MINERAL RESERVES & MINERAL RESOURCES – 2015

Summary of Mineral Resources as at December 31, 2015	Measured Resources			Indicated Resources			Total Measured & Indicated Resources			Inferred Resources		
	Tonnes (000's)	Grade (g/t)	Gold oz (000's)	Tonnes (000's)	Grade (g/t)	Gold oz (000's)	Tonnes (000's)	Grade (g/t)	Gold oz (000's)	Tonnes (000's)	Grade (g/t)	Gold oz (000's)
Southern Brazil												
Turmalina Gold Complex[2]												
Ore Body A	928	6.51	194	235	5.39	41	1,163	6.28	235	226	3.59	26
Ore Body B	338	3.22	35	158	4.08	21	496	3.51	56	43	5.16	7
Ore Body C	164	3.19	17	914	3.08	112	1,078	3.72	129	496	5.34	85
Faina	72	7.39	17	189	6.66	42	261	6.87	58	1,542	7.26	360
Pontal	251	5.00	40	159	4.28	22	410	4.72	62	130	5.03	21
Total - Turmalina	**1,753**	**5.38**	**303**	**1,655**	**4.47**	**238**	**3,408**	**4.93**	**540**	**2,437**	**6.37**	**499**
Caeté Gold Complex												
Pilar[3]												
Ore Body BA	264	4.08	35	168	5.29	29	432	4.55	63	65	5.13	11
Ore Body BF	217	4.32	30	749	4.73	114	966	4.64	144	293	6.77	64
Ore Body BFII	4	4.46	1	842	5.01	133	828	5.01	133	198	7.89	50
Ore Body C	80	4.24	11	371	4.73	56	450	4.64	67	140	5.10	23
Ore Body LFW	58	3.68	7	175	4.21	24	233	4.08	31	117	4.87	18
Ore Body LHW	-	-	-	12	3.61	1	12	3.61	1	5	3.11	1
Ore Body LPA	6	2.72	1	50	3.98	6	55	3.85	7	-	-	-
Ore Body SW	-	-	-	338	3.28	36	338	3.28	36	389	3.60	45
Total - Pilar	**628**	**4.14**	**84**	**2,687**	**4.62**	**399**	**3,315**	**4.53**	**482**	**1,207**	**5.54**	**212**
Roça Grande[4]	**207**	**2.17**	**14**	**937**	**2.95**	**89**	**1,144**	**2.80**	**103**	**1,759**	**3.48**	**197**
Total - Caeté	**835**	**3.65**	**98**	**3,625**	**4.18**	**488**	**4,460**	**4.08**	**585**	**2,966**	**4.29**	**409**
Total - Southern Brazil	**2,588**	**4.82**	**401**	**5,280**	**4.27**	**726**	**7,868**	**4.45**	**1,125**	**5,403**	**5.23**	**908**
Northern Brazil												
Gurupi Project[5]												
Cipoeiro	25,734	0.78	640	58,494	0.87	1,633	84,229	0.84	2,273	7,041	0.67	152
Chega tudo	20,923	0.66	440	37,484	0.67	805	58,408	0.66	1,246	678	0.62	13
Total - Northern Brazil	**46,657**	**0.72**	**1,080**	**95,979**	**0.79**	**2,438**	**142,636**	**0.77**	**3,519**	**7,719**	**0.66**	**165**
Total - Mineral Resources	**49,245**	**0.94**	**1,481**	**101,259**	**0.97**	**3,164**	**150,504**	**0.96**	**4,644**	**13,122**	**2.54**	**1,073**

MINERAL RESERVES & MINERAL RESOURCES

Notes to Mineral Resources:

1. CIM definitions were followed for Mineral Resources.
2. Gurupi Resources were approved by Leah Mach (SRK) as Qualified Person, as disclosed in the press release dated July 30, 2012 filed on SEDAR.
3. Mineral Resources at the Turmalina Gold Complex include the Turmalina Mine, Faina deposit, and Pontal deposit. Mineral Resources at Caeté are estimated by depletion of the 2015 year-end block model with 2016 excavations.
4. Mineral Resources are estimated at a cut-off grade of 2.10 g/t Au at Turmalina, 3.8 g/t Au at Faina, and 2.9 g/t Au at Pontal. Mineral Resources are estimated at a cut-off grade of 1.46 g/t Au for the Roça Grande Mine and 1.93 g/t Au for the Pilar Mine.
5. Mineral Resources at the Turmalina Mine include all drill hole and channel sample data and mining excavations as of December 31, 2016.
6. Mineral Resources at the Faina and Pontal deposits remain unchanged from those stated as at December 31, 2015.
7. Mineral Resources are estimated using a long-term gold price of US$1,500 for the Turmalina Mine and US$1,400 per ounce for the Faina and Pontal deposits and the Caeté deposits.
8. Mineral Resources are estimated using an average long-term foreign exchange rate of 3.49 Brazilian Reais: 1 US Dollar for Turmalina and 2.5 Brazilian Reais: 1 US Dollar for Faina and Pontal. Mineral Resources are estimated using an average long- term foreign exchange rate of 2.5 Brazilian Reais:1 US Dollar for the Caeté deposits.
9. A minimum mining width of approximately 2 m was used.
10. Bulk density is 2.83 t/m3 for Orebodies A and B and 2.97 t/m3 for Orebody C at the Turmalina Mine.
11. Gold grades are estimated by the inverse distance cubed interpolation algorithm using capped composite samples.
12. Mineral Resources are inclusive of Mineral Reserves at Turmalina. No Mineral Reserves are currently present at the Roça Grande Mine. Mineral Resources are inclusive of Mineral Reserves for the Pilar Mine.
13. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
14. Numbers may not add due to rounding.

MINERAL RESERVES & MINERAL RESOURCES

Summary of Mineral Reserves as at December 31, 2016	Proven Reserves			Probable Reserves			Proven & Probable Reserves		
	Tonnes (000's)	Grade (g/t)	Gold oz (000's)	Tonnes (000's)	Grade (g/t)	Gold oz (000's)	Tonnes (000's)	Grade (g/t)	Gold oz (000's)
Southern Brazil									
Turmalina Gold complex[1]									
Ore Body A	330	5.86	62	196	4.66	29	526	5.41	91
Ore Body C	24	3.47	3	583	4.12	77	607	4.10	80
Total - Turmalina	**354**	**5.71**	**65**	**779**	**4.23**	**106**	**1,133**	**4.69**	**171**
Caeté Gold Complex									
Pilar[2]									
Ore Body BA	11	2.31	1	-	-	-	11	2.13	1
Ore Body BF	11	2.66	1	293	4.57	43	304	4.48	44
Ore Body BFII	-	-	-	646	4.65	97	646	4.65	97
Ore Body LFW	5	2.83	-	-	-	-	5	2.83	-
Ore Body LPA	-	-	-	-	-	-	-	-	-
Total - Pilar	**27**	**2.47**	**2**	**939**	**4.62**	**140**	**966**	**4.56**	**142**
Roça Grande	-	-	-	-	-	-	-	-	-
Total - Caeté	**27**	**2.47**	**2**	**939**	**4.62**	**140**	**966**	**4.56**	**142**
Total - Southern Brazil	**381**	**5.47**	**67**	**1,718**	**4.45**	**264**	**2,099**	**4.64**	**313**
Northern Brazil									
Gurupi Project[3]									
Cipoeiro	-	-	-	45,044	1.20	1,735	45,044	1.20	1,735
Chega Tudo	-	-	-	18,713	0.99	593	18,713	0.99	593
Total - Northern Brazil	**-**	**-**	**-**	**63,757**	**1.14**	**2,328**	**63,757**	**1.14**	**2,328**
Total - P2 Mineral Reserves	**381**	**5.47**	**67**	**65,475**	**1.22**	**2,574**	**65,856**	**1.25**	**2,641**

MINERAL RESERVES & MINERAL RESOURCES

1. CIM definitions are followed for Mineral Reserves;
2. Mineral Reserves at Turmalina were estimated at a break-even cut-off grade of 2.5 g/t Au. Some stopes were included using an incremental cut-off grade of 1.2 g/t Au. Mineral Reserves at Pilar are estimated at a cut-off grade of 1.90 g/t Au.
3. Mineral Reserves at Turmalina are estimated using an average long-term gold price of US$1,250 per ounce, and a US$/BRL$ exchange rate of 3.49. Mineral Reserves at Pilar are estimated using an average long-term gold price of US$1,150 and a US$/BRL$ exchange rate of 3.80.
4. A minimum mining width of 3 m was used for Turmalina and 2 m was used for Pilar.
5. Bulk density is 2.7 t/m3 at Turmalina and 2.89 t/m3 at Pilar in iron-formation poor domains and 3.05 t/m3 in iron-formation rich domains.
6. Gurupi Reserves are based on the Technomine Feasibility Study Technical Report filed on SEDAR on January 31, 2011.
7. Number may not add due to rounding.

MINERAL RESERVES & MINERAL RESOURCES

Qualified Person

Mineral Reserves and Mineral Resources 2016 estimates for Turmalina Gold Mine were prepared by Jaguar Mining under the supervision of Jason Cox, P.Eng., and Reno Pressacco, P.Geo. of Roscoe Postle Associates Inc. ("RPA"). RPA is an independent mining consultant and each of Messrs. Cox and Pressacco are Qualified Persons within the meaning of NI 43-101. The effective date of these estimates is December 31, 2016. An independent technical report documenting the Mineral Resource estimates prepared in accordance with NI 43-101 will be filed on SEDAR.

Scientific and technical information contained in this press release has been reviewed and approved by Geraldo Guimarães Vieira dos Santos, BSc Geo., MAIG-3946 (CP), Geology Manager, who is an employee of Jaguar Mining Inc., and is a "qualified person" as defined by National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101").

Quality Control

Jaguar Mining has implemented a quality-control program that includes insertion of blanks, commercial standards, and duplicate core samples in order to ensure best practice in sampling and analysis.

NQ and BQ size drill core is sawn in half with a diamond saw. Samples are selected for analysis in standard intervals according to geological characteristics such as lithology and hydrothermal alteration contents. All diamond drill hole collars are accurately surveyed using a Total Stations instrument and down hole deviations are surveyed using optical Reflex Maribor.

Mean grades are calculated using a variable lower grade cut-off (generally 2 g/t Au). No top cutting has been applied to the data. However, the requirement for assay top cutting will be assessed during future resource work.

Half of the sawed sample is forwarded to the analytical laboratory for analysis while the remaining half of the core is stored in a secure location. The drill core samples are transported in securely sealed bags to the Jaguar in-house laboratory located at the Caeté Mine Complex in Minas Gerais. Some samples are also sent for check assaying to the independent SGS Geosol Laboratory located in Vespasiano, Minas Gerais. The preparation and analysis are all conducted at the respective facilities. The Caeté Mine Complex laboratory does not carry an ISO certification. The SGS Geosol Laboratory is ISO 9001 accredited. As part of in-house QA/QC, the Caeté Mine Complex laboratory inserts certified gold standards, blanks, and pulp duplicate samples.

For a complete description of Jaguar's sample preparation, analytical methods, and QA/QC procedures, please refer to the Turmalina Technical Report filed on Jaguar's profile at www.sedar.com