \$372/oz during the same period last year;
- For the 12 months ended December 31, 2007 and 2006, gold sales totaled 67,350 oz at an average price of \$710 and 34,880 oz at an average price of \$607, respectively. Q4 2007 gold sales totaled 18,742 oz at an average price of \$796 compared to Q4 2006 figures of 10,373 oz at an average price of \$608;
- For the full year 2007, which included some start-up issues not indicative of true operating capacity, Turmalina produced 45,527 oz of gold at an average cash cost of \$283/oz. Gold production at Turmalina during Q4 2007 totaled 14,019 oz at an average cash cost of \$346/oz. Turmalina was under construction during the same period in 2006 and did not produce gold until January 2007. During December 2007, production of both ore and doré was impacted by isolated mechanical issues in key components, which required extended periods to repair. Management estimates that the impact of the mechanical problems during December caused a shortfall of approximately 1,500 oz and increased average cash costs to \$396/oz for the month, approximately \$100/oz above normalized values considering the average feed grade processed during the month. The repairs have been completed and operations and costs have returned to expected levels;
- Work progressed on the Turmalina expansion effort during Q4 as evidenced by the conversion of inferred resources into measured and indicated (see Exploration Update below). The Company expects to complete the feasibility study to expand Turmalina to approximately 100,000 oz of annual gold production during the current quarter and initiate construction immediately thereafter;
- For the full year 2007, Sabará produced 24,587 oz of gold at an average cash cost of \$462/oz. Gold production from Sabará during Q4 2007 totaled 6,444 oz at an average cash cost of \$535/oz compared to 7,772 oz at an average cash cost of \$290/oz during the same period last year. Lower ore grades throughout the final nine months of 2007, which were expected and previously announced, were primarily responsible for the reduced output and higher costs at Sabará, a limited-life oxide operation;
- Construction at the Paciência Project is in the final stages with commissioning and start of production slated for March 2008. All permits required to commence operations have been received and the overall project is 88% complete. Photos of the latest construction progress at Paciência can be viewed on the Company’s website under the Gold Projects tab <http://www.jaguarmining.com/s/PacienciaPhotos.asp>;
- Management currently estimates gold production and cash operating costs for FY 2008 as follows:

Operation	Est. 2008 Production (oz)	Est. 2008 Cash Cost (\$/oz)
Turmalina	88,000	\$275-285
Paciência	49,000	\$335-\$340
Sabará	<u>23,000</u>	\$495-505
Total	160,000	\$325-\$330

Note: Estimated cash costs based on an exchange rate of R\$1.85/US\$1.00.

- Based on the previously announced timeline, the Caeté Project remains on schedule with completion of the feasibility study expected for the end of Q1 2008. Further success was achieved during Q4 2007 with delineation of additional mineralized zones at both Pilar and Roça Grande, which the Company now believes will lead to the development of an even larger operation based on new drill results;
- Under the Normal Course Issuer Bid program announced in August 2007, the Company purchased 174,000 shares at an average price of \$9.92 in Q4 2007;
- The Company implemented a new program to effectively eliminate the financial impact of forward sales contracts by purchasing offsetting forward contracts timed to the existing forward sales contracts, which were required by a lender for project financing for the construction of Turmalina. This strategy results in little or no impact to the Company's financial performance after Q4 2007;
- Jaguar will hold an analyst meeting and tour of the Company's operations in Minas Gerais, Brazil April 8-11, 2008;
- The Company intends to participate at several industry conferences during Q1 2008. This schedule is located under the Investor Relations tab <http://www.jaguarmining.com/s/EventsCalendar.asp>

Daniel Titcomb, Jaguar's President and CEO stated, "Experience is the cornerstone of Jaguar's operating team's accomplishments and our continued exploration success reaffirms our belief in Jaguar's underlying potential and opportunity for greater production from existing assets. With the Paciência Project nearing completion, we look forward to stronger operating performance, lowering costs and increasing production. To that end, we will continue to utilize our ability to purchase Jaguar shares in the open market under the NCIB program as necessary to maximize Jaguar's overall value. Our NCIB program demonstrates our determination to reward shareholders for their support."

Exploration Update

Jaguar's aggressive drill program continues to produce very promising results at all of the current targets under consideration. Generally the deepest intersections continue to show the mineralization is open at depth. A discussion of each region or area of focus follows:

Paciência Project

No new drill results are available since the last update provided by the Company in mid-October 2007.

During late 2007, the Company opened a second mine entrance approximately 2 km to the North of the St. Isabel mine entrance and has completed approximately 250 m of excavation to-date. From this second entrance, approximately 2 km of excavation will take place to connect to the ramp system at the St. Isabel mine at the second level. Exploration will be conducted along with the development effort to add additional tonnes vertically as well as horizontally and further increase the resource base for Paciência.

Caeté Project

The Company continues to advance the Caeté Project feasibility study, which is expected to be completed by the end of Q1 2008.

Pilar Target: As part of that effort, the Company initiated Phase 3 drilling at Pilar and obtained the following drill intersections results:

Main Drill Results - Pilar Target/CTX Project

Hole	From	To	Grade	Thick.	Phase 3
	(m)	(m)	(g/t)	(m)	
PMS-80	444.65	454.65	4.39	10.00	
	467.65	468.65	29.00	1.00	
	474.65	484.65	10.98	10.00	
PMS-81	332.00	338.00	2.06	6.00	
	356.60	357.60	6.35	1.00	
PMS-84	300.05	311.05	5.84	11.00	
	328.50	334.40	6.79	5.90	
PMS-86	595.20	597.20	4.02	2.00	
PMS-87	549.90	551.85	4.93	1.95	
	560.70	565.25	4.83	4.55	
PMS-89	531.40	543.40	3.83	12.00	
PMS-90	745.55	756.75	3.67	11.20	

Note: not all holes represent true width

The 12 holes delineated above represent the main intersections achieved over approximately 6,500 m of drilling. In total, 11,000 m of drilling is planned in Phase 3 at Pilar. The deepest holes (PMS – 86, 87, 89 and 90) show that the ore is open at depth. While the Company is analyzing the information from the Phase 3 drill program, no new resources estimates are available at this time.

Roça Grande Trend: In September 2007 the Company initiated a second phase of drilling at selected targets along the Roça Grande Trend. A total of 20,000 m of drilling is planned in Phase 2 to test the continuity of the structure and convert inferred resources to measured and indicated. Approximately one-half of the drill program has been completed with the following intersections encountered:

Main Drill Results (Phase 2) – Roça Grande/CTX Project

Hole	From	To	Grade	Thickness	Target
	(m)	(m)	(g/t)	(m)	
FRG-222	280.00	282.00	5.58	2.00	RG-02
FRG-223	205.70	207.70	6.85	2.00	
FRG-224	149.30	150.35	8.32	1.05	
	169.40	170.40	11.52	1.00	
FRG-225	159.90	163.90	10.33	4.00	
FRG-226	311.15	316.15	2.33	5.00	
FRG-229	265.25	269.25	5.68	4.00	
FRG-232	349.85	354.80	4.55	4.95	
FRG-234	110.20	112.20	4.80	2.00	
	116.20	118.20	4.85	2.00	
FRG-237	78.65	81.80	10.05	3.15	
FRG-238	37.75	42.75	2.28	5.00	
FRG-239	172.85	174.60	8.18	1.75	
FRG-243	178.60	185.60	4.07	7.00	
FRG-310	73.35	82.55	2.30	9.20	RG-03
FRG-608	78.50	80.60	4.14	2.10	RG-06
FRG-609	166.20	167.20	7.10	1.00	
FRG-613	94.90	95.90	7.68	1.00	
FRG-614	235.20	237.20	2.73	2.00	

	252.70	253.70	3.27	1.00
FRG-617	289.00	291.00	2.00	2.00
	299.70	300.70	7.17	1.00
	96.10	97.75	15.74	1.65
FRG-618	29.25	31.25	13.83	2.00

Note: not all holes represent true width

Management believes the current drilling program at Pilar and Roça Grande will initially identify approximately one million ounces of gold resources as part of the feasibility study. This estimate is based on a total tonnage of approximately 6.0 to 7.0 million tonnes at an average grade of approximately 5.0 g/t. The potential quantity and grade detailed above for Pilar and Roça Grande is conceptual in nature. There has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in this target being delineated as a mineral resource.

Sabar Operation

In order to add oxide resources to feed the Sabar Plant and therefore increase its mine life, Jaguar is developing a program at Sabar and Caet in a 15,000-hectare area. The primary target is called Serra Paraso.

Serra Paraso Target: This area was explored by VALE from 1990 to 1995. Based on information supplied to Jaguar, VALE discovered significant mineralized areas in a limited effort, but did not pursue the project. Subsequent to VALE’s release of the mineral claims, Jaguar acquired the exploration concession.

Gold mineralization in the area was identified in a North-South Trend over 4 km and soil geochemistry followed by trenching defined the drill targets. During much of 2007, Jaguar completed 60 drill holes totaling 4,590 m and encountered the following main intersections:

Hole	Intervals			
	From (m)	To (m)	Grade (g/t)	Thickness (m)
FLV-001	57.90	62.15	6.53	4.25
	78.75	79.70	15.67	0.95
FLV-003	44.05	47.05	2.70	3.00
FLV-005	38.15	45.20	2.10	7.05
	47.80	50.70	2.02	2.90
FLV-006	48.40	49.40	4.25	1.00
FLV-007	22.35	27.15	6.32	4.80
	49.05	50.35	22.00	1.30
FLV-011	9.50	10.50	5.13	1.00
	28.90	30.90	2.49	2.00
FLV-014	19.50	23.90	2.45	4.40
FLV-018	22.60	29.45	3.12	6.85
FLV-020	72.20	74.60	3.25	2.40
	87.15	90.05	4.18	2.90
FLV-023	81.50	83.80	9.21	2.30
	87.95	89.20	7.48	1.25
	95.80	99.10	4.51	3.30
FLV-024	19.45	23.55	1.89	4.10
FLV-025	80.80	81.80	8.78	1.00
FLV-027	96.05	98.45	1.93	2.40
FLV-029	68.00	70.15	6.60	2.15
FLV-030	98.45	103.10	2.38	4.65
FLV-031	96.40	98.75	2.02	2.35
FLV-033	50.10	51.40	4.75	1.30

FLV-035	95.95	100.85	1.72	4.90
FLV-036	58.80	66.45	3.26	7.65
FLV-040	40.25	41.20	4.30	0.95
FLV-041	33.50	35.50	27.13	2.00
FLV-045	28.25	32.10	2.01	3.85
FSP-002	34.10	40.80	5.38	6.70
FSP-004	33.30	35.45	5.95	2.15
FSP-005	57.75	62.75	2.20	5.00
FSP-006	11.55	13.55	2.58	2.00
FSP-007	27.40	29.15	2.02	1.75
FSP-009	11.55	14.70	2.04	3.15
FSP-013	78.10	81.70	1.86	3.60

Note: not all holes represent true width

Metallurgical recovery tests indicated that both the oxide and transition ores can be treated at the Sabará Plant, with gold recoveries estimated at approximately 85%. Jaguar has completed the evaluation of the target and intends to begin mining activities during the second half of 2008. Prior to initiation of that mining, the Company will complete its analysis of the drill program and publish resources estimates for Serra Paraíso.

Turmalina Expansion

During Q4 2007, Jaguar completed the underground crosscut to access the Satinoco ore body through the existing ramp developed by the Company to mine the Main and Northeast ore bodies at Turmalina.

The preliminary diamond drill program, which included 68 drill holes totaling 10,400 m, defined three mineralized ore zones. The evaluation of these ore bodies generated inferred resources of 276,000 oz.

In mid-2007, a complementary infill drill program was initiated to upgrade inferred resources to measured and indicated. This effort included 48 drill holes totaling 12,700 m and was concluded in November. Highlights of that drilling program are as follows:

Hole Number	Intervals			
	From (m)	To (m)	Grade (g/t)	Thickness (m)
STN-69	108.70	110.70	4.45	2.00
STN-71	182.30	183.30	7.00	1.00
STN-74	278.00	283.00	2.52	5.00
STN-77	163.50	168.80	6.05	5.30
STN-78	171.60	172.60	13.38	1.00
	175.60	178.60	6.15	3.00
	183.00	186.60	4.10	3.60
STN-80	248.00	251.00	3.22	3.00
STN-83	190.20	194.00	6.10	3.80
STN-86	85.00	87.00	4.20	2.00
STN-90	214.20	218.00	7.52	3.80
STN-91	250.00	252.00	3.63	2.00
STN-92	269.00	276.00	3.89	7.00
STN-94	273.90	276.00	3.39	2.10
	290.00	292.85	3.66	2.85
STN-95	269.25	273.25	3.10	4.00
STN-99	95.00	99.00	6.22	4.00
	102.00	104.00	6.88	2.00
	109.00	110.80	5.57	1.80
STN-100	307.20	311.20	3.38	4.00

	331.00	335.00	8.76	4.00
STN-101	337.80	338.80	25.54	1.00
STN-104	204.20	206.30	5.08	2.10
STN-105	250.15	253.15	3.05	3.00
STN-108	239.00	241.00	3.89	2.00
STN-110	346.70	347.70	5.80	1.00
STN-112	299.70	312.70	4.25	13.00

Note: not all holes represent true width

The deepest holes show that the ore is open at depth. Geological modeling of the structures produced the following NI 43-101 compliant resource estimates:

Satinoco Target Resource Estimate*			
	Total		
	Tonnes (t)	Au (g/t)	oz Au
Measured	467,000	3.76	56,460
Indicated	1,274,000	3.71	152,100
Meas + Ind	1,741,000	3.72	208,560
Inferred	523,000	3.85	64,750

*3D Block Model Cut-Off Grade = 1.00 g/t
Resource Model Cut-Off Grade = 1.50 g/t

The Company is finalizing the feasibility study for this expansion. During Q2 2008, Jaguar expects to initiate the expansion process at the Turmalina processing plant. The capital cost for the expansion at Turmalina, including equipment to mine the Satinoco ore bodies is estimated at \$10 million. Once completed, Turmalina's capacity will increase from the present 65,000 oz/yr to approximately 100,000 oz/yr.

Purchase of Forward Gold Contracts

During the fourth quarter, the Company purchased forward contracts totaling 55,654 oz at an average gold price of \$822.43/oz. The Company settled 7,098 oz of the hedges (forward sales and subsequent buy back) at the end of Q4 2007. Over the next six quarters, the Company has forward sales contracts averaging 8,092 oz per quarter at an average sales price of \$527.10, which were required by a lender to obtain project financing to complete the first phase of Turmalina. The settlement process for both the existing forward sales contracts and these newly added purchase contracts specify a cash settlement rather than physical gold delivery.

Given the large upfront cash requirement that would have been required to buy back the forward sales contracts, the Company elected to acquire the forward purchase contracts in lieu of eliminating the forward sales contracts altogether. Under the new arrangement, the Company will continue to have a cash settlement for both sides of the hedge with an expected net cash expenditure of approximately \$2.4million per quarter. Jaguar expects to record a charge against earnings of approximately \$3.8 million in Q4 2007, which is expected to be the final such charge for any hedge-related transaction. Other than the approximately 8,000 oz commitment per quarter noted, the balance of Jaguar's sales remain un-hedged, which represents approximately 80% of Jaguar's estimated 2008 production.

Analyst Meeting and Tour: April 8-11

Jaguar will hold an analyst meeting and tour of the Company's operations in Minas Gerais, Brazil, beginning April 8, 2008. Qualified individuals interested in visiting Jaguar's operations 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.

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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. The potential quantities and grades noted for the NW01 Target are conceptual in nature as there has been insufficient exploration to define a mineral resource and it is uncertain whether further exploration will result in the target being delineated as a mineral resource. The Company also relied on information concerning the Conglomerates at the Paciência as accurate and reliable from the previous concession owners and does not warrant that the information supplied reflects a potential resource. 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>.

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