



**KIRKLAND LAKE GOLD**

**KIRKLAND LAKE GOLD LTD.**

**ANNUAL INFORMATION FORM  
FOR THE YEAR ENDED DECEMBER 31, 2020**

**March 30, 2021**

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## CAUTIONARY STATEMENT

### Forward-Looking Information

This annual information form (“**Annual Information Form**”) contains “forward-looking statements” within the meaning of applicable United States securities laws and “forward-looking information” within the meaning of applicable Canadian securities legislation (together with the forward-looking statements, “**forward-looking information**”). Forward-looking information includes, but is not limited to, information with respect to: the Company’s (as defined below) expected production from, and further potential of, the Company’s properties; the future price of minerals, particularly gold; the estimation of mineral reserves and mineral resources; conclusions of economic evaluations; the realization of mineral reserve estimates; the timing and amount of estimated future production; costs of production; capital expenditures; success of ongoing and future exploration activities; mining or processing issues; the timing of sustaining capital projects; assessment of future reclamation obligations; government regulation of mining operations; and environmental risks. Estimates regarding the anticipated timing, amount and cost of exploration and development activities are based on assumptions underlying mineral reserve and mineral resource estimates and the realization of such estimates. Capital and operating cost estimates are based on extensive research of the Company, purchase orders placed by the Company to date, recent estimates of construction and mining costs and other factors. Forward-looking information is characterized by words such as “plan”, “expect”, “budget”, “target”, “schedule”, “estimate”, “forecast”, “project”, “intend”, “believe”, “anticipate” and other similar words or statements that certain events or conditions “may”, “could”, “would”, “might”, or “will” occur or be achieved. Forward-looking information is 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 the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include: the price of gold; impacts of infectious diseases, including but not limited to COVID-19; exploration, development and operating risks; health, safety and environmental risks and hazards; risks relating to foreign operations and political risks; uncertainty in the estimation of mineral reserves and mineral resources; replacement of depleted mineral reserves; uncertainty relating to mineral resources; risks related to production estimates and cost estimates; obligations as a public company; risks relating to government regulation; risks related to acquisitions, integration and dispositions; the impact of Australian laws regarding foreign investment; access to additional capital; volatility in the market price of the Company’s securities; the continuation of the Company’s dividend policy; risks related to the Company’s investments; liquidity risk; risks related to community relations; risks relating to equity investments; risks relating to first nations and aboriginal heritage; risks relating to non-governmental organizations; the availability of infrastructure, energy and other commodities; nature and climactic conditions; 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 the #4 Shaft project at the Macassa Mine (as defined below); permitting; risks related to insurance and uninsured risks; the prevalence of competition within the mining industry; currency exchange rates (such as the Canadian dollar and the Australian dollar versus the United States dollar); availability of sufficient power and water for operations; risks associated with tax matters and foreign mining tax regimes; risks relating to activist shareholders; risks relating to potential litigation; risks associated with the mineral tenure regimes in jurisdictions where the Company operates; risks associated with title to the Company’s mining claims and leases; risks relating to the dependence of the Company on outside parties and key management personnel; risks relating to the Company’s counterparties; risks associated with recovery and dilution; labour and employment matters; risks in the event of a potential conflict of interest; risks relating to the Company’s disclosure and internal controls; risks relating to global financial conditions; as well as those risk factors discussed or referred to herein and in the Company’s annual management’s discussion and analysis (“**MD&A**”) as at and for the years ended December 31, 2020 and 2019 available under the Company’s SEDAR profile at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov).

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no

assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. The Company undertakes no obligation to update forward-looking information if circumstances or management's estimates, assumptions or opinions should change, except as required by applicable law. The reader is cautioned not to place undue reliance on forward-looking information. The forward-looking information contained herein is presented for the purpose of assisting investors in understanding the Company's expected financial and operational performance and results as at and for the periods ended on the dates presented in the Company's plans and objectives and may not be appropriate for other purposes.

#### **Note to United States Investors Concerning Estimates of Mineral Reserves and Mineral Resources**

This Annual Information Form 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.

## **NON-IFRS MEASURES**

This Annual Information Form makes reference to certain non-IFRS measures including all-in sustaining costs (“**AISC**”) and AISC per ounce sold and operating cash cost per ounce sold. These measures are not recognized measures under IFRS, do not have a standardized meaning prescribed by IFRS and therefore may not be comparable to similar measures presented by other issuers; however, the Company believes that these measures are useful to assist readers in evaluating the total costs of producing gold from current operations.

AISC and AISC per ounce are Non-IFRS measures. These measures are intended to assist readers in evaluating the total costs of producing gold from current operations. While there is no standardized meaning across the industry for this measure, the Company’s definition conforms to the definition of AISC as set out by the World Gold Council in its guidance note dated June 27, 2013.

The Company defines AISC as the sum of operating costs (as defined and calculated above), royalty expenses, sustaining capital, corporate expenses and reclamation cost accretion related to current operations. Corporate expenses include general and administrative expenses, net of transaction related costs, severance expenses for management changes and interest income. AISC excludes growth capital, reclamation cost accretion not related to current operations, interest expense, debt repayment and taxes.

For more information regarding the non-IFRS measures used by the Company, see the information under the headings “Non-IFRS Financial Measures”, “Free Cash Flow and Adjusted Free Cash Flow”, “Operating Cash Costs and Operating Cash Costs per Ounce Sold”, “Sustaining and Growth Capital”, “AISC and AISC per Ounce Sold”, “Total Cash Costs and AISC Reconciliation”, “Average Realized Price per Ounce Sold”, “Adjusted Net Earnings and Adjusted Net Earnings per Share”, “Earnings before Interest, Taxes, Depreciation, and Amortization” and “Working Capital” in the Company’s MD&A for the financial year ended December 31, 2020, which sections are incorporated by reference herein. The financial statements and MD&A of the Company are available on SEDAR at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov).

## **GLOSSARY OF TERMS AND UNITS**

The following is a glossary of some of the technical terms used in this Annual Information Form.

<b>Term</b>	<b>Definition</b>
3D	Three dimensional.
AAS	Atomic Absorption Spectroscopy.
acQuire	acQuire – Geoscientific Information Management System database software.
Ag	Silver.
As	Arsenic.
Au	Gold.
batholith	A large mass of igneous rock extending to great depth with its upper portion dome-like in shape. It has crystallized below surface, but may be exposed as a result of erosion of the overlying rock. Smaller masses of igneous rocks are known as bosses or plugs.
Bi	Bismuth.
BIOX®	Bacterial oxidation used in agitated tanks for the pre-treatment of certain refractory ores and concentrates ahead of conventional cyanide leach for gold recovery.
break	A mineralized fault.
bullion	A refined metal, such as gold or silver.
Ca	Calcium.
cfm	Cubic feet per minute.

Term	Definition
CIL	Carbon in leach.
cm	Centimetre.
crosscut	A horizontal opening driven at right angles to the strike of a vein or rock formation.
Cu	Copper.
cut (and uncut)	Assays are 'cut' or reduced to a lower, more consistent value to avoid such higher grade assays skewing the average and producing inconsistent results. Assays that are 'uncut' include such higher grade assays.
cyanidation	A milling process, using hydrogen cyanide, to extract gold from the host rock.
doré	The final saleable product of a gold mine, usually a bar consisting of gold and silver, prior to refining into bullion.
drift	A horizontal underground opening that follows along the length of a vein or rock formation as opposed to a crosscut which crosses the rock formation.
EL	Exploration Licence.
fault	A break in the Earth's crust caused by tectonic forces which have moved the rock on one side with respect to the other. Faults may extend many kilometres, or be only a few centimetres in length. Similarly, the movement or displacement along the fault may vary widely.
FAusIMM	Fellow of the Australasian Institute of Mining and Metallurgy
Fe	Iron.
footwall	The wall or rock on the underside of a vein or ore structure.
fracture	A break in the rock, the opening of which affords the opportunity for entry of mineral-bearing solutions. A 'cross fracture' is a minor break extending at more-or-less right angles to the direction of the principal fractures.
free-milling gold	Gold is 'free-milling' if it can be extracted from ore such that cyanidation can extract approximately 95% of the gold when the ore is ground to size 80% passing 45 microns, without prohibitively high reagent consumption. The highest level of free-milling ore is that from which the gold can be separated by a gravity process.
ft	Feet.
g	Grams.
gangue	Worthless minerals in an ore deposit.
geotechnical	Using geology and geological engineering.
g/t	Gold concentration, gram per tonne of rock.
ha	Hectare, being a square of 100 metres on each side (10,000m <sup>2</sup> )
hangingwall	The wall or rock on the upper side of a vein or ore deposit.
HCl	.Hydrochloric Acid
HNO3	Nitric Acid.
HQ	63.5 mm diameter diamond drill core.
ICP-AES	Induced polarization – geophysical imaging technique.
igneous	A type of rock which has been formed from magma, a molten substance from the earth's core.
in	Inch.
ISO	International Organization for Standardization.
K	Potassium.
km	Kilometre.

<b>Term</b>	<b>Definition</b>
koz	Kilo ounce.
kt	Kilo tonne.
kV	Kilovolt.
kW	Kilowatt.
lb	Pound.
m	Metre.
μ	Micro.
Ma	Million years.
MAIG	Member of the Australasian Institute of Geoscientists.
mill	1) A plant in which ore is treated for the recovery of valuable metals, or the concentration of valuable minerals into a smaller volume for shipment to a smelter or refinery. 2) A piece of milling equipment consisting of a revolving drum, for the fine-grinding of ores as a preparation for treatment.
MIN	Mining Licence.
mineralization	The concentration of metals and their chemical compounds within a body of rock.
ML	Megalitre.
mm	Millimetre.
Moz	Million ounces.
mRL	Metres Reduced Level (Elevation).
Mt	Million tonnes.
Mt/a	Million tonnes per annum.
muck	Ore or rock that has been broken by blasting.
MVA	Megavolt-ampere.
MW	Megawatt.
net smelter royalty or NSR	A type of royalty based on a percentage of the proceeds, net of smelting, refining and transportation costs and penalties, from the sale of metals extracted from concentrate and doré by the smelter or refinery.
NPI	Net profit interest.
NQ	47.6 mm diameter diamond drill core.
NQ2	50.6 mm diameter diamond drill core.
opt	Gold concentration, ounce per imperial ton of rock.
ore	A mixture of minerals and gangue from which at least one metal can be extracted at a profit.
oz	Troy ounce (31.1034768 g).
paste	Paste fill is a cemented fill material of which tailings is a constituent.
plunge	The vertical angle an ore body makes between the horizontal plane and the direction along which it extends, longitudinally to depth.
ppb	Parts per billion.
PQ	85.0 mm diameter diamond drill core.
raise	A vertical or inclined underground working that has been excavated from the bottom upward.

Term	Definition
refractory	Ore that has high melting point and is resistant to milling treatment. Such ore is commonly associated with sulphides.
reserve or mineral reserve	<p>CIM defines a 'mineral reserve' as the economically mineable part of a measured or indicated mineral resource demonstrated by at least a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established, and where an effective method of mineral processing has been determined. This study must include a financial analysis based on reasonable assumptions of technical, engineering, operating, and economic factors and evaluation of other relevant factors which are sufficient for a person qualified under such instrument, acting reasonably, to determine if all or part of the mineral resource may be classified as a mineral reserve. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes diluting materials and allowances for losses that may occur when the material is mined.</p> <p>Mineral reserves are sub-divided in order of increasing confidence into probable mineral reserves and proven mineral reserves. A probable mineral reserve has a lower level of confidence than a proven mineral reserve.</p> <p>(1) <i>Probable Mineral Reserve.</i> A 'probable mineral reserve' is the economically mineable part of an Indicated, and in some circumstances a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.</p> <p>(2) <i>Proven Mineral Reserve.</i> A 'proven mineral reserve' is the economically mineable part of a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.</p>
resource or mineral resource	<p>CIM defines a 'mineral resource' as a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge.</p> <p>Mineral resources are sub-divided, in order of increasing geological confidence, into inferred, indicated and measured categories. An inferred mineral resource has a lower level of confidence than that applied to an indicated mineral resource. An indicated mineral resource has a higher level of confidence than an inferred mineral resource but has a lower level of confidence than a measured mineral resource.</p> <p>(1) <i>Inferred Mineral Resource.</i> An 'inferred mineral resource' is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.</p> <p>(2) <i>Indicated Mineral Resource.</i> An 'indicated mineral resource' is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.</p> <p>(3) <i>Measured Mineral Resource.</i> A 'measured mineral resource' is that part of a mineral resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.</p> <p>As used herein, "<b>resources</b>" or "<b>mineral resources</b>" do not include reserves.</p>

<b>Term</b>	<b>Definition</b>
royalty	An amount of money paid at regular intervals, or based on production, by the lessee or operator of an exploration or mining property to the current or former owner of the mineral interests. Generally based on a certain amount per tonne or a percentage of the total production or profits.
RQD	Rock Quality Designation.
S	Sulfur.
SAG	Semi-Autogenous Grinding.
Sb	Antimony.
shaft	A vertical or inclined excavation in rock from surface for the purpose of providing access to an ore body. Usually equipped with a hoist at the top, which lowers and raises a conveyance for handling workers and materials.
shear	The deformation of rocks by lateral movement along innumerable parallel planes, generally resulting from pressure and producing such metamorphic structures as cleavage and schistosity.
shoot	A concentration of mineral values. That part of a vein or zone carrying values of ore grade.
splay	An offshoot of a fault. A split from a major fault.
SQL	Structured Query Language.
stope	An excavation in a mine from which ore is being or has been extracted.
strike	The direction, or bearing, from true north of a vein or rock formation measured on a horizontal surface.
t	(metric) tonne (2204.6 lb or 1.1023 short tons).
tailings	Material rejected from a mill after most of the recoverable valuable minerals have been extracted.
TMA	Tailings Management Facility
tpd	Production rate measured in tonnes per day.
tph	Production rate measured in tonnes per hour.
tpoh	Production rate measured in tonnes per operating hour.
TSF	Tailings Storage Facility.
UG	Underground.
unknown ore	Ore encountered during mining that has not been defined through drilling and which is mined before being included in reserves and resources. Due to the erratic nature of the mineralization at most narrow vein gold mines, and the difficulties of defining ore zones in this environment, a significant fraction of ore mined in any period can be unknown ore. Unknown ore often must be mined when encountered to maintain the most efficient and stable mining sequence, and is normally, but not necessarily, lower grade than ore that which has been included in the reserves and resources.
vein	An occurrence of ore with an irregular development in length, width and depth usually from an intrusion of igneous rock.
WRSF	Waste rock storage facility.
XRF	X-ray fluorescence analytical technique.

### **CURRENCY PRESENTATION**

This Annual Information Form contains references to Australian dollars, referred to herein as “A\$”, United States dollars, referred to herein as “US\$”, and Canadian dollars, referred to herein as “C\$”.

The closing, high and low exchange rates for one United States dollar in terms of Australian dollars for each of the three years ended December 31, 2020, December 31, 2019, and December 31, 2018 based on the indicative rate of exchange as reported by WM/Refinitiv (formerly WM/Reuters), were as follows:

	Year-Ended December 31		
	2020 (A\$)	2019 (A\$)	2018 (A\$)
Closing	1.2997	1.4243	1.4186
High	1.7419	1.4921	1.4221
Low	1.2997	1.3751	1.2338
Average <sup>(1)</sup>	1.4523	1.4384	1.3385

Note:

<sup>(1)</sup> Calculated as an average of the applicable daily rates for each period.

On March 29, 2021, the indicative rate of exchange as reported by WM/Refinitiv was US\$1.00 = A\$1.3106 or A\$1.00 = US\$0.7630.

The closing, high, low and average exchange rates for one United States dollar in terms of Canadian dollars for each of the three years ended December 31, 2020, December 31, 2019, and December 31, 2018, based on the indicative rate of exchange as reported by Refinitiv (formerly Thomson Reuters), were as follows:

	Year-Ended December 31		
	2020 (C\$)	2019 (C\$)	2018 (C\$)
Closing	1.2730	1.2986	1.3637
High	1.4510	1.3637	1.3637
Low	1.2697	1.2986	1.2281
Average <sup>(1)</sup>	1.3405	1.3266	1.2962

Note:

<sup>(1)</sup> Calculated as an average of the applicable daily rates for each period.

On March 29, 2021, the indicative rates of exchange as reported by Refinitiv was US\$1.00 = C\$1.2588 or C\$1.00 = US\$0.7944.

The following factors for converting Imperial measurements into metric equivalents are provided:

To Convert from Imperial	To metric	Multiply by
tons (2,000 pounds)	Tonnes (1,000 kilograms)	0.907
ounces (troy)/ton	grams/tonne	34.286

## CORPORATE STRUCTURE

Newmarket Gold Inc. (one of the predecessors to the Company) (“**Old Newmarket**”), was originally incorporated as 565300 B.C. Ltd under the *Company Act* (British Columbia) on May 27, 1998 and changed its name to Raystar Enterprises Ltd. on August 13, 1998. Old Newmarket transitioned to the *Business Corporations Act* (British Columbia) (the “**BCBCA**”) on May 25, 2004. On October 17, 2007, Old Newmarket changed its name to Raystar Capital Ltd., and on October 4, 2013 announced that it had changed its name to “Newmarket Gold Inc.”. On July 7, 2015, Old Newmarket was continued under the *Business Corporations Act* (Ontario) (“**OBCA**”).

On July 10, 2015, Old Newmarket amalgamated with Crocodile Gold Corp. (“**Crocodile Gold**”) pursuant to a plan of arrangement under the OBCA to create an amalgamated entity which was also named Newmarket Gold Inc. (the “**Company**”). The subsidiaries of Crocodile Gold became the subsidiaries of the Company.

On November 30, 2016, the Company combined with Kirkland Lake Gold Inc. (“**Old Kirkland Lake Gold**”) pursuant to a plan of arrangement under the *Canada Business Corporations Act* (the “**CBCA**”), as a result of which, Old Kirkland Lake Gold became a wholly-owned subsidiary of the Company (the “**Old Kirkland Arrangement**”). In connection with the Old Kirkland Arrangement with Old Kirkland Lake Gold, the Company changed its name from Newmarket Gold Inc. to Kirkland Lake Gold Ltd.

Old Kirkland Lake Gold was originally incorporated under the *Company Act* (British Columbia) (now the BCBCA) on June 29, 1983 and continued under the CBCA on July 27, 1988, at which time the authorized capital was changed to an unlimited number of common shares. Old Kirkland Lake Gold changed its name from “Foxpoint Resources Ltd.” to “Kirkland Lake Gold Inc.” on October 25, 2002 to reflect the nature and location of the Company’s business. On January 26, 2016, Old Kirkland Lake Gold completed the acquisition of St Andrew Goldfields Ltd. (“**St Andrew Goldfields**”) pursuant to a plan of arrangement under the OBCA (the “**St Andrew Arrangement**”). As a result, St Andrew Goldfields became a wholly-owned subsidiary of Old Kirkland Lake Gold.

On December 31, 2017, the Company completed a corporate reorganization of its Australian subsidiaries pursuant to which Newmarket Gold NT Holdings Pty Ltd., an indirectly held wholly-owned subsidiary of the Company, acquired all of the common shares of Newmarket Gold Victorian Holdings Pty Ltd. (“**NGVH**”).

On December 11, 2017, NGVH entered into a share sale agreement with an affiliate of Arete Capital Partners Ltd. (“**Arete**”) pursuant to which, on December 22, 2017, Arete acquired all of the issued and outstanding common shares of Leviathan Resources Pty Ltd. and Stawell Gold Mines Pty Ltd., which held the Stawell gold mine located in the State of Victoria, Australia (the “**Stawell Gold Mine**”).

On January 31, 2020, the Company acquired all of the issued and outstanding common shares (the “**Detour Shares**”) of Detour Gold Corporation (“**Detour**”) pursuant to a plan of arrangement under the CBCA (the “**Detour Arrangement**”). Pursuant to the Detour Arrangement, Detour shareholders received 0.4343 of a common share of the Company (each whole share, a “**Common Share**”) in exchange for each Detour Share held immediately prior to closing of the Detour Arrangement. In aggregate, the Company issued 77,217,129 Common Shares to former Detour shareholders as consideration for their Detour Shares. In addition, under the Detour Arrangement, all outstanding stock options of Detour held immediately prior to closing of the Detour Arrangement were exchanged for replacement options to acquire Common Shares (“**Replacement Options**”) in accordance with the Detour Arrangement. With the completion of the Detour Arrangement, effective January 31, 2020, Detour became a wholly-owned subsidiary of Kirkland Lake Gold, and the Company is now the owner and operator of the Detour Lake mine, a large-scale, open-pit gold mine in Northern Ontario.

On May 11, 2020, the Company changed the names of its wholly-owned subsidiaries, Newmarket Gold Victorian Holdings Pty Ltd. and Newmarket Gold NT Holdings Pty Ltd. to Kirkland Lake Gold Victorian Holdings Pty Ltd. and Kirkland Lake Gold Australian Pty Ltd., respectively.

On January 2, 2021, the Company completed a corporate reorganization of its wholly-owned subsidiaries, pursuant to which Detour amalgamated with Old Kirkland Lake Gold to create an amalgamated entity which is also named Kirkland Lake Gold Inc.

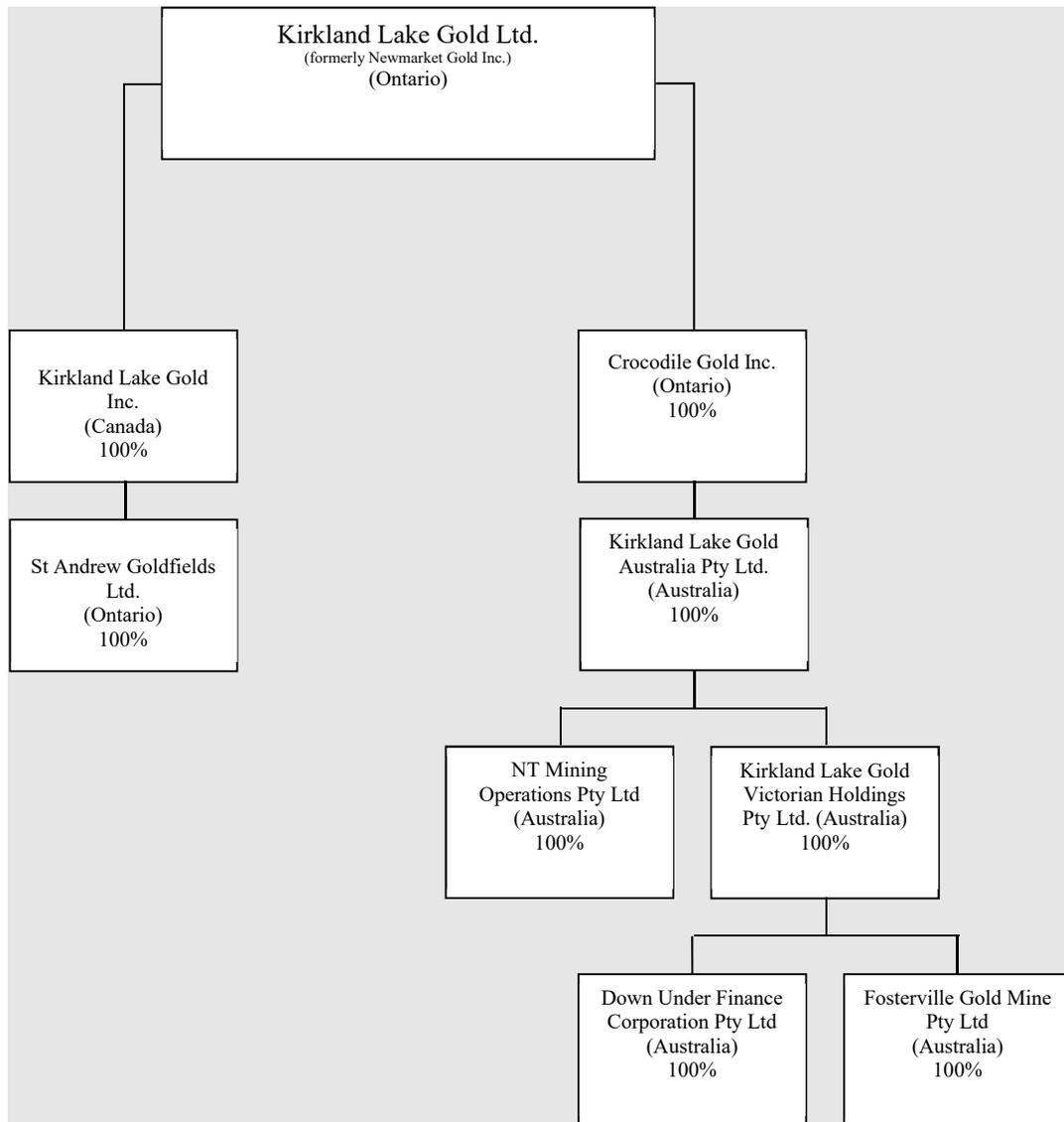
The Common Shares trade on the Toronto Stock Exchange (the “**TSX**”) and the New York Stock Exchange (the “**NYSE**”) under the symbol “KL” and on the Australian Securities Exchange (the “**ASX**”) under the symbol “KLA”. The Detour Shares, which previously traded on the TSX under the symbol “DGC”, were delisted from the TSX on February 3, 2020. On February 13, 2020, Detour ceased to be a reporting issuer.

The Company's registered and head office is located at 2800 – 200 Bay Street, Toronto, Ontario Canada M5J 2J1.

The corporate chart that follows on the next page sets forth the Company's subsidiaries (collectively, the "**Subsidiaries**"), together with the governing law of each of the Subsidiaries and the percentage of voting securities beneficially owned, controlled or directed, directly or indirectly, by the Company.

As used in this Annual Information Form, unless the context otherwise requires, reference to "**Kirkland Lake Gold**" or the "**Company**" means Kirkland Lake Gold Ltd. and the Subsidiaries. Reference to "**Old Kirkland Lake Gold**" means Kirkland Lake Gold Inc. and its subsidiaries, prior to the completion of the Old Kirkland Arrangement and reference to "**Newmarket Gold**" means the Company (when it was previously named Newmarket Gold Inc.) and its subsidiaries, prior to the completion of the Old Kirkland Arrangement. Reference to "**Detour**" means Detour prior to completion of the Detour Arrangement.

**Kirkland Lake Gold Ltd. – Corporate Structure Chart**



**GENERAL DEVELOPMENT OF THE BUSINESS**

**Overview of the Business**

Kirkland Lake Gold is a senior gold mining, development and exploration company with a diversified portfolio of assets located in the stable mining jurisdictions of Canada and Australia with a significant pipeline of high-quality exploration projects. The production profile of the Company as at December 31, 2020 was anchored by three high-quality, cornerstone assets. These assets include two high-grade, low cost underground operations, the Macassa mine complex located in northeastern Ontario (the “**Macassa Mine**”) and the Fosterville gold mine located in the State of Victoria, Australia (the “**Fosterville Mine**”), as well as the Detour Lake mine (“**Detour Lake**”), a large-scale open-pit mining operation located in northern Ontario. Detour Lake was obtained by the Company on January 31, 2020 through the acquisition of Detour pursuant to the Detour Arrangement. In addition, the Company owns the Holt mine (the “**Holt Complex**”) and the Taylor mine (the “**Taylor Mine**”) which are situated along the Porcupine-Destor Fault Zone, in northeastern Ontario, and the Cosmo gold mine located in the Northern Territory, Australia (the “**Cosmo Gold Mine**”). The Company has a strong foundation of quality, low-cost gold production, with its mines

producing a total of 1,369,652 ounces in 2020, at an average operating cash costs per ounce sold of US\$404 and all-in sustaining costs (“**AISC**”) per ounce sold of US\$800. As a result, the Company is targeting production for 2021 of 1,300,000-1,400,000 ounces. Kirkland Lake Gold’s solid base of quality assets is complemented by district scale exploration potential, supported by a strong financial position with extensive management expertise.

Kirkland Lake Gold is dedicated to continued growth in high-margin, low-cost production and mine life through the ongoing conversion of mineral resources to mineral reserves and the identification of new mineral resources through a strong commitment to exploration, while at the same time generating high levels of profitability and free cash flow. The Company also strives to enhance shareholder value through the direct return of capital to its shareholders, through its quarterly dividend, as well as through common share repurchases, when appropriate. Kirkland Lake Gold pursues its business plans through a disciplined approach focused on profitable operations, while also maintaining the high standards that the Company’s core values represent.

For further information about Kirkland Lake Gold, refer to its filings with the Canadian Securities Authorities which may be obtained through SEDAR at [www.sedar.com](http://www.sedar.com), its filings with the SEC which are available on EDGAR at [www.sec.gov](http://www.sec.gov) and on the Company’s website at [www.kl.gold](http://www.kl.gold).

### **Recent Developments**

On March 18, 2021, the Company announced a quarterly dividend of US\$0.1875 per Common Share to be paid on April 14, 2021 to shareholders of record as of March 31, 2021.

On March 1, 2021, the Company announced that Ms. Natasha Vaz had been promoted to Chief Operating Officer from her previous role of Senior Vice President, Technical Services, Technology and Innovation and that Ms. Jennifer Wagner had been promoted to Executive Vice President, Corporate Affairs and Sustainability from her previous role of Senior Vice President, Corporate Affairs, Sustainability and Legal Counsel. In addition, the Company announced that Mr. Jason Neal joined the Company as Executive Vice President.

### **Three Year History**

#### ***Financial Year Ended December 31, 2020***

On December 16, 2020, the Company announced a quarterly dividend of US\$0.1875 per Common Share to be paid on January 14, 2021 to shareholders of record as of December 31, 2020.

On December 3, 2020, the Company announced that it had completed a sale transaction with Stifel GMP and Clarus Securities Inc., pursuant to which the Company sold 18,450,000 units (the “**Units**”) at a price of C\$2.45 per Unit for gross proceeds of C\$45,202,500. Each Unit consisted of one common share (a “**Novo Share**”) of Novo Resources Corp. (“**Novo**”) owned by the Company and one-half of one common share purchase warrant of the Company (each whole warrant, a “**Warrant**”). Each Warrant entitles the holder thereof to acquire one additional Novo Share owned by the Company at an exercise price of C\$2.80 for a term of 12 months from the date of issue. In the event all Warrants are exercised, an additional C\$25,830,000 will be paid to the Company, for total gross proceeds of C\$71,032,500.

On September 18, 2020, the Company announced a quarterly dividend of US\$0.125 per Common Share to be paid on October 13, 2020 to shareholders of record as of September 30, 2020.

On August 17, 2020, the Company announced that it and St. Andrews Goldfields had entered into a strategic alliance agreement (“**Alliance Agreement**”) with Newmont Canada FN Holdings ULC (“**Newmont**”) with respect to exploration and development opportunities around the Holt Complex and Newmont’s properties in Timmins, Ontario. Under the terms of the Alliance Agreement, Newmont paid the Company US\$75 million to acquire an option (the “**Option**”) on certain mining and mineral rights related to

the Holt mine property. The Alliance Agreement also includes a commitment by the two companies to work together to identify additional regional exploration opportunities around their respective land positions in the region where they may be able to cooperate in the future to advance projects and create value for both companies. Under terms of the Alliance Agreement, the Option may be terminated by the Company upon the assumption of certain liabilities related to the Holt mine property. Pursuant to the Alliance Agreement, the Company will act as manager of strategic alliance activities. Ownership of all infrastructure on the Holt mine property, including the Holt mill, was retained by the Company, and the Option did not involve the other Holt Complex assets, including the Holloway and Taylor mines.

On August 13, 2020, the Company announced that on August 10, 2020, it had disposed of 32,627,632 common shares ("**Osisko Shares**") of Osisko Mining Inc. at a price of C\$4.45 per share for total consideration C\$145,192,962. In addition, between August 7, 2020 and August 12, 2020, the Company disposed of an aggregate of 748,700 Novo Shares for total consideration of C\$2,583,810. The Company also announced that it had purchased an additional 863,500 Common Shares for cancellation under its 2020 NCIB (as defined below).

On July 16, 2020, the Company announced that the suspension of operations at the Company's Holt Complex, in effect since April 2, 2020, would be extended until further notice.

On June 22, 2020, the Company announced the appointment of Mr. Greg Gibson as Special Advisor to the CEO, Business Process Improvement, the appointment of Mr. Duncan King as Vice President, Canadian Operations, the appointment of Mr. John Landmark and Mr. Hagan as Co-Lead of Australian Operations (interim), and the appointment of Mr. David Londono as Vice President, Special Projects. In addition, the Company announced the promotion of the following officers: Ms. Natasha Vaz to Senior Vice President, Technical Services and Innovation, Ms. Jennifer Wagner to Senior Vice President, Corporate Affairs, Legal Counsel and Corporate Secretary, Mr. Mark Utting to Senior Vice President, Investor Relations, Mr. Mohammed Ali to Vice President, Environment, and Mr. Evan Pelletier to Vice President, Mining (Kirkland Lake).

On June 17, 2020, the Company announced a quarterly dividend of US\$0.125 per Common Share to be paid on July 13, 2020 to shareholders of record as of June 30, 2020.

On June 4, 2020, the Company announced that it had received acceptance from the TSX to renew its normal course issuer bid ("**2020 NCIB**"). Under the 2020 NCIB, the Company may purchase for cancellation up to 27,711,401 Common Shares (representing 10% of the issued and outstanding Common Shares in the public float as of June 2, 2020) over a 12-month period. Under the renewed 2020 NCIB, the maximum number of securities that the Company may purchase on a daily basis, other than block purchase exemptions, is 425,225 Common Shares. During the financial year ended December 31, 2020, the Company purchased an aggregate of 10,776,500 Common Shares for cancellation under the 2020 NCIB.

On April 2, 2020, the Company announced a series of business reductions in response to the COVID-19 pandemic, including the temporary suspension of operations at the Holt Complex and reduced operations at the Macassa Mine and the corresponding withdrawal of its 2020 production and cost guidance.

On March 22, 2020, the Company announced a variety of initiatives in light of the evolving COVID-19 pandemic, including the Company's global COVID-19 response plan; a temporary reduction in operations at Detour Lake until April 30, 2020; the suspension of non-essential work at all operations, including the suspension of all exploration activities across the Company; and a termination of the Company's automatic share purchase plan ("**ASPP**") effective March 23, 2020.

On March 18, 2020, the Company announced a quarterly dividend of US\$0.125 per Common Share to be paid on April 13, 2020 to shareholders of record as of March 31, 2020.

In March 2020, the Company announced locally that it would be suspending all test mining at the Cosmo Mine and test processing at the Union Reefs Mill effective March 31, 2020. Advanced exploration activities

had commenced in October 2019 and as a result of such activities it was determined that the Company would not proceed to resume commercial operations at the Northern Territory project.

On February 24, 2020, the Company announced the appointment of Ingrid Hibbard and Peter Grosskopf to the board of directors of the Company (the “**Board**”).

On February 20, 2020, the Company provided details with respect to its planned value enhancement program which involved the purchase of 20 million Common Shares over the next 12-24 months for cancellation pursuant to its 2019 NCIB (as defined below) and renewed normal course issuer bids in the future. The Company also announced an increase to its quarterly dividend from US\$0.06 per quarter to US\$0.125 per quarter, commencing for Q1 2020. The Company declared that the Q1 2020 dividend would be paid on April 13, 2020 to shareholders of record as of March 31, 2020. In addition, the Company announced an amendment to its 2019 NCIB pursuant to which it implemented an ASPP to acquire up to 7,000,000 Common Shares until the expiry of the 2019 NCIB.

On January 31, 2020, the Company announced it had completed the Detour Arrangement pursuant to which, among other things, the Company acquired all of the issued and outstanding Detour Shares. Upon closing of the Detour Arrangement, existing Kirkland Lake Gold shareholders and former Detour shareholders held 73% and 27% of the issued and outstanding Common Shares, respectively. As a result of the Detour Arrangement, Detour became a wholly-owned subsidiary of the Company and the Detour Shares were de-listed from the TSX on February 3, 2020. The Company also announced that, effective as of January 31, 2020, Pamela Klessig and Raymond Threlkeld had retired as members of the Board.

#### ***Financial Year Ended December 31, 2019***

On December 17, 2019, the Company announced a quarterly dividend of US\$0.06 per Common Share to be paid on January 13, 2020 to shareholders of record as of December 31, 2019.

On November 25, 2019 the Company announced it had entered into an arrangement agreement with Detour, pursuant to which, among other things, it would acquire all of the issued and outstanding Detour Shares pursuant to a court-approved plan of arrangement under the CBCA. Under the terms of the Detour Arrangement, all of the Detour Shares would be acquired by the Company at an exchange ratio of 0.4343 of a Common Share for each Detour Share outstanding at the effective time of the Detour Arrangement.

On November 6, 2019, the Company announced an increase to its quarterly dividend from US\$0.04 per Common Share to US\$0.06 per Common Share effective Q4 2019.

On September 26, 2019, the Company announced the appointment of Ms. Elizabeth Lewis-Gray to the Board.

On September 11, 2019, the Company announced a quarterly dividend of US\$0.04 per Common Share to be paid on October 11, 2019 to shareholders of record as of September 30, 2019. In addition, the Company announced that it was being added to the S&P/TSX 60 Index effective prior to the open of trading on September 23, 2019.

On August 22, 2019, the Company announced it had acquired 2,000,000 units of Bonterra Resources Inc. (“**Bonterra**”) by way of private placement and private share purchase agreement. Each unit was comprised of one common share of Bonterra (a “**Bonterra Share**”) and one-half of one common share purchase warrant, with each full warrant entitling the Company to acquire one Bonterra Share at a price of C\$3.10 until August 20, 2021. Upon completion of the transaction, the Company held approximately 11.32% of the issued and outstanding Bonterra Shares on a non-diluted basis and approximately 12.48% on a partially-diluted basis.

On July 19, 2019, the Company filed an amended and restated technical report for the Macassa Mine entitled, “Macassa Property, Ontario Canada, Updated 43-101 Technical Report”. The Macassa Technical

Report addressed comments raised by the Ontario Securities Commission to include after-tax life-of-mine (“**LOM**”) cash flow and net present value (“**NPV**”) of the Macassa Mine related to the #4 Shaft project at the Macassa Mine.

On May 27, 2019, the Company announced that it had received acceptance from the TSX to renew its normal course issuer bid (“**2019 NCIB**”). Under the 2019 NCIB, the Company may purchase for cancellation up to 20,989,692 Common Shares (representing 10% of the issued and outstanding Common Shares in the public float as of May 22, 2019) over a 12-month period. Under the renewed 2019 NCIB, the maximum number of securities that the Company may purchase on a daily basis, other than block purchase exemptions, is 206,743 Common Shares. Pursuant to the 2019 NCIB, the Company purchased 10,440,700 Common Shares for cancellation at an average trading price of C\$46.22.

On May 9, 2019, the Company announced the appointment of Mr. Jeffrey Parr as the Chairman of the Board.

On May 7, 2019, the Company announced an increase to the quarterly dividend from C\$0.04 per Common Share in Q1 2019 to US\$0.04 per Common Share in Q2 2019.

On April 1, 2019, the Company filed an updated technical report prepared in accordance with NI 43-101, for each of the Macassa Mine, entitled “Macassa Property, Ontario, Canada, Updated NI 43-101 Technical Report” and the Fosterville Mine, entitled “Report on the Mineral Resources and Mineral Reserves of the Fosterville Gold Mine, Victoria, Australia” both with an effective date of December 31, 2018 and an issue date of April 1, 2019. In addition, the Company announced that it had been granted an extension to its mining licence at the Fosterville Mine, increasing the total area of mining from 17 km<sup>2</sup> to 28.5 km<sup>2</sup>.

On March 25, 2019, the Company announced the retirement of Eric Sprott as Chairman and a member of the Board, effective immediately following the Company’s 2019 annual general meeting of shareholders, to be held on May 7, 2019. The Company further announced that following Mr. Sprott’s retirement, Mr. Jeff Parr would assume the role of interim Chairman of the Board, pending his re-election to the Board at the annual general meeting.

On March 15, 2019, the Company declared its Q1 2019 dividend payment of C\$0.04 per Common Share to be paid on April 12, 2019 to shareholders of record as of March 29, 2019.

### ***Financial Year Ended December 31, 2018***

On December 11, 2018, the Company announced an increase to its quarterly dividend payment from C\$0.03 per Common Share to C\$0.04 per Common Share to be paid on January 11, 2019 to shareholders of record on December 31, 2018.

On November 18, 2018, the Company announced the appointment of David Soares as Chief Financial Officer and Eric Kallio as Senior Vice President, Exploration. In addition, the Company announced that Mr. Duncan King had been promoted to Vice President Mining, Kirkland Lake and that effective January 1, 2019, Mr. John Landmark, the VP Exploration, Australian Operations would assume the role of VP Human Resources. It was also announced that Ms. Tina Ouellette would retire as Executive Vice President, Human Resources in 2019 and that Mr. Doug Cater, Vice President, Canadian Operations would retire effective January 1, 2019.

On September 28, 2018, the Company announced that, as a result of the completion of a plan of arrangement involving Bonterra and Metanor Resources Inc. (“**Metanor**”) pursuant to which, among other things, Bonterra acquired all of the issued and outstanding common shares of Metanor, on completion of the arrangement, the Company held in aggregate 37,540,290 common shares of Bonterra and 6,136,072 common share purchase warrants of Bonterra, exercisable to acquire an additional 9,841,646 common shares of Bonterra. Upon completion of the transaction, the Company held approximately 9.44% of the

issued and outstanding common shares of Bonterra on a non-diluted basis and approximately 11.63% on a partially-diluted basis.

On September 18, 2018, the Company announced that it had acquired 14,705,882 Osisko Shares by way of a private placement financing at a price of C\$1.70 per share for total consideration of approximately C\$25 million. Upon completion of the private placement financing, the Company held 32,627,632 Osisko Shares, representing 13.61% of the issued and outstanding Osisko Shares as of the date of closing.

On September 17, 2018, the Company announced its Q3 2018 dividend payment of C\$0.03 per Common Share to be paid on October 12, 2018 to shareholders of record as of September 28, 2018.

On July 10, 2018, the Company announced that Phil Yee, Executive Vice President and Chief Financial Officer would depart the Company following the release of the Company's Q2 2018 financial results.

On June 18, 2018, the Company announced its Q2 2018 dividend payment of C\$0.03 per Common Share to be paid on July 13, 2018 to shareholders of record as of June 29, 2018.

On May 30, 2018, the Company announced that it had acquired 4,000,000 Novo Shares from Artemis Resources Limited a price of C\$5.00 per Novo Share for total consideration of C\$20.1 million. Upon completion of the acquisition, the Company held 29,830,268 Novo Shares representing 18.8% of the issued and outstanding Nova Shares on an undiluted basis and 25.4% on a partially diluted basis as of the date of closing.

On May 17, 2018 the Company renewed its normal course issuer bid (the "**2018 NCIB**") pursuant to which the Company could purchase up to 16,456,561 Common Shares for cancellation from May 22, 2018 to May 21, 2019. Pursuant to the 2018 NCIB, the Company purchased 1,970,400 Common Shares for cancellation.

On May 1, 2018, the Company reported its Q1 2018 earnings and announced an increase to its quarterly dividend payment from C\$0.02 per Common Share to C\$0.03 per Common Share, such increase commencing with the Q2 2018 quarterly dividend payable in July 2018.

On April 2, 2018, the Company filed an updated technical report that was prepared in accordance with NI 43-101 for the Fosterville Mine for the year ended December 31, 2017.

On March 22, 2018, the Company announced a quarterly dividend payment of C\$0.02 per Common Share to be paid on April 13, 2018 to shareholders of record as of March 29, 2018.

### **Significant Acquisition**

On January 31, 2020, the Company acquired all of the issued and outstanding Detour Shares pursuant to the Detour Arrangement. Pursuant to the Detour Arrangement, Detour shareholders received 0.4343 of a Common Share in exchange for each Detour Share held immediately prior to closing of the Detour Arrangement. In aggregate, the Company issued 77,217,129 Common Shares to former Detour shareholders as consideration for their Detour Shares. Upon closing of the Detour Arrangement, existing Kirkland Lake Gold shareholders and former Detour shareholders held 73% and 27% of the issued and outstanding Common Shares, respectively. Based on the opening price of the Common Shares on January 31, 2020, the total consideration pursuant the Detour Arrangement was approximately C\$4.1 billion.

In addition, under the Detour Arrangement, all outstanding stock options of Detour held immediately prior to closing of the Detour Arrangement were exchanged for Replacement Options in accordance with the Detour Arrangement. See "Overview of the Business" for additional details regarding the Detour Arrangement.

The Company filed a business acquisition report on Form 51-102F4 in connection with the Detour Arrangement on April 15, 2020 (the "**Business Acquisition Report**"). The Business Acquisition Report has

been filed with the applicable regulatory authorities and is available under the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov).

## **DESCRIPTION OF THE BUSINESS**

Kirkland Lake Gold is a senior gold mining, development and exploration company with a diversified portfolio of assets located in the stable mining jurisdictions of Canada and Australia with a significant pipeline of high-quality exploration projects.

### **Principal Markets and Distribution Methods**

The gold doré produced at the Company's operations is refined to market delivery standards by refineries in Australia and Canada. The Company markets its gold bullion through direct sales to gold bullion industry participants, including Asahi Refining Canada Ltd., ABC Refining (Australia) Pty Ltd, Canadian Imperial Bank of Commerce, and the Royal Bank of Canada.

### **Purchasers**

All of the Company's gold sales are to arm's length parties.

### **Production and Services**

Mining methods used by the Company vary from long-hole, mechanized cut-and-fill mining to conventional cut-and-fill mining (both overhead and underhand), open pit mining and other equally labour intensive mining methods.

### **Specialized Skill and Knowledge**

Many aspects of the Company's business require specialized skills and knowledge, including but not limited to areas of geology, mining, engineering, milling and production, mechanical, electrical, and pipefitting installation and repair. Personnel with the requisite skills and knowledge are readily available to the Company to meet its current needs in the current labour market, with the exception of skilled conventional miners. See "Risk Factors – Labour and Employment Matters".

### **Competitive Conditions**

The precious metal mineral exploration and mining business is competitive in all phases of exploration, development and production. Competition in the mineral exploration and production industry can be significant at times. The Company competes with a number of other companies that have resources significantly in excess of those of the Company, in the search for and the acquisition of attractive precious metal mineral properties, qualified service providers, labour, equipment and suppliers. The Company also competes with other mining companies for production from, mineral concessions, claims, leases and other interests, as well as for the recruitment and retention of qualified employees and consultants. The ability of the Company to acquire precious metal mineral properties in the future will depend on its ability to operate and develop its present properties and on its ability to select and acquire suitable producing properties or prospects for precious metal development or mineral exploration in the future. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, the terms of such financing will be favourable to the Company. Factors beyond the control of the Company may affect the marketability of minerals mined or discovered by the Company. See "Risk Factors".

### **Raw Materials (Components)**

The Company uses critical components such as water, electrical power, explosives, diesel and propane in its business, all of which are readily available.

## **Business Cycle & Seasonality**

The Company's business is not cyclical or seasonal.

## **Economic Dependence**

The Company's business is not substantially dependent on any single commercial contract or group of contracts either from suppliers or contractors. However, the Company is increasingly more reliant on its battery supplier for its electric powered underground equipment.

## **Renegotiation or Termination of Contracts**

It is not expected that the Company's business will be materially affected in the current financial year by the renegotiation or termination of any contracts or sub-contracts.

## **Environment, Community and Sustainability**

The Company's mining, exploration and development activities are subject to various levels of federal, provincial, state and local laws and regulations relating to the protection of the environment, including requirements for closure and reclamation of mining properties.

All phases of the Company's operations are subject to environmental regulation in the various jurisdictions in which it operates. To the best of management's knowledge, the Company's activities in 2020 were, and continue to be, in compliance in all material respects with such environmental regulations applicable to its mining operations, development, and exploration activities. The Company has implemented various policies, including an environmental policy, a corporate social responsibility policy, and a health and safety policy in which it accepts its corporate responsibility to practice environmental stewardship, community engagement and development, and provide a safe and healthy workplace for the Company's employees. The Company is also committed to complying with all relevant industry standards, legislation and regulations in the countries where it carries on business and have begun implementation of the best practice under the Toward Sustainable Mining program set out by the Mining Association of Canada (the "**MAC**") at all the Company's operations.

During 2020, reviews of the environmental and social performance of all of the Company's operations were led by the Company's Corporate Social Responsibility and Environment and Sustainability departments. The reviews included inspections of the Company's mine sites and surrounding areas with key operations personnel, review of monitoring programs and procedures and evaluation of the principal environmental and social issues related to each of these operations. The key observations and recommendations from the reviews are reported to the Board and its Health, Safety, Environment and CSR Committee (the "**HSE and CSR Committee**"). In addition to the periodic reviews, detailed environmental audits are completed at each mine at least once a year. These audits review environmental compliance and implementation of best practice procedures and management systems. During 2020, audits were undertaken at the Macassa Mine, Holt Complex, Fosterville Mine and the Northern Territory operations and no material issues were identified. No material social concerns were identified at the Company's mine sites in 2020.

The Company's 2021 Sustainability Report has integrated reporting performance against various external reporting frameworks, including the United Nation's Sustainable Development Goals, the MAC's Toward Sustainable Mining initiative, the International Council on Mining and Metals, the Sustainability Accounting Standards Board, the Task Force on Climate Related Financial Disclosures and the World Gold Council's Responsible Mining Principles ("**RGMPs**"). In 2020, the Company was pleased to report it received its external assurance report on its first year of implementation of the RGMPs. The report includes detailed information on the Company's environmental, social, economic, governance and health and safety performance. The complete 2021 Sustainability Report is available on the Company's website at [www.kl.gold](http://www.kl.gold).

As at December 31, 2020, the Company's environmental rehabilitation provision was US\$229,125,000. This provision is reviewed for all sites quarterly and goes through a thorough annual review at year end. The Company provides for the estimated future cost of rehabilitating mine sites and related production facilities on a discounted basis, in the event such discounting is material, as such activity that creates the rehabilitation obligation occurs. The rehabilitation provision represents the present value of estimated future rehabilitation costs. These provisions are based on the Company's internal estimates, with consideration of closure plans and rehabilitation requirements established by relevant regulatory bodies.

## **Employees**

As at December 31, 2020, the Company had approximately 2,878 employees and 1,239 contractors.

## **Foreign Operations**

The Company's mines and material mineral projects are located in Canada and Australia. Any changes in regulations or shifts in political attitudes in these jurisdictions, or other jurisdictions in which the Company has projects from time to time, are beyond the control of the Company and may adversely affect its business. Future development and operations may be affected in varying degrees by such factors as government regulations (or changes thereto) with respect to the restrictions on production, government initiatives enacted in response to the COVID 19 pandemic, export controls, income taxes, expropriation of property, repatriation of profits, environmental legislation, land use, water use, land claims of local people, mine safety and receipt of necessary permits. For the year ended December 31, 2020, the Company produced a total of 1,369,652 ounces, of which a total of 640,467 ounces were attributable to the Fosterville Mine in Australia. The effect of these factors cannot be accurately predicted. See "Risk Factors".

## **Social and Environmental Policies**

Protecting the environment and maintaining a social licence with the communities where the Company operates is integral to the success of the Company. The Company's approach to social and environmental policies is guided by both the legal guidelines in the jurisdictions in which the Company operates, as well as by a combination of Company-specific policies and standards with a commitment to best practice management.

The Company's current production activities, as well as any future operation or development projects, are subject to environmental laws and regulations in the jurisdictions in which it operates. There are environmental laws in both Canada and Australia that apply to the Company's operations, exploration, development projects, land holdings and closure. These laws address such matters as protection of the natural environment, employee health and safety, waste disposal, remediation of environmental sites, reclamation, mine safety, control of toxic substances, air and water quality and emissions standards. See "Risk Factors". Kirkland Lake Gold's operating mine sites seek to adopt leading practice environmental programs to manage environmental matters and ensure compliance with local and international legislation.

The Company maintains and implements its Environmental Policy, which sets forth the following key commitments of the Company to: (a) meet or exceed all applicable laws and regulations; (b) develop and maintain a comprehensive and effective Environmental Management System; (c) integrate environmental, social, cultural and economic considerations; (d) foster mutually beneficial environmental partnerships with its communities; (e) conduct business in a manner that minimizes potential environmental impacts; (f) instill a behaviour of environmental performance responsibility; (g) seek continuous improvement in the management and use of records in environmentally sustainable exploration, mining, processing, waste management and rehabilitation; (h) communicate openly and honestly with respect to the Company's performance in a timely manner; (i) maintain appropriate and effective communication with stakeholders; and (j) provide for the reclamation and rehabilitation of areas affected by its operations. To fulfil this commitment to environmental matters, the Company continuously reviews its environmental objectives and targets and measures and reports its performance transparently against such objectives and targets, evaluates environmental risks, takes appropriate action to mitigate such risks and effectively communicates its Environmental Policy to its employees, contractors, suppliers and stakeholders.

The Company has also developed a Social Responsibility Policy, which sets forth the following key commitments of the Company to: (a) meet or exceed all applicable laws, regulations and Company standards; (b) acknowledge all cultural and other human rights relevant to its operations and ensuring that all levels of the workforce understand and respect these rights; (c) integrate social responsibility into its decisions and activities; (d) act ethically and respectfully regarding Indigenous rights, cultural beliefs and aspirations; (e) understand, encourage and promote cross-cultural awareness; (f) engage stakeholders with respect to their concerns and values regarding development, operational and closure aspects of mineral projects; (g) communicate openly and honestly with respect to the Company's performance in a timely manner; and (h) maintain ongoing dialogue based on transparency, respect and good faith. To fulfil this commitment to social responsibility matters, the Company continuously reviews its social responsibility objectives and targets, measures and reports its performance against such objectives and targets, engages with employees and stakeholders to find improvements that benefit both local economic development and shareholders, identifies and manages significant social impacts, risks and opportunities, and communicates the Social Responsibility Policy to employees, contractors, suppliers and visitors while also making such policy available to the public.

During 2020, the Company achieved significant advancements with its Environment, Social and Governance program, both in terms of performance and reporting. Key milestones achieved during the year are summarized below:

- adopted World Gold Council's RGMP; completed year one external assurance;
- finalized policies and standards on Human Rights, Supplier Code of Conduct and Grievance Resolution;
- finalized a gender diversity policy and established an Executive Leadership team to promote diversity, equality and inclusion;
- verified that all active tailings facilities meet or exceed all MAC/Canadian Dam Association and Australian National Committee on Large Dams guidelines;
- received Tom Peters Memorial Mine Reclamation Award in recognition of Detour Lake's Progressive Reclamation Program aimed at reclaiming 10 hectares of land per year commencing in 2019;
- achieved greenhouse gas ("GHG") emissions well below industry averages, with the Macassa Mine continuing to have among the lowest GHG intensity rates in the industry;
- Macassa purchased five 50-tonne battery-powered underground haul trucks (first in industry), with the first delivered in Q1 2021; and
- launched donation program to support local health care agencies and community support groups in areas where the Company operates; A\$1.0 million donated to support Australian bush fire relief and prevention.

The Company regards the effectiveness of its COVID-19 response to be the one of its most important achievement of 2020. Commencing in March 2020, the Company introduced extensive health and safety protocols to protect workers from COVID-19, including the suspension of all non-essential work, including work on major capital projects and all exploration drilling, remote work where possible, and protocols in support of social distancing, medical testing and cleaning and sanitizing. As part of the COVID-19 response, reduced operations were introduced at Detour Lake on March 23, 2020 and the Macassa Mine on April 2, 2020, with operations suspended at the Holt Complex on April 2, 2020. The gradual recall of workers commenced at Detour Lake and the Macassa Mine, and resumption of project and exploration work, began later in the second quarter of 2020 with workforces returning to pre-COVID levels by June 30, 2020. The ramp up of exploration drilling continued throughout most of the year. The Company's health and safety protocols remained in place at the end 2020, with most expected to continue for the foreseeable future.

## **RISK FACTORS**

The operations of the Company are subject to significant uncertainty due to the high-risk nature of its business, which is the acquisition, financing, exploration, development and operation of mining properties. The following risk factors could materially affect the Company's financial condition and/or future operating results and could cause actual events to differ materially from those described in forward-looking statements relating to the Company. The risks and uncertainties described below are not the only risks and uncertainties that the Company faces. Additional risks and uncertainties, including those that the Company does not know about now or that it currently deems immaterial, may also adversely affect the Company's business.

### ***Price of Gold***

The Company's profitability and long-term viability depend, in large part, upon the market price of gold. Market price fluctuations of gold could adversely affect the profitability of the Company's operations and lead to impairments and write downs of mineral properties. Metal prices fluctuate widely and are affected by numerous factors beyond the Company's control, including: global and regional supply and demand for industrial products containing metals generally; changes in global or regional investment or consumption patterns; increased production due to new mine developments and improved mining and production methods; decreased production due to mine closures; interest rates and interest rate expectation; expectations with respect to the rate of inflation or deflation; currency rate fluctuations; availability and costs of metal substitutes; global or regional political or economic conditions; and sales by central banks, holders, speculators and other producers of metals in response to any of the above factors.

There can be no assurance that metal prices will remain at current levels or that such prices will improve. A decrease in the market prices could adversely affect the profitability of the Company's existing mines and projects as well as its ability to finance the exploration and development of additional properties, which would have a material adverse effect on the Company's results of operations, cash flows and financial position. A decline in metal prices may require the Company to write-down mineral reserve and mineral resource estimates, which could result in material write-downs of investments in mining properties. Further, if revenue from metal sales declines, the Company may experience liquidity difficulties. Its cash flow from mining operations may be insufficient to meet its operating needs, and as a result the Company could be forced to discontinue production and could lose its interest in, or be forced to sell, some or all of its properties.

In addition to adversely affecting mineral reserve and mineral resource estimates and the Company's results of operations, cash flows and financial position, declining metal prices can impact operations by requiring a reassessment of the feasibility of a particular project. Even if a project is ultimately determined to be economically viable, the need to conduct such a reassessment may cause substantial delays and/or may interrupt operations until the reassessment can be completed, which may have a material adverse effect on the Company's results of operations, cash flows and financial position.

### ***Infectious Diseases and COVID-19***

Outbreaks or the threat of outbreaks of viruses or other infectious diseases, pandemic or a similar public health threat, such as the novel coronavirus (COVID-19) pandemic, and the response thereto, could have a material adverse effect on the Company, both operationally and financially. The global response to the COVID-19 pandemic has resulted in, among other things, border closures, severe travel restrictions and extreme fluctuations in financial and commodity markets. Additional measures may be implemented by one or more governments in jurisdictions where the Company operates. Labour shortages due to illness, Kirkland Lake Gold or government imposed isolation programs or prevention measures, or restrictions on the movement of personnel or possible supply chain delays or disruptions could result in a reduction or interruption of the Company's operations, including mine shutdowns or suspensions. The inability to transport or refine and process the Company's products could have a material adverse effect on the Company's future cash flows, earnings, results or operations and financial condition. While the Company's operations have not been materially impacted to date, there can be no assurance that the Company will

remain materially unaffected by the current COVID-19 pandemic or potential future public health crises, which could cause operational and supply chain delays and disruptions (including as a result of government regulation and prevention measures), labour shortages and shutdowns, breach of material contracts, government or regulatory actions or inactions, increased insurance premiums, decreased demand or the inability to sell precious metals, declines in the price of precious metals, capital markets volatility, or other unknown but potentially significant impacts. The extent to which COVID-19 and any other pandemic or public health crisis impacts the Company's business, affairs, operations, financial condition, liquidity, availability of credit and results of operations will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information which may emerge concerning the severity of and the actions required to contain the COVID-19 pandemic or remedy its impact, among others.

### ***Exploration, Development and Operating Risks***

Mining operations are inherently dangerous and generally involve a high degree of risk. Kirkland Lake Gold's operations are subject to all of the hazards and risks normally encountered in the exploration, development and production of precious or base metals, including, without limitation, unusual and unexpected geologic formations, seismic activity, rock bursts, cave-ins, flooding and other conditions involved in the drilling and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, personal injury or loss of life and damage to tailings dams, property, and environmental damage, all of which may result in possible legal liability. Although the Company expects that adequate precautions to minimize risk will be taken, mining operations are subject to hazards such as fire, rock falls and other geomechanical issues, equipment failure or failure of retaining dams around tailings disposal areas which may result in environmental pollution and consequent liability. The occurrence of any of these events could result in a prolonged interruption of the Company's operations that would have a material adverse effect on its business, financial condition, results of operations and prospects. Further, the Company may be subject to liability or sustain losses in relation to certain risks and hazards against which it cannot insure or for which it may elect not to insure. The occurrence of operational risks and/or a shortfall or lack of insurance coverage could have a material adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

The exploration for and development of mineral deposits involves significant risks, which even a combination of careful evaluation, experience and knowledge may not eliminate. While the discovery of an ore body may result in substantial rewards, few properties that are explored are ultimately developed into producing mines. Major expenses may be required to locate and establish mineral reserves, to develop metallurgical processes and to construct mining and processing facilities at a particular site. It is impossible to ensure that the exploration or development programs planned by Kirkland Lake Gold will result in a profitable commercial mining operation. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are: the particular attributes of the deposit, such as size, grade and proximity to infrastructure, metal prices that are highly cyclical, and government regulations, including regulations relating to prices, taxes, royalties, land tenure, exploration licences, mining licences, land use, importing and exporting of minerals and environmental protection. The exact effect of these factors cannot be accurately predicted, but the combination of these factors may result in Kirkland Lake Gold not receiving an adequate return on invested capital. There is no certainty that the expenditures made towards the search and evaluation of mineral deposits will result in discoveries or development of commercial quantities of ore.

Development projects have no operating history upon which to base estimates of future capital and operating costs. For development projects, resource estimates and estimates of operating costs are, to a large extent, based upon the interpretation of geologic data obtained from drill holes and other sampling techniques, and feasibility studies, which derive estimates of capital and operating costs based upon anticipated tonnage and grades of ore to be mined and processed, ground conditions, the configuration of the ore body, expected mining and metallurgical recovery rates of minerals from ore, estimated operating costs, and other factors. As a result, actual production, cash operating costs and economic returns could differ significantly from those estimated. New mining operations may experience problems during the start-up phase, and delays in the commencement of production can often occur.

Mineral exploration is highly speculative in nature. There can be no assurance that exploration efforts will be successful. Even when mineralization is discovered, it may take several years until production is possible, during which time the economic feasibility of production may change. Substantial expenditures are required to establish proven and probable mineral reserves through drilling. Because of these uncertainties, no assurance can be given that exploration programs will result in the establishment or expansion of mineral resources or mineral reserves.

The Company's ability to meet development and production schedules and cost estimates for its development and expansion projects cannot be assured. Without limiting the generality of the foregoing, Kirkland Lake Gold is in the process of undertaking permitting efforts with respect to the #4 Shaft project at the Macassa Mine, permitting with respect to its new tailings facility at the Macassa Mine and the granting of certain exploration licences for the Fosterville Mine. Technical considerations, delays in obtaining government approvals and necessary permits, changes in scope and designs, the inability to obtain financing and/or the unanticipated costs associated with the development and construction of such projects could lead to further delays and delays in current mining operations in developing certain properties. Further, additional permits are required for the development of the West Detour project and continued development of the Detour Lake pit. There can be no assurance that the Company will obtain such permits on its anticipated timeline. Such delays could materially affect the financial performance of the Company.

### ***Health, Safety and Environmental Risks and Hazards***

Mining, like many other extractive natural resource industries, is subject to potential risks and liabilities due to accidents that could result in serious injury or death and/or material damage to the environment and Company assets. The impact of such accidents could affect the profitability of the operations, cause an interruption to operations, lead to a loss of licences, affect the reputation of the Company and its ability to obtain further licenses, damage community relations and reduce the perceived appeal of the Company as an employer. Personnel involved in the Company's operations are subject to many inherent risks, including but not limited to, rock bursts, cave-ins, flooding, fall of ground, electricity, slips and falls and moving equipment that could result in occupational illness, health issues and personal injuries. The Company strives to manage all such risks in compliance with local and international standards. The Company has implemented various health and safety measures designed to mitigate such risks, including the implementation of improved risk identification and reporting systems across the Company, effective management systems to identify and minimize health and safety risks, health and safety training and the promotion of enhanced employee commitment and accountability, including a fitness for work program which focuses on fatigue, stress, and alcohol and drug abuse. Such precautions, however, may not be sufficient to eliminate health and safety risks and employees, contractors and others may not adhere to the occupational health and safety programs that are in place. Any such occupational health and personal safety issues may adversely affect the business of the Company and its future operations.

All phases of the Company's operations are also subject to environmental and safety regulations in the jurisdictions in which it operates. These regulations mandate, among other things, water and air quality standards, noise, surface disturbance, the impact on flora and fauna and land reclamation, and regulate the generation, transportation, storage and disposal of hazardous waste. Environmental legislation is evolving in a manner that will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. There is no assurance that the Company has been or will at all times be in full compliance with all environmental laws and regulations or hold, and be in full compliance with, all required environmental, health and safety permits. In addition, no assurances can be given that new rules and regulations will not be enacted or that existing rules and regulations will not be applied in a manner which could have an adverse effect on the Company's financial position and operations. The potential costs and delays associated with compliance with such laws, regulations and permits could prevent the Company from proceeding with the development of a project or the operation or further development of a project, and any non-compliance therewith may adversely affect the Company's business, financial condition and results of operations. Environmental hazards may also exist on the properties on which the Company holds interests that are unknown to the Company at present and that have been caused by previous or existing owners or operators of the properties.

Government environmental approvals and permits are currently, or may in the future be, required in connection with the Company's operations. To the extent such approvals are required and not obtained, the Company may be curtailed or prohibited from proceeding with planned exploration or development of mineral properties. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. The costs associated with such instances and liabilities could be significant. Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in capital expenditures or production costs or reduced levels of production at producing properties or require abandonment or delays in development of its mining properties. Parties engaged in mining operations, including the Company, may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations. The Company may also be held financially responsible for remediation of contamination at current or former sites, or at third party sites. The Company could also be held responsible for exposure to hazardous substances.

In the context of environmental permits, including the approval of reclamation plans, Kirkland Lake Gold must comply with standards, laws and regulations that may entail costs and delays depending on the nature of the activity to be permitted and how stringently the regulations are implemented by the regulatory authority. The reclamation liability on any of Kirkland Lake Gold's properties will be calculated based on current laws and regulations and the expected future costs to be incurred in reclaiming, restoring and closing its exploration or operating mine sites. The Company may incur costs associated with reclamation activities, which may materially exceed the provisions established by the Company for the activities. In addition, possible additional future regulatory requirements may require additional reclamation requirements creating uncertainties related to future reclamation costs. Should the Company be unable to post required financial assurance related to an environmental remediation obligation, the Company might be prohibited from starting planned operations or required to suspend existing operations or enter into interim compliance measures pending completion of the required remedy, which could have a material adverse effect. Furthermore, changes to the amount of financial assurance that the Company is required to post, as well as the nature of the collateral to be provided, could significantly increase the Company's costs, making the maintenance and development of existing and new mines less economically feasible.

### ***Foreign Operations and Political Risk***

Kirkland Lake Gold conducts mining, development and exploration and other activities in Canada and Australia. Inherent risks with conducting foreign operations include, but are not limited to: renegotiation, cancellation or forced modification of existing contracts; expropriation or nationalization of property; changes in laws or policies or increasing legal and regulatory requirements of particular countries including those relating to taxation, royalties, imports, exports, duties, currency, or other claims by government entities, including retroactive claims and/or changes in the administration of laws, policies and practices; uncertain political and economic environments; war, terrorism, sabotage and civil disturbances; delays in obtaining or the inability to obtain or maintain necessary governmental permits or to operate in accordance with such permits or regulatory requirements; currency fluctuations; import and export regulations, including restrictions on the export of gold or other minerals; limitations on the repatriation of earnings; and increased financing costs.

These risks may limit or disrupt operating mines or projects, restrict the movement of funds, cause the Company to have to expend more funds than previously expected or required, or result in the deprivation of contract rights or the taking of property by nationalization or expropriation without fair compensation, and may materially adversely affect the Company's financial position or results of operations.

### ***Uncertainty in the Estimation of Mineral Reserves and Mineral Resources***

To extend the lives of its mines and projects, ensure the continued operation of the business and realize its growth strategy, it is essential that the Company continues to realize its existing identified mineral

reserves, convert mineral resources into mineral reserves, increase its mineral resource base by adding new mineral resources from areas of identified mineralized potential, and/or undertake successful exploration or acquire new mineral resources.

The figures for mineral reserves and mineral resources contained in this Annual Information Form are estimates only and no assurance can be given that the anticipated tonnages and grades will be achieved, that the indicated level of recovery will be realized or that mineral reserves will be mined or processed profitably. Actual mineral reserves may not conform to geological, metallurgical or other expectations, and the volume and grade of ore recovered may differ from estimated levels. There are numerous uncertainties inherent in estimating mineral reserves and mineral resources, including many factors beyond the Company's control. Such estimation is a subjective process, and the accuracy of any mineral reserve or mineral resource estimate is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretations available at the time. Short-term operating factors relating to the mineral reserves, such as the need for orderly development of the ore bodies or the processing of new or different ore grades, may cause the mining operation to be unprofitable in any particular accounting period. In addition, there can be no assurance that gold recoveries in small scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production. Lower market prices, increased production costs, reduced recovery rates and other factors may result in a revision of its mineral reserve estimates from time to time or may render the Company's mineral reserves uneconomic to exploit. Mineral reserve data is not indicative of future results of operations. If the Company's actual mineral reserves and mineral resources are less than current estimates or if the Company fails to develop its mineral resource base through the realization of identified mineralized potential, its results of operations or financial condition may be materially and adversely affected. Evaluation of mineral reserves and mineral resources occurs from time to time and estimates may change depending on further geological interpretation, drilling results and metal prices, which could have a negative effect on the Company's operations. The category of inferred mineral resource is often the least reliable mineral resource category and is subject to the most variability. Due to the uncertainty which may attach to inferred mineral resources, there is no assurance that inferred mineral resources will be upgraded to proven mineral reserves and probable mineral reserves as a result of continued exploration. The Company regularly evaluates its mineral resources and it often determines the merits of increasing the reliability of its overall mineral resources.

### ***Replacement of Depleted Mineral Reserves***

Given that mines have limited lives based on proven and probable mineral reserves, the Company must continually replace and expand its mineral resources and mineral reserves at its gold mines and discover, develop, or acquire mineral reserves for production. The Company's ability to maintain or increase its annual production of gold will depend in significant part on its ability to bring new mines into production and to expand mineral reserves or extend the life of existing mines.

### ***Uncertainty Relating to Mineral Resources***

Mineral resources that are not mineral reserves do not have demonstrated economic viability. Due to the uncertainty which may be attached to inferred mineral resources, there is no assurance that inferred mineral resources will be upgraded to measured or indicated mineral resources as a result of continued exploration.

### ***Production Estimates***

Kirkland Lake Gold has prepared estimates of future gold production for its existing and future mines. The Company cannot give any assurance that such estimates will be achieved. Failure to achieve production estimates could have an adverse impact on the Company's future cash flows, profitability, results of operations and financial conditions. The realization of production estimates are dependent on, among other things, the accuracy of mineral reserve and resource estimates, the accuracy of assumptions regarding ore grades and recovery rates, ground conditions (including hydrology), the physical characteristics of ores, the presence or absence of particular metallurgical characteristics, and the accuracy of the estimated rates and costs of mining, ore haulage and processing. Actual production may vary from estimates for a variety of reasons, including the actual ore mined varying from estimates of grade or tonnage; dilution and

metallurgical and other characteristics (whether based on representative samples of ore or not); short-term operating factors such as the need for sequential development of ore bodies and the processing of new or adjacent ore stopes from those planned; mine failures or slope failures; industrial accidents; natural phenomena such as inclement weather conditions, floods, droughts, rock slides and earthquakes; encountering unusual or unexpected geological conditions; changes in power costs and potential power shortages; shortages of principal supplies needed for mining operations, including explosives, fuels, chemical reagents, water, equipment parts and lubricants; plant and equipment failure; the inability to process certain types of ores; labour shortages or strikes; and restrictions or regulations imposed by government agencies or other changes in the regulatory environment. Such occurrences could also result in damage to mineral properties or mines, interruptions in production, injury or death to persons, damage to property of Kirkland Lake Gold or others, monetary losses and legal liabilities in addition to adversely affecting mineral production. These factors may cause a mineral deposit that has been mined profitably in the past to become unprofitable, forcing Kirkland Lake Gold to cease production.

Mineral resources and mineral reserves are reported as general indicators of mine life, however, this should not be interpreted as assurances of mine life or of the profitability of current or future operations.

The Company is currently, and expects to continue to be, dependent on three mines for all of its commercial production. In particular, Detour Lake, the Macassa Mine and the Fosterville Mine accounted for the majority of the Company's annual production in 2020 and are expected to continue to account for all of its commercial production in the near term. Any adverse conditions affecting mining, processing conditions, expansion plans or ongoing permitting at either the Macassa Mine, the Fosterville Mine, or Detour Lake could have a material adverse effect on the Company's financial performance and results of operations.

### ***Cost Estimates***

Capital and operating cost estimates made in respect of Kirkland Lake Gold's mines and development projects may not prove accurate. Capital and operating cost estimates are based on the interpretation of geological data, feasibility studies, anticipated climatic conditions, market conditions for required products and services, and other factors and assumptions regarding foreign exchange currency rates. Any of the following events could affect the ultimate accuracy of such estimate: unanticipated changes in grade and tonnage of ore to be mined and processed; incorrect data on which engineering assumptions are made; delay in construction schedules, unanticipated transportation costs; the accuracy of major equipment and construction cost estimates; labour negotiations; changes in government regulation (including regulations regarding prices, cost of consumables, royalties, duties, taxes, permitting and restrictions on production quotas on exportation of minerals); and title claims.

Changes in the Company's production costs could have a major impact on its profitability. Its main production expenses are personnel and contractor costs, materials, and energy. Changes in costs of the Company's mining and processing operations could occur as a result of unforeseen events, including international and local economic and political events, a change in commodity prices, increased costs (including oil, steel and diesel) and scarcity of labour, and could result in changes in profitability or mineral reserve estimates. Many of these factors may be beyond the Company's control.

The Company prepares estimates of future cash costs, operating costs and/or capital costs for each operation and project. There can be no assurance that such estimates will be achieved and that actual costs will not exceed such estimates. Failure to achieve cost estimates and/or any material increases in costs not anticipated by the Company could have an adverse impact on future cash flows, profitability, results of operations and the financial condition of the Company.

### ***Obligations as a Public Company***

The Company's business is subject to evolving corporate governance and public disclosure regulations that may from time to time increase both the Company's compliance costs and the risk of non-compliance, which could adversely impact the price of the Common Shares.

The Company is subject to changing rules and regulations promulgated by a number of governmental and self-regulated organizations, including, but not limited to, the Canadian Securities Administrators, the TSX, the SEC, NYSE, the Australian Securities and Investment Commission and the ASX. These rules and regulations continue to evolve in scope and complexity creating many new requirements. For example, the Government of Canada proclaimed into force the Extractive Sector Transparency Measures Act on June 1, 2015, which mandates the public disclosure of payments made by mining companies to all levels of domestic and foreign governments starting in 2017 for the year ended December 31, 2016 and provides for certain penalties in the event of non-compliance with such act. The Company's efforts to comply with such legislation could result in increased general and administration expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

The Company is also subject to corporate governance standards that apply to it as a foreign private issuer listed on the NYSE and registered with the SEC in the United States. Although it substantially complies with NYSE's corporate governance guidelines, it is exempt from certain NYSE requirements because it is subject to Canadian corporate governance requirements. It may from time to time seek other relief from corporate governance and exchange requirements and securities laws from the NYSE and other regulators.

### **Compliance Risk**

During its most recent financial year, the Company documented and tested its internal control procedures to satisfy the requirements of the *Sarbanes-Oxley Act of 2002* ("SOX"). Both SOX and Canadian legislation require an annual assessment by management of the effectiveness of the Company's internal controls over financial reporting.

The Company may fail to maintain the adequacy of its internal control over financial reporting as such standards become modified, supplemented or amended from time to time and the Company may not be able to conclude the effectiveness of its internal controls over financial reporting. The Company's failure to satisfy SOX and the equivalent Canadian legislation on an ongoing, timely basis could impact the reliability of the Company's financial statements and may negatively impact the financial performance of the Company and the trading price or market value of securities of the Company. In addition, the failure to implement required new controls or improved controls, or any difficulty in doing so, could impact the Company's operating results or result in a failure to comply with certain reporting obligations. There is no assurance that the Company will be able to remediate material weaknesses, if any are identified in future periods, or maintain all of the necessary controls to ensure continued compliance. There is also no assurance that the Company will be able to retain personnel who have the necessary finance and accounting skills because of the increased demand for qualified personnel among publicly traded companies.

To date, the Company has documented and tested its internal controls procedure which it believes to be appropriately designed and operating effectively as at December 31, 2020. Acquisitions can pose challenges in implementing the required processes, procedures and controls in the new operations. Entities that the Company acquires may not have disclosure controls and procedures or internal controls over financial reporting that are as thorough or effective as those required by the securities laws that currently apply to the Company. If any of the Company's staff fail to disclose material information that is otherwise required to be reported, no evaluation can provide complete assurance that its internal controls over financial reporting will detect this. The effectiveness of the Company's controls and procedures may also be limited by simple errors or faulty judgments. Continually enhancing its internal controls is important, especially as the Company expands, and the challenges involved in implementing appropriate internal controls over financial reporting will increase. Although the Company intends to devote substantial time to ongoing compliance with this, including incurring the necessary costs associated with therewith, it cannot be certain that it will be successful in complying with section 404 of SOX.

The *Canadian Corruption of Foreign Public Officials Act* and the *U.S. Foreign Corrupt Practices Act* and anti-bribery laws in jurisdiction in which the Company does business, prohibit companies from making improper payments for commercial advantage or other business purposes. The Company's policies mandate compliance with these anti-bribery laws, which carry substantial penalties. While the Company

does not operate in jurisdictions with established public and private sector corruption, violation of such laws, or allegations of such violation could have a material adverse effect on the Company's financial position and results of operations.

### ***Government Regulation***

The Company's business, mining operations and exploration and development activities are subject to extensive federal, state, territorial and local laws and regulations governing exploration, development, production, exports, taxes, labour standards, waste disposal, protection of the environment, reclamation, historic and cultural resource preservation, mine safety and occupational health, control of toxic substances, reporting and other matters. Although the Company believes that its exploration activities are currently carried out in accordance with all applicable rules and regulations, new rules and regulations may be enacted, and existing rules and regulations may be applied in a manner that could limit or curtail production or development of the Company's properties. Amendments to current laws and regulations governing the operations and activities of the Company or more stringent implementation thereof could have a material adverse effect on the Company's business, financial condition and results of operations. See also "Risk Factors – Foreign Operations and Political Risk".

### ***Acquisitions, Dispositions and Integration***

From time to time, the Company examines opportunities to acquire additional mining assets and businesses. Any acquisition that the Company may choose to complete may be of a significant size, may change the scale of the Company's business and operations, and may expose the Company to new geographic, political, operating, financial and geological risks. The Company's success in its acquisition activities depends on its ability to identify suitable acquisition candidates, negotiate acceptable terms for any such acquisition, and integrate the acquired operations successfully with those of the Company. Any acquisitions would be accompanied by risks. For example, there may be a significant change in commodity prices after the Company has committed to complete the transaction and established the purchase price or exchange ratio; a material ore body may prove to be below expectations; the Company may have difficulty integrating and assimilating the operations and personnel of any acquired companies, realizing anticipated synergies and maximizing the financial and strategic position of the combined enterprise, and maintaining uniform standards, policies and controls across the organization; the integration of the acquired business or assets may disrupt the Company's ongoing business and its relationships with employees, customers, suppliers and contractors; and the acquired business or assets may have unknown liabilities which may be significant. In the event that the Company chooses to raise debt capital to finance any such acquisition, the Company's leverage will be increased. If the Company chooses to use equity as consideration for such acquisition, existing shareholders may experience dilution. Alternatively, the Company may choose to finance any such acquisition with its existing resources. There can be no assurance that the Company would be successful in overcoming these risks or any other problems encountered in connection with such acquisitions.

As a result of its acquisitions, the Company has assumed liabilities and risks. While the Company conducts due diligence with respect to acquisitions of businesses and assets, there may be liabilities or risks, including liabilities related to the prior operation of the business acquired, that the Company failed, or was unable, to discover in the course of performing its due diligence investigations, which may be significant. Any such liabilities, individually or in the aggregate, could have a material adverse effect on the Company's business, financial condition and results of operations.

If the Company decides to sell certain assets or projects, it may encounter difficulty in finding buyers or executing alternative exit strategies on acceptable terms in a timely manner, which could delay the accomplishment of its strategic objectives. For example, delays in obtaining tax rulings and regulatory approvals or clearances, and disruptions or volatility in the capital markets may impact the Company's ability to complete proposed dispositions. Alternatively, the Company may dispose of a business at a price or on terms that are less than it had anticipated. After reaching an agreement with a buyer or seller for the disposition of a business, the Company may be subject to necessary regulatory and governmental approvals on acceptable terms as well as satisfaction of pre-closing conditions, which may prevent the

Company from completing the transaction. Dispositions may impact the Company's production, mineral reserves and resources and its future growth and financial conditions. Despite the disposition of divested businesses, the Company may continue to be held responsible for actions taken while it controlled and operated the business. Dispositions may also involve continued financial involvement in the divested business, such as through continuing equity ownership, guarantees, indemnities or other financial obligations. Under these arrangements, performance by the divested businesses or other conditions outside the Company's control could affect its future financial results.

### ***Australian Foreign Investment Law***

Pursuant to Australian law, a person acquiring control or direction, directly or indirectly, of 15% or more of the securities of the Company may be required to obtain prior approval from the Australian Foreign Investment Review Board. An investor who fails to obtain such approval may be subject to fines or may be forced to dispose of a portion of the investment. Investors should consult their own legal advisors prior to making any investment in securities of the Company.

### ***Additional Capital***

The exploration and development of the Company's properties, including continuing exploration and development projects, and the construction of mining facilities and commencement of mining operations, may require substantial additional financing. Failure to obtain sufficient financing will result in a delay or indefinite postponement of exploration, development or production on any or all of the Company's properties or even a loss of a property interest. Additional financing may not be available when needed or if available, the terms of such financing might not be favourable to the Company and might involve substantial dilution to existing shareholders. Failure to raise capital when needed would have a material adverse effect on the Company's business, financial condition and results of operations.

### ***Market Price of Securities***

The Common Shares are listed on the TSX, NYSE and the ASX. Securities markets have had a high level of price and volume volatility, and the market price of securities of many resource companies have experienced wide fluctuations in price that have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. Factors unrelated to the financial performance or prospects of Kirkland Lake Gold include macroeconomic developments locally and globally and market perceptions of the attractiveness of particular industries. There can be no assurance that continued fluctuations in mineral prices will not occur.

As a result of any of these factors, the market price of the securities of the Company at any given point in time may not accurately reflect the Company's long-term value. In response to periods of volatility in the market price of a company's securities, shareholders may institute class action securities litigation. Such litigation, if instituted, could result in substantial cost and diversion of management attention and resources, which could significantly harm profitability and the reputation of Kirkland Lake Gold.

### ***Dividend Policy***

The Company has a dividend policy providing for a dividend yield that is consistent with the yield of comparable companies' dividend rates and such policy is reviewed on a periodic basis and assessed in relation to the growth of the operating cash flows of the Company.

Payment of any future dividends will be at the discretion of the Board after taking into account many factors, including the Company's operating results, financial condition, comparability of the dividend yield to peer gold companies and current and anticipated cash needs. There can be no assurance that dividends will continue to be paid in the future or on the same terms as are currently paid by the Company.

### ***Investment Risk***

The Company's investments in securities of other public companies are subject to volatility in the share prices of such companies. Kirkland Lake Gold cannot provide any assurance that an active trading market for any of the subject shares is sustainable. The trading prices of the subject shares could be subject to wide fluctuations in response to various factors beyond the Company's control, including, quarterly variations in the subject companies' results of operations, changes in earnings (if any), estimates by analysts, conditions in the industry of such companies and macroeconomic developments in North America and globally, currency fluctuations and market perceptions of the attractiveness of particular industries. The lack of a liquid market could adversely affect the value that the Company could ultimately realize on such investments.

### ***Liquidity Risk***

The Company has in the past and may in the future seek to acquire additional funding by the sale of Common Shares, the sale of assets or through the assumption of additional debt. Movements in the price of the Common Shares have been volatile in the past and may be volatile in the future. Furthermore, the liquidity of the Company's securities may be impacted by large shareholders.

### ***Community Relations***

The Company's relationships with the communities in which it operates, and other stakeholders are critical to ensure the future success of its existing operations and the construction and development of its projects. There is an increasing level of public concern relating to the perceived effect of mining activities on the environment and on communities impacted by such activities. Publicity adverse to the Company, its operations or extractive industries generally, could have an adverse effect on the Company and may impact relationships with the communities in which Kirkland Lake Gold operates and other stakeholders. While the Company is committed to operating in a socially responsible manner, there can be no assurance that its efforts in this respect will mitigate this potential risk. Further, damage to the Company's reputation can be the result of the perceived or actual occurrence of any number of events, and could include any negative publicity, whether true or not.

The increased usage of social media and other web-based tools used to generate, publish and discuss user-generated content and to connect with other users has made it increasingly easier for individuals and groups to communicate and share opinions and views in regard to the Company and its activities, whether true or not. While the Company strives to uphold and maintain a positive image and reputation, the Company does not ultimately have control over how it is perceived by others. Reputation loss may lead to increased challenges in developing, maintaining community relations and advancing its projects and decreased investor confidence, all of which may have a material adverse impact on the financial performance and growth of the Company.

### ***First Nations and Aboriginal Heritage***

First Nations title claims, and Aboriginal heritage issues may affect the ability of the Company to pursue exploration, development and mining on its properties. The resolution of First Nations and Aboriginal heritage issues is an integral part of exploration and mining operations in Canada and Australia and the Company is committed to managing any issues that may arise effectively. However, in view of the inherent legal and factual uncertainties relating to such issues, no assurance can be given that material adverse consequences will not arise. For instance, there is an increasing level of public concern relating to the perceived effect of mining activities on communities impacted by such activities. The evolving expectations related to human rights, indigenous rights, and environmental protection may result in opposition to the Company's current and future operations or further development or new development of the Company's properties. Such opposition may be directed through legal or administrative proceedings or expressed in manifestations such as protests, roadblocks or other forms of public expression against the Company's activities, and may have a negative impact on the Company's reputation and operations.

### ***Non-Governmental Organizations***

Certain non-governmental organizations (“**NGOs**”) that oppose globalization and resource development are often vocal critics of the mining industry and its practices, including the use of hazardous substances in processing activities. Adverse publicity generated by such NGOs or other parties generally related to extractive industries or specifically to the Company’s operations, could have an adverse effect on the Company’s reputation, impact the Company’s relationship with the communities in which it operates and ultimately have a material adverse effect on the Company’s business, financial condition and results of operations.

NGOs may lobby governments for changes to laws, regulations and policies pertaining to mining and relevant to the Company’s business activities, which, if made, could have a material adverse effect on the Company’s business, financial condition and results of operations.

NGOs may organize protests, install road blockades, apply for injunctions for work stoppage, file lawsuits for damages and intervene and participate in lawsuits seeking to cancel the Company’s rights, permits and licences. These actions can relate not only to current activities but also historic mining activities by prior owners and could have a material adverse effect on the Company’s business and operations. NGO’s may also file complaints with regulators in respect of the Company’s, and its directors’ and insiders’, regulatory filings. Such complaints, regardless of whether they have any substance or basis in fact or law, may have the effect of undermining the confidence of the public or a regulator in the Company or such directors or insiders and may adversely affect the Company’s prospects of obtaining the regulatory approvals necessary for advancement of some or all of its exploration and development plans or operations and the Company’s business, financial condition and results of operations.

### ***Construction and Development of New Mines***

The success of construction projects and the development of new mines by the Company is subject to a number of factors including the availability and performance of engineering and construction contractors, mining contractors, suppliers and consultants, the receipt of required governmental approvals and permits in connection with the construction of mining facilities, the conduct of mining operations (including environmental permits), and the successful completion and operation of ore passes, among other operational elements. Any delay in the performance of any one or more of the contractors, suppliers, consultants or other persons on which the Company is dependent in connection with its construction activities, a delay in or failure to receive the required governmental approvals and permits in a timely manner or on reasonable terms, or a delay in or failure in connection with the completion and successful operation of the operational elements of new mines could delay or prevent the construction and start-up of new mines as planned. There can be no assurance that current or future construction and start-up plans implemented by the Company will be successful, that the Company will be able to obtain sufficient funds to finance construction and start-up activities, that personnel and equipment will be available in a timely manner or on reasonable terms to successfully complete construction projects, that the Company will be able to obtain all necessary governmental approvals and permits or that the construction, start-up and ongoing operating costs associated with the development of new mines will not be significantly higher than anticipated by the Company. Any of the foregoing factors could adversely impact the operations and financial condition of the Company.

Commercial viability of a new mine or development project is predicated on many factors. 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. Thus, it is possible that actual costs may change significantly, and economic returns may differ materially from the Company’s estimates. In addition, mineral reserves and mineral resources projected by feasibility studies and technical assessments performed on the projects may not be realized, and the level of future metal prices needed to ensure commercial viability may not materialize. Consequently, there is a risk that start-up of new mine and development projects may be subject to write-down and/or closure as they may not be commercially viable.

### ***Availability and Costs of Infrastructure, Energy and Other Commodities***

Mining, processing, development and exploration activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important determinants that affect capital and operating costs. Unusual or infrequent weather phenomena, sabotage, government or other interference in the maintenance or provision of such infrastructure could adversely affect Kirkland Lake Gold's operations, financial condition and results of operations.

The profitability of the Company's operations will be dependent upon the cost and availability of commodities which are consumed or otherwise used in connection with the Company's operations and projects, including, but not limited to, diesel, fuel, natural gas, electricity, steel and concrete. Commodity prices fluctuate widely and are affected by numerous factors beyond the control of the Company. If there is a significant and sustained increase in the cost of certain commodities, the Company may decide that it is not economically feasible to continue all of the Company's commercial production and development activities and this could have an adverse effect on profitability. Higher worldwide demand for critical resources like input commodities, drilling equipment, mobile mining equipment, tires and skilled labour could affect the Company's ability to acquire them and lead to delays in delivery and unanticipated cost increases, which could have an effect on the Company's operating costs, capital expenditures and production schedules.

Further, the Company relies on certain key third-party suppliers and contractors for services, equipment, raw materials used in, and the provision of services necessary for, the development, construction and continuing operation of its assets. As a result, the Company's activities at its mine sites are subject to a number of risks, some of which are outside its control, including negotiating agreements with suppliers and contractors on acceptable terms, the inability to replace a supplier or a contractor and its equipment, raw materials or services in the event that either party terminates the agreement, interruption of operations or increased costs in the event that a supplier or contractor ceases its business due to insolvency or other unforeseen event and failure of a supplier or contractor to perform under its agreement with the Company. The occurrences of one or more of these events could have a material effect on the business, results of operations and financial condition of the Company.

### ***Nature and Climatic Conditions***

The Company and the mining industry are facing continued geotechnical challenges, which could adversely impact the Company's production and profitability. Unanticipated adverse geotechnical and hydrological conditions, such as landslides, droughts, pit wall failures and rock fragility may occur in the future and such events may not be detected in advance. Geotechnical instabilities and adverse climatic conditions can be difficult to predict and are often affected by risks and hazards outside of the Company's control, such as severe weather and considerable rainfall, which may lead to periodic floods, mudslides, wall instability and seismic activity, which may result in slippage of material.

Geotechnical failures could result in limited or restricted access to mine sites, suspension of operations, government investigations, increased monitoring costs, remediation costs, loss of ore and other impacts, which could cause one or more of the Company's projects to be less profitable than currently anticipated and could result in a material adverse effect on the Company's results of operations and financial position. At the Fosterville Mine, ore is processed by crushing and grinding followed by flotation, bacterial oxidation and carbon in leach (CIL) circuits. Downtime at the Fosterville BIOX® plant impacts bacterial activity and gold recovery in the BIOX® circuit, which could have a negative effect on the financial condition and results of operation of the mine.

Kirkland Lake Gold has properties located in the Northern Territory, Australia. Typically, the Northern Territory's tropical wet season is from the end of November to the end of March. During the wet season, the properties may be subject to unpredictable weather conditions such as cyclones, heavy rains, strong winds and flash flooding. Kirkland Lake Gold has undertaken several steps to minimize the effects of the wet season on its operations including sealing roads, accommodating the build-up of mined inventory and planning exploration and mining activities around the wet season. Nonetheless, no assurance can be given

that the unpredictable weather conditions will not adversely affect mining and exploration activities. In particular, mining, drilling and exploration activities may be suspended due to poor ground conditions, ore haulage activities may be slowed or delayed as roads may be temporarily flooded, and deposits where the host rock is clayish in nature may have to be mined or processed at slower than anticipated rates and/or mixed with lower grade stockpile ore. Furthermore, the occurrence of physical climate change events may result in substantial costs to respond to the event and/or recover from the event, and to prevent recurrent damage, through either the modification of, or addition to, existing infrastructure at the Company's operations. The scientific community has predicted an increase, over time, in the frequency and severity of extraordinary or catastrophic natural phenomena as a result of climate change. The Company can provide no assurance that it will be able to predict, respond to, measure, monitor or manage the risks posed as a result.

The Company's mining and processing operations are, in some instances, energy intensive. While the Company has initiated numerous processes to reduce its overall carbon footprint, such as the use of electric battery powered mining equipment, the Company acknowledges climate change is an international and community concern. Legislation and regulations relating to emission levels and energy efficiency are becoming more rigorous and may result in increased costs at its Canadian and Australian operations. In addition, as climate change is increasingly perceived as an international and community concern, stakeholders may increase demands for emissions reductions and call-upon mining companies to better manage their consumption of climate-relevant resources. While the Company has taken measures to manage the use of energy, such regulatory requirements may have an adverse impact on the Company.

Physical climate change events, and the trend toward more stringent regulations aimed at reducing the effects of climate change, could impact the Company's decisions to pursue future opportunities, or maintain existing operations, which could have an adverse effect on its business and future operations.

The Company can provide no assurance that efforts to mitigate the risks of climate changes will be effective and that the physical risks of climate change will not have an adverse effect on its operations and profitability.

### ***Information Technology***

The Company is reliant on the continuous and uninterrupted operations of its information technology ("IT") systems. User access and security of all IT systems are critical elements to the operations of the Company. The Company's operations depend, in part, on how well the Company and its suppliers protect networks, equipment, IT systems and software against damage from a number of threats, including, but not limited to, cable cuts, damage to physical plants, natural disasters, terrorism, fire, power loss, hacking, computer viruses, vandalism and theft. The Company's operations also depend on the timely maintenance, upgrade and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures. Any IT failure pertaining to availability, access or system security could result in disruption for personnel and could adversely affect the reputation, operations or financial performance of the Company.

The Company's IT systems could be compromised by unauthorized parties attempting to extract business sensitive, confidential or personal information, corrupting information or disrupting business processes or by inadvertent or intentional actions by the Company's employees or vendors. A cyber security incident resulting in a security breach or failure to identify a security threat, could disrupt business and could result in the loss of business sensitive, confidential or personal information or other assets, as well as litigation, regulatory enforcement, violation of privacy and security laws and regulations and remediation costs.

Although to date the Company has not experienced any material losses relating to cyber attacks or other information security breaches, there can be no assurance that it will not incur such losses in the future. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access remain a priority. As cyber threats continue to

evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

Social media and other web-based information sharing applications may result in negative publicity or have the effect of damaging the reputation of the Company, whether or not such publicity is in fact verified, truthful or correct. The Company places a great emphasis on ensuring the highest reputational standards, however, it may not have the ability to control how it is perceived by others. Reputational loss may result in challenges in developing and maintaining community and shareholder relations and decreased investor confidence.

### ***Permitting***

The Company's operations are subject to receiving and maintaining permits from appropriate governmental authorities. There is no assurance that delays will not occur in connection with obtaining all necessary renewals of permits for the Company's existing operations, additional permits for any possible future changes to operations, or additional permits associated with new legislation. Prior to any development on any of its properties, the Company must receive permits from appropriate governmental authorities. There can be no assurance that the Company will continue to hold all permits necessary to develop or continue operating at any particular property. Any of these factors could have a material adverse effect on the Company's results of operations and financial position.

### ***Insurance and Uninsured Risks***

Kirkland Lake Gold's business is subject to a number of risks and hazards generally, including: adverse environmental conditions; industrial accidents; labour disputes; unusual or unexpected geological conditions; ground or slope failures; cave-ins; changes in the regulatory environment; and natural phenomena such as inclement weather conditions, floods and earthquakes. Such occurrences could result in damage to mineral properties or production facilities, personal injury or death, environmental damage to Kirkland Lake Gold's properties or the properties of others, delays in mining, monetary losses and possible legal liability.

The businesses and properties of Kirkland Lake Gold are insured against loss or damage, subject to a number of limitations and qualifications. Such insurance will not cover all the potential risks associated with a mining company's operations. Kirkland Lake Gold may also be unable to maintain insurance to cover these risks at economically feasible premiums. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, insurance against risks such as environmental pollution or other hazards as a result of exploration and production is not generally available to Kirkland Lake Gold or to other companies in the mining industry on acceptable terms. The Company might also become subject to liability for pollution or other hazards that it may not be insured against or that Kirkland Lake Gold may elect not to insure against because of premium costs or other reasons. The Company may suffer a material adverse effect on its business, results of operations, cash flows and financial position if it incurs a material loss related to any significant event that is not covered, or adequately covered, by its insurance policies.

### ***Competition***

The mining industry is intensely competitive in all of its phases and Kirkland Lake Gold competes with many companies possessing greater financial and technical resources than itself. Competition in the precious metals mining industry is primarily for mineral rich properties that can be developed and produced economically; the technical expertise to find, develop, and operate such properties; the labour to operate the properties; and the capital for the purpose of funding such properties. Many competitors not only explore for and mine precious metals, but also conduct refining and marketing operations on a global basis. Such competition may result in Kirkland Lake Gold being unable to acquire desired properties, to recruit or retain qualified employees or to acquire the capital necessary to fund its operations and develop its properties. Existing or future competition in the mining industry could materially adversely affect Kirkland Lake Gold's prospects for mineral exploration and success in the future.

### ***Currency and Gold Price Fluctuations***

The Company does not have a foreign exchange hedging program in place. As such, currency fluctuations may affect the Company's capital costs and the costs that the Company incurs at its operations. Gold is sold throughout the world based principally on a United States dollar price, but most of the Company's operating and capital expenses are incurred in Australian dollars and Canadian dollars. The appreciation of these currencies against the United States dollar would increase the costs of gold production at such mining operations, which could materially and adversely affect Kirkland Lake Gold's profitability, results of operations and financial position. Furthermore, the Company does not hedge its future gold sales. As such, a decrease in the price of gold could materially and adversely affect Kirkland Lake Gold's profitability, results of operations and financial position.

### ***Tax Matters***

The Company's taxes are affected by a number of factors, some of which are outside of its control, including the application and interpretation of the relevant tax laws and treaties. If the Company's filing position, application of tax incentives or similar "holidays" or benefits were to be challenged for any reason, this could have a material adverse effect on the Company's business, results of operations and financial condition.

The Company is subject to routine tax audits by various tax authorities. Tax audits may result in additional tax, interest payments and penalties which would negatively affect the Company's financial condition and operating results. New laws and regulations or changes in tax rules and regulations or the interpretation of tax laws by the courts or the tax authorities may also have a substantial negative impact on the Company's business. There is no assurance that the Company's current financial condition will not be materially adversely affected in the future due to such changes.

### ***Foreign Mining Tax Regimes***

Mining tax regimes in foreign jurisdictions are subject to differing interpretations and are subject to constant change. The Company's interpretation of taxation law as applied to its transactions and activities may not coincide with that of the tax authorities. As a result, transactions may be challenged by tax authorities and the Company's operations may be assessed, which could result in significant additional taxes, penalties and interest. In addition, proposed changes to mining tax regimes in foreign jurisdictions could result in significant additional taxes payable by the Company, which would have a negative impact on the financial results of Kirkland Lake Gold.

### ***Activist Shareholders***

In recent years, publicly-traded companies have been increasingly subject to demands from activist shareholders advocating for changes to corporate governance practices, such as executive compensation practices, social issues, or for certain corporate actions or reorganizations. There can be no assurances that activist shareholders will not publicly advocate for the Company to make certain corporate governance changes or engage in certain corporate actions. Responding to challenges from activist shareholders, such as proxy contests, media campaigns or other activities, could be costly and time consuming and could have an adverse effect on the Company's reputation and divert the attention and resources of the Company's management and Board, which could have an adverse effect on its business and results of operations. Even if the Company does undertake such corporate governance changes or corporate actions, activist shareholders may continue to promote or attempt to effect further changes, and may attempt to acquire control of the Company to implement such changes. If shareholder activists seeking to increase short-term shareholder value are elected to the Board, this could adversely effect the Company's business and future operations. Additionally, shareholder activism could create uncertainty about the Company's future strategic direction, resulting in loss of future business opportunities, which could adversely effect the Company's business, future operations, profitability and its ability to attract and retain qualified personnel.

## ***Litigation***

All industries, including the mining industry, are subject to legal claims, with and without merit. Legal proceedings may arise from time to time in the course of the Company's business. Such litigation may be brought in the future against Kirkland Lake Gold or one or more of its Subsidiaries or the Company or one or more of its Subsidiaries may be subject to another form of litigation. Defence and settlement costs of legal claims can be substantial, even with respect to claims that have no merit. As of the date hereof, no material claims have been brought against the Company, nor has the Company received an indication that any material claims are forthcoming. However, due to the inherent uncertainty of the litigation process, should a material claim be brought against the Company, the process of defending such claims could take away from the time and effort management of the Company would otherwise devote to its business operations and the resolution of any particular legal proceeding to which the Company or one or more of its Subsidiaries may become subject could have a material adverse effect on the Company's financial position and results of operations.

## ***Mineral Tenure***

In the countries in which the Company operates, the mineral rights, or certain portions of them, are owned by the relevant governments. In such countries, the Company must enter into contracts with the applicable governments, or obtain permits or concessions from them, that allow the Company to hold rights over mineral rights and rights (including ownership) over parcels of land and conduct its operations thereon. The availability of such rights and the scope of operations the Company may undertake are subject to the discretion of the applicable governments and may be subject to conditions. New laws and regulations, or amendments to laws and regulations relating to mineral tenure and land title and usage thereof, including expropriations and deprivations of contractual rights, if proposed and enacted, may affect the Company's rights to its properties.

In many instances, the Company can initially only obtain rights to conduct exploration activities on certain prescribed areas, but obtaining the rights to proceed with development, mining and production on such areas or to use them for other related purposes, such as waste storage or water management, is subject to further application, conditions or licences, the granting of which are often at the discretion of the governments. In many instances, the Company's rights are restricted to fixed periods of time with limited renewal rights. Delays in the process for applying for such rights or renewals or expansions, or the nature of conditions imposed by government, could have a material adverse effect on the Company's business, including its existing developments and mines, and the Company's financial condition and results of operations.

The cost of holding these rights often escalates over time or as the scope of the Company's operating rights expands. There is no assurance that the mineral rights regimes under which the Company hold properties or which govern its operations thereon will not be changed, amended, or applied in a manner which could have a material adverse effect on the Company business, financial condition and results of operations, that the ongoing costs of obtaining or maintaining the Company's rights will remain economic and not result in uncompensated delays or that compliance with conditions imposed from time to time will be practicable. Any inability to obtain and retain rights to use lands for the Company's ongoing operations at all or on a timely basis could have a material adverse effect on the Company's business, financial condition and results of operations.

Certain of the Company's properties are subject to royalty and other payment obligations. Failure to meet its payment obligations under these agreements could result in the loss of the Company's rights.

There is no assurance that the Company will be able to hold or operate on its properties as currently held or operated or at all, or that the Company will be able to enforce its rights with respect to its holdings, which could have a material adverse effect on the Company's business, financial condition and results of operations.

### ***Title to the Company's Mining Claims and Leases***

The acquisition and maintenance of title to mineral properties is a very detailed and time-consuming process. While the Company has carried out reviews of title to its mining claims and leases, this should not be construed as a guarantee that title to such interests will not be challenged or impugned. Title insurance is generally not available for mineral properties and the Company's ability to ensure that it has obtained secure mine tenure may be severely constrained. Third parties may have valid claims underlying portions of the Company's interests, including prior unregistered liens, agreements, royalty transfers or claims, including native land claims, other encumbrances and title may be affected by, among other things, undetected defects. The Company has had difficulty in registering ownership of certain titles in its own name due to the demise of the original vendors of such titles when owned by the Company's predecessors-in-title. If these challenges are successful, this could have an adverse effect on the development of the Company's properties as well as its results of operations, cash flows and financial position. In addition, the Company may be unable to operate its properties as permitted or to enforce its rights with respect to its properties.

### ***Dependence on Outside Parties***

Kirkland Lake Gold has relied upon consultants, engineers, contractors and other parties and intends to rely on these parties for exploration, development, construction and operating expertise. Substantial expenditures are required to construct mines, to establish mineral reserves through drilling, to carry out environmental and social impact assessments, to develop metallurgical processes to extract metal from ore and, in the case of new properties, to develop the exploration and plant infrastructure at any particular site. Deficient or negligent work or work not completed in a timely manner could have a material adverse effect on Kirkland Lake Gold.

### ***Counterparty Risk***

The Company is exposed to various counterparty risks that could adversely impact the Company's planned growth, including, but not limited to: financial institutions that hold the Company's cash, companies that have payables to the Company, the Company's insurance providers, lenders and other banking counterparties, and companies that have received deposits from the Company for the future delivery of equipment. The Company seeks to limit counterparty risk by entering into business arrangements with high credit-quality counterparties, limiting the amount of exposure to each counterparty and monitoring the financial condition of counterparties.

### ***Dependence on Key Management Personnel***

The Company is dependent upon a number of key management personnel. The Company's ability to manage its operating, development, exploration and financing activities will depend in large part on the efforts of these individuals. As the Company's business grows, it will require additional key financial, administrative, mining, marketing and public relations personnel as well as additional staff for operations. The Company faces intense competition for qualified personnel, and there can be no assurance that the Company will be able to attract and retain such personnel. The loss of the services of one or more key employees or the failure to attract and retain new personnel could have a material adverse effect on the Company's ability to manage and expand the Company's business.

### ***Labour and Employment Matters***

Production at the Company's mining operations is dependent upon the efforts of its employees and the Company's operations would be adversely affected if it fails to maintain satisfactory labour relations. Factors such as work slowdowns or stoppages caused by the attempted unionization of operations and difficulties in recruiting qualified miners and hiring and training new miners could materially adversely affect the Company's business. This would have a negative effect on the Company's business and results of operations; which might result in the Company not meeting its business objectives.

In addition, relations between the Company and its employees may be affected by changes in the scheme of labour relations that may be introduced by the relevant governmental authorities in whose jurisdictions the Company carries on business. Changes in such legislation or in the relationship between the Company and its employees may have a material adverse effect on the Company's business, results of operations and financial condition.

Furthermore, the Company is reliant on the good character of its employees and is subject to the risk that employee misconduct could occur. Although the Company takes precautions to prevent and detect employee misconduct, these precautions may not be effective and the Company could be exposed to unknown and unmanaged risks or losses, including regulatory sanctions and serious harm to the its reputation. The existence of the Company's Code of Conduct and Ethics, among other governance and compliance policies and processes, may not prevent incidents of theft, dishonesty or other fraudulent behaviour nor can the Company guarantee compliance with legal and regulatory requirements. If material employee misconduct does occur, the Company's business, financial condition and results of operations could be adversely affected.

There is a collective bargaining agreement in place at the Fosterville Mine which currently covers approximately **360** employees primarily in mining, processing and maintenance. The agreement was entered into in July 2018 and received approval from the Fair Work Commission in March 2019. Accordingly, the collective bargaining agreement at the Fosterville Mine became effective on March 20, 2019 and will expire on June 30, 2021. Since commencing operations at the Fosterville Mine in 2005, no threats of industrial action or work stoppage have been made, nor are they expected to be made in future.

The Company has sufficient skilled miners to carry on operations. There are currently no material labour shortages with the Company operating near its budgeted staffing levels. See "Employees".

### ***Conflicts of Interest***

Certain of the directors and officers of the Company also serve as directors and/or officers of other companies involved in natural resource exploration and development and, consequently, there exists the possibility for such directors and officers to be in a position of conflict. The Company expects that any decision made by any of such directors and officers involving the Company will be made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of the Company and its shareholders, but there can be no assurance in this regard. In addition, each of the Company's directors is required to declare and refrain from voting on any matter in which such directors may have a conflict of interest or which are governed by the procedures set forth in the OBCA and any other applicable law. In the event that the Company's directors and officers are subject to conflicts of interest, there may be a material adverse effect on its business.

### ***Disclosure and Internal Controls***

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Disclosure controls and procedures are designed to ensure that the information required to be disclosed by the Company in reports filed with securities regulatory agencies is recorded, processed, summarized and reported on a timely basis and is accumulated and communicated to the Company's management, as appropriate, to allow timely decisions regarding required decisions. The Company has invested resources to document and analyze its system of disclosure controls and its internal control over financial reporting. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance with respect to the reliability of financial reporting and financial statement preparation. The Company's failure to satisfy the requirements of applicable Canadian securities laws on an ongoing, timely basis could result in the loss of investor confidence in the reliability of its financial statements, which in turn could harm its business and negatively impact the trading price of the common shares. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm the Company's operating results or cause it to fail to meet its reporting obligations.

## **Global Financial Conditions**

Global financial conditions continue to be characterized as volatile. In recent years, global markets have been adversely impacted by various credit crises and significant fluctuations in fuel and energy costs and metals prices. Many industries, including the mining industry, have been impacted by these market conditions. Global financial conditions remain subject to sudden and rapid destabilizations in response to future events, as government authorities may have limited resources to respond to future crises. A continued or worsened slowdown in the financial markets or other economic conditions, including but not limited to consumer spending, employment rates, business conditions, inflation, fuel and energy costs, consumer debt levels, lack of available credit, the state of the financial markets, interest rates and tax rates, may adversely affect the Company's growth and profitability. Future crises may be precipitated by any number of causes, including natural disasters, geopolitical instability, changes to energy prices or sovereign defaults. If increased levels of volatility continue or in the event of a rapid destabilization of global economic conditions, it may result in a material adverse effect on commodity prices, demand for metals, including gold, availability of credit, investor confidence, and general financial market liquidity, all of which may adversely affect the Company's business and the market price of the Company's securities.

## **MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES**

Set forth below under the heading "Material Properties – Detour Lake – Mineral Resource and Mineral Reserve Estimates" are the mineral resource and mineral reserve estimates for Detour Lake, effective December 31, 2020. Set forth below under the heading "Material Properties – The Macassa Mine – Mineral Resource and Mineral Reserve Estimates" are the mineral resource and mineral reserves estimates for the Macassa Mine, effective December 31, 2020. Set forth below under the heading "Material Properties – The Fosterville Mine – Mineral Resource and Mineral Reserve Estimates" are the mineral resource and mineral reserves estimates for the Fosterville Mine, effective December 31, 2020. See "Interest of Experts".

## **MATERIAL PROPERTIES**

For the purposes of this Annual Information Form, Kirkland Lake Gold has identified Detour Lake, the Macassa Mine and the Fosterville Mine as its material properties as at December 31, 2020. The following is a description of Kirkland Lake Gold's material mineral properties as at December 31, 2020.

### **Detour Lake**

The scientific and technical information included in the below summary has been derived, in part, from, and in some instances are extracts from, the technical report entitled "Detour Lake Operation, Ontario, Canada, NI 43-101 Technical Report" (the "Detour Technical Report") that has an effective date of December 31, 2020, and prepared by Mr. Andre Leite, P.Eng., Mr. Jean-Francois Dupont, P.Eng., Dr. Veronika Raizman, P.Geo., and Mr. Paul Andrew Fournier, P.Eng., each of whom is a "qualified person" pursuant to NI 43-101. All defined terms used in the following summary have the meanings ascribed to them in the Detour Technical Report. The below summary is subject to all the assumptions, qualifications and procedures set out in the Detour Technical Report. The Detour Technical Report was prepared in accordance with NI 43-101. For full technical details of the report, reference should be made to the complete text of the Detour Technical Report, which has been filed with the applicable regulatory authorities and is available under the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov). The summary set forth below is qualified in its entirety with reference to the full text of the Detour Technical Report. The authors of the Detour Technical Report have reviewed and approved the scientific and technical disclosure contained in this Annual Information Form related to Detour Lake other than, with regards to Mr. Dupont, Dr. Raizman and Mr. Fournier, with respect to the mineral resource and mineral reserve estimates

contained under the heading “Material Properties – Detour Lake – Mineral Resource and Mineral Reserve Estimates”. See “Interest of Experts”.

### **Project Description, Location and Access**

The Detour Lake operation is situated approximately 300 km northeast of Timmins and 185 km by road northeast of Cochrane. From the town of Cochrane (population of approximately 5,000 residents), the Detour Lake operation is easily accessible by the Detour Lake mine road, the northern extension of Highway 652. The first 151 km on Highway 652 is paved surface, followed by 34 km of well-maintained gravel surfaced road to the mine site. Road access is available year-round. The closest major airport to the site is at Timmins, Ontario, approximately 61 km to the southeast.

The Detour Lake operation mineral tenures form one contiguous group of mining patents, mining leases and cell mining claims in the District of Cochrane, Ontario, with a small group of cell mining claims in Massicotte Township, Québec that collectively cover an area of 646 km<sup>2</sup>. The mineral tenure in Ontario consists of 2,213 cell mining claims (39,714 ha), 44 lease documents (23,712 ha), and six patent documents (602 ha). There are an additional 20 cell mining claims covering 549 ha in Quebec.

The Company has 30 leases and 10 patents totaling 18,574.442 ha of surface rights for the Detour Lake operation. The patented lands are subject to a yearly annual mining tax payable to the Crown. The 21 year mining leases are subject to annual rental payment to the Crown and applications for renewal are subject to review and consent by the Ministry of Energy, Northern Development and Mines. The surface rights are sufficient for all surface infrastructure and mine operations.

The Detour Lake operation is subject to the royalties listed in the table below. Certain of the claims are subject to a 2% net smelter returns royalty payable to Franco-Nevada Corporation (“**Franco Nevada**”). This royalty is included in the cash flow analysis that supports the mineral reserve estimate for the Detour Lake operation. Other claims are subject to royalties to third-parties but these claims do not fall within the area of the estimated mineral resources and mineral reserves. The Company has certain payments obligations to First Nations groups in the area of the estimated mineral resources and mineral reserves; these payments are included in the economic analysis. The Detour Lake operation is not subject to any other back-in rights payments, agreements or encumbrances.

### **Royalty Summary Table**

<b>Property</b>	<b>NSR Amount</b>	<b>NSR Holder</b>	<b>Buy-out Option</b>
Blocks A through E	2%	Franco-Nevada	none
Mine Property	2%	Franco-Nevada	none
Purchased claims (individual)	2%	Individual prospector	none
Gowest	1%	Franco-Nevada	C\$750,000

Exploration activities require water-taking permits to be obtained to provide the necessary water for exploration drilling activities. To date, all such permits have been granted as required.

There are no known significant factors or risks that might affect access or title to, or the right or ability to perform work on, the property which the Detour Lake operation is subject to. See “Infrastructure, Permitting and Compliance Activities” for permitting and environmental considerations applicable to the Detour Lake operation.

## History

On January 31, 2020, the Company completed the Detour Arrangement and Detour became a wholly-owned subsidiary of the Company. On January 2, 2021, the Company completed a corporate reorganization of its wholly-owned subsidiaries, pursuant to which Detour amalgamated with Old Kirkland Lake Gold to create an amalgamated entity which is also named Kirkland Lake Gold Inc.

Companies who have had project involvement prior to the Company's interest in the Detour Lake operation include Amoco Canada Petroleum Company Ltd. ("**Amoco**"), Campbell Red Lake Mines ("**Campbell**"), Dome Mines Ltd. ("**Dome**"), Placer Dome Inc. ("**Placer Dome**"), Pelangio-Larder Mines Limited, Franco-Nevada Mining Company Limited, Marl Resources Corp., Pelangio Mines Inc. ("**Pelangio**"), Trade Winds Ventures Inc. ("**Trade Winds**"), Goldcorp Canada Ltd. and Detour. Work completed included geological mapping, geochemical surveys (rock chip, grab, channel, trench and soil sampling), airborne geophysical surveys, ground geophysical surveys (Crone electromagnetic, RADEM, magnetometer, induced polarization), core and RC drilling, metallurgical testwork, mineral resource and mineral reserve estimates, mining studies, environmental studies, and geotechnical and hydrological studies. Campbell mined the Campbell open pit from 1983–1987. Placer Dome conducted underground operations from 1987–1999 and briefly restarted open pit mining in 1998. Detour commenced operations at the Detour Lake Main Pit in 2013.

During the initial 17-year mine life from 1987–1999, production is estimated at 1.7 Moz gold from about 14.3 Mt grading 3.82 g/t gold, with mill recovery averaging 93.1%. Production during Detour's ownership period (2013–January 30, 2020) is estimated at 3.6 Moz gold from about 135.5 Mt grading 0.90 g/t gold, with mill recovery averaging 90.1%.

## Geological Setting, Mineralization and Deposit Type

The Detour Lake operation is located within the northwestern portion of the Abitibi Greenstone Belt that consists of east–west-trending synclines of felsic to ultramafic volcanic rocks. Intervening domes are cored by syn-volcanic tonalite and gabbro diorite rocks and alternate with east–west-trending bands of late tectonic turbiditic and conglomeratic sedimentary rocks. The greenstone–granite architecture is partially aligned and disrupted along a linear, east–west-trending belt that defines the position of the Sunday Lake Deformation Zone.

There are two recognized episodes of gold mineralization at the Detour Lake and West Detour deposits. The first episode consists of a wide and generally auriferous sulphide-poor quartz vein stockwork formed in the hanging wall of the Sunday Lake Deformation Zone. The second episode is a stage of gold mineralization overprinting the early auriferous stockwork, principally in the hanging wall of the Sunday Lake Deformation Zone, with a higher sulphide content.

Mineralization surrounding the current Detour Lake resource has been defined over a strike extent of approximately 3.75 km, a width of 1.35 km, and an approximate elevation range of 800 m. Mineralization is hosted within a broad assemblage of mafic volcanic rocks with an overall east–west trend. The bulk of the mineralization within this corridor is concentrated along a highly-strained corridor of a moderate to strong potassic alteration envelope at the contacts between pillowed and massive mafic flows. Gold is associated with quartz–carbonate–pyrite–pyrrhotite ± tourmaline veins and/or disseminated to very local semi-massive sulphides in hydrothermally-altered wall rocks.

The West Detour deposit has a strike extent of 3.1 km, a width of 2.2 km, and an approximate elevation range of 1 km. Generally, the gold zones occur in a variety of structural settings and several rock types including massive to pillowed tholeiitic basalt flows, variably deformed-altered basaltic to peridotitic komatiite units, cherty tuffs, gabbro and deformed felsic to intermediate dykes. Mineralized lenses vary from 5 x 5 m in true width. Gold is associated with pyrite, pyrrhotite, and rarely chalcopyrite.

The Zone 58N deposit has an east–west strike length of 450 m, extends from surface to a depth of 800 m,

and the mineralized system remains open at depth. Gold mineralization in Zone 58N is within the southern portion of a feldspar porphyry intrusion, and hosted by a swarm of plagioclase-phyric tonalitic dykes that intrude mafic rocks. Gold is found within and at the margins of quartz ± tourmaline ± carbonate stockwork-type veins that infill areas of brittle deformation. Visible gold occurs in nearly every drill hole that intersects mineralization and is also present as micro-inclusions within pyrite grains, or intergrown with bismuth-tellurides.

The surface expression of Zone 75 is located 20–50 m south of Zone 58N. The Zone 75 mineralized system has been intersected over an east–west strike length of approximately 650 m, from surface to a depth of 600 m, and the mineralized system remains open at depth. Zone 75 mineralization is localized to the stratigraphic contact of high-magnesian and high-iron tholeiitic mafic units. When in close spatial proximity to Zone 58N, the mineralization within Zone 75 is much stronger and gold grades typically increase significantly. At depth when the lateral distance between Zone 58N and Zone 75 increases to >50 m, mineralization dramatically decreases in terms of both sulphide and gold content.

Deposits identified to date are considered to be examples of orogenic greenstone-hosted hydrothermal lode gold deposits.

Exploration potential remains in the area where mineral resources are estimated with all deposits remaining open at depth. Regionally, geophysical surveys and exploration drill holes have identified a number of gold-bearing structural trends that warrant additional exploration evaluation.

## **Exploration**

Since the completion of the Detour Arrangement, the Company has completed additional exploration drilling, mineral resource and mineral reserve estimates, updated the mining method and mine planning, migrated data to a new Fusion database, expanded or is in the process of constructing selected infrastructure (core storage, accommodations camp, an airfield and aerodrome, onsite assay laboratory, additional mobile maintenance offices and shops) and continued with permitting of the West Detour project.

## **2020 Drilling**

Exploration in 2020 included a total of 95 holes (69,808 meters) of diamond drilling to evaluate areas surrounding the Main Pit, West Pit and 58 North Areas.

The primary focus of the 2020 drilling program was on areas surrounding the Main and West Pits along the Detour Mine Trend (DMT) where the Company is targeting growth in mineral resources and included 84 holes (66,115 meters) representing the first portion of an overall program targeting a minimum of 270,000 meters prior to the end of 2021. Implementation of the 2020 drill program involved a number of key projects in order to complete work in a timely fashion as well as ensure acceleration of work into 2021. A list of some of the key projects completed is as follows:

- Hiring of all necessary manpower and contractors to allow operation of up to 12 drills by early 2021;
- Construction of drill roads and drill pads using mine waste rock to allow access into wet portions of the property;
- An expansion of the Detour Property Exploration office site and the lease of a larger office complex;
- Tree clearing and rock backfill to accommodate the larger site including areas for parking and drill core/sample storage;
- The construction of a new 150' x 60' core logging facility that joined with the existing core cutting building. The existing core logging spacing could only accommodate 4 drills efficiently;
- Preparation of a new laydown area for the drill contractor for their office/supplies and shop area that included hydro hookup off the mine road near the main drilling area;
- Completion of a new drill tender, subsequent contract award and mobilization of 8 surface drills.
- Submission of a water taking permit due to the drilling water requirements for 12 drills;

- Construction of a 1.4 km water distribution system in order to supply up to 650,000 litres of water for winter drilling; and
- Planning for drilling and construction of drill pads on Walter Lake in early 2021.

Due to space limitations in the existing two small core logging buildings, only four surface drills were able to operate prior to the completion of the new logging facility. After completion of the new facility and its connection to the existing sampling building in October, the number of drills was increased to eight.

The key focus for drilling in the Main and West Pit areas was on the Saddle Zone, which is situated between the Main Pit and West Pit location and was highly successful, intersecting broad zones of mineralization with attractive open-pit grades as well as intervals of significantly higher grades at depth. The Saddle Zone is an area that is under-explored, has no current mineral reserves and only limited mineral resources. Limited drilling at the North Pit area, located northwest of the Main Pit, also intersected attractive open-pit grades.

Based on assay results and other observations obtained from the 2020 program, the outlook for the project continues to look encouraging with there being evidence of a broad and continuous corridor of mineralization extending between the West and Main pits and to a depth of up to 820 m below surface. Initial drilling also suggests that mineralization within the corridor is very similar to that found in the West and Main pits and is hosted mainly by broad zones containing variable amounts of quartz and pyrite, which are controlled mainly by east-west trending, moderately north dipping folds and shear structures which plunge at a shallow angle to the west. Given results to date, the potential to identify further extensions to mineralization as well as potential additions to mineral resources and mineral reserves between the Main and West pits through additional drilling is considered positive.

Exploration at the 58 North area was completed mainly in the first quarter of 2020 and included 11 holes (3,693 meters) The 58N area is located approximately 8 km south of the main Detour minesite and along the Lower Detour-Massicotte deformation (LDDZ) corridor. The 58N deposit carries a current mineral resource of 2.9 million tonnes grading 5.8 gpt for 534,000 ounces in the Indicated category and 1.0 million tonnes grading 4.35 gpt for 136,000 ounces in the Inferred category (Detour Lake Operation, Ontario, Canada NI-43101 Technical Report, November 26, 2018). During the year ended December 31, 2020, Kirkland Lake Gold provided three separate press releases pertaining to its 2020 exploration program at Detour Lake. On June 29, 2020, the Company announced the details of 17 drill holes (7,176 m) from three holes (2,520 m) drilled west of the Main Pit in the Saddle Zone area, five holes (1,860 m) drilled at the North Pit area and nine holes (2,796 m) drilled at the 58 North area. On September 9, 2020, the Company announced results from 8 holes (9,171 m) and one wedge hole (1,143 m) drilled in the Saddle Zone area located in an area between the Main Pit and West Pit. On December 23, 2020, the Company announced results from 25 holes (19,523 m) and one wedge hole (1,110 m) also drilled in the Saddle Zone area located between the Main Pit and West Pit locations. Results from the remaining holes are in the process of being logged, sampled and assayed.

### **QA/QC Controls**

The Company has implemented a quality assurance and control (“QA/QC”) program to ensure sampling and analysis of all exploration work is conducted in accordance with best practices. Samples are logged and sampled in a secure facility at the Detour Lake mine site and under supervision of qualified geologists. NQ sized core is predominantly sawn in half with one half of the core prepared for shipment, the other half of core retained for future assay verification. Certified reference material (“CRM”) standards and coarse blank material are inserted every 20 samples. Core samples are shipped directly by courier and tracked via a chain of custody from site to certified off-site analytical laboratories for preparation and assaying.

Kirkland Lake Gold utilizes four accredited external laboratories that are independent of the Company to manage the significant volume of sample submissions. Each lab is certified by the Standards Council of Canada (SCC) which conforms with ASB-RG Mineral Analysis Laboratory for the Accreditation of Mineral

Analysis Testing Laboratories and CAN-P-4E ISO/IEC 17025: General Requirements for the Competence of Testing and Calibration Laboratories.

Sample preparation includes crushing drill core up to 80% passing 2 mm, riffle splitting 500 grams and pulverizing to 95% passing 105 µm followed by both scheduled and specifically requested silica sand cleaning. Gold Analysis involves Fire Assay – Atomic Absorption (AA) technique from a 50-gram pulp sample with grade ranges between 5 to 10,000 ppb. Samples greater than 10,000 ppb are analyzed with a gravimetric finish. Selected high grade samples are also analyzed using the screen metallica procedure.

Contracted laboratories for the Kirkland Lake Gold's Detour Lake project include; ALS Global (sample preparation completed in Timmins, Ontario with pulps sent to Vancouver, BC for analysis), Activation Laboratories (sample preparation and analysis completed in Timmins, Ontario), SGS Laboratories (sample preparation and analysis completed in Cochrane, Ontario) and AGAT Laboratories (sample preparation in Timmins and analysis in Mississauga).

### **Drilling (Prior to 2020)**

Approximately, 8,111 holes (1,690,20133 meters) of drilling is contained in the database prior to 2020 and includes holes to support exploration evaluations, Mineral resource and mineral reserve estimates, mine planning, geotechnical and hydrogeological evaluations, and infrastructure site sterilization (condemnation drilling). Drilling and assaying that supports the mineral resource estimate for the Detour Lake deposit were completed from 1974–2018 by Amoco, Campbell, Dome, Placer Dome, Tradewinds, Pelangio and Detour Gold Drilling and assaying that supports the mineral resource estimate for the Zone 58N deposit was completed by Detour from 2012–2017. Within the immediate area of the mineral resource estimate, there are a total of 387 core drill holes (144,709.5 m).

Drill core is photographed, logged and recoveries are recorded. Surface collar surveys include a mix of measurements from cut grids, and differential global positioning system instruments. The initial position and azimuth of most underground holes was typically determined using measurements from underground survey stations and reference points. Down-hole surveys have used acid tests, and Tropari, Sperry Sun, Flexit SmartTool, Reflex EZ-Shot, Reflex Maxibor II, and Reflex Gyro Sprint-IQ instruments. Depending on the campaign and instrumentation being used, survey data could be collected at 3–75 m intervals downhole.

For surface drilling programs testing the Detour Lake deposit, the true width is estimated to be 65–75% of the drilled length, except for exploration holes drilled to the north where the true width is estimated at 60–65% of the drilled length. Actual true width is dependent of the inclination and direction of the hole when intercepting the mineralized zone. For surface drilling programs testing the West Detour deposit, the true width is estimated to be 65–75% of the drilled length. Actual true width is dependent of the inclination and direction of the hole when intercepting the mineralized zone. For historic underground drilling programs at the Detour Lake and West Detour deposits drill was done in “fans” and true thickness of mineralization is variable from approximately 60–85% of drilled thickness.

Grade control drilling uses RC methods; these drill holes do not support mineral resource estimation. Grade control is conducted at 10 m spacing (north–south) on 20 m sections. Holes are drilled at an azimuth of 180° (due south), at -60° inclination. Lengths of holes are designed to intercept either two or three full benches, thus are typically 28 m or 42 m long, unless adjusted for unusual bench heights. The occasional area can be drilled to 56 m depth to accommodate drill access near old underground workings or other circumstances. All holes locations are surveyed. Any RC hole over three benches has a gyroscopic survey performed for hole deviation.

In the opinion of the authors of the Detour Technical Report, the quantity and quality of the logged geological data, collar, and downhole survey data collected in the exploration and infill drill programs are sufficient to support mineral resource and mineral reserve estimation and mine planning as follows:

- core and RC logging meets industry standards for gold exploration at the time the logging was conducted;
- collar surveys have been performed using industry standard instrumentation at the time the survey was conducted;
- downhole surveys were performed using industry standard instrumentation at the time the survey was conducted;
- recovery data from core drill programs are acceptable; and
- drill orientations are generally appropriate for the mineralization style and the orientation of mineralization for the bulk of the deposit areas.

Drilling has generally been done at regularly-spaced intervals and is considered representative of the deposits. Drilling was not specifically targeted to the high-grade portions of the deposits, rather, a relatively consistent drill spacing was completed.

### **Sample, Analysis and Data Verification (Prior to 2020)**

Core was typically split for sampling, with one half sent for assay and the other half retained as a reference. Sample intervals ranged from 0.3–1.5 m.

A number of laboratories were used over the Detour Lake operation's history. Where known, the laboratories used during the legacy programs included Assayers Limited, in Rouyn, Quebec; the Dome Mine Laboratory in Timmins, Ontario; Swastika Laboratories Ltd, in Swastika, Ontario; the Detour Lake Mine assay laboratory; X-Ral Laboratories in Rouyn, Quebec; Bondar Clegg in Ottawa, Ontario; Chemex Laboratories in Mississauga, Ontario; Chemex Laboratories in Rouyn, Quebec; Accurassay Laboratories in Thunder Bay, Ontario; and Activation Laboratories Ltd in Timmins, Ontario ("**Actlabs**"). Accreditations at the time the work was performed is not known. All laboratories other than the Dome Mine Laboratory and the Detour Lake Mine assay laboratory were independent of the operators at the time. All laboratories were independent of the Company. Trade Winds and Detour Gold used SGS Minerals in Garson, Ontario, SGS Minerals in Don Mills, Ontario, Accurassay in Timmins, Ontario, Accurassay in Thunder Bay, Ontario, ALS Minerals in Sudbury, Ontario ("**ALS Sudbury**"), and ALS Minerals in Vancouver, B.C. ("**ALS Vancouver**"). Where known, the laboratories held ISO:17025 accreditation for selected analytical techniques. The laboratories were independent of Trade Winds and Detour and are independent of the Company. The Company has used ALS Sudbury, ALS Vancouver, and Actlabs. The laboratories hold ISO:17025 accreditation for selected analytical techniques. The laboratories are independent of the Company.

Sample preparation and analysis protocols varied during the legacy programs. Samples were typically crushed, ground or pulverized, and assayed using either fire assay of a one-assay-ton sub-sample, an aqua regia digestion and ketone extraction method, atomic absorption or a pulp and metallics procedure. During the Detour programs, samples were crushed, pulverized, and analyzed using either fire assaying with AAS finish, an inductively-coupled plasma–atomic emission spectroscopy finish, a gravimetric finish, metallic screen procedures, or an inductively-coupled plasma–optical emission spectrometry finish. During the Company's programs, samples were crushed, pulverized, and analyzed using AAS and samples >10 g/t analyzed with a gravimetric finish. Selected high-grade samples are analyzed using a screen metallics procedure.

Grade control samples are analysed at SGS Minerals in Cochrane and ActLabs. The laboratories currently hold ISO17025 accreditation for selected analytical techniques. The laboratories were independent of Detour Gold and are independent of the Company. Grade control samples are crushed, pulverized and assayed using assay with an ICP–OES finish. Sulphur and carbon analysis are done on 14 m composites (equivalent to one bench) using LECO.

Bulk density determinations for the Detour Lake deposit initially used an average derived from the historical mining operations. The Company reviewed available bulk density values, and for the current mineral

resource estimate, a density value was determined for each assigned lithology code by constructing histograms and removing outliers and determining the average for each lithology. Lithologies without a bulk density were assigned an average density of 2.99 t/m<sup>3</sup>. The resource estimate uses an average value of 2.91 t/m<sup>3</sup> for the West Detour deposit, based on 632 determinations. The Zone 58N estimate uses an average value of 2.8 t/m<sup>3</sup>, based on 2,644 measurements.

Quality assurance and quality control (“QA/QC”) in the form of insertion of blanks, standard reference material (standards) and duplicates was not routinely practiced during legacy program submission of samples for analysis. The QA/QC for the legacy programs typically relied on the laboratory’s internal protocols. After 1993, standards, blanks and duplicates were routinely inserted in the sample stream. Review of the available QA/QC program results do not indicate any problems with the analytical programs, and the gold analytical data are acceptable to support mineral resource and mineral reserve estimation.

Sample security was managed by exploration staff from the drilling phase through to core processing and subsequent dispatching by contracted couriers directly to the analytical facilities. Sample collection was systematically monitored from the drill rigs to the core facility and storage area which in turn is security monitored gated on-site preparation facility. Chain-of-custody procedures consist of sample submittal forms to be sent to the laboratory with sample shipments to ensure that all samples are received by the laboratory.

A number of data verification programs for Detour Lake and the West Detour project deposits were carried out by independent consultants and Detour personnel over time. Kirkland Lake Gold personnel re-verified the entire database during migration of the data from the three Access databases used by Detour to the current Fusion database. The applicable author of the Detour Technical Report personally verified the integrity of the database and validity of the collar, survey, assay and lithological coding data. Positive production reconciliation since the start of the mining operations at Detour Lake validates the assumptions of metal content and gold extraction. The applicable author of the Detour Technical Report considers that a reasonable level of verification has been completed and that no material issues have been left unidentified from the programs undertaken. The data are acceptable to be used in mineral resource and mineral reserve estimation.

### **Mineral Processing and Metallurgical Testing**

The Detour Lake process plant was constructed in 2012, started operations in 2013, and has been operating since. The plant design was based on metallurgical testwork completed during pre-feasibility and feasibility studies, conducted from 2009–2010. Most of the metallurgical testing was completed at SGS Lakefield Research Limited in Ontario with follow-up testwork (lead nitrate and oxygen control) carried out on-site by site personnel.

Metallurgical testwork completed as part of the 2009 pre-feasibility study on Detour Lake included mineralogical examination; gravity recovery tests, including gravity recoverable gold tests; cyanide leach tests on gravity tailings; grade variability testing; barren solution recycle testing; cyanide destruction tests; preparation of tailings for chemical and physical characterization and environmental testing; and environmental testwork. During the 2010 Detour Lake feasibility study, tests focused on project optimization, and included evaluation of gold recovery versus grind size, use of oxygen in leach and crushing and grinding studies.

Since those studies, extensive plant testwork has proved the benefit of leaching with high oxygen rates and lead nitrate. Three full grinding circuit surveys were completed by Detour Lake operations personnel and modelled by third-party consultants BBA using JKSimMet to assist with grinding circuit optimizations and characterization. Improvements are planned for the gravity circuit to increase gold recovery (feeding of cyclone underflow to the gravity circuit, operating the intensive leach reactor in leach mode for more time); are planned or underway for the leach circuit to increase gold recovery (addition of a sixth leach tank to the leach trains, improvements in oxygen diffusion, reduced leach densities, and lead nitrate addition); improving grind fineness (ball size optimization, process control improvement, increase ball-mill power; and expectation of reduced hardness of mineralization from Detour West); better cyanide control (limiting copper dissolution through temperature control); reducing carbon-in-pulp solution losses; and minimizing gold-in-

carbon losses.

Work conducted on the Zone 58N area included head assaying, mineralogy, gravity concentration, cyanide leach tests. The mineralization was evaluated to check if the current process plant flowsheet could be used. Based on the results of the Zone 58N metallurgical testing, the existing Detour Lake process plant is capable of processing the Zone 58N mineralization.

Metallurgical recovery forecasts are based on equations developed during the Detour Lake pre-feasibility and feasibility studies, modified with information from ROM operations. As the West Detour deposit has similar mineralogy to that of the Detour Lake deposit, the same recovery assumptions are used for the West Detour mineralization. The metallurgical recovery assumptions used in the 2020 Detour Lake mine LOM plan average 91.9%. Recoveries for Zone 58N are forecast at 98.1%.

The variability of the ore in the Detour Main Pit is related to the talc, copper and sulphur content. The talc zone is mainly located on the southern end of the Main Pit. Copper and sulphur are present throughout the pit in various quantities. High-talc ores are soft and process faster. High-talc ore used to impact recovery in the past and talc ores were limited to 15% of the plant feed. However, the operations have determined that recovery can be maintained with very high lead nitrate dosage rates. Processing of 40% talc ore in 2020 yielded similar recoveries as non-talc ore. Sulphur content can impact recovery, and blending strategies to avoid feeding the plant with ores over 2% sulphur are in place and have worked successfully.

Copper is an element that impact cyanide and sulphur di-oxide consumption. It is managed by blending if too high and controlling slurry temperature to leach feed. To avoid the copper plating on the carbon, a control strategy on the cyanide/copper ratio is in place.

### **Mineral Resource and Mineral Reserve Estimates**

The Detour Lake operation consists of the operating Detour Lake Main Pit and planned open pit operations at West Detour and North Pits. Mineral resources are estimated for the Detour Lake, West Detour and Zone 58N areas. Mineral reserves are estimated for the Detour Lake and West Detour areas. The West Detour estimate is split into the West Detour and North Pit pits

### **Mineral Resource Estimate**

Mineral resources are estimated for the Detour Lake, West Detour, North Pit and Zone 58N areas.

The geological models for Detour Lake, West Detour and Zone 58N are based on 3D wireframes. The geological model for the North Pit is based on interpreted mineralized zone (domain) established using an indicator kriging interpolation of gold grades.

A 3D model of all prior mined areas in the Detour Lake area was created from available plans and sections. Individual models were created for underground access, stopes, and the Campbell open pit. This model was used to deplete the block model.

Compositing was done on 5 m intervals at Detour Lake, and West Detour, 3 m intervals for the North Pit, and 2 m intervals for Zone 58N. Grade capping was applied based on a reconciliation study for Detour Lake, and on examination of probability plots for West Detour, North Pit and Zone 58N. Spatial continuity of the composite grades within each deposit was assessed using variography and correlograms.

The interpolation of the Detour Lake resource model was completed using ordinary kriging (“OK”). An inverse distance weighting to the second power (“ID2”) interpolation, an inverse distance weighting to the third power (“ID3”) interpolation, and nearest neighbour (“NN”) estimates were completed concurrent to the OK estimate for validation purposes. Density was estimated using an ID3 method and used the gold search parameters. The interpolation of the West Detour deposit resource model was completed using OK. The North Pit deposit block model was estimated using OK interpolation method on 3 m capped composite gold

grades. ID2 and NN interpolations were also estimated for validation purposes. Due to the highly erratic distribution of gold grades at Zone 58N, a five-pass interpolation strategy was adopted using a combination of NN and ID3. Models were validated using a combination of visual inspection, global bias checks and swath plots. Results were considered acceptable.

Mineral resource confidence classifications were assigned based on a combination of distance to the nearest drill hole, a minimum number of drill holes, and geological and grade continuity.

The Detour Lake, West Detour and North Pit mineral resource models were combined in a common model. The combined model was adjusted for mining depletions as of year-end 2020. Mineral resources are reported considering a 0.5 g/t gold cut-off grade, assuming open pit mining methods. The Zone 58N deposit estimate assumes that the deposit will be mined using underground mining methods, based on the use of transverse and longitudinal long-hole stopes. The estimate is reported above a cut-off grade of 2.2 g/t gold.

Mineral resources are reported using the 2014 CIM Definition Standards, have an effective date of December 31, 2020 and are reported exclusive of those mineral resources converted to mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Factors that may affect the mineral resource estimates include: metal price and exchange rate assumptions; changes to the assumptions used to generate the estimation domains; changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological and mineralization shape and geological and grade continuity assumptions; changes in the treatment of high-grade gold values; density assignments; changes to geotechnical, mining and metallurgical recovery assumptions; changes to the input and design parameter assumptions that pertain to the assumptions for open pit and underground mining constraining the estimates; and assumptions as to the continued ability to access the site, retain mineral and surface rights titles, maintain environment and other regulatory permits, and maintain the social license to operate.

### **Mineral Reserve Estimate**

Mineral reserves are reported as the diluted ore tonnage and grade scheduled to be fed to the mill over the life of the operation, based on open pit mining methods. The associated production schedule considers an optimized mill and stockpile strategy to maximize discounted cash flows. Measured and indicated mineral resources within the Detour Lake, West Detour and North Pit final pits were converted to proven and probable mineral reserves respectively. Inferred mineral resources captured within the pit shells were sent to waste.

Each deposit was optimized independently to reflect the different bench height planned for that pit. Engineered pit designs were completed using the pit optimization shells as a guide. The resulting pit designs include practical geometry that is required in an operational mine, such as the haul road to access all the benches, recommended pit slopes with geotechnical berms, proper benching configuration and smoothed pit walls.

The cut-off evaluation incorporated considerations of mill and stockpile capacities, mine constraints and economic parameters when defining mill and stockpile cut-off grades over time on a yearly basis. The marginal cut-off grade is 0.27 g/t gold but an elevated cut-off of 0.35 g/t gold is used as a minimum in the cut-off grade optimization process. Mining will use the variable optimized cut-off grade strategy.

Mine dilution is accounted for by the use of mine panels that emulate variable degrees of dilution as a function of the continuity of the mineralization at different cut-off grades. Different panel sizes and dimensions were tested against production reconciliation results for the past four years (2016–2019) at a cut-off grade of 0.5 g/t gold. The average dilution factored in over the LOM represents a 7% increase in tonnage and 6% lower grade.

Mineral reserves are reported using the 2014 CIM Definition Standards and are reported assuming a variable optimized cut-off strategy with a minimum cut-off grade of 0.35 g/t gold.

Factors that may affect the mineral reserve estimates include: changes to the gold price and exchange rate assumptions; changes to pit slope and geotechnical assumptions; changes to operating cost assumptions used in the constraining pit shell; changes to pit designs from those currently envisaged; unforeseen dilution; changes to hydrogeological and pit dewatering assumptions; changes to inputs to capital and operating cost estimates; ability to permit West Detour and North Pit pits and western extent of the ultimate Detour Lake pit; and changes to modifying factor assumptions, including environmental, permitting and social licence to operate.

## Mineral Resource and Mineral Reserve Statements

The mineral reserves and mineral resources (exclusive of mineral reserves) estimates for the Detour Lake Mine Open Pit and Detour Lake Mine Underground, as of December 31, 2020, are presented below.

### Detour Lake (Open Pit Mineral Reserves), Effective Date December 31, 2020

Deposit		Proven			Probable			Proven and Probable		
		Tonnes (Mt)	Grade (g/t)	Contained Ounces (koz)	Tonnes (Mt)	Grade (g/t)	Contained Ounces (koz)	Tonnes (Mt)	Grade (g/t)	Contained Ounces (koz)
Detour Main	Ore $\geq 0.50$ g/t Au	76.3	1.23	3,010	306.7	0.90	8,852	383.0	0.96	11,862
	Ore $< 0.50$ g/t Au	4.5	0.42	60	110.0	0.41	1,449	114.4	0.41	1,510
	<i>Total Main Pit</i>	<i>80.7</i>	<i>1.18</i>	<i>3,071</i>	<i>416.7</i>	<i>0.77</i>	<i>10,301</i>	<i>497.4</i>	<i>0.84</i>	<i>13,372</i>
West Detour	Ore $\geq 0.50$ g/t Au	2.0	0.96	61	56.6	0.94	1,717	58.5	0.95	1,779
	Ore $< 0.50$ g/t Au	1.0	0.40	14	31.1	0.40	402	32.1	0.40	416
	<i>Total West Pit</i>	<i>3.0</i>	<i>0.77</i>	<i>75</i>	<i>87.6</i>	<i>0.75</i>	<i>2,120</i>	<i>90.7</i>	<i>0.75</i>	<i>2,194</i>
North Pit	Ore $\geq 0.50$ g/t Au	—	—	—	5.9	0.95	180	5.9	0.95	180
	Ore $< 0.50$ g/t Au	—	—	—	2.2	0.41	29	2.2	0.41	29
	<i>Total North Pit</i>	—	—	—	<i>8.1</i>	<i>0.80</i>	<i>209</i>	<i>8.1</i>	<i>0.80</i>	<i>209</i>
<b>Total all pits</b>	<b>Ore <math>\geq 0.50</math> g/t Au</b>	<b>78.2</b>	<b>1.22</b>	<b>3,071</b>	<b>369.1</b>	<b>0.91</b>	<b>10,749</b>	<b>447.4</b>	<b>0.96</b>	<b>13,821</b>
	<b>Ore <math>&lt; 0.50</math> g/t Au</b>	<b>5.5</b>	<b>0.42</b>	<b>74</b>	<b>143.2</b>	<b>0.41</b>	<b>1,880</b>	<b>148.7</b>	<b>0.41</b>	<b>1,954</b>
	<b>Total Ore</b>	<b>83.7</b>	<b>1.17</b>	<b>3,145</b>	<b>512.4</b>	<b>0.77</b>	<b>12,630</b>	<b>596.1</b>	<b>0.82</b>	<b>15,775</b>

#### Mineral Reserves Notes:

- The mineral reserves have an effective date of December 31, 2020. The Qualified Person for the estimate is Mr. Andre Leite
- Mineral reserves amenable to open pit mining methods were estimated using a gold price assumption of US\$1,300/oz, an exchange rate of 1.31 C\$/US\$, a 2% net smelter return royalty, refining charge of 0.05%, variable metallurgical recoveries based on a formula, inter-ramp pit slope angles that range from 25.1–56.3°, mining cost of C\$3.42/t mined, incremental haulage costs of C\$0.019/7.25 m bench at Detour Lake and C\$0.15/5 m bench at West Detour and North Pit, process costs of C\$9.75/t milled, general and administrative costs of C\$3.59/t milled, non-mining sustaining capital costs of C\$3.42/t milled, and mining sustaining capital costs of C\$0.35/t mined. The estimate is reported above variable optimized cut-off and a minimum cut-off grade of 0.35 g/t Au.
- Estimates were rounded in accordance with reporting guidelines. Totals may not sum due to rounding.
- Totals may not add up due to rounding.

**Detour Lake Measured and Indicated Mineral Resources (Exclusive of Reserves), Effective Date December 31, 2020**

Deposit	Measured			Indicated			Total Measured and Indicated		
	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
Detour Lake	21.0	1.66	1,121	86.7	1.03	2,870	107.7	1.15	3,991
West Detour	0.3	0.89	7	22.7	0.88	644	22.9	0.88	652
North Pit	—	—	—	0.5	0.90	15	0.5	0.90	15
Zone 58N	—	—	—	2.9	5.80	534	2.9	5.80	534
<b>Total Measured and Indicated</b>	<b>21.3</b>	<b>1.65</b>	<b>1,128</b>	<b>112.8</b>	<b>1.12</b>	<b>4,063</b>	<b>134.1</b>	<b>1.21</b>	<b>5,191</b>

**Mineral Resources Notes:**

1. See notes below.

**Detour Lake Inferred Mineral Resources (Exclusive of Reserves), Effective Date December 31, 2020**

Deposit	Inferred		
	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
Detour Lake	31.8	0.82	844
West Detour	20.5	0.95	626
North Pit	0.0	0.89	0
Zone 58N	1.0	4.35	136
<b>Total Inferred</b>	<b>53.3</b>	<b>0.94</b>	<b>1,606</b>

**Mineral Resources Notes:**

1. The mineral resources have an effective date of December 31, 2020. The Qualified Person for the estimate is Mr. Andre Leite, P.Eng., a Kirkland Lake Gold employee.
2. Mineral resources are reported exclusive of those mineral resources converted to mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Mineral resources are reported using the 2014 CIM Definition Standards.
3. Mineral resources considered amenable to open pit mining methods were estimated using a gold price of US\$1,500/oz, an exchange rate of 1.31 C\$/US\$, variable metallurgical recovery assumptions based on formulae, refining and transport costs of C\$5/oz Au, mining costs of C\$3.42/t mined, process costs of C\$9.75/t milled, tailings management costs of C\$1.50/t milled, general and administrative costs of C\$3.59/t milled, non-mining sustaining capital costs of \$2.44/t milled, mining sustaining capital costs of C\$0.35/t mined, incremental bench cost of \$0.019/t/bench, and variable pit slope angles that range from 25–56°. The estimate is reported above a cut-off grade of 0.5 g/t Au.
4. Mineral resources considered amenable to underground pit mining methods were estimated assuming long-hole and transverse stoping methods. The estimates used a gold price of US\$1,300/oz, metallurgical recovery assumption of 97%, refining and transport costs of C\$5/oz Au, average mining cost of C\$75/t mined, process and tailings costs of C\$9/t milled, general and administrative costs of C\$11.50/t, assumed dilution average of 12%. The estimate is reported above a cut-off grade of 2.2 g/t Au.
5. Estimates have been rounded in accordance with reporting guidelines. Totals may not sum due to rounding.

The Company is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing and political or other relevant factors that would materially affect either the mineral resource estimate or the mineral reserve estimate for Detour Lake other than discussed above.

## Mining Operations

The geotechnical design parameters for Detour Lake Main Pit were reviewed by Golder Associates (“Golder”) in 2020. The assessment accounts for a revised bench height of 14.5 m for the Main Pit implemented in 2020 and for information obtained as temporary and final walls are exposed. The geotechnical parameters for the West Detour and North pit were also provided by Golder. The bench face angles varied from 65-75 degrees and the inter ramp angles varied between 46-56 degrees. A process of ongoing geotechnical monitoring and documentation was implemented at the mine and additional risk mitigation techniques continue to be evaluated and employed as needed.

The mine water management plan is matched to the mine development strategy. It accounts for a pit dewatering system consisting of pump stations, pit sumps and old underground workings (used as additional water storage capacity to manage water inflows). Water management infrastructure includes non-contact water diversion structures and water retention ponds, appropriately sized based on hydrological/hydrogeological modeling and the changes in mining activity and stockpiling over the LOM.

The Detour Lake pit design incorporates a double ramp access for most of the LOM. The final ramp and principal access will be located in the north wall. The West Detour and North Pit were designed using a single ramp access. There are a total of nine phases designed for the LOM: five for the Detour Lake Main Pit, three for the West Detour Pit and one for North Pit.

The design of each one of the three final pits (Detour Lake, West Detour and North Pit) is guided by respective optimized shells.

Both WRSF and stockpile strategies are in agreement with the permitting strategy for the West Detour pit; and respect related environmental constraints. Currently the mine has two WRSFs, one ore stockpile and one overburden/topsoil stockpile for mine reclamation purposes. The mine plan accounts for three additional ore stockpiles, three new WRSFs, and one new overburden/topsoil stockpile.

The Detour Lake mine uses conventional truck-shovel open pit mining. The mine is operated using an owner-operator mining equipment and labour strategy. Excluding the muskeg and overburden/till top layer, all material must be blasted. Pioneering drilling and blasting is required in the overburden/rock contact. Additionally, during winter months free digging of overburden material is not possible due to frost. Mining at West Detour is planned to employ similar conventional mining methods with the initial use of smaller equipment for the pre-stripping phase, especially in overburden. Given the smaller dimensions of the North Pit, a smaller fleet size will be used.

The Detour Lake mine has used a 12 m bench-height since operations commenced. A 6 m sub-bench was used to mine the areas requiring pioneering to improve operational conditions related to boulders and pinnacles of bedrock. Starting in mid-2020, the mine transited to a 14.5 m bench height for areas to be primarily mined by rope shovels and to 7.25 m benches in areas to be mined using hydraulic shovels. The revised mine design has led to improvements in shovel productivities.

The Detour Lake mine operates 24 hours per day year-round on 12 hour shifts for all operational crews. Operational teams work on a 7-day in/7-day out rotation. The mine has implemented a successful hot-seating process for its main production equipment (shovel, trucks and drills). Management/supervisory and support personnel work at site on different schedules.

The mine production schedule forecasts a total 1,725 Mt to be mined over a period of 18 years (2021–2038). A total of 597 Mt of ore is planned to be milled over a period of 22 years (2021–2042); with the last four years of production supported by long-term stockpile reclaim. The optimized and variable cut-off strategy combined with 158 Mt of stockpile capacity, results in an average LOM stripping ratio of 1.90.

The mine life estimate is based on current mineral reserves only. The Company conducts ongoing exploration and drilling with the objective of identifying new mineral resources and converting mineral

resources into additional mineral reserves. If and to the extent that the Company is successful in identifying new mineral reserves, the mine life estimate may be updated.

### **Processing and Recovery Operations**

Design assumptions were based on the metallurgical test work described under “Detour Lake - Mineral Processing and Metallurgical Testing” above.

The process plant is based on a robust metallurgical flowsheet designed for optimum recovery with minimum operating costs. The flowsheet is based upon unit operations that are well proven in industry.

The primary crushing system is a single stage, open circuit, primary gyratory crusher that feeds a secondary cone crusher operated in open circuit. The gold recovery circuit selected was a leach circuit followed by a carbon-in-pulp circuit. The mineralization then proceeds to acid wash, stripping, electrowinning, and refining.

The processing plant was designed to process ore at an average throughput of 55,000 tpd or 20 MT/a, equivalent to milling rates of 2,500 tph with operating time of 92% in a 24 hour day. While operating time has lagged at around 89%, the milling has far exceeded the design rate averaging 2,952 t/hr in 2020 for 23.06 Mt milled. On at least 70 occasions in 2020, a 74 thousand tonne milled per day rate was achieved.

With the upturn of current performance of the processing plant, ongoing optimization efforts and some new capital initiatives, the LOM plan assumes that the plant throughput will increase from 23 Mt in 2020 to 28.0 Mt in 2025 and thereafter. The annual plant throughput of 28.0 Mt is planned to be achieved by increasing the milling rate to 3,436 t/hr and improving operating time to 93%.

Various initiatives have been developed to bring the plant to the 28 Mt throughput rate. Those initiatives are: improved fragmentation; improved primary crusher choke feeding; secondary crusher screens; curved pulp lifters; semi-autogenous grind mill speed increase; permit to go over 75,000 tpd; re-feed system after the secondary crushers; pebble crusher variable speed drives; ore blending; and an increase in plant operating time to 93%.

Energy consumption is not expected to significantly increase as a result of the increased throughput rate. A lot of the initiatives to increase plant throughput are related to increases in grinding efficiency with the same power. The LOM assumes at 28.0 Mt to use 731,000 MW per year, which the plant electrical system is adequately designed to supply.

A decant tower system is used to reclaim and pump water from the TMA back to the process plant to satisfy process water requirements. Reclaim water is piped to the process plant. Depending on the water balance in the TMA, water from the open pit and various collection ditches around the WRSFs can also be directed to the plant. Make-up water for the reagent mixing is sourced from East Lake when required.

Consumables used in the plant include: steel balls; quicklime; sodium cyanide; sulphur di-oxide; sodium metabisulphite; anti-scalant; caustic; copper sulphate; carbon; and ore anti-freeze conditioner.

### **Infrastructure, Permitting and Compliance Activities**

Surface infrastructure to support operations is primarily in place, and includes: three open pits: Detour Lake Main (in operation), West Detour and North Pit (to be constructed); processing facilities: grinding and leaching facilities, along with management and engineering offices, change house, workshop, warehouse, and assay laboratory facilities; mine facilities: management and engineering offices, change house, heavy mining vehicle and light vehicle workshops, wash bay, warehouse, explosives magazine, crusher, mine access gate house, return water pump house; administration buildings: facilities for overall site management, safety inductions, and general and administrative functions; accommodations camp; four

stockpiles; four WRSFs; three TMA cells; water management facilities: stormwater and water storage dams, diversions, culverts; and a landfill facility.

Projects were ongoing through 2020 which included construction of additional camp capacity, construction of an airfield and aerodrome, construction of an onsite assay laboratory, construction of additional mobile maintenance offices and shops, and construction of additional exploration facilities.

Facilities in Cochrane include administration offices, a bus terminal with employee parking lot and security check-ins, four houses and an eight-unit apartment block. The Company has a shared services centre in Timmins that services Detour Lake. SGS Minerals operates a full-service analytical laboratory in Cochrane in support of Detour Lake.

Workers are accommodated in two camps. Accommodations are in the process of being expanded, and will have a total of 1,447 persons. Potable water is obtained from Little Hopper Lake, which is adequate for Detour Lake's current and future needs. Potable water is also obtained from borehole wells close to the camp. Fresh water is pumped from East Lake and is primarily used in the processing plant for reagent mixing but it also used as wash water in the truck wash facility and water make-up for the fire water tank.

The existing 180 km long powerline runs from the processing facility to a tie in at Island Falls, and thence to the Pinard substation. The 230 kilovolt transmission line allows for the distribution of more than 85 MW of power, suitable to service the entire Detour Lake mine operation. In the event of a power failure, there is sufficient emergency power generation for the provision of basic services.

Tailings are stored on surface in an engineered TMA located east of the process plant. The TMA is designed to function as three interconnected cells for tailings and water management. Tailings deposition will generally occur in only one cell at any time with water recycle for process plant use occurring mainly from the active cells, but possibly also during some periods from the inactive deposition cell prior to final closure. In the fourth quarter of 2020, tailings deposition was transitioned from Cell 1 to Cell 2. The construction of a thickened tails or filtered tails is planned with deposition of thickened or filtered tails starting in January 2025. Starting in 2037 tails is to be deposited in the Main Pit (mine operation in the Main pit finishing in 2036). The TMA Cell 2 and Cell 3 facility provides for storage of approximately 454 Mt of tailings solids. Inspection and monitoring is performed during construction and operation of the tailings dams to assess their performance and safety; and to verify that actual conditions are consistent with the design assumptions and intentions. A dam safety review completed in 2020 confirmed that the TMA is performing as designed.

In 2020, a mine water pond with capacity of 3.5 Mm<sup>3</sup> was completed. The mine water pond serves as a central water management facility (e.g., for open pit water and local runoff), and provides additional contingencies for storage and treatment, if needed. Tailings, tailings slurry water, and water reclaimed for the operation of the process plant are managed through the TMA. Water is continuously reclaimed back to the plant site for processing needs using a decant tower with pumping facilities located in the tailings pond. Make-up water for the operation of the process plant is sourced from East Lake when required. When required, water collected from the mine site (that has not been in contact with processed reagents) is discharged to East Creek to prevent the accumulation of water above target operating levels. In 2023, the discharge location will be transferred to a location on Sunday Creek, pending regulatory approval.

The Detour Lake Main Pit and West Detour areas were subject to extensive baseline, environmental monitoring, and technical studies, as per provincial and federal regulatory requirements. The presence of Woodland Caribou is of particular note because it is a Species at Risk, designated as Threatened under the Provincial Endangered Species Act and Federal Species at Risk Act. Potential impacts and mitigation measures are being addressed through the process of an Endangered Species Act Permit, for which approval is anticipated in 2021.

Key areas that are actively monitored include air quality, potential for metal leaching and acid rock drainage, surface and groundwater quality, fisheries and other aquatic resources, and flora and fauna.

Two federal and four provincial licences/authorizations were granted in support of the current mining operations. Subsequent permits, such as Permits to Take Water and Environmental Compliance Approvals, have been approved, renewed, and/or amended as needed in order to support ongoing development and operations.

Prior to development of the West Detour project, a number of provincial and federal environmental approvals, or amendments to existing approvals, will be required. In particular, the West Detour project will be subject to a Class C Environmental Assessment pursuant to the Ontario Environmental Assessment Act. The completion of the West Detour Environmental Study Report process is anticipated for 2021. The environmental approval applications will provide additional detail regarding the engineering design of the proposed West Detour project facilities, potential effects and proposed mitigations measures.

The Company has undertaken ongoing consultation with the public, government regulators and its Indigenous partners regarding the operations, environmental commitments and planned activities. The Company has also established consultation principles to guide interactions within mine permitting, operations, and exploration.

The Company has agreements with First Nations who have treaty and Indigenous rights which they assert within the operations area of the Detour Lake mine. These agreements provide a framework for strengthened collaboration in the development and operations of the mine and outlines tangible benefits for the First Nations, including direct financial support, skills training and employment, opportunities for business development and contracting, and a framework for issues resolution, regulatory permitting and the Company's future financial contributions. In addition, the Company engages with Indigenous communities in connection with permitting applications and ongoing projects.

The Company will be responsible for providing the full amount of the financial assurance for the closure and rehabilitation of the Detour Lake mine and the West Detour project, subject to any required or approved changes to the existing Closure Plan. The total estimated closure cost for the Detour Lake Operations at peak development (i.e., all facilities constructed) is \$147,734,282, exclusive of the West Detour project. Security provided to the Ministry of Energy, Northern Development and Mines to date for the present stage of development totals \$103,718,794. Financial assurance for the West Detour project will be formalized with the filing of Closure Plan Amendment 3, anticipated for the fourth quarter of 2021/the first quarter of 2022.

## **Capital and Operating Costs**

### **Capital Costs**

Capital costs consist largely of mining equipment (replacements, additions, component replacements, capitalized maintenance), construction of tailings cells and dam raises, deferred stripping using a by-phase approach, and processing plant projects to increase plant capacity to 28 Mt/a. Capital costs for the first three years of plan are based on budget cycle estimates with supplier quotes, engineered designs, maintenance strategies, production plans or preliminary estimates. Estimates in later years are based on maintenance strategies, equipment replacement schedules, and long-term sustaining capital estimates are based on recent operating history and current asset value. Tailings cells 2 and 3 are based on physical material movement requirements and recent unit cost history.

The table below presents the 2021 budgeted costs and estimated costs for the LOM, excluding 2021.

### Capital Cost Forecast

Area	2021 Budget (US\$ million)	LOM Estimated Cost excluding 2021 (US\$ million)
Site general and infrastructure	91	618
Mining and processing	81	1,550
Operations expansion	173	1,109
Closure and rehabilitation	1	134
<b>Total</b>	<b>347</b>	<b>3,411</b>

**Note:**

- Numbers have been rounded. The mine life is 18 years, followed by four years of production supported by long-term stockpile reclaim. 2021 reported excluding exploration capital spending.

### Operating Costs

Operating costs are based on actual costs seen during operations at site and are projected through the LOM plan.

All operating costs were evaluated on an annual basis and include all costs related to mining ore and waste from the Detour Lake, West Detour and North pits; processing of ore; all expenses associated with site administration; adjustments for deferred stripping and changes in inventory; costs related to agreements with First Nations; and royalties to Franco Nevada and First Nations. The consumables for the operation are based on current prices or contracts for future years.

Budgeted 2021 and estimated LOM operating costs, excluding 2021, are provided in the table below.

### Operating Cost Forecast

Area	Units	2021 Budget (US\$)	LOM Estimated Cost excluding 2021 (US\$)
Mining	US\$/t mined	2.62	2.65
Processing	US\$/t processed	6.37	6.67
Site general	US\$/t processed	3.50	2.41

**Note:**

- The mine life is 18 years, followed by four years of production supported by long-term stockpile reclaim.

Costs in subsequent years may vary significantly from the 2021 budget and LOM cost estimates as a result of current or future year non-recurring expenditures, changes to input cost and exchange rates, and changes to the Company's current operations and/or production plans. The Company's current LOM plan is based on existing mineral reserves. The Company conducts ongoing exploration and analysis at its operating mines to improve project value, which may change the capital and operating costs in the future.

### Economic Analysis

The Detour Lake operation was valued using a discounted cash flow approach. Estimates were prepared for all the individual elements of cash revenue and cash expenditures for ongoing operations. Cash flows are assumed to occur in the middle of each period.

Operating costs were prepared based on recent operating history and technical assumptions associated with the production profile. Capital costs were prepared based on engineering estimates, vendor quotes, maintenance strategies, or estimated long-term requirements based on current asset value.

The currency used to calculate the cash flow is Canadian dollars. A discount rate of 5% was assumed based on more than seven years of commercial production in a stable low-risk jurisdiction.

The gold price assumption used in the economic analysis is US\$1,500/oz Au at an exchange rate of 1.31 C\$/US\$. Gold price assumptions are determined corporately by Kirkland Lake Gold. The assumption is more conservative than the London Metal Exchange closing prices on December 31, 2020 for spot (US\$1,894/oz Au) and 24-month futures (US\$1,907/oz Au). It is slightly higher than the London Bullion Market Association average monthly precious metals price for the past three years (US\$1,477/oz Au).

The cumulative free cash flow before tax is estimated at C\$11,141 M. The cumulative free cash flow after tax is C\$8,354 M. At a 5% discount rate, the net present value of free cash flows before tax is C\$6,614 M and of free cash flow after tax is C\$4,968 M. Internal rate of return and payback period results are not relevant as the cumulative discounted after-tax free cash flows are never negative. This reflects the fact that the Detour Lake mine is already in operation and that operating cash flows are sufficient to cover sustaining and growth capital requirements.

### **Exploration, Development and Production**

From January 31, 2020 to December 31, 2020, during the period in which the Company became owner of the Detour Lake operation, the mine produced 516,800 ounces of gold, which was approximately 1% lower than lower forecasted limit due to mainly the impact of COVID-19 related restrictions.

Mill throughput for 2020 was 23.0 Mt at an average gold grade of 0.83 g/t with an average gold recovery of 91.3%, compared to mill throughput in 2019 at 22.0 Mt at an average grade of 0.92 g/t Au, with an average recovery of 92.1 %. The Detour Lake operation is budgeted in 2021 to process a total of 24.5 Mt of ore at an average grade of 0.97 g/t Au, and will have an estimated process gold recovery of 92.3 %.

Gold production from the Detour Lake operation in 2021 is expected to be between 680,000 and 720,000 ounces.

The 2021 exploration budget is approximately US\$42 million. The exploration focus is on upgrading inferred mineral resources to indicated mineral resources, extending mineralized zones and finding new mineralized structures to expand the mineral reserves and mineral resources for the operations. More specifically, the 2021 drill program is expected to target areas within the current inferred mineral resource areas at 40 x 40 m spacing in support of a new indicated mineral resource model. The program will also aim to delineate the extension of mineralization at up to 80 to 100m drill spacings. The areas targeted will focus on the Saddle area and further west of and under the Detour West Pit. Locally, extensions of mineralization of the North pit in these same areas will be tested. The area being targeted for the Pit expansion program focuses on a strike length of 2.9 kms between sections 14900 E to 17820 E and will test mineralization up to 900m below surface. The wider spaced program extending mineralization beyond current inferred mineral resources further west of the targeted pit to 12600 E.

Ultimately, this program could include up to 270,000 metres of drilling >5 km strike length along the Sunday Lake Deformation Zone and is expected to be completed by the end of 2021

### **The Macassa Mine**

The scientific and technical information included in the below summary has been derived, in part, from, and in some instances are extracts from, the amended and restated technical report entitled "Macassa Property, Ontario, Canada Updated NI 43-101 Technical Report" (the "**Macassa Technical Report**") dated effective December 31, 2018 and prepared by Mariana Pinheiro Harvey, P. Eng., Robert Glover, P. Geo., William Tai, P. Eng. and Ben Harwood, P. Geo., each of whom is a "qualified person" pursuant to NI 43-101. All defined terms used in the following summary have the meanings ascribed to them in the Macassa Technical Report. The below summary is subject to all the assumptions, qualifications and procedures set out in the Macassa Technical Report. The Macassa Technical Report was prepared in accordance with NI 43-101.

For full technical details of the report, reference should be made to the complete text of the Macassa Technical Report, which has been filed with the applicable regulatory authorities and is available under the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov). The summary set forth below is qualified in its entirety with reference to the full text of the Macassa Technical Report. The authors of the Macassa Technical Report, with the exception of Mr. Robert Glover, P. Geo. (who is no longer an employee of the Company), have reviewed and approved the scientific and technical disclosure contained in this Annual Information Form related to the Macassa Mine, other than the information set forth under the heading "Material Properties – The Macassa Mine – Mineral Resource and Mineral Reserve Estimates". See "Interest of Experts".

### **Project Description, Location and Access**

The Macassa Mine is located in the Municipality of Kirkland Lake, within Teck Township, District of Timiskaming, Ontario, Canada, approximately 600 km north of Toronto. The Macassa Mine is at the west end of the community of Kirkland Lake, which has approximately 8,000 inhabitants. Kirkland Lake has been a mining community since the Tough-Oakes Burnside Mine (later called the Toburn) started in 1914 and, as a result, an experienced mining work force, as well as mining services, equipment and infrastructure are readily available. The Macassa Mine is adjacent to Highway 66 just east of Highway 11. The area is serviced by railway and bus. Although there is a small airport in Kirkland Lake there are no scheduled commercial flights from southern Ontario.

Kirkland Lake Gold holds title to 300 mining claims in Teck and Lebel Townships that cover approximately 3,724 ha. There are 157 patented claims, 11 crown leases and 132 occupational cell claims made up of 67 single cell mining claims and 65 boundary mining claims. All of the claims are located in eastern Teck Township and western Lebel Township. They cover the properties of the Macassa Mine including the Tegren property at the west end of the mine strip. To the east of the Macassa Mine, the properties cover the past producing mines of Kirkland Minerals, Tech-Hughes, Lake Shore and Wright-Hargreaves. Of note, the Lebel claims are not contiguous with the main property.

There are 91 patented claims covering approximately 869 ha that include mineral rights and surface rights. There are 66 patented claims covering approximately 869 ha that hold the mineral rights only. These claims are surveyed and do not require assessment work to be done each year. There are 10 crown leases covering approximately 338 ha that hold the mining rights only, and 1 crown lease holding both mining and surface rights that cover approximately 11 ha. These leases are surveyed and do not require assessment work each year. Taxes have to be paid on both the patented claims and the crown leases. In addition, there are 25 patented claims that hold only the surface rights and taxes are paid on them. There are 132 occupational cell claims, which are not surveyed and require minimum assessment work to be completed each year. In the second and all subsequent years, a minimum of \$400 of assessment work per single cell mining claim and \$200 of assessment work per year for boundary mining claims to be reported until a lease is applied for. The work does not have to be done on each claim, it can be spread over contiguous claims and excess work in a year can be used for later years. Some claims will require the assessment work between 2023 and 2025. There are enough excess work credits to keep the claims in good standing for approximately another 10 years.

Many of the claims have royalties due to the previous owners. These royalties are usually based on production or the NSR from the sale of the metal production. They apply to one or more claims and vary depending on the agreement reached when purchasing the claims. On October 31, 2013, the Company and Franco-Nevada Corporation ("**Franco-Nevada**") completed a royalty transaction. Franco-Nevada paid US\$50 million for a 2.5% NSR on the production from all of Kirkland Lake Gold's properties. This royalty is in addition to any existing royalties. Kirkland Lake Gold bought back 1% of the NSR at the end of 2016 for US\$36 million. The obligation to Franco-Nevada currently stands at 1.5% NSR. Kirkland Lake Gold has also entered into a 0.5% NSR royalty agreement with certain First Nation communities that are part of an impact benefit agreement.

All environmental permits and approvals for the Macassa Mine are in good standing with the appropriate regulatory bodies. Amendments are performed in compliance with appropriate legislation. In the opinion of

the authors of the Macassa Technical Report, there are no significant factors or risks that may affect access, title or the right or ability of the Company to perform work on the Macassa property.

## History

The Kirkland Lake mining camp has been a prolific gold producer since mining started in 1914. The Macassa Mine and the four former producers that the Company now owns have produced approximately 23 million ounces of gold since 1917. The production from these five mines accounts for about 90% of the total camp production.

The Macassa Mine started in 1933. The first shaft was sunk in the Main Break zone in the late 1920's to a depth of 152m; however, sufficient gold was not located, and operations were halted. In 1931, the Macassa property was entered via underground access at the east end of the property from the adjacent Kirkland Minerals Mine from the 2475 Level. This entry was successful in finding gold and in October 1933 the first mill on the property began processing the ore at a rate of 181 short tons per day ("**stpd**"). The milling rate was increased to 386 stpd in 1949 and to 476 stpd in 1956. In August 1988, a new mill was built that could process up to 544 stpd of ore and 680 stpd of tailings (reclaimed). By 1996, modifications had increased mill capacity to 816 stpd of ore and 907 stpd of tailings. When mining was suspended in 1999, mill capacity was near 1,361 stpd of ore.

Starting in 1988 and until October 1999, the tailings from the Lake Shore Mine were processed at the Macassa Mine. These tailings were recovered by either dry mining or by dredging.

Operations were suspended in 1999 due to the declining price of gold, with the workings allowed to flood in 2000.

Macassa Mines Ltd. was incorporated in 1926 and evolved through a succession of mergers to become Lac Minerals Ltd. ("**Lac Minerals**") in 1982. The merger consolidated the properties of the Little Long Lac group into one entity and the Macassa Mine and the other Kirkland Lake properties were included. Lac Minerals was acquired by Barrick Gold Corporation ("**Barrick**") in August 1994 and Barrick offered a number of Lac Minerals' mineral properties for sale. After a short period of operation by Barrick the property was sold to Kinross Gold Corporation ("**Kinross**") in May 1995. Foxpoint Resources ("**Foxpoint**") purchased the Kirkland Lake properties from Kinross in December 2001 for C\$5 million and the assumption of C\$2 million in reclamation bond obligations related to the closure plan for the properties. Foxpoint changed its name to Kirkland Lake Gold Inc. in October 2002. Following the business combination of Old Kirkland Lake Gold with Newmarket Gold Inc. in 2016, the Company changed its name to Kirkland Lake Gold Ltd.

Upon purchasing the assets in 2001, initial exploration efforts concentrated on surface drilling on the former Wright Hargreaves, Lakeshore, Teck Hughes and Kirkland Minerals properties. As the Macassa #3 Shaft was de-watered, underground exploration at Macassa was phased in, beginning in 2002. This culminated in the discovery of the South Mine Complex ("**SMC**") in 2005. From that point to 2010, all exploration drilling was underground at the Macassa Mine. In 2010, surface exploration programs were re-implemented in conjunction with underground exploration at Macassa and continued through 2017. Exploration drilling programs in 2018 were focused underground at Macassa while a camp-wide initiative to compile and interpret current and historical data was being carried out to aid in the generation of regional exploration targets. Underground development at Macassa to facilitate exploration includes drifting and drill bay excavations on various levels. A surface drilling program was reinitiated in late 2019 focusing on targets associated with the Amalgamated Break. The focus of the 2020 exploration program was to extend and further define the SMC both along strike and dip as well as targeting unexplored areas of the Amalgamated Break and the Main Break at depth east of #4 Shaft. Surface drilling also continued in 2020 focused on drilling targets associated with the Amalgamated Break and '04/Main Break.

From 1933 to 2020, Macassa produced approximately 5.58 million ounces of gold from 12.4 million short tons of ore at an average head grade of 0.459 opt.

## **Geological Setting, Mineralization and Deposit Type**

The Kirkland Lake mining camp is located in the west portion of the Archean Abitibi greenstone belt of the Abitibi Sub-province that forms part of the Superior Province in the Precambrian Shield. In the Kirkland Lake area, the Abitibi Sub-province is composed of komatiitic, tholeiitic and calc-alkaline volcanic rocks, turbidite-dominated sedimentary lithologies, locally distributed alkaline metavolcanics rocks and associated fluvial sedimentary formations. These successions have been intruded by tonalite, trondhjemite and granodiorite batholiths.

The Macassa deposit is hosted within the Timiskaming Group of rocks, which is approximately 3.2 km wide and stretches from Kenogami Lake (Ontario) to the Quebec border. In the Kirkland Lake area, host rocks are predominantly conglomerates and sandstones, trachytic lava flows and pyroclastic tuffs trending N65°E and dipping steeply to the south in the Kirkland Lake area. Immediately east of Kirkland Lake, the formations are warped to an east-southeast direction, then return to an east-northeast direction at Larder Lake, and continue this way to the Quebec border.

Gold mineralization occurs preferentially in the syenites. The Kirkland Lake-Larder Lake Break, and its associated splay faults and fracture system, form a complex, major structural feature that can be traced from Matachewan (west of Kirkland Lake) to Louvicourt (Quebec). It passes through, or near, current, and historical mining areas, such as: Larder Lake, Rouyn-Noranda, Cadillac, Malartic, Val d'Or and Louvicourt.

The Macassa Mine is hosted within a fault system located north of the main Kirkland Lake-Larder Lake Break, as individual fracture filled quartz veins from several centimetres to a few metres in thickness. Historical workings at Macassa indicate that gold was often associated with 1% to 3% pyrite and, sometimes, molybdenite or tellurides. Silver is found amalgamated with the gold and in tellurides. Pyrite and silicification does not always guarantee the presence of gold, but higher grade ore is almost always accompanied by increased percentages of pyrite and silica.

The Kirkland Lake Gold deposit occurs in, and peripheral to a composite, multi-phase syenite stock that intrudes east-northeast trending clastic sedimentary rocks and alkaline tuff of the Timiskaming assemblage. Gold mineralization is associated with the Kirkland Lake Fault System, a probable early syn-metamorphic, northeast-trending, and steeply southeast dipping reverse fault network that includes the '04, Main, North, and South breaks, and which is localized along the northeast-trending syenite complex hosting the deposit. Gold mineralization in the SMC area occurs in a complex interconnected network of narrow, east to northeast trending, moderate southeast to south dipping mineralized shear zones and auriferous alteration.

## **Exploration**

Kirkland Lake Gold has carried out extensive surface and underground exploration programs throughout their holdings in the Kirkland Lake Area.

Exploration in 2020 continued to be largely focused on diamond drilling from underground platforms to both extend the current SMC and Amalgamated Break resources as well as to replace those ounces mined through upgrading of current Inferred Resources. Up to two drills were employed on surface to test previously unexplored areas of the Amalgamated and '04/Main Breaks and to target potential extension of the near surface resources surrounding the Amalgamated Break.

A total of 1,436m of underground exploration development was completed in 2020 with the main focus on advancing the 5300 level both east and west and the 5807 decline to the east to provide platforms for further exploration of the SMC, Amalgamated Break and Main Break zones.

In 2020, a number of process and data collection initiatives were also put in place to enhance future exploration efforts. This included redesigning the workflow in the core logging facility to improve safety and efficiency. There was also a focus on more robust data collection from the diamond drill core. An initiative was introduced to ensure and verify accurate collar locations of both current and historic drill holes, where

possible, through an ongoing coordinated effort between the Exploration and Engineering Departments. Higher resolution photography was implemented to allow for collection of better quality images of the drill core for future reference. A geochemical data collection program was initiated utilizing a handheld XRF on laboratory pulp material from assayed drill core to build a geochemical database to be used to enhance the camp-wide exploration model. The collection of specific gravity data from selected drill core samples was also added to the standard core logging process. Structural measurements from oriented core were also collected on a campaign basis for selected drill programs. Plans to engage a Post-Doctoral Embedded Researcher to complete a camp-wide structural, lithologic and geochemical ore control model was put on hold largely due to the COVID-19 pandemic with plans to reinstate in 2021.

Exploration efforts in 2021 will again be focused largely on diamond drilling from underground platforms on the 3400, 5300, 5600, 5700 and 5800 levels. Key to the success of the exploration program is the advancement of underground development to support the drilling efforts. A total of 2,294m of exploration development is planned on the 3400, 5150, 5300, 5700 and 5800 levels. This development will provide diamond drilling platforms for 2021 as well as future years. A new exploration drilling program in the Near Surface Ramp will be focused on exploring previously untested areas of the '04 Break as well as potential extensions of the near surface resource that are better accessed from underground platforms. Surface exploration plans in 2021 utilize one diamond drill to explore targets associated with the near surface resource and deeper, more regional, targets including the '04 Break west of the Amikougami Cross-fault.

The 2021 plan includes reinstating the Post-Doctoral Embedded Research program through partnership with MERC and Laurentian University. A high-resolution core scanning trial has been budgeted with Enersoft Inc. to collect high-resolution imagery, XRF, RQD and hyperspectral data from diamond drill core with the aim of finding specific trends and geochemical/structural controls on gold deposition. The Exploration team continues to investigate and analyze new techniques and technologies on an ongoing basis.

## **Drilling**

Kirkland Lake Gold contracts out all diamond drilling on surface and underground. The diamond drilling provides whole core recovery, generally NQ diameter for surface drilling and a combination of AQ, BQ and NQ diameter for underground drilling programs. AQ diameter core is utilized in definition drilling only. The core is boxed by the contractor and transported to the shaft station by the drill contractor or Macassa personnel and then to the Macassa core logging facility for logging and sampling.

In 2020, a total of 248,654 metres of underground exploration diamond drilling was budgeted. The programs were primarily designed to test the east and west extension of the SMC as well as the SMC at depth with additional targets on the '04/Main and Amalgamated Breaks. Surface exploration plans in 2020 included 21,946m of diamond drilling testing Amalgamated Break and '04/Main Break targets. Production definition programs included 9,000m of planned diamond drilling targeting near term mining areas in the SMC and '04 Break.

At December 31, 2020, a total of 120,530 metres of underground exploration drilling had been completed, using up to nine drills in platforms on the 5300, 5600 and 5700 levels. Of the 120,530 total underground metres for FY 2020, 44,087 metres were drilled to test the extents of the East, West and Lower SMC, with an additional 18,997 metres being drilled to test the Amalgamated Break. In addition, 1,167 metres of drilling were completed from the 5300 Level to test the Main Break on the former Kirkland Minerals property 300 metres below the deepest mine level and proximal to the location of the #4 shaft. Infill drilling consisted of 56,279 metres of drilling focused on upgrading resources within the SMC and Lower SMC.

On April 22, 2020, the Company announced encouraging drill results at Macassa, which expanded high-grade mineralization to the east of the SMC by an additional 75 metres from existing mineral resources. In addition, the Company announced that it had identified a new corridor of high-grade mineralization 700 metres long and 300 metres high located at depth along the historic Main Break on the Kirkland Minerals property. The corridor is located in close proximity to the new #4 shaft (currently being developed) and also

to the planned location of the new exploration drift being developed east off the 5700 Level. Included in this corridor is an intersection of 141.3 g/t over 2.4 metres that is located within 650 metres of the #4 shaft and is 50 metres further east from previous drilling and 300 metres below the deepest level off the Kirkland Minerals shaft. The identification of the new corridor of high-grade mineralization highlights the significant exploration potential that continues to exist along the Main Break, which accounts for most of the 25 million ounces of historic production in the Kirkland Lake gold camp.

On October 19, 2020, The Company announced the intersection of exceptional gold grades at Macassa outside of existing mineral resources near the location where the dip of the SMC approaches the contact with mineralized zones stacked vertically along the Amalgamated Break. This area is considered highly prospective as it involves two separate areas of gold mineralization effectively coming together. The results also continued to expand the mineralization at depth in the Lower SMC and identified new areas of high-grade mineralization along the Amalgamated Break, further increasing the Company's confidence that new mineral reserves may be added by drilling along the Break through the Kirkland Lake camp.

In addition, the Company completed 16,356 metres of drilling from surface utilizing up to two drills targeting both shallow and deep regional targets associated with the Amalgamated Break as well as shallow targets associated with the '04/Main Break. Of the total 16,356 metres, 844 metres were drilled to target deep regional areas of the Amalgamated Break, while 7,151 metres were completed to target areas proximal to the current near surface mineral resource associated with the Amalgamated Break and 8,361 metres were completed to target the '04/Main Break.

The 2021 Exploration budget is approximately US\$30.1 million and includes 251,001 metres of diamond drilling utilizing eleven diamond drills between underground and surface as well as 2,294 km of underground exploration development. Of the total drill metres, 208,070m are dedicated to underground exploration from #3 shaft utilizing nine diamond drills in platforms on the 3400, 5300, 5600, 5700 and 5800 levels. These programs are designed to explore for extensions of the SMC and Amalgamated Break zones both along strike and dip, upgrading of current Inferred Resource to Indicated Resources in the SMC as well as exploring new areas of the '04/Main Break and Amalgamated Break trends. Underground development on the 3400, 5150, 5300, 5700 and 5800 levels will be key to the advancement of these drill programs. One drill will be dedicated to the Near Surface Ramp with plans to drill 24,186m targeting previously unexplored areas of the '04 Break and possible extensions of the Near Surface Resource. In addition, 18,745 metres of diamond drill is planned from surface utilizing one drill to explore targets associated with the near surface resource and deeper, more regional, targets including the '04 Break west of the Amikougami Cross-fault.

Drillhole collar locations are digitally surveyed and downhole surveys are taken at regular intervals using north seeking gyro or magnetic north instruments to track hole deviation. There are minimal variations to the movement of the drillhole trace, but factors such as rock quality and fabric may affect the direction.

Underground drillholes are planned with an expected target depth in mind. After the target is reached, the drillhole planner also adds an extra buffer zone to increase the confidence in intercepting the zone. When the end of the hole depth is reached, the drilling contractor ends the hole and moves on to the next usually without confirmation from the Geology department. On surface, drillholes are typically confirmed by the geologist before stopping to commence a new hole.

## **Sample, Analysis and Data Verification**

### Sampling Methods

Diamond drill core samples, chip samples and muck samples are all used at Macassa for grade control. Only the core samples and the chip samples are used for resource determination. Diamond drilling is used to explore the extensions of the zones, to find new zones from underground and to provide sample data between the mine levels for resource determinations. The recovered drill core is logged and sampled by trained personnel employed by the Company in Macassa's facility at the mine site. The core is marked for sampling by the logger in intervals ranging from 0.3 metres to 1.0 metre in length and may be selected for

whole or half core sampling depending on the program requirements. Where samples are selected for whole core sampling, the entire core in each sample interval along with the sample tag are bagged and sent to the laboratory for assay. Where half core sampling is required, the intervals selected for sampling are tagged and cut in half lengthwise using a diamond saw, by a designated core splitter employed by the Company. One half of the split core is retained in the core box and stored in a designated area on site for further consideration. The other half is placed in properly marked sample bags with the identifying tag for shipment to an outside assaying facility. For all definition core, the intervals selected for sampling are whole bagged and sent to either the Macassa laboratory or an outside assaying facility. The diamond drill hole collars are surveyed for location and downhole surveys are taken using by north-seeking gyros or other magnetic north seeking instruments to track deviation.

The chip samples are obtained underground by a geologist or by a trained sampler. Each new exposure of the zones on the walls or face is sampled in all of the workings. Sample intervals are marked across the face and walls in channels recording the length, rock type and features of the sample. The sample intervals are set so that zones of greatest geological homogeneity are grouped within the sample boundary, i.e. ore zones, waste zones, structural zones, contacts and lithological boundaries are all fairly represented. The sample length for chips samples range between 0.3m and 1.0m in length. The samples are tagged and placed in appropriately marked bags and transported to the Macassa laboratory. The samples are marked and located using the survey markers for control. After the ore is blasted, the mining crew and occasionally the mine geologists will obtain muck samples. It is a practice at Macassa Mine to take one random grab sample from the muck for every 10 short tons of muck (ore or potential ore). Assay values used for grade control and reconciliation purposed are assigned to both cut and fill and long holes stope ore based on the miner mucks assay grades. Face chips taken from cut and fill stope are used for mining control and modelling purposes. All chip and muck samples are tagged and placed in appropriately marked sample bags and then transported to the Macassa laboratory. At the lab, they are reduced in size by riffing before being treated by the standard assay procedures.

#### Macassa Assay Method

The Macassa Mine has a non-independent assay laboratory associated with the milling complex. This laboratory assays all of the mill samples, bullion and mine samples (which include chips, mucks and definition drill core). The exploration samples from the drilling programs are sent to the Swastika Laboratory in Swastika, Ontario for analysis.

At the Macassa laboratory, the prepping procedure for samples is as follows:

- Sample is crushed to 85% passing 10 mesh, sent down a conveyor and into a rotary splitter.
- 2- 200g sample is kept for core, 1 – 200g sample is kept for all other mine samples; sample is pulverized with 85% passing 200 mesh screens;
- The crusher is cleaned by compressed air after each sample. They are cleaned out by granite after each group, after a high grade sample and after each sample when running double sided core.
- The pulverizer is cleaned by compressed air after each sample.
- Silica sand is pulverized after each group, after each high grade and after each double sided core sample.

The Macassa laboratory follows industry standard protocols for sample preparation and assaying. Normal fire assay procedures are employed, using 1 assay ton for core or ½ assay ton for the other mine samples.

Swastika Laboratories, an independent laboratory, is accredited to ISO/IEC 17025:2005 by Canadian Association for Laboratory Accreditation Inc. Their prepping procedure for samples is as follows:

- Drying of samples is done at 80°C in a forced air circulation system.
- Sample is dry crushed with >80% passing 10 mesh (1700 µm) using low chrome steel jaw plates.

- Riffle split to a 300g sample.
- Pulverized with >90% passing 150 mesh (107 µm) screens using low chrome steel bowl sets.
- The pulverizer and crusher are cleaned by compressed air after each sample.
- Waste core is run through the crusher after every high grade sample.
- Silica sand is pulverized after every high grade sample.
- Au is analyzed by lead fusion fire assay followed by Microwave Plasma-Atomic Emission Spectrometer (“MP-AES”) finish on 29.17g sample. Au assays > 8.57 g/t are also analyzed by lead fusion fire assay with gravimetric finish performed on 29.17g sample.

In the opinion of the authors of the Macassa Technical Report, the procedures, policies and protocols for the sampling, sample preparation, analytical/assaying techniques and security systems are proper and adequate at the Macassa Mine.

Assay results are reported to the database analyst who verifies the data ensuring all quality control protocols are in compliance with expectations before entering the data into the database.

#### Quality Assurance and Quality Control

Kirkland Lake Gold engages in industry standard practices to re-test mineralized pulps at a second commercial lab for a check on the quality of the primary assay results. Approximately 5% of the mineralized exploration samples that go directly to a commercial lab are sent to another commercial lab for verification.

Samples were selected from the 2020 drilling campaign by considering pulps that grade above 3.4 g/t. Check assays were chosen from both Macassa laboratory and Swastika Laboratories used during the 2020 drill program and were sent to either Swastika Laboratories or Bureau Veritas (BV) in Timmins, Ontario. Ideally, values returned by the umpire laboratory would be equivalent to the primary laboratory. The check assay duplicates show adequate accuracy for the labs used in 2020. Of the 697 Swastika Laboratories samples sent to BV, 85% of the pairs reporting within 25% of each other. Of the 631 Macassa laboratory samples sent to Swastika, 82% of the pairs reporting within 25% of each other. In order to reduce potential selection bias sample selection on grade, for 2021, the Company will be selecting check assays by grouping samples into grade ranges on a monthly basis and selecting 5% randomly from each group.

CRMs are inserted into the sample stream to measure the trueness or accuracy of the analytical method used by the laboratory.

Blank material is used to monitor contamination caused when sample preparation equipment is not cleaned properly after a mineralized sample. Macassa blanks consists of drill core of matching size composed of unmineralized basic syenite from previously drilled holes in the area. One blank material is inserted after a sample with the potential for moderate to high grade gold. Blank materials inserted into the sample stream did not suggest any contamination during sample preparation or analyses.

Review of the 2020 QA/QC results from the analytical programs has been completed and Kirkland Lake Gold has concluded that the data is of sufficient quality to support mineral resource and mineral reserve estimation.

#### Data Verification

Drillhole data is verified by professional geologists and consists of a wide variety of checks based upon the survey and pick-up of drillhole collars, downhole surveys using north seeking gyro tools during the drilling of the holes. The drillhole trace is continually monitored by the geologists to ensure that the hole remains on track to intercept the target.

Drillhole data is checked by the database analyst and the senior resource geologist prior to generating the mineral resource estimate. Errors or suspect data are checked and corrected, or else excluded from the mineral resource estimate. A list of excluded holes is kept on file and includes reasons for exclusion and whether specific mineralized zones or the entire hole should be excluded.

In the opinion of the authors of the Macassa Technical Report, the procedures, policies and protocols for data verification are proper and appropriate at the Macassa Mine. The sampling, handling and assaying methods used at Macassa are consistent with good exploration and operational practices.

After review in 2020, Kirkland Lake Gold has concluded that the procedures, policies and protocols for data verification are proper and appropriate at the Macassa Mine. The sampling, handling and assaying methods used at Macassa are consistent with good exploration and operational practices.

### Mineral Processing and Metallurgical Testing

It should be noted that the apparent increased telluride content that was observed in the SMC zones indicated that modifications to the processing may be required to keep the high gold recovery that has traditionally been experienced at Macassa; to that effect, cyanidation is taking place at the grinding stage. Assumptions used for mill recovery are based on a grade-recovery curve that has been developed over the years; this grade-recovery curve is updated yearly.

In the opinion of the authors of the Macassa Technical Report, there are no processing factors or deleterious elements that could have a significant effect on potential economic extraction.

### Mineral Resource and Mineral Reserve Estimates

The updated mineral reserves and mineral resources (exclusive of mineral reserves) estimates for the Macassa Mine and Macassa Near Surface, as of December 31, 2020, are presented below.

#### ***Macassa Mineral Reserves and Mineral Resources (Exclusive of Reserves), Effective as at December 31, 2020***

Macassa	December 31, 2020		
	Tonnes (000's)	Grade (g/t)	Gold Ounces (000's)
<b><i>Mineral Reserves</i></b>			
Proven	235	15.9	120
Probable	3,297	20.4	2,162
<b>Proven + Probable</b>	<b>3,532</b>	<b>20.1</b>	<b>2,282</b>
<b><i>Mineral Resources</i></b>	<b>Exclusive of Mineral Reserves</b>		
Measured	295	15.8	150
Indicated	1,505	12.8	619
<b>Measured + Indicated</b>	<b>1,800</b>	<b>13.3</b>	<b>769</b>
<b>Inferred</b>	<b>1,349</b>	<b>17.0</b>	<b>737</b>

**Macassa Near Surface Mineral Reserves and Mineral Resources (Exclusive of Reserves), Effective as at December 31, 2020**

Macassa Near Surface	December 31, 2020		
	Tonnes (000's)	Grade (g/t)	Gold Ounces (000's)
<b>Mineral Reserves</b>			
Proven	-	-	-
Probable	308	8.7	86
<b>Proven + Probable</b>	<b>308</b>	<b>8.7</b>	<b>86</b>
<b>Mineral Resources</b>	<b>Exclusive of Mineral Reserves</b>		
Measured	-	-	-
Indicated	117	6.1	23
<b>Measured + Indicated</b>	<b>117</b>	<b>6.1</b>	<b>23</b>
Inferred	96	8.6	26

**Mineral Reserves Notes:**

1. CIM Standards (2014) were followed in the estimation of mineral reserves.
2. Mineral reserves were estimated using a long-term gold price of US\$1,300/oz (C\$1,700/oz).
3. Cut-off grades were calculated for each stope and included the costs of: mining, milling, general and administration, royalties and capital expenditures and other modifying factors (e.g. dilution, mining extraction, mill recovery).
4. Dilution estimates vary by mining methods and ranges from 15% to 33%.
5. Extraction estimate is 90%.
6. Mineral reserves estimates were prepared under the supervision of N.Vaz, P. Eng, Chief Operating Officer of the Company, who is a qualified person as defined under NI 43-101.
7. Totals may not add up due to rounding.

**Mineral Resource Notes:**

1. CIM Standards (2014) were followed in the estimation of mineral resources.
2. Mineral resources are estimated using a gold price of US\$1,500/oz (C\$1,920/oz).
3. Mineral resources are reported exclusive of mineral reserves.
4. Mineral resources were estimated at the following cut-off grades: Macassa '04/Main Break: 8.6 g/t Au; Macassa Near Surface: 3.4 g/t Au; and Macassa SMC: 5.1 g/t Au.
5. Mineral resource estimates were prepared under the supervision of Eric Kallio, P. Geo. Senior Vice President, Exploration of the Company, who is a qualified person as defined under NI 43-101.
6. Totals may not add up due to rounding.
7. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

The Company is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing and political or other relevant factors that would materially affect either the mineral resource estimate or the mineral reserve estimate for the Macassa Mine.

The mineral reserve estimate is based on the Macassa Mine's measured and indicated mineral resources. For these, mining plans were developed, in which specific mining methods were applied and required development was planned.

To develop the mineral reserves, the economic feasibility of each stope was determined, inclusive of all mining, milling, general administration, royalties and sustaining capital expenditures. Appropriate modifying factors were applied, such as dilution and recovery (mining extraction), based on the mining method. The economic viability of the measured and indicated resources converted into mineral reserves was determined by Macassa Mine's engineering department. Areas of uncertainty that may impact the mineral reserve estimate includes the price of gold and exchange rate assumptions used, geological complexity and unforeseen geomechanical constraints.

## **Mining Operations**

There are currently three active mining areas in Macassa Mine: Main Break (MB), Lower North (LN) and New South (NS). The areas LN and NS are both part of the SMC. Access to the mining areas is through the #3 Shaft and connecting lateral development within the MB and SMC zones. The main mining methods at Macassa Mine include Underhand Cut and Fill, Longhole Stoping and Mechanized Overhand Cut and Fill. The selection of mining method depends on several factors including ore geometry, grade and the need for locations to deposit waste fill. There are also several geomechanical considerations, such as structure and stresses, which impact the mining method selection.

Paste fill is the main material used to backfill stopes, although unconsolidated rockfill is also used where possible. Material hoisted to surface via #3 Shaft, which has an average capacity of 2,200 tpd.

Once the ore is hoisted to surface, it is then trucked to the crushing facilities. After crushing and grinding (95% passing, 45 microns), the ore is processed by conventional cyanide leaching with a carbon-in-pulp recovery system, as described below under "Processing and Recovery Operations".

Macassa Mine has been on the forefront in the use of Battery Electric Vehicles ("BEVs") and was the first mine in Ontario to implement BEVs as the standard for the LHD and truck fleet. Kirkland Lake Gold has partnerships with battery equipment manufacturers to develop and design BEVs, that meet the requirements of the Company's operations. Macassa Mine will continue to utilize BEVs as a key element of its fleet of underground equipment.

## **Processing and Recovery Operations**

Currently, ore is delivered to the plant using dump trucks. The ore is crushed down to 11mm at a maximum throughput rate of 80 tph and then ground to 40-45 microns; cyanide is added at the grinding stage. It is then delivered to two pre-oxidation tanks before being pumped to the thickener. The thickener overflow reports to the carbon columns (where over 75% of the gold is recovered) and the underflow to the leach circuit. Leaching takes place in seven tanks with a retention time of 100 hours. The carbon-in-pulp circuit consists of six tanks. Gold is stripped from the carbon in a pressurized Zadra elution circuit using an 8t pressurized vessel. Following electrowinning, the concentrate is melted in an induction furnace to produce doré grading 85% to 88% gold and 8% to 10% silver. The capacity of the plant is 2,000 tpd.

In the opinion of the authors of the Macassa Technical Report, there are no processing factors or deleterious elements that could have a significant effect on potential economic extraction at the Macassa Mine.

## **Infrastructure, Permitting and Compliance Activities**

It is the opinion of the authors of the Macassa Technical Report that the surface rights, the availability and sources of power, water, mining personnel, potential tailings storage areas, potential waste disposal areas and processing plant site are sufficient to continue the operations of the Macassa Mine.

### Project Infrastructure

Macassa has two shafts from surface that provide access to the mine, #2 and #3 Shafts. A third shaft, #1 Shaft, has been decommissioned, but is still used to exhaust air from the mine. A fourth shaft (Elliott Shaft) has been sealed, as per the filed closure plan. The office and dry complex, surface maintenance facilities and warehousing are located by #3 Shaft. The mill, refinery and assay lab are located in close proximity to #1 Shaft.

Power to the site is supplied by HydroOne via the K4 115kV and G3K 44 kV transmission lines. The power is stepped down on site to 5kV for distribution via three 10 MVA transformers (one located at the mill complex and two located at the #3 Shaft mine complex). Power is distributed underground via three 500 MCM 5kV feeder cables going down #3 Shaft, one 4/0 15kV feeder cable going down #3 Shaft and one

500 MCM 5kV feeder cable going down #2 Shaft. In the event of power loss, a 2 MVA diesel powered generator onsite provides power to operate the #3 Shaft service hoist and power to the surface compressors to provide limited compressed air underground.

Process water for mining activity comes primarily from the abandoned eastern workings of the historic mines, controlled via a bulkhead located on 4250 Level. Water for the underground operational needs is supplied by a series of water boxes which control the water pressure and distribute the water underground from pump stations at 4250 Level #3 Shaft and 3000 Level #3 Shaft.

Dewatering the mine is accomplished by a series of pump lift stations located at: 1275, 3000, 4250 and 5600 Levels, all in proximity of the Shaft station. Each pump station, except for 3000 Level, consists of two, multistage centrifugal Carver pumps capable of pumping a combined maximum of 4.5 m<sup>3</sup>/min, being fed by water contained within the dam at each station. The pumping stations are arranged for single pump or two pumps in parallel operation. The pumping station on 3000 Level consists of three pumps. Water reporting to 5600 station is from #3 Shaft bottom (via two parallel submersible pump) and the SMC production area, via a series of drain holes from 5300 Level.

The underground operation is fed by two surface compressed air plants. The main plant located at #3 Shaft is capable of delivering 18,000 cfm to the underground workings via a 10 inch airline in the shaft. The auxiliary plant located at #2 Shaft is capable of delivering 4,500 cfm to the underground workings via a 6 inch airline in the shaft. The compressed air plant capacity is sufficient to meet operational demands, however on occasion, during peak flows in lower regions of the SMC zone ramps, the pressure drop resulting from friction losses in the distribution network can result in operational challenges. To address this issue work is ongoing to optimize the distribution capacity to ensure stable pressure throughout the shifts

#### Future Infrastructure

In 2018, the Company announced plans for the development of a new shaft, #4 Shaft at the Macassa Mine. Shaft sinking and construction of the related facilities is underway. At the end of 2020, the shaft had been sunk to a depth of 4247 feet, with the shaft bottom planned for a depth of 6400 feet. A loading pocket will be developed on the 6300 Level. The new shaft is expected to be operational by the end of the third quarter of 2022. The new shaft is an essential component in achieving Macassa Mine's LOM plan. The new shaft allows mine operations to be streamlined and upgraded, including better personnel and material/supply movement and an increase in ventilation airflows. #4 Shaft will be circular, concrete lined and 21.5ft in diameter. The shaft will have a main service cage, an auxiliary cage and two skips.

The construction of a new tailings facility was completed in 2019. The design of the North Tailings Storage Facility ("**NTSF**") incorporates the construction of one large and several smaller dams; the project schedule was laid out in two phases. Phase 1 was completed in 2018, in which two dams were constructed to an elevation of 328m. Phase 2 was finalized in 2019, and entails bringing both the 2018 dams and four others to an elevation of 332m.

The development of twin ventilation raises to surface has commenced and will connect to the lower SMC zone (5600 Level). They are 3.7m in diameter and are being excavated using raise bores (4 legs). These raises will exhaust air from the Macassa Mine, in order to accommodate higher airflow through the mine, necessary for increased production. The raises will be driven in two stages, using 3400 Level as an intermediate level. The piloting of these raises commenced April 2020, and their completion is scheduled in conjunction with the implementation of the #4 Shaft in 2022. At the end of 2020, one leg was completed (reamed), another leg in the reaming cycle and another in the pilot hole cycle.

Existing plans after the commissioning of #4 Shaft include a material expansion of current production. The #4 Shaft project will be funded internally, and the investment was chosen based on both objective financial analysis parameters as well as the subjectively derived operational needs focused on risk reduction. The primary reasoning for the #4 Shaft project is as follows:

- The new shaft is expected to support a higher level of production and lower unit costs.
- The NPV of the project is expected to increase due to both the lower LOM operating costs as well as higher revenues gained earlier on in the project life.
- The new shaft will de-risk the operation, which currently relies on #3 Shaft for the hoisting of material to surface. #3 Shaft was developed in an unfavourable orientation in regards to principle stresses and has previously been exposed to damaging seismicity primarily due to the stope mining sequence nearby. Though the risk is being effectively managed through sound ground control practices, the addition of a new shaft in a favourable location and orientation will eliminate the risk of lost production and mine access from the possibility of #3 Shaft being damaged from seismic activity.
- Current ventilation inflow underground is constrained by the area of the existing #3 Shaft. The commissioning of the new shaft will allow for substantially higher inflow of air underground, improving the ventilation and general working conditions in the mine.
- The new shaft will support more effective exploration towards the east of the South Mine Complex.

#### Waste and Tailings Disposal, Site Monitoring and Water Management

The Macassa NTSF has replaced the Macassa TSF, which had been in operation for approximately the past 70 years. The existing TSF was shut down in October 2019. The Company is in the early stages of taking this facility to closure.

Currently, the slurry material that leaves the mill is deposited into the Macassa NTSF, which is approximately 54 hectares and consists of one Basin. As part of the water management strategy at the Macassa Mine, the solids settle in a thickened tails thickener and high density tails are deposited in the NTSF. The thickener overflow (supernatant) is pumped back to the Existing Conditioning Pond, where it is held. Conditioning Pond effluent has two main destinations: it is either reclaimed and pumped to the Mill and used for processing, or it is treated through an effluent treatment plant where it is discharged into a series of four settling ponds and ultimately is released through the Final Discharge location into the receiving water body, Amikougami Creek.

There are various monitoring and inspection programs that occur both on and off-site to support and improve the tailings and water management strategies. Compliance monitoring includes surface and ground water characterization monitoring, air quality monitoring (metals and fugitive dust), storm water drainage monitoring, freeboard inspections, as well as visual inspections of the TSF and NTSF done by multiple departments. A third party Dam Safety Inspection (“DSI”) is completed annually at all KLG TSF’s, as well as at the Kirkland Minerals TSF, which is an inactive facility which the Company is responsible for maintaining. Dam Safety Reviews (“DSR”) are completed on all KLG tailings facilities every 5 years.

Upon closure, the Macassa TSF will be in its final closure configuration as per the filed Closure Plan Amendment (as defined below). The facility will be in active closure, therefore inspections and monitoring will still be ongoing. Water quality monitoring and treatment is expected to occur for the first two to three years post-closure while steady state conditions are being reached.

#### Permitting

The significant permit applications and amendments have been submitted to support the current configuration of the NTSF. For the new shaft project, construction permits have been acquired. The focus in 2020, was to continue on longer-lead operational permits to support full-scale operations. Additional efforts in 2020 have been on the permitting of the Near Surface Portal. A closure plan amendment was submitted in 2018 to support both the NTSF as well as the shaft project, and to include smaller material changes at the operations level (the “**Closure Plan Amendment**”).

## Social and Community Impact

With the mining complex located on the edge of the Town of Kirkland Lake, it is a part of the community landscape, and operational and environmental considerations are of vital importance. The Company is committed to supporting the community, not just through its operational standards and performance, but also socially and culturally. Kirkland Lake Gold is an active member of the community and contributor to community events, and maintains an open dialogue with community leadership. Kirkland Lake Gold does not anticipate opposition from the local communities to continued operation of the Macassa Mine.

The Company has an agreement with First Nations who have treaty and Indigenous rights which they assert within the operations area of the Macassa Mine. The agreement provides a framework for strengthened collaboration in the development and operations of the mine and outlines tangible benefits for the First Nations, including direct financial support, skills training and employment, opportunities for business development and contracting, and a framework for issues resolution, regulatory permitting and the Company's future financial contributions. In addition, Kirkland Lake Gold engages with Indigenous communities in connection with permitting applications and ongoing projects. The Company also maintains an open and transparent relationship with the local community and members of the public.

## **Capital and Operating Costs**

### Capital Costs

Capital cost estimates are based on historical costs at the Macassa Mine and costs included in the 2019 budget or budgetary quotations from suppliers in the industry.

Over the LOM, annual capital expenditures for the Macassa Mine are estimated to average C\$68M per year, excluding #4 Shaft costs. The sustaining capital portion averages \$54M per year, while the growth capital averages C\$14M per year, excluding #4 Shaft costs.

The table below is an excerpt from the Macassa Technical Report and shows the LOM estimated capital expenditures, in Canadian dollars, as of December 31, 2018. In 2020, capital costs at Macassa were C\$176 million.

### **LOM CAPITAL COST ESTIMATES FROM THE DECEMBER 2018 LOM PLAN**

<b>Capital Costs</b>	<b>Total (C\$ 000's)</b>
Sustaining	379,000
Growth	97,000
Growth #4	341,000
Total	817,000

LOM sustaining capital costs total C\$379M and include costs for development, infrastructure, pastefill, construction, equipment purchases/rebuilds and allocation of indirect costs required to support ongoing mining. Sustaining capital costs include C\$168M for development and C\$18M for twin ventilation raises to surface.

LOM growth capital costs total C\$438M and include C\$14M for a thickened tails facility, C\$18M for a new crushing facility, C\$21M for a new pastefill plant, C\$27M for the expansion and reinforcement of the tailings dams and additional lifts, and C\$341M #4 Shaft costs between the years 2019 to 2023.

Exploration spending was estimated using the 2019 budget numbers. A total of C\$154M has been allocated for growth exploration costs over the LOM.

### Operating Costs

The operating costs were developed based on the yearly budget and previous historical operating costs at Macassa Mine. For the LOM period from 2019 to 2021, before the commissioning of #4 Shaft, costs remain relatively constant. Once commissioned, #4 Shaft will contribute to lowering the unit costs, while production is anticipated to double over the same period.

Annual LOM operating costs for the Macassa Mine are estimated to average C\$388/t before the completion of #4 Shaft and is estimated to range between C\$242/t to C\$312/t after #4 Shaft is commissioned. The Mine unit costs before #4 Shaft commissioning average C\$302/t, and range between C\$183/t to C\$207/t after commissioning, with the Mill unit costs ranging from C\$35/t to C\$52/t over the LOM.

Mine operating expenditures include direct and indirect operating costs related to Macassa Mine. Allocated mining costs include mining, engineering, and geology. General and administrative costs include surface/plant, administration, environmental, and shared services. Mine operating costs also include the allocation of closure costs over the LOM.

The table below is an excerpt from the Macassa Technical Report and shows the LOM estimated operating expenditures in Canadian dollars, as of December 31, 2018. In 2020, operating costs at Macassa were C\$145 million.

#### **LOM OPERATING COST ESTIMATES FROM THE DECEMBER 2018 LOM PLAN**

<b>Operating Costs</b>	<b>Total (C\$ 000's)</b>
Operating Expenditure	1,489,000
Mine	1,163,000
Mill	196,000
Administration	130,000
Royalties	187,000
<b>Total</b>	<b>1,676,000</b>

### Economic Analysis

Macassa Mine is currently in production, but existing plans include a material expansion of current production after the commissioning of #4 Shaft in 2022. The #4 Shaft Project will be funded internally, and the investment was chosen based on both objective financial analysis parameters as well as the subjectively derived operational needs focused on risk reduction.

The economic analysis was completed as follows:

- Using the mineral reserves as stated in the 2018 mineral reserve estimate (effective as of December 31, 2018) as well as re-evaluated measured and indicated resources that were determined to be economic with the estimates for improved unit costs post #4 Shaft completion. The converted mineral resources were also included.

- Using operating costs based on the Macassa Mine budget, which is based on actual costs as tracked throughout the working year, and historical costs.
- Using capital costs based on the Macassa Mine budget, which were based on historical costs and budgetary quotations from suppliers in the industry.

Each production area was evaluated to confirm that the gross revenue generated will support the operating and direct capital costs required. Annual cashflow projections were estimated over the LOM based on the estimated capital and operating expenditures and gold sales revenue.

The economic assumptions used for the 2019 year are as per the 2019 budget, as follows:

- Price of gold of US\$1,218.75 .
- Currency exchange rate of US\$1.00=C\$1.33.
- Production tonnes based on the 2019 budget, with an average #3 Shaft hoisting capacity 2,000 tonnes per day.

The economic assumptions for the remaining years of the LOM are as follows:

- Price of gold of US\$1,230.
- Currency exchange rate of US\$1.00=C\$1.33.
- Average #3 Shaft hoisting capacity 2,000 tonnes per day and average #4 Shaft hoisting capacity of 4,000 tonnes per day.
- No escalation of consumable unit costs was considered.

The mineral resource conversion factors used were 75% for measured and indicated mineral resources, and 50% for inferred mineral resources. These converted mineral resource estimates are used in the physicals from years 2025 to 2027 in the LOM inclusive of mineral resource conversion. The Company's profitability and long-term viability depend, in large part, upon the market price of gold. Market price fluctuations of gold could adversely affect the profitability of the Company's operations and lead to impairments and write downs of mineral properties. Metal prices fluctuate widely and are affected by numerous factors beyond the Company's control, including: global and regional supply and demand for industrial products containing metals generally; and global or regional political or economic conditions.

Readers are cautioned that the above economic assessment is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.

The LOM after-tax cash flows total C\$1.6B (undiscounted) with a corresponding after-tax net present value ("**NPV**") of C\$1.2B at a 5% discount rate. The following highlights the LOM undiscounted after-tax cashflow. The Cash Costs per ounce sold (ounces mined are assumed to be the ounces sold) range from C\$345/oz to C\$700/oz (US\$260/oz to US\$525/oz) over the LOM, averaging C\$525/oz (US\$390). Over the 9-year LOM, the AISC ranges from C\$500/oz to C\$900/oz (US\$375/oz to US\$675/oz), averaging C\$715/oz (US\$540/oz).

A sensitivity analysis was performed on the financial model presented. The after-tax NPV was determined at discount rates of 0%, 5% and 10% against variations of +/-20% applied to the price of gold, grade, operating expenses and capital expenses. Results indicate that of the four variables assessed, the price of gold and grade have the greatest impact, with the operating costs and the capital costs having less fluctuation as the variation to the base is increased/decreased. All scenarios presented had a positive NPV despite variations, indicating a robust plan with a high after-tax profit margin.

The payback period was calculated including #4 Shaft capital expenses for both project phases. All calculations were evaluated on an after-tax basis, and the payback was calculated undiscounted. Payback calculations were completed from 2018 onwards. The analysis indicates that full project payback is expected mid 2025.

In 2019 a study was completed to assess the mining viability of mineralized zones that were located near surface, collectively called the Near Surface Zone. The study looked at developing a standalone operation utilizing a portal/ramp to access three mineralized zones (in the 2018 Reserves), the East, Central and West zones. The conclusion of the study was favourable, indicating a positive NPV. In July of 2020, the portal was collared and by the end of the year xxx feet of ramp was developed.

### **Exploration, Development and Production**

In 2019 a study was completed to assess the mining viability of mineralized zones that were located near surface, collectively called the Near Surface Zone. The study looked at developing a standalone operation utilizing a portal/ramp to access three mineralized zones (in the 2018 Reserves), the East, Central and West zones. The conclusion of the study was favourable, indicating a positive NPV. In July 2020, the portal was collared and by the end of the year 2,218 feet of ramp had been developed.

In 2020 development activity focused on developing the LN and SM zones through continuing the declines to access current and new stoping areas. It should be noted that part of the ramping system within the SM will also be used to access #4 Shaft (5807 Ramp). Major infrastructure development was also carried and included the twin ventilation raise system to surface (described previously), an upgrade to the SMC ventilation system and completing the excavation of a new shop facility and starting the installation of the facilities (concrete floors, doors, overhead crane, etc.).

The authors of the Macassa Technical Report identified the following opportunities at the Macassa Mine:

- SMC mineralization remains open to the east, west and at depth. Diamond drilling continues to return high grade mineralization. In order to support the drilling requirements, the exploration drifts and associated drill bays must remain high priority development headings at the mine. This is a key focus of the 2021 mineral resource expansion program.
- Exploration development towards 3000 Level, east of #2 Shaft, that is designed to explore the '04 Break and Main Break could create the opportunity to reintroduce some of the historical mineral resources back into the global resource estimate. Drilling for this exploration target is planned for the second half of 2021.
- The Amalgamated Break was a high priority drill target in 2020 to expand the new resource that was delineated during the 2019 drill program. This area remains a target for expansion into 2021. In order to support the drilling requirements, the exploration drifts and associated drill bays must remain high priority development headings at the mine.
- The shallow Amalgamated Break resource has opportunity for expansion to the east and west as well as up and down dip and development of the near surface ramp will provide underground platforms to drill areas that are not accessible from surface due to infrastructure in 2021.
- Exploration development from the 5150 Level west of the Amikougami cross fault will generate drill platforms for future testing of the '04 Break, Amalgamated Break and potential west extension of the SMC in this largely unexplored area. This development is planned for completion late in the third quarter of 2021.
- #4 Shaft is scheduled to be completed in late 2022 with a designed production (hoisting) rate of 4,400 short tons per day. Re-evaluating the mineral resource cut-off grade economics using lower operating costs after the commissioning of the new shaft will likely be favourable to increasing mineral resources.

- Improvements to the material handling process are likely to result in favourable impact on the mine operating costs.
- Upgrade of the ventilation system through either increased airflow or temperature reduction will have a favourable impact on the work environment temperature.
- Past paste filling operations involved the delivery of paste using boreholes from surface to underground, utilizing cement trucks to deliver and dump the paste, in batches, down the borehole. The mine now utilizes newly drilled boreholes beside the paste plant, which allows the paste to be delivered directly into the boreholes without the use of the cement trucks. This has streamlined the pour process with continuous pouring directly from the paste fill plant, speeding up cycle times underground.
- In 2018, Macassa started to implement tele-remote mucking in selected areas, leading to a decrease in cycle times and added process efficiencies. Along with continuing to expand the teleremote implementation, Macassa Mine is also exploring further improvement opportunities by combining equipment automation (trucks) with tele-remote. When successfully implemented this process will enable material handling and movement in between shifts.

In addition, the authors of the Macassa Technical Report have made the following recommendations:

- Continue exploration drilling to test for the easterly and westerly strike extension of the South Mine Complex and Amalgamated Break mineralization employing underground diamond drills on the 5300 Level and the 5600 and 5700 Level ramps.
- Continue to test near surface targets associated with the '04 Break and Amalgamated Break.
- Hiring of a post-doctoral embedded researcher to complete a comprehensive study on the structural and geochemical controls on the ore at Macassa to aid in future exploration targeting.
- Optimization of the process for modelling and estimation of mineral resources at Macassa. Assess mineral potential to the east and along the Main Break below the 5800 Level and to the east into Kirkland Minerals and Tech Hughes properties. Continue to work with historical data to assess potential of longer-term exploration targets.
- Technical work should be undertaken to assess infrastructure requirements for the continuous mining of the Macassa deposit.
- Related to the point above, interrogation of the newly created lithological model and the mine drillhole database as an exploration tool to assess future targeting opportunities.
- There is an opportunity to improve the turnaround times for the assaying of underground samples through the establishment of a centralized assay lab.

### **The Fosterville Mine**

The scientific and technical information included in the below summary has been derived, in part, from, and in some instances are extracts from, the technical report entitled "Updated NI 43-101 Technical Report, Fosterville Gold Mine in the State of Victoria, Australian, prepared for Kirkland Lake Gold Ltd." (the "**Fosterville Technical Report**") dated effective December 31, 2018 and prepared by Troy Fuller, MAIG, and Ion Hann, FAusIMM, each of whom is a "qualified person" pursuant to NI 43-101. All defined terms used in the following summary have the meanings ascribed to them in the Fosterville Technical Report. The below summary is subject to all the assumptions, qualifications and procedures set out in the Fosterville Technical Report. The Fosterville Technical Report was prepared in accordance with NI 43-101. For full technical details of the report, reference should be made to the complete text of the Fosterville Technical Report, which has been filed with the applicable regulatory authorities and is available under the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov). The summary set forth below is qualified in its entirety by reference to the full text of the Fosterville Technical Report. The authors of the Fosterville Technical Report have reviewed and approved the scientific and technical disclosure contained in this Annual Information Form related to the Fosterville Mine. See "Interest of Experts".

## Project Description, Location and Access

The Fosterville Mine is located approximately 20 km east of the city of Bendigo and 130 km north of the city of Melbourne in the State of Victoria, Australia. The regional center of Bendigo (20 km to the south-west) has a population of around 114,000 (Australian Bureau of Statistics, 2018), and provides a source of skilled labour. The Fosterville Mine has ready access via two separate sealed roads and a variety of all-weather un-sealed roads linking to regional highways.

The Fosterville Mine and all associated infrastructure, including the tailings dam and waste dumps, are located on Mining Licence 5404, which is 100% owned by Kirkland Lake Gold. Mining Licence 5404 has a total area of 17.16 km<sup>2</sup> and is valid until August 24, 2035. Subsequent to the effective date of the Fosterville Technical Report, FGM (as defined below) was granted Mining Licence extensions to the north and south of Mining Licence 5404. These extensions increase the total area of the Mining Licence to 28.5 km<sup>2</sup> and encompass potential resource extensions of the Harrier and Robbin's Hill gold systems.

Kirkland Lake Gold also holds title, through its wholly owned subsidiary, Fosterville Gold Mine Pty Ltd. ("**FGM**"), to four surrounding Exploration Licences totalling 1,082 km<sup>2</sup>. Subsequent to the effective date of the Fosterville Technical Report, on February 26, 2019, Exploration Licence 3539 (which encloses the current Mining Licence 5404) expired. The tenement was unable to be renewed under current state legislation and was placed in moratorium (currently exempt from licence application). However, this land area, together with an adjoining moratorium area, is under a ground release tender process being managed by the State Government of Victoria and is due to conclude in March 2021.

Within Mining Licence 5404, there is a 2.5% gold royalty payable to New Holland Mining Ltd, now Metalla Royalty & Streaming Ltd. , for the areas in the northeastern and southeastern portions of the newly extended Mining Licence 5404. In addition, a 2% net smelter royalty is held by AMARC. AMARC was originally a wholly-owned subsidiary of AMI. AMI was acquired by Centerra Gold Inc. ("**Centerra**") in January 2018 and AMARC, which holds the royalty, was subsequently sold to Triple Flag Mining Finance Bermuda Ltd.

Subsequent to the effective date of the Fosterville Technical Report, the State of Victoria, Australia imposed a royalty in the amount of 2.75% of the gold produced under a mineral licence, including Mining Licence 5404, which came into effect on January 1, 2020.

FGM's rehabilitation bond liability is assessed regularly by the Company in conjunction with the Department of Jobs, Precincts and Regions. In June 2019, the rehabilitation bond was proposed to be increased to A\$9.42M. As of the date hereof, the Department's final formal acceptance of the review has not been received.

Rehabilitation is undertaken progressively at the Fosterville Mine in accordance with the mining licence conditions and the site Rehabilitation and Closure Plan. The Fosterville Mine is operating under an approved Risk-Based Work Plan administered by the *Mineral Resources (Sustainable Development) Act 1990* (Victoria).

Mining Licence 5404 and Mining Licence 4456 were granted prior to enactment of the *Native Title Act 1993* (Commonwealth) and as such are not subject to any native title compensation claim, now or after any future renewals. Exploration Licences EL4937, EL006502, EL006503 & EL006504 are subject to an Indigenous Land Use Activity Agreement.

## History

Gold was first discovered in the Fosterville area in 1894 with mining activity continuing until 1903 for a total of 28koz of production. Mining in this era was confined to the near-surface oxide material. Aside from a minor tailings retreatment in the 1930s, activity resumed in 1988 with a further tailings retreatment program conducted by Bendigo Gold Associates Pty Ltd, which ceased in 1989. Mining recommenced in 1991 when Brunswick Mining NL and then Perseverance Corporation Ltd. ("**Perseverance**") (from 1992) commenced

heap-leaching operations from shallow oxide open pits. Between 1988, and the cessation of oxide mining in 2001, a total of 240koz of gold were produced (Roberts et al, 2003).

A feasibility study into a sulfide mining operation was completed by Perseverance in 2003. Work on the plant and open-pit mining commenced in early 2004. Commercial sulfide hosted gold production began in April 2005 and up to the end of December 2006 a total of 136,882oz of gold had been produced. Underground development commenced in March 2006 with first production recorded in September 2006. In October 2007, Perseverance announced that it had entered into an agreement with Northgate Minerals Corporation (“**Northgate**”) pursuant to which Northgate would acquire Perseverance with full control of Perseverance passing to Northgate in February 2008.

Significant open-pit production had ceased at the end of 2007; however, minor production from open pits contributed in 2011 and 2012. The 500,000th ounce milestone of sulfide gold production was achieved in April 2011. In August 2011, Northgate entered into a merger agreement with AuRico Gold Inc. (“**AGI**”) who assumed control of Northgate in October 2011. In March 2012, AGI and Crocodile Gold jointly announced that Crocodile Gold would acquire the Fosterville Mine and the Stawell Gold Mine. Crocodile Gold’s ownership of the Fosterville Mine was achieved on May 4, 2012. In July 2015, Old Newmarket merged with Crocodile Gold to form Newmarket Gold Inc.

On November 30, 2016, Old Kirkland Lake Gold combined with Newmarket Gold Inc. to form a new mid-tier gold company which was renamed “Kirkland Lake Gold Ltd.”. Kirkland Lake Gold has since rapidly increased the output of the Fosterville Mine operation based on its exploration success, in particular, the development of the high grade Eagle and Swan mineralized zones. Gold production has grown year over year, facilitated by increasing grade profiles at depth, with annual mine output expanding from 151,755oz at 7.55g/t Au in 2016 to 619,366oz at 39.6g/t Au in 2019. By June 2019, the Fosterville Mine had produced its 2.0 millionth ounce and in December 2020 the 3 millionth ounce was produced. As of December 31, 2020, the Fosterville Mine had achieved total production of 3,032,502 ounces since the construction of the sulfide plant in April 2005.

### **Geological Setting, Mineralization and Deposit Types**

The Fosterville goldfield is located within the eastern Bendigo Zone, which is bound by the Avoca Fault to the west and the Heathcote Fault Zone to the east. The Bendigo Zone contains Ordovician turbidite sequences of sub-greenschist to greenschist metamorphic grade. Gold mineralization is associated with two main events across the western Lachlan Orogen at ~445Ma and ~380-370Ma, with a possibly another minor event at ~410-400Ma (Phillips et al, 2012). The ~445Ma event is thought to have involved crustal thickening and the circulation of metamorphic fluids through the crust (Vandenberg et al, 2000) and formed gold deposits at Bendigo, Castlemaine, Maldon and Daylesford. The ~380-370Ma event is restricted largely to the Melbourne and eastern Bendigo Zones and is believed to be responsible for some of the emplacement of late gold-in-veins at the Fosterville Mine (Bierlein & Maher, 2001).

The Fosterville goldfield is hosted by Lower Ordovician Lancefieldian (486~488 Ma) turbidites within the Ordovician Castlemaine Group rocks. This sequence has been weakly metamorphosed to sub-greenschist facies and folded into a set of upright, north-northwest trending and shallowly south plunging open to closed folds. The folding resulted in the formation of a series of bedding parallel laminated quartz (“**LQ**”) veins and bedding parallel thrust faults.

Gold and associated sulfide mineralization at the Fosterville Mine is controlled by late brittle faulting and fracturing. These brittle faults are generally steeply west-dipping, reverse faults with a series of moderately west-dipping, reverse splay faults formed in the footwall of the main faults. There are also less abundant, moderately southeast and southwest-dipping faults which govern high grade visible gold mineralization along the Eagle and Swan zones. Two main styles of gold mineralization occur at the Fosterville Mine; a sediment-hosted sub-micron refractory style where gold is locked in disseminated arsenopyrite and pyrite crystals which form selvages to quartz-carbonate vein stockworks throughout the 9 km long fault system, and a gold-in-vein mineralization style where visible gold is hosted in quartz-carbonate veins that show laminated and stylolitic vein textures as well as brecciation. Gold mineralization is structurally controlled

with high-grade zones localized by the geometric relationship between bedding-parallel and oblique faults. Mineralized shoots are typically 4-15m thick and show down-dip and down-plunge dimensions of 50-150m and 300-2,000m+, respectively.

Antimony mineralization, mainly in the form of stibnite, occurs with quartz and varies from replacement and infill of earlier quartz-carbonate stockwork veins, to massive stibnite-only veins up to 0.5m in width. The late stibnite-quartz mineralization occurs in favourable structural locations, such as the Phoenix, Eagle and Swan vein and fault structures and therefore shows a spatial association with visible gold. The occurrence of visible gold has become increasingly significant at the Fosterville Mine and is observed more frequently at greater depth within the Lower Phoenix System. Throughout 2016 to 2019, visible gold was also observed with notably increased frequency, in deeper parts of the Harrier System and also within the nearby Robbin's Hill exploration target. Visible gold particles are predominantly specks ( $\leq 3$  mm), however more rarely they can be  $> 5$  mm. The width of quartz-carbonate veining that contain visible gold is variable, with widths ranging from a few millimeters to several metres (true thickness). The veins usually have incomplete infill with druse quartz within those voids. Visible gold can be found as specks in narrow linear trends as well as isolated specks without a clear trend.

## Exploration

Regional exploration programs and further integration of datasets to date have been successful in providing support and definition for several targets across the tenement package. Subsequent to exploration work detailed in the Fosterville Technical Report, over 7,900 soil geochemical samples have been collected including 4,000 mobile metal ion samples where geology cover obscured target host rocks. An airborne gravity gradiometry survey was completed across Exploration Licence 006502, and the northern portions of Exploration Licence 006503 and Mining Licence 5404 providing significant guidance for regional exploration. An airborne electromagnetic ("EM") survey was completed on Exploration Licence 006502 and Exploration Licence 006504 to provide tenement wide datasets and integrated with gravity inversions. An additional high resolution ground gravity survey was completed over the main target area of interest at Thunder Swamp in Exploration Licence 006502.

Exploration Licence 3539 was required to be relinquished in late February 2019. While all other tenements remain active, Exploration Licences 006694 and 006695 were amalgamated into Exploration Licence 006503 effective November 29, 2019 and due to statutory reductions the newly amalgamated Exploration Licence 006503 and Exploration Licences 006502, 006504 and 4937 collectively now comprise 1081.7 km<sup>2</sup>. Late in 2019, a high resolution 3D seismic reflection survey was completed by HiSeis Ltd, across the northern exposed extent of the Fosterville trend and the Robbins Hill mineralization within Mining Licence 5404. An area covering 2.5 km x 2.5 km for a 6 km<sup>2</sup> block and 179 line kilometres was completed. A total of 18,747 receiver points recording 14,550 vibrator source point sweeps. The survey was collected with geophones at 12.5 m spacing's and vibrator source point sweeps from 6.25 m to 12.5 m spacing on up to 25m spaced lines. The seismic data shows strong reflectors in the top 3 km with reflection response data still being seen from 6 – 8 km depths. Processing of this data was completed in Perth, West Australia by HiSeis and Southern Geoscience Consultants ("HiSeis"). The data was reviewed by Southern Geoscience Consultants, FGM and HiSeis prior to a final geological interpretation completed in June 2020. To potentially obtain additional information from the 3D seismic data it was subsequently processed by VelSeis Pty Ltd and this work was mostly completed by the end of 2020.

Preliminary assessment of refraction tomography of the first 300m depth, a by product of the reflection survey, shows high promise for fold and fault architecture detail. It is anticipated that potentially, fault offsets of less than 10 vertical metres will be able to be identified from this data. Preliminary reflection data which is the primary data collected from the survey, is promising showing fold resolution and closures of less than 30m width. The data is also providing fault information and fault – fold relationships and offsets critical in understanding the distribution of mineralization at the Fosterville Mine. The complete dataset will provide a targeting and interpretation tool for use in 2021 and beyond to depths in excess of 3 km at the Robbin's Hill deposit area and strike extents to target with greater drill efficiency in the northern portion of Mining Licence 5404.

In November 2020 a ground gravity survey was completed in the northern, central and southern parts of Mining Licence 5404 for interpretation and integration with the geological model to improve drill targeting of gold mineralization.

## **Drilling**

Exploration drilling activities undertaken in 2020, were focused on Near-Mine targets within Mining Licence 5404. Some exploration work was also undertaken on prospective regional targets throughout the expansive Exploration Licence holdings, however these works were impacted by the onset of the COVID-19 pandemic in March. The intent of the exploration was to replace and increase the mineralized resource at the Fosterville Mine by extending presently known ore shoots and to locate anomalous gold mineralization for further exploration investigation, then subsequent resource evaluation.

Diamond drilling is the primary drilling technique used at the Fosterville Mine with up to nine underground and six surface diamond rigs in operation during 2019 and 2020. In addition, in 2019 a reverse circulation drill rig was employed to test geochemical and geophysical anomalies throughout the property.

In March 2020, with the onset of the COVID-19 pandemic, exploration field activities were suspended and only operating and sustaining capital underground diamond drilling continued uninterrupted. The underground drilling fleet was reduced from 9 to 3 rigs to execute this drilling and all surface drilling was put on hold. The number of diamond drills were increased in April with an additional two underground and two on surface. Additional drills were progressively restarted over the remainder of the year and by the end of 2020 there were 15 drills working on Mining Licence 5404.

Throughout the period from 2016 to 2020, development mapping and continued drilling confirmed the existence of multiple mineralized structures, of various size and continuity in the footwall of the main west-dipping Lower Phoenix (Benu) Fault, which present significant resource growth opportunity. Improved geological understanding of the Lower Phoenix System has highlighted the significance of these favourable settings for mineralization, including: (i) the East-dipping to SSE dipping mineralized structures, namely the Eagle Fault and East Dipping Faults, which commonly contain quartz–stibnite vein assemblages and substantial concentrations of visible gold which are typically enveloped by haloes of disseminated sulfide; (ii) the Low-angled Lower Phoenix Footwall west-dipping structures which typically consist of large laminated quartz veins up to several metres width, indicating a series of multiple mineralizing events, including a later stage quartz-stibnite phase with visible gold; and (iii) the south westerly dipping Swan Fault which is characterized by a one to three metre thick quartz vein, containing visible gold and stibnite and exhibiting various textures and typically enveloped by disseminated sulphide mineralization.

The Swan Fault exists as an oblique structure cross-cutting the eastern limb of the anticline and is bounded by the Eagle Fault down-dip and the Kestrel Syncline at its upper margin. Swan is the highest grade mineralized zone defined at Fosterville to date and contributes 1,250,000 oz at an average grade of 30.6 g/t Au (1,270,000 tonnes) to the updated December 31, 2020 mineral reserve estimate making up 70% of the total Fosterville mineral reserves. Extremely high grades in Swan are coincident with the intersection of the Eagle and Swan Splay Faults.

Continued drill definition of Lower Phoenix structures over 2019-2020, in combination with ore development and production exposure and reconciliation performance has reaffirmed the significance of footwall structures to the Lower Phoenix (Benu) Fault. Furthermore, mineralization on these structures is open along plunge, providing encouraging future mineral resource and mineral reserve growth potential for the Fosterville operation.

Drilling into the Harrier System during 2016 identified high-grade mineralization containing occurrences of visible gold at depth, primarily associated with the Harrier Base structure. The Harrier Base structure exhibits reverse thrust movement of approximately 60m. Visible gold is hosted within a laminated quartz-carbonate vein assemblage, which may contain minor amounts of stibnite. In the strongest mineralized zones, a broad halo of sulfide mineralization surrounds quartz structures bearing visible gold. The high-grade visible gold mineralization was first recognized at approximately the 4480mRL, a comparable

elevation to where visible gold occurrences in the Lower Phoenix System became more prominent. Drilling into the Harrier Anticline zone began in 2019, the down dip target considered to be particularly prospective where the Harrier Base Fault intersects and offsets an anticline hinge.

During 2020, up to six surface diamond drills operated in the Robbin's Hill area, primarily targeting gold mineralization along the west-dipping Curie Fault, one of the controlling structures for mineralization at Robbins's Hill. Programs have included infill drilling within the existing mineral resource, and also extension and step out drilling along the Robbin's Hill mineralization trend. Major sulfide mineralization is concentrated within structures exhibiting significant dilation (veins and faults). Sulfide mineralization is dominated by pyrite and arsenopyrite but can include trace occurrences of stibnite, galena, sphalerite and chalcopyrite. Visible gold occurs at depth with observations thus far hosted by quartz in the Curie Fault, including several specks <2 mm in diameter. Veins in the Curie Fault containing visible gold are dominated by quartz with minor calcite, chlorite, albite, and epidote. Other minerals present that appear to be spatially associated with visible gold mineralization include stibnite and disseminated arsenopyrite-pyrite mineralization in the surrounding host rock. Visible gold is typically associated with laminated textures within the quartz vein.

Regional drilling has focused on emerging gravity targets in Exploration Licence 006502 obscured by Murray Basin sediments. Early results at Thunder Swamp have identified low level gold anomalism associated regionally significant gravity anomalies confirming presence of a gold fertile minerals system. Drilling efforts closer to Fosterville have returned very encouraging results from the Goornong South prospect which remain open and significant gold results at the Russell's Reef prospect (within the expanded Mining Licence 5404) which require follow up drilling.

### **Sampling, Analysis and Data Verification**

During 2019 and 2020, RC drilling samples were collected from a trailer mounted cyclone providing an approximate 2kg two-metre composite sample and one metre sub-samples retained for quality assurance, quality control ("QA/QC") checks. Where gold mineralization intervals were identified in assays, the corresponding one metre sub-samples were dispatched for multi-element analysis to improve the resolution around the areas of interest. The RC samples collected are stored at a FGM-owned sample-handling facility.

In the diamond drill core, all visible sulfide mineralization, quartz vein stockwork and LQ veins plus at least three metres of apparent waste either side is sampled. Samples are cut to geological boundaries and within a length range of 0.05m to 1.3m, with a preferred length of one metre. Infill diamond holes (spaced at 25m or less) can be full-core sampled; the entire core sample is broken with a hammer in the tray and moved directly into the sample bag. All other core is halved using a diamond saw and the upper half of the core dispatched for analysis and the lower half returned to the core tray in its original orientation. PQ core was sampled by cutting a sliver equivalent in volume to half NQ2 core from the top of the core. Recovery of diamond drill core is acceptable where it is determined that over 90% recovery for a run has been achieved. If recovery is proven to be less due to core loss or because of poor ground, the samples may not be used for mineral resource estimation.

All diamond drill core is stored on site within the fenced and gated core handling facility or within the mine compound on the backfilled Falcon Pit storage area. Assay sample pulps are also returned from the laboratory and stored at the core handling facility. All exploration pulps are stored indefinitely whereas resource infill drilling are kept for a period of two years.

In underground sampling, an attempt is made to sample every round (3 to 4m nominal advance) in the ore drives where safe to do so. Sample intervals are chosen based on structure, mineralization and lithology, and are a minimum of 0.1m and a maximum of 1.5m in length. Mapping data that was collected at the same time as the samples are used to validate the sample results.

Work undertaken by employees of the Fosterville Mine is limited to core logging and the mark-up, cutting and bagging of samples. All other sample preparation and analysis was conducted off-site at the

commercial laboratories. The Fosterville Mine uses independent assay laboratories, which provide assay data in digital form.

Since 2005, On Site Laboratory Services (“**OSLS**”), a commercial laboratory based in Bendigo, has been the primary provider of analytical services to the operation. The OSLS Bendigo laboratory gained ISO 9001 accreditation in October 2008 with registration ISO9001:2008 (CERT-C33510). National Association of Testing Authorities (“**NATA**”) accreditation in accord with ISO/IEC 17025 was issued to OSLS, with accreditation number 20456 on 13 May 2019.

OSLS use a combined crusher and mill to pulverize the entire sample to a nominal 90% passing 75µm. A 25g sub-sample is analyzed for gold by fire assay with an AAS finish. Au results greater than 80g/t are diluted to 1:10 and tested using the AAS. A 0.5g sub-sample of the pulp is digested in a HNO<sub>3</sub>/HCl digest and then analyzed for Ag, As, Bi, Ca, Cu, Fe, K, Sb and S by ICP-AES. A full program of repeats, standards and inter-laboratory check sampling was conducted on the gold analyses.

Gekko Analytical Laboratories (“**GAL**”) were contracted to provide analytical services for diamond core and underground face samples between April 2015 and April 2016. Analytical techniques include fire assay for gold, titration and atomic absorption spectrometry for antimony, combustion analysis and infrared detection for both sulfur and non-organic carbon. GAL gained NATA, Australia accreditation in October 2015 with accreditation number, 19561.

All samples are dried at approximately 105°C. GAL uses a jaw crusher to crush the sample material to 8mm. The sample is then placed within a Boyd crusher and rotary splitter combination to enable further crushing to 3mm and optional splitting of the sample if it weighs in excess 3kg. Pulverization takes place with up to 3kg of sample to achieve 90% passing 75µm. Sizing is reported with Au assays at 1:20 frequency. Approximately 120g of pulverized sample is scooped into a wire and cardboard pulp packet. Two pulp packets are created as a laboratory duplicate at a frequency of 1:10. A 25g scoop of sample is taken from the pulp packet and smelted with 180g flux. A 10g scoop from the pulp is re-fired for comparison if the initial grade was determined at >50g/t. Antimony is analyzed by using an aqua regia digestion with an AAS finish. If the result is over 1% Sb, the sample is then analyzed by an acid digestion and titration. Total sulfur is analyzed using combustion analysis followed by Infrared detection. Non-Carbonate carbon is analyzed by weak acid digest and combustion analysis followed by infrared detection (LECO). During this time the laboratory was audited by Fosterville Mine personnel to assess the preparation and sample handling processes.

With increased sample loads in the second half of 2018, Bureau Veritas Minerals (Adelaide) (“**BVM**”) provided analytical services of resource definition and exploration samples. Analytical techniques include fire assay for gold. This laboratory is ISO 9001 accredited as well as NATA, Australia accreditation with accreditation number, 1526.

At BVM all samples as received, are dried at approximately 105° C. The sample is then crushed to 3mm in a jaw crusher (with optional splitting of the sample if it weighs in excess 3kg). Pulverization takes place with up to 3kg of sample to achieve 85% passing 75µm. Approximately 200g of pulverized sample is scooped into a cardboard pulp packet. Two pulp packets (lab duplicates) are created as a laboratory duplicate at a frequency of 2:50 (or 2 per fire). A 40g sub-sample is analyzed for gold by fire assay with an AAS finish. Au results greater than 5g/t are diluted at a dilution ratio of 1:10 and analyzed using the AAS.

QA/QC procedures are completed on samples after being imported into the database. Assays not passing the QA/QC tolerances on blanks, standards, duplicates and repeats are retained in the database but are not available for viewing for resource work within MinePlan™. Where it is determined the sample itself is compromised, rather than the analysis, then the sample is demoted and its assays are not reported in MinePlan™ or other applications.

Any values falling beyond defined quality parameters are investigated according to laboratory and company procedures. Sufficient proof or suspicion of error requires re-assays on the affected portion of a job, where

the original assays are rejected, and the results from the subsequent batch (provided these pass QA/QC processes) are used instead.

In 2018, there were a number of improvements to the process around sample security. Samples are bagged and numbered either on site at the drill rig or at the Fosterville Mine core handling facility. Before samples are sent to laboratories, they are placed in labelled plastic bags in lots of about five and transported using the laboratory's pick-up vehicles. On arrival at the laboratory, the list of samples sent is matched to the actual samples received and confirmation is sent by either fax or email using a sample consignment system. Since late 2018, these plastic bags are now tied off with tamper tags before transport and chain of custody documentation is completed upon pickup by the analytical laboratory contractor.

Data security is ensured through the use of an 'acquire™/SQL Server' database of all company exploration drilling information. This database includes all assays, geological and geotechnical information. As well as data interrogation, the database allows automated error checking as new data is entered. The database is backed up in full daily, and incrementally eight times a day. Additionally, a full image of the virtual machine environment hosting SQL Server is backed up once daily. Access to the database is controlled by user login permissions.

The drilling carried out by previous owners at Fosterville routinely included QA/QC checks. In addition, sampling QA/QC consultants, SMP Consultants, reviewed the sampling, analytical and data storage procedures used in drilling programs to May 2002 (Cruse, 2002). Data system reviews of the exploration database were also undertaken by IO Digital Systems in 2004 and 2006 (Kelemen, 2004; McConville, 2006). The database includes numerous automated data validation methods. The database structure and the use of primary key fields prevent certain types of invalid data (e.g. overlapping sample intervals) from being stored in the database. Also, numerous checks are performed on the data when it is imported (e.g. assay QA/QC performance gates, variation in down-hole surveys from previous survey).

The Qualified Persons preparing the mineral resource estimate for the Fosterville Mine have further validated the data upon extraction from the database prior to resource interpolation. This verification used MinePlan™ drill views as the primary tool to identify data problems. When coupled with the more mechanical check processes ensuring high quality data is entering the database in the first place, these checks were effective in allowing the Qualified Persons to be confident that the data was geologically coherent and of appropriate quality and adequate for use in resource estimations and reserve studies.

### **Mineral Processing and Metallurgical Testing**

Metallurgical test work is ongoing with particular focus on maximizing gravity recoverable gold and preparing for any future ore types and mineralogy that will challenge existing gold recovery methods.

Several newly discovered geological structures at depth, such as Eagle, East Dipping and Swan Faults, have gold in the form of coarse visible gold that frequently occurs with low sulfide mineralization. In 2015, a series of plant trials and mineralogy surveys indicated that the visible gold is being recovered in the flotation concentrates (primarily Flash flotation concentrate) and is recoverable from this concentrate by gravity methods. A gravity gold circuit was commissioned in April 2016. The gravity circuit consists of a Knelson concentrator and Gemeni tables recovering gold from the recirculating load of the concentrate regrind mill. In August 2018, a second Knelson concentrator was commissioned in the SAG mill recirculating load. The SAG mill and regrind mill gravity concentrates are separately tabled, calcined and poured for accounting purposes. Project plans to install an additional 30" KC-XD Knelson concentrator in the SAG Mill circuit to ensure primary gravity circuit availability were completed in 2020.

Deleterious minerals are present within the system. They predominantly include carbonaceous materials, antimony sulphides and arsenic. In the opinion of the Fosterville Technical Report authors, deleterious elements can be identified and impacts to gold recoveries understood, through a dedicated Ore Evaluation and metallurgical test-work program and extensive operational experience. It is considered that the presence of these elements can be effectively managed through critical control measures, such that any

significant impact to economic extraction is minimised. No identified processing factors have a significant impact on economic extraction.

### Mineral Resource and Mineral Reserve Estimates

The mineral resources reported are contained within Mining Licence 5404. Mineral reserves reported are fully contained within Mining Licence 5404. The mineral resource areas of Central, Southern, Harrier and Robbin's Hill are historically defined resource areas, which were established at different times in the evolution of the project. The Central Area contains multiple mineral resource models, primarily for reasons of data handling.

Previously, all mineral reserves were contained within the Central and Harrier mineral resource areas. Currently, in addition to these, a mineral reserve has been defined within the Robbin's Hill area. Mineral reserves contained within the Central mineral resource area have been subdivided into Central and Phoenix mineral reserves.

The updated mineral reserves and mineral resources (reported exclusive of mineral reserves) estimates for Fosterville and Robbin's Hill, as of December 31, 2020, are presented below.

### Summarized Mineral Reserves and Mineral Resources (Exclusive of Mineral Reserves) for Fosterville as at December 31, 2020

Fosterville		December 31, 2020		
		Tonnes (000's)	Grade (g/t)	Gold Ounces (000's)
<b>Mineral Reserves</b>				
	Proven	1,050	24.4	822
	Probable	2,570	11.8	973
	<b>Proven + Probable</b>	<b>3,610</b>	<b>15.4</b>	<b>1,790</b>
<b>Mineral Resources</b>		<b>Exclusive of Mineral Reserves</b>		
	Measured	752	5.1	124
	Indicated	6,930	5.7	1,260
	<b>Measured + Indicated</b>	<b>7,690</b>	<b>5.6</b>	<b>1,390</b>
	Inferred	6,140	6.5	1,280

### Summarized Mineral Reserves and Mineral Resources (Exclusive of Mineral Reserves) for Robbin's Hill as at December 31, 2020

Robbin's Hill <sup>(1)</sup>		December 31, 2020		
		Tonnes (000's)	Grade (g/t)	Gold Ounces (000's)
<b>Mineral Reserves</b>				
	Proven	-	-	-
	Probable	1,060	5.3	180
	<b>Proven + Probable</b>	<b>1,060</b>	<b>5.3</b>	<b>180</b>
<b>Mineral Resources</b>		<b>Exclusive of Mineral Reserves</b>		
	Measured	-	-	-
	Indicated	2,120	4.8	329
	<b>Measured + Indicated</b>	<b>2,120</b>	<b>4.8</b>	<b>329</b>
	Inferred	2,420	6.0	467

- (1) *The Robbin's Hill mineral reserve and mineral resource estimates are reported separately from the Fosterville Mine as it is anticipated that Robbin's Hill will be a new and separate mining operation feeding the Fosterville Mill.*

#### **Mineral Reserves Notes:**

1. CIM Standards (2014) were followed in the estimation of mineral reserves.
2. Mineral reserves were estimated using a long-term gold price of US\$1,300/oz (A\$1,765/oz).
3. Cut-off grades were calculated for each mining block and included the costs of: mining, milling, general and administration, royalties and capital expenditures and other modifying factors (e.g. dilution, mining extraction, mill recovery).
4. Dilution estimates vary by mining methods and ranges from 10% to 50%.
5. Extraction estimates vary by mining methods and range from 60% to 90%.
6. Mineral reserves estimates were prepared under the supervision of Ion Hann, FAusIMM, who is a qualified person as defined under NI 43-101.
7. Totals may not add up due to rounding.

#### **Mineral Resource Notes:**

1. CIM Standards (2014) were followed in the estimation of mineral resource
2. Mineral resources are estimated using a gold price of US\$1,425/oz (A\$1,938/oz).
3. Mineral resources are reported exclusive of mineral reserves.
4. Open Pit mineral resources were estimated using cut-off grades ranging between 0.8 g/t Au and 1.0 g/t Au.
5. Underground mineral resources were estimated using cut-off grades ranging between 2.3 g/t Au and 3.1 g/t Au.
6. Mineral resource estimates were prepared under the supervision of Troy Fuller, MAIG, who is a qualified person as defined under NI 43-101.
7. Totals may not add up due to rounding.
8. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

The Company is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing and political or other relevant factors that would materially affect either the mineral resource estimate or the mineral reserve estimate for the Fosterville Mine.

#### **Mining Methods**

Since the completion of the Harrier Open Cut Mine in early December 2007, the sole source of ore had been the underground operations until the second quarter of 2011 when ore feed became available from a series of open pit cut backs on the Harrier Pit, John's Pit and O'Dwyer's South Pit. Following the completion of O'Dwyer's South cut in the fourth quarter of 2012, the sole source of ore has been from the underground operations. The current Life of Mine ("**LOM**") plan contains ore sourced from underground operations only.

The underground mine commenced declining in March 2006 with production first recorded in September 2006. Development and stoping have been conducted in the Phoenix, Falcon, Ellesmere, Kink, Vulture, Raven, Robin and Harrier ore bodies since that time. As at January 1, 2020 works are planned to continue in the Phoenix (including Swan, Eagle, et al) and Harrier ore bodies.

Access to the underground workings is via two portals, located in the Ellesmere and Falcon open pits, and connected declines that run at an average gradient of 1 in 7 down. Nominal decline dimensions are 5.5m wide by 5.8m high with other access development varying in size but can generally be considered at least 5.5m wide by 5.0m high.

The Phoenix to 4240mRL, Harrier below 4500mRL, Central and Robin ore bodies are accessed from a footwall decline position while the Phoenix below 4240mRL and Harrier ore body above 4500mRL are accessed from the hangingwall. All areas are planned to be extracted using open stoping techniques, primarily in a top down sequence, with the application of Cemented Rock Fill or Paste Fill where applicable and practical. Selection of the specific mining method and extraction sequence within the open stoping regime is based upon previous experience at the Fosterville Mine and expectations of ore zone geometry and geotechnical conditions. A standard level interval of 20 vertical metres can be applied across all mining areas however, this can be and is varied as is required to maximize the extraction of the economic material.

Underground mining is conducted using a conventional fleet of trackless diesel equipment including development jumbos, production drills, loaders, trucks and ancillary equipment. The mine is currently

undergoing a technology upgrade to become a connected mine, enabled by digital communication capability and looking to utilise battery electric equipment technology. Current operations are undertaken predominately as owner miner, with mining activity undertaken on a continuous roster of 12 hour shifts, 7 days per week.

Production tonnage rates within the Phoenix and Harrier orebodies are expected to increase over the coming years as ventilation upgrades take effect and both areas open up through previous development and sequencing. Peak production output within the plan is >600,000 tonnes per annum. The LOM production schedule assumes pastefill within the high grade Phoenix orebody. This will be supplemented by rock and Cemented Rock Fill. The current LOM plan does not include pastefill in the Harrier orebody.

### **Processing and Recovery Operations**

The process plant incorporates the following unit operations:

- Single stage crushing with a primary jaw crusher;
- Open stockpile with reclaim tunnel;
- 20ft diameter by 20ft length SAG mill;
- A gravity circuit to recover coarse gold from the grinding circuit recirculating load;
- Flotation circuit to produce a gold bearing sulfide mineral concentrate and a barren residue;
- 8ft diameter by 13ft length flotation concentrate regrind mill;
- A gravity circuit to recover coarse gold from the flotation concentrate with gravity circuit concentrate being direct smelted;
- A bacterial oxidation circuit consisting of BIOX® reactors to oxidize the flotation concentrate, releasing gold from the sulfide mineral matrix;
- A three-stage counter current decantation circuit to separate the gold bearing oxidized solid residue from the solubilized acid oxidation products;
- A liquor neutralization circuit to neutralize acid and precipitate arsenic as stable basic ferric arsenate and sulfate as calcium sulfate (gypsum) using both ground limestone and lime slurries;
- A limestone grinding facility comprising a single wet ball mill operated in closed circuit with a hydro-cyclone to produce a ground limestone slurry for pH control in the BIOX® tanks and neutralization of sulfuric and arsenic acids produced from oxidation of gold bearing sulfide minerals;
- CIL circuit, with a pH adjustment tank at the head of the circuit, to leach gold from oxidized material and load the cyanide soluble gold onto activated carbon;
- Heated leach circuit to combat preg-robbing capabilities of the non-carbonaceous carbon always present in the Fosterville orebody; a specialized in-house technology developed by Fosterville and currently marketed as HiTECC™ by Outotec;
- Pressure Zadra elution circuit to remove gold from carbon, followed by electro-winning recovery and smelting to doré;
- A paste plant facility utilizing combined flotation and neutralization tailings to backfill mining stopes; and

- A mine water treatment plant to treat excess mine water to a water quality acceptable for reuse through the processing plant.

In the opinion of the authors of the Fosterville Technical Report, there are no processing factors or deleterious elements that could have a significant effect on potential economic extraction at the Fosterville Mine.

## **Infrastructure, Permitting and Compliance Activities**

### Infrastructure

The process plant is laid out on either side of a central rack in order to facilitate the distribution of reagents, services and inter-area piping. Individual plant areas are separately banded to isolate and contain spillage. Storm water and abnormal spillage events report to an existing drainage channel, to the west of the plant area, which discharges to an existing containment dam to the north.

Power is supplied to the site via the Fosterville Terminal Station (FVTS) that was constructed by Perseverance in 2005. This station is connected to the 220kV transmission line that runs from Bendigo to Shepparton and traverses the southern end of Mining Licence 5404, approximately 2km south of the processing plant. In 2020, a second transformer was installed and commissioned. The current arrangement has 1 x 20MVA (original Tx) and 1 x 30MVA (new Tx), 220kV /11kV power transformers. The terminal station is owned by FGM, operated by SP Ausnet and maintained and operated by Beon. Power consumption in the processing plant is approximately 7,500kW at a power factor of 0.98 and in the underground operations is approximately 9,500kW. A 22kV Powercor supply runs through the northern part of the mining lease which provides 415V power to operate the tailings dam electrical infrastructure for site water management. The Fosterville Mine is a non-discharge site with provisions to introduce recycled Class B water from the Bendigo water reclamation plant operated by Coliban Water. A recycled water pipeline was commissioned in April 2005 that has the capacity to supply approximately 2,000ML annually. This supply has the ability to supplement some elements of the processing facility. The current arrangement for the provision of water to the Fosterville Mine is secured through a ten-year contract with the North Central Catchment Management Authority, Coliban Water until 2026. A further ten-year contract renewal is available upon written request on expiry.

All other site infrastructure is in place and approved under a Risk Based Work Plan in October 2017 under the *Mineral Resources (Sustainable Development) Act 1990* (Victoria).

### Permitting

The Fosterville Mine currently operates under the Mining Licence 5404. The Licence was renewed in October 2018 and now has an expiry date in August 2035.

A submission for a variation to extend the Mining Licence 5404 boundary was approved in March 2019, extending the licence area to 2847.72Ha. A Mining Lease application MIN006267, which is adjacent to the south-western border of Mining Licence 5404, was submitted for approval in 2016. Kirkland Lake Gold and the Dja Dja Wurrung Clans Corporation are currently developing a close relationship to realise tangible benefits for the traditional owners of the land, with the relationship to be ratified in an agreement in negotiation regarding the Native Title Agreement.

A Work Plan was approved for the project in February 2, 2004. There have been a number of Work Plan Variations that have been prepared for the project which form addendums to the 2004 Work Plan. An amendment to the *Mineral Resources (Sustainable Development) Act 1990* (Victoria) in 2015 introduced the requirement for holders of a Mining Licence to lodge a risk based work plan prior to any further work plan variation approvals. FGM lodged a consolidated risk based work plan in April 2017 and is currently working under PLN-00932 approved in March 2019.

A work plan variation was submitted in July 2019 for approval to extend the existing McCormick's Waste Rock Dump facility, along with an application to clear areas of native vegetation for a number of capital projects (i.e., car park extension, security gatehouse, southern haul road extension and stores expansion). This work plan variation was granted in October 2020.

In addition to the above, the following projects were approved by means of administrative changes to the Fosterville Mine's approved work plan in 2019:

- ASTER Plant
- Elution Circuit Upgrade and Gold Room expansion
- Harrier 4490 Exploration Drill Drive

There are a number of requirements relating to rehabilitation and closure both in the Mining Licence conditions and the approved Work Plan. All rehabilitation and closure requirements have been incorporated into the site Rehabilitation Management Plan.

### Environmental

The Fosterville Mine produces an excess of mine water from the dewatering of underground operations. A water treatment plant, which contains a Reverse Osmosis ("RO") plant and a precipitation and ion exchange plant has been constructed in 2019 and is operating onsite. RO technology is a common solution for water treatment, readily available and understood. A by-product of the process is the generation of a concentrated saline solution called brine. The brine produced is being stored in a new evaporation pond, which is able to withstand seasonal rainfalls without discharge. Construction of the mine water treatment plant commenced during 2018 and commissioning occurred throughout Q4 2019. The plant is now operational. Treated mine water is used within the process circuit, reducing the amount of recycled water, which is delivered via pipeline from the Epsom Wastewater Treatment Plant. This assists in reducing the volume of water pumped into mine water storage, therefore improving the water management on site.

Fosterville Mine's operations generate noise from a variety of sources that have the potential to impact off site receptors. Noise-generating activities include, but are not limited to, heavy vehicle movements, ore processing, operation of fixed plant and ancillary infrastructure, surface and underground blasting, and exploration activities. Noise levels at sensitive receptors vary depending on a range of factors, such as the location and elevation of the receptor, any intervening topography or noise attenuation barriers, climatic conditions, the presence of other non-mine extraneous noise sources. FGM is actively working on a noise attenuation program, with noise management a key design criterion in the primary fan installation commissioned mid-2020 and a current project to address noise emanating from the BIOX blowers.

Storm water dams have been maintained with the ability to contain mine affected runoff from a 1:100 year rainfall event with improved pumping capacity, dam size and diversion of upstream catchment. The operational management plan for storm water management of the catchment continues to be implemented.

During 2020, FGM (in collaboration with Coliban Water) continued to monitor and assess a field trial to assess the viability of using biosolids as a medium for improving soil structure and quality as part of the overall site rehabilitation strategy.

Biosolids are a solid by-product from the sewage treatment processes, which have been treated to make them safe for further use. Biosolids fertilizers have previously been incorporated into a number of soil plots and planted with native species. The trial area is located on a historical in-pit tailings storage facility, which was capped with oxide material and biosolids were then applied in 2018.

In accordance with the Environmental Protection Agency approved Environmental Improvement Plan, the Fosterville Mine is assessed on a quarterly basis to monitor groundcover, species diversity and health rating. Soil health is also monitored on an annual basis. Monitoring to-date has found the incorporation of biosolids has improved the soil quality, where the plots were initially classified as class D soils; they have

improved to class C soils. Biosolids plots also have increased species diversity, groundcover percentage and revegetation success at varying concentrations. FGM will continue quarterly monitoring throughout 2021 to assess the success of the biosolids trial.

Flotation and neutralization tails have been stored in the following facilities: TSF1, Hunts and Fosterville In-Pit Facilities, O'Dwyer's South In-Pit Facility and TSF4. During 2020, FGM had been depositing flotation and neutralization tails into TSF1, Hunts In-Pit Facility, O'Dwyer's South In-Pit Facility and TSF4. The Fosterville In-Pit Facility has been filled and capped. Capping performance is being monitored by the amount of rainfall infiltration through the cap, and is measured by two lysimeters installed within the cover profile.

All CIL tailings have been stored in plastic lined facilities within and adjacent to the old Fosterville Heap leach pads. The Fosterville CIL tailings precinct includes the following facilities: CIL TSF1, CILTSF2 and CILTSF3; CIL Hardstand 1 and 2; CIL Storm Pond 1 and 2; and CIL Storm Dam 1. Construction of CIL Hardstand 3 commenced in 2018, following work plan approval. Operation of this facility commenced in 2019 and continued in 2020..

Potentially acid forming materials excavated from open pits have been stored in: McCormick's Waste Dump, Johns Pit (taken from Johns Pit and Harrier Pit) and Flotation and Neutralization Tailings. The Waste Rock Management Plan was updated in 2019, after which FGM commissioned an external review of the waste rock monitoring results and the management plan. The review supported the waste rock geochemical characterisation work completed to-date, which suggests Fosterville Mine's waste rock was non-acid-forming and contained a significant inherent Acid Neutralizing Capacity that was available to offset any isolated acid formation.

The review confirmed that the existing management controls identified in the management plan were appropriate. Kinetic column leach testing of the main waste rock lithologies continues to further the understanding of long term leaching characteristics. Additional ongoing characterization has begun, with weekly waste rock samples being collected from the Ellesmere saddle for testing of chemical composition and acid-forming potential.

Paste Fill enables the use of mine tailings to backfill excavated zones created by underground mining operations. The backfill material is prepared on the surface in a dedicated paste plant facility. Thickened mine tailings are mixed with a binder and fed underground via bores providing confinement of mined voids in the underground workings. In preliminary feasibility studies FGM identified paste fill technology as the preferred option to environmentally and efficiently improve underground stope stability and mining practices. The paste plant project was submitted for approval in November 2018 and a conditioned Work Plan approval was received in March 2019. Construction began during the second quarter of 2019 and acknowledgment that the Work Plan Variation conditions were met was received in October 2019. The paste plant began commissioning in October 2019 and first paste was delivered underground at the Fosterville Mine on 24 January 2020.

### Social and Community

Community engagement and consultation on all aspects of the operation continues as an integral part of FGM's business model. There are a range of forums and consultation methods undertaken, including quarterly Environmental Review Committee meetings, an annual open day, newsletters, information updates, letters and an active Facebook page. Project and/or activity-specific public meetings are also held, where future activities and plans are communicated to community. FGM considers the feedback from these sessions during planning and execution of future projects.

Community engagement activities are undertaken in accordance with the site Community Engagement Plan. FGM prepares an annual sustainability report that is made available to all members of the community and is uploaded to the Kirkland Lake Gold website.

Throughout 2020, FGM held two virtual town meetings. These meetings provided the community with information on FGM's operational activities within Mining Licence 5404 and the exploration programs occurring within FGM's exploration licences. These engagement events were supported by additional landholder meetings (where COVID-19 protocols allowed) and direct communications to address specific enquiries or requests for information.

#### Mine Closure (Remediation and Reclamation) Requirements and Costs

FGM's rehabilitation bond liability is assessed regularly by the Company in conjunction with the Department of Jobs, Precincts and Regions. In June 2019 the rehabilitation bond was proposed to be increased to A\$9.42M, the Department's final formal acceptance of the review has not been received to date.

Rehabilitation is undertaken progressively at FGM in accordance with the mining licence conditions and the site Rehabilitation and Closure Plan. FGM operates under an approved risk-based Work Plan administered by the *Mineral Resources (Sustainable Development) Act 1990 (Victoria)*.

All closure requirements are included in the Fosterville Mine Rehabilitation Management Plan.

#### **Capital and Operating Costs**

##### Capital Costs

Sustaining Capital expenditure over the period 2020-2021 is maintained at levels similar to 2019 with the intention to maintain two main declines/production fronts (Lower Phoenix South and Harrier South). This reflects the development required (decline, level accesses, ventilation raises) to access the subsequent year of production, plant and equipment and required resource definition drilling. The quantities of development used to estimate this cost are derived from 3D computer modelling and design. The sustaining capital cost estimate declines in 2022 as mineral reserves are depleted.

Growth Capital expenditure declines from 2019 – 2021 as major projects are completed. Growth Capital for major projects through this period include a Mine Water Treatment Plant, Ventilation Upgrade, Paste Fill Plant, Refinery Upgrade, Transformer Upgrade, Thiocyanate Removal Plant, Surface Chiller Plant and Drill Drive Development.

The table below is an excerpt from the Fosterville Technical Report and shows the LOM estimated capital expenditures in Australian dollars, as of December 31, 2018. In 2020, capital costs for the Fosterville Mine were A\$183 million.

#### **LOM CAPITAL COST ESTIMATES FROM THE DECEMBER 2018 LOM PLAN**

<b>Capital Costs</b>	<b>Total (A\$ 000's)</b>
Sustaining	408,000
Growth	108,000
Total	516,000

##### Operating Costs

Annual LOM operating costs per tonne for the Fosterville Mine are estimated to range from A\$264 per tonne to A\$287 per tonne, averaging A\$274 per tonnes over the LOM. The table below is an excerpt from the

Fosterville Technical Report and shows the LOM estimated operating expenditures in Australian dollars, as of December 31, 2018. In 2020, operating costs (exclusive of royalties) for the Fosterville Mine were A\$127 million.

#### LOM OPERATING COST ESTIMATES FROM THE DECEMBER 2018 LOM PLAN

Operating Costs	Total (A\$ 000's)
Operating Expenditure	658,000
Mine	361,000
Mill	177,000
Administration	120,000
Royalties	89,100
Total	747,100

#### Exploration, Development and Production

The Fosterville Mine has a demonstrated solid production history over a 15 year plus period since the beginning of commercial sulfide gold production in April 2005, and it is the view of the authors of the Fosterville Technical Report that the risk of not achieving projected economic outcomes is low given the operational experience gained over this time period.

The authors of the Fosterville Technical Report recommend that further growth exploration activities within the Mining Licence be pursued. Given the strong understanding of geological controls on mineralization, this has high potential to yield additional mineral resources and mineral reserves. Particular areas that are recommended to focus upon are extensions of the Lower Phoenix system, extensions of the Harrier system and the Robbin's Hill system which is positioned approximately 4 km to the north-east of current mine workings.

Exploration of the Lower Phoenix system is technically challenging from surface due to target depths and as such, Kirkland Lake Gold has established a dedicated underground drill platform (Harrier Exploration Drill Drive and P3912 Drill Drive) to undertake this drilling. The Harrier Drill Drive connected with the Lower Phoenix capital infrastructure in 2019 and has provided a platform to explore extensions of the Phoenix and Lower Phoenix mineral resources. Drilling over 2019 and 2020 demonstrated that the Lower Phoenix mineralized system extends and is continuous for at least 950m down plunge from the bottom of the Swan Zone, which represents an extremely large exploration target for future drilling. Drilling targeting extensions of the Lower Phoenix and Phoenix systems in 2021 is estimated to cost A\$5.8M.

Continued exploration of the Harrier mineralized system should be pursued. The system is open both down dip and down plunge. Geological models continue to evolve in this area with incoming data and drilling should target favourable structural settings for high grade visible gold mineralization and extensions of sulfide mineralization. Extensions of mineralization south of the Daley's Hill pit should also be investigated and a large component of the exploration program in the Harrier and Daley's Hill area is planned to be undertaken from surface based drill positions. Drilling planned in the Harrier and Daley's Hill areas for 2021 is estimated to cost A\$6.4M

Subsequent to the effective date of the Fosterville Technical Report, FGM has been granted mining licence extensions to the north and south of Mining Licence 5404. These extensions increase the total area of the mining licence to 28.5 km<sup>2</sup> and encompass potential resource extensions of the Harrier and Robbin's Hill Gold systems. Given the potential of near mine exploration targets, it is recommended that growth drill programs are implemented in pursuit of defining potential mineral resources independent from current mining centers. Growth drill programs planned to be undertaken within the mining lease during 2021 include;

- Cygnet Drilling program, which will explore for gold mineralization located in the footwall of the Swan Fault,
- Geophysical target program, which will drill test targets generated by interpretation of geophysical datasets including 3D seismic generated targets in the Robbins Hill area, and
- Robbin's Hill programs which will continue to build an understanding of the potential beneath the Robbin's Hill pits.
- Investigative programs at the southern end of the Mine Lease targeting the Windsor's Rush and Russell's Reef prospects at depth.

A total cost of A\$22.4M is budgeted in 2021 to execute the above programs.

A maiden mineral reserve was established at Robbins Hill in 2019 and the Company commenced development towards this deposit from existing underground infrastructure in January 2020. The development will serve as an underground exploration drilling platform to not only explore the strike extent of known mineralized structures at Robbin's Hill but explore other mineralized trends between the Fosterville and Robbin's Hill lines of mineralization. A total of 4,553m of development has been planned for 2021 at an estimated cost of A\$39.0M.

Exploration Licence 3539 (which encloses the current Mining Licence 5404) expired on February 26, 2019. The tenement was unable to be renewed under current state legislation and has been placed in moratorium (currently exempt from licence application). The tenement area holds substantial exploration potential along multiple identified lines of mineralization. Fosterville has proven exploration, mining and processing capabilities and is in a good position to maximize the potential of any mineral resources identified in the exploration licence area. The Victorian Government placed 4 ground release areas (block sizes range from 327 to 512 km<sup>2</sup>) out to tender in October 2019, one of which covers the area of the previously held EL3539 area. FGM is participating in the tender process with respect to such ground release areas and if successful would have exclusive rights to exploration licence applications. With exemplar status in areas of environment and community engagement, Fosterville is well positioned to retain exploration rights to this prospective ground. The successful tenderers are due to be announced in the first half of 2021.

With numerous prospective targets generated from exploration works undertaken to date within the surrounding exploration leases it is recommended to advance the pipeline of regional targets. The regional exploration project termed Large Ore Deposit Exploration ("**LODE**") aims to integrate and interpret all available geoscientific data, rapidly cover the current exploration holdings with reconnaissance exploration techniques such as soil sampling, airborne electromagnetic, gravity and seismic surveys and advance development of prospective targets with various drilling techniques. A total of A\$6.0M has been estimated to undertake Fosterville LODE work during 2021.

Growth Capital diamond drilling, for a total cost of approximately A\$17.4M, is proposed for the systematic expansion of indicated mineral resources. The proposed drilling will target inferred mineral resources, with the objective to increase resource confidence to an indicated mineral resource classification to allow for mineral reserve evaluation. The drilling will not only provide increased confidence in mineral resources which could lead to expansion of mineral reserves, but additional geological and geotechnical information ahead of mining, essential for optimizing the placement of supporting infrastructure and the effective extraction of the resource. A total of 1,130m of development at an estimated cost of A\$10.1M has been planned to support Growth Capital drilling programs in the Lower Phoenix area in 2021.

## DIVIDENDS

There are no restrictions on the ability of the Company to declare and pay dividends on the Common Shares. During the year ended December 31, 2018, Kirkland Lake Gold paid a total of \$16,329,968 in dividends to its shareholders. During the year ended December 31, 2019, Kirkland Lake Gold paid a total of \$29,469,062 in dividends to its shareholders. During the year ended December 31, 2020, Kirkland Lake Gold paid a total of \$115,942,291 in dividends to its shareholders. Subsequent to the year ended December 31, 2020, Kirkland Lake Gold paid a total of \$50,268,352 in dividends on January 14, 2021 to shareholders of record as of December 31, 2020 and announced an increase of its quarterly dividend to \$0.1875 per share. On March 18, 2021, the Company announced a quarterly dividend of US\$0.1875 per Common Share to be paid on April 14, 2021 to shareholders of record as of March 31, 2020. The declaration and payment of future dividends will be at the discretion of the Board and will be made based on the Company's financial position and other factors relevant at the time.

Each of these dividends was designated to be an eligible dividend for the purposes of the *Income Tax Act* (Canada).

## DESCRIPTION OF CAPITAL STRUCTURE

### **Authorized Capital**

The Company is authorized to issue an unlimited number of Common Shares of which there were 267,055,602 Common Shares issued and outstanding as of March 29, 2021. The Company is also authorized to issue an unlimited number of preferred shares ("**Preferred Shares**") of which there were none outstanding as of March 29, 2021.

### **Common Shares**

Holders of Common Shares are entitled to receive notice of any meetings of shareholders of the Company, to attend and to cast one vote per Common Share at all such meetings, except meetings at which only holders of another class or series of shares are entitled to vote separately as such class or series. Holders of Common Shares are entitled to receive on a *pro-rata* basis such dividends, if any, as and when declared by the Board at its discretion from funds legally available therefor and upon the liquidation, dissolution or winding up of the Company are entitled to receive on a *pro-rata* basis the net assets of the Company after payment of debts and other liabilities, in each case subject to the rights, privileges, restrictions and conditions attaching to any other series or class of shares ranking senior in priority to or on a *pro-rata* basis with the holders of Common Shares with respect to dividends or liquidation. The Common Shares do not carry any cumulative voting, pre-emptive, subscription, redemption or conversion rights, nor do they contain any sinking or purchase fund provisions.

### **Preferred Shares**

The Company may issue Preferred Shares at any time or from time to time in one or more series. Before any shares of a series are issued, the Board shall fix the number of shares that will form such series and shall, subject to the limitations set out in the Company's articles, determine the designation, rights, privileges, restrictions and conditions to be attached to the Preferred Shares of such series. The Preferred Shares of each series shall rank on a parity with the Preferred Shares of every other series with respect to dividends and return of capital and shall be entitled to a preference over the Common Shares and over any other shares ranking junior to the Preferred Shares with respect to priority in payment of dividends and in the distribution of assets in the event of the liquidation, dissolution or winding-up of the Company, or any other distribution of the assets of the Company among its shareholders for the purpose of winding up its affairs. Except as required by law or unless provision is made in the Company's articles, the holders of the Preferred Shares as a class shall not be entitled to receive notice of, to attend or to vote at any meeting of the shareholders of the Company. The rights, privileges, restrictions and conditions attached to the

Preferred Shares as a class may be added to, changed or removed but only with the approval of the holders of the Preferred Shares.

### Constraints

There are no constraints imposed on the ownership of the Company's securities to ensure that it meets a required level of Canadian ownership.

### Ratings

During the financial year ended December 31, 2020, none of the Company's securities have received a rating from a rating organization.

## MARKET FOR SECURITIES

### Trading Price and Volume

The Common Shares are listed and posted for trading on the TSX and NYSE under the symbol "KL" and on the ASX under the symbol "KLA". The following tables set forth information relating to the monthly trading of the Common Shares on the TSX, NYSE and ASX, respectively, for the financial year ended December 31, 2020.

#### TSX

Month	High (C\$)	Low (C\$)	Volume
January 2020	59.09	52.28	32,459,267
February 2020	54.51	41.3	41,898,554
March 2020	48.75	25.67	54,881,086
April 2020	61.5	40.83	35,847,392
May 2020	61.67	49.75	25,817,605
June 2020	56.08	48.21	29,951,452
July 2020	73.31	55.73	28,371,392
August 2020	76.43	63.01	19,685,657
September 2020	72.52	62.01	23,507,773
October 2020	67.99	58.3	17,111,733
November 2020	65.37	50.01	22,446,844
December 2020	55.07	49.7	27,231,353

NYSE

Month	High (USD\$)	Low (USD\$)	Volume
January 2020	45.44	39.63	26,848,214
February 2020	41.13	30.68	56,705,023
March 2020	36.31	18.03	65,871,849
April 2020	43.91	28.70	49,579,585
May 2020	44.23	36.12	42,876,774
June 2020	41.32	35.36	42,569,543
July 2020	54.74	40.31	52,575,764
August 2020	57.69	47.45	36,834,969
September 2020	55.29	46.25	33,177,883
October 2020	51.78	43.76	30,713,936
November 2020	50.13	38.38	38,448,826
December 2020	43.37	38.96	36,094,310

ASX

Month	High (A\$)	Low (A\$)	Volume
January 2020	68.50	59.40	98,866
February 2020	62.50	49.00	84,749
March 2020	55.00	38.44	96,181
April 2020	66.50	46.76	65,362
May 2020	66.50	56.22	74,101
June 2020	61.50	53.00	212,019
July 2020	72.35	59.30	125,632
August 2020	80.50	67.10	118,530
September 2020	74.75	66.50	53,641
October 2020	71.58	62.80	31,246
November 2020	68.96	54.50	67,088
December 2020	57.67	51.95	59,210

**ESCROWED SECURITIES & SECURITIES SUBJECT TO  
CONTRACTUAL RESTRICTIONS ON TRANSFER**

To the Company's knowledge, as at December 31, 2020, no securities of the Company were held in escrow or are subject to contractual restrictions on transfer.

## DIRECTORS AND OFFICERS

The following table sets forth the name, province or state and country of residence, the position held with the Company and period during which each director and the executive officer of the Company has served as a director and/or executive officer, the principal occupation, and the number and percentage of Common Shares beneficially owned by each director and executive officer of the Company as of the date hereof. The statement as to the Common Shares beneficially owned, controlled or directed, directly or indirectly, by the directors and executive officers hereinafter named is in each instance based upon information furnished by the person concerned and is as at the date hereof. All directors of the Company hold office until the next annual meeting of shareholders of the Company or until their successors are elected or appointed.

Name and Residence	Position with the Company and Period Served as a Director	Principal Occupation	Number and Percentage of Common Shares Beneficially Owned <sup>(1)</sup>
<b>Directors</b>			
Jeffrey Parr <sup>(2)(4)(6)</sup> Ontario, Canada	Non-Executive Chairman and Director since November 30, 2016	Retired Mining Executive, Chartered Professional Accountant, Chartered Accountant. Previously, Chief Financial Officer of Centerra Gold Inc. from 2008 to 2016; Vice President, Finance of Centerra from 2006 to 2008; director of Old Kirkland Lake Gold from 2014 to 2016.	19,790 (0.007%)
Anthony Makuch <sup>(5)(6)</sup> Ontario, Canada	President, Chief Executive Officer and Director since November 30, 2016	President and Chief Executive Officer and director of the Company since November 30, 2016. Previously, President, Chief Executive Officer and director of Old Kirkland Lake Gold from July 2016 to November 30, 2016; President, Chief Executive Officer and director of Lake Shore Gold Corp. from 2008 to 2016.	64,843 (0.02%)
Jonathan Gill <sup>(4)(5)(6)</sup> Ontario, Canada	Director since November 30, 2016	Retired Mining Executive and Professional Engineer. Previously, director of Lake Shore Gold Corp. from 2008 to 2016.	Nil (0.0%)
Arnold Klassen <sup>(2)(3)(4)</sup> British Columbia, Canada	Director since November 30, 2016	Chartered Professional Accountant, Chartered Accountant and Certified Public Accountant. Currently, President of AKMJK Consulting Ltd., Chief Financial Officer of LaSalle Exploration Corp. and director of GFG Resources Inc. Previously, director of Lake Shore Gold Corp. from 2008 to 2016; director of Claude Resources Inc. from April 2015 to May 2016; and director of Northern Superior Resources Inc. from August 2008 to November 2016.	15,000 (0.006%)

<b>Name and Residence</b>	<b>Position with the Company and Period Served as a Director</b>	<b>Principal Occupation</b>	<b>Number and Percentage of Common Shares Beneficially Owned<sup>(1)</sup></b>
Barry Olson <sup>(2)(5)(6)</sup> Arizona, United States	Director since November 30, 2016	Retired Mining Executive. Previously, Senior Vice President of Project Development at Goldcorp Inc. from October 2008 to October 2013; director of Old Kirkland Lake Gold from 2014 to 2016.	5,650 (0.002%)
Elizabeth Lewis-Gray <sup>(5)(6)</sup> Victoria, Australia	Director since September 26, 2019	Co-founder, Chair and Managing Director of Gekko Systems. Founder and now Patron of CEEC (Coalition for Eco-Efficient Comminution) and founding Chair of the Australian Federal Government's Mining Equipment, Technology and Services (METS) Growth Centre.	940(0.0004%)
Ingrid Hibbard Ontario, Canada	Director since February 24, 2020	President, Chief Executive Office and director of Pelangio Exploration Inc. Previously, President of Pelangio-Larder Mines Limited; director of Detour until 2018; director of Lake Shore Gold Corp. from 2014 to 2016.	17,183 (0.006%)
Peter Grosskopf Ontario, Canada	Director since February 24, 2020	Chief Executive Officer and Director of Sprott Inc. Previously, President of Cormark Securities Inc.; co-founder of Newcrest Capital Inc.	10,000 (0.004%)
<b>Executive Officers</b>			
David Soares Ontario, Canada	Chief Financial Officer	Chief Financial Officer of the Company since November 20, 2018. Previously, Chief Financial Officer of Baffinland Iron Mines Corporation from November 2017 to November 2018; Chief Financial Officer of the Pueblo Viejo Mine held by Barrick from 2015 to 2017.	Nil (0.0%)
Natasha Vaz	Chief Operating Officer	Chief Operating Officer of the Company since March 1, 2021. Previously, Senior Vice President, Technical Services, Technology and Innovation of the Company from June 22, 2020 until March 2021; Vice President, Technical Services of the Company from April 2019 until June 2020; Vice President, Technical Services for Tahoe Resources Inc. from April 2016 to March 2019; Vice President, Technical Services for Lakeshore Gold Corp. from June 2013 to March 2016.	Nil (0.0%)

<b>Name and Residence</b>	<b>Position with the Company and Period Served as a Director</b>	<b>Principal Occupation</b>	<b>Number and Percentage of Common Shares Beneficially Owned<sup>(1)</sup></b>
Jennifer Wagner Ontario, Canada	Executive Vice President, Corporate Affairs and Sustainability	Executive Vice President, Corporate Affairs and Sustainability of the Company since March 1, 2021. Previously, Senior Vice President, Corporate Affairs, Sustainability and Legal Counsel of the Company from June 22, 2020 until March 2021; Vice President, Legal of the Company from November 30, 2016 to June 2020; Corporate Legal Counsel and Corporate Secretary of Old Kirkland Lake Gold from July 2015 to November 30, 2016; in house counsel and corporate secretary to various TSX and TSXV listed mining companies from 2008 to 2015.	Nil (0.0%)
Jason Neal	Executive Vice President	Executive Vice President of the Company since March 1, 2021. Previously, President and Chief Executive Officer of TMAC Resources Inc. from February 2018 to February 2021; Co-Head and Managing Director of the Global Metals and Mining Group at BMO Capital Markets from 2010 to February 2018, having joined the group in 1997.	1,000 (0.0004%)
Alasdair Federico Ontario, Canada	Executive Vice President, Corporate Affairs and CSR	Executive Vice President, Corporate Affairs and CSR of the Company since November 30, 2016. Previously, Executive Vice President, Corporate Affairs of Old Kirkland Lake Gold from September to November 30, 2016; Vice President, Legal Affairs of Lake Shore Gold Corp. from 2008 to 2016.	Nil (0.0%)
Eric Kallio Ontario, Canada	Senior Vice President, Exploration	Senior Vice President, Exploration of the Company. Previously, Vice President Exploration (Timmins) of Tahoe Resources Inc. from April 2016 to 2018; Vice President, Exploration for Lake Shore Gold Corp from 2008 to April 2016.	Nil (0.0%)
Mark Utting Ontario, Canada	Senior Vice President, Investor Relations	Senior Vice President, Investor Relations of the Company since June 2020. Previously, Vice President, Investor Relations of the Company from June 2017 to June 2020; Vice President, Investor Relations of Tahoe Resources Inc. from April 2016 to June 2017; Vice President, Investor Relations of Lake Shore Gold Corp. from March 2008 to April 2016.	Nil (0.00%)

<b>Name and Residence</b>	<b>Position with the Company and Period Served as a Director</b>	<b>Principal Occupation</b>	<b>Number and Percentage of Common Shares Beneficially Owned<sup>(1)</sup></b>
Meri Verli Ontario, Canada	Senior Vice President, Business Operation Management Systems	Senior Vice President, Business Operation Management Systems of the Company since August 2020. Previously, Chief Financial Officer of McEwen Mining Inc. from July 2019 to May 2020; Senior Vice President, Finance and Treasury of the Company from September 2016 to July 2017; Vice President, Finance at Lake Shore Gold from September 2007 to September 2016.	Nil (0.00%)
Raymond Yip Ontario, Canada	Vice President, Business Intelligence	Vice President, Business Intelligence of the Company since November 30, 2016. Previously, Vice President, Business Intelligence of Old Kirkland Lake Gold from September 2016 to November 30, 2016; Director, Information Systems for Lake Shore Gold Corp. from 2011 to 2016; IT consultant to various mining companies including QuadraFNX, DMC Mining and Torex Gold.	Nil (0.00%)
Darin Smith Ontario, Canada	Vice President, Corporate Development	Vice President, Corporate Development of the Company since May 2018. Previously, Director, Corporate Development of the Company from May 2017; Business Development at Antofagasta Minerals from 2012 to 2017; Vice President in the Global Metals and Mining Group of BMO Capital Markets from 2008 to 2011.	500 (0.0002%)
Duncan King Ontario, Canada	Vice President, Canadian Operations	Vice President, Canadian Operations of the Company since June 22, 2020. Previously, Vice President, Australian Operation (interim) of the Company from March 2020 to June 2020; Vice President, Mining, Kirkland Lake of the Company from November 2018 to March 2020; the General Manager, Canadian Operations of the Company from 2017 to November 2018; Manager of the Bell Creek Mine for Lake Shore Gold Corp. from 2014 to 2016; General Superintendent of the Lakeshore Gold Corp. Timmins West Mine from 2008 to 2014.	Nil (0.0%)

<b>Name and Residence</b>	<b>Position with the Company and Period Served as a Director</b>	<b>Principal Occupation</b>	<b>Number and Percentage of Common Shares Beneficially Owned<sup>(1)</sup></b>
John Landmark Queensland, Australia	Vice President, Australian Operations, Co-Lead	Vice President, Australian Operations (Co-Lead) of the Company since June 22, 2020. Previously, Vice President, Human Resources of the Company from January 2019 to June 2020; Vice President, Exploration, Australian Operations of the Company from January 2017 to January 2019; Vice President, Exploration of Newmarket Gold Inc. in 2016; Regional Head of Exploration for Anglo American plc from 2011 to 2016.	Nil (0.0%)
Ion Hann Victoria, Australia	Vice-President, Australian Operations, Co-Lead	Vice President, Australian Operations (Co-Lead) of the Company since September 2020. Previously, General Manager of FGM from June 2018 to August 2020; Production Manager of FGM from July 2017 to May 2018; Mining Manager of FGM from 2005 to 2017.	Nil (0.0%)
Gord Leavoy Ontario, Canada	Vice President, Mineral Processing	Vice President, Mineral Processing of the Company since August 2019. Previously, Director; Mineral Processing from March 2017 to August 2019; Regional Mill Manager from June 2016 to March 2017; Mill Manager from February 2016 to June 2016.	Nil (0.00%)
Mohammed Ali Ontario, Canada	Vice President, Environment	Vice President, Environment of the Company since June 2020. Previously, Director, Environment, Canadian Operations of the Company from October 2017 to January 2020; Regional Manager with Klohn Crippen Berger from November 2016 to October 2017; Regional Director for Sustainability, Environment and CSR for Hatch from July 2006 to October 2016.	Nil (0.0%)
Marika Van der Klugt Victoria, Australia	Vice President, Health and Safety	Vice President, Health and Safety of the Company since September 2020. Previously, Director, Health and Safety from 2019 to September 2020; Mungari HSET Manager for Evolution Mining from November 2017 to August 2019; Site Senior Executive at the Century Mine, MMG, from April 2015 to September 2017.	Nil (0.0%)

Name and Residence	Position with the Company and Period Served as a Director	Principal Occupation	Number and Percentage of Common Shares Beneficially Owned <sup>(1)</sup>
Greg Rooney Ontario, Canada	Vice President, Human Resources	Vice President, Human Resources of the Company since July 2020. Previously, Vice President, People and Culture for Algonquin Power & Utilities Corp. from April 2016 to December 2019; Senior Vice President, Human Resources for Aecon Group Inc. from January 2007 to April 2015.	Nil (0.0%)

Notes:

- (1) Based on 267,055,602 Common Shares outstanding as at March 29, 2021.
- (2) Member of the Audit Committee.
- (3) Member of the Corporate Governance and Nominating Committee.
- (4) Member of the Compensation Committee.
- (5) Member of the Health, Safety and Environment Committee.
- (6) Member of the Technical Committee.

As at the date hereof, the current directors and executive officers of the Company, as a group, beneficially owned, directly or indirectly, or exercised control over, a total of 134,906 Common Shares, representing approximately 0.051% of the issued and outstanding Common Shares as at March 29, 2021.

The principal occupations, businesses or employments of each of the Company's directors and the senior executive officers within the past five years are disclosed in the brief biographies set out below.

**Jeffrey Parr – Chairman and Director.** Mr. Parr is a Chartered Professional Accountant (CPA, CA 1984) and holds a Masters of Business Administration from McMaster University and a Bachelor of Arts in Economics from the University of Western Ontario. Mr. Parr has over 30 years of executive management experience in the mining and service provider industries. He joined Centerra Gold Inc. in 2006 and was appointed Chief Financial Officer in 2008 where he served until his retirement in 2016. From 1997 to 2006 he worked for Acres International as Chief Financial Officer and from 1988 to 1997, held progressively senior financial positions at WMC International (a subsidiary of Western Mining Corporation responsible for operations and exploration in the Americas), ultimately serving as the Company's Executive Vice President. He is also a member of the Board and Chair of the Audit Committee of Discovery Metals Corp. Mr. Parr is a member of the Canadian Institute of Chartered Professional Accountants and has obtained the ICD.D designation from the Institute of Corporate Directors.

**Anthony Makuch – President, Chief Executive Officer and Director.** Mr. Makuch is a Professional Engineer (Ontario) with over 25 years of management, operations and technical experience in the mining industry, having managed numerous projects in Canada and the United States from advanced exploration through production. He has been a frequent recipient of mine safety performance awards. Mr. Makuch holds a Bachelor of Science Degree (Honours Applied Earth Sciences) from the University of Waterloo, both a Master of Science Degree in Engineering and a Master of Business Administration from Queen's University and has obtained the Institute of Corporate Directors ICD.D designation from the University of Toronto Rotman School of Business. Mr. Makuch was formerly the President and Chief Executive Officer of Old Kirkland Lake Gold from July to November 2016 and was previously the President and Chief Executive Officer of Lake Shore Gold Corp. ("**Lake Shore Gold**") from 2008 to 2016.

**Jonathan Gill – Director.** Mr. Gill is a Professional Engineer with more than 45 years of mining experience, much of it working in senior mine management roles for Inco Limited in its Ontario and Manitoba divisions

and for PT Inco in Indonesia. Since retiring in 2003, Mr. Gill has worked on a number of project assignments for Inco, both in Canada and at the Goro project in New Caledonia; as well as for other companies involving reviews of such projects as FNX Mining Company's Sudbury operations, the Ambatovy nickel project in Madagascar and the Onca Puma project in Brazil. Mr. Gill was a director of Lake Shore Gold from 2008 to 2016. Mr. Gill is a member of the Association of Professional Engineers of Ontario and is a former Employer Chair of Ontario's Mining Legislative Review Committee. Mr. Gill has obtained the Institute of Corporate Directors ICD.D designation.

**Arnold Klassen – Director.** Mr. Klassen is a Chartered Professional Accountant, Chartered Accountant and Certified Public Accountant and has more than 40 years experience in accounting, audit and tax with over 35 years of experience in the Mining Industry. Mr. Klassen is currently President of AKMJK Consulting Ltd., a private consulting company, Chief Financial Officer of LaSalle Exploration Corp., a mineral exploration company listed on the TSX Venture Exchange and a director of GFG Resources Inc., a mineral exploration company listed on the TSX Venture Exchange. Prior to that Mr. Klassen was the Vice President of Finance for Dynatec Corporation from 1988 to 2007. Dynatec Corporation was a publicly traded TSX listed company from 1997 to 2007. He held a similar position with the Tonto Group of Companies from 1984 to 1998. Mr. Klassen holds a degree in Commerce from the University of British Columbia and spent seven years with KPMG prior to becoming Vice President of Finance with the Tonto Group of Companies. Mr. Klassen has obtained the Institute of Corporate Directors designation.

**Barry Olson – Director.** Mr. Olson has a Bachelor of Science degree in Metallurgical Engineering and Masters of Science degree in Mining Engineering from the University of Idaho. He most recently served as Senior Vice President of Project Development at Goldcorp Inc. and served as its Vice President of Project Development from October 2008 to October 2013. He has over 28 years of progressive mining experience in both South America and the United States and has extensive experience in design, construction, and managing mines in Mexico, Canada, US, Argentina, and Chile.

**Elizabeth Lewis-Gray – Director.** Ms. Lewis-Gray is co-founder, Chair and Managing Director of Gekko Systems, a technology leader in mineral processing with a focus on digital instrumentation, automation, mineral recovery and low-energy solutions. Founder and now Patron of CEEC (Coalition for Eco-Efficient Comminution), Ms. Lewis-Gray was visionary in the formation of this not-for-profit organization, which aims to accelerate knowledge transfer and change in the field of eco-efficient comminution for the mining industry. Ms. Lewis-Gray has served as a member of the Australian Gold Council, the Australian Federal Government's Innovation Australia Board and National Precincts Board and the Victorian Government's Resources Advisory Council. She was the founding Chair of the Federal Government's Mining Equipment, Technology and Services (METS) Growth Centre, METS Ignited and currently serves as Deputy Chair. In 2016, Federation University Australia honoured Ms. Lewis-Gray with an Honorary Doctorate in recognition of service and contributions to the mining sector, mineral processing, business leadership, and environmental management. She holds a Degree in Economics, a Master of Business Management and a Diploma in Financial Securities. Ms. Lewis-Gray is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM), the Australian Academy of Technology, Science and Engineering and the Securities Institute of Australia.

**Ingrid Hibbard – Director.** Ms. Hibbard has over 30 years of experience spanning all facets of the mineral resources industry from early-stage exploration to mine development and production. Ms. Hibbard is currently the President, Chief Executive Office and director of Pelangio Exploration Inc., a Canadian exploration company with properties in Canada and Ghana. Ms. Hibbard played a founding role in advancing the Detour Lake mine property. She was President of Pelangio-Larder Mines, Limited, which in 1998, acquired the Detour Lake mine property from Placer Dome (CLA) Ltd. under a joint venture with Franco-Nevada Mining Company Limited. Pelangio subsequently sold the Detour Lake assets to Detour in 2007. Ms. Hibbard remained a director of Detour Gold until 2018. Ms. Hibbard also served on the board of Lake Shore Gold from 2014 to 2016. Ms. Hibbard holds a BA and a LL.B. from the University of Western Ontario and is called to the Bar in both Ontario and Manitoba. Prior to her stewardship of public companies, Ms. Hibbard began her career in mining by practicing corporate and securities law with clients ranging from multi-national mining operators to mineral resource explorers and individual prospectors.

**Peter Grosskopf – Director.** Mr. Grosskopf has more than 30 years of experience in the financial services industry. At Sprott Inc., he is responsible for strategy and managing the firm's private resource investment businesses. His career includes a long tenure in investment banking, where he managed many strategic and underwriting transactions for companies in a variety of sectors. Prior to joining Sprott, Mr. Grosskopf was President of Cormark Securities Inc. He has a track record of building and growing successful businesses including Newcrest Capital Inc. (as one of its co-founders) which was acquired by the TD Bank Financial Group in 2000. Mr. Grosskopf is a CFA® charterholder and earned an Honours Degree in Business Administration and a Masters of Business Administration from the Richard Ivey School of Business at the University of Western Ontario.

**David Soares – Chief Financial Officer.** Mr. Soares has over 15 years of finance and management experience reflecting progressively senior leadership roles with multinational mining companies, including Xstrata, Glencore and Barrick. Prior to joining Kirkland Lake Gold, Mr. Soares served as Chief Financial Officer of Baffinland Iron Mines Corporation, a joint venture between Arcelor Mittal and Nunavut Iron Ore. He has international governance experience having served as a director of national level organizations representing industry and the private sector. Mr. Soares holds a Chartered Professional Accountant designation (CPA, CA) from the Chartered Professional Accountants of Ontario, a Master of Business Administration from the Ivey Business School, and a Bachelor of Commerce from the University of Toronto.

**Natasha Vaz – Chief Operating Officer.** Ms. Vaz is a professional engineer with over 18 years of experience. Ms. Vaz joined the Company in 2019 as Vice President, Technical Services and, most recently served as Senior Vice President, Technical Services, Technology and Innovation from June 2020 until her promotion to Chief Operating Officer on March 1, 2021. Mr. Vaz is a proven mining industry executive with extensive operational experience and significant knowledge of the Company's assets. She holds a Bachelor of Applied Sciences, Mineral Engineering from the University of Toronto and an Executive MBA from the Kellogg-Schulich School of Management. Prior to joining Kirkland Lake Gold, Mr. Vaz served as Vice President, Technical Services for Tahoe Resources Inc., and prior to that with Lake Shore Gold.

**Jennifer Wagner – Executive Vice President, Corporate Affairs and Sustainability.** Ms. Wagner is a corporate securities lawyer with over 15 years of experience in the mining sector. Ms. Wagner has extensive experience advising companies on a variety of corporate commercial transactions, governance and compliance matters. She started her career at a prominent Canadian law firm in Toronto. Ms. Wagner received a Bachelor of Arts from McGill University and an LL.B. from the University of Windsor. Ms. Wagner was formerly the Corporate Legal Counsel and Corporate Secretary of Old Kirkland Lake Gold from July 2015 to November 2016. Prior to joining Kirkland Lake Gold, Ms. Wagner was legal counsel and corporate secretary for various TSX and TSXV listed mining companies.

**Jason Neal – Executive Vice President.** Mr. Neal is a veteran mining investment banker, having joined BMO Capital Markets at the start of 1997 after graduating from Simon Fraser University with a Bachelor of Business Administration, and working his entire career focused exclusively on the metals and mining industry. Mr. Neal was promoted to Co-Head and Managing Director of the Global Metals and Mining Group in 2010, providing leadership to a team operating in offices located in Toronto, Vancouver, London, New York, Beijing and Melbourne. Prior to joining Kirkland Lake Gold in March 2021, Mr. Neal was the President and Chief Executive Officer of TMAC Resources Inc. from February 2018 until the completion of its acquisition by Agnico Eagle Mines Limited in February 2021.

**Alasdair Federico – Executive Vice President, Corporate Affairs and CSR.** Mr. Federico is an experienced lawyer and business executive with over a decade of experience in matters of corporate strategy and governance, including managing negotiations and relationships with investors, business partners, and other stakeholders. Prior to joining the Company, Mr. Federico was Vice-President, General Counsel and Corporate Secretary at Lake Shore Gold from 2008 until its acquisition by Tahoe Resources on April 1, 2016. Prior to joining Lake Shore Gold, Mr. Federico worked for a prominent Canadian law firm in Toronto. Mr. Federico holds a Bachelor of Commerce from the Rotman School of Management at the University of Toronto and a Bachelor of Law from the University of Western Ontario.

**Eric Kallio – Senior Vice President, Exploration.** Mr. Kallio is a geologist registered with the Association of Professional Geoscientists of Ontario (APGO). He has over 30 years of experience working on exploration and underground and open-pit mine planning, scoping and feasibility studies in Canada and abroad. Most recently, Mr. Kallio was Vice President, Exploration (Timmins) for Tahoe Resources Inc. since April 2016 and, prior to that, was Vice President, Exploration for Lake Shore Gold. Among other corporate assignments, Mr. Kallio served in a variety of senior exploration and mine geology roles with Placer Dome, Kinross Gold, Patricia Mining Corporation, Centerra Gold Inc. and Detour. He has also worked on a consulting basis for a wide range of international mining companies and served as a director on the board of Holmer Gold Mines Limited until December 2004.

**Mark Utting – Senior Vice President, Investor Relations.** Mr. Utting is a Chartered Financial Analyst with over 25 years of experience in investor relations and corporate communications, mainly in the mining and financial services industries. Most recently, Mr. Utting served as the Vice President, Investor Relations for Tahoe Resources Inc. from April 2016 to June 2017. Prior to joining Tahoe, Mr. Utting served as the Vice President, Investor Relations of Lake Shore Gold from 2008 to 2016 and was previously the Director, Investor Relations of Extencicare REIT; Director, Director of Communications and Investor Relations of Dynatec Corporation and Director, and Director of Investor Relations of Rio Algom Limited.

**Meri Verli – Senior Vice President, Business Operation Management Systems.** Ms. Verli is an experienced senior finance executive with an extensive background in financial management and reporting, financial and operational recovery, mergers and acquisitions, risk management and strategy development. Ms. Verli has held several senior management roles in the gold mining sector, including most recently as the Chief Financial Officer of McEwen Mining Inc, Senior Vice President of Finance and Treasury at the Company until July 2017 and Vice President, Finance at Lake Shore Gold from 2007 to 2016 when the business combination with Tahoe Resources was completed. At her previous tenure with the Company, Ms. Verli was part of the team that executed the transformational merger between Old Kirkland Lake Gold and Newmarket Gold Inc. and was instrumental in integrating the finance and treasury teams, policies and practices for the various acquired entities. Ms. Verli is a Chartered Professional Accountant, holds a PhD in Economic Sciences, a Bachelor of Geology and Engineering and a Bachelor of Economics from the University of Tirana, Albania.

**Duncan King – Vice President, Canadian Operations.** Mr. King has been Vice President, Canadian Operations since June 2020. Prior to this, he was the Vice President, Australian Operations (interim) from March 2020 to June 2020, Vice President, Mining, Kirkland Lake from November 2018 to March 2020 and the General Manager Canadian Operations from September 2017 to November 2018. Previously, Mr. King acted as the Manager of the Bell Creek underground mine and mill at Lake Shore Gold from 2014 to 2016. From 2008 to 2014, Mr. King was the General Superintendent of the Timmins West Mine held by Lake Shore Gold since its inception and was integral in the completion of the 720 metre level shaft with all accompanying infrastructure. Prior to this Mr. King worked for several different companies in varying progressively demanding positions, including at FNX Mining at the McCreedy West and Podolsky mines.

**John Landmark – Vice President, Australian Operations (Co-Lead).** Mr. Landmark's international career spans a diverse range of executive leadership, technical and advisory roles in exploration, mining operations, human resources, and safety risk management. Mr. Landmark was previously the Vice President, Human Resources of the Company from January 2019 to June 2020. Prior to this, he was the Vice President, Exploration, Australian Operations of the Company from January 2017 to January 2019. Mr. Landmark brings over 30 years of international mineral exploration and mining industry experience. Mr. Landmark joined Newmarket Gold Inc. in 2016 and led the company's exploration activities while being the Group functional head for Geology. Prior to joining Newmarket Gold, he was a Regional Head of Exploration for Anglo American plc, where he managed exploration programs for copper-gold, iron ore and coal in Australia, Indonesia, Papua New Guinea and Mongolia. Prior to this role, he led Anglo American's exploration activities in Brazil. His exploration and mining geology career started out in South Africa and Namibia, and he then moved on to Australia. Mr. Landmark holds a Master of Science in Exploration and Mining Geology from James Cook University in Australia and a Bachelor of Science (Hons) in Geology from Wits University in South Africa.

**Ion Hann – Vice President, Australian Operations (Co-Lead).** Mr. Hann has spent 15 years in the Eastern Goldfields of Western Australia, at multiple organizations. Mr. Hann joined FGM in 2005 as the Mining Manager. In the last two years, Mr. Hann has been the General Manager at FGM, leading the six-fold increase in production and multi-million dollar capital projects for the site, while maintaining a high level of operational excellence and leadership in sustainable mining practices and health and safety in the workplace. Mr. Hann has a Bachelor's Degree in Engineering from the Western Australian School of Mines and is a Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM).

**Raymond Yip – Vice President, Business Intelligence.** Mr. Yip is a computer engineer with over 15 years of experience in the IT industry, with 10 years in the mining sector. Most recently, he served as Director, Information Systems for Lake Shore Gold from 2011 to 2016. Prior to that, Mr. Yip provided IT consulting services to various mining companies including QuadraFNX, DMC Mining and Torex Gold. Having held progressively senior positions at a major Canadian telecommunications company, Mr. Yip has diverse IT experience across various industries including financial, healthcare and automotive. Mr. Yip holds a Bachelor of Applied Science degree from Queen's University.

**Darin Smith – Vice President, Corporate Development.** Mr. Smith is a mining finance professional with over fifteen years of experience in financial analysis and corporate strategy within the mining sector. Prior to joining Kirkland Lake Gold in May 2017, he served in a business development role at Antofagasta Minerals. Darin began his career as an investment banker at BMO Capital Markets where he spent 10 years in the Global Metals and Mining Group in both their Toronto and London offices. He holds a Bachelor of Applied Science in Mining Engineering and a Master of Management Analytics, both from Queen's University.

**Gord Leavoy – Vice President, Mineral Processing.** Mr. Leavoy started with the Company in early 2016 and has over 35 years experience in mineral processing. His experience spans base metals and gold across North America. In addition, he has extensive experience in mine tailings dam construction, maintenance and processing plant operations. Prior to joining the Company, Mr. Leavoy held a variety of roles with Texas Gulf, Falconbridge, Kinross, Placer Dome, Goldcorp and Lake Share Gold.

**Mohammed Ali – Vice President, Environment.** Mr. Ali is an environmental, social and sustainability executive with over 20 years of experience in the mining sector. He brings broad technical, regulatory, and management expertise stemming from a background in research, consulting, engineering and business development. He has led sustainability initiatives, environmental strategies and management of numerous mining projects in Canada and internationally. He works with regulators, consultants and technical teams to bring solutions and has led large multinational high profile environmental mining projects throughout his career. He brings a wealth of experience from his previous roles in industry, consulting and auditing metal mines and gold mines all over the world. He is active in environmental and sustainability trends and permitting. He sits on numerous committees including the Green Mining Initiative, Canadian Institute of Mining, Ontario Mining Association and chairs various mining, environmental and sustainability committee and conferences in Canada and globally. He was recently awarded the prestigious Sustainability Award by the Canadian Institute of Mining and was previously the recipient of the Central District Distinguished Service Award by the Canadian Institute of Mining. He holds a degree in Chemical Engineering.

**Marika Van der Klugt – Vice President, Health and Safety.** Ms. Van der Klugt has more than 25 years of industry experience gained at both the operational and corporate levels, having worked in multiple commodities (base metals, gold and coal) globally. As a contributing member of the Minerals Council of Australia their subsidiaries, she is also a respected leader in industry diversity committees including the federal Tradeswomen Australia. Ms. Van der Klugt joined the Company as the Director for Health and Safety for the Company's Australia operations in 2019 and was promoted to Vice President, Health & Safety in September 2020. Since that time, she has been instrumental in bringing a level of awareness and contemporary practice regarding health and safety to all operations. Ms. Van der Klugt holds formal qualifications in Chemical Engineering, Open Pit Operational Management (Quarry Manager and Surface Blasting), Risk Management, Human Behavior in addition to an MBA.

**Greg Rooney – Vice President, Human Resources.** Mr. Rooney has more than twenty five years of experience in aligning the Human Resources Management and Environmental, Health and Safety strategy to organizational operational and financial goals. Prior to joining the Company in July 2020, Mr. Rooney led the Human Resources and Environmental, Health and Safety functions for various TSX and NYSE listed companies with operations across Canada, United States of America and Bermuda. Mr. Rooney holds a Bachelor of Applied Science degree (Chemical) from Queen's University and has attended the Executive Human Resources Management Program at the Rotman School of Business. He maintains both his Professional Engineer (Ontario) and a Certified Human Resources Executive (CHRE) designations.

#### **Corporate Cease Trade Orders, Bankruptcies, Penalties or Sanctions**

No director or executive officer of the Company, is, as at the date hereof, or has been, within the 10 years before the date hereof, a director, chief executive officer or chief financial officer of any company (including Newmarket Gold) that:

- (a) was subject to a cease trade or similar order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days and that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or
- (b) was subject to a cease trade or similar order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as a director, chief executive officer or chief financial officer.

No director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company:

- (a) is, as at the date hereof, or has been within the 10 years before the date hereof, a director or executive officer of any company (including Newmarket Gold) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (b) has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

No director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company has been subject to:

- (a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or
- (b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

#### **Conflicts of Interest**

To the best of the Company's knowledge, and other than as disclosed herein, there are no known existing or potential conflicts of interest between the Company and any directors or officers of the Company, except

that certain of the directors and officers serve as directors and officers of other public or private companies and therefore it is possible that a conflict may arise between their duties as a director or officer of the Company and their duties as a director or officer of such other companies. See “Risk Factors” above.

The directors and officers of the Company are required by law to act honestly and in good faith with a view to the best interests of the Company and to disclose any interests that they may have in any project or opportunity of the Company. If a conflict of interest arises at a meeting of the Board, any director in a conflict is required to disclose his interest and abstain from voting on such matter in accordance with the OBCA.

## **AUDIT COMMITTEE**

In accordance with applicable Canadian securities legislation and, in particular, National Instrument 52-110 – *Audit Committees* (“**NI 52-110**”), information with respect to the Company’s Audit Committee is contained below. The full text of the Audit Committee Charter, as passed by the Board, is attached hereto as Appendix “A”.

### **Audit Committee Charter**

The Audit Committee has adopted a written charter setting out its purpose, which is to oversee all material aspects of the Company’s financial reporting, control and audit functions. The Audit Committee is responsible for, among other things, (a) monitoring the performance and independence of the Company’s external auditors, (b) reviewing certain public disclosure documents and (c) monitoring the Company’s systems and procedures for financial reporting and internal control.

### **Composition of the Audit Committee**

During the financial year ended December 31, 2020, the Audit Committee was comprised of three directors, all of whom were independent directors. The members of the Audit Committee as of December 31, 2020 were: Messrs. Arnold Klassen (Chair), Jeffrey Parr and Peter Grosskopf.

In addition to being independent directors as described above, each member of the Company’s Audit Committee is considered “independent” and “financially literate” pursuant to NI 52-110.

### **Relevant Education and Experience**

See “Directors and Officers” above for a description of the education and experience of each Audit Committee member that is relevant to the performance of his responsibilities as an Audit Committee member.

### **Pre-Approval Policies and Procedures**

The Audit Committee Charter sets out responsibilities regarding the provision of non-audit services by the Company’s external auditors and requires the Audit Committee to pre-approve all permitted non-audit services to be provided by the Company’s external auditors, in accordance with applicable law.

### **External Auditor Service Fees**

The aggregate fees billed by the Company’s external auditor during the years ended December 31, 2020 and December 31, 2019 are set out in the table below.

<b>Year Ended</b>	<b>Audit Fees<sup>(1)</sup></b>	<b>Audit Related Fees<sup>(2)</sup></b>	<b>Tax Fees<sup>(3)</sup></b>	<b>All Other Fees</b>
December 31, 2019	\$2,312,000	\$7,100	Nil	Nil
December 31, 2020	\$2,461,592	\$97,740	\$1,250	Nil

**Notes:**

- (1) "Audit Fees" refer to the aggregate fees billed by the Company's external auditor for audit services, including fees incurred in relation to quarterly reviews, procedures in connection with securities filings, and statutory audits.
- (2) "Audit-Related Fees" refer to the aggregate fees billed for assurance and related services by the Company's external auditor that are reasonably related to the performance of the audit or review of the Company's financial statements and not reported under Audit Fees.
- (3) "Tax Fees" refer to the aggregate fees billed for the professional services rendered by the Company's external auditor for tax compliance.
- (4) "All Other Fees" refer to the aggregate fees billed for products and services provided by the Company's external auditor, other than the services reported under (1), (2) and (3) above.

**LEGAL PROCEEDINGS AND REGULATORY ACTIONS**

To the best of Kirkland Lake Gold's knowledge, the Company is not and was not, during the financial year ended December 31, 2020, a party to any legal proceedings, nor is any of its property, nor was any of its property during the financial year ended December 31, 2020, the subject of any legal proceedings. As at the date hereof, no such legal proceedings are known to be contemplated.

There have been no penalties or sanctions imposed against the Company by a court relating to securities legislation or by any securities regulatory authority during the financial year ended December 31, 2020, or any other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor making an investment decision, and the Company has not entered into any settlement agreements with a court relating to securities legislation or with a securities regulatory authority during the financial year ended December 31, 2020.

**INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

Other than as disclosed herein, none of the directors or executive officers of the Company, nor any person or company that beneficially owns, controls, or directs, directly or indirectly, more than 10% of any class or series of outstanding voting securities of the Company, nor any associate or affiliate of the foregoing persons, has or has had any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect the Company.

**TRANSFER AGENTS AND REGISTRARS**

The transfer agent and registrar for the Common Shares of the Company is TSX Trust Company, at its principal offices in Toronto, Ontario.

**MATERIAL CONTRACTS**

Other than contracts entered into in the ordinary course of business, there were no material contracts entered into during the financial year ended December 31, 2020 or prior thereto which remain in effect.

## INTERESTS OF EXPERTS

The following are the qualified persons involved in preparing the NI 43-101 technical reports or who certified a statement, report or valuation from which certain scientific and technical information relating to the Company's material mineral projects contained in this Annual Information Form has been derived, and in some instances extracted from.

- Andre Leite, P.Eng., Jean-Francois Dupont, P.Eng., Dr. Veronika Raizman, P.Geo. and Paul Andrew Fournier, P.Eng. have acted as qualified persons in connection with the Detour Technical Report and have reviewed and approved the scientific and technical information related to Detour Lake contained in this Annual Information Form; with regards to Mr. Leite, Mr Dupont, Dr. Raizman and Mr. Fournier, with respect to the mineral resources and mineral reserve estimates contained under the heading "Material Properties – Detour Lake – Mineral Resource and Mineral Reserve Estimates". Each of the aforementioned persons is an employee of the Company.
- Mariana Pinheiro Harvey, P. Eng., Robert Glover, P. Geo, William Tai, P. Eng., and Ben Harwood, P. Geo. have acted as qualified persons in connection with the Macassa Technical Report and, other than Mr. Glover (who is no longer employed by the Company), have reviewed and approved the scientific and technical information related to the Macassa Mine contained in this Annual Information Form, except with respect to the mineral resources and mineral reserve estimates contained under the heading "Material Properties – The Macassa Mine – Mineral Resource and Mineral Reserve Estimates". Each of the aforementioned persons, is an employee of the Company.
- Troy Fuller, MAIG and Ion Hann, FAusIMM have acted as qualified persons in connection with the Fosterville Technical Report and have reviewed and approved the scientific and technical information related to the Fosterville Mine contained in this Annual Information Form, other than with regards to Mr. Hann, with respect to the mineral resources estimates contained under the heading "Material Properties – The Fosterville Mine – Mineral Resource and Mineral Reserve Estimates" and with regards to Mr. Fuller, with respect to the mineral reserves estimates contained under the heading "Material Properties – The Fosterville Mine – Mineral Resource and Mineral Reserve Estimates". Each of the aforementioned persons is an employee of the Company.
- Natasha Vaz, P.Eng., has acted as qualified person responsible for the mineral reserve estimates for the Macassa Mine and has reviewed and approved the scientific and technical information related to the mineral reserve estimates for the Macassa Mine contained under the heading "Material Properties – The Macassa Mine – Mineral Resource and Mineral Reserve Estimates" and all scientific and technical nature contained in this Annual Information Form not otherwise reviewed and approved by any other named expert. Ms. Vaz is an employee of the Company.
- Eric Kallio, P. Geo., acted as qualified person responsible for the mineral resource estimates for the Macassa Mine and has reviewed and approved the information related to the mineral resource estimates for the Macassa Mine contained under the heading "Material Properties – The Macassa Mine – Mineral Resource and Mineral Reserve Estimates". Mr. Kallio is an employee of the Company.

The aforementioned firms or persons held either less than one percent or no securities of the Company or of any associate or affiliate of the Company when they rendered services, prepared the reports or the mineral reserve estimates or the mineral resource estimates referred to, as applicable, or following the rendering of services or preparation of such reports or data, as applicable, and either did not receive any or received less than a one percent direct or indirect interest in any securities of the Company or of any associate or affiliate of the Company in connection with the rendering of such services or preparation of such reports or data.

KPMG LLP, Chartered Professional Accountants, is the auditor of Kirkland Lake Gold and has reported that they are independent of Kirkland Lake Gold within the meaning of the relevant rules and related

interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations and that they are independent accountants with respect to the Company under all relevant U.S. professional and regulatory standards.

### **ADDITIONAL INFORMATION**

Additional information relating to the Company may be found under the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com), on EDGAR at [www.sec.gov](http://www.sec.gov) or on the Company's website at [www.kl.gold](http://www.kl.gold).

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans is contained in the management information circular dated May 29, 2020, filed in connection with the annual and special meeting of shareholders held on June 30, 2020. Such information for the financial year ended December 31, 2020 will be updated and contained in the Company's management information circular required to be prepared and filed in connection with its annual meeting of shareholders, which is expected to be held on May 6, 2021.

Additional financial information is provided in the Company's annual financial statements and MD&A for the financial year ended December 31, 2020, each of which is available under the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com) and on EDGAR at [www.sec.gov](http://www.sec.gov).

## **SCHEDULE "A" – AUDIT COMMITTEE CHARTER**

### **AUDIT COMMITTEE CHARTER**

The Audit Committee ("Committee") is appointed by the Board of Directors (the "Board") of Kirkland Lake Gold Ltd. ("Kirkland Lake Gold" or the "Company") to assist the Board in fulfilling its oversight responsibilities with respect to accounting and financial reporting processes, the integrity of the financial statements of the Company, compliance with legal and regulatory requirements, the overall adequacy and maintenance of the systems of internal controls that management has established and the overall responsibility for the Company's external and internal audit processes including the external Auditor's qualifications, independence and performance. This Charter is intended to comply with the requirements set out in the NYSE Listed Company Manual (the "Manual") and Rule 10A-3 of the Securities Exchange Act of 1934, as amended ("Rule 10A-3").

#### **Constitution & Authority**

The Committee shall consist of not less than three directors appointed by the Board. Each member of the Committee must be "independent" and "financially literate" as required by National Instrument 52-110 – Audit Committees, applicable securities legislation and related requirements, including Section 303A.02 of the Manual and Rule 10A-3, and at least one director must satisfy the definition of "financial expert" as set out in Item 407 of Regulation S-K.. The authority, structure, operations, purpose, responsibilities and specific duties of the Committee are described below.

The members of the Committee shall be elected by the Board at the annual organizational meeting of the Board and such Committee members shall serve until the following organizational meeting of the Board or until their successors are duly elected and qualified. The Board may remove a member of the Committee at any time in its sole discretion by resolution of the Board. The Chairperson of the Committee shall be designed by the Board from among the Committee members.

The Committee shall have access to such officers and employees of the Company, its external auditor (the "Auditor"), internal auditor ("Internal Auditor") and legal counsel, and to such information respecting the Company, and may engage separate independent counsel and advisers at the expense of the Company, all as it considers to be necessary or advisable in order to perform its duties and responsibilities.

The Committee has the authority to communicate directly with and to meet with the Auditor and the Internal Auditor, without management involvement. The Auditor shall report directly to the Committee. The Committee shall be responsible to resolve disagreements, if any, between management and the Auditor regarding financial reporting.

The Committee will be provided by the Company with appropriate funding, as determined by the Committee, for payment of: (i) compensation to any Auditor engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company; (ii) compensation to any advisers employed by the Committee; and (iii) ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

#### **Mandate**

The Company's management is responsible for preparing the Company's financial statements and other financial information and for presenting the information contained in the financial statements fairly and in accordance with International Financial Reporting Standards ("IFRS"). Management is also responsible for establishing internal controls and procedures and for maintaining the appropriate accounting and financial reporting principles and policies designed to assure compliance with accounting standards and all applicable laws and regulations.

The Auditor's responsibility is to audit the Company's financial statements and provide its opinion, based

on its audit conducted in accordance with generally accepted auditing standards, whether the financial statements present fairly, in all material respects, the financial position, results of operations and cash flows of the Company in accordance with IFRS.

The Internal Auditor's responsibility is to evaluate the design and test the operating effectiveness of internal controls over financial reporting to support the requirements set out in National Instrument 52-109 and under applicable rules of the United States Securities and Exchange Commission.

The Committee will provide the Board with such recommendations and reports with respect to the financial disclosures of the Company as it deems advisable.

The role of the Committee is principally one of oversight. Accordingly, the Committee shall:

1. be responsible for the appointment, retention, level of compensation and oversight of the work of the Company's Auditor;
2. approve, in advance, all non-audit services provided to the Company by the Auditor and the related compensation;
3. evaluate the work of the Auditor and confirm its independence;
4. provide independent and objective monitoring of the Company's internal control systems and financial reporting processes;
5. provide a means of communication between the Board, management and the Auditor on matters relating to financial reporting;
6. provide the necessary oversight over:
  - (a) the integrity, adequacy and timeliness of the Company's financial reporting and disclosure practices, including the preparation of financial statements;
  - (b) the processes for identifying the Company's principal financial risks and the control systems to monitor those risks;
  - (c) the Company's compliance with legal and regulatory requirements related to financial reporting; and
  - (d) perform any other activities consistent with its mandate, the Company's constating documents and laws of general application as the Committee or Board deems necessary or desirable.

## **Responsibilities**

In performing its oversight responsibilities, the Committee shall:

1. review and assess, on an annual basis, the adequacy of its mandate and recommend any proposed changes to the Board for approval;
2. review annual its own performance;
3. monitor, on a regular basis, the independence of the Auditor by reviewing all relationships between

the Auditor and the Company and all non-audit work performed for the Company by the Auditor and the Committee or a member thereof shall pre- approve all non-audit services to be provided to the Company or a subsidiary by the Auditor;

4. monitor, on a regular basis, the independence of the Internal Auditor by reviewing all relationships between the Internal Auditor and the Company;
5. review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the Auditor and any former Auditor;
6. review with the Auditor and management the annual plan for the audit of the financial statements before commencement of the work;
7. review with the Internal Auditor and management the annual internal audit work plan before commencement of the internal audit work and review and approve the Internal Audit Charter;
8. review with the Auditor the results of the Auditor's work and any problems or difficulties that were encountered, including any disagreements between the Company's management and the Auditor regarding financial reporting, and assess management's responses thereto;
9. review summaries of significant reports prepared by the Internal Auditor including management's responses to such reports;
10. review with management and the Auditor the annual audited financial statements and 'Management Discussion and Analysis' reports, before filing or distribution, including matters requiring review pursuant to laws and regulations of general application;
11. review with management (or ensure that the Board does so) the quarterly unaudited financial statements and Management Discussion and Analysis reports, before filing or distribution, including matters required to be reviewed under laws and regulations of general application;
12. review with management the annual budget, and any required interim adjustments, including the assumptions (for reasonableness, accuracy and timeliness), for recommendation to the Board;
13. review with management, as appropriate, news releases and any other form of disclosure containing earnings and other material financial information;
14. satisfy itself that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from its financial statements, other than the public disclosure referred to in paragraphs 6 and 7, and must periodically assess the adequacy of those procedures;
15. review with management, the Auditor and the Internal Auditor, the adequacy and effectiveness of the Company's internal controls over financial reporting including any significant or material deficiencies and the adequacy and timeliness of its financial reporting processes and the quality and acceptability of the Company's accounting principles and estimates, including the clarity of financial disclosure and the degree of conservatism or aggressiveness of the accounting policies and estimates;
16. review with management and the Auditor the quality and appropriateness of the Company's financial reporting and accounting standards and principles and significant changes to those standards or principles or in their application, including key accounting decisions affecting the financial statements, alternatives thereto and the rationale for decisions made;

17. annually, obtain and review a report by the Auditor describing: the firm's internal quality-control procedures; any material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with any such issues;
18. review with management and the Auditor the treatment and disclosure of significant related party transactions and potential conflicts of interest;
19. review with management the risk of frauds within the operations or financial reporting and consider the actions taken by management and the systems implemented to address these risks;
20. ensure that adequate procedures are in place for the receipt, retention and treatment of:
  - (a) complaints and expressions of concern regarding accounting, financial disclosure, internal controls, auditing or legal and regulatory matters; and
  - (b) confidential, anonymous submission by employees regarding questionable accounting, auditing and financial reporting and disclosure matters;
21. examine the process for identifying, categorizing, evaluating and mitigating the Company's principal risks and the potential impact or consequences they might have, individually or compounded, on the sustainability of the Company, as well as measures available to ensure the latter, and report to the Board, members of which shall use their reasonable efforts to ensure the adequacy of the oversight of management and that management duly carries out its required functions;
22. review the appointment of the Company's Chief Financial Officer and any other key financial executives involved in the financial reporting process;
23. review disclosures made to the Committee by the Company's Chief Executive Officer and Chief Financial Officer during their certification process required under applicable Canadian and United States securities laws. Review any significant deficiencies in the design and operation of internal controls over financial reporting or disclosure controls and procedures and any fraud; and
24. conduct or authorize investigations into any matter that the Committee believes is within the scope of its responsibilities.

## **Meetings**

The Committee will meet at least once per quarter or more frequently as circumstances require to perform the duties described above in a timely manner. Meetings may be held at any time deemed appropriate by the Committee.

Quorum for the transaction of business at any meeting of the Committee shall be a majority of the number of members of the Committee. A Committee member who is unable to attend in person may attend a Committee meeting by telephone, video conference or other telecommunication device that permits all persons participating in the meeting to speak and hear each other. The Committee shall hold in camera sessions without the presence of management after each meeting.

The Committee may request any officer or employee of the Company or the Company's outside counsel or independent Auditors to attend a meeting of the Committee or to meet with any members of, or consultants to, the Committee. In addition, the Committee or, at a minimum, the Chairperson, may meet

with the Company's external legal counsel to discuss the Company's policies and practices relevant to the scope of responsibilities of the Committee.

Meetings of the Committee shall be held from time to time as the Committee or the Chairperson shall determine upon 48 hours notice to each of its members. The notice period may be waived by a quorum of the Committee.

The Chairperson will appoint a secretary of each meeting of the Committee who need not be a member of the Committee and who will maintain the minutes of the meeting and circulate copies of the minutes to each Committee member on a timely basis. The minutes of the Committee meetings will be made available for review by the Board.

### **Approval**

Approved by the Board of Directors on December 30, 2020.