

## PRESS RELEASE

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**Jaguar Mining Provides Update of 2008 Drilling Program** *Mineralization at Turmalina Extends to Depth of 800 Meters* 

**Jaguar Mining Inc.** ("**Jaguar**" or "the Company") (**JAG: TSX/NYSE Arca, JAG.NT: TSX**) is providing drilling results from its recent brown field exploration program in the Iron Quadrangle in Minas Gerais, Brazil.

During 2008, Jaguar completed approximately 48,000 m of drilling in the Iron Quadrangle, discovering significant mineralized structures at all its major projects. Jaguar's exploration success during 2008 continues to demonstrate the strong potential to couple-on sizeable new resources to support the Company's aggressive production growth targets and attain a mid-tier producer status. Recent exploration highlights by operation are as follows:

### **TURMALINA**

To-date, Jaguar has identified four primary mineralized structures of significant size and grades as part of the Turmalina operation. The structures are known as Ore Bodies A (Main), B (North East), C (Satinoco) and D (Satinoco Extension). From the first three structures, the Company has previously reported measured and indicated gold resources of 816,290 ounces, inferred resources of 268,100 ounces and proven and probable reserves of 714,000 ounces, which are included in the resources.

#### Ore Body A

Jaguar's reported resources for Turmalina are to a depth of approximately 500 m where the mineralized structure is open at depth and along strike. As part of its drill program to prove the continuity of the mineralization at Ore Body A to a depth of over 800 m, the Company recently drilled four holes to depths ranging from 850 m to 975 m. Two of these drill holes intersected the mineralized structure in Ore Body A to a depth of approximately 800 m. A grade of approximately 7 g/t was encountered in a narrow zone at depth thereby confirming the extension of the mineralized structure. Jaguar's team believes the size of the mineralized structure and mineralization is similar to the existing reserve base in this ore body to the depth of 500 m. This is also consistent with the characteristics of other gold mines in the Iron Quadrangle, some of which have operated to depths of 2,400 m. The Company intends to update the inferred resources category at Turmalina using the information from these recent drill results but does not have any plans to conduct further deep drilling at Turmalina at this time.

Commenting on the successful deep drill results at Turmalina, Jaime Duchini, Jaguar's Chief Geologist stated, "The plunge of the mineralized structure at Turmalina is highly consistent with other historical gold mines in Minas Gerais and gives us confidence that this operation could produce gold for many years to come. Not only does Turmalina have continuity to a depth of approximately 800 m, but we continue to find new mineralized zones along strike within close proximity of the four existing ore bodies having the same characteristics, which is integral to the continued expansion plans in the years ahead."

### Ore Body B

As part of the surface exploration to estimate resource potential in a newly discovered oxide zone at Ore Body B, several trenches were opened in the outcropping to expose and sample the mineralized zone. Channel samples revealed two separate mineralized areas with average surface grades ranging from 3 g/t to 5 g/t. Jaguar's team intends to update the geological model to incorporate this new data into the overall mine model. The oxide ore would be blended with sulfide ore and processed through the carbon-in-pulp ("CIP") plant at Turmalina, providing immediate additional low cost ore.

### Ore Body C and Zone D

Additional gold bearing oxide ore has been identified in the weathered rock above the sulfide zone, as well as within the sulfide zone. The following table provides drill results for the most significant intersections:

	IIala	Mineralized Intervals			
	Hole	From (m)	To (m)	Au (g/t)	Length (m)
	FSN-129	311.00	312.00	2.34	1.00
		317.00	319.00	4.25	2.00
	FSN-130	122.00	124.00	9.12	2.00
		131.00	133.05	3.85	2.05
	FSN-138	147.75	150.75	11.40	3.00
Zone C (NW)		175.60	176.40	1.04	0.80
	FSN-139	88.90	89.90	3.19	1.00
		137.15	138.15	46.50	1.00
		172.70	176.70	5.15	4.00
	FSN-148	7.50	22.10	5.07	14.60
	FSN-150	7.25	9.25	8.73	2.00
	FSN-152	15.00	20.00	6.65	15.00
Zone C (Central)	FSN-157	13.00	15.00	3.71	2.00
	FSN-158	41.00	44.00	6.54	3.00
Zone D	FSN-132	79.00	80.00	6.40	1.00
	FSN-133	83.00	85.00	5.85	2.00
	FSN-140	230.50	232.40	4.56	1.90

Note: Not all holes represent true width

## Fazenda Experimental Target

This new area represents a new discovery which management believes has significant potential and is unrelated to the mineralized on-strike zone associated with Zones A-D at Turmalina. The Fazenda Experimental Target is located in a structure parallel to Zones A-D, where historic mining work at shallow depths can be seen, approximately 10 km from the Turmalina processing plant. Jaguar has conducted limited soil sampling, trenching and other geo-chemical work in the area over the past two years.

During Q3 2008, four drill holes were carried out, which entailed 200 m along strike. Three drill holes intercepted mineralized structures. Intersection grades varied from 2.9 g/t to 6.5 g/t at intervals of 3 m or less. Additional trenching has provided evidence that the continuity near the surface extends well beyond areas where no drilling has taken place.

During 2009, Jaguar intends to conduct additional underground exploration as part of the forward development of Turmalina's Ore Bodies A, B and C, as well as in Zone D and at the Fazenda Experimental Target to increase resources with the objective of generating reserves to further expand Turmalina's annual production beyond the current plan of 100,000 ounces.

## **PACIÊNCIA**

During Q3 2008, the Company continued its exploration program in the NW01 and Conglomerates Targets, including drifts for mine development, to further increase Paciência's resource base.

## NW01 Target (Marzagão)

Underground development work at the NW01 Target resumed in December after Jaguar's team interpreted the drilling information acquired through Q3 2008. The mineralized zone that was identified by surface drilling is partially exposed, with approximately 30 m in length by 3 m in width. Channel sampling in this area gave rise to grades ranging from 1 g/t to 10 g/t. The extension is open towards the North West and laterally towards the North East. Surface drill holes at the drift level indicate the presence of an additional mineralized zone. Drill hole FMZ-28 was represented by only one sample with an unusually high amount of "free" gold and a grade of 595 g/t over 0.7 m.

Hole	Mineralized Intervals			
TIOR	From (m)	To (m)	Au (g/t)	Length (m)
FMZ-021	118.60	125.60	1.76	7.00
	85.40	86.40	6.31	1.00
FMZ-022	89.40	90.40	1.82	1.00
	118.15	119.15	3.16	1.00
FMZ-025	121.80	122.80	42.60	1.00
	158.20	164.20	2.03	6.00
FMZ-026	122.70	123.70	1.93	1.00
FMZ-027	54.20	55.20	1.63	1.00
FMZ-027	67.50	68.50	2.50	1.00
FMZ-028	144.10	145.60	17.42	1.50
	190.90	191.60	595.00	0.70
FMZ-030	43.80	45.15	1.49	1.35
FMZ-031	23.40	24.75	2.64	1.35
FMZ-032	16.90	17.90	1.75	1.00
FMZ-033	30.50	31.50	1.80	1.00
FMZ-035	104.95	106.95	5.46	2.00
FMZ-036	125.20	126.20	3.13	1.00
FMZ-037	107.90	108.85	2.25	0.95
	130.40	133.30	15.51	2.90

Note: Not all holes represent true width

The shape and other characteristics of this structure suggest that other mineralized zones might be located in the vicinity of the NW01 target. Two surface rigs are presently drilling in the South East extension of the drift with the objective of intercepting these new zones.

The program further confirms Jaguar's model for the mineralization in its 20 km concession in the São Vicente trend, identifying new mineralized zones between the major ore shoots identified on surface.

### Conglomerates Target

The Conglomerates Target is not part of the São Vicente lineament where Jaguar's Santa Isabel Mine and NW01 targets are located. The conglomerates are located approximately 12 km east of the Paciência processing plant.

These structures are somewhat unique in Brazil, where there is currently only one other commercial operation. The target area presently under exploration is represented by a conglomerate that occurs at the base of the Minas Supergroup (Proterozoic age) rocks, directly in contact with rocks of the Rio das Velhas Supergroup (Archean age). The property's previous owners, the Anschutz Group and Western Mining, carried out exploration campaigns between 1985 and 1990, which included underground development and channel sampling, surface and underground diamond drilling and geological mapping. Based on their efforts, a pre NI 43-101 gold resource of approximately 110,000 oz was estimated.

Subsequent to acquiring the property in mid-2007, Jaguar concluded a surface in-fill drill program that included 7,112 m drilled in 28 holes. The highlights from this effort are included below:

Hole	Mineralized Intervals			
	From (m)	To (m)	Au (g/t)	Length (m)
FPL-002	277.95	279.70	20.44	1.75
FPL-004	202.25	204.80	6.73	2.55
FPL-005	141.30	142.70	4.06	1.40
FPL-007	318.20	318.60	1.96	0.40
FPL-008	219.80	220.30	1.85	0.50
FPL-009	303.90	304.40	3.38	0.50
FPL-011	315.90	316.00	20.75	0.10
FPL-012	338.45	339.05	15.82	0.60
FPL-014	347.80	348.45	1.08	0.65
FPL-020	286.05	287.40	2.81	1.35
FPL-023	305.65	305.95	3.53	0.30
FPL-025	228.70	231.55	3.65	2.85
FPL-027	288.35	289.75	1.92	1.40
FPL-028	349.25	352.80	10.87	3.55

Note: Not all holes represent true width

Given the substantial relief, which makes drilling from the surface quite a challenge, Jaguar has opened up the structure through an access ramp and an additional 350 m of drifts to the first level. Underground development to reach a second level is being carried out to provide access to the mineralized zone for further in-fill drilling.

At Level 1, the conglomerate layer was identified to extend over 100 m, confirming the grades and widths obtained through surface drilling. At the exposed section, the mineralized conglomerate shows thicknesses that vary from less than 1 m to 2.5 m and grades of up to 200 g/t. Partial channel results in the drift already defined a mineralized zone with an average grade of 6.8 g/t over a 150 m<sup>2</sup> conglomerate layer area.

The development of exploration drifts in Level 1 will continue to laterally expose the conglomerate layer. Through additional drilling, Jaguar's team expects to estimate the resource potential in one known 300-m section and trace the geometry of the conglomerate reef to depth. The Company is currently developing a new resource estimate and views this new geological setting as additional feed for the Paciência processing plant.

### CAETÉ PROJECT

As announced in November 2008, Jaguar has temporarily suspended development of the Caeté Project pending an assessment of market conditions and the availability of capital to move the Project forward. Jaguar is presently evaluating financial alternatives which would provide the necessary capital to re-start the Project during 2009 with an approximate 12-month construction

period. All permits, licenses and power contracts remain in effect to construct and initiate operations.

Underground work at the Roça Grande mining complex has been temporarily suspended; however, development at the Pilar Mine continues to move forward. Jaguar intends to transport ore by truck from Pilar to the Paciência processing plant during the latter half of 2009 to supplement the ore being supplied from Paciência's Santa Isabel Mine.

Besides the Roça Grande and Pilar Mines, the Caeté Project area hosts other targets Jaguar's team believes could hold significant gold resources. One such target is the Catita II Target (formerly Juca Vieira), where limited mining operations were conducted in the middle of the 20<sup>th</sup> Century.

The *Catita II Target* is an underground structure with measured and indicated mineral resources previously reported by Jaguar of 654,000 t of ore at an average grade of 5.51 g/t. The ore bodies are irregular lenses of quartz-carbon sulfide rocks (minerals: arsenopyrite, pyrrhotite and pyrite) in a sub-vertical shear zone. Thicknesses vary from less than 1 m to over 10 m and have strong structural integrity.

An exploration program carried out between 1981 and 1992 by the previous property owner, AngloGold Ashanti, revealed significant grades as shown below.

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		Mineralized 1	Intervals	
Hole	From (m)	To (m)	Au (g/t)	Length (m)
FJV-01	148.75	151.94	7.37	3.19
FJV-05	59.63	60.06	6.62	0.43
FJV-07	147.01	147.61	17.18	0.60
	107.10	107.78	4.01	0.68
FJV-08	108.65	109.01	3.91	0.36
FJ V -U8	110.34	111.11	4.90	0.77
	123.55	124.33	4.08	0.78
FJV-09	178.30	181.46	4.70	3.16
FJV-10	280.39	281.22	5.17	0.83
	290.62	291.30	5.07	0.68
	293.23	293.55	3.70	0.32
FJV-11	275.04	275.72	4.83	0.68
FJV-12	241.84	242.15	4.03	0.31
FJV-13	241.40	246.69	6.72	5.29
FJV-14	197.74	199.81	9.67	2.07
FJV-15	56.60	59.75	4.89	3.15
Note: Not all ho	les represent	true width		

During 2007 and 2008, Jaguar carried out a surface drilling program that consisted of 12,967 m in 32 drill holes to evaluate the characteristics of the mineralized zones approximately 300 m below the section that was previously mined by the former owner. Jaguar is currently updating the

geological model and the new evaluated resources will be included in the Company's resource base. Highlights from this effort are shown below.

Hole	Mineralized Intervals			
	From (m)	To (m)	Au (g/t)	Length (m)
FJV-26	227.50	228.45	2.75	0.95
	232.20	233.10	2.18	0.90
FJV-27	201.05	203.05	3.96	2.00
	331.35	336.20	1.85	5.75
	339.15	340.15	14.85	1.00
	351.95	354.45	4.58	3.50
FJV-28	291.75	295.50	8.17	3.75
1 J V - 20	299.35	300.25	4.93	0.90
FJV-29	220.85	221.85	3.35	1.00
FJV-30	301.45	303.40	5.25	1.95
FJV-31	318.30	319.20	4.42	0.90
L1A-21	329.85	331.70	7.28	1.85
FJV-34	324.80	325.80	4.80	1.00
FJV-34	327.70	328.55	3.19	0.85
FJV-35	320.05	321.90	2.27	1.85
	323.80	324.80	20.65	1.00
FJV-37	328.55	333.30	1.16	4.75
	339.10	343.85	2.08	4.75
	208.55	213.40	3.92	4.85
FJV-38	349.55	352.15	4.04	2.60
	354.10	356.00	6.50	1.90
EIV 20	202.40	206.20	5.45	3.80
FJV-39	345.65	348.45	5.61	2.80
EIV 40	313.20	315.15	2.02	1.95
FJV-40	317.10	323.70	6.40	6.60
EIV. 42	348.85	349.80	2.35	0.95
FJV-43	417.30	418.25	2.88	0.95
FJV-44	342.00	345.10	8.41	3.10
FJV-46	367.90	369.05	3.18	1.15
FJV-48	328.45	332.25	3.55	3.80
FJV-49	391.50	392.50	3.93	1.00
FJV-50	338.80	350.00	3.89	11.20
FJV-51	260.55	268.95	5.42	8.40
FJV-53	232.35	245.30	5.27	12.95
	253.85	254.85	7.68	1.00
Note: Not all ho	oles represent tr	ue width		

Jaguar's 2008 exploration program has produced significant results which should increase both reserves to its existing mines and annual tonnes processed.

The Company presently plans to release its Q4 2008 preliminary operating results, including gold production, sales, average realized price and total cash operating costs during the week of January 19, 2009. Jaguar intends to release its Q4 and FY 2008 financial results during the middle of March 2009. For the two weeks prior to this, the Company will be in a self-imposed quiet period and will limit communications to investors, prospective investors and other interested parties to previously publicly-released statements.

# **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. The Company has no gold hedges in place thereby providing the leverage to gold prices directly to its Additional information is available on the Company's website at investors. www.jaguarmining.com.

### For Information:

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Drill results 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.

There has not been sufficient exploration to define a mineral resource based on these drill results and it is uncertain if further exploration will result in mineral resources.

#### **Forward Looking Statements**

This press release contains forward-looking statements, within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and applicable Canadian securities laws, concerning Jaguar's objectives in the years ahead, the Company's ability to increase its resource and reserve base to support its production targets and the ability to raise the necessary capital to re-start the Caeté Project during 2009 with an approximate 12-month construction period. Forwardlooking statements can be identified by the use of words, such as "are expected", "is forecast", "intends", "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 Company also relied on information concerning the Catita II Target near the Caeté plant and the Conglomerates Target near 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, 2007 filed on System for Electronic Document Analysis and Retrieval and available at <a href="http://www.sedar.com">http://www.sedar.com</a> and the Company's Annual Report on Form 40-F for the year ended December 31, 2007 filed with the United States Securities and Exchange Commission and available at <a href="http://www.sedar.com">http://www.sedar.com</a> and Exchange Commission and available at <a href="http://www.sedar.com">http://www.sedar.com</a> and Exchange Commission and available at <a href="http://www.sedar.com">http://www.sedar.com</a> and Exchange Commission and