

TSX: IMG NYSE: IAG

NEWS RELEASE

IAMGOLD PROVIDES UPDATE ON THE DRILLING PROGRAM ON THE MONSTER LAKE PROJECT

Toronto, Ontario, May 27, 2014 – IAMGOLD Corporation ("IAMGOLD" or the "Company") today provided an update from ongoing exploration activities at its newly optioned Monster Lake project located 50 kilometres southwest of Chibougamau, Quebec, Canada. IAMGOLD initiated the current exploration program on the project at the end of 2013 pursuant to an Earn-In Agreement finalized with TomaGold Corporation (TSXV: LOT), in which IAMGOLD may earn a 50% interest in each of the Monster Lake, Winchester and Lac à l'eau jaune properties, collectively referred as the Monster Lake Project. To earn its interest IAMGOLD must complete scheduled cash payments and exploration expenditures totaling US\$17.6 million over five years.

The company has completed a phase one diamond drilling program totalling 4,528 metres (nine holes) targeting the direct down-dip and lateral extensions of the 325-Megane mineralized zone previously drilled by TomaGold. Assay results have been received for five drill holes totalling 2,835 meters and are provided in Table I below. A drill hole plan map and longitudinal section are attached to this news release.

Highlights include:

- 10.47 metres grading 11.55 g/t Au from 457.0 metres depth (including 48.90 g/t Au over 2.0 metres) in hole ML-14-108 (325-Megane Zone),
- Intersection of a footwall zone grading 13.65 g/t Au over 3.77 metres from 636.86m depth, including 46.0 g/t Au over 1.1 metres in hole ML-14-110 (referred to as the Lower 325-Megane Zone)

The drilling to date has confirmed the presence of three sheared, altered and mineralized zones: the Upper 325-Megane Zone (new identified structure), the 325-Megane Zone previously outlined by TomaGold's most recent drilling and the Lower 325-Megane Zone (tested only in a few areas by previous drilling). With the limited drilling completed to date, the three zones appear sub-parallel and are spaced approximately 100 metres apart. The targeted 325-Megane Zone is interpreted to be hosted within a regional shear zone that can be traced along strike within the current property.

Craig MacDougall, Senior Vice President, Exploration for IAMGOLD, stated, "Our exploration program is targeting high grade mineralization and I am very encouraged with these initial results from only our first drilling program. Our exploration team continues to target possible extensions of the 325-Megane Zone and has already confirmed the presence of other mineralized zones. Work will continue to focus on identifying additional targets with potential for the discovery of new high grade zones."

The Monster Lake project is underlain by Archean volcanic rocks of the Obatogamau Formation and is traversed by an important deformation corridor and gold-bearing mineralized structures. Historical drilling and recent success by TomaGold have identified at least a four-kilometre long mineralized structure hosting most of the gold surface showings and diamond drilling intersections, including the 325-Megane Zone.

Next Steps

The Company's approved 2014 exploration program for the Monster Lake project includes a minimum of 8,000 metres of diamond drilling. A summer mapping program is getting underway to help delineate and confirm priority targets in the central core of the Monster Lake property and in the regional extension of the deformation corridor on the Lac à l'eau jaune and Winchester properties. Further detailed assessment of

historic gold occurrences will be carried out. The recently completed high resolution airborne magnetic survey will also help to develop a structural framework to identify target areas for further exploration.

Technical Information and Quality Control Notes

The drilling results contained in this news release have been prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101").

The "Qualified Person" responsible for the supervision of the preparation and review of this information is Marie-France Bugnon, P. Geo., General Manager Exploration. Marie-France is considered a "Qualified Person" for the purposes of National Instrument 43-101 with respect to the technical information being reported on. The technical information has been included herein with the consent and prior review of the above noted Qualified Person. The Qualified person has verified the data disclosed, and data underlying the information or opinions contained herein.

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 (NQ size) samples are selected by the IAMGOLD geologists and sawn in half with a diamond saw at the project 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 transported in sealed bags to the AGAT Laboratory prep lab facility in Val-d'Or, Québec. Samples are coarse crushed to a -10 mesh and then a 1000 gram split is pulverized to 95% passing -150 mesh. Analytical pulps are forwarded for analysis at the AGAT Laboratories (ISO / IEC 17025 Certified by the Standards Council of Canada) in Mississauga, Ontario. Samples are analyzed using a standard fire assay with a 50 gram charge with an Atomic Absorption (AA) finish. For samples that return assay values over 5.0 grams per tonne (g/t), another pulp is taken and fire assayed with a gravimetric finish. Core samples showing visible gold or samples which have returned values greater than 10.0 g/t are re-analyzed by pulp metallic analysis. IAMGOLD inserts blanks and certified reference standard in the sample sequence for quality control.

CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION

All information included in this news release, including any information as to the Company's future financial or operating performance, and other statements that express management's expectations or estimates of future performance, other than statements of historical fact, constitute forward looking information or forward-looking statements and are based on expectations, estimates and projections as of the date of this news release. Forwardlooking statements contained in this news release include, but are not limited to, statements with respect to: the Company's guidance for production, exploration, rock hardness, grade, strip ratios, the future price of gold, the estimation of mineral reserves and mineral resources, the realization of mineral reserve and mineral resource estimates, the timing and amount of estimated future production, costs of production, permitting timelines, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses and title disputes or claims. Forward-looking statements are provided for the purpose of providing information about management's current expectations and plans relating to the future. Forward-looking statements are generally identifiable by, but are not limited to the, use of the words "may", "will", "should", "could", "intends", "potential", "continue", "expect" or "anticipate" or the negative of these words or other variations on these words or comparable terminology. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by management, are inherently subject to significant business, economic and competitive uncertainties and contingencies. The Company cautions the reader not to place any reliance whatsoever on forward-looking information or forward-looking statements. Forward- looking information and forward-looking statements involve risks, uncertainties and other factors that may cause the actual financial results, performance or achievements of IAMGOLD to be materially different from the Company's estimated future results. performance or achievements expressed or implied by those forward-looking statements, and the forward-looking statements are not guarantees of future performance. Risks and unknowns inherent in all projects include the inaccuracy of estimated reserves and resources, metallurgical recoveries, capital and operating costs of such projects, and the future prices for the relevant minerals. The capital expenditures and time required to develop new mines or other projects are considerable, and changes in costs or construction schedules can affect project economics. Actual costs and economic returns may differ materially from IAMGOLD's estimates or IAMGOLD could fail to obtain the governmental approvals necessary for the operation of a project; in either case, the project may not proceed, either on its original timing or at all.

The Company disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise except as required by applicable law.

About IAMGOLD

IAMGOLD (www.iamgold.com) is a mid-tier mining company with five operating gold mines (including current joint ventures) on three continents and one of the world's top three niobium mines. A solid base of strategic assets in Canada, South America and 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.

For further information please contact:

Bob Tait, VP Investor Relations, IAMGOLD Corporation Tel: (416) 360-4743 Mobile: (647) 403-5520

Laura Young, Director Investor Relations, IAMGOLD Corporation

Tel: (416) 933-4952 Mobile: (416) 670-3815

Penelope Talbot-Kelly, Analyst Investor Relations, IAMGOLD Corporation

Tel: (416) 933-4738 Mobile (647) 280-0519

Toll-free: 1-888-464-9999 info@iamgold.com

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.sec.gov.

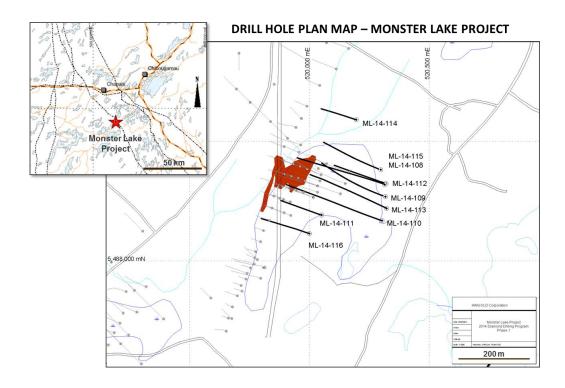
Si vous désirez obtenir la version française de ce communiqué, veuillez consulter le http://www.iamgold.com/French/Home/default.aspx.

Table 1

| Monster Lake Project Drilling Results - 2014 Winter Drilling program | | | | | | | | | | | | |
|--|-------------------------------|----------|-----------|-----|-----|-----|--------|--------|----------|------------------------------|-------|-----------------------|
| Hole No. | UTMNAD83Zone18 ⁽¹⁾ | | | AZ | DIP | ЕОН | from | То | Interval | True Width ⁽²⁾ | Au | NOTE |
| | Easting | Northing | Elevation | | | (m) | (m) | (m) | (m) | (m) | (g/t) | |
| ML-14-108 | 520296 | 5488383 | 370 | 290 | -55 | 480 | 56.10 | 58.00 | 1.90 | 1.65 | 1.81 | Upper 325-Megane Zone |
| | | | | | | | 445.25 | 446.50 | 1.25 | 1.08 | 6.44 | |
| | | | | | | | 457.00 | 467.47 | 10.47 | 9.07 | 11.55 | 325-Megane Zone |
| Including ⁽³⁾ | | | | | | | 458.00 | 460.00 | 2.00 | 1.73 | 48.90 | |
| Including ⁽³⁾ | | | | | | | 466.00 | 467.47 | 1.47 | 1.27 | 11.10 | |
| ML-14-109 | 520316 | 5488270 | 370 | 290 | -55 | 582 | 66.00 | 71.16 | 5.16 | 4.47 | 1.30 | Upper 325-Megane Zone |
| Including ⁽³⁾ | | | | | | | 69.00 | 71.16 | 2.16 | 1.87 | 1.64 | Upper 325-Megane Zone |
| | | | | | | | 559.77 | 560.41 | 0.64 | 0.55 | 0.95 | 325-Megane Zone |
| ML-14-110 | 520302 | 5488169 | 370 | 290 | -50 | 667 | 210.10 | 211.26 | 1.16 | 1.00 | 1.04 | |
| | | | | | | | 508.00 | 509.45 | 1.45 | 1.26 | 0.71 | 325-Megane Zone |
| | | | | | | | 636.86 | 640.63 | 3.77 | 3.26 | 13.65 | Lower 325-Megane Zone |
| Including ⁽³⁾ | | | | | | | 638.80 | 639.88 | 1.08 | 0.94 | 46.17 | |
| ML-14-111 | 520318 | 5488324 | 370 | 290 | -60 | 454 | 59.59 | 60.13 | 0.54 | 0.47 | 3.48 | Upper 325-Megane Zone |
| | | | | | | | 300.92 | 301.92 | 1.00 | 0.87 | 1.40 | 325-Megane Zone |
| | | | | | | | 420.18 | 421.16 | 0.98 | 0.85 | 1.85 | Lower 325-Megane Zone |
| ML-14-112 | 520315 | 5488321 | 370 | 291 | -53 | 652 | 480.90 | 489.27 | 8.37 | 7.25 | 1.32 | 325-Megane Zone |
| Including ⁽³⁾ | | | | | | | 485.18 | 487.27 | 2.09 | 1.81 | 2.97 | |
| | | | | | | | 596.51 | 597.65 | 1.14 | 1.00 | 1.48 | Lower 325-Megane Zone |

- Notes:

 1. Drill hole intercepts are calculated with a lower cut of 0.50 g/t Au and represents the best results associated to the intersected structure.
- True widths of intersections are approximately 85-90% of the core interval.
 Assays are reported uncut but high grade sub-intervals are highlighted.



MONSTER LAKE 2014 WINTER DRILLING PROGRAM - PRELIMINARY RESULTS

