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NEWS RELEASE

IAMGOLD REPORTS 51% RESERVE INCREASE AT ROSEBEL GOLD MINE DRIVEN BY THE DECLARATION OF RESERVES AT SARAMACCA -

INCREASING PRODUCTION AND EXTENDING ROSEBEL'S MINE LIFE TO 2033

All amounts are in US dollars, unless otherwise indicated. Numbers in tables may not add due to rounding.

Toronto, Ontario, September 23, 2018 – IAMGOLD Corporation ("IAMGOLD" or the "Company") today announced an updated Resource and Reserve estimate for its Rosebel Gold Mine ("Rosebel") in Suriname, **which includes a declaration of reserves from the Saramacca deposit**, located approximately 25 kilometres from the Rosebel mill.

HIGHLIGHTS (ATTRIBUTABLE BASIS)1,2

- Consolidated Reserves increased by 51%, or 1.6 million ounces, to 4.7 million ounces, which include 1.0 million ounces from the Saramacca deposit.
- Consolidated Measured and Indicated Resources increased by 2%, or 0.1 million ounces, to 9.3 million ounces.
 - Saramacca Measured and Indicated Resources increased by 72%, or 0.5 million ounces, to 1.2 million ounces.
- Mine life of 15 years (2018-2033) with average mill throughput of 10.9 million tonnes per annum (excluding 2033).
- Mine life extended by five years from the Life-of Mine ("LOM") plan reported in the 2017 Technical Report.
- Average annual production of 281,000 ounces (318,000 ounces on a 100% basis) over 15 years, with peak annual production of 362,000 ounces (415,000 ounces on a 100% basis)
- Average annual production increases by 11% to 295,000 ounces (337,000 ounces on a 100% basis) from 2020 to 2032, when Saramacca will be in or close to full production.

Consolidated gold reserves at Rosebel increased by 51%, resulting from the significant contribution from the Saramacca deposit, as well as overall improvements to the current LOM Plan allowing for the inclusion of the Koolhoven deposit. The declaration of reserves at Saramacca contributed 1.0 million ounces, accounting for 64% of the increase, while the inclusion of Koolhoven contributed another 0.4 million ounces. The increase was achieved with no changes to the \$1,200 per ounce gold price assumption for estimating reserves. The additional reserves extend Rosebel's mine life by five years to 2033, with future average annual production estimated at 318,000 ounces on a 100% basis.

While providing direct positive impacts to the overall reserves and the Rosebel operation, the future development of Saramacca also positions the Company to further unlock the exploration potential of its consolidated land holdings along the Saramacca - Brokolonko trend.

Steve Letwin, President and CEO of IAMGOLD, commented, "Saramacca has delivered. Within only a year of confirming the resource, Rosebel has rapidly advanced Saramacca to reserve status and incorporated the additional ounces into the overall LOM plan. I congratulate the exploration and

¹ Attributable ounces: 95% Rosebel (excluding Saramacca), 66.5% Saramacca.

² All comparisons include depletion prior to September 1, 2018 (for RGM only).

engineering teams for these excellent results and their dedication to moving this project quickly towards production. The significance of this accomplishment stands out at a time when reserve replacement is no longer easy in our industry. In gaining another five years, Rosebel is only half way through its life expectancy of nearly three decades."

The inclusion of Saramacca in Rosebel's reserves followed positive results from advanced technical studies jointly led by IAMGOLD, SRK Consulting (Canada) Inc. ("SRK") and other consultants. The studies outlined an economically viable project for Saramacca and justified fast tracking the development of the project to achieve a mining start in the second half of 2019.

Over the last few months, IAMGOLD issued an Environmental and Social Impact Study (ESIA) to the Surinamese environmental regulators to begin the public consultation process.

A technical report summarizing the technical studies will be filed on SEDAR within 45 days of the date of this news release.

SARAMACCA FUTURE WORK

Saramacca is on track to commence mining in the second half of 2019. Due to the fast track nature of the Saramacca Project, ongoing technical studies are at various levels of advancement, ranging from prefeasibility to detailed engineering, and construction has been initiated for various elements of the Project. Firm orders have been placed for the acquisition of the mining fleet, and the haul road between Saramacca and the current Rosebel concession is currently in the final phases of detailed engineering. Pre-construction preparation activities started earlier this month.

On-going optimization studies on pit slope dewatering and subsequent slope design improvements will be completed by the end of 2018. Metallurgical recovery optimization test work and design will be carried out in the fourth quarter 2018, with the objective to further improve recoveries. Potential mill circuit upgrades will be evaluated as part of this work.

Drilling will continue to target specific areas of interest within the known pit shell, as well as lateral and atdepth extensions of the deposit. The Rosebel team continues to work at identifying opportunities to further optimize project economics related to the development of the open-pit Saramacca mine.

Project execution capital expenditures are estimated at \$128 million (±15%).

ROSEBEL CONCESSION (EXCLUDING SARAMACCA)

The current reserve estimate for the open pits in the Rosebel Concession follows from work developed for the previous disclosure. There were no major changes to the key parameters, with the exception of the inclusion of Koolhoven in this reserve estimate, which was made possible, in part, by the addition of Saramacca, which allows greater flexibility with the mill blending strategy.

STUDY HIGHLIGHTS

Consolidated LOM Key Parameters (100% Basis)

| LOM Mining Capacity: | |
|--|-------------|
| • 2019 | 70.0 Mtpa |
| • 2020 | 87.0 Mtpa |
| 2021 and remainder of LOM | 105.0 Mtpa |
| Mining Dilution (Saprolite-Transition-Rock) | 8-10-10% |
| Maximum Milling Capacity | 12.8 Mtpa |
| LOM Average Annual Gold Production | 318,000 oz. |
| LOM Average Recovery | 89.8% |
| Mine Life (2018-2033) | 15 years |
| LOM Average Mined Diluted Grade | 1.12 g/t Au |
| Average LOM Strip Ratio | 6.9 : 1 |
| Gold Price Assumption used in financial analysis | \$1,200/oz |

US\$/C\$ exchange rate of 1:1.25

Saramacca LOM Key Parameters (100% Basis)

| Saramacca Mining Capacity: | |
|--|---------------|
| • 2019 | 1.0 Mtpa |
| • 2020 | 15.0 Mtpa |
| 2021 and remainder of LOM | 30.0 Mtpa |
| Average Mill Feed | 1.9 Mtpa |
| Average Annual Gold Production (2020-2032) | 98,000 oz. |
| Average Recovery | 84.2% |
| Mine Life (2019-2033) | 14.5 years |
| Average Diluted Grade | 1.81 g/t Au |
| Average Strip Ratio | 10.8 : 1 |
| Total Gold Production | 1,298,000 oz. |
| Estimated Project Execution Capital Expenditures | \$128M (±15%) |

US\$/C\$ exchange rate of 1:1.25

MINERAL RESOURCES

The Mineral Resource estimate used as the basis for the study is summarized below.

Mineral Resources - September 1, 2018

| Deposit | Classification | Tonnes (000) | Grade (g/t Au) | Contained Ounces (000s) 100% Basis | Attributable Contained Ounces (000s) |
|--------------|----------------------|-----------------|-------------------|--|--|
| RGM | Measured | 34,216 | 0.6 | 696 | 661 |
| | Indicated | 261,108 | 0.9 | 7,817 | 7,426 |
| | Measured & Indicated | 295,324 | 0.9 | 8,513 | 8,087 |
| | Inferred | 65,154 | 0.9 | 1,797 | 1,707 |
| Saramacca | Indicated | 27,938 | 2.0 | 1,763 | 1,172 |
| | Inferred | 11,824 | 0.7 | 273 | 182 |
| Consolidated | Measured | 34,216 | 0.6 | 696 | 661 |
| | Indicated | 289,047 | 1.0 | 9,580 | 8,598 |
| | Measured & Indicated | 323,262 | 1.0 | 10,276 | 9,260 |
| | Inferred | 76,978 | 0.8 | 2,070 | 1,889 |

Notes:

- 1. Attributable ounces: 95% for Rosebel (excluding Saramacca), 66.5% for Saramacca.
- 2. CIM Definition Standards were followed for classification of Mineral Resources.
- 3. Mineral Resources reported at a weighted average cut-off grade for Rosebel (excluding Saramacca) of 0.18 g/t Au for saprolite, 0.23 g/t Au for transition material and 0.35 g/t Au for fresh rock material. Average cut-off grades for Saramacca are 0.25 g/t Au for laterite and saprolite, 0.30 g/t Au for transition material and 0.50 g/t Au for fresh rock material.
- 4. Mineral Resources for RGM includes 2018 depletion prior to September 1, 2018.
- 5. Mineral Resources are constrained within a pit shell estimated using a long-term gold price of \$1,500/oz.
- 6. Mineral Resources are inclusive of Reserves quoted below.

MINERAL RESERVES

The tonnes, grades, and classification of the Mineral Reserves are summarized below.

Mineral Reserves - September 1, 2018

| Deposit | Classification | Tonnes (000) | Grade (g/t Au) | Contained Ounces (000s) 100% Basis | Attributable Contained Ounces (000s) |
|-----------|-------------------|-----------------|-------------------|--|--|
| RGM | Proven & Probable | 117,872 | 1.0 | 3,632 | 3,450 |
| | Stockpiles | 15,803 | 0.6 | 283 | 269 |
| Saramacca | Proven & Probable | 26,549 | 1.8 | 1,542 | 1,025 |
| Total | | 160,224 | 1.1 | 5,457 | 4,745 |

Notes:

- 1. Attributable ounces: 95% for Rosebel (excluding Saramacca), 66.5% for Saramacca.
- 2. Reserves estimated assuming open pit mining methods.
- 3. Reserves are based on a gold price of \$1,200/oz.
- 4. Average weighted process recovery of 89.8%.

- 5. Mining cost: \$2.19/t mined. Processing costs: \$4.79/t milled. Power costs: \$3.13/t milled. General and Administrative costs of \$2.16/t milled.
- 6. Mineral Reserves include 2018 depletion prior to September 1, 2018.
- 7. Mineral reserves include material from all pits, including Saramacca.

ABOUT THE SARAMACCA PROJECT

The Saramacca project is strategically located approximately 25 kilometres southwest of the Rosebel Gold Mine milling facility. Mineralization is hosted in the Paramaka Formation within the lower part of the Marowijne Greenstone Belt, which is dominated by metamorphosed basalts in the immediate project area. These are traversed by the regional, northwest trending Saramacca shear zone, which is believed to be an important deformation zone for the localization of gold mineralization.

On August 30, 2016, the Company signed a letter of intent with the Government of Suriname to acquire rights to the Saramacca property, with the intent of defining a National Instrument 43-101 mineral resource within 24 months. The terms of the letter included an initial payment of \$0.2 million, which enabled immediate access to the property for Rosebel's exploration team to conduct due diligence, as well as access to the data from previous exploration activity at the Saramacca property, On September 30, 2016. having been satisfied with the results of the due diligence, the Company ratified the letter of intent to acquire the Saramacca property and subsequently paid \$10 million in cash and agreed to issue 3.125 million IAMGOLD common shares to the Government of Suriname in three approximately equal annual instalments on each successive anniversary of the date the right of exploration was transferred to Rosebel (December 14, 2016). In addition, the agreement provides for a potential upward adjustment to the purchase price ("purchase price adjustment") based on the contained gold ounces identified by Rosebel in National Instrument 43-101 measured and indicated resource categories, within a certain Whittle shell within the first 24 months, to a maximum of \$10 million. On December 8, 2017, the parties agreed to amend the letter of intent to provide for an immediate payment of \$5 million towards the purchase price adjustment. In addition, when calculating the purchase price adjustment, the parties have agreed to include all ounces which fall within any category of a mineral resource.

The Saramacca project falls within the "UJV" area as defined in an Agreement with the Government of Suriname announced on April 15, 2013. The Agreement establishes a joint venture growth vehicle under which Rosebel would hold a 70% participating interest and the Government will acquire a 30% participating interest on a fully-paid basis.

QUALIFIED PERSONS

The mineral disclosure was prepared by IAMGOLD and SRK, and incorporates the work of IAMGOLD, SRK and other consultants. SRK Qualified Persons are independent of IAMGOLD and have reviewed and approved this news release. IAMGOLD Qualified Persons are not independent of IAMGOLD and have reviewed and approved this news release. The affiliation and areas of responsibility for each Qualified Person involved in preparing this mineral disclosure upon which the technical report will be based, are:

IAMGOLD QPs

- R. Dutaut, Geo., Property description and location, accessibility, climate, local resources, infrastructure and physiography, history, geological setting and mineralization, deposit type, exploration, drilling, sample preparation and analysis and security, data verification, and mineral resource estimate – Rosebel Property (excluding Saramacca)
- A. Doucette, Eng., Mining method, mineral reserve estimate and Infrastructure
- S. Rivard, Eng., Recovery method Mineral processing and metallurgical testing
- M. Payeur, Eng., Market Studies and Contracts, Environmental studies, permitting, and social or community impacts, Capital and operating cost estimate, and other relevant data and information

SRK QPs

- D. Chartier, P. Geo., Accessibility, climate, local resources, infrastructure and physiography, history, geological setting and mineralization, deposit type, exploration, drilling, sample preparation and analysis and security, data verification, and mineral resource estimate – Saramacca Property
- O. Leuangthong, P. Eng., Mineral resource estimate Saramacca Property

The information in this news release was reviewed and approved by Lise Chénard, Eng., Director Mine Geology and Daniel Vallières, Eng., Director Technical Services. Both Ms. Chénard and Mr. Vallières work for IAMGOLD and are Qualified Persons as defined by National Instrument 43-101.

DATA VERIFICATION

The sampling of, and assay data from, drill core is monitored through the implementation of a quality assurance - quality control (QA-QC) program designed to follow industry best practice. Drill core (HQ and NQ size) samples are selected by the IAMGOLD geologists and sawn in half with a diamond saw at the Rosebel mine site. Half of the core is retained at the site for reference purposes. Sample intervals may vary from half a metre to one and a half metres in length depending on the geological observations.

Samples are then transported either to FILAB in Paramaribo, Suriname, a representative lab of ALS or to the RGM laboratory. FILAB is an ISO 9001 (2008) and ISO/IEC 17025 accredited laboratory. The RGM laboratory is certified ISO/IEC 17025:2005. Samples are analyzed for gold using standard fire assay technique with an atomic Absorption (AA) finish. IAMGOLD inserts blanks and certified reference standard in the sample sequence for quality control program; about 5% of the pulps and reject are re-assayed using both internal and external laboratories. Samples representative of the various lithologies are collected from each drill hole and measured for bulk density at the site RGM laboratory.

CONFERENCE CALL

A conference call will be held on Monday, September 24, 2018 at 8:30 a.m. (Eastern Daylight Time) for a discussion with management regarding the updated Resource and Reserve estimate for Rosebel. A webcast of the conference call will also be available through IAMGOLD's website - www.iamgold.com.

Conference Call Information: North America Toll-Free: 1-800-319-4610 or 1-604-638-5340.

A replay of this conference call will be accessible for one month following the call by dialing: North America toll-free: 1-800-319-6413 or 1-604-638-9010, passcode: 2614#.

Forward-Looking Information

All Mineral Reserve and Mineral Resources estimates reported by the Company were estimated in accordance with the Canadian National Instrument 43-101 and the Canadian Institute of Mining, Metallurgy, and Petroleum Definition Standards (May 10, 2014). These standards differ significantly from the requirements of the U.S. Securities and Exchange Commission. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.

This document contains "forward-looking information" within the meaning of Canadian securities legislation and "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995. This information and these statements, referred to herein as "forward-looking statements" are made as of the date of this document. Forward-looking statements relate to future events or future performance and reflect current estimates, predictions, expectations or beliefs regarding future events and include, but are not limited to, statements with respect to:

- (i) the estimated amount and grade of Mineral Resources and Mineral Reserves;
- (ii) the PFS representing a viable development option for the Project;

- (iii) estimates of the capital costs of constructing mine facilities and bringing a mine into production, of sustaining capital and the duration of financing payback periods;
- (iv) the estimated amount of future production, both produced and metal recovered; and,
- (v) estimates of operating costs and total costs, net cash flow, net present value and economic returns from an operating mine.

Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives or future events or performance (often, but not always, using words or phrases such as "expects", "anticipates", "plans", "projects", "estimates", "envisages", "assumes", "intends", "strategy", "goals", "objectives" or variations thereof or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, or the negative of any of these terms and similar expressions) are not statements of historical fact and may be forward-looking statements.

All forward-looking statements are based on IAMGOLD's or its consultants' current beliefs as well as various assumptions made by them and information currently available to them. The most significant assumptions are set forth above, but generally these assumptions include:

- (i) the presence of and continuity of metals at Rosebel Gold Mines (including the Saramacca Deposit) at estimated grades;
- (ii) the geotechnical and metallurgical characteristics of rock conforming to sampled results including the quantities of water and the quality of the water that must be diverted or treated during mining operations;
- (iii) the capacities and durability of various machinery and equipment;
- (iv) the availability of personnel, machinery and equipment at estimated prices and within the estimated delivery times;
- (v) currency exchange rates;
- (vi) metals sales prices and exchange rate assumed;
- (vii) appropriate discount rates applied to the cash flows in the economic analysis;
- (viii) tax rates and royalty rates applicable to the proposed mining operation;
- (ix) the availability of acceptable financing under assumed structure and costs;
- (x) anticipated mining losses and dilution;
- (xi) metallurgical performance;
- (xii) reasonable contingency requirements;
- (xiii) success in realizing proposed operations;
- (xiv) receipt of permits and other regulatory approvals on acceptable terms; and
- (xv) the fulfillment of environmental assessment commitments and arrangements with local communities.

Although management considers these assumptions to be reasonable based on information currently available to it, they may prove to be incorrect. Many forward-looking statements are made assuming the correctness of other forward looking statements, such as statements of net present value and internal rates of return, which are based on most of the other forward-looking statements and assumptions herein. The cost information is also prepared using current values, but the time for incurring the costs will be in the future and it is assumed costs will remain stable over the relevant period.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that estimates, forecasts, projections and other forward-looking statements will not be achieved or that assumptions do not reflect future experience. We caution readers not to place undue reliance on these forward-looking statements as a number of important factors could cause the actual outcomes to differ materially from the beliefs, plans, objectives, expectations, anticipations, estimates assumptions and intentions expressed in such forward-looking statements. These risk factors may be generally stated as the risk that the assumptions and estimates expressed above do not occur as forecast,

but specifically include, without limitation: risks relating to variations in the mineral content within the material identified as Mineral Resources and Mineral Reserves from that predicted; variations in rates of recovery and extraction; the geotechnical characteristics of the rock mined or through which infrastructure is built differing from that predicted, the quantity of water that will need to be diverted or treated during mining operations being different from what is expected to be encountered during mining operations or post closure, or the rate of flow of the water being different; developments in world metals markets; risks relating to fluctuations in the Canadian dollar relative to the US dollar; increases in the estimated capital and operating costs or unanticipated costs; difficulties attracting the necessary work force; increases in financing costs or adverse changes to the terms of available financing, if any; tax rates or royalties being greater than assumed; changes in development or mining plans due to changes in logistical, technical or other factors; changes in project parameters as plans continue to be refined; risks relating to receipt of regulatory approvals; delays in stakeholder negotiations; changes in regulations applying to the development, operation, and closure of mining operations from what currently exists; the effects of competition in the markets in which IAMGOLD operates; operational and infrastructure risks and the additional risks described in IAMGOLD's Annual Information Form filed with SEDAR in Canada (available at www.sedar.com) for the year ended December 31, 2017 and in the Corporation's Annual Report Form 40-F filed with the U.S. Securities and Exchange Commission on EDGAR (available at https://www.sec.gov/edgar/searchedgar/companysearch.html. IAMGOLD cautions that the foregoing list of factors that may affect future results is not exhaustive.

When relying on our forward-looking statements to make decisions with respect to IAMGOLD, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. IAMGOLD does not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by IAMGOLD or on our behalf, except as required by law.

About IAMGOLD

IAMGOLD (www.iamgold.com) is a mid-tier mining company with four operating gold mines on three continents. A solid base of strategic assets in North and South America and West Africa is complemented by development and exploration projects and continued assessment of accretive acquisition opportunities. IAMGOLD is in a strong financial position with extensive management and operational expertise.

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Please note:

This entire news release may be accessed via fax, e-mail, IAMGOLD's website at www.iamgold.com and through CNW Group's website at www.newswire.ca. All material information on IAMGOLD can be found at www.sedar.com or at www.sec.gov.

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