

KIRKLAND LAKE GOLD ANNOUNCES FILING OF DETOUR LAKE MINE TECHNICAL REPORT

Toronto, Ontario – October 17, 2021 - Kirkland Lake Gold Ltd. ("Kirkland Lake Gold" or the "Company") (TSX:KL) (NYSE:KL) (ASX:KLA) today announced that it has filed on SEDAR a National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") technical report with respect to the new Mineral Resource estimates for the Detour Lake Mine ("Detour Lake"). The technical report, entitled, "Detour Lake Operation, Ontario, Canada, NI 43-101 Report" is effective as of July 26, 2021 (the "Technical Report") and is in support of the new Mineral Resource estimates for Detour Lake as part of its mid-year Mineral Resources update released on September 2, 2021.

Key highlights from the Technical Report include:

- Measured and Indicated⁽¹⁾⁽²⁾ ("M&I") Mineral Resources increase 10,061,000 ounces or 216% from December 31, 2020 estimates to 14,718,000 ounces at June 30, 2021 (572.0 million tonnes ("MT") at average grade of 0.80 grams per tonne ("g/t"))
- M&I Mineral Resource estimates include 12,214,000 ounces⁽³⁾ (386.5MT at average grade of 0.98 g/t) with additional 2,505,000 ounces (185.5MT at average grade of 0.42 g/t) of low-grade M&I Mineral Resources⁽⁴⁾
- Inferred Mineral Resources at June 30, 2021 of 1,115,000 ounces⁽¹⁾ (48.3MT at average grade of 0.81 g/t)
- Increase in Mineral Resources expected to drive growth in Mineral Reserves from December 31, 2020 estimate of 15,775,000 ounces (596.1MT at average grade of 0.82 g/t)⁽⁵⁾⁽⁶⁾; December 31, 2021 Mineral Reserve and Mineral Resource estimates to be released in first quarter of 2022.
 - (1) Mineral Resources are reported exclusive of Mineral Reserves.
 - (2) Mineral Resources include Mineral Resources considered amenable to open-pit mining methods and are bound within a pit shell.
 - (3) Measured and Indicated Mineral Resources at 0.50 g/t cut-off grade.
 - (4) M&I Mineral Resources include Mineral Resources at grades below 0.50 g/t with a cut-off grade of 0.35 g/t.
 - (5) December 31, 2020 Mineral Reserve estimate includes 13,821,000 ounces (447.4MT at average grade of 0.96 g/t) at a 0.50 g/t cut-off grade with an additional 1,954,000 ounces of low-grade Mineral Reserves (148.7MT at average grade of 0.41 g/t) at grades below 0.50 g/t with a cut-off grade of 0.35 g/t.
- (6) See technical report entitled "Detour Lake Operation NI 43-101 Technical Report" with an effective date of December 31, 2020 as filed on SEDAR on March 30, 2021 (the "2020 Technical Report").

Technical Report and Qualified Persons

Readers are encouraged to read the Technical Report in its entirety, including all qualifications, assumptions and exclusions that relate to the Mineral Resource. The Technical Report is intended to be read as a whole, and sections should not be read or relied upon out of context.

The Mineral Resource estimates for Detour Lake included in this press release were prepared under the supervision of Eric Kallio, P.Geo., Senior Vice President, Exploration and Andre Leite, P.Eng., AUSIMM CP (MIN), MEng., Vice President, Technical Service. Mr. Kallio and Mr. Leite are "qualified persons" as defined in NI 43-101 and have reviewed and approved disclosure of the scientific and technical information and data in this press release.

About Kirkland Lake Gold Ltd.

Kirkland Lake Gold Ltd. is a senior gold producer operating in Canada and Australia that is targeting 1,300,000 – 1,400,000 ounces of production in 2021. The production profile of the Company is anchored by three high-quality operations, including the Macassa Mine and Detour Lake Mine, both located in Northern Ontario, and the complemented by district scale exploration potential, supported by a strong financial position with extensive management expertise.



For further information on Kirkland Lake Gold and to receive news releases by email, visit the website www.kl.gold.

Risks and Uncertainties

The exploration, development and mining of mineral deposits involves significant risks, which even a combination of careful evaluation, experience and knowledge may not eliminate. Kirkland Lake Gold is subject to several financial and operational risks that could have a significant impact on its cash flows and profitability. The most significant risks and uncertainties faced by the Company include: the price of gold; the uncertainty of production estimates (which assume accuracy of projected grade, recovery rates, and tonnage estimates and may be impacted by unscheduled maintenance, labour and other operating, engineering or technical difficulties with respect to the development of its projects, many of which may not be within the control of the Company), including the ability to extract anticipated tonnes and successfully realizing estimated grades; the threat of outbreaks of viruses or other infectious disease, including COVID-19; changes to operating and capital cost assumptions; the inherent risk associated with project development and permitting processes; the uncertainty of the mineral resources and their development into mineral reserves; the replacement of depleted reserves; foreign exchange risks; changes in applicable laws and regulations (including tax legislation); reclamation obligations; regulatory; tax matters and foreign mining tax regimes, as well as health, safety, environmental and cybersecurity risks. For more extensive discussion on risks and uncertainties refer to the "Risks and Uncertainties" section in the December 31, 2020 Annual Information Form and the Company's MD&A for the period ended December 31, 2020 filed on SEDAR and on EDGAR.

Cautionary Note Regarding Forward-Looking Statements

Certain statements in this press release constitute 'forward looking statements', including statements regarding the plans, intentions, beliefs and current expectations of the Company with respect to the future business activities and operating performance of the Company. The words "may", "would", "could", "will", "intend", "plan", "anticipate", "believe", "estimate", "expect" and similar expressions, as they relate to the Company, are intended to identify such forward-looking statements. Investors are cautioned that forward-looking statements are based on the opinions, assumptions and estimates of management considered reasonable at the date the statements are made, and are inherently subject to a variety of risks and uncertainties and other known and unknown factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. These factors include, among others, the development of the Company's properties and the anticipated timing thereof, expected production from, and the further potential of the Company's properties, the potential to increase the levels of mineral resources and mineral reserves and potential conversion of mineral resources; the anticipated timing with respect to the updated 43-101 technical report for the Detour Lake Mine with respect to the updated mineral reserves estimate and the updated mineral resources estimate; and commencement of exploration programs on various targets within the Company's land holdings and the implication of such exploration programs (including but not limited to any potential decisions to proceed to commercial production), the anticipated overall impact of the Company's COVID19 response plans, including measures taken by the Company to reduce the spread of COVID19, including but not limited to the rapid testing implemented at the Company's sites, the ability to lower costs and gradually increase production, the ability of the Company to successfully achieve business objectives, the ability of the Company to achieve its longer-term outlook and the anticipated timing and results thereof, statements made with respect to our guidance for production, assumptions relating to revenues, operating cash flow and other metrics set out in the Company's disclosure materials, the optimization of the Company's mine plans, including the updated mine plan for the Detour Lake mine expected in 2022, the Company's continuous improvement initiatives and the potential impacts thereof, the performance of the Company's equity investments and the ability of the Company to realize on its strategic goals with respect to such investments, the effects of unexpected costs, liabilities or delays, the potential benefits and synergies and expectations of other economic, business and or competitive factors, including the ability of the Company to realize on certain planned synergies associated with the acquisition of Detour Gold Corporation, the Company's expectations in connection with the projects and exploration programs being met, the impact of general business and economic conditions, global liquidity and credit availability on the timing of cash flows and the values of assets and liabilities based on projected future conditions, fluctuating gold prices, currency exchange rates (such as the Canadian dollar versus the US dollar), mark-to-market

derivative variances, possible variations in ore grade or recovery rates, changes in accounting policies, changes in the Company's corporate mineral resources, changes in project parameters as plans continue to be refined, changes in project development, construction, production and commissioning time frames, the possibility of project cost overruns or unanticipated costs and expenses, higher prices for fuel, power, labour and other consumables contributing to higher costs and general risks of the mining industry, failure of plant, equipment or processes to operate as anticipated, unexpected changes in mine life, seasonality and unanticipated weather changes, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, risks related to information technology and cybersecurity, timing and costs associated with the design, procurement and construction of the Company's various capital projects, including but not limited to potential future impacts and effects of COVID19, including but not limited to potential future delays and unanticipated suspension or interruption of operations, the #4 Shaft project at the Macassa Mine, the ventilation, paste plant, transformer and water treatment facility at the Fosterville Mine, the ability to obtain all necessary permits associated with the Detour Lake Mine, the ability to obtain the necessary permits in connection with all of its various capital projects, including but not limited to the rehabilitation of the Macassa tailings facility and the development of a new tailings facility and the anticipated results associated therewith, the West Detour project, processing plant expansion at the Detour Lake Mine, the ability to obtain renewals of certain exploration licences in Australia, native and aboriginal heritage issues, including but not limited to ongoing negotiations and consultations with the Company's First Nations partners, risks relating to infrastructure, permitting and licenses, exploration and mining licences, government regulation of the mining industry, risks relating to foreign operations, uncertainty in the estimation and realization of mineral resources and mineral reserves, quality and marketability of mineral product, environmental regulation and reclamation obligations, including but not limited to risks associated with reclamation and closure obligations relating to the Northern Territory projects, risks relating to the Northern Territory wet season, risks relating to litigation and unanticipated costs to assume the defence of such litigation, risks relating to applicable tax and potential reassessments thereon, risks relating to changes to tax law and regulations and the Company's interpretation thereof, foreign mining tax regimes and the potential impact of any changes to such foreign tax regimes, competition, currency fluctuations, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims, and limitations on insurance, as well as those risk factors discussed or referred to in the AIF of the Company for the year ended December 31, 2020 filed with the securities regulatory authorities in certain provinces of Canada and available at www.sedar.com. Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results may vary materially from those described herein as intended, planned, anticipated, believed, estimated or expected. Although the Company has attempted to identify important risks, uncertainties and factors which could cause actual results to differ materially, there may be others that cause results not be as anticipated, estimated or intended. The Company does not intend, and does not assume any obligation, to update these forward-looking statements except as otherwise required by applicable law.

Mineral resources are not mineral reserves, and do not have demonstrated economic viability, but do have reasonable prospects for eventual economic extraction. Measured and indicated resources are sufficiently well defined to allow geological and grade continuity to be reasonably assumed and permit the application of technical and economic parameters in assessing the economic viability of the resource. Inferred resources are estimated on limited information not sufficient to verify geological and grade continuity or to allow technical and economic parameters to be applied. Inferred resources are too speculative geologically to have economic considerations applied to them to enable them to be categorized as mineral reserves. There is no certainty that Measured or Indicated mineral resources can be upgraded to mineral reserves through continued exploration and positive economic assessment.

Information Concerning Estimates Of Mineral Reserves And Measured, Indicated And Inferred Resources

This press release has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ in certain material respects from the disclosure requirements of United States securities laws. The terms "mineral reserve", "proven mineral reserve" and "probable mineral reserve" are Canadian mining terms as defined in accordance with Canadian National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") – CIM Definition Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council, as amended (the "CIM Standards"). These definitions differ



significantly from the definitions in the disclosure requirements promulgated by the Securities and Exchange Commission (the "SEC") applicable to domestic reporting companies. Investors are cautioned that information contained in this Annual Information Form may not be comparable to similar information made public by United States companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations of the SEC thereunder.

FOR FURTHER INFORMATION, PLEASE CONTACT:

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