



NEWS RELEASE

September 26, 2016
For Immediate Release

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TSX: JAG

Jaguar Intercepts High-Grade Gold Mineralization at Pilar Gold Mine; Strong Potential to Convert Additional Mineral Resources and Reserves

Toronto, Canada, September 26, 2016 - Jaguar Mining Inc. ("Jaguar" or the "Company") (TSX: JAG) is pleased to announce positive drill results from 40 underground diamond drill holes conducted at the Pilar Gold Mine ("Pilar") located at the Company's Caeté Complex in the state of Minas Gerais, Brazil. The Caeté Complex is situated in the Iron Quadrangle, one of the most prolific mining districts in South America. These results continue to reaffirm increasing grade profiles at depth at the Pilar BFII ore body and suggest a strong potential for the significant conversion of Mineral Resources to Mineral Reserves.

This drill program (5,369 metres ("m")) included 40 holes, which generated multiple high-grade drill intercepts from Pilar including BFII, BF, BA, LFW, LHW, C, and SW ore bodies. The total cost of this exploration program was approximately \$0.4 million. The underground resource definition-drilling program was designed to test the current resource envelope, and to test the down plunge extensions of the Pilar ore bodies. The drill program targeted, in particular, the newly discovered BFII ore body, as previously outlined in the "Technical Report on the Roça Grande and Pilar Operations, Minas Gerais State, Brazil", a copy of which is available on the Company's SEDAR profile at www.sedar.com.

Drilling Highlights and Key Intercepts

- Underground definition drilling on the Pilar BFII ore body has returned significant high-grade mineralization. Key intercepts include:
 - Hole FSB552A – 17.40 g/t Au over 6.80 m (6.46 m ETW¹);
 - Hole PPL325 – 7.73 g/t Au over 16.35 m (15.52 m ETW¹);
 - Hole PPL326 – 24.19 g/t Au over 5.65 m (4.46 m ETW¹);
 - Hole PPL363 – 23.95 g/t Au over 4.00 m (3.35 m ETW¹); and
 - Hole PPL340 – 9.05 g/t Au over 7.90 m (6.24 m ETW¹)
- ¹ETW - Estimated true width
- Exploration drilling focused on testing extensions to the Banded Iron Formation ("BIF") ore bodies to assess the growth potential for Measured and Indicated Mineral Resources.
- Definition drilling focused on providing increased confidence and classification of the near-term mineral resources.
- The definition drilling programs are designed to replace current reserves being depleted from mining and will be added to the new 2016 Mineral Reserve and Mineral Resource model at year-end.

Rodney Lamond, President and Chief Executive Officer of Jaguar, stated: "Today's reported high-grade intercepts continue to confirm a strong mineralized system down-plunge of current Mineral Reserves at Pilar, in particular the high-grade intercepts related to the newly discovered BFII ore body. These results provide excellent potential for higher grades, the increase of Mineral Resources, and the conversion to reserves for mining at Pilar. Additionally, we have been very pleased with our operations at Pilar where our average grade has steadily increased and we are on track to achieve our production guidance for 2016. For the balance of 2016, the underground exploration and definition drilling programs will be focused on mineral resource growth and resource conversion to reserves in order to grow sustainable gold production."

Drill Programs

This latest completed drill program consisting of 40 holes, over 5,369 m, (Table 1 and Figure 1) was designed to test and convert the current mineral resource envelope, and to test the extensions of the Pilar ore bodies. In addition, drilling has focused on providing increased confidence and classification of the near-term Mineral Resources. The drill program continues to confirm the geological continuity of BIF ore bodies and high grades at depth. The Company expects to continue to test down-plunge continuity in the BFII, BF, and BA ore bodies with a dedicated drill program throughout 2016 and 2017, which will include approximately 5,000 m of diamond drilling to increase definition and confidence below Level 9.

The Company's current assessment of the historical geological information and the rational use of state-of-the-art 3-D software have been an important contribution to the understanding of the gold emplacement and consequent target generation of new resource identification.

Pilar Gold Mine

The Pilar Mine is situated in the northeast portion of the Iron Quadrangle about 100 kilometres east of the city of Belo Horizonte in Minas Gerais, Brazil. The Iron Quadrangle is one of the largest and most important mining and mineral districts in South America with historical production of over 50 million ounces of gold. Mining activities in the Iron Quadrangle have been ongoing since the late 1600s. A number of important and historical gold deposits, including those of AngloGold Ashanti and Vale, are located in the Iron Quadrangle and make up a significant contribution to Brazil's gold production.

The deposit is hosted in a meta volcanic sedimentary sequence of the Rio das Velhas Greenstone Belt and the mineralization is located between a folded zone of BIF, which forms a local isoclinal syncline dipping to the southeast. The west limb of this syncline has a normal stratigraphic stacking and is called the SW limb and the inverted limb, at the east side, is called limb B. The regional axial plane foliation has general direction of NNE/SSW dipping to SSE.

Mineralized zones are classified according to the position of the mineralization relative to the major syncline, the morphological continuity, and the structural and mineralogical occurrence mode. The mineralization is divided from footwall to hanging wall in the SW, LFW, BFII, BF, LHW, BA, and C ore bodies.

The SW ore body matches with the west limb, SW, of the syncline. The LFW ore body consists of a mineralized lens of sericite-chlorite-carbonate-quartz schist present in the footwall of the inverted limb B. The mineralized zones BFII, BF, and BA are parasitic anticlines dipping to the SE, also in limb B of the major syncline. The C ore body is a group of mineralized lenses of sericite-chlorite-carbonate-quartz schist associated with the contact of the shear zone with the BIF at the hanging wall of limb B.

Qualified Person

Scientific and technical information contained in this press release has been reviewed and approved by Marcos Dias Alvim, BSc Geo., MAusIMM (CP), Project Development 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 continues to use 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 upper gold grade cut 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, either at the Roça Grande Mine Laboratory in Caeté, Minas Gerais or at the SGS Geosol Laboratory in Vespasiano, Minas Gerais. 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 "Technical Report on the Roça Grande and Pilar Operations, Minas Gerais State, Brazil", a copy of which is available on the Company's SEDAR profile at www.sedar.com.

About Jaguar Mining Inc.

Jaguar Mining Inc. is a Canadian-listed junior gold mining, development, and exploration company operating in Brazil, with three gold mining complexes, and a large land package with significant upside exploration potential from mineral claims covering an area of approximately 191,000 hectares. The Company's principal operating assets are located in the Iron Quadrangle, a prolific greenstone belt in the state of Minas Gerais and include the Turmalina Gold Mine Complex ("Mineração Turmalina Ltda" or "MTL") and the Caeté Gold Mine Complex ("Mineracao Serras do Oeste Ltda" or "MSOL"), which combined produce more than 90,000 ounces of gold annually. The Company also owns the Paciência Gold Mine Complex, which has been on care and maintenance since 2012. Additional information is available on the Company's website at www.jaguarmining.com.

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Forward-Looking Statements

Certain statements in this news release constitute "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information contained in forward-looking statements can be identified by the use of words such as "are expected", "is forecast", "is targeted", "approximately", "plans", "anticipates" "projects", "anticipates", "continue", "estimate", "believe" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. The Company has made numerous assumptions with respect to forward-looking information contained herein, including, among other things, assumptions about the availability of financing for exploration, development and production activities; the supply and demand for, and the level and volatility of the price of, gold; the accuracy of reserve and resource estimates and the assumptions on which the reserve and resource estimates are based; the receipt of necessary permits; ongoing relations with employees and impacted communities; and general business and economic conditions. Forward-looking information involve a number of known and unknown risks and uncertainties, including among others the uncertainties with respect to the price of gold, labor disruptions, mechanical failures, increase in costs, environmental compliance and change in environmental legislation and regulation, procurement and delivery of parts and supplies to the operations, uncertainties inherent to capital markets in general and other risks inherent to the gold exploration, development and production industry, which, if incorrect, may cause actual results to differ materially from those anticipated by the Company and described herein. Accordingly, readers should not place undue reliance on forward-looking information.

For additional information with respect to these and other factors and assumptions underlying the forward-looking information made in this news release, see the Company's most recent annual information form and management's discussion and analysis, as well as other public disclosure documents that can be accessed under the issuer profile of "Jaguar Mining Inc." on SEDAR at www.sedar.com. The forward-looking information set forth herein reflects the Company's reasonable expectations as at the date of this news release and is subject to change after such date. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law. The forward-looking information contained in this news release is expressly qualified by this cautionary statement.

**Figure 1 – Longitudinal Section, Pilar Gold Mine indicating drilling locations
(Not all drill locations have been projected on this section)**

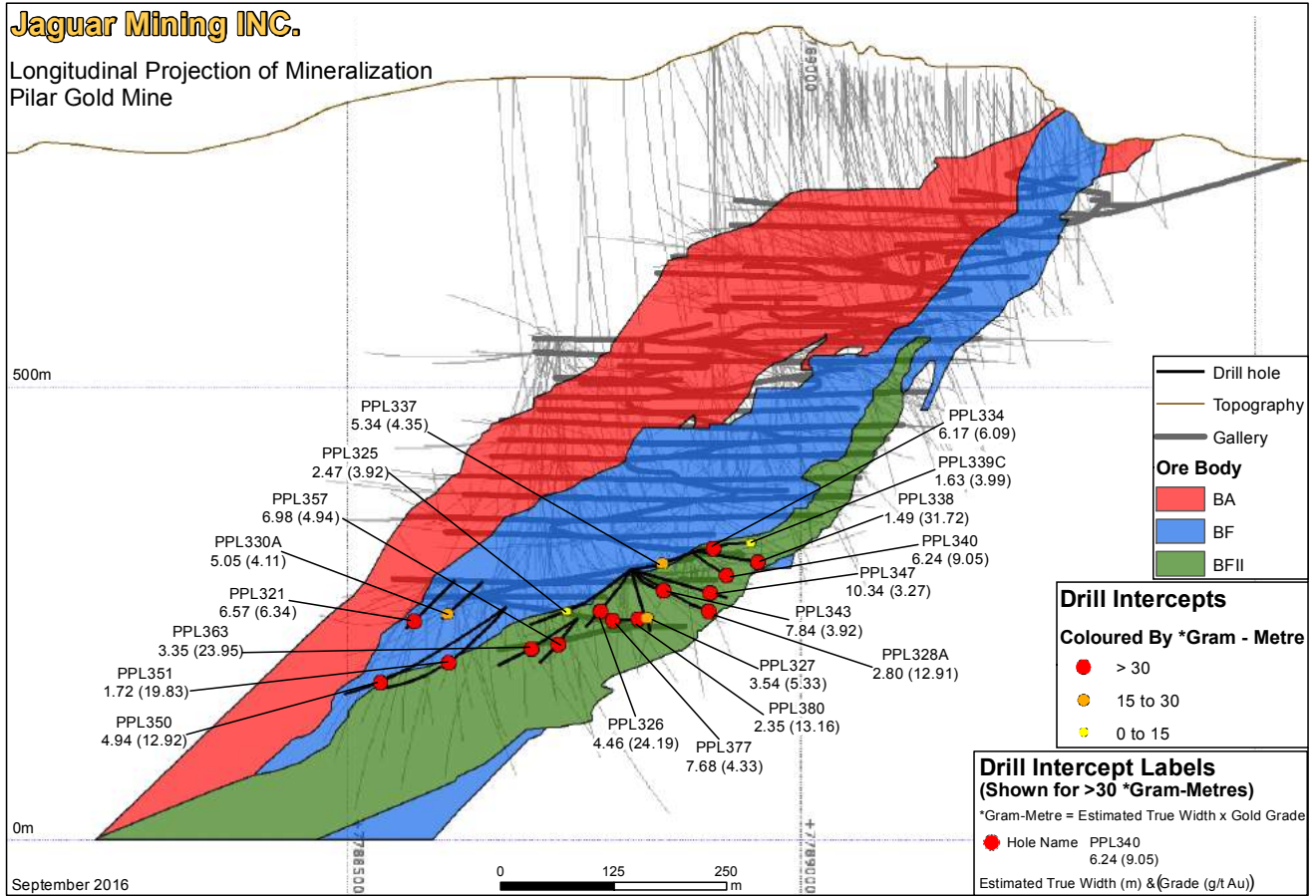


Figure 2 – Caeté Complex Location Map

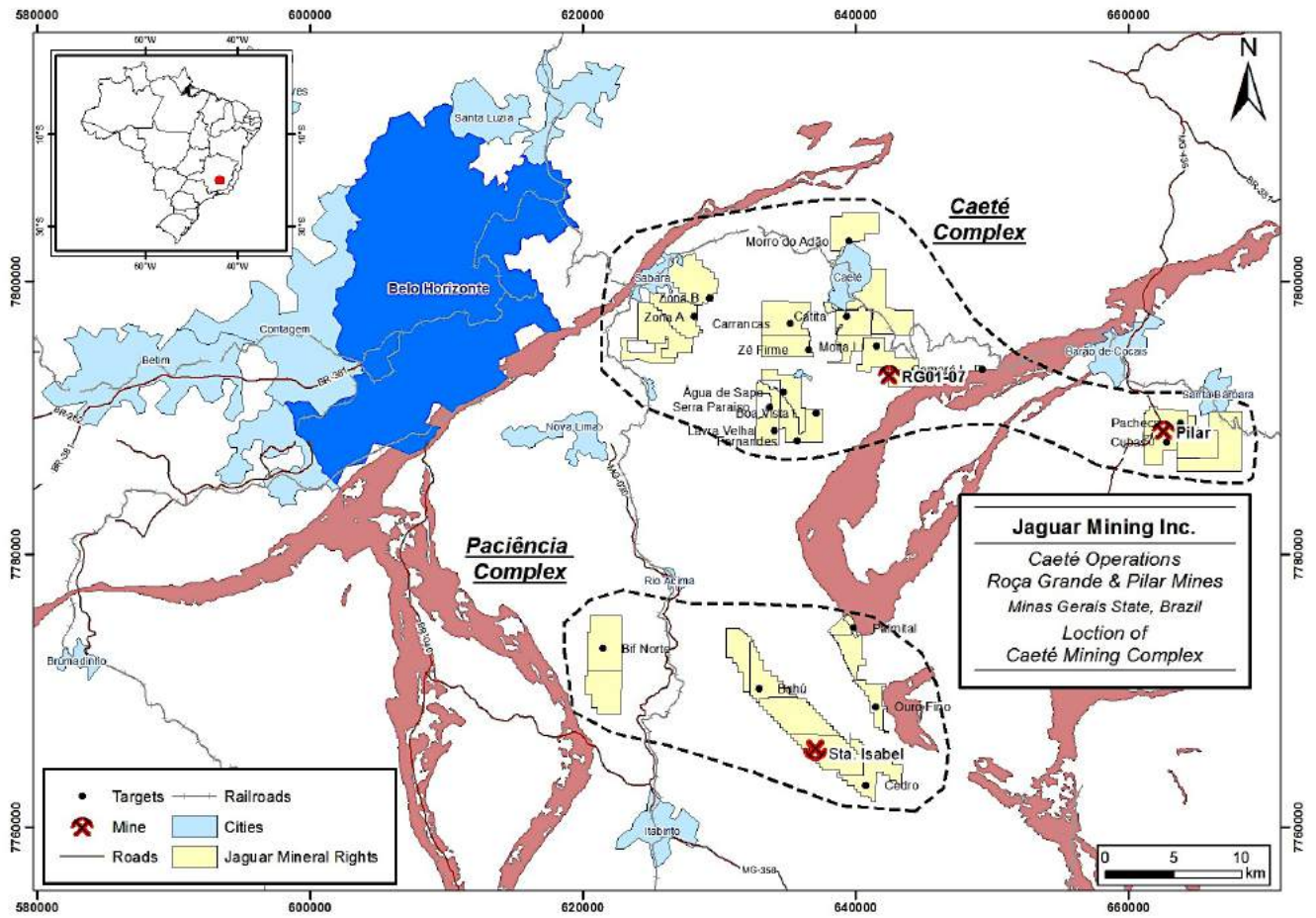


Table 1 – Drill Results

Pilar Gold Mine Drill Results						
Hole ID	From (m)	To (m)	Downhole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	Ore Body
FSB549	24.25	28.60	4.35	2.91	3.32	BFII
FSB551	25.00	27.50	2.50	1.53	0.98	BFII
	29.90	33.60	3.70	3.38	10.12	BFII
FSB552A	18.80	20.30	1.50	1.32	10.57	BFII
	21.80	28.60	6.80	6.46	17.40	BFII
FSB553	26.25	29.50	3.25	2.86	7.33	BFII
FSB554	47.30	51.65	4.35	4.22	3.78	BFII
	53.50	56.50	3.00	2.74	1.19	BFII
	63.30	65.20	1.90	1.08	7.34	BFII
	66.40	68.90	2.50	1.43	5.06	BFII
FSB556	43.20	45.10	1.90	1.38	4.03	BFII
FSB561	31.60	35.10	3.50	2.10	7.75	BFII
FSB562	26.10	29.30	3.20	2.90	1.44	BFII
PPL325	107.10	123.45	16.35	15.52	7.73	BFII
	124.60	130.40	5.80	5.77	2.87	BFII
PPL326	90.25	95.90	5.65	4.46	24.19	BFII
	112.10	118.50	6.40	6.01	3.15	BFII
PPL327	105.30	109.75	4.45	3.54	5.33	BFII
	127.20	127.85	0.65	0.53	4.76	BFII
	135.25	137.10	1.85	1.51	6.47	BFII
PPL328A	129.05	132.45	3.40	3.25	1.17	BFII
	149.90	154.20	4.30	2.80	12.91	BFII
	171.20	174.20	3.00	1.84	0.86	BFII
PPL333	174.65	176.60	1.95	1.83	6.54	BFII
PPL337	99.75	105.85	6.10	5.34	4.35	BFII
PPL338	58.80	60.70	1.90	1.79	1.56	BFII
	72.80	74.60	1.80	1.49	31.72	BFII
PPL339C	73.25	74.85	1.60	1.02	27.59	BFII
PPL340	52.85	60.75	7.90	6.24	9.05	BFII
	64.50	65.75	1.25	1.13	7.01	BFII
	68.50	71.00	2.50	2.46	4.87	BFII
PPL342	175.30	176.80	1.50	0.68	2.18	BFII
PPL343	101.75	104.10	2.35	1.41	0.66	BFII
	116.60	117.30	0.70	0.44	7.46	BFII
	122.10	122.60	0.50	0.26	11.08	BFII
PPL344	173.10	173.95	0.85	0.82	14.26	BFII
	176.25	176.55	0.30	0.28	39.54	BFII
PPL357	32.35	41.00	8.65	6.98	4.94	BFII
PPL363	54.55	58.55	4.00	3.35	23.95	BFII
FSB554	33.25	34.70	1.45	1.22	5.51	BF
FSB556	20.20	24.50	4.30	1.54	2.97	BF
PPL320	110.45	112.70	2.25	2.22	0.75	BF
	142.60	145.60	3.00	2.71	1.66	BF
	146.40	148.60	2.20	1.99	4.17	BF
PPL321	104.80	106.95	2.15	1.46	1.20	BF
	114.30	123.95	9.65	6.57	6.34	BF
	130.80	131.95	1.15	1.13	25.40	BF

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Hole ID	From (m)	To (m)	Downhole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	Ore Body
	138.60	139.80	1.20	0.77	2.61	BF
	142.80	146.25	3.45	2.21	2.40	BF
PPL324	109.20	112.80	3.60	2.94	1.43	BF
	132.55	134.10	1.55	1.47	6.03	BF
	136.45	137.05	0.60	0.57	2.83	BF
	139.00	141.45	2.45	2.33	4.41	BF
	143.20	144.30	1.10	1.09	5.29	BF
	PPL325	160.80	165.50	4.70	3.85	1.46
PPL326	128.85	129.40	0.55	0.35	7.63	BF
	142.40	144.25	1.85	1.60	1.14	BF
	148.05	151.45	3.40	1.54	2.66	BF
PPL330A	91.80	92.90	1.10	0.73	3.98	BF
	119.25	124.30	5.05	5.05	4.11	BF
PPL331	114.55	115.85	1.30	1.19	13.48	BF
PPL334	173.40	180.60	7.20	6.17	6.09	BF
PPL339C	90.65	92.10	1.45	0.83	1.60	BF
PPL340	84.60	88.30	3.70	3.47	3.33	BF
PPL343	137.50	146.00	8.50	7.84	3.92	BF
	165.60	167.45	1.85	1.71	4.00	BF
PPL350	167.70	172.90	5.20	4.94	12.92	BF
	179.65	186.10	6.45	6.22	5.05	BF
PPL351	122.45	124.45	2.00	1.72	19.83	BF
PPL377	55.80	63.90	8.10	7.68	4.33	BF
PPL380	64.10	66.80	2.70	2.35	13.16	BF
FSB546	48.90	50.20	1.30	0.63	5.70	BA
	67.30	78.60	11.30	5.48	6.01	BA
PPL320	72.05	73.20	1.15	0.93	1.96	BA
PPL324	71.45	71.75	0.30	0.29	15.24	BA
	82.40	83.85	1.45	1.42	1.43	BA
PPL335	82.20	88.00	5.80	4.02	3.15	BA
	96.30	98.55	2.25	2.17	2.28	BA
	99.50	101.70	2.20	2.12	1.55	BA
	106.30	110.00	3.70	3.20	4.24	BA
	PPL336	95.70	100.25	4.55	1.70	1.19
PPL335	41.80	42.65	0.85	0.80	1.77	C
PPL336	40.85	42.55	1.70	1.65	1.31	C
	47.70	49.35	1.65	1.58	1.68	C
FSB552A	44.40	46.55	2.15	2.14	1.12	LFW
PPL325	94.95	99.50	4.55	2.47	3.92	LFW
	103.05	105.00	1.95	1.78	1.64	LFW
PPL326	78.00	83.65	5.65	4.53	7.10	LFW
PPL328A	115.90	119.65	3.75	3.07	1.01	LFW
PPL333	116.60	118.50	1.90	1.41	1.93	LFW
PPL338	23.05	24.9	1.85	1.55	11.24	LFW
	38.50	39.8	1.3	0.78	3.25	LFW
PPL339C	26.40	28.85	2.45	1.63	3.99	LFW
PPL340	20.10	21.75	1.65	1.06	11.12	LFW
PPL341	91.05	93.4	2.35	2.31	1.15	LFW
	145.00	146.65	1.65	1.06	3.18	LFW

Pilar Gold Mine Drill Results						
Hole ID	From (m)	To (m)	Downhole Interval (m)	Estimated True Width (m)	Gold Grade (g/t Au)	Ore Body
PPL342	121.40	122.70	1.30	1.25	6.24	LFW
	124.20	129.20	5.00	4.82	1.67	LFW
	132.35	134.15	1.80	1.73	2.18	LFW
PPL343	61.80	64.60	2.80	2.23	2.73	LFW
	85.05	85.95	0.90	0.40	1.89	LFW
PPL344	90.20	95.60	5.40	5.21	1.89	LFW
PPL363	32.65	40.45	7.80	5.56	6.25	LFW
PPL321	100.00	102.15	2.15	1.49	7.23	LHW
PPL320	122.00	123.45	1.45	1.22	0.63	LPA
PPL325	141.50	146.60	5.10	2.73	5.13	LPA
PPL329	92.25	98.85	6.60	6.45	1.30	LPA
PPL330A	112.55	115.80	3.25	2.66	4.48	LPA
PPL331	105.75	108.00	2.25	2.16	4.89	LPA
PPL346	26.60	29.20	2.60	1.49	3.73	SW
	71.70	72.80	1.10	0.63	12.05	SW
	100.75	101.85	1.10	0.63	3.58	SW
PPL347	13.95	25.20	11.25	10.34	3.27	SW
	52.85	55.75	2.90	1.66	1.42	SW
PPL348	48.65	52.65	4.00	2.29	4.30	SW