UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 40-F

☐ Registration statement pursuant to Section 12 of the Securities Exchange Act of 1934

or
Annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended $\underline{\text{December 31, 2017}}$ Commission File Number $\underline{\text{001-38179}}$

Kirkland Lake Gold Ltd. et name of Registrant as specified in its ch (Exact)

Ontario

(Province or other jurisdiction of incorporation or organization)

1000 (Primary Standard Industrial Classification Code Number)

N/A (I.R.S. Employer Identification Number)

200 Bay Street, Suite 3120 Toronto, Ontario M5J 2J1 Canada (416) 840-7884

(Address and telephone number of Registrant's principal executive offices)

Registered Agent Solutions, Inc.

99 Washington Avenue
Suite 1008
Albamy, NY 12260
(888) 705-7274
(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

Name of each exchange on which registered

New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class

Common Shares, no par value

Securities registered pursuant to Section 12(g) of the Act: None.

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

For annual reports, indicate by check mark the information filed with this Form:

■ Annual information form

Audited annual financial statements

Indicate the number of outstanding shares of each of the registrant's classes of capital or common stock as of the close of the period covered by the annual report: 210,944,884

Indicate by check mark by filing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934 (the "Exchange Act"). If "Yes" is marked, indicate the file number assigned to the Registrant in connection with such Rule.

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days. \blacksquare Yes \square No

 $Indicate \ by \ check \ mark \ whether \ the \ registrant \ is \ an \ emerging \ growth \ company \ as \ defined \ in \ Rule \ 12b-2 \ of \ the \ Exchange \ Act.$

Emerging growth company 🗷

Emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

EXPLANATORY NOTE

Kirkland Lake Gold Ltd. (the "Company" or the "Registrant") is a Canadian issuer that is permitted, under the multijurisdictional disclosure system adopted in the United States, to prepare this annual report on Form 40-F (this "Annual Report") pursuant to Section 13 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), in accordance with Canadian disclosure requirements, which are different from those of the United States. The Company is a "foreign private issuer" as defined in Rule 3b-4 under the Exchange Act and Rule 405 under the Securities Act of 1933, as amended. Equity securities of the Company are accordingly exempt from Sections 14(a), 14(b), 14(c), 14(f) and 16 of the Exchange Act pursuant to Rule 3a12-3 thereunder.

FORWARD LOOKING STATEMENTS

The Exhibits incorporated by reference into this Annual Report contain forward-looking statements that reflect our management's expectations with respect to future events, our financial performance and business prospects. All statements of historical fact are forward-looking statements. The use of the words such as "plan", "expect", "budget", "target", "schedule", "estimate", "forecast", "project", "intendi", "believe", "anticipate" and other similar words or statements that certain events or conditions "may", "could", "would", "might", or "will" occur or be achieved, and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. These statements involve known and unknown risks, uncertainties, and other factors that may cause actual results or events to differ materially from the "and the December 31, 2017 filed as Exhibits by 100 from the "All" of the present deal December 31, 2017 filed as Exhibits by 100 from the "All" of the present deal December 31, 2017 filed as Exhibits incorporated by reference into this Annual Report are made as of the respective dates set forth in such Exhibits. Such forward-looking statements in the Exhibits incorporated by reference into this Annual Report though on the understand the present of gold; exploration, development and operating risks, bealth, safety and environmental risks and uncertainties and other known and unknown factors that could cause the actual results, performance or achievements expressed or implied by the forward-looking information. Such factors include: the price of gold; exploration, development and operating risks, bealth, safety and environmental risks and brazards, risks relating to foreign operations and political risks; uncertainty in the estimation of mineral resources; rake relating to exploration, development and operating risks; pealth and understand in the such project at the Company's securities, injudity risk; risks relating to foreign operations and politic

This list is not exhaustive of the factors that may affect our forward-looking statements. Some of the important risks and uncertainties that could affect forward-looking statements are described further in the exhibits attached to this Annual Report, including those described in the AIF and the MD&A and incorporated by reference herein. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in the forward-looking statements.

NOTE TO UNITED STATES READERS - DIFFERENCES IN UNITED STATES AND CANADIAN REPORTING PRACTICES

The Registrant is permitted, under a multijurisdictional disclosure system adopted by the United States Securities and Exchange Commission (the "SEC"), to prepare this Annual Report in accordance with Canadian disclosure requirements, which are different from those of the United States. The Registrant prepares its financial statements, which are filed with this Annual Report in accordance with International Accounting Standards Board, and which are not comparable to financial statements of United States companies.

RESOURCE AND RESERVE ESTIMATES

The exhibits filed or incorporated by reference into this Annual Report have been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of United States securities laws. The terms "mineral reserve" and "probable mineral reserve" are Canadian mining terms as defined in accordance with Canadian National Institute of Mining, Metallurgy and Petroleum (the "CIM")—CIM Definition Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council, as amended. These definitions in SEC Industry Guide 7 under the United States Securities Act of 1993, as amended (the "Securities Act").

Under SEC Industry Guide 7 standards, a "final" or "bankable" feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves and the primary environmental analysis or report must be filed with the appropriate governmental authority

In addition, the terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are defined in and required to be disclosed by NI 43-101; however, these terms are not defined terms under SEC Industry Guide 7 and are normally not permitted to be used in reports and registration statements filed with the SEC. Investors are cautioned not to assume that any part of an inferred mineral resource will ever be converted into reserves. "Inferred mineral resources may not form the basis of feasibility or per-feasibility studies, except in are cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resource may not form the basis of feasibility or per-feasibility or mineral resource in a resource in permitted disclosure of "contained ounces" in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC Industry Guide 7 standards as in place tonnage and grade without reference to unit measures.

Accordingly, information contained in this Annual Report and the documents incorporated by reference herein contain descriptions of our mineral deposits that may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

CURRENCY

Unless otherwise indicated, all dollar amounts in this Annual Report on Form 40-F are in United States dollars. The exchange rate of Canadian dollars into United States dollars, on December 29, 2017, based upon the daily exchange rate as quoted by the Bank of Canada was U.S.\$1.00 = Cdn.\$1.2545.

ANNUAL INFORMATION FORM

The AIF for the fiscal year ended December 31, 2017 is filed as Exhibit 99.1 to this Annual Report and is incorporated by reference herein.

AUDITED ANNUAL FINANCIAL STATEMENTS

The audited consolidated financial statements of the Company for the years ended December 31, 2017 and 2016, including the report of the independent auditor thereon, are filed as Exhibit 99.2 to this Annual Report, and are incorporated by reference herein.

MANAGEMENT'S DISCUSSION AND ANALYSIS

The Company's MD&A for the year ended December 31, 2017 is filed as Exhibit 99.3 to this Annual Report, and is incorporated by reference herein.

TAV MATTEDO

Purchasing, holding, or disposing of the Company's securities may have tax consequences under the laws of the United States and Canada that are not described in this Annual Report.

CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

As of the end of the period covered by this Annual Report, the Company carried out an evaluation, under the supervision of the Company's Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act). Based upon that evaluation, the Company's CEO and CFO have concluded that, as of the end of the period covered by this Annual Report, the Company's disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (ii) accumulated and communicated to the Company's management, including its principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control over Financial Reporting

This Annual Report does not include a report of management's assessment regarding internal control over financial reporting due to a transition period established by rules of the SEC for newly public companies.

Attestation Report of the Registered Public Accounting Firm

This Annual Report does not include an attestation report of the Company's registered public accounting firm due to a transition period established by rules of the SEC for newly public companies.

Changes in Internal Control over Financial Reporting

During the period covered by this Annual Report, no change occurred in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

CORPORATE GOVERNANCE

The Company's Board of Directors (the "Board of Directors") is responsible for the Company's corporate governance and has a separately designated standing Corporate Governance and Nominating Committee, Audit Committee, Audit Committee, The Board of Directors has determined that all the members of the Compensation Committee, Audit Committee and the Corporate Governance and Nominating Committee are independent, based on the criteria for independence prescribed by Section 303A.02 of the New York Stock Exchange (the "NYSE") Listed Company Manual.

C------

Compensation of the Company's CEO and all other executive officers is recommended to the Board of Directors for determination by the Compensation Committee. The Company's Compensation Committee is comprised of Arnold Klassen (Chair), Jeffrey Parr and Jonathan Gill . The Compensation Committee is responsible for establishment of executive compensation policies and programs; establishment, review and approval of corporate goals and executive compensation; review of incentive compensation; nonintor compliance with any legal requirements relating to the granting to the gr

Corporate Governance and Nominating Committee

Nominees for the election to the Board of Directors are recommended by the Corporate Governance and Nominating Committee is comprised of Raymond Threlkeld (Chair), Amold Klassen and Pamela Klessig. The Corporate Governance and Nominating Committee is responsible, on behalf of the Board of Directors, for developing the Company's approach to, and reviewing the Company's effectiveness with respect to, governance and assessing the composition and effectiveness of the Board of Directors. The Company's Corporate Governance and Nominating Committee Charter is available on the Company's website at www.klgold.com.

AUDIT COMMITTEE

The Board of Directors has a separately designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act and Section 303A.06 of the NYSE Listed Company Manual. The Company's Audit Committee is comprised of Jeffrey Parr (chair), Arnold Klassen and Raymond Threlkeld, all of whom, in the opinion of the Company's Board of Directors, are independent (as determined under Rule 10A-3 of the Exchange Act and Section 303A.02 of the NYSE Listed Company Manual). All three members of the Audit Committee are financially literate, meaning they are able to read and understand the Company's financial statements and to understand the Dompany's financial statements and to understand the Dompany's financial statements. The Audit Committee meets the composition requirements set forth by Section 303A.07 of the NYSE Listed Company Manual.

The members of the Audit Committee do not have fixed terms and are appointed and replaced from time to time by resolution of the Board of Directors.

The full text of the Audit Committee Charter is available on the Company's website at www.klgold.com and is attached as Schedule "A" to the AIF, which is filed as Exhibit 99.1 to this Annual Report.

Audit Committee Financial Expert

The Board of Directors has determined that Jeffrey Parr qualifies as a financial expert (as defined in Item 407 (d)(5)(ii) of Regulation S-K under the Exchange Act), has financial management expertise (pursuant to section 303A.07 of the NYSE Listed Company Manual) and is independent (as determined under Exchange Act Rule 10A-3 and section 303A.02 of the NYSE Listed Company Manual).

PRE-APPROVAL OF AUDIT AND NON-AUDIT SERVICES PROVIDED BY INDEPENDENT AUDITOR

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.

PRINCIPAL ACCOUNTANT FEES AND SERVICES - INDEPENDENT AUDITOR

The following table shows the aggregate fees billed to the Company by KPMG LLP and its affiliates, Chartered Professional Accountants, the Company's independent auditor, in each of the last two years.

	2016 (5)	2017
Audit Fees (1)	\$883,850	\$1,190,000
Audit-Related Fees (2)	Nil	10,000
Tax Fees (3)	212,888	Nil
All Other Fees (4)	350,517	Nil
Total	\$1,447,255	\$1,200,000

[&]quot;Audit Fees" refers to the aggregate fees billed by the Company's external auditor for audit services, including fees incurred in relation to quarterly reviews, review of securities filings, and statuatory audits. For the period ended December 31, 2016, audit fees comprised of \$805,000 for services rendered by KPMG LLP, Chartered Professional Accountants, the external auditor of the Company (the "Current External Auditor") and \$78,850 for services rendered by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the External Auditor of Newmarket (the "Previous External Auditor").

OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements.

^{(2) &}quot;Audit-Related Fees" refers 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. These reported fees related to compliance of a royalty program.

⁽i) "Tax Fees" refers to the aggregate fees billed for professional services rendered during the year ended December 31, 2016 by the Previous External Auditor for tax compliance, tax advice and tax planning.

⁽a) "All Other Fees" refers to the aggregate fees billed for services provided by the Current External Auditor, other than the services reported under the other three columns. For the period ended December 31, 2016, the other fees relate to advisory services provided in connection with the acquisition of St Andrew Goldfields Ltd.

⁽⁶⁾ External Auditor Fees incurred during the year ended December 31, 2016, refer to the aggregate of the Previous External Auditor and the Current External Auditor.

CODE OF ETHICS

The Company has adopted a Code of Conduct and Ethics that applies to directors, officers and employees of, and consultants to, the Company (the "Code"). The Code has been posted on the Company's website at www.klgold.com. The Code meets the requirements for a "code of ethics" within the meaning of that term in General Instruction 9(b) of the Form 40-F.

All amendments to the Code will be made available to all employees and all waivers of the Code with respect to any of the officers covered by it will be promptly disclosed as required by applicable securities rules and regulations. During the fiscal year ended December 31, 2017, the Company did not waive or implicitly waive any provision of the Code with respect to any of the Company's principal executive officer, principal accounting officer or controller, or persons performing similar functions.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The following table lists, as of December 31, 2017, information with respect to the Company's known contractual obligations (in thousands):

Payments due by period

			, ,,		
Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Accounts payable and accrued liabilities	\$84,746	\$84,746	-	-	-
Finance lease payments	42,267	18,480	23,787	•	•
Office rent and other obligations	5,558	1,643	2,230	1,509	176
Income taxes payable	8,337	8,337	•	•	•
Total	\$140,908	\$113,206	\$26,017	\$1,509	\$176

NOTICES PURSUANT TO REGULATION BTR

There were no notices required by Rule 104 of Regulation BTR that the Company sent during the year ended December 31, 2017 concerning any equity security subject to a blackout period under Rule 101 of Regulation BTR.

NYSE CORPORATE GOVERNANCE

The Company complies with corporate governance requirements of both the Toronto Stock Exchange (the "TSX") and the NYSE. As a foreign private issuer the Company is not required to comply with all of the corporate governance requirements of the NYSE; however, the Company adopts best practices consistent with domestic NYSE listed companies when appropriate to its circumstances.

The Company has reviewed the NYSE corporate governance requirements and confirms that except as described below, the Company is in compliance with the NYSE corporate governance standards in all significant respects:

Shareholder Meeting Quorum Requirement: The NYSE is of the opinion that the quorum required for any meeting of shareholders should be sufficiently high to insure a representative vote. The Company is two persons, each being a shareholder entitled to vote thereat or a duly appointed proxy or proxyholder for an absent shareholder so entitled, holding or representing in the aggregate not less than 10% of the issued shares of the Corporation enjoying voting rights at such meeting.

Proxy Delivery Requirement: The NYSE requires the solicitation of proxies and delivery of proxy statements for all shareholder meetings, and requires that these proxies shall be solicited pursuant to a proxy statement that conforms to SEC proxy rules. The Company is a "foreign private issuer" as defined in Rule 3b-4 under the Exchange Act, and the equity securities of the Company are accordingly exempt from the proxy rules set forth in Sections 14(a), 14(b), 14(c) and 14(f) of the Exchange Act. The Company solicits proxies in accordance with applicable rules and regulations in Canada.

Approval of Equity Compensation Plans. Section 303.0.08 of the NYSE's Listed Company Manual requires shareholder approval of all equity compensation plans and material revisions to such plans. The definition of "equity compensation plans" covers plans that provide for the delivery of both newly issued and treasury securities, as well as plans that rely on securities re-acquired in the open market by the issuing company for the purpose of redistribution to employers and directors. The TSX rules provide that the creation of any equity compensation plans that provide for new issuances of securities is subject to shareholder approval. Any amendments to such plans are subject to shareholder approval unless the specific equity compensation plan contains detailed provisions, approved by the shareholders that specify those amendments requiring shareholder approval and those amendments which can be made without shareholder approval. The Company follows the TSX rules with respect to the requirements for shareholder approval of equity compensation plans and revisions to such plans.

The foregoing are consistent with the laws, customs and practices in Canada.

MINE SAFETY DISCLOSURE

Not applicable.

UNDERTAKING

The Company undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

CONSENT TO SERVICE OF PROCESS

The Company has previously filed with the SEC a written consent to service of process on Form F-X. Any change to the name or address of the Company's agent for service shall be communicated promptly to the SEC by amendment to the Form F-X referencing the file number of the Company.

SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this Annual Report to be signed on its behalf by the undersigned, thereunto duly authorized.

KIRKLAND LAKE GOLD LTD.

By: <u>signed "Philip Yee"</u>
Name: Philip Yee
Title: Executive Vice President and Chief Financial Officer

Date: April 2, 2018

EXHIBIT INDEX

The following documents are being filed with the Commission as Exhibits to this Annual Report:

Description

Exhibit

99.1	Annual Information Form dated April 2, 2018
99.2	Audited Annual Consolidated Financial Statements and notes thereto as at and for the years ended December 31, 2017 and December 31, 2016, together with the report thereon of the independent auditor
99.3	Management's Discussion and Analysis for the year ended December 31, 2017
99.4	Certificate of Chief Executive Officer Pursuant to Rule 13a-14(a) of the Exchange Act
99.5	Certificate of Chief Financial Officer Pursuant to Rule 13a-14(a) of the Exchange Act
99.6	Certificate of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.7	Certificate of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.8	Consent of KPMG LLP
99.9	Consent of Pierre Rocque
99.10	Consent of Douglas Cater
99.11	Consent of Troy Fuller
99.12	Consent of Ion Hann
99.13	Consent of Ian Holland
99.14	Consent of Mark Edwards
99.15	Report on the Mineral Resources & Mineral Reserves of the Fosterville Gold Mine dated April 2, 2018
99.16	Macassa Property, Ontario, Canada Updated NI 43-101 Technical Report dated March 30, 2017 (incorporated by reference from the Company's Form 40-F Registration Statement filed as Exhibit 99.123 on August 7, 2017)
99.17	Taylor Property, Ontario, Canada Updated NI 43-101 Technical Report dated March 30, 2017 (incorporated by reference from the Company's Form 40-F Registration Statement filed as Exhibit 99.128 on August 7, 2017)



KIRKLAND LAKE GOLD LTD.

ANNUAL INFORMATION FORM FOR THE YEAR ENDED DECEMBER 31, 2017

April 2, 2018

3120 – 200 Bay Street Toronto, Ontario M5J 2J1 www.klgold.com

TABLE OF CONTENTS

CAUTIONARY STATEMENT	1
CURRENCY PRESENTATION	5
CORPORATE STRUCTURE	6
DESCRIPTION OF THE BUSINESS	15
RISK FACTORS	17
SUMMARY OF MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES	30
MATERIAL PROPERTIES	31
DIVIDENDS	45
DESCRIPTION OF CAPITAL STRUCTURE	45
MARKET FOR SECURITIES	47
DIRECTORS AND OFFICERS	49
AUDIT COMMITTEE	57
LEGAL PROCEEDINGS AND REGULATORY ACTIONS	58
INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	58
TRANSFER AGENTS AND REGISTRARS	58
MATERIAL CONTRACTS	58
INTERESTS OF EXPERTS	59
ADDITIONAL INFORMATION	59
Schedule "A" - AUDIT COMMITTEE CHARTER	A 1

CAUTIONARY STATEMENT

Forward-Looking Information

This annual information form ("Annual Information Form") contains "forward-looking information" within the meaning of applicable Canadian securities legislation. 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 Company's ability to raise additional funds; 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 mount of estimates future production; costs of production; capital expenditures; success of exploration activities; mining or processing issues; the timing and of sustaining capital projects; assessment of future recurred mining, and a cost of exploration and development regulations 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 operations underlying mineral reserve and mineral resource estimates of construction and mining operations and estimates of exploration and evelopment and operating cost estimates are based on extensive research of the Company purchase orders placed by the Company to date, recent estimates of exploration and evelopment and operating over the exploration of the company purchase orders placed by the Company to date, recent estimates of construction and mining operations and estimates of exploration and evelopment and operating operations of the Company to be materially "respect," "budget," estimates," estimates and a capital estimates of explorations and a submition of the company and a submition of the compan

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 to update forward-looking information in the province of the province

1

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" and "probable mineral reserve" are Canadian mining terms as defined in accordance with Canadian National Instrument 43-101 – Standards of Disclosure for 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 "Commission" or "bankable" resibility study is required to report the United States Securities Act "D. In particular, under Industry Guide 7" under the United States Securities Act or 1913, as amended (the "Certification or "bankable" resibility study is required to report and Exchange Commission (the "Commission" or "bankable" resibility study is required to report average price is used in any mineral reserve or cash flow analysis to designate mineral reserves and the primary environmental analysis or report must be filed with the appropriate governmental authority. In addition, Industry Guide 7 applies different standards in order to classify mineralization as a mineral reserve. As a result, the definitions of proven mineral reserves and probable mineral reserves used in N1 43-101, based on the CIM Standards, differ from the definitions used in Industry Guide 7 under Commission standards, mineralization could be required to be in hand or the issuance must be immineral reserve and reserve under the Commission standards, mineralization could be required to be in hand or the issuance must be immineral reserve under the Commission standards.

n addition, the terms "mineral resource", "measured mineral resource" and "inferred mineral resource" are defined in and required to be disclosed by NI 43-101. However, the Commission does not recognize mineral resources and United States companies are generally not permitted to disclose mineral resources of any category in documents they file with the Commission. Investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into Mineral Reserves as defined in NI 43-101 or Industry Guide 7. Further, inferred mineral resources may are a great amount of uncertainty as to their existence, and great uncertainty as to their existence, uncertainty as to their existence, and great uncertainty as to their existence, and great uncertainty as to their existence, and

GLOSSARY OF TERMS AND UNITS

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

-	
Term	Definition
alluvial	Relatively recent deposits of sedimentary material laid down in river beds, flood plains, lakes, or at the base of mountain slopes.
Archaean	An era in geologic time about 3.8 billion to 2.5 billion years ago during which the Earth's crust solidified.
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.
break	A mineralized fault.
BIOX ®	Bacterial oxidation used in agitated tanks for the pretreatment of certain refractory ores and concentrates ahead of conventional cyanide leach for gold recovery.
bullion	A refined metal, such as gold or silver.
cataclasis	Crushing of rocks.
crosscut	A horizontal opening driven from a shaft and at right angles to the strike of a vein or rock formation.
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.
diabase	A common basic igneous rock usually occurring in dykes or sills.
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.
dyke	A long and relatively thin body of igneous rock that, while in the molten state, intruded a fissure in older rocks.
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.
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 "fee-milling" if it can be extracted from one such that eyanidation 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 garvity process.
gangue	Worthless minerals in an ore deposit.
geotechnical	Using geology and geological engineering.
g/t	Gold concentration, gram per tonne of rock
hangingwall	The wall or rock on the upper side of a vein or ore deposit.
hectare	A square of 100 metres on each side.
igneous	A type of rock which has been formed from magna, a molten substance from the earth's core.
intrusive	A body of igneous rock formed by the consolidation of magma intruded into other rocks, in contrast to lavas, which are extruded upon the surface.
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 furth, for the fine-griding of ores as a preparation for treatment.
mineralization	The concentration of metals and their chemical compounds within a body of rock.
MNDM	Ministry of Northern Development and Mines of the government of the province of Ontario.
muck	Ore or rock that has been broken by blasting.
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.
NI 43-101	National Instrument 43-101 Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators.
refractory	Ore that has high melting point and is resistant to milling treatment. Such ore is commonly associated with sulphides.
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.

3

Term	Definition	
paste	Tailings used for back-filling the underground voids in a mine to provide stable support of the mine and overburden (during mining and after closure of the mine) and eliminate or reduce above-ground tailings storage.	
plunge	The vertical angle an ore body makes between the horizontal plane and the direction along which it extends, longitudinally to depth.	
raise	A vertical or inclined underground working that has been excavated from the bottom upward.	
reserve or mineral reserve	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 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, engineeri 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 which material is mined.	
	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.	
	(1) Probable Mineral Reserve: 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.	
	(2) Proven Mineral Reserve. 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.	
resource or mineral resource	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.	
	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 an Inferred Mineral Resource.	
	(1) Inferred Mineral Resource. 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.	
	(2) Indicated Mineral Resource. 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 ecotomic parameters, to support mine planning and evaluation of the ecotomic valuation of the ecotomic valuation of the ecotomic parameters, to support mine planning and evaluation of the ecotomic valuation of the ecotom	
	(3) Mensured Mineral Resource. 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 the cationisms such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuities.	
	As used herein, "resources" or "mineral resources" do not include reserves for the Canadian assets, but do include reserves for the Australian assets.	
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.	
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.	
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.	
tailings	Material rejected from a mill after most of the recoverable valuable minerals have been extracted.	

Term	Definition
tpd	Production rate measured in tonnes per day
	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.
winze	An internal shaft

CURRENCY PRESENTATION

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

The closing, high and low exchange rates for the United States dollar in terms of Australian dollars for each of the three years ended December 31, 2017, December 31, 2016, and December 31, 2015 based on the indicative rate of exchange as reported by the Reserve Bank of Australia, were as follows:

		Year-Ended December 31	
	2017 (A\$)	2016 (AS)	2015 (AS)
Closing	1.2821	1.3819	1.3687
High	1.3824	1.4562	1.2130
Low	1.2314	1.2801	1.4442
Average (1)	1.3039	1.3437	1.3292

On March 28, 2018, the indicative rate of exchange as reported by the Reserve Bank of Australia was US\$1.00 = A\$1.3046 or A\$1.00 = US\$0.7665

The closing, high, low and average exchange rates for the United States dollar in terms of Canadian dollars for each of the three years ended December 31, 2017, December 31, 2016, and December 31, 2015, based on the noon spot rate of exchange for 2015 and 2016 and based on the indicative rate of exchange for 2017, as reported by Thomson Reuters, were as follows:

		Year-Ended December 31	
	2017 (C\$)	2016 (C\$)	2015 (C\$)
Closing	1.2545	1.3427	1.3687
High	1.3743	1.4589	1.3990
Low	1.2128	1.2544	1.1728
Average (1)	1.2986	1.3248	1.2787
AT .			

Note:
(1) Calculated as an average of the applicable daily rates for each period.

Note:
(1) Calculated as an average of the the applicable daily rates for each period.

On March 28, 2018, the indicative rates of exchange as reported by by Thomson Reuters was US\$1.00 = C\$1.2901 or C\$1.00 = US\$0.7751.

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 OBCA.

On July 10, 2015, Old Newmarket amalgamated with Crocodile Gold Corp. (" Crocodile Gold ") pursuant to a plan of arrangement (the " Crocodile Arrangement") under the Business Corporations Act (Ontario) (" 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 "Arrangement"). In connection with the 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, changing from a provincially to a Canadian federally incorporated company, 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 Lid." 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 Inc." on October 25, 2002 to reflect the nature and location of the Company's business. On January 26, 2016, Old 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 Inc." on October 25, 2002 to reflect the nature and location of the Company's business. On January 26, 2016, Old 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 Inc." on October 25, 2002 to reflect the nature and location of the Company's business. On January 26, 2016, Old 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 Inc." on October 25, 2002 to reflect the nature and location of the Company's business. On January 26, 2016, Old 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 Inc." on October 25, 2002 to reflect the nature and location of the Company's business. On January 26, 2016, Old 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 Inc." on October 25, 2002 to reflect the nature and location of the Company 26, 2016, Old Kirkland Lake Gold Inc." on October 25, 2002 to reflect the nature and lo

On December 31, 2017, the Company completed a corporate reorganization of its Australian subisidiares pursuant to which Newmarket Gold NT Holdings Pty Ltd. (" NGNT"), 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").

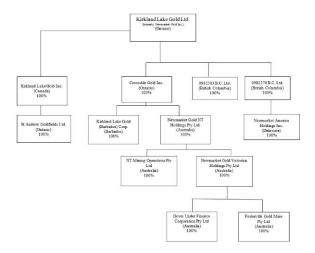
The Company's common shares ("Common Shares") trade on the Toronto Stock Exchange (the "TSX"), the New York Stock Exchange (the "NYSE") under the symbol "KL" and on the Australian Securities Exchange (the "ASX") under the symbol "KLA".

The Company's registered and head office is located at 3120 – 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 jurisdiction of incorporation of each company and the percentage of voting securities beneficially owned, controlled or directly, 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 Arrangement with the Company 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 Arrangement with Old Kirkland Lake Gold.

Kirkland Lake Gold Ltd. - Corporate Structure Chart



8

Overview of the Business

Kirkland Lake Gold is a mid tier 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 is anchored by two high-grade, low cost operations including 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"). In addition, the Company owns the Holt mine (he "Taplor Mine") which are situated along the Porcupine Destor Fault Schoen Destor Fault

Further information about Kirkland Lake Gold can be found in the Company's regulatory filings available on SEDAR at www.sedar.com and on the Company's website at www.klgold.com.

Recent Developments

On April 2, 2018, Kirkland Lake Gold 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 declared its fourth dividend payment of \$0.02 to be paid on April 13, 2018 to shareholders of record as of March 29, 2018.

On January 17, 2018, Kirkland Lake Gold announced its targeted higher production and improved unit costs guidance for 2018 and announced the new shaft project at the Macassa Mine (the "Macassa Shaft Project").

On January 11, 2018, the Company announced record annual and quarterly production for the full year and three months ended December 31, 2017 with consolidated full year 2017 gold production of 596,405 ounces, including full year record production at all operating mines.

Three Year History

Financial Year Ended December 31, 2017

On December 15, 2017, the Company announced an increase to its quarterly dividend payment from C\$0.01 per Common Share to C\$0.02 per Common Share to shareholders of record as of December 29, 2017.

On December 31, 2017, the C\$61.9 million principal amount of 7.5% convertible unsecured subordinated debentures (the "7.5% Debentures") matured and the Company issued an aggregate of 4,505,393 Common Shares at a conversion price of C\$13.70 per Common Share, repaid C\$324,116 of principal in cash with respect to the outstanding 7.5% Debentures that were not converted in accordance with the terms of the First Supplemental Indenture, and paid an aggregate of C\$2,139,968 in interest.

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 pursuant to the terms of a share sale agreement dated December 11, 2017. In accordance with the terms of the agreement, the Company received US\$6.25M in cash consideration and retained a 2% NSR on the property.

On November 30, 2017 the Company completed a secondary listing as a foreign exempt issuer on the ASX under the symbol "KLA".

On November 7, 2017, the Company announced a 120 metre down-plunge extension of the high-grade Swan Zone at the Fosterville Mine which included drill results from 15 underground holes totalling 2,150 metres outside of then current measured and indicated mineral resources of the Swan Zone in the Lower Phoenix gold system.

On September 12, 2017, the Company declared its second quarterly dividend payment of C\$0.01 per Common Share to shareholders of record as of September 29, 2017.

On September 11, 2017, the Company filed an updated NI 43-101 technical report on the Fosterville Mine entitled "Report on the Mineral Resources & Mineral Reserves of the Fosterville Mine in the State of Victoria, Australia" effective June 30, 2017 in support of the updated mineral resources and mineral reserves estimates contained in the Company's press release dated July 27, 2017.

On September 6, 2017, the Company announced that it had acquired 14,000,000 units of Novo Resources Corp. ("Novo") by way of a private placement financing at a price of C\$4.00 per unit for a total purchase perice of C\$56,000,000. Each unit was comprised of one common share of Novo (a "Novo Share") and one common share purchase warrant of Novo, entitling the Company to acquire a Novo Share at a price of C\$6.00 until September 6, 2020. The warrants are subject to an accelerated expiry, such that in the event the Novo Shares trade over C\$12.00 for a period of 20 consecutive days at anytime after September 6, 2018, Novo may provide notice of early expiry of the warrants will expire within 30 days of such notice. In accordance with the terms of the offering, the Company acquired certain anti-dilution rights and the right to appoint a nominee to the Board of Directors of Novo. Immediately following completion of the offering, Kirkland Lake Gold held approximately 18.19% of Novo on a non-diluted basis and approximately 25.3% on a partially-diluted basis.

On August 31, 2017, the Company acquired 11,830,268 Novo Shares from a third party, representing approximately 9.9% of Novo on a non-diluted basis.

On August 16, 2017, the Company completed a secondary listing on the NYSE and the Common Shares began trading under the symbol "KLC". Effective on the day of listing, the Company's shares ceased trading on the OTCQX under the symbol "KLGDF".

On August 8, 2017, the Company reported continued high-grade drill results at depth from underground drilling at the Fosterville Mine which included results from 6 underground drill holes totalling 2,652 metres into existing mineral resources and extensions of the Swan Zone within the Lower Phoenix system.

On July 27, 2017, the Company announced results of its mid year 2017 mineral reserves and mineral reserve grade from 9.8 g/t (in the prior mineral reserve and mineral reserve estimate effective December 31, 2016) to 17.9 g/t. It was noted that the significant increase in reserves was supported by down-plunge extensions of high-grade within the Lower Phoenix gold system, supported by 532,000 ounces of gold at an average grade of 58.8 g/t from the Swan Zone.

On June 30, 2017, the maturity date, the Company repaid its 6% convertible unsecured subordinated debentures (the "6% Debentures" and together with the 7.5% Debentures, the "Debentures") totalling C\$56.8 in cash. In aggregate, the Company paid a total of C\$58,541,801 to holders of the 6% Debentures representing both the principal and accrued interest.

On June 28, 2017, Kirkland Lake Gold announced an extension of high-grade gold mineralization at its Macassa Mine in Ontario based on recent results from 25 drill holes totalling 12,068 metres.

On June 19, 2017, the Company announced the appointment of certain key executive officer positions to its management team, including the promotion of Pierre Rocque from VP, Technical Services to the position of VP, Canadian Operations, the appointment of Ian Holland as VP, Australian Operations, the appointment of Mark Utting as VP, Investor Relations and the appointment of Brian Hagan as VP, Health, Safety and the Environment.

On May 23, 2017, Kirkland Lake Gold announced the departure of Darren Hall as the Chief Operating Officer of the Company and the resignation of Ryan King as VP, Investor Relations. The Company also announced the appointment of Darin Smith as Director, Corporate Development of the Company.

On May 15, 2017, the Company announced the commencement of a normal course issuer bid (the " 2017NCIB") effective May 17, 2017 to purchase up to 15,186,571 Common Shares until May 16, 2018. Under the 2017 NCIB, the maximum number of Common Shares which can be purchased on a daily basis, other than under block purchase exemptions, is 294,727 Common Shares.

On May 3, 2017, the Company announced further high-grade drill results from the Lower Phoenix and Harrier gold systems from 59 drill holds totalling 14,070 metres into extensions of the Lower Phoenix gold system and 20 drill holes totalling 7,791 metres in the Harrier South gold system.

On April 24, 2017, the Company announced its acquisition of 10,357,143 units of Metanor Resources Inc. ("Metanor") at a price of C\$0.70 per unit for a total purchase price of \$7,250,000.10 pursuant to a private placement financing. Each unit consisted of one common share of Metanor and one-half of one common share purchase warrant of Metanor, each full warrant entitling the Company to acquire one common share of Metanor at a price of C\$0.90 until April 21, 2019. Upon completion of the offering, Kirkland Lake Gold held approximately 13.7% of Metanor on an undiluted basis and 19.3% on a partially diluted basis.

On March 30, 2017, Kirkland Lake Gold filed updated technical reports for each of the Macassa Mine, Fosterville Mine, the Holt-Holloway property, the Hislop property and the Northern Territory Operations, which includes the Cosmo Mine and the Taylor Mine for the year ended December 31. 2016.

On March 29, 2017, the Company announced that the Board of Directors of the Company (the "Board") approved a dividend policy recommending the payment of a quarterly dividend of C\$0.01 per Common Share (C\$0.04 per Common Share annually). The inaugural quarterly dividend of C\$0.01 per Common Share was payable on July 14, 2017 to shareholders of record as at the close of business on June 30, 2017.

On January 19, 2017, the Company announced a change in its stock symbol on the OTC Markets to "KLGDF" (OTCQX:KLGDF) and announced that the Company had changed its auditors from PricewaterhouseCoopers LLP to KPMG LLP. KPMG LLP. Were the auditors of Old Kirkland.

On January 17, 2017, the Company announced high grade extensions at depth and new high grade intercepts from underground drilling at its Fosterville Mine in Australia. The significant mineralized system referred to as the Lower Phoenix system was tested over 20 underground holes totalling 6,471 metres. In addition, the Harrier South system was tested over 7 holes totalling 2,670 metres.

On January 3, 2017, the Company announced certain executive management appointments, including the appointment of Darren Hall as the Chief Operating Officer, Alasdair Federico as the Executive Vice President, Corporate Affairs and CSR, Jason Gregg as Vice President, Human Resources, Ryan King as Vice President, Investor Relations and John Landmark as Vice President, Exploration, Australia.

Financial Year Ended December 31, 2016

On December 23, 2016, the Company announced that it had completed a non-brokered private placement financing of 691,700 Common Shares which are "flow-through" shares within the meaning of the Income Tax Act (Canada). The flow-through shares were issued at a price of \$10.12 per flow-through share for aggregate gross proceeds of approximately \$7,000,000.

On December 12, 2016, the Company provided its 2017 production guidance. In addition, the Company announced that it would be transitioning its Stawell Gold Mine located in Australia to care and maintenance and would transition the Holloway mine located in northeastern Ontario (the Holloway Mine") to surface exploration drill programs in 2017.

On December 6, 2016, the Company announced that it changed the ticker symbol for the Common Shares on the TSX to "KL".

On November 30, 2016, the Company announced the closing of the Arrangement, involving the business combination between Old Kirkland Lake Gold and Newmarket Gold to create Kirkland Lake Gold. Pursuant to the terms of the Arrangement, Old Kirkland Lake Gold became a wholly-owned subsidiary of the Company and the Company completed a consolidation of its shares on the basis of 0.475 post-consolidation shares for each pre-consolidated share held. In addition, the Company issued approximately 117,505,144 Common Shares to the former holders of Old Kirkland Lake Gold shares as consideration under the Arrangement. As a result, on closing of the Arrangement, approximately 60d horders of Newmarket Gold. The Company announced that the publicly traded Debentures of Old Kirkland Lake Gold shareholders and 43% of the Common Shares were held by former old kirkland Lake Gold shareholders and 43% of the Common Shares were held by former old sold shareholders and 43% of the Common Shares were held by former shareholders of Newmarket Gold. The Company announced that the publicly traded Debentures of Old Kirkland Lake Gold shareholders and 43% of the Common Shares were held by former shareholders of Newmarket Gold. The Company announced that the publicly traded Debentures of Old Kirkland Lake Gold shareholders and 43% of the Common Shares were held by former shareholders of Newmarket Gold. The Company announced that the publicly traded Debentures of Old Kirkland Lake Gold shareholders and 43% of the Common Shares were held by former shareholders of Newmarket Gold. The Company announced that the publicly traded Debentures of Old Kirkland Lake Gold shareholders and 43% of the Common Shares were held by former shareholders and 43% of the Common Shares were held by former shareholders and 43% of the Common Shares were held by former shareholders and 43% of the Common Shares were held by former shareholders and 43% of the Common Shares were held by former shareholders and 43% of the Common Shares were held by former shareholders and 43%

In connection with closing of the Arrangement, Anthony Makuch, the former President and Chief Executive Officer of Old Kirkland Lake Gold, including Meri Verli, Senior Vice President, Finance and Treasurer, Jennifer Wagner, Corporate Legal Counsel and Corporate Secretary, Doug Cater, Vice President, Exploration, Pierre Rocque, Vice President, Mine Engineering and Ray Yip, Vice President, Business Intelligence Systems were appointed in the same positions with the Company. In addition, the Company announced the appointment of Philip Yee as the Executive Vice President and Chief Financial Officer of the Company, effective December 1, 2016.

On November 25, 2016, Newmarket Gold and Old Kirkland Lake Gold announced the results of their respective special meetings of shareholders with respect to the Arrangement. In particular, it was noted that the shareholders of Newmarket Gold had elected Anthony Makuch, Maryse Belanger, Jonathan Gill, Arnold Klassen, Pamela Klessig, Barry Olson, Jeffrey Parr, Eric Sprott and Raymond Threlkeld to the Board.

On November 8, 2016, Newmarket Gold announced high grade drill results and record monthly production from its Fosterville Mine. The Lower Phoenix system was tested over nine underground holes totalling 3,637 metres and the Harrier South system was tested over 7 holes totalling 2,893 metres, returning the highest grades recovered to date at the Harrier South system.

On September 29, 2016, Newmarket Gold and Old Kirkland Lake Gold announced the entering into of a definitive arrangement agreement (the "Arrangement Agreement") providing for the Arrangement and pursuant to which all of the common shares of Old Kirkland Lake Gold (the "Old Kirkland Lake Gold Shares") would be exchanged on the basis of 2.1053 common shares of Newmarket Gold, on a pre-consolidation basis, ("Newmarket Shares") for every one Old Kirkland Lake Gold Share held.

On September 20, 2016, Newmarket Gold announced additional near mine high-grade gold mineralization in the Lower Phoenix gold system at the Fosterville Mine in Australia.

On September 15, 2016, Old Kirkland Lake Gold announced that it changed the ticker symbol for the Old Kirkland Lake Gold Shares on the TSX to "KLG" and the ticker symbols for the 6% Debentures and 7.5% Debentures to "KLG.D.B." and "KLG.D.B.A", respectively.

On September 13, 2016, Old Kirkland Lake Gold announced the appointment of Meri Verli, Senior Vice President, Finance and Treasurer (effective September 14, 2016), Pierre Rocque, Vice President Mining Engineering (effective September 26, 2016), and Ray Yip, as Vice President Business Intelligence Systems (effective September 3, 2016). In addition, Old Kirkland Lake Gold announced the departure of Chris Stewart, Vice President of Operations from Old Kirkland Lake Gold.

On August 22, 2016, Newmarket Gold announced new zones of gold mineralization at its Cosmo Gold Mine, from its 2016 growth exploration program

On August 3, 2016, Newmarket Gold announced that Lukas Lundin was retiring from the Board of Directors of Newmarket Gold and that Maryse Belanger was appointed to the Newmarket Gold Board of Directors. In addition, Newmarket Gold announced that John Landmark had been appointed as the Vice President, Exploration.

On July 13, 2016, Old Kirkland Lake Gold announced that it had completed a non-brokered private placement financing of 1,047,343 common shares which are "flow-through" shares within the meaning of the Income Tax Act (Canada). The flow-through shares were issued at a price of \$14.32 per flow-through share for aggregate gross proceeds of approximately \$15,000,000.

On June 13, 2016, Old Kirkland Lake Gold announced the resignation of George Ogilvie as President and Chief Executive Officer and the appointment of Anthony Makuch as the President and Chief Executive Officer of Old Kirkland Lake Gold, which took effect on July 18, 2016

On May 18, 2016, Newmarket Gold announced that it had filed an amended NI 43-101 Technical Report for Preliminary Economic Assessment of its Maud Creek gold project located in the Northern Territory, Australia (the "Maud Creek Gold Project").

On April 6, 2016, Newmarket Gold announced the appointment of Michael Vint to the Newmarket Gold Board of Directors.

On April 4, 2016, Old Kirkland Lake Gold announced that it had received acceptance from the TSX with respect to a normal course issuer bid to purchase: up to \$5,690,300 of 6% Debentures ("KLG.D.B";) and up to \$6,210,000 of 7.5% Debentures ("KLG.D.BA"), representing 10% of the issued and outstanding of each of the 6% Debentures and the 7.5% Debentures at a weighted average price of \$98.30 and \$6,900,000 of 7.5% Debentures at a weighted average price of \$98.30 and \$6,900,000 of 7.5% Debentures at a weighted average price of \$98.50.

On March 21, 2016, Newmarket Gold announced the results of its updated 2015 year end mineral reserves and mineral resources estimates for its Fosterville Mine, Stawell Gold Mine and Northern Territory and its Maud Creek Gold Project and announced the filing of an updated NI 43-101 technical report for each property on SEDAR.

On February 26, 2016, Newmarket Gold announced that a total of 4,039,120 common share purchase warrants had been exercised at a price of \$1.63 for gross proceeds of approximately \$6,600,000.

On February 12, 2016, Newmarket Gold announced that on March 30, 2016 (the "Redemption Date"), it intended to redeem in full all of its then outstanding convertible unsecured debentures due April 30, 2018 (the "Newmarket Debentures") in accordance with the provisions of the convertible debenture indenture dated as of April 5, 2013, as supplemented and amended by the first supplemental indenture dated as of July 10, 2015. The redemption price for the Newmarket Debentures was 100% of the aggregate outstanding principal amount (the "Redemption Price"), together with accrued and unpaid interest up to, but excluding, the Redemption Date. On March 30, 2016, Newmarket Debentures were converted by the holders into Newmarket Shares prior to the Redemption Date. Newmarket Shares prior to the Redemption Date. Newmarket Shares, and settling any accrued and unpaid interest up to, but excluding, the Redemption Date, in cash.

On January 26, 2016, Old Kirkland Lake Gold announced the completion of the St Andrew Arrangement pursuant to which Old Kirkland Lake Gold acquired all of the outstanding common shares of St Andrew Goldfields on the basis of 0.0906 of an Old Kirkland Lake Gold Share for each share of St Andrew Goldfields and St Andrew Goldfields became a wholly-owned subsidiary of Old Kirkland Lake Gold.

Financial Year Ended December 31, 2015

On November 18, 2015, Newmarket Gold announced the appointment of Darren Hall as Chief Operating Officer of Newmarket Gold effective December 7, 2015, replacing the previous Chief Operating Officer of Newmarket Gold,

Rodney Lamond. On August 29, 2015, Newmarket Gold announced that Rodney Lamond would step down as Chief Operating Officer of Newmarket Gold effective September 15, 2015.

On November 16, 2015, Old Kirkland Lake Gold and St Andrew Goldfields announced the entering into of a definitive arrangement agreement providing for the St Andrew Arrangement (the "St Andrew Arrangement Agreement").

On November 4, 2015, Edward Farrauto was appointed to Board of Directors of Newmarket Gold

On September 22, 2015, Newmarket Gold announced that as of September 21, 2015 it began trading in the United States on the OTC marketplace, the OTCQX * under the symbol "NMKTF".

On July 10, 2015, Old Newmarket and Crocodile Gold completed the Crocodile Arrangement pursuant to which Old Newmarket and Crocodile Gold amalgamated and such amalgamated and such amalgamated and such amalgamated entity was also named Newmarket Gold Inc. and the holders of common shares of Old Newmarket Share held, 0.2 of a Newmarket Gold common share and the holders of common share of Crocodile Gold ("Crocodile Gold Shares") received, for each Old Newmarket Share held, 0.2 of a Newmarket Gold common share of Newmarket Gold or CS0.37 in cash. The cash component was subject to pro-rution as Crocodile Gold shareholders elected to receive an aggregate of greater than CS20,000,000 in cash. In addition, immediately prior to the closing of the Crocodile Arrangement, the proceeds of Old Newmarket Shares were issued. CS20,000,000 Subscription Receipt (as defined below) financing were released from serrow and the underlying Old Newmarket Shares were issued. CS20,000,000 of the proceeds were used to fund the cash consideration payable to former Crocodile Gold shareholders who elected to receive cash pursuant to the Crocodile Arrangement, and the remaining CS5,000,000 of the proceeds was used to bolster the working capital position of Newmarket Gold.

On July 8, 2015, Old Newmarket announced the successful completion of its continuance, effective July 7, 2015, from the Province of British Columbia into the Province of Ontario in accordance with the provisions of the OBCA.

On June 1, 2015, Old Newmarket announced that it entered into an underwriting agreement (the "Underwriting Agreement") with GMP Securities L.P. and BMO Capital Markets as co-lead underwriters and joint bookrunners, together with a syndicate of underwriters including Haywood Securities Inc. and RBC Capital Markets (collectively, the "Underwriters"). Pursuant to the Underwriting Agreement, the Underwriters purchased from Old Newmarket on an underwritten, private placement basis 19,840,000 subscription receipts (the "Subscription Receipts") of Old Newmarket for aggregate gross proceeds of CS24,800,000. In addition, a director of Old Newmarket purchased from Old Newmarket on a non-brokered private placement basis, C\$200,000 of Subscription Receipts. The total gross proceeds of the private placement was C\$25,000,000.

On May 26, 2015, Old Kirkland Lake Gold announced that it exercised its right to buy-out a remaining 0.5% net smelter return royalty for \$250,000. The royalty was part of a 1% net smelter return royalty on the HM Claim which was part of the Queenston Mining Joint Venture near the Macassa Mine Complex. The initial 0.5% was purchased by Old Kirkland Lake Gold for \$250,000 on April 8, 2015.

On May 19, 2015, Old Kirkland Lake Gold announced it would be changing its fiscal year end from April 30 to December 31.

On May 11, 2015, Old Newmarket and Crocodile Gold announced the entering into of a definitive arrangement agreement providing for the Crocodile Arrangement (the "Crocodile Arrangement Agreement").

On April 15, 2015, Old Kirkland Lake Gold announced that the admission of its ordinary shares for trading on the AIM Market of the London Stock Exchange plc would be cancelled with effect from 7:00 a.m. (UK time) on August 3, 2015, with the last trading day being July 31, 2015.

On April 1, 2015, Old Kirkland Lake Gold announced that it had received acceptance from the TSX with respect to a normal course issuer bid to purchase up to \$5,750,000 6% Debentures and up to \$6,900,000 7.5% Debentures

representing 10% of the issued and outstanding of each of the 6% Debentures and the 7.5% Debentures in the public float as at March 30, 2015.

On March 31, 2015, Crocodile Gold filed NI 43-101 technical reports on the Stawell Gold Mine, the Cosmo Gold Mine and the Fosterville Mine

On February 18, 2015, Old Kirkland Lake announced the closing of a bought deal prospectus offering of common shares. A total of 7,935,000 Old Kirkland common shares were issued at a price of \$4.35 per share, for total gross proceeds of \$34,517,250, which included the full exercise of the over-allotment option by a syndicate of underwriters co-led by National Bank Financial Inc. and Macquarie Capital Markets Canada Ltd. and including Sprott Private Wealth LP, BMO Capital Markets and Clarus Securities Inc.

On January 14, 2015, Crocodile Gold announced the closing of an agreement with AuRico Gold Inc. ("AuRico") to terminate the net free cash flow sharing arrangement between the parties that was implemented in connection with the Navco Acquisition (defined below) in exchange for a one-time payment of CS20 million in cash and the grant of a net smelter royalty of 2% from the Fosterville Mine, commencing January 14, 2015, and a net smelter royalty of 1% from the Stawell Gold Mine, commencing January 1, 2016. As a result of the agreement, Crocodile Gold was released from its obligation to pay AuRico any further net free cash flow generated from the Fosterville Mine and Stawell Gold Mine, which obligations originally arose as a result of the completion of the acquisition of the Stavelli Gold Mine through the acquisition of all of the shares of Northgate Australian Venture Corporation ("Navo") from AuRico (the "Navo" Acquisition") pursuant to a share purchase agreement dated March 27, 2012, as amended on May 4, 2012. Navoe has subsequently changed its name to Newmarketh Gold Victoria Holdings Pty Ltd.

DESCRIPTION OF THE BUSINESS

Kirkland Lake Gold is a mid tier gold mining, development and exploration company with a diversified portfolio of assets located in the stable mining jurisdictions of Canada and Australia and a significant pipeline of high-quality development projects. The production profile of the Company is anchored by two high-grade, low-cost operations including the Macassa Mine Complex located in northeastern Ontario and the Fosterville Mine located in the State of Victoria, Australia. In addition, the Company owns the Holt Mine, the Holloway Mine, the Hislop mine (the "Hislop Mine") and the Taylor Mine which are situated along the Porcupine-Destor Fault Zone, in northeastern Ontario along with the Cosmo Gold Mine located in the Northern Territory, Australia. The Company is based on a strong foundation of quality gold production from its mines, and is targeting annual production of your £20,000 ounces of gold in 2018. Kirkland Lake Gold is dedicated to the development of its resources and targeted exploration, while continuing to generate free cash flow and maintaining a large resource base. The Company also strives to enhance shareholder value through a disciplined approach to growth, which includes executing on a clearly defined gold asset consolidation strategy and by building gold reserves and resources while maintaining the high standards that the Kirkland Lake Gold core values represent.

Principal Markets and Distribution Methods

The gold dore 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, Royal Bank of Canada and Auramet Trading LLC.

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 overhand and underhand), 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 Difficulties".

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 expect and acquire recious 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.

Rusiness 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 the battery supplier for its electric powered underground equipment.

Renegotiation or Termination of Contract

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.

Employees

As at December 31, 2017, the Company had approximately 1,690 employees and 344 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, 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. The effect of these factors cannot be accurately predicted. See "Risk Factors".

Protecting the environment and maintaining a social license 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 which it operates. There are environmental laws in both Canada and Australia that apply to the Company's operations, exploration, development projects and land holdings. 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: (a) complying with corporate requirements, environmental legislation, licences and regulations; (b) developing and maintaining a comprehensive Environmental Management System; (c) integrating environmental, social, cultural and economic consideration effectively into all planning and decision making processes; (d) fostering mutually beneficial environmental partnerships with our communities (e) conducting business in a manner that minimizes potential environmental Impacts; (f) instilling a behavior of environmentally sustainable manner with respect to exploration, mining, processing, was temanagement and rehabilitation; (h) understanding, encouraging and promoting cross-cultural awareness; (f) maintaining appropriate and effective communication with landowners, people of country and other stakeholders who may be directly affected by the Company's operations; and (j) providing for the reclamation and rehabilitation of areas affected by our operations, considering future end land use.

The Company has also developed a Social Responsibility Policy, which sets forth the following key commitments: (a) complying with, as a minimum standard, applicable legal requirements and commitments to which we subscribes; (b) acknowledging all cultural and other human rights relevant to our operations and ensuring that all levels of the workforce understand and respect these rights; (c) acknowledging and respecting Indigenous rights, cultural beliefs and aspirations; (d) engaging stakeholders with respect to their concerns, aspirations and values regarding development, operational and colours aspects of mineral projects, recognizing the strong links between economic, such and honestly with all stakeholders about our performance in a timely manner; and (f) integrating social considerations into aspects of our business decisions and activities, including exploration, project development, mine operation, mine expansion, acquisitions, divestments and mine closures, to avoid or mitigate adverse social impacts.

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 operations; results and could cause actual events to differ materially from those described in forward-looking statements relating to the Company. 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 mine developments and improved mining and production methods; decreased production due to mine closures; interest and interest rate expectations; 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 minera

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.

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 and base metals, including, without limitation, unusual and unexpected geologic formations, seismic activity, rock bursts, cave-ins, flooding and other conditions involved in the drillings adms, property, and environmental damage, all of which may result in possible legal liability result in possible legal liability results in prostice in the environmental damage, and prosted to hazards such as fire, rock falls, equipment failure or failure of retaining dams around tailings disposal areas which may result in possible legal 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 station to certain risks and hazards against it cannot insure or for which it may elect not to insure. The occurrence 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, 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 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. It is not unusual for new mining operations to 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 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 Macassa Shaft Project, permitting with respect to its new tailings facility at the Macassa Mine, rehabilitation of the current tailings facility at the Macassa Mine, increased production thoughput at the Taylor Mine, the development and implementation of a paste fill plant for the Fosterville Mine and a water treatment plant at the Fosterville Mine. Technical considerations, delays in obtaining government approvals and necessary permits, 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. 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 licenses, 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 so perations are subject to many inherent risks, including but not limited to, rock bursts, cave-ins, flooding, fall of ground, falls and moving equipment that could result in occupational illnings. 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 including a filtness for work program which focuses on fatigue, steps, health and safety risks, of the company and the result of the company and the promotion of enhanced employees, contractors and others may not be sufficient to eliminate health and safety risks and employees, contractors and others may not adhere to the occupational health and safety risks uses may adversely affect the business of the Company and its future overations:

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 pave any deversely 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 cuttailed, and may include correct 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 comparations and activities of mining comparations and permits governing operations and activities of mining comparations and permits governing operations and activities of mining comparations and permits governing operations and activities of mining comparations and permits governing operations and activities of mining operations and permits governing operations and activities of mining comparations and permits governing operations and activities of mining operations and activities of mining operations and activities of mining operations and permits governing operations and activities of mining operations and permits governing operations and activities of mining operations and permits governing operations and activities of mining operations and permits governing operations and activities of mining operations and permits governing operations and 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 financially responsible for remediation of contaminat

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 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.

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 retoractive claims and/or changes in the administration of laws, policies and practices; uncertain political and economic environments; war, terrorism, sabraneces; delays in obtaining or the inability to obtain in or maintain encessary 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 reserves 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 controls smade and judgments used in engineering and geological interpretation. 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 under on-stee conditions or during production. Lower market priors, increased production costs, readed and offer factors may result in a revision of its mineral reserve estimates from time to time or may render the Company's mineral reserves and estimates may change depending on further geological interpretation, drilling results and metal prices, which could have a negati

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 reserves 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 or estopes from those places from the pl

Cont Entire at a

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 uch 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, and the International Accounting Standards Board. 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. 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 us as a foreign issuer listed on the NYSE and registered with the Commission in the United States. Although we substantially comply with NYSE's corporate governance requirements. We may from time to time seek other relief from corporate governance and exchange requirements and securities laws from the NYSE and other regulators. For the fiscal year ending December 31, 2018, the Company will be required to document and test is internal control procedures to satisfy the requirements of the Company is controls. Some requirements of the Company's controls. Internal controls over financial reporting and our external auditors to conduct an independent assessment of the effectiveness of the Company's controls. Internal controls over financial reporting may not be able to maintain them as required by SOX. The Company may not be able to maintain effective internal controls over financial reporting on an ongoing basis, if standards are modified, supplemented or amended from time to time. If we do not satisfy the SOX requirements on an ongoing hasis, investors could lose confidence in the reliability of our financial statements, and this could harm our business and have a negative effect on the trading price or market value of securities of the Company.

If we do not implement new or improved controls, or experience difficulties in implementing them, it could harm our operating results or we may not be able to meet our reporting obligations. There is no assurance that we 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 we 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. Acquisitions can pose challenges in implementing the required processes, procedures and controls in a procedures or internal controls over financial reporting that are as thorough or effective as those required by the securities laws that currently apply to us. If any of our staff fail to disclose material information that is otherwise required to be reported, no evaluation can provide complete assurance that our internal controls over financial reporting will detect this. The effectiveness of our controls and procedures may also be limited by simple errors or faulty judgments. Continually perhanding our internal controls is important, especially as we expand and the challenges involved in implementing appropriate internal controls over financial reporting will increase. Although we intend to devote substantial time to ongoing compliance with this, including incurring the necessary costs associated with therewith, we cannot be certain that we will be successful in complying with section 404 of SOX.

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 may be enacted and existing rules and regulations may be applied in a mannet and could limit or 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 "- Foreign Operations and Political Risk".

Acauisitions 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 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 acquisition exists a consideration for 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.

Australian Foreign Investment I a

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, 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 on the Company's business, financial condition and results of operations.

Market Price of Securities

The Common Shares are listed on the TSX, NSYE 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'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.

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, since approximately 10.4% of the Common Shares are held by Eric Sprott, the Chairman of the Board, the liquidity of the Company's securities may be negatively impacted.

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 regards to the Company and may and its activities to the Company and may intense to uphold and maintain a positive image and reputation, the Company of the 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 Haritage

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.

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, 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 as planned. There can be no assurance that current or future construction and start-up plans implemented by the Company will be successfull, 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 swill 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.

Some of the Company's projects have no operating history upon which to base estimates of future cash flow. 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.

Commercial viability of a new mine or development project is predicated on many factors. 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 cases 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.

N. ICE C. C. P.

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 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 BOX® plant impacts bacterial activity and gold recovery in the BOXS® circuit, which could have a negative effect on the financial condition and results of operations 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.

Information Technolog

The Company is reliant on the continuous and uninterrupted operations of its information technology (" Π ") systems. User access and security of all Π 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 continued to protect systems, computers, software, somewhat is 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 utherabilities.

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 or expectations, cash flows and financial position if it incurs a material loss related to any significant event that is not covered, by its insurance policies.

.....

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 competitions 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 Fluctuations

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.

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.

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 may be subject to another form of litigation. Defense 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 lass the Company received an indication that any material claims are forthcoming. However, due to the inherent unitariation process, should a material claim be brought against the Company, the processors of defending such claims could lake 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 non-critical process.

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.

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 new 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.

Lahour 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.

There is a collective bargaining agreement in place at the Fosterville Mine which currently covers approximately 275 employees primarily in mining, processing and maintenance. The agreement was entered into in 2015 and is set to expire on June 30, 2018. The Company has begun the negotiation process to complete a new agreement and it is expected that a new agreement will be entered into prior to the expiry date. 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 manning 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.

SUMMARY OF MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES

Set forth below are the mineral resource and mineral reserve estimates for the Company's material mineral properties for the year ended December 31, 2017. Such estimates were based on the following reports:

- 1. Report on the Mineral Resources and Mineral Reserves of the Fosterville Gold Mine, Victoria, Australia, dated April 2, 2018 and effective December 31, 2017 and prepared by Troy Fuller, MAIG, and Ion Hann, FAusIMM, each of whom is a "qualified person" pursuant to NI 43-101 (the "Fosterville Technical Report").
- 2. Report on the Mineral Resources and Mineral Reserves of the Macassa Gold Mine Complex, Kirkland Lake, Ontario, Canada dated March 30, 2017 and effective December 31, 2016, prepared by Pierre Rocque, P.Eng. and Douglas Cater, P.Geo, each of whom is a "qualified person" pursuant to NI 43-101 (the "Macassa Technical Report").
- 3. Report on the Mineral Resources and Mineral Reserves of the Taylor Gold mine, Matheson, Ontario dated March 30, 2017 and effective December 31, 2016 and prepared by Pierre Rocque, P. Eng. and Douglas Cater, P. Geo., each of whom is a "qualified person" pursuant to NI 43-101 (the "Taylor Technical Report").

Mineral resource and mineral reserve estimates are prepared in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum's ("CIM") Definition Standards on Mineral Resources and Mineral Reserves (2014), as amended. The reported mineral resources are exclusive of the mineral reserves.

MATERIAL PROPERTIES

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

The Fosterville Mine

The below summary is a direct extract and reproduction of the summary contained in the Fosterville Technical Report, without material modification or revision and all defined terms used in the summary shall 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 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 was prepared in accordance with NI 43-101. For full technical details of the report, reference in this annual Information Form and the summary set forth below is qualified in its entirety with reference to the full text of the Fosterville Technical Report and approved the scientific and technical disclosure contained in this Annual Information Form related to the Fosterville Mine.

EXECUTIVE SUMMARY

The Fosterville Technical Report has been prepared for Kirkland Lake Gold Ltd. (Kirkland Lake Gold), the beneficial owner of the Fosterville Gold Mine. Kirkland Lake Gold is listed on the Toronto and New York Stock Exchanges under the ticker symbol "KLA". On November 30, 2016, Newmarket Gold Inc. ("Newmarket") combined with Kirkland Lake Gold Inc. and the combined company was renamed Kirkland Lake Gold Ltd. The Fosterville Technical Report provides the Mineral Resource and Mineral Reserve estimates for the Fosterville Gold Mine (Fosterville or FGM) that have resulted from ongoing exploration and resource definition and as a result of ongoing mine design and evaluation during the period June 30, 2017 to December 31, 2017.

Location

The Fosterville Gold Mine is located approximately 20km east of the city of Bendigo and 130km north of the city of Melbourne in the State of Victoria, Australia.

The FGM 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 Ltd.

Kirkland Lake Gold also holds titles through Fosterville Gold Mine Pty Ltd of four surrounding Exploration Licences totaling 1351km 2. These Exploration Licences encompass the entire known strike extent of the Fosterville Goldfield.

History and Ownership

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 1930's, activity resumed in 1988 with a further tailings retreatment program conducted by Bendigo Gold Associates, which ceased in 1989. Mining recommenced in 1991 when Brunswick Mining NL and then Perseverance Corporation Ltd (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 poured (Roberts et al, 2003).

A feasibility study into a sulfide mining operation was completed by Perseverance in 2003 with construction and open pit mining commencing in early 2004. Commercial production commenced in April 2005 and up to the end of December

2006 had produced 136,882oz gold. In October 2007, Perseverance announced that it had entered into an agreement with Northgate Minerals Corporation to acquire the company with full control passing to Northgate in February 2008.

The 500,000 th ounce of sulfide gold production was achieved in April 2011.

In August 2011, Northgate entered into a merger agreement with AuRico Gold Inc., who assumed control of Northgate in October 2011. In March 2012 AuRico and Crocodile Gold Corp. jointly announced that Crocodile Gold would acquire the Fosterville and Stawell Mines. Crocodile Gold's ownership of Fosterville was achieved on May 4, 2012. In July 2015, Newmarket Gold Inc. merged with Crocodile Gold to form Newmarket Gold Inc.

In January 2016 a significant milestone in Fosterville Gold Mine's history was reached when the one millionth ounce of sulfide gold was poured.

At the end of November 2016, Kirkland Lake Gold Inc. merged with Newmarket Gold Inc. to form a new mid-tier gold company Kirkland Lake Gold Ltd.

Geology and Mineralization

The Fosterville Goldfield is located within the Bendigo Structural Zone in the Lachlan Fold Belt. The deposit is hosted by an interbedded turbidite sequence of sandstones, siltstones and shales. This sequence has been metamorphosed to sub-greenschist facies and folded into a set of upright, open to closed folds. The folding resulted in the formation of a series of bedding parallel laminated quartz (LQ) veins.

Mineralization at Fosterville is controlled by late brittle faulting. These late 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 fault. There are also moderately east-dipping faults, which have become more significant footwall to the anticlinal offsets along the west-dipping faults. Primary gold mineralization occurs as disseminated arsenopyrite and pyrite forming as a selvage to veins in a quartz-carbonate veinlet stockwork. The mineralization is structurally controlled with high-grade zones localized by the geometric relationship between bedding and faulting. Mineralized shoots are typically 4-15m thick, 50-150m up and down-dip and 300-2,000m+ down-plunge.

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 in favorable structural locations, such as the Phoenix, Eagle and Lower Phoenix Structures. There are also occurrences of primary visible gold (Smm in size) that has a spatial association with stibnite in fault related quartz veins. The occurrence of visible gold las bocome increasingly inclined at a fostervival end is observed more frequently with depth and down-plunge within the Lower Phoenix Mineralized Zones. Throughout 2016 and 2017, visible gold (Smm in size) mineralization occurrences were also observed at depth in the Harret Mineralized Zones with notably increased frequency.

Fosterville Gold Mine engaged Quantitative Geoscience (QG) in November 2014, in response to the noted increased frequency of visible gold occurrences at depth, to provide FGM with some external advice and thinking regarding the implications to resource estimation and mine geology practices. Throughout 2015 and 2016 QG continued to assist FGM through review of current practices and providing technical theory and background to sampling, assaying and resource modeling in visible gold environments. In May 2017, Fosterville Gold Mine engaged SRK Consulting (Australasia) Pty Ltd (SRK) to provide an external independent review of laboratory sampling, sample preparation, assay procedures and estimation methodology. Whilst no sub-sampling and assay bias were identified during the review, recommendations were made to test and/or improve the laboratory processes and test for and/or minimize the potential for sub-sampling and assay bias. In regards to modeling methodology, SRK made recommendations related to sub-domaining, de-clustering, top cutting and validation which have been implemented in this December 2017 Mineral Resource estimate.

Current Status

Since the commencement of commercial gold production in April 2005, the sulfide plant at Fosterville Gold Mine has produced 1,416,282oz of gold up to the end of December 2017. This production was initially sourced solely from open cut mining with underground mining starting to contribute from late 2006. The Harrier open cut was initially completed in December 2007 and since that time the underground mine has been the primary source of ore. Ore sourced from a series of pit expansions on the previously mined Harrier, John's and O'Dwyer's South Pits between Q1 2011 and Q4 2012 has provided supplementary feed to underground or sources. Since the beginning of 2013 underground operations has been the sole provider of mill feed at Fosterville. Current mining activities are focused on the Central, Phoenix and Harrier underground areas and current gold production guidance for 2018 is 260-300koz.

During 2018, Kirkland Lake Gold has budgeted approximately 168km of exploration and resource definition diamond drilling, 40km of RC/RAB drilling, soil sampling and geophysical surveys and development of dedicated underground drill platforms (1,046m). Total estimated cost for exploration and resource development activities for 2018 is A\$47.1M.

Mineral Resources and Mineral Reserves

The Mineral Resources and Mineral Resource Areas of Central, Southern, Harrier and Robbin's Hill are historically defined resource area, 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. Details on Mineral Resource block model extents can be seen in Error! Reference source and found. in the Fosterville Technical Report.

Mineral Resources are reported exclusive of Mineral Reserves (Table 1-1).

All Mineral Reserves are contained within the Central and Harrier Mineral Resource Area. Mineral Reserves contained within the Central Mineral Resource Area have been subdivided into Central and Phoenix Mineral Reserves Table-15-1.

CIL Residue Mineral Reserves are distinguished from in situ Mineral Reserves in Table 1-2 on the basis of differing gold recovery assumptions.

TABLE 1-1 SUMMARIZED MINERAL RESOURCES (EXCLUSIVE OF MINERAL RESERVE) FOR FGM AS AT DECEMBER 31, 2017

	Summarized Mineral Resources (Exclusive of Mineral Reser	ve) for Fosterville as of December 31, 2017			
Classification	Tonnes (kt)	Gold Grade (g/t Au)	Insitu Gold (kOz)		
Oxide and Sulfide Materials					
Measured	1,944	2.90	181		
Indicated	11,920	5.15	1,973		
Total (Measured and Indicated)	13,864	4.83	2,154		
Inferred	8 279	7 14	1 900		

- tes:

 CIM definitions (2014) were followed in the estimation of Mineral Resources.

 For the Mineral Resource estimate, the Qualified Person is Troy Fuller, Geology Manager of FGM.

 See notes provided for Errort Reference source not found, for more detail on oxide and sulfide resources.

 Mineral Resources are rounded to 1000, 00 gl gt Au and labor, Minor discources provided for Errort Reference source not found. for more detail no exide and sulfide resources.

 Mineral Resources that are not Mineral Resources of not have demonstrated economic viability.

 Mineral Resources that are not Mineral Resources do not have demonstrated economic viability.

 Mineral Resources that are not Mineral Resources of not have demonstrated economic viability.

 Cut-off grades applied are 0.7 glt Au for oxide, 1.0 glt Au for near-surface sulfide (above 5050mRL) and 3.0 glt Au for underground sulfide mineralization (below 5050mRL).

 A minimum mining width of 2.7 ms was applied.

 Dry Bulk Density of mineralized material applied are 2.40/m³ for oxide, 2.56/m³ for transitional material, 2.64/m³ for fresh material between 5000 and 5050mRL, 2.72/m³ for fresh material between 4500 and 5000mRL, and 2.78/m³ for fresh material below 4500mRL.

	Summarized Mineral Reserves for Fostervil	le as of December 31, 2017				
Classification	Tonnes (kt)	Gold Grade (g/t Au)	Insitu Gold (kOz)			
Proven	236	14.80	112			
Probable	2,052	24.06	1,587			
Total (Proven and Probable)	2,288	23.11	1,699			
	CIL Residues					
Proven	649	7.69	160			

- M definitions (2014) were followed in the estimation of Mineral Reserves.

 the Mineral Reserves estimate, the Qualified Person is Ion Hann, Mining Manager of FGM.

 et Mineral Reserves estimate used a gold price of USSL 1296 per ounce (ASI, 600 per ounce).

 et offer grades applied ranged from 2 to 10 s 3 g 4 ru for underground sulfide ore depending upon width, mining method and ground conditions, lutton ranging from 10 to 30% and maning recovery ranging from 60 to 100% were applied to stopes within the Mineral Reserves settmate.

 reradite stated as contained ouncer—25% recovery is expected. Recoveries are based on operating performances.

Conclusions and Recommendations

The Authors have made the following interpretations and conclusions:

- The understanding of the fundamental geological controls on mineralization at Fosterville is high. Primary mineralization is structurally controlled with high-grade zones localized by the geometric relationship between bedding and west-dipping faulting. This predictive model has led to considerable exploration success in following the down-plunge extensions of high-grade mineralization.
 - ➤ The Lower Phoenix Fault is a major west-dipping structure in the active mine development area and is defined by reverse faulting on a shale package where anticline thrust displacement of ~80m occurs. The fault dips 35-55° to the west and mineralization can be traced along an approximate dip extent of 190m and strike extent of 1.9km. The dominant mineralization style on this structure is disseminated sulfide; however, occurrences of visible gold at depth have become increasingly more common and concentrated where footwall structures intersect one another. The Lower Phoenix System currently remains open to the north and south so maximum plunge extent has not yet been defined;
- Throughout 2016 and 2017, development mapping and continued drilling confirmed that there were multiple mineralized structures of various size and continuity footwall to the main west-dipping Lower Phoenix Fault, which present significant resource growth potential. Progressive geological understanding of the Phoenix and Lower Phoenix footwall environs has highlighted the significance of these favorable settings for mineralization, including;
 - East-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 halos of disseminated sulfide. The Eagle Fault is discordant to bedding and variably dips between 10 and 60° to the east and transforms further to the south to strike in an ENE direction, dipping ~45° to the SSE. Mineralization on the Eagle Zone extends over a ~1km strike extent and is untested and open at depth below the 3805mRL and south of 6125mN. Drilling is planned to target beyond this extent during 2018. East Dipping

Faults are typically bedding parallel to sub parallel with dips of ~70° east to sub-vertical. The defined extent of East Dipping structures containing significant mineralization is now ~1.6km;

- Low-angled Lower Phoenix Footwall west-dipping structures typically consist of large quartz veins up to several meters wide with laminated textures, indicating a series of multiple mineralizing events, including a later stage quartz-stibnite phase of mineralization with visible gold.

 The faults are interpreted to have minimal offset but rather have been hydraulically fractured. Where these structures form linkages between the Lower Phoenix and East Dipping Faults, extremely high-gold grades are observed; and
- During 2016 drilling extending footwall to the Lower Phoenix discovered west-dipping Swan (previously reported as Lower Phoenix Footwall) mineralization, which occupies a reverse fault structure exhibiting rotational displacement. The structure is characterized by a one to three-meter-thick brecciated quartz-dominant vein with clearly defined laminated margins. It exhibits unique spotted stibnite and country rock laminations within the quartz, especially where it is highly developed. High-gold grades are associated with stylolite-rich quartz veins existing as trends of visible gold grains (Samm in size). On its periphery there is a lower-grade selvage of sulfide dominated Au mineralization which can be up to Zm in width. The Swan structure has returned some of the highest grade intercepts on the Fosterville Licence. Subsequent drilling during 2017 reaffirmed the high-grade continuity of mineralization and increased the known extent of this highly mineralized structure, which is now defined over 570m in strike length and 390m in vertical extent. The Swan Zone is the highest grade mineralized zone defined at Fosterville to date and contributes 1,156,000z at an average grade of 61.2g/t Au (588,000 tonnes) to the December 31, 2017 Mineral Reserve estimate making up 68% of the total in situ Mineral Reserves. The Swan appears to adjoin the high-grade Eagle structure at its lower edge and is mostly untested down-plunge. Continued drilling from the hangingwall drill platforms during 2018 will advance the understanding of the size and scale of this priority resource growth target.
- Continued drill definition of these structures over 2017, in combination with ore development and production exposure and reconciliation performance has reaffirmed the significance of footwall structures to the Lower Phoenix Fault. The defined continuity, proximity to existing Mineral Resource and high-grade tenor of these structures enhances the December 2017 Mineral Resource and Reserve position. Furthermore, mineralization on these structures is open down-plunge, providing encouraging future Mineral Resource and Mineral Res
- Drilling into the Harrier System over 2016 identified high-grade mineralization containing significant amounts of visible gold at depth, primarily associated with the Harrier Base structure. Resource drilling throughout 2017 continued to support 2016 results and resource confidence has further increased in this zone. In addition, step out drilling identified significant mineralization approximately 100m to be sum of the June 2017 Harrier Base Mineral Resource and up to m the Osprey structure beneath the Daley's Hill Pit indicating the potential for significant increased and reserve growth in this zone. The Harrier Base structure exhibits reverse thrust movement of approximately 00m. Visible gold is hosted within a laminated quartz-carbonate vein assemblage, which may contain minor amounts of stimule proposed minor and the proposed proposed and proposed proposed approximately the 4480mRL, a comparable elevation to where visible gold occurrences in the Lower Phoenix became more prominent. The Harrier Base minoralization is open to the south.
- There is an observed change in the nature of some of the Fosterville mineralization at depth with a number of high-grade, quartz-carbonate +/- stibnite vein hosted, visible gold drill intercepts recorded for the Swan, Eagle, Lower Phoenix, Lower Phoenix Footwall, East Dipping and Harrier Zones. Disseminated sulfide mineralization continues

to persist at all depths and is relatively uniform in character. It is currently inferred that the quartz-carbonate +/-stibnite-visible gold assemblages have been emplaced at a later date to the disseminated sulfide providing an upgrade to the mineralization;

- Progressive geological interpretation has led to continued development of robust geological and resource models underpinning the Mineral Resource and Mineral Reserve estimates. The relationship between mineralization and the controlling structural/stratigraphic architecture means that quality geological interpretation is critical to producing quality resource/reserve estimates; and
- The modifying factors used to convert the Mineral Resources to Mineral Reserves have been refined with the operating experience gained since underground production commenced in September 2006. In particular, the robustness of the mining recovery and dilution estimates has improved with experience relative to the pre-mining assessments.

The following recommendations are made

- Further growth exploration activities should be pursued. Given the strong understanding of geological controls on mineralization, this could have the potential to yield additional resources and reserves. Particular areas that are recommended to focus upon are the up and down-plunge extensions of the Lower Phoenix system (northwards up-plunge from 8600mN and southwards down-plunge from 6200mN);
- Exploration of the Lower Phoenix system southwards of 6200mN is technically challenging from surface due to target depths and as such Kirkland Lake Gold has commenced the development of dedicated underground drill platforms to facilitate further exploration of the Lower Phoenix system down-plunge. The current 2018 exploration budget includes development extensions of the Harrier Exploration Drive Decline to establish drilling platforms to target Lower Phoenix extensions and diamond drilling from these platforms to explore these gold targets. This platform will continue to provide an drill position for resource definition and infill drilling to increase Lower Phoenix resource confidence over the duration of 2018. The Harrier Exploration Drill Drive Decline provides an ideal platform to drill test the Phoenix down plunge and is scheduled to connect Harrier and Phoenix mine areas in late 2018. The long term benefits of this development link are significant, not only as providing a hangingwall drill platform to explore the Lower Phoenix and Phoenix extensions over a 1.5km strike extent, but also in not constraining production as it will provide an alternative ore haulage route. Total cost of this program is estimated at \$A7.6M.
- Exploration of the Lower Phoenix system up-plunge, northwards of 8600mN will be progressively pursued from surface drill positions to provide satisfactory drill intercept angles. A drill section on 8700mN is planned from surface to explore the extensions of the Lower Phoenix and Lower Phoenix Footwall during 2018. The results of this drilling will determine whether subsequent drilling is proposed further to the north.
- Further work is recommended to explore for extensions of known Mineral Resources that project beyond the extent of the Mining Licence. In particular, the extent and scale of the Harrier system will be defined and resources developed in a timely manner. With an increasing grade profile identified at depth and the establishment of high-grade Mineral Reserves at lower levels in Harrier, it is strongly recommended that the down-plunge extensions of the Harrier system are further explored. The total cost of this project is estimated at A\$7.7M.
- Given the potential of near mine exploration targets within the Mining Licence, 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 2018 include the Cyenet

Drilling program, which will explore for gold mineralization footwall to the Swan Fault, Fosterville Deeps Drilling which will explore for gold mineralization at depth up to 1.2km vertically below current mining areas in the Lower Phoenix, Eastern Fan Drilling which targets projections of defined west-dipping mineralized structures up to 1.2km the east of current mining areas in the Lower Phoenix and Robbin's Hill Programs, which will continue to build an understanding of the underground Mineral Reserve potential beneath the Robbin's Hill priss. A total cost of ASS.16M is budgeted in 2018 to execute these programs.

- It is recommended that an aggressive regional exploration program be undertaken with respect to surrounding exploration leases (EL3539 and EL4937). During the first half of 2017, Kirkland Lake Gold instigated a review of targets contained within Exploration Licence holdings and generated a proposal to spend AS9M spend over a 2-year period to advance a pipeline of regional targets. The program, 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 cost of \$11.6M is estimated with respect to the program being undertaken with respect to the Exploration Licences.
- Growth Expensed diamond drilling is proposed for targeting extensions of known mineralized trends outside of Mineral Resources. The proposed drilling will target the extensions of Inferred Mineral Resources in both the Lower Phoenix and Harrier systems with the aim to deliver additional Mineral Resource inventory and provide definition along Mineral Resource boundaries. Total cost for this program is estimated at A\$3.4M.
- Growth Capital diamond drilling for a total cost of approximately A\$9.6M is proposed for the systematic expansion of Indicated Mineral Resources in the Phoenix mineralized system. 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 significant 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.

.....

The Macassa Mine

The below summary is a direct extract and reproduction of the summary contained in the Macassa Technical Report, without material modification or revision, other than the updated Mineral Resources and Mineral Reserves ("MRMR") tables set out below, and all defined terms used in the summary shall have the meanings ascribed to them in the Macassa Technical Report. The MRMR tables were updated as of December 31, 2017 and reflect depletion from mining in 2017 and additions from exploration successes in 2017. The below summary is subject to all the assumptions, qualifications and proceedures set out in the Macassa Technical Report. The Macassa Technical Report was prepared in accordance with N143-101. 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. The Macassa Technical Report is incorporated by reference in this Annual Information Form and 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 have reviewed and approved the scientific and technical disclosure contained in this Annual Information Form related to the Macassa Gold Mine.

EXECUTIVE SUMMARY

The Macassa Technical Report has been prepared for Kirkland Lake Gold Ltd., the beneficial owner of the Macassa Gold Mine. This document provides the Mineral Resource and Mineral Reserve estimates for the Macassa Gold Mine that have resulted from ongoing exploration and resource definition drilling and as a result of ongoing mine design and evaluation during the period from December 31, 2015 to December 31, 2016.

The Macassa Mine is located in the Municipality of Kirkland Lake, Teck Township, District of Timiskaming, Ontario, Canada, at approximately 48°10' N Latitude and 80°2' W Longitude, approximately 600 km north of Toronto.

The Macassa Mine went through numerous owners since it started in 1933. Operations were suspended in 1999 due to depressed gold price and the mine was flooded in 2000. Underground mining restarted in 2002. The property consists of 253 mining claims in the Teck and Lebel Townships that covers 4,035 hectares (186 patented claims, 11 crown leases and 56 staked claims).

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.

The Macassa deposit is hosted within the Timiskaming Group of rocks, which is approximately 3.2 km wide and stretches from Kenogami Lake to the Quebec border. Host rocks are predominantly conglomerates and sandstones, trachytic lava flows and pyroclastic tuffs trending N65°E and dipping steeply to the south at Kirkland Lake. 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 in a fault system located north of the main Kirkland Lake-Larder Lake Break, as individual fracture fill quartz veins from several centimetres to a few metres. Historical workings at Macassa indicated that gold was often associated with 1% to 3% pyrite and, sometimes, molybdenite or tellurides. Silver is both 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 South Mine Complex Zone, ("SMC") located to the south of the Main Break and the '04 Break, reveals a different style of mineralization that includes wide sulphide systems instead of quartz vein mineralization. Tellurides appear to be more prevalent in the SMC (e.g. Calaverite).

KLG's exploration program will be directed at expanding the potential of the SMC zones along strike (to the eastern boundary of the Property) and dip, and continue to explore the Amalgamated Break Trend through surface exploration.

Access to the mining areas is by #3 Shaft and various lateral development headings within the '04 Break, Main Break and SMC zones. Main mining method includes longhole stoping, mechanized overhand cut and fill, and underhand cut and fill. Various materials are available for backfilling stopes: waster rock, cemented rock fill and paste fill. Ore (and some waste) is hoisted to surface via #3 Shaft, which has an average capacity of 2,200 tpd.

After crushing and grinding (95% passing 44 microns), the ore is processed by conventional cyanide leaching with a carbon-in-pulp recovery system. The mill capacity is 2,000 tpd and average recovery is approximately 97%.

The updated mineral resources and mineral reserves estimates as of December 31, 2017, are presented in Summary Table 1 and Summary Table 2, respectively.

Summary Table 1: Mineral resources at Macassa Mine (as of Dec 31, 2017).

		Measured Resources			Indicated Resources			Measured + Indicated			Inferred Resources	
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
	(kt)	(g/t)	(koz)	(kt)	(g/t)	(koz)	(kt)	(g/t)	(koz)	(kt)	(g/t)	(koz)
04 Break	708	17.9	391	1,035	15.8	527	1,743	16.4	920	594	14.5	277
SMC	445	21.7	311	835	17.5	470	1,280	19.0	781	1,202	26.2	1,014
Other	419	14.7	198	359	16.7	192	780	15.6	390	122	19.3	76
Totals	1,572	17.8	900	2,229	16.6	1,189	3,802	17.1	2,089	1,918	22.1	1,367

- CIM definitions (2014) were followed in the estimation of mineral resources.

 Mineral resources are reported exclusive of mineral reserves.

 Mineral resource serve estimates were prepared under the supervision of D. Cater, P. Geo., the Vice President, Exploration, Canadian Operations of the Company.

 Mineral resources were estimated at a block cut-off grade of 8.5 7 git Au or 0.2 5 opt.

 Mineral resources are estimated airs ago alph price of USSL 2800 (c) (SL 5000 c).

 A minimum mining width of 1.83m or 6 Horizontal Mining Width ("HMW" used on the '04 Break) or 2.74m or 9' Vertical Mining Height ("VMH" used on the SMC shallow dipping veins) was applied.

 Totals may not add exactly due to rounding.

Summary Table 2: Mineral reserves at Macassa Mine (as of Dec 31, 2017).

Macassa Mine		Proven			Probable			Proven and Probable	
	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
Main Break/'04	116	13.0	49	420	14.9	201	536	14.5	250
North SMC	168	19.1	103	539	16.6	287	707	17.2	390
South SMC	58	17.3	32	1,531	25.9	1,277	1,590	25.6	1,309
Shaft Pillar	44	16.4	23	131	14.5	61	175	15.0	84
Total	386	16.7	207	2,622	21.7	1,826	3,007	21.0	2,033

- Notes:

 1. CIM definitions (2014) were followed in the estimation of mineral reserves.

 2. Cut-off grades were calculated for each stope, unless noted otherwise.

 3. Mineral reserves were estimated using a long-term gold price of US\$1.280/oz (C\$1,600/oz).

 4. Mineral reserves continues these prepared under the supervision of P. Rocque, P. Eng., the Vice President, Canadian Operations of the Company.

 5. Totals may not add exactly due to rounding.

Production activities at the Macassa Mine started in 1933. After a brief shutdown due to low gold prices in the early 2000's, the mine re-opened and continued to produce gold from high grade ore.

The recent business transaction between Kirkland Lake Gold Inc. and Newmarket Gold Inc. provided additional opportunities to further develop the Property supported by an increased in capital expenditures. In the current gold price environment, the operation is expected to generate significant free cash flows that will benefit KLG's shareholders.

Main opportunities at the Macassa Mine are as follows:

- SMC mineralization remains open to the east, west and at depth. Diamond drilling continues to return high grade mineralization. That said, the 5300 Level exploration drift east with associated drill bays must be considered a high priority development heading at the mine.
- In 2017, the operation will transition from modified polygonal mineral resource estimates to block modelling. This will optimize grade interpolation, determination of high grade capping levels, and aid with mine/mill reconciliation process.
- Improvements in the material handling process could result in favourable impact on the mine operating costs
- Upgrade of the ventilation system will have a favourable impact on the work environment temperature.

Main risks that could be present at the operation are as follows:

- Future exploration programs are unable to keep pace with mining that in turn results in mineral resources and mineral reserves being depleted;
- . Increased costs for skilled labour, power, fuel, reagents, trucking, etc. could lead to an increase the cut-off grade and decrease the level of mineral resources and mineral reserves;
- . Mechanical breakdown of critical equipment (hoist, conveyance, mill, etc.) or infrastructure that could decrease or halt the production throughput at the mine;
- Production throughput relies on completing development activities as per the mining plan schedule. If lower development productivity than budgeted are encountered, this will likely affect the production profile of the current mining plan.

The following recommendations are provided

- 2017 will be a transformational year at Macassa as the Company changes the mineral resource calculation method from modified polygonal to block modelling. This change is anticipated to result in more efficient resource updates, facilitate grade reconciliation studies and will provide benefits to the LOM planning.
- Exploration Drilling will continue to test for the easterly strike extension of the SMC mineralization to the east employing a combination of deep scout level drilling from surface, with follow-up underground drill testing from the 5300 Level east.
- . Complete technical studies to increase the airflow and reduce the work environment temperature and humidity. Some study work can be completed internally; Otherwise, approximately \$50,000 was budgeted to complete technical work.
- · Technical work should be undertaken to assess infrastructure requirements for the continuous mining of the Macassa deposit

In the opinion of the Qualified Persons, the mineral resources and mineral reserves estimates truly reflect the mineralization that is currently known and were completed in accordance with the requirements of NI 43-101.

The Taylor Gold Min

The below summary is a direct extract and reproduction of the summary contained in the Taylor Technical Report, without material modification or revision, other than the updated MRMR tables set out below, and all defined terms used in the summary shall have the meanings ascribed to them in the Taylor Technical Report. The MRMR tables were updated as of December 31, 2017 and reflect depletion from mining in 2017 and additions from exploration successes in 2017. The below summary is subject to all the assumptions, qualifications and procedures set out in the Taylor Technical Report was prepared in accordance with M1 43-101. For off the report, reference should be made to the complete text of the Taylor Technical Report, which has been filed with the applicable regulatory authorities and is available under the Company's SEDAR profile at www.sedar.com. The Taylor Technical Report is incorporated by reference in this Annual Information Form and the summary set forth below

is qualified in its entirety with reference to the full text of the Taylor Technical Report. The authors of the Taylor Technical Report have reviewed and approved the scientific and technical disclosure contained in this Annual Information Form related to the Taylor Gold Mine.

EXECUTIVE SUMMARY

This technical report provides the mineral resource and mineral reserve estimates for the Taylor Mine that have resulted from ongoing exploration and resource definition drilling and as a result of ongoing mine design and evaluation during the period January 1, 2016 to December 31, 2016, Such estimates were further updated as of December 31, 2017 and reflect depletion from mining in 2017 and additions from exploration successes in 2017.

The Taylor property is located in the Taylor Township, approximately eight km northwest of the town of Matheson and four km, north of Highway 101, which lies within the Black River-Matheson Municipality and within Lots 5 – 8, Concessions II and III of Taylor Townships in the Larder Lake Mining Division, District of Cochrane, Ontario, Canada. The main access to the property is via Regional Road #11, north of Highway #101.

The infrastructure is well developed and can support mining activities in the area. Power, fuel and water are already available at the Taylor Mine. The area is well serviced with an array of major roads and two airports (in Timmins and Rouyn-Noranda). Since the ore will be treated at the company's Holt mill, there are no requirements to store tailings at the Taylor site; waste rock storage areas were constructed during previous mining activities and are being used, as required.

The Taylor property area had been explored by Hollinger and by a joint venture between Labrador Mining and Exploration Company Ltd. (successor to Hollinger) and later by Esso Minerals Canada (Esso Minerals). The property was acquired by St Andrew Goldfields Ltd. (SAS) in 2000; SAS was acquired by Kirkland Lake Gold Inc. on January 26, 2016.

The Taylor Mine Complex is located along the Porcupine-Destor Fault Zone ("PDF"), a major structural feature associated with globally significant gold deposits lying within the Abitibi Greenstone Belt of northeastern Ontario and north-western Quebec. The Abitibi Greenstone Belt is typical of other Archean-aged greenstone belts in the Canadian Shield and elsewhere in the world in that, it contains predominantly volcanic and sedimentary sequences of rocks intruded by mafic to felsic intrusions and late cross-cutting diabase dikes. Being approximately 750 km in length by 250 km in width, it is one of the largest greenstone belt in the world. Volcanic, sedimentary and contemporaneous intrusive rocks in the Abitibi range in age from 2,745 to 2,680 Ma. Gold production from deposits located in proximity to the PDF has been prolific. Total output is estimated at over 62 million ounces of gold since the start of gold production in the Porcupine Camp.

The Taylor Mine is located along the PDF in its central portion, approximately 60 km east of the main gold producers in the vicinity of Timmins. The PDF in the area of the Taylor Mine strikes roughly east-west, and dips to the south between 40° and 60°, with the majority of the property lying to the south of the projected trace of the PDF. The PDF is a complex structural zone and it is more accurately described as a zone of tens of metres width, along which are contained many individual zones of movement. In the Taylor property area, the footwall of the PDF is considered to be a thick series of relatively undeformed and unaltered metasedimentary rocks intersected to the footwall.

The Taylor Mineralization is in close proximity, within the hanging wall, to the PDF. Over a strike length of 2.3 km there are three mineralization zones that have been identified, from east to west these are:

- · The Shaft Deposit, with gold mineralization associated with felsic intrusive rocks
- . The West Porphyry Deposit (WPZ), a system of stacked lenses, with the gold mineralization associated with felsic intrusive and altered mafic-ultramafic rocks (Green Quartz Carbonate).

The Shoot Deposit, with gold mineralization hosted by argillaceous metasedimentary rocks within a package of green quartz carbonate.

Gold commonly occurs as relatively coarse-sized free gold in quartz, but also occurs as fine particles, which may be intimately associated with sulphides (particularly pyrite and locally, arsenopyrite) both in quartz-carbonate veins or in surrounding altered host rocks.

The deposits within the Taylor Mine Complex are present along and within the hanging wall of the PDF. The company interprets the area to contain faults parallel to the PDF on the north and south side. Reverse faulting may occur in this sense creating an opportunity for offset zones. Though sparse in drilling, KLG has identified lenses in the footwall of the PDF, named the 1003 Zone (West Porphyry Deposit), which will continue to be explored in 2018. The Taylor Fault located to the south also creates an opportunity for offset zones. KLG plans on diamond drilling to test further away from the PDF.

In 2016, KLG employed two underground rigs to define and explore nearby targets and expand the resource. One target was in the area of the Bulk Sample #1 at the 100 Level (approximately 100 m below surface). Drilling focused mainly above the mined area with the goal of expanding the resource of the 1010 lenses. Another target focused down dip of the WPZ drilling from the lowest level, the 450 Level (450 m below surface), to expand the resource at depth and test for the potential of en échelon lenses.

On surface, KLG utilized three drills to test for mineralization along strike of the PDF to the east of the Shaft Deposit, Recent drill results from 2016 drilling have shown gold present in quartz veins approximately 800m away.

While the Taylor Mine consists of a few zones: the Shoot Deposit (located on the west side of the property), the WPZ, the East Porphyry Deposit and the Shaft Deposit (located on the east side of the property), development and operating activities are currently focused on the WPZ; it extends vertically about 600 m and is mostly open at depth. The deposit is accessed via a ramp and mined by overhand cut and fill method (for shallow dip ore zones) or longhole stoping (where the ore zones dip at an angle greater than 45°). Ore and waste are trucked to surface where the ore is loaded into surface trucks for haulage to the Holt mill and the waste is stockpiled on designated surface areas. Ventilation is forced underground via the shaft opening. Auxiliary fans are installed, as required, for adequate airflow distribution. Underground water is pumped to a collector pond on surface prior to be discharged in the environment.

Ore is delivered to the mill where it goes through the grinding circuit (5 m diameter by 6.1 m long SAG mill), a 4 m diameter by 5.5 m long ball mill and a 3.6 m diameter by 4.9 m long tertiary ball mill, all operating in series and in closed circuit.

After going through the primary cyclone cluster, the secondary cyclone cluster feeds a 27 m thickener underflow that feeds carbon-in-leach tanks. The tank system is conventional gravity flow for slurry with counter-current carbon advancement

Precious metal stripping is performed in batch operations. Carbon is transferred to an adsorption column where a Zadra process is utilized as the gold elution method. Barren solution is circulated through two shell and tube heat exchangers and a electric inline heater.

The resulting pregnant solution is pumped from the solution tank to an electro-winning cell. The gold precipitate is further refined in a furnace and the doré bars are poured.

KLG has recently signed an agreement with First Nations who have treaty and aboriginal rights which they assert within the operations area of the mine

The updated mineral resources and mineral reserves, as of December 31, 2017, are presented in Summary Table 1 and Summary Table 2, respectively.

Summary Table 1: Mineral resources at Taylor Mine (as of Dec 31, 2017).

		Measured Resources			Indicated Resources			Measured + Indicated			Inferred Resources	
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
	(kt)	(g/t)	(koz)	(kt)	(g/t)	(koz)	(kt)	(g/t)	(koz)	(kt)	(g/t)	(koz)
VPZ (1004)	584	8.12	153	442	6.5	93	1,026	7.5	246	1,069	5.6	191
Shoot				601	4.4	85	601	4.4	85	191	4.2	26
East /Shaft	4	8.1	1	201	5.3	34	205	5.3	35	1,308	5.1	214
Totals	589	8.12	154	1,244	5.3	212	1,832	6.2	370	2,570	5.2	430
Mineral resources ar Mineral resource est Mineral resources w Mineral resources ar A minimum mining A bulk density of 2.8	re reported exclusi timates were prepa were estimated at a re estimated using width of 3m was a	block cut-off grade of 2. a long term gold price of applied.	n of D. Cater, P. Geo., the V		Canadian Operations of	the Company.						

Summary Table 2: Mineral reserves at Taylor Mine (as of Dec 31, 2017).

Taylor Mine		Proven			Probable			Proven and Probable	
	kt	g/t	koz	kt	g/t	koz	kt	g/t	koz
1004 East	216	5.5	38	80	4.9	13	296	5.4	51
1004 West	222	5.4	39	34	5.0	5	255	5.4	44
1006	0	0.0	0	10	4.6	2	10	4.6	2
1008	7	4	1	139	4.0	18	146	4.0	19
Shoot Zone	0	0.0	0	383	4.2	52	383	4.2	52
Total	445	5.5	78	646	4.3	89	1,091	4.8	167

- CIM definitions (2014) were followed in the estimation of mineral reserves.
 Cut-off grades were calculated for each stope, unless noted otherwise.
 Mineral reserves were estimated using a long-term gold price of USS1, 280/oz (CS1,600/oz).
 Mineral reserves estimates were prepared under the supervision of P. Rocque, P. Eng., the Vice President, Canadian Operations of the Company.
 Totals may not add exactly due to rounding.

Commercial production at Taylor was declared in November 2015. During 2016 (the first full year of operation), Taylor processed a total of 199,200 tonnes at an average head grade of 6.9 g/t Au, resulting in 42,639 ounces being produced. In 2017, Taylor processed 292,000 tonnes at an average grade of 5.6 g/t Au, resulting in 50,764 ounces being produced.

Opportunities at Taylor include:

- Strike / Dip extension of mineralized zones that remain open and warrant drill testing.
- New Discovery potential is available given the historical sparse drill coverage which to date has been concentrated along the PDF. Additional targets exist to both the south and within the sediments situated north of PDF.
- The installation of a gravity recovery circuit may improve the overall recovery by 1% to 2% based on recent test work.
- Geology re-interpretation based on information gained through additional drilling and underground sampling may lead to additional mineral resources (and possibly to additional mineral reserves).

Some of the risks include:

- · Future exploration programs are unable to keep pace with mining that in turn results in mineral resources and mineral reserves being depleted;
- Mineral resources may not be converted up to mineral reserves due to a lack of economic support;
- Drop in gold price to a level whereby it becomes uneconomic to continue mining and developing the mine complex;
- . Increased costs for skilled labour, power, fuel, reagents, trucking, etc. could lead to an increase the cut-off grade and decrease the level of mineral resources and mineral reserves;
- Mechanical breakdown of critical equipment or infrastructure that could decrease or halt the production throughput at the mine; and

· Continuity of ore zones not well defined or understood

Recommendations

- Exploration potential at Taylor is regarded as excellent. Diamond drilling from both surface and underground is warranted to: 1) assess mineralized strike and dip extensions; 2) to define the overall trend and width of the through-going diabase dykes; and 3) to target new discoveries on the property and associated with the PDF trend.
- Underground development to the west and associated diamond drill platforms are critical to the delineation of future mineral resources.
- The re-processing of the 1997 Quantee IP survey over the Shaft Deposit, has yielded encouraging results when sliced into a series of level plans. Drilling is required to follow-up on the geophysical signature of the Shaft and the WPZ mineralized trend at depth.
- A seismic reflection line was conducted 5 km west of Taylor, as part of the Discover Abitibi exploration initiative in 2005, which defined a buried mafic volcanic complex to the north of the PDF. Additional seismic lines are justified, to define the regional geological setting at depth, with scout level drilling proposed to confirm the seismic line interpretation.
- . Continued definition drilling at the current drill spacing (15 m by 15 m centres) is recommended to confirm the geometry of the mineralized zones.

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, 2017, Kirkland Lake Gold paid a total of \$4,182,726 in dividends to its shareholders. Subsequent to the year ended December 31, 2017, Kirkland Lake Gold paid a total of \$4,28,897 on January 15, 2018 to shareholders of record as of December 29, 2017. In March 2017, the Company announced a quarterly dividend policy of C\$0.01 per Common Share and in November 2017 announced an increase in the quarterly dividend payment from C\$0.01 to C\$0.02 per Common Share. 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.

DESCRIPTION OF CAPITAL STRUCTURE

Authorized Capital

The Company is authorized to issue an unlimited number of Common Shares of which there were 211,211,383 Common Shares issued and outstanding as of March 29, 2018. 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, 2018.

Common Share

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 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 to the Company after payment of debts and other liabilities, in each case subject to the rights, in each case subject to the rights on strateging 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 Sarest in the event 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 shall not be entitled to receive notice of, to attend or to vote at any meeting of the shareholders of the Preferred Shares.

Ontions to Purchase Common Shares

The Company's stock option plan permits the Board to grant to directors, officers, consultants and employees of Kirkland Lake Gold stock options to purchase from the Company a designated number of Common Shares up to, but not exceeding, 5.5% of the issued and outstanding Common Shares from time to time, less any Common Shares reserved for issuance under any other share-based compensation arrangements. As at March 29, 2018, there were 1,183,092 stock options outstanding. During the year ended December 31, 2017 the Company did not grant any stock options.

Restricted Share Units and Performance Share Units

Kirkland Lake Gold's long-term incentive plan permits the Board to grant to executive directors, officers, and consultants of the Company share units which can be satisfied through the issuance of Common Shares or cash or a combination of both, at the discretion of the Board, up to, but not exceeding, 2% of the issual and outstanding Common Shares from time to time, less any Common Shares reserved for issuance under any other share-based compensation arrangements. As at March 29, 2018 there were 536,138 restricted share units think could be satisfied through the issuance of Common Shares.

D-6----- J Ch ---- II-----

Kirkland Lake Gold's deferred share unit plan permits the Board to grant to its non-executive, independent directors deferred share units which can be satisfied through the issuance of Common Shares or cash or a combination of both, at the discretion of the Board, up to, but not exceeding, 2% of the issued and outstanding Common Shares from time to time, less any Common Shares reserved for issuance under any other share-based compensation arrangements. As at March 29, 2018, there were 165,412 deferred share units which could be satisfied through the issuance of Common Shares.

C--------

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

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, 2017.

Month	High	Low	Volume
	(CS)	(CS)	
January 2017	9.34	7.00	18,676,627
February 2017	11.15	8.76	19,333,321
March 2017	10.38	8.38	29,985,384
April 2017	10.69	8.85	21,592,218
May 2017	10.55	8.67	29,015,349
June 2017	12.48	9.99	63,325,336
July 2017	13.18	11.17	18,094,045
August 2017	16.42	12.69	21,380,989
September 2017	16.96	15.03	22,657,199
October 2017	18.57	14.76	21,014,668
November 2017	19.06	15.18	16,951,199
December 2017	19.35	16.73	16,028,789

NYSE

Month	High	Low	Volume
	(USD\$)	(USD\$)	
August 2017 (1)	13.14	10.61	4,448,310
September 2017	13.73	12.32	9,376,140
October 2017	15.19	11.52	14,156,810
November 2017	14.99	11.79	15,420,990
December 2017	15.42	13.03	11,488,540

ASX

Month	High	Low	Volume
	(AS)	(A\$)	
November 2017 (1)	Nil	Nil	Nil
December 2017	24.00	19.00	20 129

Note:
(1) On November 30, 2017 the Common Shares of the Company began trading on the ASX under the symbol "KLA".

Old Kirkland Lake Gold Debentures

On July 19, 2012, Old Kirkland Lake Gold issued \$57.5 million aggregate principal amount 6% Debentures maturing on June 30, 2017. On November 7, 2012, Old Kirkland Lake Gold issued \$69 million aggregate principal amount of 7.5% Debentures on maturing on December 31, 2017. Both the 6% Debentures are listed for trading on the TSX under the symbols "KLG.DB" and "KLG.DB.A", respectively. Following completion of the Arrangement, the 6% Debentures and the 7.5% Debentures continue to be listed under their respective symbols on the TSX. The Debentures were issued pursuant to the terms of an indenture between Gold Kirkland Lake Gold and Computershare Trust Company of Canada ("Computershare") dated July 19, 2012 (the "Kirkland Indenture"), as supplemented by the first supplemental indenture between the parties thereto dated as of November 7, 2012 (the "First Supplemental Indenture").

In connection with the closing of the Arrangement, the Company, Old Kirkland Lake Gold and Computershare entered into a second supplemental indenture to the Kirkland Indenture on November 30, 2016 (the "Second Supplemental Indenture"), which provided that following the effective time of the Arrangement, upon the conversion of any Debentures, each holder is entitled to receive Common Shares in lieu of the Old Kirkland common shares to which a holder was previously entitled pursuant to the terms of the Kirkland Indenture. Subject to the foregoing, the Debentures continue to be governed by and be subject to the terms of the Kirkland Indenture.

On March 13, 2017, the Company, Old Kirkland Lake Gold and Computershare entered into a third supplemental indenture to the Kirkland Indenture (the "Third Supplemental Indenture") to, among other things, evidence the Company's agreement to fully and unconditionally guarantee the payment obligations of Old Kirkland Lake Gold under the Kirkland Indenture, the First Supplemental Indenture and the Second Supplemental Indenture. As a result, of this guarantee Old Kirkland Lake Gold was entitled to rely on the public disclosure documents filed by the Company pursuant to the exemption provided in section 13.4 of National instrument 51-102 – Continuous Disclosure Obligations.

On June 30, 2017 the 6% Debentures matured and the Company paid an aggregate of C\$58,541,810 in principal and interest to the holders of the 6% debentureholders. On December 31, 2017, the C\$61.9 million principal amount of 7.5% Debentures matured and the Company issued an aggregate of 4,505,393 Common Shares at a conversion price of C\$13.70 per Common Share, repaid C\$324,116 of principal in cash with respect to the outstanding 7.5% Debentures that were not converted in accordance with the terms of the First Supplemental Indenture, and paid an aggregate of C\$2,139,968 in interest. On January 23, 2018, Old Kirkland Lake Gold ceased to be a reporting issuer in all jurisdictions of Canada.

A summary of the monthly price range and volume of trading of the Debentures during the financial year ended December 31, 2017 are as follows:

		6% Debentures			7.5% Debentures	
Month	High (CS)	Low (C\$)	Avg. Volume	High (C\$)	Low (C\$)	Avg. Volume
January 2017	101.60	101.00	720	105.25	102.50	67,324
February 2017	102.00	101.50	4,650	110.00	103.26	31,520
March 2017	101.50	100.60	4,660	105.00	103.03	1,470
April 2017	101.20	100.50	19,690	105.00	103.50	2,220
May 2017	100	100.25	1,330	105.00	103.02	700
June 2017	102.80	102.80	12,750	106.00	105.05	6,220
July 2017	N/A	N/A	N/A	109.89	109.00	670
August 2017	N/A	N/A	N/A	125.00	109.94	2,430
September 2017	N/A	N/A	N/A	126.00	120.00	5250
October 2017	N/A	N/A	N/A	129.99	115.00	920
November 2017	N/A	N/A	N/A	140.00	120.00	4,580
December 2017	N/A	N/A	N/A	135.00	126.30	120,776

PRIOR SALES

The following table sets forth information in respect of issuances of securities that are convertible or exchangeable into Common Shares during the financial year ended December 31, 2017.

Date Of Issuance	Price Per Share or Exercise Price Per Option	Number and Type of Securities
January 1, 2017	n/a	256,658 RSUs (1)
January 1, 2017	n/a	256, 658 PSUs (2)
January 1, 2017	n/a	103,600 DSUs (3)
April 17, 2017	n/a	8,187 PSUs (2)
April 17, 2017	n/a	25,244 RSUs (1)
June 19, 2017	n/a	42,792 RSUs (1)
June 19, 2017	n/a	42,792 PSUs (2)

- Notes:

 (1) See" Description of Capital Structure Restricted Share Units and Performance Share Units" above. Awards granted on January 1, 2017 will vest and be payable based on the five-day volume weighted average price of the Common Shares on the TSX prior to December 31, 2019 and may be satisfied through the issuance of cash, Common Shares on any combination thereof in accordance with the terms of the Company's long-term incentive plan.

 (2) See" Description of Capital Structure Restricted Share Units and Performance Share Units "above. Performance is measured based on the Company's total shareholder return compared to the S&PTSX Global Gold Index with a payout factor ranging between Nil to 2.00 based on the Company's percentile ranking for the performance period.

 (3) See" Description of Capital Structure Restricted Share Units and Performance Share Units "above. Performance Share Units" above. DSUs are granted to non-executive directors on the date of separation from the Board based on the five-day volume weighted average share price of the Common Shares on the TSX prior to the date of separation and may be paid in cash, Common Shares on any combination thereof.

Escrowed Securities & Securities Subject to Contractual Restrictions On Transfer

To the Company's knowledge, no securities of the Company are 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 directly, 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.

Position with the Company and Period
Served as a Director and/or Executive

Number and Percentage of Common Shares Beneficially Owned (1)

Name and Residence	Officer	Principal Occupation	Owned O	
Directors				
Eric Sprott	Non-Executive Chairman and Director since November 30, 2016	Professional investor, Director and Founder of the Sprott Foundation. Former Chairman of the Board, Sprott Inc. Previously, Chief Executive Officer and Chief Investment Officer, Sprott Inc. and Senior Portfolio Manager, Sprott Asset Management from 2008 to 2010; Senior Portfolio Manager of Sprott Asset Management LP until January 20, 2015; and Chairman of Old Kirkland Lake Gold from 2015 to 2016.	22,078,395 (10.46%)	
Ontario, Canada	since November 30, 2016			
Anthony Makuch (5)(6)	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 and President,	56,400 (0.026%)	
Ontario, Canada	Director since November 30, 2016	Chief Executive Officer and director of Lake Shore Gold Corp. from 2008 to 2016.		
Jonathan Gill (4)(5)(6)	Director	Retired Mining Executive and Professional Engineer; Director of Lake Shore Gold from 2008 to 2016.	Nil (0.0%)	
Ontario, Canada				
Arnold Klassen, (2)(3)(4)	Director	Chartered Professional Accountant, Chartered Accountant and Certified Public Accountant. Currently, President of AKMJK Consulting Ltd. Previously, Director of Lake Shore Gold from 2008 to 2016.	20,000 (0.009%)	
British Columbia,		AKMJK Consulting Ltd. Previously, Director of Lake Snore Gold from 2008 to 2016.		
Canada				
Jeffrey Parr (2)(4)(6)	Director	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 Gold from 2006 to 2008; director	6,050 (0.002%)	
Ontario, Canada		of Old Kirkland Lake Gold from 2014 to 2016.		
Barry Olson (5)(6)	Director Retired Mining Executive. Previously, Senior Vice President of Project Development at Gold Corp Inc. from October		5,000 (0.002%)	
Arizona, United States		2008 to October 2013; director of Old Kirkland Lake Gold from 2014 to 2016.		
Pamela Klessig, (3)(5)(6)	Director Professional Geologist; Retired Mining Executive. Previously, President and Chief Executive Officer of Concord		15,000 (0.007%)	
Nevada, United States		Resource Corp. from 2005 to 2011; director of Old Kirkland Lake Gold from 2011 to 2016.		
Raymond Threlkeld (2)(3)	Director	Corporate director and consultant on natural resource development; Director of New Gold Inc. since June 1, 2009. Previously, President and Chief Executive Officer of Rainy River Resources Ltd. from 2009 to 2013; director of	49,750 (0.012%)	
Virginia, United States		Newmarket Gold from July 2015 to November 2016.		

Served as a Director and/or Executive			Owned (1)	
Name and Res	sidence Officer	Principal Occupation		
Executive Officers				
Philip Yee Ontario, Canada	Executive Vice President and Chief Financial Officer	Chief Financial Officer of the Company since December 1, 2016. Previously, Executive Vice President, Corporate Integration & Systems Management of Old Kirkland Lake Gold from October to November 30, 2016; Senior Vice President and Chief Financial Officer of Lake Shore Gold Corp. from 2013 to 2016.	71,220 (0.033%)	
Christina Ouellette Ontario, Canada	Executive Vice President, Human Resources	Executive Vice President, Human Resources of the Company since February 26, 2017. Previously, Vice President, Human Resources of Lake Shore Gold Corp. from 2009 to 2016.	5,350 (0.002%)	
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 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%)	
Pierre Rocque Ontario, Canada	Vice President, Canadian Operations	Vice President, Canadian Operations of the Company since June 2017. Previously, Vice President Technical Services of the Company since November 30, 2016; Vice President, Mine Engineering of Old Kirkland Lake Gold from September to November 30, 2016; Vice President (formely Director of) Engineering for St Andrew Goldfields from April 2010 to March 2014; Director Technical Services at Lake Shore Gold from August 2008 to March 2010.	1,000 (0.001%)	
Doug Cater Ontario, Canada	Vice President, Exploration, Canadian Operations	Vice President, Exploration, Canadian Operations of the Company since November 30, 2016. Previously, Vice President, Exploration of Old Kirkland Lake Gold from January to November 30, 2016; Vice President of Exploration at St Andrew Oldfields Ltd. from 2012 to 2016.	17,113 (0.0%)	

Number and Percentage of Common Shares Beneficially

Nil (0.0%)

Nil (0.0%)

Position with the Company and Period

Vice President, Australial Operations

Exploration, Australian Operations

Vice President,

Ian Holland Victoria, Australia

John Landmark

Queensland, Australia

Vice President, Australian Operations of the Company since June 2017. Previously, General Manager of the Fosterville Mine from 2010 to 2017 and has worked at the Fosterville Mine in senior managerial roles since 2007.

Vice President, Exploration, Australian Operations of the Company since December 2016. Peviously, Vice President, Exploration of Newmarket Gold during 2016; Regional Head of Exploration for Anglo American ple from 2011 to 2016.

	Name and Residence	Position with the Company and Period Served as a Director and/or Executive Officer	Principal Occupation	Number and Percentage of Common Shares Beneficially Owned (1)
Brian Hagan Ontario, Canada		Vice President, Health, Safety and Environment	Vice President, Health, Safety and Environment of the Company since June 2017. Previously, Vice President, Health Safety and Environment of Lake Shore Gold Corp. from 2008 to 2011; Mine Manager of the McCreedy West Mine for FNX Mining Company from 2006 to 2008.	
Jennifer Wagner Ontario, Canada		Vice President, Legal and Corporate Secretary	Corporate Legal Counsel and Corporate Secretary of the Company since November 30, 2016. Previously, Corporate Legal Counsel and Corporate Secretary of Old Kirkland Lake Gold from July 2015 is to November 30, 2016, in house counsel and corporate secretary to various ISSA and TSXV listed mining companies from 2008 to 2015.	
Mark Utting Ontario, Canada		Vice President, Investor Relations	Vice President, Investor Relations of the Company since November 30, 2016. Previously, Vice President, Investor Relations for Tahoe Resources Inc. from April 2016 to June 2017; Vice President, Investor Relations at Lake Shore Gold from May 2008 to April 2016.	
Raymond Yip		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 from 2011 to 2016; IT consultant to various mining companies including QuadraFNX, DMC Mining and Torex Gold.	, , ,

- (1) Based on 211,211,383 Common Shares outstanding as at March 29, 2018.
 (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 22,328,728 Common Shares, representing approximately 10.5% of the issued and outstanding Common Shares as at March 19, 2018.

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.

Eric Sprott - Chairman and Director. Mr. Sprott is a renowned and respected leader in the investment community and one of the world's premiere gold and silver investors with over 40 years of experience in the investment industry. Mr. Sprott netered the investment industry as a research analyst at Merrill Lynch and Company Inc. In 1981, he founded Sprott Securities (a predecessor to Sprott Securities Inc., to its employees. From 2008 until September 2010, Mr. Sprott served as the Chief Executive Officer of Sprott Inc., before stepping down to focus on his roles as Chairman of the Board of Sprott Inc., Chief Investment Officer of Sprott Inc.

and Senior Portfolio Manager of Sprott Asset Management LP. On January 20, 2015, as part of his transition away from day-to-day fund management, Mr. Sprott stepped down from his management to less with Sprott Inc. and Sprott Asset Management LP and in 2017 Mr. Sprott stepped down as the Chairman of the Board of Sprott Inc. Over the course of his career, Mr. Sprott has received numerous industry awards and, in 2012, he was awarded the Queen Elizabeth II Diamond Jubilee Medal by the Governor General. In 2013, he was appointed as a Member of the Order of Canada. Mr. Sprott graduated with a Bachelor of Commerce from Carleton University in 1965 and was awarded an Honorary Doctorate from Carleton University in 2003. He received his Chartered Accountant designation in 1968 and was awarded the FCA designation in 2011. He has been elected Fellow of the Chartered Professional Accountants of Ontario (FCPA, FCA), a designation reserved for those who demonstrate outstanding career achievements and service to the community and profession.

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 Corp.

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 Inc. 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 35 years experience in accounting, audit and tax with 30 years of experience in the Mining Industry, Mr. Klassen is currently President of KMIK Consulting Ltd., a private consulting company, and prior to that 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

Pamela Klessig – Director. Ms. Klessig has over 30 years of experience in global mineral exploration, development and production. She was a founder and former President and Chief Executive Officer of Concordia Resource Corp. (formerly Western Uranium Corp.) As a complement to her technical expertise, Ms. Klessig was a stockbroker for four years with A.G. Edwards and Sons Inc., now Wells Fargo Investment Advisors. Ms. Klessig holds a Bachelor in geology from Western State College, is a Certified Professional Geologist and a qualified person as defined by NI 43-101.

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 Gold Corp 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 Nevada, California, Chile and Arpentina

Jeffrey Parr – Director. Mr. Parr, a Chartered Professional Accountant, Chartered Accountant, Chartered Accountant, Chartered Accountant (CPA, CA 1984), received his Master of Business Administration degree from McMaster University in 1982 and a Bachelor of Arts in Economics from the University of Western Ontario in 1979. He has over 30 years of experience in the mining and service provider

industries. Until his retirement on March 31, 2016, Mr. Parr was the Chief Financial Officer of Centerra Gold Inc. He joined Centerra in 2006 and was appointed Chief Financial Officer in 2008. From 1997 to 2006 he worked for Acres International as Chief Financial Officer, and from 1988 to 1997, he held progressively senior financial positions at WMC International Ltd. ultimately serving as the company's Executive Vice President. Mr. Parr is a member of the Canadian Institute of Chartered Professional Accountants of Ontario. Mr. Parr has also served as Director and Vice Chair of the Mining Association of Canadia.

Raymond Threlkeld – Director. Mr. Threlkeld has a proven track record in the gold sector in project development, construction and mine operations. Mr. Threlkeld is a seasoned mining professional with more than 33 years of experience in mineral exploration, mine operations and construction and executive management. Most recently, Mr. Threkeld acted as interim Chief Operating Officer at New Gold Inc. and was preveiously the President and Chief Executive Officer of Rainy River Resources that was developing the 4 million ounce Rainy River gold deposit in Ontario, prior to its purchase by New Gold Inc. for \$310 million in 2013. From 2006 to 2009, he led a team along with Randall Oliphant that acquired, developed and put into operation the Mesquite gold mine in California with Western Goldfields, which was subsequently purchased by New Gold Inc. for \$314 million in 2007, From 1996 to 2004, Mr. Threlkeld held a variety of senior executive positions with Barrick Gold or the position of Vice President, Project Development. During his tenure at Barrick Gold, he was responsible for placing more than 30 million ounces of gold resources into production in Africa, South America and Australia. Mr. Threlkeld holds a B.Sc. in Geology from the University of Nevada.

Philip Yee — Executive Vice President and Chief Financial Officer. Mr. Yee is an experienced senior finance executive with an extensive background in financial management and reporting, financial and operational recovery, mergers and acquisitions, international risk management and strategy development. He is a Chartered Professional Accountant with more than 25 years of experience and success including more than 15 years as a member of high calibre senior management teams leading world-class mining operations. Accountant with more than 25 years of experience and success including more than 15 years as a member of high calibre senior management teams leading world-class mining operations. Acquisition of the properties of th

Christina Ouellette – Executive Vice President, Human Resources. Ms. Ouellette is a Certified Human Resource Professional with over 20 years of senior management experience. Ms. Ouellette has a strong background and considerable experience in labour relations, employee relations, recruitment, talent and succession planning, compensation planning, and providing strategic human resources direction and guidance in support of business objectives. Ms. Ouellette was formerly the Vice President, Human Resources for Lake Shore Gold from 2009 to 2016, the Director Human Resources of Lake Shore Gold from 2008 to 2009; the Manager of Human Resources for FNX Mining from 2006 to 2009. Ms. Ouellette has obtained the Institute of Corporate Directors ICD.D designation.

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 Coursel 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 hotals a holds a Backelor of Commerce from the Rotman School of Management at the University of Toronton and a Backelor of Law from the University of Westerm Ontario.

Pierre Rocque - Vice President, Canadian Operations. Mr. Rocque is a mining engineer with over 25 years of experience. He has worked at many gold mines in Canada, including as Vice President Engineering for St Andrew Goldfields, Director Technical Services at Lake Shore Gold, Chief Engineer at the Red Lake, QR and Macassa mines, Rock Mechanics Engineer at Hemlo's Golden Giant Mine and various mining engineering roles at Hoyle Pond and

Agnico-Eagle's Joutel mines. Mr Rocque also worked as Manager Mine Improvement Projects and Chief Engineer-Geotechnical at WMC (now BHP Billiton) Olympic Dam mine in Australia. Most recently, Mr. Rocque was the Global Practice Director – Mining at Hatch. Mr Rocque graduated from l'Ecole Polytechnique de Montréal with a Bachelor degree in Mining Engineering and from Queen's University at Kingston with a Master's degree in Mining Engineering.

Doug Cater – Vice President, Exploration, Canadian Operations. Mr. Cater is a professional geologist with over 30 years of industry experience gained while working with senior Canadian based mining and exploration companies. Most recently he served as the Vice President of Exploration with St Andrew Goldfields since 2012. Mr. Cater previously held the position of Project Manager, Back River Gold, with Sabnian Gold and Silver Corp, and guided the exploration team responsible for the discovery of the Llama, Unwelt and Exploration and Exploration Manager with Dundee Precious Metals Inc., from 2009 to 2012 Amount of Professional Resource of Science degree and is a council member of the Association of Professional Geoscientists of Ontario (APGO), representing the Southwest Ontario district, and member of the Minister's Mining Act Advisory Committee (MMAAC). Mr. Cater is also a Director of Sierra Metals Inc.

Ian Holland – Vice President, Australian Operations. Ian Holland, FAusIMM, was previously the General Manager of the Fosterville Mine since 2010 and has worked at Fosterville Mine since 2007. He is a geologist by background with over 20 years of experience at a number of gold and base metal operations across Australia. Prior to joining Fosterville Mine, Ian filled a range of technical and management roles at the large-scale Mount Isa Mines complex in Queensland from 2001 to 2007. Previous operations include Mount Gordon Copper Mine in Queensland and the Renison Mine in Tasmania. He holds both a Bachelor of Science and Master of Minerals Geoscience from James Cook University, as well as a Graduate Diploma in Applied Finance and Investment from the Securities Institute.

John Landmark – Vice President, Exploration, Australian Operations. 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 brings over 30 years of international mineral exploration and mining industry experience. Mr. Landmark joined Newmarket Gold in 2016 and led the company's exploration activities while being the Group functional head for Geology. Britanian industry experience in Exploration for Anglo American's exploration in Exploration for two managed exploration programs for copper-gold, iron ore and coal in unitarial, andonesis, Papua New Guinea and Mongola. Prior to this role, he led Anglo American's exploration for twinis 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.

Brian Hagan – Vice President, Health and Safety. Brian Hagan brings over 35 years of experience implementing health, safety and environmental management systems in the North American mining industry. Mr. Hagan previously served as the Vice President, Health Safety and Environment for Lake Shore God Corp. from 2008 to 2011. Prior to this role, Mr. Hagan was the Mine Manager of the Microedy West Mining Company. Prior to his role at FNX, Mr. Hagan spent 12 years as the Director of Health and Safety for Dynatec Corporation. Mr. Hagan is a former Chairman of the Ontario Mining Contractors Safety Association and has served on the Ontario Mining Company.

Jennifer Wagner - Vice President, Legal and Corporate Secretary. Ms. Wagner is a corporate securities lawyer with over 12 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.

Mark Utting – Vice President, Investor Relations. Mark 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 Corp. from 2008 to 2016 and was previously the Director, Investor Relations of Extendicare REIT; Director, Director of Communications and Investor Relations of Dynatec Corporation and Director, and Director, and Director of Investor Relations of Rio Algom Limited.

Raymond Yip – Vice President, Business Intelligence - Raymond 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 QuadraTNX; DMC Mining and Totex Gold. Having held progressively senior positions at a major Canadian telecommunications company, Mr. Yip has adverse IT experience across various industries including financial, healthcare and automotive. Mr. Yip holds a Bachelor of Applied Science degree from Queen's University.

Cornorate Cease Trade Orders Rankruntcies 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.

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 bankruptey 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 such other companies.

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 year ended December 31, 2017, the Audit Committee was comprised of three directors, all of whom were independent directors. The current members of the Audit Committee are: Messrs. Jeffrey Parr (Chair), Arnold Klassen and Raymond Threlkeld. 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, 2017 and December 31, 2016 are set out in the table below

Year Ended	Audit Fees (1)	Audit Related Fees (2)	Tax Fees (3)	All Other Fees (4)
December 31, 2016 (5)	C\$883,850	Nil	C\$212,888	\$350,517
December 31, 2017	C\$1,190,000	C\$10,000	Nil	Nil

- "Audit Fees" refers to the aggregate fees billed by the Company's external auditor for audit services, including fees incurred in relation to quarterly reviews, review of securities filings, and statuatory audits. For the period ended December 31, 2016, audit fees comprised of \$805,000 for services rendered by RPMG LLP, Chartered Professional Accountants, the external auditor of the Company (the "Current External Auditor") and \$78,830 for services rendered by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the External Auditor of Newmarket (the "Previous External Auditor") and \$78,830 for services rendered by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the External Auditor of Newmarket (the "Previous External Auditor") and \$78,830 for services rendered by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the External Auditor of Newmarket (the "Previous External Auditor") and \$78,830 for services rendered by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the External Auditor of Newmarket (the "Previous External Auditor") and \$78,830 for services rendered by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the External Auditor of Newmarket (the "Previous External Auditor") and \$78,830 for services rendered by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the External Auditor of Newmarket (the "Previous External Auditor") and \$78,830 for services rendered by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the External Auditor of Newmarket (the "Previous External Auditor") and \$78,830 for services rendered by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the External Auditor of Newmarket (the "Previous External Auditor") and the Current External Auditor for tax compliance of a royalty program.

 "In a Fees" refers to the aggregate fees billed for professional Accountants, the External Auditor for tax compliance of a royalty program.

 "In a Fees" refers to the aggregate fees billed for

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

To the best of Kirkland Lake Gold's knowledge, the Company is not and was not, during the year ended December 31, 2017, a party to any legal proceedings, nor is any of its property, nor was any of its property during the year ended December 31, 2017, 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 year ended December 31, 2017, 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 year ended December 31, 2017.

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. The transfer agent and registrar for the Debentures of the Company is Computershare Trust Company of Canada at its principal office in Toronto,

MATERIAL CONTRACTS

There were no material contracts entered into during the year ended December 31, 2017 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 fro

- Pierre Rocque, P. Eng, and Douglas Cater, P. Geo, have acted as qualified persons in connection with the Macassa Technical Report and Pierre Rocque, P. Eng and Doug Cater, P. Geo have acted as qualified persons in connection with the Taylor Technical Report and have reviewed and approved the information related to the Macassa Mine and the Taylor Mine) contained in this Annual Information Form. Mr. Rocque is the Vice President, Canadian Operations of the Company, Mr. Cater is the Vice President, Exploration, Canadian Operations of the Company, and

 Troy Fuller, MAIG and lon Hann, FauslinM have acted as qualified persons in connection with the Fosterville Technical Report and have reviewed and approved the information related to the Fosterville Mine contained in this Annual Information Form. Troy Fuller is the Geology Manager of the Fosterville Mine and Ion Hann is the Mining Manager of the Fosterville Mine.

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 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.

None of the aforementioned firms or persons, nor any directors, officers or employees of such firms, are currently, or are expected to be elected, appointed or employed as a director, officer or employee of the Company or of any associate or affiliate of the Company other than (i) Pierre Rocque, Vice President Canadian Operations; (ii) Douglas Cater, Vice President, Exploration, Canadian Operations; (iii) Troy Fuller, Geology Manager, Fosterville Mine; and (iv) Ion Hann, Mining Manager, Fosterville Mine. Mr. Rocque holds 1,000 Common Shares of the Company and Mr. Cater holds 17,113 Common Shares

Pricewaterhouse Coopers LLP, Chartered Professional Accountants, Vancouver, British Columbia were the auditors of Newmarket Gold and KPMG Chartered Professional Accountants, were the auditors of Old Kirkland Lake Gold prior to the completion of the Arrangement

KPMG LLP, Chartered Professional Accountants, is the current auditor of Kirkland Lake Gold Ltd. 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.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities authorized for issuance under equity compensation plans is contained in the management information circular dated April 7, 2017 and filed in connection with the annual and special meeting of shareholders held on May 4, 2017. Such information for the year ended December 31, 2017 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 2, 2018.

Additional financial information is provided in the Company's annual financial statements and MD&A for the year ended December 31, 2017, each of which is available under the Company's SEDAR profile at www.sedar.com.

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 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 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:

- 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;
- . evaluate the work of the Auditor and confirm its independence;
- 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;

- review annually 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;
 - 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;
- 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
- 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'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 August 2, 2017.



CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2017 and 2016

Management's Responsibility for Financial Reporting

The accompanying consolidated financial statements of Kirkland Lake Gold Ltd. are the responsibility of management and have been approved by the Board of Directors.

The accompanying consolidated financial statements have been prepared by management and are in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

A system of internal controls has been developed and is maintained by management to provide reasonable assurance that the Company's assets are safeguarded, transactions are executed and recorded in accordance with management's authorization, proper records are maintained and relevant and reliable financial information is produced. These controls include maintaining quality standards in hiring and training of employees, policies and procedures manuals, a corporate code of conduct and ensuring that there is proper accountability for performance within appropriate and well-defined areas of responsibility. The system of internal controls is further supported by a compliance function, which is designed to ensure that we and our employees comply with securities legislation and conflict of interest rules.

The significant accounting policies used are described in Note 3 to the consolidated financial statements. The financial statements include estimates based on the experience and judgment of management in order to ensure that the financial statements are presented fairly, in all material respects.

The Board of Directors exercises its responsibilities for ensuring that management fulfills its responsibilities for financial reporting and internal control with the assistance of its Audit Committee. The Audit Committee is appointed by the Board of Directors and all of its members are directors who are not officers or employees of Kirkland Lake Gold Ltd. The Audit Committee meets periodically to review financial reports and to discuss internal controls over the financial reporting process, auditing matters and financial reporting issues. The Committee reviews the Company's annual financial statements and recommends their approval to the Board of Directors.

These financial statements have been audited by KPMG LLP, the independent registered public accounting firm, in accordance with Canadian generally accepted auditing standards on behalf of the shareholders. KPMG LLP has full and free access to the Audit Committee and may meet with or without the presence of management.

(Signed) "Anthony Makuch"

Anthony Makuch

President and Chief Executive Officer

(Signed) "Philip C. Yee"

Philip C. Yee

Executive Vice President and Chief Financial Officer

February 20, 2018 Toronto, Canada

INDEPENDENT AUDITORS' REPORT

To the Shareholders of Kirkland Lake Gold Ltd.

We have audited the accompanying consolidated financial statements of Kirkland Lake Gold Ltd., which comprise the consolidated statements of financial position as at December 31, 2017 and December 31, 2016, the consolidated statements of operations and comprehensive income, cash flows and changes in equity for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of Kirkland Lake Gold Ltd. as at December 31, 2017 and December 31, 2016, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Original Signed by:

/e/ KPMC LLE

Chartered Professional Accountants, Licensed Public Accountants

February 20, 2018

Toronto, Canada

KIRKLAND LAKE GOLD LTD. Consolidated Statements of Financial Position (In thousands of United States Dollars)

As at	Note	December 31, 2017	December 31, 2016
Assets			
Current assets			
Cash		\$231,596	\$234,898
Accounts receivable	14	15,668	7,481
Inventories	15	41,432	40,926
Prepaid expenses		10,922	6,581
		299,618	289,886
Non-current assets			
Other long-term assets	16	114,680	6,187
Restricted cash	17	22,193	20,042
Mining interests and plant and equipment	18	1,049,309	976,044
Deferred tax assets	13	_	6,535
		\$1,485,800	\$1,298,694
Liabilities			
Current liabilities			
Accounts payable and accrued liabilities	19	\$84,746	\$72,076
Share based liabilities	21	1,898	_
Convertible debentures	22	_	84,961
Finance leases	20	16,358	12,877
Income tax payable	13	8,337	3,747
Deferred premium on flow through shares	24(a)	_	2,943
Provisions	23	19,133	20,975
		\$130,472	\$197,579
Non-current liabilities			
Share based liabilities	21	218	436
Finance leases	20	22,217	15,157
Provisions	23	41,652	40,994
Deferred tax liabilities	13	133,645	138,614
		\$328,204	\$392,780
Shareholders' equity		· · · · · · · · · · · · · · · · · · ·	·
Share capital	24(a)	951,184	900,389
Equity portion of convertible debentures	22	_	15,674
Reserves	24(b)	33,122	49,997
Accumulated other comprehensive income	- ((4)	36,078	(71,585)
Retained earnings		137,212	11,439
		1,157,596	905,914
		\$1,485,800	\$1,298,694

Commitments and Contractual Obligations (Note 30)

APPROVED ON BEHALF OF THE BOARD:
Signed "Jeff Parr", DIRECTOR Signed "Anthony Makuch", DIRECTOR

KIRKLAND LAKE GOLD LTD.
Consolidated Statements of Operations and Comprehensive Income
for the years ended December 31, 2017 and December 31, 2016
(In thousands of United States Dollars, except per share amounts)

		Year ended	Year ended
	Note	December 31, 2017	December 31, 2016 (Restated - note 6)
Revenue		\$747,495	\$403,340
Production costs	8	(288,315)	(192,842)
Royalty expense		(21,396)	(15,552)
Depletion and depreciation	18	(148,655)	(58,970)
Earnings from mine operations		289,129	135,976
Expenses			
General and administrative	9	(25,646)	(11,991)
Transaction costs		(397)	(17,746)
Exploration and evaluation		(48,411)	(15,817)
Care and maintenance	10	(11,877)	(80)
Earnings from operations		202,798	90,342
Other income, net	II	3,376	210
Finance Items			
Finance income	12	2,111	843
Finance costs	12	(12,206)	(11,628)
Earnings before income taxes		196,079	79,767
Current income tax expense	13	(44,223)	(2,800)
Deferred tax recovery (expense)	13	5,474	(30,233)
Earnings from continuing operations		157,330	46,734
Loss from discontinued operations	6	(24,904)	(4,627)
Net earnings		\$132,426	\$42,107
Other comprehensive income			
Items that have been or may be subsequently reclassified to net earnings			
Unrealized and realized gains on available for sale investments, net of \$3,758 tax	16	26,764	340
Exchange differences on translation of foreign operations		80,898	988
Total other comprehensive income		107,662	1,328
Comprehensive income		\$240,088	\$43,435
Basic earnings per share from continuing operations	24(b(iii))	\$0.76	\$0.39
Diluted earnings per share from continuing operations	24(b(iii))	\$0.75	\$0.38
Basic loss per share from discontinued operations	24(b(iii))	(\$0.12)	(\$0.04)
Diluted loss per share from discontinued operations	24(b(iii))	(\$0.12)	(\$0.04)
Basic earnings per share	24(b(iii))	\$0.64	\$0.35
Diluted earnings per share	24(b(iii))	\$0.63	\$0.34
	·		
Weighted average number of common shares outstanding (in 000's)			
Basic	24(b(iii))	207,436	121,172
Diluted	24(b(iii))	208,628	123,889

KIRKLAND LAKE GOLD LTD. Consolidated Statements of Cash Flows For the years ended December 31, 2017 and December 31, 2016 (In thousands of United States Dollars)

		Year ended	Year ended
	Note	December 31, 2017	December 31, 2016 (Restated - note 6)
Operating activities			
Earnings from continuing operations		\$157,330	\$46,734
Depletion and depreciation		148,655	58,970
Share based payment expense		4,344	1,710
Other income, net		(3,376)	(210
Finance items, net		10,095	10,785
Income tax expense		38,749	33,033
Income tax paid		(40,132)	(835
Cash reclamation expenditures		(10,212)	(403
Change in non-cash working capital	25	4,359	37,197
Net cash provided by operating activities of continuing operations		309,812	186,981
Net cash (used in) provided by operating activities of discontinued operations		(12,990)	(6,456
Investing activities			
Additions to mining interests	18	(85,643)	(57,778
Buy back of royalty	18	_	(30,669
Additions to plant and equipment	18	(46,197)	(15,273
Available for sale investments and warrant investments	16	(80,844)	-
Sale of available for sale investment		4,608	-
Sale of Stawell Mine	6	6,250	_
Proceeds on dispositions of assets	6	1,621	749
Cash and cash equivalents received on business combinations	7	_	76,067
Transfer (to)/from restricted cash, net		(680)	7,430
Net cash used in investing activities of continuing operations		(200,885)	(19,474
Net cash used in investing activities of discontinued operations		(612)	(240
Financing activities			
Net proceeds from exercise of stock options	24(b(i))	17,002	5,786
Net proceeds from flow through financings	24(a)	_	16,648
Interest paid, net of interest received of \$1,597		(4,648)	(6,329
Payment of finance lease obligations		(16,179)	(7,897
Payment of dividends	24(a)	(3,281)	_
Buy back of shares	24(a)	(60,143)	_
Redemption of convertible debentures	22	(44,034)	(466
Net cash (used in) provided by financing activities of continuing operations		(111,283)	7,742
Net cash used in financing activities of discontinued operations		(121)	(11
Impact of foreign exchange on cash balances of continuing operations		12,548	(1,295
Impact of foreign exchange on cash balances of discontinued operations		229	(67
Change in cash of continuing operations during the period		10,192	173,954
Change in cash of discontinued operations during the period		(13,494)	(6,774
Change in cash		(3,302)	167,180
Cash, beginning of period		234,898	67,718
Cash, end of year		\$231,596	\$234.898

$Supplemental\ cash\ flow\ information-Note\ 25$

KIRKLAND LAKE GOLD LTD.

Consolidated Statements of Changes in Equity For the years ended December 31, 2017 and December 31, 2016 (In thousands of United States Dollars, except share information)

		Share Capita	ıl		Reserves	Accumulated other compre	hensive income (loss)		Shareholders' Equity
					Share based				
	Note	Shares (000s)	Amount	Equity portion of convertible debentures	payments and other reserves	Foreign currency translation	Investment revaluation	(Accumulated Deficit)/ Retained earnings	
Balance at December 31, 2015		170,433	\$288,556	\$15,674	\$25,215	(\$72,912)	_	(\$30,668)	\$225,865
Acquisition of St Andrew Goldfields	7(b)	70,249	112,706	_	2,069	_	_	_	114,775
Flow through share issuance, net of issue costs	24(a)	2,897	12,794	_	_	_	_	_	12,794
Exercise of share options, including transfer from reserves		4,542	8,455	_	(2,669)	_	_	_	5,786
Share based payments expense	24(b(ii))	_	_	_	1,319	_	_	_	1,319
Acquisition of Newmarket Gold, net of share issue costs of \$162	7(a)	178,492	477,878	_	24,062	_	_	_	501,940
Consolidation of shares	7(a)	(223,581)	_	_	_	_	_	_	_
Foreign currency translation		_	_	_	_	988	_	_	988
Unrealized gain on available for sale investments, net of tax									
		_	_	_	_	_	340	_	340
Net earnings		_		_	_	_		42,107	42,107
Balance at December 31, 2016		203,032	\$900,389	\$15,674	\$49,996	(\$71,924)	\$340	\$11,439	\$905,914
Exercise of share options and warrants, including transfer from reserves	24(a)	7,351	42,562	_	(25,560)	_	_	-	17,002
Share issuance	24(a)	1,500	10,686	_	_	_	_	_	10,686
Redemption of convertible debentures	22	4,505	57,690	(15,674)	6,564	_	_	_	48,580
Share based payments expense	24(b(ii))	_	_	_	2,122	_	_	_	2,122
Foreign currency translation		_	_	_	_	86,866	_	_	86,866
Reclassification of foreign currency translation reserve to net earnings	16(a)	_	_	_	_	(5,968)	_	_	(5,968)
Unrealized gain on available for sale investments, net of tax	16(a)	_	_	_	_	_	27,557	_	27,557
Realized gain on sale of JDS Silver, net of tax	16(a)	_	_	_	_	_	(793)	_	(793)
Dividends declared	24(a)	_	_	_	_	_	_	(6,653)	(6,653)
Share repurchases	24(a)	(5,443)	(60,143)	_	_	_	_		(60,143)
Earnings from continuing operations									
		_		_	_	_		132,426	132,426
Balance at December 31, 2017		210,945	\$951,184	_	\$33,122	\$8,974	\$27,104	\$137,212	\$1,157,596

1. DESCRIPTION OF BUSINESS AND NATURE OF OPERATIONS

Kirkland Lake Gold Ltd. (individually, or collectively with its subsidiaries, as applicable, "Kirkland Lake Gold", or the "Company"), is a publicly listed entity incorporated in the province of Ontario, Canada. The Company's common shares are listed on the Toronto Stock Exchange ("TSX"), the New York Stock Exchange under the symbol "KL" and on the Australian Securities Exchange under the symbol "KLA". The Company's head office, principal address and records office are located at 200 Bay Street, Suite 3120, Toronto, Ontario, Canada, MSJ ZJ1.

On November 30, 2016, Kirkland Lake Gold Inc. ("Old Kirkland Lake"), at the time a publicly listed company which owned and operated two mining complexes in Kirkland Lake as well as several exploration properties in the province of Ontario, completed an arrangement (the "Arrangement" – note 7) with Newmarket Gold Inc. ("Newmarket"), a publicly listed company which owned and operated several mines as well as various exploration properties in Australia. Under the Arrangement all existing Old Kirkland Lake common shares were exchanged into Newmarket common shares at a ratio of 1: 2.1053. Old Kirkland Lake became a wholly-owned subsidiary of Newmarket, which was then renamed "Kirkland Lake Gold Ltd." At the same time the Company completed a consolidation of the combined common shares on the basis of 0.475 post-consolidation shares for each one pre-consolidation share

On January 26, 2016, Old Kirkland Lake acquired all the issued and outstanding common shares of St Andrew Goldfields Ltd. ("St Andrew" - note 7"). St Andrew was a TSX listed Canadian based gold mining and exploration company with an extensive land package in the Timmins mining district in Ontario and held the Holt, Holloway and Taylor mines, together referred to as the Holt Complex.

2. BASIS OF PREPARATION

Statement of Compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). The accounting policies applied in these consolidated financial statements are presented in note 3 and have been applied consistently to all years presented, unless otherwise noted. These consolidated financial statements were approved by the Company's Board of Directors on February 20, 2018

The consolidated financial statements have been prepared on a historical cost basis except for certain financial assets and liabilities which are measured at fair value

The November 30, 2016 Arrangement with Newmarket is considered a business combination under IFRS with Old Kirkland Lake being the acquirer for accounting purposes (note 7(a)). As such the comparative information in these financial statements is the Old Kirkland Lake comparative information, with the results of operations and reported cash flows of Newmarket consolidated from November 30, 2016.

The preparation of the consolidated financial statements in compliance with IFRS requires management to make certain critical accounting estimates. It also requires management to exercise judgment in the process of applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in note 4.

3. SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies are set out below:

a) Basis of presentation and consolidation

The consolidated financial statements incorporate the financial statements of the Company and its subsidiaries. Subsidiaries are those entities controlled by the Company. Control exists when the Company is exposed to or has rights to the variable returns from the subsidiary and has the ability to affect those returns through its power over the subsidiary. Power is defined as existing rights that give the Company the ability to direct the relevant activities of the subsidiary. The financial statements of the subsidiaries are included in the consolidated financial statements from the date that control is transferred to the Company to the date control ceases. All intercompany transactions, balances, income and expenses are eliminated in full upon consolidation.

The subsidiaries of the Company as at December 31, 2017 and their principal activities are described below:

Name	Country of Incorporation	Proportion of Ownership Interest	Principal Activity
Kirkland Lake Gold Inc.	Canada	100%	Operating
St Andrew Goldfields Ltd.	Canada	100%	Operating
Crocodile Gold Inc.	Canada	100%	Holding Company
Newmarket Gold Victorian Holdings Pty Ltd.	Australia	100%	Holding Company
Down Under Finance Corporation Pty Ltd.	Australia	100%	Holding Company
Fosterville Gold Mine Pty Ltd.	Australia	100%	Operating
Newmarket Gold NT Holdings Pty Ltd.	Australia	100%	Holding Company
NT Mining Operations Pty Ltd.	Australia	100%	Operating
982583 B.C. Ltd.	Canada	100%	Inactive
0982576 B.C. Ltd.	Canada	100%	Inactive
Newmarket America Holdings Inc.	U.S.A.	100%	Inactive
Kirkland Lake Gold (Barbados) Corporation	Barbados	100%	Holding Company

b) Foreign currency translation

The functional currency for each entity consolidated with the Company is determined by the currency of the primary economic environment in which it operates (the "functional currency"). The functional currency for the Company and its Canadian subsidiaries is the Canadian dollar, the functional currency for all Australian subsidiaries is the Australian dollar. The consolidated financial statements are presented in United States dollars which is the presentation currency for the Company.

In preparing the financial statements of the individual entities, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated at the rates prevailing at that date. Non-monetary items carried at fair value that are measured at fair value in foreign currencies are translated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated at the rate on the date of transaction.

Exchange differences are recognized in profit or loss in the period in which they arise except for exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal or partial disposal of the net investment

On the disposal of a foreign operation (i.e. a disposal of the Company's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation), all the accumulated exchange differences in respect of that operation attributable to the Company are reclassified to profit or loss. In the case of a partial disposal (i.e. no loss of control) of a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognized in profit or loss

A business combination is defined as an acquisition of assets and liabilities that constitute a business. A business is an integrated set of activities and assets that consist of inputs, including non-current assets, and processes, including operational processes, that when Expense to those integrated with the inputs nave the abunity to create outputs that provide a return to the Company and its shareholders. A business also includes those assets and liabilities that do not necessarily have all the inputs and processes required to produce outputs, but can be integrated with the inputs and processes of the Company to create outputs. When acquiring a set of activities or assets in the exploration and development stage, which may not have outputs, the Company considers other factors to determine whether the set of activities or assets is a business.

Company obtains control over the acquiree, which is generally the date that consideration is transferred and the Company acquires the assets and assumes the liabilities of the acquiree. The Company considers all relevant facts and circumstances in determining the acquisition date.

The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the fair values of the assets at the acquisition date transferred by the Company, the liabilities, including contingent consideration, incurred and payable by the Company to former owners of the acquiree and the equity interests issued by the Company. The measurement date for equity interests issued by the Company is the acquisition date. Acquisition related costs are expensed as incurred.

Revenue is measured at the fair value of the consideration received or receivable and represents amounts received for goods sold in the normal course of business, net of discounts and sales related taxes. Revenue from gold sales is recognized to the extent that it is probable that economic benefits will flow to the Company, the revenue can be reliably measured and when all significant risks and rewards of ownership are transferred to the customer

e) Financial Instruments

Financial assets and liabilities are recognized when the Company become party to the contracts that give rise to them and are classified as loans and receivables, financial instruments fair valued through profit or loss, held-to-maturity, available for sale financial assets and other liabilities, as appropriate. The Company considers whether a contract contains an embedded derivative when the entity first becomes a party to it. The embedded derivatives are separated from the host contract if the host contract is not measured at fair value through profit or loss and when the economic characteristics and risks are not closely related to those of the host contract. Reassessment only

occurs if there is a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required.

Financial assets at fair value through profit or loss ("FVTPL")

Financial assets at FVTPL include financial assets held for trading and financial assets designated upon initial recognition as at FVTPL. A financial asset is classified in this category principally for the purpose of selling in the short term, or if so designated by management. Transaction costs are expensed as incurred.

Available for sale financial assets

Available for sale ("AFS") financial assets are those non-derivative financial assets that are designated as such or are not classified as loans and receivables, held-to-maturity investments or financial assets at FVTPL. AFS financial assets are measured at fair value upon initial recognition and at each period end, with unrealized gains or losses being recognized as a separate component of equity in other comprehensive income until the investment is derecognized or until the investment is determined to be impaired, at which time the cumulative gain or loss previously reported in equity is included in net earnings (loss). The Company has classified its investments in certain public and private companies as available for sale financial assets.

Trade receivables, loans and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as loans and receivables. Loans and receivables are initially recognized at the transaction value and subsequently carried at amortized cost using the effective interest method. Gains and losses are recognized in net earnings (loss) when the loans and receivables are derecognized or impaired, as well as through the amortization process. Interest income is recognized by applying the effective interest rate, except for short term receivables when the recognition of interest would be immaterial.

Other financial liabilities

Other financial liabilities, including accounts payable and accrued liabilities, convertible debentures and finance leases are recognized initially at fair value, net of transaction costs. After initial recognition, other financial liabilities are subsequently measured at amortized cost using the effective interest method. Gains and losses are recognized in net earnings (loss) when the liabilities are derecognized as well as through the amortization process. Borrowing liabilities are classified as current liabilities unless the Company has an unconditional right to defer settlement of the liability for at least 12 months after the statement of financial position date.

Derivative instruments, including embedded derivatives, are recorded at fair value on initial recognition and at each subsequent reporting period. Any gains or losses arising from changes in fair value on derivatives are recorded in net earnings (loss).

Fair values

The fair value of quoted investments is determined by reference to market prices at the close of business on the statement of financial position date. Where there is no active market, fair value is determined using valuation techniques. These include using recent arm's length market transactions; reference to the current market value of another instrument which is substantially the same; discounted cash flow analysis; and, pricing models.

Financial instruments that are measured at fair value subsequent to initial recognition are grouped into a hierarchy based on the degree to which the fair value is observable as follows

Level 1 fair value measurements are quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Impairment of financial assets

Financial assets, other than those recorded at FVTPL, are assessed for indicators of impairment at each period end. A financial asset is considered impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investments have been adversely impacted. In the case of investments classified as available for sale, an evaluation is made as to whether a decline in fair value is significant or prolonged based on an analysis of indicators such as market price of the investment and significant adverse changes in the technological, market, economic or legal environment in which the investment and significant adverse changes in the technological market.

If an available for sale asset is impaired, the change in fair value is transferred to net earnings (loss) in the period, including cumulative gains or losses previously recognized in other comprehensive income or loss. Reversals of impairment in respect of equity instruments classified as available for sale are not recognized in net earnings (loss) but included in other comprehensive income

A financial asset is derecognised when either the rights to receive cash flows from the asset have expired or the Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party.

A financial liability is derecognised when the associated obligation is discharged or canceled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in net earnings (loss).

Cash and cash equivalents includes cash and short-term money market instruments with an original maturity of three months or less, or which are on demand

Inventories are valued at the lower of weighted average cost or net realizable value. Inventories include work-in-process inventory (stockpiled ore, gold in circuit and bullion inventories) as well as materials and supplies inventory

For work-in-process inventory the costs of production include: (i) materials, equipment, labour and contractor expenses which are directly attributable to the extraction and processing of ore; (ii) depletion and depreciation of plant and equipment used in the extraction and processing of ore; and (iii) related production overheads (based on

normal operating capacity). Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and costs of selling the final product.

Supplies are valued at the lower of weighted average cost and net realizable value.

h) Mining interest

Mining interests represent capitalized expenditures related to the development of mining properties, related plant and equipment and expenditures arising from property acquisitions. Upon disposal or abandonment, the carrying amounts of mining interests are derecognized and any associated gains or losses are recognized in profit or loss.

Purchased mining properties are recognized as assets at their cost of acquisition or at fair value if purchased as part of a business combination. The Company expenses exploration and evaluation expenditures and near term ore development costs as incurred. Near term development costs occur in areas where the Company expects production to occur within the subsequent 12 months. Property acquisition costs, longer term development, and costs incurred to expand ore reserves are capitalized if the criteria for recognition as an asset are met.

The carrying amounts of mining properties are depleted using the unit-of-production method over the estimated recoverable ounces, when the mine is capable of operating at levels intended by management. Under this method, depletable costs are multiplied by the number of ounces produced, and divided by the estimated recoverable ounces contained in proven and probable reserves and a portion of resources where it is considered highly probable that those resources will be economically extracted.

A mine is capable of operating at levels intended by management when: (i) operational commissioning of major mine and plant components is complete; (ii) operating results are being achieved consistently for a period of time; (iii) there are indicators that these operating results will be continued; and (iv) other factors are present, including one or more of the following:

- a significant portion of plant/mill capacity has been achieved:
- a significant portion of available funding is directed towards operating activities;
- a pre-determined, reasonable period of time has passed; or significant milestones for the development of the mining property have been achieved.

Management reviews the estimated total recoverable ounces contained in depletable reserves and resources at each financial year end, and when events and circumstances indicate that such a review should be made. Changes to estimated total recoverable ounces contained in depletable reserves and resources are accounted for prospectively.

Plant and equipment is carried at cost less accumulated depreciation and impairment losses or at fair value if purchased as part of a business combination. The cost of plant and equipment comprises its purchase price, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, the estimated close down and restoration costs associated with the asset and borrowing costs incurred that are attributable to qualifying assets as

Depreciation is recorded on a straight-line or unit of production basis, over the shorter of the useful life of the asset or the remaining life of the mine; the life of mine is based on estimated recoverable ounces contained in proven and

probable reserves and a portion of resources where it is considered highly probable that those resources will be economically extracted.

The significant classes of depreciable plant and equipment and their estimated useful lives are as follows:

Category Rates Mill and related infrastructure Life of mine Vehicles and mobile equipment 3-5 years Office equipment 5 years Computer equipment 3 years

Assets under construction are depreciated when they are substantially complete and available for their intended use, over their estimated useful lives. Management reviews the estimated useful lives, residual values and depreciation methods of the Company's plant and equipment at the end of each financial year, and when events and circumstances indicate that such a review should be made. Changes to estimated useful lives, residual values or depreciation methods resulting from such review are accounted for prospectively

Leased assets

Leases in which the Company assumes substantially all risks and rewards of ownership are classified as finance leases. Assets held under finance leases are recognized at the lower of the fair value and the present value of minimum lease payments at inception of the lease, less accumulated depreciation and impairment losses. Lease payments are accounted for as discussed in note 3(k).

Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets

i) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset (i.e. an asset that necessarily takes a substantial period of time to get ready for its intended use or sale) are capitalized as part of the cost of the asset. All other borrowing costs are expensed in the period they occur.

Assets that have an indefinite useful life are not subject to amortization and are tested annually for impairment or whenever events annually for impairment exist. Assets that are subject to amortization, depletion or depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount of assets is the greater of their fair value less costs to sell and value in use.

Fair value is based on an estimate of the amount that the Company may obtain in a sale transaction on an arm's-length basis. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash generating unit to which the asset belongs. The Company's cash generating units are the lowest level of identifiable groups of assets that generate cash inflows that are largely

independent of the cash inflows from other assets or groups of assets. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, otherwise they are allocated to the smallest group of cash generating units for which a reasonable and consistent allocation basis can be identified

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depletion or depreciation or amortization, if no impairment loss had been recognized.

Assets held under finance lease are recognized as discussed in note 3(h). The corresponding liability is recognized as a finance lease obligation at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease obligation to achieve a constant rate of interest on the remaining liability. Finance charges are recorded as a finance expense in net earnings (loss), unless they are attributable to qualifying assets, in which case they are capitalized.

erating lease payments are recognized as an expense on a straight-line basis over the lease term, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are realized.

The Company has the ability under certain share based compensation plans (note 21 and 24(b(i)) to grant equity based awards to directors, senior officers and employees of, or consultants to, the Company or employees of a corporation providing management services to the Company.

The grant date fair value of the estimated number of stock options awarded to employees, officers and directors that will eventually vest, is recognized as share based compensation expense over the vesting period of the stock options with a corresponding increase to equity. The grant date fair value of each stock option granted is estimated on the date of the grant using the Black-Scholes option-pricing model and is expensed over the vesting period, based on the Company's estimate of equity instruments that will eventually vest. At the end of each reporting period, the Company revises its estimate of the number of equity instruments expected to vest and adjusts the amount of recorded compensation expense accordingly. The impact of the original estimates, if any, is recognized in net earnings (loss) or capitalized in mining properties such that the accumulated expense reflects the revised estimate, with a corresponding adjustment to the share based payment reserve. The share based payment cost is recognized in net earnings (loss) or capitalized in mining properties (for options granted to individuals involved on specific projects).

ii) I ong-term Incentive Plan

The performance share units ("PSUs") and restricted share units ("RSUs") awarded to eligible executives are measured at fair value at grant date. The fair value of the estimated number of PSUs and RSUs awarded expected to vest is recognized as share based compensation expense over the vesting period of the PSUs and RSUs with a corresponding amount recorded in equity until the respective shares are issued in settlement of the PSUs and RSUs.

iii) Deferred Share Units

Deferred share units ("DSUs") awarded to non-executive directors will be settled in cash. The fair value of the DSUs awarded, representing the fair market value of the Company's shares is recognized as share based compensation expense at grant date with a corresponding amount recorded as a share based liability. Until the DSU liability is settled, the fair value of the DSUs is re-measured at the end of each reporting period and at the date of settlement, with changes in fair value recognized as share based compensation expense or recovery in the period.

Phantom share units, which were assumed by the Company as a result of the Arrangement with Newmarket, are recorded at their fair market value on the date of grant based on the quoted market price of the Company's shares and are revalued at each reporting date based on the difference between the quoted market price of the Company's shares at the end of the period and the grant date strike price. The fair value is recognized as a share based payment expense in net earnings (loss) with a corresponding entry in share based liabilities.

For transactions with non-employees, the fair value of the equity settled awards is measured at the fair value of the goods or services received, at the date the goods or services are received by the Company. In cases where the fair value of goods or services received cannot be reliably estimated, the Company estimates the fair value of the awards at the date of grant.

The Company has a defined contribution pension plan for its Canadian employees whereby the Company contributes a fixed percentage of the employees' salaries to the pension plan. The employees are able to direct the contributions into a variety of investment funds offered by the plans. In Australia, the Company contributes a fixed percentage of the employees' salaries to a federally mandated preservation fund of the employee's choice. Pension costs associated with the Company's required contributions under the plans are recognized as an expense when the employees have rendered service entitling them to the contribution and are charged to net earnings, or capitalized to mining interests for employees directly involved in the specific projects.

Taxes, comprising both income taxes and mining taxes, are recognised in net earnings (loss), except when they relate to items recognized in other comprehensive income (loss) or directly in equity, in which case the related taxes are recognized in other comprehensive income (loss), or directly in equity, respectively

Deferred income taxes are recognized in the consolidated financial statements using the balance sheet liability method of accounting, and are recognized for unused tax losses, unused tax credits and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. As an exception, deferred tax assets and liabilities are not recognized if the temporary differences arise from the initial recognition of goodwill or an asset or liability in a transaction (other than in a business combination) that affects neither accounting profit nor taxable profit.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled based on the tax rates (and tax laws) that have been enacted or substantively enacted at the statement of financial position date

16

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which temporary differences can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Company intends to settle its current assets and liabilities on a net basis.

Common shares issued by the Company are classified as equity, Incremental costs directly attributable to the issue of new common shares are recognized in equity, net of tax, as a deduction from the share proceeds (share issue costs),

Under Canadian income tax legislation, a company is permitted to issue flow through shares whereby the company agrees to incur qualifying expenditures and renounce the related income tax deductions to the investors. The Company allocates the proceeds from the issuance of these shares between the offering of shares and the sale of tax benefits. The allocation is made based on the difference between the quoted price of the shares and the amount the investor pays for the shares. A deferred flow through premium liability is recognized for the difference. The liability is reversed when the expenditures are made and is recorded in profit or loss. The spending also gives rise to a deferred tax temporary difference between the carrying value and tax value of the qualifying expenditure.

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

Contingent liabilities are not recognized in the consolidated financial statements, if not estimable and probable, and are disclosed in notes to the consolidated financial statements unless their occurrence is remote. Contingent assets are not recognized in the consolidated financial statements, but are disclosed in the notes if their recovery is deemed probable.

Environmental rehabilitation

Provisions for environmental rehabilitation are made in respect of the estimated future costs of closure and restoration and for environmental rehabilitation costs (which include the dismantling and demolition of infrastructure, removal of residual materials and remediation of disturbed areas) in the accounting period when the related environmental disturbance occurs. The provision is discounted using a pre-tax rate, and the unwinding of the discount is included in finance costs. At the time of establishing the provision, a corresponding asset is capitalized and is depreciated over future production from the mining property to which it relates. The provision is reviewed on an annual basis for changes in cost estimates, changes in legislation, discount rates and operating lives.

17

Changes to estimated future costs are recognized in the statement of financial position by adjusting the rehabilitation asset and liability. Increases in estimated costs related to mine production become part of ore inventory. For closed sites, changes to estimated costs are recognized immediately in the net earnings (loss).

r) Earnings (loss) per share

Basic earnings or loss per share is computed by dividing the net earnings (loss) attributable to common shareholders by the weighted average number of common shares outstanding for the relevant period. The Company follows the treasury stock method in the calculation of diluted earnings per share, except when assessing the dilution impact of the convertible debt, where the if-converted method is used. The treasury method assumes that outstanding stock options, PSUs and RSUs with an average exercise price below the market price of the underlying shares are exercised and the assumed proceeds are used to repurchase common shares of the Company at the average market price of the common shares for the period. The if-converted method assumes that all convertible debt has been converted in determining fully diluted earnings or loss per share if they are in the money, except where such conversion would be anti-dilutive.

A discontinued operation is a component of the Company that either has been disposed of or abandoned, or that is classified as held for sale, and: (a) represents a separate major line of business or geographical area of operations; (b) is part of a single plan to dispose of a separate major line of business or geographical area of operations; or (c) is a subsidiary acquired exclusively with a view to resale. Assets, liabilities, comprehensive income, and cash flows relating to a discontinued operation are segregated and reported separately from the continuing operations in the year of reclassification, with restatement of comparative information prior to the reporting year in which the reclassification occurs.

4. SIGNIFICANT ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Company's accounting policies, which are described in note 3, management is required to make judgments, estimates and assumptions about the carrying amount and classification of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are generally recognized in the period in which the estimates are revised.

The following are the significant judgments and areas involving estimates, that management have made in the process of applying the Company's accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial

Significant Judgments in Applying Accounting Policies

Determination of functional currency

In accordance with International Accounting Standards ("IAS") 21, The Effects of Changes in Foreign Exchange Rates, management determined that the functional currency of the Company's Canadian and Australian subsidiaries is, respectively, the Canadian and Australian dollar. Determination of functional currency involves judgments to

determine the primary economic environment and the Company reconsiders the functional currency of its entities if there is a change in events and conditions which determined the primary economic environment.

Deferred income taxes

Judgment is required in determining whether deferred tax assets are recognized on the statement of financial position. Deferred tax assets, including those arising from unutilized tax losses require management to assess the likelihood that the Company and/or its subsidiaries will generate taxable earnings in future periods, in order to utilize recognized deferred tax assets.

Determination of whether a set of assets acquired and liabilities assumed constitute the acquisition of a business or asset may require the Company to make certain judgments as to whether or not the assets acquired and liabilities assumed include the inputs, processes and outputs necessary to constitute a business as defined in IFRS 3 – Business Combinations. Based on an assessment of the relevant facts and circumstances, the Company concluded that the acquisition of St Andrew on January 26, 2016 and Newmarket on November 30, 2016 met the criteria for accounting as a business combination.

Determination of reserves and resources

Reserve and resource estimates are used in the unit of production calculation for depletion and depreciation expense, the determination of the timing of rehabilitation provision costs, business combination accounting and impairment analysis

There are numerous uncertainties inherent in estimating reserves and resources. Assumptions that are valid at the time of estimation may change significantly when new information becomes available. Changes in the forecast prices of commodities, exchange rates, production costs, or recovery rates as well as new drilling results may change the economic status of reserves and resources and may result in the reserves and resources being revised.

Estimates of future taxable income are based on forecast cash flows from operations and the application of existing tax laws in each jurisdiction. To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Company and/or its subsidiaries to realize the net deferred tax assets recorded at the statement of financial position date could be impacted.

The allocation of the purchase price of acquisitions requires estimates as to the fair market value of acquired assets and liabilities. The information necessary to measure the fair values as at the acquisition date of assets acquired and liabilities assumed requires management to make certain judgments and estimates about future events, including but not limited to estimates of mineral reserves and mineral resources and exploration potential of the assets acquired, future operating costs and capital expenditures, discount rates to determine fair value of assets acquired and future metal prices and long term foreign exchange rates.

Changes to the preliminary measurements of assets and liabilities acquired may be retrospectively adjusted when new information is obtained until the final measurements are determined within one year of the acquisition date.

Impairment of assets

The carrying amounts of mining properties and plant and equipment are assessed for any impairment triggers such as events or changes in circumstances which indicate that the carrying value may not be recoverable. If there are indicators of impairment, an exercise is undertaken to determine whether the carrying values are in excess of their recoverable amount. Such review is undertaken on an asset by asset basis, except where such assets do not generate cash flows independent of other assets, and then the review is undertaken at the cash generating unit level ("CGU").

The Company considers both external and internal sources of information in assessing whether there are any indications that mining interests are impaired. External sources of information the Company considers include changes in the market, economic and legal environment in which the Company operates that are not within its control and affect the recoverable amount of mining interests. Internal sources of information the Company considers include the manner in which mining properties and plant and equipment are being used or are expected to be used and indications of economic performance of the assets.

Significant estimates and assumptions are made in determining the environmental rehabilitation costs as there are numerous factors that will affect the ultimate liability payable. These factors include estimates of the extent and costs of rehabilitation activities. technological changes, regulatory changes, cost increases, and changes in discount rates.

Those uncertainties may result in actual expenditures in the future being different from the amounts currently provided. The provision represents management's best estimate of the present value of the future rehabilitation costs required.

5. ADOPTION OF NEW ACCOUNTING STANDARDS

The Company has adopted the following amendments to accounting standards, effective January 1, 2017. These changes were made in accordance with the applicable transitional provisions.

The amendments clarify that the existence of a deductible temporary difference depends solely on a comparison of the carrying amount of an asset and its tax base at the end of a reporting period, and is not affected by possible future changes in the carrying amount or expected recovery of the asset. The amendments to the standard did not have a material impact on the consolidated financial statements.

IAS 7, Statement of Cash Flows

This amendment requires disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash and non-cash changes. The Company has presented the required disclosures for the current period in note 22.

Accounting Standards Issued But Not yet Adopted

In July 2014, the IASB issued the final version of IFRS 9 Financial Instruments ("IFRS 9"), which replaces IAS 39 Financial Instruments: Recognition and Measurement ("IAS 39"), IFRS 9 is effective for annual periods beginning on or after January 1, 2018. The Company will adopt IFRS 9 for the annual period beginning January 1, 2018 and will take advantage of the exemption allowing it not to restate comparative information for prior periods with respect to classification of its available for sale investments. IFRS 9 provides a revised model for classification and measurement of financial assets, including a new expected credit loss ("ECL") impairment model. The revised model for classifying financial assets results in classification according to their contractual cash flow characteristics and the business models under which they are held. IFRS 9 introduces a reformed approach to hedge accounting. IFRS 9 also largely retains the existing requirements in IAS 39 for the classification of financial liabilities.

The Company has completed its assessment of the impact of IFRS 9 and expects the following impacts upon adoption:

i) The Company holds several equity investments as available for sale with a fair value of \$100,109 as at December 31, 2017. Under the new standard, the Company will make the irrevocable election under IFRS 9 to measure its available for sale investments at Fair Value Through Other Comprehensive Income ("FVTOCI"). As a result, all fair value gains and losses will be reported in Other Comprehensive Income ("OCI"), no future impairment losses will be recognized in net earnings, similarly no gains or losses will be reclassified to net earnings on disposal.

As at December 31, 2017, the balance of unrealized gains which will continue to remain within accumulated other comprehensive income is \$26,764. The new classification and measurement requirements under IFRS 9 are not expected to have a material impact on the Company's other financial assets and financial liabilities.

ii) The other changes under IFRS 9, including the new ECL impairment model, are not expected to have a material impact on the Company's financial statements.

IFRS 15, Revenue from Contracts with Customers

IFRS 15 Revenue from Contracts with Customers ("IFRS 15") will replace IAS 18 Revenue, IAS 11 Construction Contracts, and some revenue-related interpretations. The standard contains a single model that applies to contracts with customers and two approaches to recognizing revenue: at a point in time or over time. The model features a contract-based five-step analysis of transactions to determine whether, how much, and when revenue is recognized. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized. The Company will adopt IFRS 15 for the annual period beginning January 1, 2018. Based on the Company's preliminary assessment, it concluded that the new revenue standard will not have an impact on the timing of revenue recognition at its Canadian or Australian operations.

IFRS 16, Leases

In January 2016, the IASB issued the IFRS 16, Leases ("IFRS 16") which replaces the existing lease accounting guidance. IFRS 16 requires all leases to be reported on the balance sheet, unless certain criteria for exclusion are met.

The Company will adopt IFRS 16 for the annual period beginning January 1, 2019. The extent of the impact of adopting the standard has not yet been determined. The Company is in the process of developing its implementation plan and expects to report more detailed information, including estimated quantitative financial impacts, if material, in its consolidated financial statements as the effective date approaches

21

IFRIC 22 Foreign Currency Transactions and Advance Consideration

IFRIC Interpretation 22 Foreign Currency Transactions and Advance Consideration clarifles which date should be used for translation when a foreign currency transaction involves an advance payment or receipt. The Interpretation is applicable for annual periods beginning on or after January 1, 2018. The Company will adopt the Interpretation in its financial statements for the annual period beginning on January 1, 2018. Based on the Company's assessment, this interpretation will not have a material impact on the dates used for translation for advance payments or receipts in foreign currencies.

IFRIC 23, Uncertainty over Income Tax Treatments

On June 7, 2017, the IASB issued IFRIC Interpretation 23, Uncertainty over Income Tax Treatments. The Interpretation provides guidance on the accounting for current and deferred tax liabilities and assets in circumstances in which there is uncertainty over income tax treatments. The Interpretation is applicable for annual periods beginning on or after January 1, 2019. Earlier application is permitted. The Company intends to adopt the Interpretation in its financial statements for the annual period beginning on January 1, 2019. The Company is currently in the process of assessing the impact that the new interpretation will have on its consolidated financial statements.

In December 2017, the Company completed the sale of Stawell Gold Mines Pty Ltd which owned the Stawell Gold Mine ("Stawell Mine") located in the State of Victoria, Australia. The Stawell Mine was previously one of the Company's operating segments. The Company received \$6,250 in cash consideration and retained a 2.5% net smelter return ("NSR") on the Stawell Mine. There is a performance bond held with an Australian bank of \$4,581 that guarantees the rehabilitation obligation. If the bond is subsequently drawn, the purchaser will be obligated to reimburse the Company as a requirement under the sale agreement. The performance bond will remain in place for the earlier of three years or the start of production at the Stawell Mine. Losses and cash flows of the Stawell mine have been presented as a discontinued operations, with information for the comparative year ended December 31, 2016 restated to present the 2016 results of operations and cash flows as discontinued operations. The loss from discontinued operations for the years ended December 31, 2017 and 2016 is presented in the table below:

	Year ended December 31, 2017	Year ended December 31, 2016	
Revenue		S—	\$3,323
Production costs		_	(5,527)
Royalty expense		_	(34)
Depletion and depreciation		_	(96)
Loss from mine operations		_	(2,334)
Expenses			
Exploration		(1,477)	(22)
Care and maintenance		(8,884)	(3,976)
Loss from operations		(10,361)	(6,332)
Other income, net		363	(172)
Loss on disposition of Stawell Mine		(11,600)	_
Foreign translation reserve		(5,968)	_
Loss from discontinued operations before taxes		(27,566)	(6,504)
Income tax recovery		2,662	1,877
Loss from discontinued operations		(\$24,904)	(\$4,627)
Loss per share from discontinued operations - basic		(\$0.12)	(\$0.04)
Loss per share from discontinued operations - diluted		(\$0.12)	(\$0.04)

7. BUSINESS COMBINATIONS

a) Acquisition of Newmarket Gold Inc.

The Arrangement resulting in the acquisition of Newmarket was completed on November 30, 2016.

The following table summarizes the fair value of the consideration paid and the final estimates of the fair values of identified assets acquired and liabilities assumed from Newmarket. The Company used a discounted cash flow model to estimate the expected future cash flows of the properties. Expected future cash flows are based on estimates of future production and commodity prices, operating costs and forecast capital expenditures based on the life of mine as at the acquisition date. During the year ended December 31, 2017, the purchase price allocation was finalized after the completion of the tax related effects of the Newmarket acquisition. The adjustments and reconciliation from the preliminary purchase price allocation are disclosed below.

Purchase Price	Preliminary	Adjustments	Final
Common shares issued	\$478,040	S—	\$478,040
Options and performance share units assumed	24,062	_	24,062
- Arrester - Arreste - Arr	\$502,102	s—	\$502,102
Net Assets Acquired			
Assets			
Cash and cash equivalents	\$68,286	\$	\$68,286
Current assets, excluding cash and cash equivalents	41,542	_	41,542
Mining interests and plant and equipment	549,575	1,087	550,662
Restricted cash	19,369	_	19,369
Available for sale investments	5,425	_	5,425
Liabilities			
Accounts payable and accrued liabilities	\$29,379	(\$538)	\$28,841
Environmental rehabilitation and other provisions	42,560	_	42,560
Finance lease obligations	5,074	_	5,074
Deferred income tax liabilities	105,082	1,625	106,707
	\$502.102	s—	\$502,102

These consolidated financial statements include revenue of \$33,931 and earnings from mine operations of \$3,186 related to Newmarket mine operations, from the close of the Arrangement to December 31, 2016.

b) Acquisition of St Andrew Goldfields

On January 26, 2016, Old Kirkland Lake completed the acquisition of St Andrew and acquired all of the issued and outstanding common shares of St Andrew pursuant to a plan of arrangement.

The following table summarizes the fair value of the consideration transferred to St Andrew shareholders and the final estimates of the fair values of identified assets acquired and liabilities assumed. The Company used a discounted cash flow model to estimate the expected future cash flows of the properties. Expected future cash flows are based on estimates of future production and commodity prices, operating costs and forecast capital expenditures based on the life of mine as at the acquisition date. The purchase price allocation was completed during the year ended December 31, 2016.

Purchase Price	
Common shares issued	\$112,706
Stock options assumed on acquisition	2,069
	\$114,775
Net Assets Acquired	
Assets	
Cash and cash equivalents	\$7,781
Current assets, excluding cash and cash equivalents	18,571
Mining interests	44,007
Plant and equipment	50,245
Restricted cash	8,103
Other long term assets	154
Deferred tax assets	15,210
Liabilities	
Accounts payable and accrued liabilities	\$12,021
Environmental rehabilitation provision	6,742
Finance lease and other obligations	4,746
Deferred income tax liabilities	5,787
	\$114,775

8. PRODUCTION COSTS

Production costs for the years ended December 31, 2017 and 2016 include the following:

	Year ended December 31, 2017	Year ended December 31, 2016
Operating costs	\$287,918	\$192,499
Share based payment expense. (note 24(b(ii)))	397	343
Production costs	\$288,315	\$192,842

9. GENERAL AND ADMINISTRATIVE

General and administrative expenses for the years ended December 31, 2017 and 2016 include the following:

	Year ended December 31, 2017	Year ended December 31, 2016
General and administrative - other	\$20,238	\$9,137
Severance payments	1,461	1,624
Share based payment expense. (note 24(b(ii)))	3,947	1,230
General and administrative	\$25,646	\$11,991

Severance payments represent termination and severance payments regarding certain executive changes as a result of restructuring undertaken by the Company in 2017 and 2016.

Care and maintenance includes expenses incurred on the Company's Cosmo Mine in the Northern Territory since June 30, 2017, the Holloway mine which was transitioned to care and maintenance at the beginning of 2017 and the Hislop mine acquired with St Andrew (in care and maintenance as at January 26, 2016, the date of acquisition and on temporary suspension since September 30, 2016). Care and maintenance for the years ended December 31, 2017 and 2016 is as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
Cosmo mine	\$9,587	\$ <u></u>
Holloway mine	2,192	_
Hislop mine	98	80
Care and maintenance	\$11,877	\$80

11. OTHER INCOME, NET

	Year ended December 31, 2017	Year ended December 31, 2016
Loss on disposal of non core mining interests and plant and equipment (note 18)	(\$992)	(\$1,007)
Change in fair value of warrant investments	1,618	_
Realized gain on sale of JDS Silver	793	_
Recognition of deferred premium on flow through shares (note 24(a))	3,070	897
Unrealized and realized foreign exchange (loss) gain, net	(2,209)	429
Other income	1,096	(109)
Other income, net	\$3,376	\$210

Finance income and expense for the years ended December 31, 2017 and 2016 includes the following:

	Year ended December 31, 2017	Year ended December 31, 2016
Interest income on bank deposits	\$2,111	\$843
Finance income	\$2,111	\$843
		_
Unwinding of discount on convertible debentures (note 22)	\$3,349	\$4,189
Interest paid on convertible debentures	4,816	6,017
Interest on finance leases and other loans	1,427	603
Finance fees and bank charges	1,611	442
Unwinding of discount on rehabilitation provision (note 23)	1,003	377
Finance expense	\$12,206	\$11,628

13. INCOME TAXES

a) Income tax expense

A reconciliation of income tax expense for continuing operations and the product of earnings from continuing operations before income tax multiplied by the combined Canadian federal and provincial statutory income tax rate is as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
Earnings before income taxes	\$196,079	\$79,767
Computed income tax expense at Canadian statutory rates (25%)	\$49,020	\$19,942
Non-deductible expenses	6,683	3,697
Foreign tax rate differential	5,484	(491)
Current and deferred Ontario Mining Tax	9,814	8,442
Tax benefit not recognized	_	570
Renouncement of flow through expenditures (note 24(a))	2,990	1,229
Revision in estimates	(1,953)	282
Recognition of previously unrecognized deferred tax assets	(40,471)	_
Withholding tax	7,406	
Other	(224)	(639)
Income tax expense	\$38,749	\$33,032
Current income tax expense	44,223	(2,800)
Deferred tax (recovery) expense	(\$5,474)	\$30,232

During the year ended December 31, 2017, the effective tax rate is 19.8% (December 31, 2016 - 42.5%) which is reflective of the recognition of previously unrecognized deferred tax assets.

The Company recognized \$40,471 of previously unrecognized deferred tax assets in the period that were acquired in a previous business combination. This deferred tax benefit was realized as a result of a change in expected future profits to be realized after a reorganization of the acquired corporate structure.

b) Deferred income tax balances

The tax effect of temporary differences that give rise to deferred income tax assets and liabilities at December 31, 2017 and 2016 are as follows:

As at December 31	2017	2016
Net deferred income tax assets:		
Mining interests and plant and equipment	\$ —	(\$19,714)
Environmental rehabilitation provision	=	1,806
Financing costs	=	364
Ontario Mining Tax	=	1,911
Loss carry forwards	=	22,179
Inventory	=	40
Other	_	(51)
	b	\$6.535

As at December 31	2017	2016
Net deferred income tax liabilities:		
Mining interests and plant and equipment	(\$197,172)	(\$127,284)
Environmental rehabilitation provision	15,561	5,054
Financing costs	325	315
Ontario Mining Tax	(22,189)	(15,751)
Discount of convertible debentures	_	(943)
Loss carry forwards	73,134	3,043
Inventory	(5,346)	(3,788)
Investments	(4,076)	
Corporate minimum tax credits	2,403	
Deferred revenue	(1,583)	(2,043)
Employee provisions	5,069	3,028
Other	229	(245)
	(\$133,645)	(\$138.614)

Changes in net deferred tax liabilities for the years ended December 31, 2017 and 2016 are as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
Balance, beginning of year	(\$132,079)	(\$11,030)
Recognised as a result of acquisitions	_	(95,670)
Recognised in net earnings from continuing operations	5,474	(30,233)
Recognized in equity	(3,758)	_
Recognized in discontinued operations	7,224	1,876
Foreign currency translation in other comprehensive income	(10,506)	2,978
Net deferred income tax liabilities, end of year	(\$133.645)	(\$132.079)

At December 31, 2017, no deferred tax liabilities have been recognized in respect of the aggregate amount of \$7,500 (December 31, 2016 - \$83,000) of taxable temporary differences associated with investments in subsidiaries. The Company controls the timing and circumstances of the reversal of these differences, and the differences are not anticipated to reverse in the foreseeable future.

As at December 31, 2017, deferred income tax assets have not been recognized in respect of the following because it is not probable that future taxable profit will be available against which the Company can use the benefits:

As at December 31	2017	2016
Investments	\$—	\$308
Investment tax credits	13,072	12,187
Mining interests	11,489	10,712
Australian non-capital loss carryforwards	_	112,779
Provision for reclamation provision and accrued liabilities	_	21,440
Australian royalty tax	306,858	249,577

The temporary differences arising from investment tax credits have an expiry date of 2029 to 2030. The temporary differences arising from mineral properties and Australian royalty tax have an indefinite expiry date.

As at December 31, 2017, the Company had the following Canadian and Australian income tax attributes to carry forward:

	Year ended December 31, 2017	Expiry Date
Canada		
Non-capital losses	\$4,725	2036-2037
Tax basis of mining interests	\$164,042	Indefinite
Tax basis of plant of equipment	\$50,764	Indefinite
Financing costs	\$278	2018-2021
Corporate minimum tax credits	\$2,403	2037
Australia		
Non-capital losses	\$239,813	Indefinite
Tax basis of mining interests	\$10,962	Indefinite
Tax basis of plant and equipment	\$19,308	Indefinite
14. ACCOUNTS RECEIVABLE		
As at December 31	2017	2016
Trade receivables	\$4,246	\$874
Sales tax and other statutory receivables	10,379	5,765
Other receivables	1,043	842
	\$15,668	\$7,481

The fair value of receivables approximates their carrying value. None of the amounts included in receivables at December 31, 2017 are past due.

Trade receivables represent the value of gold doré sold as at year end for which the funds are not yet received; gold sales are generally settled within 1-2 weeks after delivery to a refinery, as such there are no doubtful accounts. In determining the recoverability of other receivables, the Company considers any change in the credit quality of the counterparty, with the concentration of the credit risk limited due to the nature of the counterparties involved.

15. INVENTORIES

As at December 31	2017	2016
Gold doré	\$1,515	\$1,265
Gold in circuit Ore stockpiles	12,814	16,010
Ore stockpiles	6,538	5,581
Supplies and consumables	20,565	18,070
	\$41,432	\$40,926

The cost of gold doré, gold in circuit, ore stockpiles ("metal inventory"), and supplies and consumables recognized as an expense and included in operating costs in 2017 and 2016 is \$287,918 and \$192,499 , respectively (note 8). During the year ended December 31, 2017, there were write downs of inventory to net realizable value of \$422 related to supplies inventory (December 31, 2016 - \$nil). There were no reversals of write downs of inventory to net realizable value during the years ended December 31, 2017 and 2016.

16. OTHER LONG-TERM ASSETS

As at December 31	2017	2016
Available for sale investments	\$100,109	\$5,885
Warrant investments	12,754	_
NSR Royalty from Stawell Mine sale (note 6)	1,138	_
Other	679	302
	\$114,680	\$6,187

Available for sale investments

Changes in the available for sale investments for the years ended December 31, 2017 and 2016 are as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
Balance, beginning of year	\$5,885	s—
Acquisition of investments	69,171	_
Disposition of investments	(5,772)	_
Unrealized gain	30,249	340
Acquired as part of Newmarket acquisition (note 7(a))	_	5,425
Acquired as part of St Andrew acquisition note 7(b)	_	154
Foreign currency translation	576	(34)
Available for sale investments, end of year	\$100,109	\$5,885

The available for sale and warrant investments include:

Metanor Resources Inc.

On April 21, 2017 and December 19, 2017, the Company acquired 10,357,143 units and 1,915,000 units, respectively of Metanor Resources Inc. (Metanor), a Company listed on the TSX Venture Exchange, at a price of C\$0.70 per unit through private placement offerings. Each unit consists of one common share and one-half of one common share purchase warrant. Each full warrant entitles the Company to acquire one common share of Metanor at a price of C\$0.90 up to 24 months following the initial acquisition of the units. The acquired Metanor common shares are recorded as an available for sale investment and are recorded at fair value.

The purchase prices of the units were \$5.370 (C\$7.250) and \$1,071 (C\$1,341), respectively, for the April 21, 2017 and December 19, 2017 purchases. The available for sale investments were recorded at fair value of \$4,802 (C\$6,483) and \$920 (C\$1,151) and the warrant investments were recorded at fair value of \$568 (C\$767) and \$151 (C\$190), respectively.

The available for sale investment is marked to market at each period end with the change in the value of the investment recorded in other comprehensive income. The Company recorded an unrealized gain of \$685 for the year ended December 31, 2017

The warrant investments are recorded at fair value at each period end with the change in value recorded in net earnings. The Company recorded in other income (loss) unrealized gains of \$168 for the year ended December 31, 2017. The warrants were valued using a Black-Scholes option pricing model.

On June 30, 2017, the Company acquired 17,857,000 common shares of Bonterra Resources Inc. ("Bonterra"), a publicly listed company trading on the TSX Venture Exchange at a price of C\$0.50 per share for an aggregate purchase price of \$6,878 (C\$8,928). The Company acquired the shares pursuant to a private placement financing. The Bonterra shares are recorded as an available for sale investment. The acquired shares were valued at the purchase price at the date of acquisition at \$6,878 (C\$8,928). The Company recorded an unrealized gain of \$1,140 for the year ended December 31, 2017 .

At December 31, 2016, the Company owned 4,698,219 common shares of JDS Silver Holdings Inc., ("JDS Silver"), a private company, valued at \$4,200 (C\$5,639) or C\$1.20 per share. The shares of JDS Silver were acquired as part of the Newmarket transaction. In July 2017, the Company purchased an additional 1,804,489 shares for C\$1,083 (C\$0.60 per share). On October 17, 2017, pursuant to an arrangement agreement dated September 10, 2017 (the "JDS Silver Arrangement"), JDS Silver sold all of their issued and outstanding common shares to Coeur Mining Inc. ("Coeur").

On October 17, the Company received 198,217 shares of Coeur at a value of \$7,46 per share and cash of \$4,608 (C\$5,815) in exchange for 6,502,708 common shares of JDS Silver. On exchange of the shares, the Company recorded a gain of \$793 (C\$1,008) in

The Coeur shares have been designated as available for sale. During the year ended December 31, 2017, the Company recorded an unrealized gain of \$4 on the common shares of Coeur which is recorded in other comprehensive income

Novo Resources Corp.

In August 2017, the Company acquired 11,830,268 common shares of Novo Resources Corp. (Novo), a publicly listed company trading on the TSX Venture Exchange, from Newmont Canada FN Holdings ULC (Newmont) at a price of C\$1.60 per Novo share for a total cost of \$15,121 (C\$18,928).

In September 2017, the Company acquired 14,000,000 units of Novo at a price of C\$4.00 per unit through a private placement offering for acqueate proceeds of \$45,855 (C\$56,000). Each unit consists of one common share and one common share burchase warrant. Each warrant entitles the Company to acquire one common share of Novo at a price of C\$6.00 until September 6, 2020. The warrants are subject to an accelerated expiry whereby, from September 6, 2018 until September 6, 2020. If the daily high trading price of Novo's common shares exceeds \$12.00 for a period of 20 consecutive trading days, Novo may provide notice of early expiry and the warrants will expire 30 days thereafter. The Company retains an anti-dilution right and the right to appoint a nominee to the Board of Novo. The Novo common shares are held as an available for sale investment. The purchase price was \$45,855 (C\$56,000) for the units, and fair value of \$35,996 (C\$43,960) was ascribed to the available for sale investment and \$9,859 (C\$12,040) to the

As of December 31, 2017, the Company owns 25,830,268 common shares and 14,000,000 warrants of Novo.

The available for sale investment is recorded at fair value at each period end with the change in value being recorded in other comprehensive income. The Company recorded an unrealized gain of \$25,857 for the year ended December 31, 2017.

The warrants are recorded at fair value at each period end with the change in value recorded in net earnings. The Company recorded in other income an unrealized gain of \$1,267 for the year ended December 31, 2017. The warrants were valued using the Up and Out Barrier option pricing method.

De Grey Mining Limited

On November 30, 2017, the Company closed a private placement financing with De Grey Mining Limited ("De Grey"), a publicly listed company trading on the Australian Stock Exchange and acquired 33,333,333 units of De Grey at a price of A\$0.15 per unit. Each unit is comprised of one common share and one common share purchase warrant. Each warrant entitles the Company to acquire one common share at an exercise price of A\$0.20 until November 30, 2019. The De Grey common shares are held as an available for sale

The purchase price of the units was \$3,843 (C\$4,932) and fair value of \$2,747 (C\$3,670) was ascribed to the common shares available for sale and \$1,096 (C\$1,263) to the warrants.

The available for sale investment is recorded at fair value at each period end with the change in value being recorded in other comprehensive income. The Company recorded an unrealized gain of \$1,236 for the year ended December 31, 2017.

The warrant investments are recorded at fair value at each period end with the change in value recorded in net earnings. The Company recorded in other income, an unrealized gain of \$183 for the year ended December 31, 2017. The warrants were valued using a Black-Scholes option pricing model.

17. RESTRICTED CASH

As at December 31		2017	2016
Cash collateral relating to rehabilitation performance guarantees		\$20,414	\$19,019
Other restricted cash		1,779	1,023
		\$22,193	\$20,042
Movements in the restricted cash balances for the years ended December 31, 2017 and 2016 are as follows:	ows:		
As at December 31	2017		2016
Balance at beginning of year	\$20,042		\$—
Additions	680		229
Foreign currency translation	1,471		187
Acquired as part of Newmarket acquisition (note 7(a))	=		19,369
Acquired as part of St Andrew acquisition note 7(b)	_		8,103
Replaced with surety bonds	_		(7,846)
Restricted cash, end of year	\$22,193		\$20,042

Cash collateral related to rehabilitation performance guarantees includes \$20.414 (A \$26,125) for performance guarantees provided by the Company to the State of Victoria and Northern Territory governments relating to the future reclamation and rehabilitation of the

18. MINING INTERESTS AND PLANT AND EQUIPMENT

Year ended December 31, 2017	Depletable	Non depletable	Total Mining Interest	Plant and equipment	Total
Cost					
At January 1, 2017	\$692,430	\$135,834	\$828,264	\$298,925	\$1,127,189
Additions, including transfer from construction in progress	95,643	212	95,855	69,755	165,610
Construction in progress, net of transfers to plant and equipment	_	_	_	1,405	1,405
Fair value of shares issued for IBA, amortized over life of mine (note 24(a))	10,686	_	10,686	_	10,686
Change in environmental closure assets (estimate and discount rate)	8,109	30	8,139	_	8,139
Disposals	(208)	(30,199)	(30,407)	(18,196)	(48,603)
Foreign currency translation	57,725	10,408	68,133	23,682	91,815
Cost at December 31, 2017	\$864,385	\$116,285	\$980,670	\$375,571	\$1,356,241
Accumulated depreciation and depletion					
At January 1, 2017	\$95,410	s—	\$95,410	\$55,735	\$151,145
Depreciation	140	_	140	42,201	42,341
Depletion	108,403	_	108,403	_	108,403
Disposals	(338)	_	(338)	(9,861)	(10,199)
Foreign currency translation	9,825	_	9,825	5,417	15,242
Accumulated depreciation and depletion at December 31, 2017	\$213,440	s—	\$213,440	\$93,492	\$306,932
Carrying value at December 31, 2017	\$650,945	\$116,285	\$767,230	\$282,079	\$1,049,309
Year ended December 31, 2016	Depletable	Non depletable	Total Mining Interest	Plant and equipment	Total
Cost					
At January 1, 2016	\$198,162	\$41,530	\$239,692	\$121,325	\$361,017
Additions, including transfer from construction in progress	58,007	216	58,223	27,587	85,810
Construction in progress, net of transfers to plant and equipment	_	_	_	3,748	3,748
Buyback of royalty	30,669	_	30,669	_	30,669
Acquisition of St Andrew Goldfields note 7(b)	44,007	_	44,007	50,245	94,252
Acquisition of Newmarket Gold note 7(a)	352,359	95,076	447,435	102,140	549,575
Change in environmental closure assets (estimate and discount rate)	10,366	44	10,410	_	10,410
Disposals	(130)	_	(130)	(9,523)	(9,653)
Foreign currency translation	(1,010)	(1,032)	(2,042)	3,403	1,361
Cost at December 31, 2016	\$692,430	\$135,834	\$828,264	\$298,925	\$1,127,189
Accumulated depreciation and depletion					
At January 1, 2016	\$58,054	\$	\$58,054	\$41,866	\$99,920
Depreciation	_	_	_	20,287	20,287
Depletion	36,079	_	36,079	_	36,079
Disposals	(130)	_	(130)	(7,597)	(7,727)
Foreign currency translation	1,406	_	1,406	1,179	2,585
Accumulated depreciation and depletion at December 31, 2016	\$95,410	\$—	\$95,410	\$55,735	\$151,145
Carrying value at December 31, 2016	\$597,020	\$135,834	\$732,854	\$243,190	\$976,044

Mining Interests

Depletable mining interests at December 31, 2017 and 2016 includes carrying value of the assets for the producing mines in Canada for \$303,210 and \$257,508, respectively (Macassa Mine and Holt Complex and related mills, with the Holt complex acquired in January 26, 2016) and Australia for \$ 347,735 and \$339,512, respectively (Fosterville and Cosmo mines (in the Northern Territory) and respective mills, acquired on November 30, 2016), with the remainder of the change from the date of acquisition due to foreign exchange impact.

Non-depletable mining interests at December 31, 2017 and 2016 includes \$46,245 and \$43,026, respectively for the carrying value of previously acquired interest in exploration properties around the Company's Macassa Mine in Canada, with the change in value related primarily to impact of foreign exchange; and \$70,234 and \$92,807, respectively for the carrying value of various acquired exploration properties in Australia, with the remainder of the change from the date of acquisition due to foreign exchange impact.

On November 3, 2016, the Company acquired 1% of the 2.5% net smelter return royalty on the Macassa property from Franco-Nevada Canada Holdings Corp. for a cash payment of \$30,669

Plant and Equipment

Plant and equipment at December 31, 2017, includes \$1,405 of construction in progress (December 31, 2016 - \$3,748). Plant and equipment also includes costs of \$72,307 (December 31, 2016 - \$47,635) and accumulated depreciation of \$17,883 (December 31, 2016 - \$10,682) related to capital equipment and vehicles under finance leases (note 20).

During the year ended December 31, 2017 the Company disposed of certain old equipment for cash proceeds of \$1,621 and recognized a loss of \$992 (year ended December 31, 2016 – proceeds of \$749 and loss of \$1,926).

19. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

As at December 31	2017	2016
Trade payable and accrued liabilities	\$69,155	\$57,897
Payroll and government remittances	15,591	14,179
	\$84,746	\$72,076

Accounts payable are non-interest bearing and are generally due within 30 days or payable on demand.

The fair value of accounts payable and accrued liabilities approximate their carrying amount. Trade payables relate mainly to the acquisition of materials, supplies and contractor services

20. FINANCE LEASES

ses and other loans at December 31, 2017 and 2016 include the obligations of the Company under various equipment and vehicle finance leases; the finance leases expire between January 31, 2018 and December 31, 2021 and reflect interest between 2.97% and 4.95%. The Company has the option to purchase the equipment and vehicles leased at the end of the terms of the leases, for a nominal amount. The Company's obligations under finance leases are secured by the lessor's title to the leased assets

The following schedule outlines the total minimum payments due for the finance lease obligations over their remaining terms as at December 31, 2017 and 2016

	Year ended December 31, 2017	Year ended December 31, 2016
Not later than one year	\$17,570	\$13,531
Later than one year and not later than five years	23,031	15,947
Less: Future finance charges	(2,026)	(1,444)
Present value of minimum lease payments	\$38,575	\$28,034
Less: Current portion	(16,358)	(12,877)
Non-current portion	\$22,217	\$15,157

Lease facilities

The Company has credit facilities for a maximum of \$70,925 (C \$54,549 and A \$35,000, respectively) which are comprised entirely of equipment lease facilities. The amounts financed under the lease facilities are secured with the equipment under the respective lease facilities. The fair value of the finance leases as at December 31, 2017, was \$38,686 (December 31, 2016 - \$26,777), which has been determined using the contractual market cash flows and market rates of interest between 3.65% and 4.77% (December 31, 2016 - range of 3.15% - 4.15%).

At December 31, 2017. \$ 36.829 was drawn under the (C\$ 30.864 and A\$ 15.579) lease facilities (December 31, 2016 - C\$10.834), Amounts drawn under the equipment lease facilities are subject to separate lease agreements with a maximum term of 48 months and interest rates which are variable depending on when the finance leases are entered into; all obligations under these agreements are included in the finance lease liability at December 31, 2017 and 2016.

21. SHARE BASED LIABILITIES

On January 1, 2017, the Board approved a deferred share unit plan (the "DSU Plan") for non-executive directors of the Company. On May 4, 2017 shareholders of the Company approved the DSU Plan which provides that on the date the director ceases to be a director of the Company (the "Separation Date"), the director will be entitled to receive either a cash payment, Common Shares or some combination thereof, equal to the five-day volume weighted average trading price of the Company's Common Shares on the TSX immediately prior to the Separation Date.

As a result of the Arrangement with Newmarket, the Company assumed phantom share units previously granted to certain Australian employees of Newmarket. Each of the phantom share units entitles the holder to a cash payment on exercise based on the market value of the Company's shares on the date of exercise less the strike price of the phantom share unit.

Changes in the number of DSUs and phantom share units outstanding during the years ending December 31, 2017 and 2016 are as follows:

	Year ended Deco	Year ended December 31, 2017		per 31, 2016
	DSUs	Phantom share units	DSUs	Phantom share units
Balance at beginning of year,	40,356	185,037	_	
Granted	103,600	_	70,623	_
Assumed with the Newmarket transaction	_	_	_	261,493
Redeemed	(12,950)	(90,037)	(30,267)	(40,831)
Cancelled	_	_	_	(35,625)
Balance at end of year	131,006	95,000	40,356	185,037

Changes in the share based liabilities during the years ending December 31, 2017 and 2016 are as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
Opening liability	\$436	\$—
Phantom share unit liability assumed with Newmarket transaction	_	382
Share based payment expense	2,222	391
Redeemed DSUs and phantom share units (cash payments)	(605)	(310)
Foreign currency translation	63	(27)
Total share based payment liability	\$2,116	\$436
Current portion of share based liability	\$1,898	\$ <u></u>
Long term share based liability	\$218	\$436

22. CONVERTIBLE DEBENTURES

	Year ended December 31, 2017	Year ended December 31, 2016
Carrying amount, beginning of period	\$84,961	\$78,807
Redemption of convertible debentures	(44,034)	(466)
Conversion of convertible debentures	(48,559)	_
Unwinding of discount	3,349	4,189
Foreign currency translation	4,283	2,431
Carrying amount, end of year	s —	\$84,961
Current portion	_	84,961
Long term balance	\$—	\$—

On June 30, 2017, the Company redeemed all debentures outstanding under the July 19, 2012 convertible debenture issuance for cash consideration of \$43,779 (C \$56,837). The debentures redeemed represented the outstanding debentures of a C\$57,500 private placement of convertible unsecured subordinated debentures (6% debentures) completed on July 19, 2012. The debentures bore interest at 6% per annum, payable semi-annually. During the year ended December 31, 2017, \$1,313 (C\$1,705) of interest related to these debentures was paid (year ended December 31, 2016 - \$2,584 (C\$3,414)). Subsequent to the redemption of the 6% debentures, the amount of \$6,564 that was recorded in a component of shareholder's equity was reallocated to share capital.

As at December 31, 2017, there were no debentures outstanding under the November 7, 2012 issuance. During December 2017, debenture holders elected to convert \$48,559 (C\$61,724) at a conversion price of \$13.70 per share, being a conversion rate of 72.9927 common shares for each \$1,000 in principal held. As a result, the Company issued an aggregate of 4,505,393 common shares. In addition, the Company paid an aggregate amount of \$255 (C\$324) in cash with respect to the outstanding debentures not converted. The debentures converted or redeemed represented the outstanding debentures of a C \$69,000 private placement of convertible unsecured subordinated debentures ("7.5% debentures") for net proceeds of C \$65,800 . The debentures bore interest at 7.5% per annum, payable semi-annually. During the year ended December 31, 2017, \$3,503 (C\$4,467) of interest related to these debentures was paid (year ended December 31, 2016 - \$3,523 (C\$4,656)). Subsequent to the conversion of the 7.5% debentures, the amount of \$9,110 recorded in a component of shareholder's equity was reallocated to share capital.

the market price of the debentures at year end.

				Year ended	December 31, 2017			
		Changes from financing	cash flows		0	ther changes		
	Balance as at January 1, 2017	Repurchase of debentures	Interest paid	Interest expense	Conversions	Unwinding of discount	Foreign currency translation	Balance as at December 31, 2017
Long-term debt	\$84,961	(\$44,034)	(\$4,816)	\$4,816	(\$48,559)	\$3,349	\$4,283	s—
				Year ended	December 31, 2016			
		Changes from financing	cash flows		C	Other changes		
	Balance as at January 1, 2016	Repurchase of debentures	Interest paid	Interest expense	Conversions	Unwinding of discount	Foreign currency translation	Balance as at December 31, 2016
Long-term debt	\$78,807	(\$466)	(\$6,017)	\$6,017	\$—	\$4,189	\$2,431	\$84,961

23. PROVISIONS

As at December 31	2017	2016
Environmental rehabilitation provision	\$54,429	\$55,971
Long service leave	6,356	5,812
Other	=	186
Total provisions	\$60,785	\$61,969
Current provisions	19,133	20,975
Long term balance	\$41,652	\$40,994

Environmental rehabilitation provision

The Company provides for the estimated future cost of rehabilitating mine sites and related production facilities on a discounted basis as such activity that creates the rehabilitation 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.

Changes in the environmental rehabilitation provision for the years ended December 31, 2017 and 2016 are as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
Balance, beginning of period	\$55,971	\$4,753
Change in estimates	8,927	10,266
Disposition of Stawell	(5,482)	_
Assumed with business combinations (note 7)	=	41,300
Site closure and reclamation costs paid	(10,212)	(403)
Unwinding of discount on rehabilitation provision	1,003	377
Foreign currency translation	4,222	(322)
Balance, end of the period	\$54,429	\$55,971
Current portion	13,946	16,397
Long term balance	\$40,483	\$39,574

During 2017, the Company completed additional reclamation work in the amount of \$6,676, of which \$10,427 (C \$14,000), was included in the current provision at December 31, 2016.

Assumptions used in valuing the environmental provision as at December 31, 2017 and 2016 are as follows:

As at December 31, 2017	Estimated Closure Period	Inflation Rate	Risk free rate	Undiscounted estimated closure costs
Canadian Operations				
Macassa Mine Complex	2034 - 2074	2%	2.45%-2.51%	\$13,727
Holt Complex	2019 - 2039	2%	1.59%-2.51%	\$11,152
Australian Operations				
Fosterville Gold Mine	2022	3%	2.30%	\$8,238
Northern Territory Operations	2023	3%	2.04% - 2.61%	\$30,655
As at December 31, 2016	Estimated Closure Period	Inflation Rate	Risk free rate	Undiscounted estimated closure costs
Canadian Operations				
Macassa Mine Complex	2017, 2030	2%	2.14% - 2.40%	\$18,068
Holt Complex	2018 - 2023	2%	4%	\$8,716
Australian Operations				
Fosterville Gold Mine	2021	2.50%	2.32%	\$8,570
Northern Territory Operations	2022	2.50%	1.96%	\$22,495
Stawell Mine	2019	2.50%	1.96%	\$5,978

All estimates and assumptions are reviewed on an annual basis to take into account any material changes to underlying assumptions and inputs. However, actual rehabilitation costs will ultimately depend upon future market prices for the necessary decommissioning works required, which will reflect market conditions at the relevant time. Furthermore, the timing of rehabilitation is likely to depend on when the mines cease to produce at economically viable rates. This, in turn, will depend upon future gold prices and costs of production, which are inherently uncertain.

Long service leave

Long service leave is an Australian employee entitlement which accrues based on an employee's length of service to a company. The provision is estimated based on the total current service of the Company's employees and the probability of expected future service and earnings. As at December 31, 2017, the total accrued long service leave was \$6,356, of which \$5,187 is included in the current provision (December 31, 2016 - \$5,812 and \$4,391, respectively).

24. SHAREHOLDERS' EQUITY

The Company is authorized to issue an unlimited number of common shares without par value.

(a) SHARE CAPITAL

As at December 31, 2017, the Company had 210,944,884 common shares outstanding (December 31, 2016 - 203,031,934).

During the year ended December 31, 2017, the Company issued an aggregate of 4,505,393 common shares upon the conversion of the 7.5% debentures (see note 22).

During the year ended December 31, 2017, the Company issued an aggregate of 7,351,060 common shares upon the exercise of 5,739,722 stock options, 1,608,982 PSUs and 2,356 warrants

On May 15, 2017, the TSX approved the Company's Normal Course Issuer Bid ("NCIB") to purchase up to 15,186,571 common shares of the Company, representing 10% of the issued and outstanding common shares in the public float as of May 11, 2017. Repurchases of common shares pursuant to the NCIB are permitted from May 17, 2017 until May 16, 2018, or such earlier time as the NCIB is completed or terminated by the Company. During the year ended December 31, 2017, the Company purchased 5,443,400 shares for cancellation under the NCIB, for \$60,143 (C\$76,536). All common shares repurchased were legally cancelled and are recorded as a reduction of share capital in the Consolidated Statements of Changes in Equity.

On May 12, 2017, the Company issued 1,500,000 common shares to two First Nations as part of an Impact and Benefits Agreement ("IBA") (note 18).

On July 14, 2017 and October 16, 2017, the Company paid a quarterly dividend of C\$0.01 per common share in the amounts of \$1,623 (C\$2,107) and \$1,658 (C\$2,076), respectively. On December 15, 2017, the Company declared a quarterly dividend of C\$0.02 per common share that was paid on January 15, 2018 to shareholders of record as of the close of business on December 29, 2017. The Company accrued \$3,372 (C\$4,219) as at December 31, 2017 related to the declared dividend with the corresponding reduction in retained earnings.

In 2016, the Company raised gross proceeds of \$16,740 (C\$22,000) by issuing flow through common shares under two private placements (691,700 flow through common shares at a price of C\$10.12 per common share issued in June 2016 and 1,047,340 flow-through common shares at a price of C\$14.32 per common share issued in December 2016). The number of common shares issued are stated on a post-consolidation basis. The net proceeds of \$16,679 (C\$21,885) were recorded as share capital of \$12,794 (C\$16,748) and deferred premium liability of \$3,885 (C\$5,137); the deferred premium is recognized as other income as the Company incurs Canadian exploration eligible flow through expenditures (CEE). During the year ended December 31, 2017 , \$ 3,070 of amortized deferred premium was recognized in other income (December 31, 2016 - \$897).

As at December 31, 2017, C\$22,000 of CEE was spent in relation to the flow-through financings (C\$6,484 to December 31, 2016).

Changes in the deferred premium liability as at December 31, 2017 and 2016 are as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
Balance at beginning of year	\$2,943	\$ <u></u>
Deferred premium liability on flow through share issuances	=	3,885
Recognition of deferred premium liability	(3,070)	(897)
Foreign currency translation	127	(45)
	S	\$2,943

(b) RESERVES

(i) Share based compensation plans

The Company has the following outstanding equity based awards:

Pursuant to the terms of the Arrangement entered into between Old Kirkland Lake and Newmarket (note 7), the Newmarket stock option plan (the "Stock Option Plan") superseded the Old Kirkland Lake stock option plans, however, awards outstanding under Old Kirkland Lake (the "Old Kirkland Stock Option Plan") provides for the Company and any of its subsidiaries or affiliates, consultants, and management employees. On May 4, 2017, shareholders of the Company approved certain amendments to the Stock Option Plan, including changing the Stock Option Plan to a "rolling plan". Accordingly, the aggregate number of common shares to be reserved for issuance in satisfaction of stock options translated by the terms of the Old Kirkland Stock Option Plan provides for the issuance of stock options to eligible participants to employees. On May 4, 2017, shareholders of the Company approved certain amendments to the Stock Option Plan, including changing the Stock Option Plan to a "rolling plan". Accordingly, the aggregate number of common shares to be reserved for issuance in satisfaction of stock options granted pursuant to the Stock Option Plan and all other security based compensation plans must not exceed 5.5% of the common shares issued and outstanding (on a non-diluted basis) at the time of granting any stock options. In accordance with the terms of the Stock Option Plan: (i) the exercise price of a stock option granted shall be determined by the Company's Board but in any event, shall not be less than the closing price of the common shares trading on the TSX on the date of grant; (ii) stock options shall have a maximum term of five years; and (iii) will generally be terminated ninety days after a participant ceases to be an officer, director, employee or consultant of the Company.

During the year ended December 31, 2017 the Company did not grant any stock options.

Changes in stock options during the years ended December 31, 2017 and 2016 were as follows:

		Year ended December 31, 2017		
	Number of	Weighted average	Number of	Weighted average
	options	exercise price (CS)	options	exercise price (C\$)
Opening Balance	7,514,307	\$4.60	3,920,800	\$5.85
Granted	_	_	30,000	5.31
Assumed on St Andrew acquisition	_	_	1,566,876	6.86
Assumed on Newmarket arrangement	_	_	4,625,161	3.52
Exercised	(5,739,722)	3.91	(2,173,306)	3.51
Expired	(235,269)	13.95	(448,224)	17.52
Forfeited	(40,001)	4.96	(7,000)	6.83
Stock options outstanding, end of year	1,499,315	5.80	7,514,307	4.60
Stock options exerciseable, end of year	1,332,460	\$6.01	7,180,808	\$4.73

The weighted average fair value of the share options granted under the Old Kirkland Lake Stock Option Plan during the year ended December 31, 2017 is C\$nil per share (year ended December 31, 2016 – C\$2.43). Options are valued using the Black-Scholes option pricing model. Where relevant, the expected life used in the model has been adjusted based on management's best estimate of the effects of non-transferability, exercise restrictions and behavioral considerations. Expected volatility is based on the historical share price volatility the Company and the mining industry.

The fair value of options granted under the Old Kirkland Lake Plan during the year ending December 31, 2016 was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions:

	Year ended December 31, 2016
Weighted average exercise price per share	C\$5.31
Risk-free interest rate	0.45%
Expected volatility	67%
Expected life	3.91 years
Expected dividend yield	0%
Expected forfeiture rate	5.45%
Weighted average per share grant date fair value	C\$2.43

Options assumed with the business combinations in 2016 were valued at the date of acquisition using the Black-Scholes option pricing model with the following weighted average assumptions:

Assumed on the	St Andrew Acquisition	Newmarket Arrangement
Exercise price per share	C\$6.86	C\$3.52
Risk-free interest rate	0.72%	0.55%
Weighted average per share grant date fair value	1.86	4.06
Expected volatility	60%	40%
Expected life	3.98 years	0.50 years
Expected dividend yield	0%	0%
Expected forfeiture rate	0%	0%

Stock Options Exercised

The following table outlines share options exercised during the year ended December 31, 2017 :

Grant price		Number of options exercised	Exercise dates	Weighted average closing share price at exercise date
	\$1.11 - \$7.81	1,804,842	January 1, 2017 - March 31, 2017	\$9.87
	\$0.86 - \$7.81	2,791,059	April 1, 2017 - June 30, 2017	\$10.13
	\$2.11 - \$7.81	720,018	July 1, 2017 - September 30, 2017	\$14.72
	\$2.91 - \$15.11	423,803	October 1, 2017 - December 31, 2017	\$17.39
		5,739,722		\$11.16

For the year ended December 31, 2016 :

Grant price		Number of options exercised	Exercise dates	Weighted average closing share price at exercise date
	\$2.99-\$6.83	1,196,035	January 1, 2016 to March 31, 2016	\$8.79
	\$2.99-\$6.83	569,607	April 1, 2016 to June 30, 2016	\$10.88
	\$2.99-\$6.83	366,998	July 1, 2016 to September 30, 2016	\$11.25
\$3.16 - \$5.81		40,666	October 1, 2016 to December 31, 2016	\$9.13
		2,173,306		\$9.76

Other equity based instruments

On January 1, 2017, the Board approved a long-term incentive plan (the "Long Term Incentive Plan" or "LTIP") that

provides for RSUs and PSUs (collectively, "Share Units") that may be granted to employees, officers and eligible contractors of the Company and its affiliates. A director of the Company is not eligible to participate in the LTIP unless he or she is also an employee of the Company, On May 4, 2017, shareholders of the Company approved amendments to the LTIP to provide the Company with the ability, at the discretion of the Company's Board of Directors to issue common shares or cash or any combination thereof in satisfaction of the Company's boligations under Share Units held by participants. The maximum number of common shares as would, when common shares as would, when common shares subject to grants under DSUs, RSUs and PSUs of the Company, be equal to 2% of the common shares then outstanding; and (ii) such number of common shares as would, when combined with all other common shares of the Company, be equal to 5.5% of the common shares outstanding from time to time.

The value of an RSU and PSU at the grant date is equal to the fair market value of a common share of the Company on that date. Unless otherwise determined by the Compensation Committee, no RSU or PSU shall vest later than three years after the date of grant.

Upon vesting of the PSUs, the number of shares the holder can receive ranges between 0% and 200% of the number of the PSUs granted, to be determined at the end of the performance period based on the performance of the Company's underlying shares.

Movements in the number of the PSUs and RSUs for the years ended December 31, 2017 and 2016 are as follows:

	Year ended December 31, 2017		Year ended December 31, 2016	
	PSUs	RSUs	PSUs	RSUs
Balance, beginning of year	1,707,571	108,589	_	
Granted	309,637	326,694	137,272	157,272
Assumed with the Newmarket arrangement	_	_	1,620,857	_
Cancelled	(61,041)	(66,041)	(16,767)	(26,767)
Redeemed	(1,613,961)	(4,979)	(33,791)	(21,916)
Balance, end of year	342,206	364,263	1,707,571	108,589

(ii) Share based payment expense

The cost of share based payments is allocated to production costs (options granted to employees involved in the commercial operations at the mines and mill), general and administrative costs (options granted to directors and corporate employees) and transaction costs (expense related to the vesting of certain officers of the Company terminated upon completion of the Newmarket arrangement).

	Year ended December 31, 2017	Year ended December 31, 2016
RSU and PSU share based payment expense	\$1,969	\$367
RSU and PSU cash payments	65	106
Stock options share based payment expense	88	846
Equity based instruments share based payment expense	\$2,122	\$1,319
Cash settled instruments share based payment expense (note 21)	\$2,222	\$391
Total share based payment expense	\$4.344	\$1.710

The allocation of share based payment expense on the consolidated statement of operations and comprehensive income for the years ended December 31, 2017 and 2016 is as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
General and administrative	\$3,947	\$1,230
Transaction costs	_	137
Production costs	397	343
Total share based payment expense	\$4,344	\$1,710

(iii) Basic and diluted income per share

Basic and diluted income per share for the years ended December 31, 2017 and 2016 is calculated as shown in the table below. The diluted income per share for the years ended December 31, 2017 and 2016 includes the impact of certain outstanding options, PSUs and RSUs. The impact of the outstanding convertible debentures is not included in the calculation for the year ended December 31, 2016 as the impact would be anti-dilutive.

	Year ended December 31, 2017	Year ended December 31, 2016
Earnings from continuing operations	\$157,330	\$46,734
Loss from discontinued operations (note 6)	(24,904)	(4,627)
Net earnings	132,426	42,107
Weighted average basic number of common shares outstanding (in '000s)	207,436	121,172
Basic earnings per share from continuing operations	0.76	0.39
Basic loss per share from discontinued operations	(\$0.12)	(\$0.04)
Basic earnings per share	\$0.64	\$0.35
Weighted average diluted number of common shares outstanding (in '000s)	208,628	123,889
Diluted earnings per share from continuing operations	\$0.75	\$0.38
Diluted loss per share from discontinued operations	(\$0.12)	(\$0.04)
Diluted earnings per share	\$0.63	\$0.34

Weighted average diluted number of common shares for years ended December 31, 2017 and 2016 is calculated as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
Weighted average basic number of common shares outstanding (in '000s)	207,436	121,172
In the money shares - share options (in '000s)	972	2,478
In the money shares - RSUs (in '000s)	220	239
Weighted average diluted number of common shares outstanding	208,628	123,889

The following items were excluded from the computation of weighted average shares outstanding for the year ended December 31, 2017 and 2016 as their effect would be anti-dilutive:

	Year ended December 31, 2017	Year ended December 31, 2016	
Share options (in '000s)		527	5,036
RSUs and PSUs (in '000s)		486	1,577
Convertible debentures (in '000s)		_	8.503

25. SUPPLEMENTAL CASH FLOW INFORMATION

As at December 31, 2017, the Company's cash balance of \$231,596 (December 31, 2016 - \$234,898) was held in full at major Canadian and Australian banks in deposit accounts.

Supplemental information to the statements of cash flows is as follows:

	Year ended December 31, 2017	Year ended December 31, 2016	
Change in non-cash working capital			
Decrease (increase) in accounts receivable		(\$7,468)	\$1,372
Decrease (increase) in inventory		6,291	9,589
Decrease (increase) in prepaid expenses and current assets		(3,740)	(2,286)
Decrease (increase) in accounts payable and accrued liabilities		9,276	28,679
		\$4,359	\$37,354
Investing and financing non-cash transactions			
Plant and equipment acquired financed through finance lease		\$24.963	\$15.864

26. OPERATING SEGMENTS

The reportable operating segments are those operations for which operating results are reviewed by the President and Chief Executive Officer who is the chief operating decision maker regarding decisions about resources to be allocated to the segment and to assess performance provided those operations pass certain quantitative thresholds. Operations with revenues, earnings or losses or assets that exceed 10% of the total consolidated revenue, earnings or losses or assets are reportable segments.

Each of the Company's reportable operating segments generally consists of an individual mining property managed by a single general manager and operations management team.

As a result of the acquisitions of Newmarket and St. Andrew in 2016, the Company now operates multiple gold mines in Canada and Australia, including the Macassa Mine complex and Holt Complex in Northern Ontario, Canada, the Fosterville Mine and Northern Territory (which includes the Cosmo mine) in Australia. The Company's operating segments reflect these multiple mining interests and are reported in a manner consistent with internal reporting used to assess the performance of each segment and make decisions about resources to be allocated to the segments.

The information reported below as at and for the years ended December 31, 2017 and 2016 is based on the information provided to the President and Chief Executive Officer.

As at and for the year ended December 31, 2017

	Macassa Mine	Holt Complex	Fosterville	Northern Territory	Corporate and other	Total
Revenue	\$247,104	\$145,892	\$327,055	\$27,444	\$—	\$747,495
Production costs	(102,743)	(77,299)	(70,906)	(37,367)	_	(288,315)
Royalty expense	(5,377)	(9,586)	(6,433)		_	(21,396)
Depletion and depreciation	(38,015)	(22,576)	(82,589)	(5,473)	(2)	(148,655)
Earnings (loss) from mine operations	100,969	36,431	167,127	(15,396)	(2)	289,129
Expenses						
General and administrative	_	_	_		(25,646)	(25,646)
Transaction costs	_	_	_	_	(397)	(397)
Exploration and evaluation	(10,756)	(7,780)	(21,400)	(8,475)	_	(48,411)
Care and maintenance	_	(2,290)		(9,587)	_	(11,877)
Earnings (loss) from operations	90,213	26,361	145,727	(33,458)	(26,045)	202,798
Other income (loss)						3,376
Finance items						
Finance income						2,111
Finance costs						(12,206)
Earnings before taxes from continuing operations						196,079
Expenditures on:						
· ·	620.070	617.22/	634 641	85 (07		605 (43
Mining interest Plant and equipment	\$28,079 14,324	\$17,226 9,939	\$34,641 20,105	\$5,697 1,829	s— —	\$85,643 46,197
	· · · · · · · · · · · · · · · · · · ·					
Total capital expenditures	\$42,403	\$27,165	\$54,746	\$7,526	\$—	\$131,840
Total assets	\$562,752	\$92,168	\$433,385	\$140,036	\$257,459	\$1,485,800
Total liabilities	\$117,119	\$46,348	\$116,929	\$34,953	\$12,855	\$328,204

year ended		

					Corporate and other	
	Macassa Mine	Holt Complex	Fosterville	Northern Territory		Total
Revenue	\$213,496	\$159,237	\$22,950	\$7,657	s	\$403,340
Production costs	(91,279)	(80,129)	(14,637)	(6,797)	_	(192,842
Royalty expense	(5,070)	(9,999)	(483)	_	_	(15,552
Depletion and depreciation	(31,345)	(18,077)	(8,326)	(1,217)	(5)	(58,970
Earnings (loss) from mine operations	85,802	51,032	(496)	(357)	(5)	135,976
Expenses						
General and administrative	_	_	_	_	(11,991)	(11,991
Transaction costs	_	_	_	_	(17,746)	(17,746
Exploration and evaluation	(8,621)	(5,881)	(346)	(969)	_	(15,817
Care and maintenance	_	(80)	_	_		(80
Earnings (loss) from operations	77,181	45,071	(842)	(1,326)	(29,742)	90,342
Other income (loss)						210
Finance items						
Finance income						843
Finance costs						(11,628
Earnings before taxes from continuing operations						79,767
Expenditures on:						
Mining interest	\$33,551	\$21,590	\$2,862	\$178	s	\$58,181
Plant and equipment	7,616	6,646	539	472	_	15,273
Total capital expenditures	\$41,167	\$28,236	\$3,401	\$650	S—	\$73,454
Total assets	\$437,312	\$200,580	\$80,618	\$67,708	\$512,476	\$1,298,69
Total liabilities	\$177,360	\$39,943	\$23,602	\$27,274	\$124,601	\$392,780

Information as at and for the year ended December 31, 2016 has been restated to exclude the Stawell Mine which was sold in 2017 and is presented as a discontinued operation (note 6).

The following table shows metal sales and non-current assets by geographic region:

	Metal sales		Non-current assets	
	Years ended Decemb	Years ended December 31,		,
	2017	2016	2017	2016
Geographic information				
Australia	\$354,498	\$30,607	\$555,241	\$551,387
Canada	\$392,997	\$372,733	\$630,941	\$457,421
Total	\$747,495	\$403,340	\$1,186,182	\$1,008,808

The following table summarizes sales to individual customers exceeding 10% of annual metal sales for the following periods:

For the year ended					
December 31, 2017	Macassa Mine	Holt Complex	Fosterville	Northern Territory	Total
Customer					
1	s —	s—	\$326,447	S —	\$326,447
2	92,387	55,893	_		148,280
3	91,778	51,102	_	_	142,880
					617,607
% of total sales					83%
For the year ended					
December 31, 2016	Macassa Mine	Holt Complex	Fosterville	Northern Territory	Total
Customer					
1	\$58,978	\$36,837	\$—	S	\$95,815
2	68,203	24,244	_	_	92,447
3	_	77,297	_	_	77,297
					265,559
% of total sales					66%

The Company is not economically dependent on a limited number of customers for the sale of its product because gold can be sold through numerous commodity market traders worldwide. The customers differ in years 2017 and 2016.

27. CAPITAL RISK MANAGEMENT

The Company manages its capital structure and makes adjustments to it to effectively support the acquisition, operation, exploration and development of mineral properties. In the definition of capital, the Company includes, as disclosed on its consolidated statement of financial position: share capital, equity portion of convertible debentures, deficit, reserves and convertible debentures.

The Company's capital at December 31, 2017 and 2016 is as follows:

As at December 31	2017	2016
Share capital	\$951,184	\$900,389
Equity portion of convertible debentures	=	15,674
Reserves	33,122	49,997
Accumulated other comprehensive income	36,078	(71,585)
Retained earnings	137,212	11,439
Liability portion of convertible debentures (note 22)	_	84,961
	\$1,157,596	\$990,875

The Company believes it has sufficient funds to finance its current operating, development and exploration expenditures. Longer term, the Company may pursue opportunities to raise additional capital through equity and/or debt markets as it progresses with its properties and projects. The Company will continue to assess new properties and seek to acquire an interest in additional properties if it feels there is sufficient geologic or economic potential and if it has adequate financial resources to do so.

Management reviews its capital management approach on an ongoing basis and believes that its approach, given the relative size of the Company, is reasonable.

Neither the Company nor its subsidiaries are subject to any other externally imposed capital requirements.

28. FINANCIAL INSTRUMENTS

Carrying values of financial instruments

The carrying values of the financial assets and liabilities at December 31, 2017 and 2016 are as follows:

As at December 31	2017	2016
	2017	2016
Financial Assets		
At fair value through profit or loss		
Warrant investments	\$12,754	\$—
Loans and receivables, measured at amortized cost		
Cash	\$231,596	\$234,898
Restricted cash	\$22,193	\$20,042
Accounts receivable (not including sales taxes)	\$5,289	\$1,716
	\$259,078	\$256,656
Available for sale, measured at fair value through Other Comprehensive Income		
Investments in equity securities of public and private companies	\$100,109	\$5,885
Financial Liabilities		
Other financial liabilities, measured at amortized cost		
Accounts payable and accrued liabilities	\$84,746	\$72,076
Finance leases	\$38,575	\$28,034
Convertible unsecured debentures	\$ —	\$84,961

Fair values of financial instruments

The fair values of cash, accounts receivable, restricted cash, accounts payable and accrued liabilities approximate their carrying values due to the short term to maturity of these financial instruments.

The fair value hierarchy of financial instruments measured at fair valued on the consolidated statement of financial position is as follows:

As at December 31	2017	2016
Level I Available for sale investments - publicly traded (note 16)	\$100,109	\$1,686
Level 2 Warrant investments	\$12,754	Ş
Level 3 Available for sale investments - privately held (note 16)	<i>\$</i> —	\$4,199

Financial instruments risks factors

The Company is exposed to financial risks sensitive to changes in share prices, share prices, share price volatility, foreign exchange and interest rates. The Company's Board of Directors has overall responsibility for the establishment and oversight of the risk management framework. Currently the Company has no outstanding options, forward or future contracts to manage its price-related exposures.

The Company's risk exposures and the impact on the Company's financial instruments are summarized below:

Credit risk

The Company's credit risk is primarily attributable to trade and other amounts receivable, which consist primarily of goods and services tax due from the Federal Governments of Australia and Canada. Consequently, credit risk is considered low and no allowance for doubtful debts has been recorded at the date of the consolidated statements of financial position. At December 31, 2017 and December 31, 2016, there were no significant trade receivables and the Company has no significant concentration of credit risk arising from

The Company's cash and restricted cash are held with established Canadian and Australian financial institutions for which management believes the risk of loss to be remote. Deposits held with banks may exceed the amount of insurance provided on such deposits.

The Company monitors the expected settlement of financial assets and liabilities on an ongoing basis; there are no significant payables or obligations that are outstanding past their due dates. As at December 31, 2017, the Company had a net working capital of \$169,146 (December 31, 2016 - \$ 92,307), including cash of \$231,596 (December 31, 2016 - \$ 234,898).

Future financing requirements, if any, will depend on a number of factors that are difficult to predict and are often beyond the control of the Company. The main factor is the realized price of gold received for gold produced from the Company's operating mines and the operating and capital costs of those mines, and exploration and development costs associated with the Company's growth projects.

The contractual cash flow requirements of the Company as at December 31, 2017 are as follows:

As at December 31, 2017

	Total	Less than a year	1-3 years	4-5 years	After 5 years
Accounts payable and accrued liabilities	\$84,746	\$84,746	s —	s —	s-
Finance lease payments	42,267	18,480	23,787	_	_
Office rent and other obligations	5,558	1,643	2,230	1,509	176
Income taxes payable	8,337	8,337	_	_	_
	\$140,908	\$113,206	\$26,017	\$1,509	\$176

Market risk

(a) Foreign currency risk

The Company is exposed to foreign currency risk as the development and operation of the Company's mining assets will largely be funded with Canadian and Australian dollars while gold is priced on international markets in US dollars, the Company's presentation currency.

	CAD	AUD
Closing US dollar exchange rate at December 31, 2017	\$0.80	\$0.78
Average US dollar exchange rate during the year ended December 31, 2017	\$0.77	\$0.77
Closing US dollar exchange rate at December 31, 2016	\$0.74	\$0.72
Average US dollar exchange rate during the year ended December 31, 2016	\$0.75	\$0.74

Currency risk only exists on account of financial instruments being denominated in a currency that is not the functional currency and being of a monetary nature. The following table indicates the impact of foreign currency exchange risk on net monetary financial assets, denominated in a currency other than the functional currency, as at December 31, 2017. The table below also provides a sensitivity analysis of a 10 percent adverse movement of the US dollar against the Canadian dollar and Australian dollar as identified which would have decreased the Company's net earnings by the amounts shown in the table below. A 10 percent weakening of the US dollar against the said foreign currencies would have had the equal but opposite effect as at December 31, 2017.

	USD\$
Total foreign currency net financial assets in US\$ (a)	\$190,194
Impact of a 10% variance of the US \$ on net earnings	\$18,475
(a) Includes financial assets and financial liabilities denominated in United States Pollars	

(b) Interest rate risk

The Company's exposure to risks of changes in market interest rates relates primarily to interest earned on its cash balances. The Company reviews its interest rate exposure periodically, giving consideration to potential renewals of existing positions and alternative

The finance leases bear interest at fixed rates. The Company does not account for any fixed rate liabilities at fair value, consequently a change in the interest rates at the reporting date would not impact the carrying amount of financial liabilities on the Consolidated Statement of Operations. The impact on cash of a movement in interest rates by a plus or minus 1% change would not be material to the value of cash.

The Company is exposed to equity securities price risk of changes because of the available for sale and warrant investments held by the Company. The Company's portfolio of investments is not part of its core operations, and accordingly, gains and losses from these investments are not representative of the Company's performance during the year. As at December 31, 2017, the impact of a 10% increase or decrease in the share prices of the available for sale and warrant investments would have resulted in an increase or decrease, respectively in unrealized gains, of \$9,377 that would have been included in other comprehensive income and \$3,052 in net earnings.

29. RELATED PARTY TRANSACTIONS

The remuneration of directors and executive officers is determined by the compensation committee of the Board of Directors. The directors' fees, consulting fees and other compensation of directors and executive officers were as follows:

	Year ended December 31, 2017	Year ended December 31, 2016
Officer salaries and short-term benefits	\$6,405	\$1,463
Share based payment expense	3,173	1,799
Directors fees	553	522
Severance payments	1,461	1,624
	\$11.592	\$5 408

Related party transactions are measured at the exchange amount which is the consideration agreed to between the parties.

30. COMMITMENTS AND CONTRACTUAL OBLIGATIONS

The Company has royalty obligations on its various mines sites as discussed below:

- A 1.5% NSR royalty payable to Franco-Nevada Corporation ("FNV") on production from the Company's Macassa property. The previous royalty amount of 2.5% was reduced in 2016 when the Company exercised its option to buy back 1% of the Macassa royalty for \$30,532.
- For the Company's mine properties in the State of Victoria, Australia, a 2% NSR royalty on the Fosterville Gold Mine, payable as applicable quarterly to Centerra Gold.

51

- A 1% NSR on production from the Taylor mine payable to FNV; a sliding scale NSR linked to gold price for the Holt and Holloway mines with the NSR paid for 2017 between 7% and 8% for Holloway and 10% for Holt.
- A 0.5% NSR on production from the Macassa, Taylor, Holt and Holloway mines to the First Nations identified in the IBA.
- A 1% ad valorem royalty on any future gold production above 250,000 ounces derived from the Maud Creek Gold Project (Australia); a 1% gross royalty and A\$5 per ounce royalty are payable on any future gold production from certain tenements from the Maud Creek Gold Project that are located south of the main Maud Creek gold deposit. The Company also has a contingent contractual obligation of a payment of A\$2 million that would be due upon a decision to proceed with development of the Maud Creek Gold Project.
- The Fosterville Gold Mine is subject to a license fee which enables it to use the patented BIOX process to treat refractory ore from the underground mine. The fee is paid at a rate of A\$1.33 per ounce of gold produced and treated through the BIOX Plant and terminates when 1,500,000 ounces of gold in aggregate has been treated in the plant. As at December 31, 2017, approximately 1,308,962 ounces of gold had been treated in the plant (December 31, 2016 - 1,126,840 ounces).



Management's Discussion & Analysis

For the years ended December 31, 2017 and 2016

MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") dated February 20, 2018 for Kirkland Lake Gold Ltd. (the "Company" and as defined in the section entitled "Business Overview") contains information that management believes is relevant to an assessment and understanding of the Company's consolidated financial position and the results of its consolidated operations for the year ended December 31, 2017 and 2016, which were prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards ("IFRS") as issued by the International Accounting Standards ("IRS") as issued by the International Properties of the International Properties

FORWARD LOOKING STATEMENTS

This MD&A may contain forward-looking statements and should be read in conjunction with the risk factors described in the "Risk and Uncertainties" and "Forward Looking Statements" sections at the end of this MD&A and as described in the Company's Annual Information Form for the year ended December 31, 2016, Additional information including this MD&A, Consolidated Financial Statements for the year ended December 31, 2017, the Company's Annual Information Form for the year ended December 31, 2016, and press releases have been filed electronically through the System for Electronic Document Analysis and Retrieval ("SEDAR") and are available online under the Kirkland Lake Gold Ltd. profile at www.sedar.com and on the Company's website (www.klgald.com).

NON - IEDS MEASURE

Certain non-IFRS measures are included in this MD&A, including overage realized gold price per ounce, operating cash costs and operating cash cost per ounce sold, all-in sustaining cost per ounce sold ("AISC"), free cash flows, adjusted net earnings from continuing operations, working capital and earnings before interest, taxes, depreciation and amortization ("EBITDA"). In the gold mining industry, these are common performance measures but may not be comparable to similar measures presented by other issuers. The Company believes that these measures, in addition to information prepared in accordance with IFRS, provides investors with useful information to assist in their evaluation of the Company's performance and ability to generate cash flow from its operations. Accordingly, it is intended to provide additional information and should not be considered in isolation or as aubitute for measures of performance prepared in accordance with IFRS, For further information, refer to the "Non-IFRS Measures" section of this MD&A.

The following additional abbreviations may be used throughout this MD&A: General and Administrative Expenses ("G&A"); Plant and Equipment ("PE"); Gold ("Au"); Ounces ("oz"); Grams per Tonne ("Mt"); Tonnes ("Mt"); Tonnes ("Mt"); Tonnes ("Mt"); Tonnes ("Mt"); Tonnes ("Mt"); Kilo Tonnes ("Mt"); Estimated True Width ("ETW"); and Life of Mine ("LOM").

COMPARATIVE INFORMATION

During the year ended December 31, 2016, the Company (as Kirkland Lake Gold Inc.) completed two separate business combinations: a plan of arrangement with Newmarket Gold Inc. ("Newmarket") which closed on November 30, 2016 and the acquisition of St Andrew Goldfields Ltd. ("St Andrew"), which closed on January 26, 2016. The results of operations for Newmarket and St Andrew are only included from their respective dates of acquisition. For more information please refer to the "Business Overview" section in this MD&A.

REPORTING CURRENCY

All amounts are presented in U.S. dollars ("5") unless otherwise stated. References in this document to "C\$" are to Canadian dollars and references to "A\$" ore to Australian dollars. Unless otherwise specified, all tabular amounts are expressed in thousands of U.S. dollars, except per share or per ounce amounts.



Table of Contents

BUSINESS OVERVIEW		3
CONSOLIDATED FINANCIAL AND OPERATIONAL HIGHLIGHTS		4
PERFORMANCE AGAINST 2017 GUIDANCE		7
FULL-YEAR 2018 GUIDANCE		9
LONGER-TERM OUTLOOK		10
EXTERNAL PERFORMANCE DRIVERS		11
REVIEW OF FINANCIAL AND OPERATING PERFORMANCE		14
REVIEW OF OPERATING MINES		20
GROWTH AND EXPLORATION		27
REVIEW OF FINANCIAL CONDITION AND LIQUIDITY		30
OFF-BALANCE SHEET ARRANGEMENTS		31
OUTSTANDING SHARE AND CONVERTIBLE EQUITY INFORMATION		31
QUARTERLY INFORMATION		32
COMMITMENTS AND CONTINGENCIES		33
RELATED PARTY TRANSACTIONS		34
CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS		34
ACCOUNTING POLICIES AND BASIS OF PRESENTATION	:	36
NON-IFRS MEASURES	:	37
INTERNAL CONTROLS OVER FINANCIAL REPORTING AND DISCLOSURE CONTROLS AND PROCEDURES		45
RISKS AND UNCERTAINTIES		45
FORWARD LOOKING STATEMENTS	!	56
INFORMATION CONCERNING ESTIMATES OF MINERAL RESERVES AND MEASURED, INDICATED AND INFERRED RESOURCES	!	57
TECHNICAL INFORMATION	!	58
CORPORATE INFORMATION	!	59



BUSINESS OVERVIEW

Kirkland Lake Gold Ltd. (individually, or collectively with its subsidiaries, as applicable, the "Company" or "Kirkland Lake Gold") is a mid-tier, Canadian, U.S. and Australian-listed, gold producer with four wholly owned underground operating mines in Canada and Australia. The Company's production profile is anchored by two high-grade, low-cost operations: the Macassa Mine ("Macassa") located in northeastern Ontario, in Agoding in Canada and the Fosterville Mine ("Fosterville") located in the state of Victoria, Australia. Kirliand Lake Gold also realizes additional gold production from its Taylor ("Paloy") and Hot ("Holl') mines located in northeastern Ontario. In Addition, the Company's business policion also includes two wholly owned mines currently on care and maintenance. The Cosmo Mine ("Holloway") in Northeastern Ontario was placed on care and maintenance effective Unes 30, 2017, while the Holloway Mine ("Holloway") in Northeastern Ontario was placed on care and maintenance effective December 31, 2016. The Stawell Mine ("Stawell") in Victoria, Australia was placed on care and maintenance in December 2016 and was sold as of December 21, 2017.

The Company also has a pipeline of growth projects and strategic investments and continues to conduct extensive exploration on its land holdings in Canada and Australia. The current exploration programs are focused on extending known zones of mineralization and testing for new discoveries in order to increase the level of mineral resources and reserves in support of future organic growth.

Kirkland Lake Gold is focused on delivering superior value for its shareholders and maintaining a position within the mining industry as a sustainable, leading low-cost gold producer. Through the advancement of its exploration and development project pipeline and by maintaining a large reserve and resource base of quality assets, Kirkland Lake Gold is focused on developing future production growth. The Company believes that the potential to identify new sources of production through exploration success, extending mine life at existing deposits, and utilizing excess milling capacity at each of its operations can support future organic growth to increase value for its shareholders.

In addition, Kirkland Lake Gold makes strategic investments in the common shares of other public issuers in instances where the Company can gain exposure to prospective mineral properties that offer the potential for future profitable gold production In the event that the prospective mineral properties owned by a public issuer in which Company invests results in the establishment of a sufficiently attractive economic deposit, the Company's intention would be to acquire ownership of the deposit.

On January 26, 2016, Old Kirkland Lake Gold inc. ("Old Kirkland Lake Gold'") acquired all the issued and outstanding common shares of St Andrew pursuant to a plan of arrangement (the "St Andrew Arrangement"). As a result of the St Andrew Arrangement, Old Kirkland Lake Gold acquired the Holt, Holloway, and Taylor Mines (collectively, the "Holt Mine Complex"). The St Andrew Arrangement was considered a business combination under IFRS with Old Kirkland Lake Gold being the acquirer for accounting purposes.

On November 30, 2016, Old Kirkland Lake Gold completed a plan of arrangement with Newmarket (the "Newmarket Arrangement"). As a result of the Newmarket Arrangement, Old Kirkland Lake Gold became a wholly-owned subsidiary of Newmarket, and Newmarket was subsequently renamed Kirkland Lake Gold Ltd. The Newmarket Arrangement was considered a business combination under IFRS with Old Kirkland Lake Gold being the acquirer for accounting purposes.

Effective December 6, 2016, Kirkland Lake Gold's common shares began trading on the Toronto Stock Exchange ("TSK") under the symbol "KL" and began trading on the OTCQX under the symbol "KLGDF" effective January 19, 2017. Effective August 16, 2017, the Company's common shares began trading on the New York Stock Exchange under the symbol "KL" and, concurrent with this listing, was de-listed from the OTCQX. Effective November 30, 2017, the Company's common shares were listed on the Australian Securities Exchange under the symbol "KLA". During 2017, the Company also had unsecured convertible debentures of Iold Kirkland Lake Gold, the CS62.1 million 7.5% debentures (the "7.5% Debentures"), which traded on the TSX under the symbol KLG.DB.A. These debentures matured on December 31, 2017, with over 99% of the debentures being converted into the Company's common shares, and the remainder being repaid in cash (see the luguidity and financial Condition Review of this MD&A for more information). The Company's CS56.8 million 6% unsecured convertible debentures (the "6% Debentures"), which were traded under the symbol KLG.DB, were repaid from existing cash resources on June 30, 2017, the maturity date for the issue.

During 2017, the Company made strategic investments in a number of junior exploration companies based in Canada and Australia. The largest of these investments was a \$61.0 (C\$74.9) million investment, made by way of private purchase and a



Q4 2017 MANAGEMENT'S DISCUSSION AND ANALYSIS

private placement financing, to acquire an aggregate 25.8 million common shares of Novo Resources Corp. ("Novo"), representing an 16.98% ownership interest at the time of acquisition. As part of a private placement financing to acquire 14.0 million common share purchase warrants, each entitling the Company to acquire a common share of Novo at a price of C\$6.00 until September 6, 2020, subject to certain acceleration rights held by Novo. Novo is a TSX Venture-listed junior exploration company that controls a 12,000 km 2 land package in the Pilbara Region of Western Australia.

On December 21, 2017, the Company completed a transaction to sell to an affiliate of Arete Capital Partners Ltd. ("Arete") all the issued and outstanding common shares of its indirectly held wholly owned subsidiary, Stawell Gold Mines Pty Ltd., which held the Stawell Mine. Pursuant to the terms of the transaction, the Company received \$6.25 million in cash consideration upon closing and retains a 2.5% net smelter return royalty on the Stawell Mine. An after-tax loss of \$24.9 million and \$4.6 million were included in discontinued operations for 2017 and 2016, respectively.

The comparative information in this MD&A and for the audited Consolidated Financial Statements for the year ended December 31, 2016 is that of Old Kirkland Lake Gold, with the results of operations of St Andrew consolidated from the date of acquisition, being January 26, 2016.

CONSOLIDATED FINANCIAL AND OPERATIONAL HIGHLIGHTS

The following is a summary of the Company's financial and operational results for the year ("2017") and three ("Q4 2017") months ended December 31, 2017. Results for the full-year ("2016") and three months ("Q4 2016") ended December 31, 2016, which are discussed for comparison purposes to 2017 and Q4 2017, include the Company's Australian operations from November 30, 2016, following the completion of the Newmarket Arrangement. Comparison of results for 2017 to 2016 include results from the Holt Mine Complex from January 26, 2016, following completion of the St Andrew Arrangement. In addition, results for 2016 and Q4 2016 presented in this MD&A have been restated to exclude discontinued operations, which includes the results of the Stawell Mine during these periods. A more detailed analysis is provided throughout this MD&A.

(in thousands of dollars, except per share amounts)	Three Months Ended December 31, 2017	Three Months Ended December 31, 2016 (Restated)	Year Ended December 31, 2017	Year Ended December 31, 2016 (Restated)
Revenue	\$212,364	\$130,901	\$747,495	\$403,340
Production costs	68,283	60,625	288,315	192,842
Earnings before income taxes	54,799	17,698	196,079	79,767
Loss from discontinued operations	(24,904)	(4,627)	(24,904)	(4,627)
Net earnings	\$40,980	\$3,076	\$132,426	\$42,107
Basic earnings per share from continuing operations	\$0.32	\$0.05	\$0.76	\$0.39
Basic earnings per share	\$0.20	\$0.02	\$0.64	\$0.35
Diluted earnings per share	\$0.20	\$0.02	\$0.63	\$0.34
Cash flow from operating activities of continuing operations	103,351	68,456	309,812	186,981
Cash investment on mine development and PPE	38,832	23,111	131,840	73,051



		Three Months Ended December 31, 2016		
	Three Months Ended December 31, 2017	(Restated)	Year Ended December 31, 2017	Year Ended December 31, 2016 (Restated)
Tonnes milled	454,897	437,601	1,974,093	1,271,670
Grade (g/t Au)	11.8	7.5	9.8	7.9
Recovery (%)	96.3%	93.6%	95.7%	95.1%
Gold produced (oz)	166,579	105,757	596,405	313,653
Gold Sold (oz)	165,715	111,690	592,674	326,687
Averaged realized price (\$/oz sold) (1)	1,282	1,202	1,261	1,234
Operating cash costs per ounce (\$/oz sold) (1)	412	533	481	571
AISC (\$/oz sold) (1)	816	900	812	930
Adjusted net earnings from continuing operations (1)	71,153	22,806	149,133	67,851
Adjusted net earning per share from continuing operations (1) (1) Non-IFRS - the definition and reconciliation of these Non-IFRS measures are included on pages 37-44 of the	\$0.34 is MD&A.	\$0.16	\$0.72	\$0.56

2017 Highlights

- Production growth: 2017 production totaled 596,405 ounces, a 90% increase from 313,653 ounces in 2016 when consolidated production included the Company's Australian operations only from November 30, 2016 and for the Holt Mine Complex from January 26, 2016.

 Improved unit costs: Total production costs in 2017 were \$288.3 million, which compared to \$192.8 million he previous year, with the increase reflecting higher business volumes resulting from higher tonnes and higher grades in 2017. Operating cash costs per ounce sold averaged \$481., a \$509 per ounce or 10% better than the previous year.

 \$481., a \$509 per ounce or 10% better than the previous year.

 \$500 per ounce or 10% better than the previous year.

 \$500 per ounce or 10% better than the previous year.

 \$500 per ounce or 10% better than the previous year.

 \$500 per ounce or 10% better than the previous year.

- 2016.
 Solid earnings performance: Net earnings in 2017 totaled \$132.4 million (\$0.64 per basic share), an increase of \$90.3 million or 214% from net earnings of \$42.1 million (\$0.35 per basic share) in 2016. The increase in net earnings largely reflected the impact of increased production and revenue, lower unit costs and a lower effective tax rate. These factors more than offset higher levels of production costs, depletion and depreciation expenses and significantly higher exploration spending compared to 2016. Net earnings in 2017 consisted of earnings from continuing operations of \$157.3 million and a loss from discontinued operations of \$24.9 million (\$0.72 adjusted net earnings from continuing operations), representing growth of \$81.2 million or 120% from \$57.3 million in 2016. The exclusion from adjusted net earnings from continuing operations in 2017 of the \$24.9 million of transactions were higher than net earnings and to the exclusion of transaction of transaction costs, mainly related to the completion of the Newmarket Arrangement, the impact of purchase placet of purchase of the war. In 2016, adjusted net earnings from continuing operations for the \$24.9 million of transactions were higher than net earnings due to the exclusion of transaction of transaction costs, mainly related to the completion of the Newmarket Arrangement, the impact of purchase allocation adjustments on acquired metal inventory, and a loss from discontinued operations.

 Significant commitment to explorations. Significant commitment to exploration and evaluation expenditures in 2017 totaled \$48.4 million, more than triple the \$15.8 million of exploration expenditures in 2016. During 2017, the Company announced significant extensions to high-grade mineralization at the Swan Zone at Fosterville, the South Mine Complex at Macassa and the Lantern Deposit at the Cosmo Mine. In addition, new areas of high-grade gold mineralization were intersected at the Taylor Mine up to 1.8 km east of the Shaft Deposit and at depth below the West Porp
- Swan Zone at Fosterville, the South Mine Complex at Macassa and the Lanterin Deposit at the Cosho mine. In absolution, see the Company's December 31, 2017 Mineral Reserves and Mineral Resource estimates included a 36% increase in consolidated Mineral Reserves to 4.6 million ounces at an average grade of 11.1 grams per tonne. Also included in the estimates were growth in both Mineral Reserves and Mineral Reserves reaching 1,700,000 ounces at an average grade of 23.1 grams per tonne, a doubling of the Swan Zone at



- Fosterville, with Mineral Reserves totaling 1.2 million ounces at 61.2 grams per tonne, and a 58% increase in Measured and Indicated Mineral Resources at Macassa, to 2.1 million ounces at an average grade of 17.1 grams per tonne.
- Solid financial position: Cash totaled \$231.6 million at December 31, 2017 compared to \$234.9 million at December 31, 2016.
- Convertible debentures eliminated: During 2017, the Company's outstanding convertible debentures were eliminated with \$43.8 (C\$56.8) million being paid to redeem the 6.0% Debentures at maturity on June 30, 2017 and more than 99% of the C\$62.0 million 7.5% Debentures being converted into 4,505,393 commons shares in December 2017.
- Repurchased 5.4 million common shares: The Company repurchased 5.4 million common shares is The Company repurchased 5.4 million common shares in 2017 for a total of \$60.1 (C\$76.5) million through a normal course issuer bid ("NCIB") initiated in May 2017. Dividends: The Company introduced a dividend policy in March 2017, with an initial quarterly dividend payment of \$0.01 per share paid in July 2017 and October 2017. The dividend increased to \$0.02 per share
- sed to \$0.02 per share effective the January 15, 2018 payment
- Strategic investments: A number of strategic investments were made during 2017, including investments of approximately \$61.0 (C\$74.9) million in Novo, \$6.9 (C\$8.9) million in Bonterra Resources Inc., \$6.4 (C\$8.6) million in Metanor Resources Inc. and \$3.8 (C\$4.9) million in De Grey Mining Limited.

Q4 2017 Highlights

- Record quarterly production: Q4 2017 production totaled 166,579 ounces, a 56% increase from Q4 2016 and 20% higher than Q3 2017. Lower unit costs: Q4 2017 production costs totaled 568.3 million compared to production costs of \$60.6 million in Q4 2016 and \$65.5 million in Q3 2017. Operating cash cost per ounce sold in Q4 2017 averaged \$412, a 23% improvement from \$533 in Q4 2016 and 15% better than \$482 the previous quarter. AISC per ounce sold averaged \$412, a 23% improvement from \$533 in Q4 2016 and \$45.5 million in Q3 2017. Totaled \$41.0 million operation sold totaled \$103.4 million compared to \$68.5 million in Q4 2016 and \$66.8 million in Q4 2016 and \$66.8 million in Q4 2017 totaling \$64.5 million, 42% and 105% higher than \$45.3 million in Q4 2016 and \$31.5 million in Q3 2017, respectively.

 Solid earnings growth: Net earnings in Q4 2017 totaled \$41.0 million (\$0.02 per basic share), which compared to net earnings of \$3.1 million (\$0.02 per basic share) in Q4 2016 and \$43.8 million in Q3 2017, because the previous quarter. Net earnings for Q4 2017 consisted of earnings from continuing operations totaling \$65.9 million and a loss from discontinued operations of \$24.9 million related to the sale of the Company's 154.0 million compared to 104.0 m



6 | Page

Dividend payment: The Company's second quarterly dividend of \$1.7 (C\$2.1) million or C\$0.01 per share was made on October 16, 2017. On December 15, 2017, the Company announced an increase to the Q4 dividend payment from C\$0.01 to C\$0.02 as this was determined for shareholders of record on December 29, 2017.

PERFORMANCE AGAINST 2017 GUIDANCE

Kirkland Lake Gold achieved all of the Company's consolidated production and unit cost guidance for full-year 2017. A number of revisions were made to the Company's guidance during the year. Guidance for consolidated production and AISC per ounce sold were improved three times. Consolidated production guidance began the year at 500,000 - 525,000 ounces and was ultimately improved to 580,000 - 595,000 ounces on November 2, 2017. AISC per ounce sold guidance commenced 2017 at 5950 - \$1,000 with the final improvement resulting in a target range of \$800 - \$825. Other revisions to consolidated guidance during 2017 included: two improvements to operating cash not sper ounce sold guidance, which began the year at \$625 - \$675 and was ultimately established at \$475 - \$500 on November 2, 2017, a revision to sustaining and growth capital expenditure guidance from \$150 - \$200 million to \$120 - \$180 to \$120 - \$180 to \$120 - \$180 to \$120 to \$

2017 Guidance (as at November 2, 2017)

		Canadian Mines		Australian Mines		
(\$ millions unless otherwise stated)	Macassa	Taylor	Holt	Fosterville	Northern Territory (3)	Consolidated
Gold production (kozs)	190 - 195	50 - 55	65 - 70	250 - 260	20	580 - 595
Operating cash costs/ounce sold (\$/oz) (2)(5)	\$520 - \$550	\$575 - \$625	\$670 - \$725	\$260 - \$280	\$1,500 - \$1,600	\$475 - \$500
AISC/ounce sold (\$/oz) (2)(5)						\$800 - \$825
Operating cash costs (2)						\$270 - \$280
Royalty costs						\$20 - \$25
Sustaining and growth capital (5)						\$160 - \$180
Exploration and evaluation						\$45 - \$55
Corporate G&A expense (4)						\$20

- Corporate (SiA expense (4)

 Represents the Company's quidance for which the three-month period ended December 31, 2017 was measured against.

 (2) Operating cash costs, operating cash costs operating cash costs of expense used in production costs as prevaled in the Costander Research of the R

2017 Performance

		Canadian Mines			ralian Mines		
(\$ millions unless otherwise stated)	Macassa	Taylor	Holt	Fosterville	Northern Territory (3)	Consolidated (2)	
Gold production (kozs)	194,237	50,764	66,677	263,845	20,595	596,405	
Operating cash costs/ounce sold (\$/oz) (1)(4)	\$523	\$610	\$685	\$264	\$1,661	\$481	
AISC/ounce sold (\$/oz) (1)(4)						\$812	
Operating cash costs (1)						\$285.3	
Royalty costs						\$21.4	
Sustaining and growth capital (4)						164.5	
Exploration and evaluation						\$48.4	
Corporate G&A expense (5)						\$21.7	

- Trate USA. expense (1)
 Operating cash costs, operating cash costs/ounce and AISC/ounce sold reflect an overage USS to CS exchange rate of 1.2965 and a USS to AS exchange rate of 1.3041
 Consolidated 2017 production includes 287 ounces processed from the Holloway Mine.
 Northern Territory includes Cosmo Mine and Union Rest[4] Mil. The Cosmo Mine was piaced on care and maintenance effective June 30, 2017 (see News Release dated May 4, 2017).
 Non-HRS*. The definition and reconciliation of these Non-HRS measures are included on pages 37-46 of this MDBA.
 Includes general and administrative costs and severance properties. Evaluate and cost on sharp control and pages 30, 2017 (see News Release dated May 4, 2017).

- Consolidated gold production for 2017 of 596,405 ounces exceeded the Company's improved guidance for the year of 580,000 595,000 ounces. All of the Company's operating mines achieved or exceeded their respective production guidance. The primary factor driving the strong consolidated production performance and multiple increases in guidance was the performance at Fosterville, where grades outperformed expected levels for much of the year, including during Q4 2017 when the mine achieved its highest ever quarterly average grade of 21.5 grams per tonne. Fosterville's torol toricon guidance was increased twice during 2017 from 140,000 160,000 ounces in 194,237 ounces achieved the top end of the improved guidance range of 190,000 195,000 ounces. Production guidance was as increased on May 4, 2017 from 180,000 185,000 ounces on the anticipation of higher run-of-mine tonnage over the balance of the year. Both run-of-mine tonnage run average grades at Macassa increased from comparable 2016 levels. Guidance for the Mine of 55,000 07,000 ounces ermained unchanged throughout 2017, with the mine's production of 66,677 ounces achieving the target range of 50,000 55,000 ounces, which had been revised from 55,000 ounces on August 2, 2017.
- Production costs for the year totaled \$288.3 million. Operating cash costs of \$285.3 million in 2017 exceeded the guidance range of \$270 \$280 million due mainly to the higher than expected production volumes during the year.
- Operating cash costs per ounce sold for 2017 averaged \$481, in the low end of the improved guidance range of \$475 \$500. Operating cash costs at Fosterville averaged \$264 per ounce sold, achieving guidance of \$260 \$280, which had been improved on August 2, 2017 from \$310 \$300. Higher than expected grades were the main factor contributing to Fosterville's low unit operating cash costs during the year. Macassa's operating cash costs of \$523 per ounce sold were in the low end of the improved target range of \$520 \$550, which had been revised from \$552 \$568 per ounce sold on \$400 + \$400
- AISC per ounce sold averaged \$812 for 2017, in line with the improved guidance of \$800 \$825. In addition to a solid operating cash cost performance, discussed above, the Company's strong AISC performance also reflected lower than anticipated levels of sustaining capital expenditures on a per ounce sold basis.



KL KIRKLAND LAKE GOLD

- Royalty costs totaled \$21.4 million for 2017, which was in the low end of the Company's full-year 2017 guidance of \$20 \$25 million.
- Sustaining and growth capital for 2017 totaled \$164.5 million, which was in line compared to the Company's revised guidance of \$160 \$180 million. Sustaining capital expenditures for the year totaled \$147.7 million, with growth capital expenditures totaling \$16.8 million. The revision of the Company's guidance on August 2, 2017 from \$180 \$200 million largely reflected lower than expected levels of capital development, primarily at Macassa and Holt, due to revisions to mine sequencing plans and, in some cases, the deferral of development work.
- Exploration expenditures totaled \$48.4 million, consistent with the Company's full-year 2017 guidance of \$45 \$55 million.
- Corporate G&A expense for 2017 totaled \$21.7 million, which compared to revised guidance of \$20.0 million. The higher than expected corporate G&A expense was mainly due to additional consulting and legal fees related to initiatives undertaken during the year.

FULL-YEAR 2018 GUIDANCE

Exploration and evaluation

Corporate G&A expense (3)

On January 17, 2018, Kirkland Lake Gold released full-year guidance for 2018 (see News Release dated January 17, 2018). Compared to the Company's full-year 2017 results, the Company's 2018 guidance includes increased production, improved unit costs and higher levels of capital and exploration expenditures in support of the Company's longer-term objective of growing annual gold production over the next five to seven years to approximately a million ounces. A review of the Company's full-year 2018 guidance is provided below.

(\$ millions unless otherwise stated) Fosterville Macassa Taylor Consolidated (2) Gold production (kozs) 65 - 75 260 - 300 215 - 225 60 - 70 +620 475 - 500 \$425 - \$450 Operating cash costs/ounce sold (\$/oz) (1)(2) 625 - 650 625 - 650 270 - 290 AISC/ounce sold (\$/oz) (1)(2) \$750 - \$800 Operating cash costs (1) \$260 - \$270 Royalty costs \$22 - \$27 \$150 - \$170 Sustaining capital (2) \$85 - \$95

- Operating ask costs, operating cosh costs/ounce and AISC/ounce sold reflect an overage US\$ to C\$ exchange rate of 1.300 and a US\$ to A\$ exchange rate of 1.300 Non-IR\$5. The definition and reconciliation of these Non-IR\$5 measures are included on pages 37.44 of its MD&A.

 Includes general and administrative costs and severance payments. Excludes non-cash share-based payment expense.
- Consolidated gold production in 2018 is targeted at over 620,000 ounces, an increase from the 596,405 ounces produced in 2017. Production is expected to increase at both Macassa (2017 production of 194,237 ounces) and Taylor (2017 production totaled 50,764). Production at Holt is expected to be similar to the 2017 production level of 66,677 ounces. Fosterville is also targeting to have similar production to 2017, when the mine produced 263,845 ounces, as the impact of mining lower-grade stopes, due to mine sequencing, is offset by the benefit of initial stope production from the high-grade Swan Zone in the second half of 2018. The wide target range for production at Fosterville reflects the potential for production growth to be achieved in the event that the mine continues to benefit from positive grade reconciliations, as was the case throughout much of 2017.
- Operating cash costs per ounce sold are expected to average \$425 \$450, which compares to full-year 2017 operating cash costs of \$481 per ounces sold. The improvement in operating cash costs per ounce sold in 2018 is largely expected to result from higher grades at the Macassa Mine.
- AISC per ounce sold in 2018 are expected to improve from the comparable full-year 2017 level of \$812. AISC for full-year 2018 are targeted at \$750 \$800 in 2018, with the anticipated year-over-year improvement expected to result



\$75 - \$90

\$20 - \$22

from lower operating cash costs per ounce sold, which is expected to more than offset higher levels of sustaining capital expenditures per ounce sold.

- Operating cash costs for 2018 are estimated at \$260 \$270 million, which compares favourably to full-year 2017 operating cash costs of \$285.3 million. Operating cash costs at each of the Company's operating mines are expected to be similar to comparable 2017 levels. The anticipated reduction in consolidated operating cash costs results from the placement of the Cosmo Mine on care and maintenance on June 30, 2017, and the Company's expectation that the mine will remain on care and maintenance throughout 2018.
- Royalty costs in 2018 are estimated at \$22 \$27 million, which compares to total royalty expense of \$21.4 million for full-year 2017.
- Sustaining capital expenditures in 2018 are targeted at \$150 \$170 million, which compares to total sustaining capital expenditures of \$147.7 million for full-year 2017. Higher sustaining capital expenditures in 2018 are expected at Fosterville, reflecting planned investments that will support multiple years of production. Included in the investments is extensive underground development to access and commence production from the Swan Zone in the Lower Phoenix gold system and from the Harrier South Zone in the Harrier gold system. Also included in sustaining capital expenditures at Fosterville will be upgrades to the mine's mobile equipment fleet and investments in the grinding, gravity and BIOX* circuits in the Fosterville mill.
- Growth capital expenditures are estimated at \$85 \$95 million in 2018, which compares to total growth capital expenditures of \$16.8 million for full-year 2017. Of planned growth capital expenditures in 2018, approximately \$45 million are at Macassa, and relate to the commencement of two key multi-year projects, the sinking of a new shaft and construction of a new tailings impoundment area, with the latter targeted for completion in 2019. Growth capital at Fosterville in 2018 is estimated at approximately \$35 million with major projects planned for the year including a new ventilation system, involving driving two vent raises, construction of a paste fill plant and establishment of a new water treatment plant in support of future production growth and effective environmental management.
- Exploration and evaluation expenditures in 2018 are expected to increase to 575 590 million from \$48.4 million in 2017. Of planned exploration expenditures, approximately \$60 \$75 million are targeted for the Company's Australian operations, where the Company is planning extensive exploration drilling and development at both Fosterville and in the Northern Territory. Exploration work at Fosterville will focus on extending known mineralized zones, testing for new mineralized structures in the current mining area, and completing exploration work at a number of district targets within newly granted exploration licenses. Exploration work in the Northern Territory will focus on development and drilling aimed at improving the understanding of the Lantern Deposit at Cosmo, as well as drilling to evaluate a number of other regional targets as the Company works towards establishing a five-year production plan for the Cosmo Mine and Union Mine and Union Refs Mill that is sufficiently attractive to support a resumption of operations. Lower levels of exploration drilling are planned for the Canadian operations, with planned work to focus on underground drilling at Macassa for resource replacement and expansion and both surface and underground drilling at Taylor targeting additional expansion of mineralization around the Shaft and West Porphyry deposits.
- Corporate G&A expense in 2018 is targeted at \$20 \$22 million, similar to the \$21.7 million of corporate G&A reported for full-year 2017.

LONGER-TERM OUTLOOK

Kirkland Lake Gold is committed to generating returns for shareholders by achieving high levels of operational excellence, effectively allocating capital and growing low-cost, high-margin production. The Company expects to achieve continued year-over-year production growth with a longer-term objective of reaching a million ounces of annual production from existing mines within the next five-to-even years. Af Fosterville, the Company is targeting production growth to over 400,000 ounces per year within the next twe-to-even years flowing the completion of a new shaft, swan Zone, and additional mining fronts are established. In Canada, production at Macassa is expected to grow ear over this same period, with a longer-term target of reaching over 400,000 ounces per year were the next five-to-even years flowing the completion of a new shaft, announced on January 17, 2018. The Company is also working to increase production at the Taylor Mine and, with continued exploration success, is advancing plans to resume operations in the Northern Territory of Australia in 2019. Kirkland Lake Gold's significant cash balance and strong financial position provides financial flexibility to support the Company's growth plans, including

KL KIRKLAND LAKE GOLD

10 | Page

continued aggressive exploration of both near-term and longer-term opportunities on the Company's district-scale land positions in Canada and Australia.

EXTERNAL PERFORMANCE DRIVERS

The Company's results of operations, financial position, financial performance and cash flows are affected by various business conditions and trends. The variability of gold prices, fluctuating currency rates and increases and/or decreases in costs of materials and consumables associated with the Company's mining activities are the primary economic factors that have impacted financial results during the three months and year ended December 31, 2017. The Company's key internal performance drivers are production volumes and costs which are discussed throughout this MD&A, specifically in sections, "Review of Operating Mines" and "Consolidated Financial Review". The key external performance drivers are the price of gold and foreign exchange rates.

C-14 D-1-

The price of gold is a significant external factor affecting profitability and cash flow of the Company and therefore, the financial performance of the Company is expected to be closely linked to the price of gold. The price of gold is subject to volatile fluctuations over short periods of time and can be affected by numerous macroeconomic conditions, including supply and demand factors, value of the US dollar, interest rates, and global economic and political issues.

At December 31, 2017, the gold price closed at \$1,297 per ounce (based on the closing price on the London Bullion Market Association ("LBMA") pm fix), which is 13% higher than the closing gold price on December 31, 2016 of \$1,146 per ounce. The Company's average realized gold price for 2017 was \$1,261 per ounce, 2% higher than the average gold price of \$1,224 per ounce during the same period in 2016.

As at December 31, 2017, the Company did not have a precious metals hedging program and management believes the Company is well positioned to benefit from potential increases in the price of gold while continuing to focus on cost management, mine efficiencies and low-cost gold production from its existing mines.

Foreign Exchange Rates

The Company's reporting currency is the US dollar; however, the operations are located in Canada and Australia, where its functional currencies are the Canadian and Australian dollars, respectively. Consequently, the Company's operating results are influenced significantly by changes in the US dollar exchange rates against these currencies. Weakening or strengthening Canadian and Australian dollars respectively decrease or increase costs in US dollar terms at the Company's Canadian and Australian operations, as a significant portion of the operating and capital costs are denominated in Canadian and Australian dollars. The impact of the Australian dollar fluctuations only impact the Company's operating from the date of the acquisition of Newmarket which closed on November 30, 2016.

As at December 31, 2017, the Australian dollar closed at \$0.7800 (strengthening by 8% during the year) and the Canadian dollar closed at \$0.7952 (strengthening by 7% in 2017) against the US dollar. The average rates for 2017 for the Australian and Canadian dollars were \$0.7668 and \$0.7713, respectively, against the US dollar. For 2016, the average rate for the Canadian dollar was \$0.7551. The Company had exposure to exchange rates involving the Australian dollar only from November 30, 2016 to the end of that year. During that period, the average exchange rate for the Australian dollar was \$0.7493.

Consistent with gold prices, currency rates can be volatile and fluctuations can occur as a result of different events, including and not limited to, global economies, government intervention, interest rate changes and policies of the U.S. administration. As at December 31, 2017, the Company did not have a foreign exchange hedging program in place to guard against significant fluctuations in the Canadian, US or Australian dollar.

UPDATED RESOURCE AND RESERVES

On February 20, 2018, the Company provided updated Mineral Reserve and Mineral Resource estimates as at December 31, 2017.

Technical reports prepared in accordance with National Instrument 43-101 supporting the 2017 Mineral Reserve and Mineral Resource estimates will be filed under the Company's SEDAR profile of on or before March 30, 2018.



D LAKE GOLD 11 | Page

Highlights of the Mineral Reserve and Mineral Resource estimates for December 31, 2017 include:

- Consolidated Mineral Reserves increased 36% to 4,640,000 ounces @ 11.1 grams per tonne ("g/t") versus 3,420,000 ounces @ 9.0 g/t at December 31, 2016.
- Mineral Reserves at Fosterville increased 1,210,000 ounces or 247% from December 31, 2016 to 1,700,000 ounces with an average grade of 23.1 g/t (65% increase in Mineral Reserve ounces from mid-year 2017 Mineral Reserve and Mineral Resource estimate effective June 30, 2017). Measured and Indicated Mineral Resources increased 59% from December 31, 2016 to 4,190,000 ounces at an average grade of 8.4 g/t (inclusive of Mineral Reserves); Inferred Mineral Resources more than doubled to 1,900,000 ounces at an average grade of 7.1 grams per tonne. Significant growth in Mineral Resources and Mineral Resources at Fosterville expected to result in reduced depreciation and depletion expense in 2018 compared to 2017.
- Fosterville Swan Zone Mineral Reserves more than doubled from the initial Mineral Reserve estimate dated June 30, 2017, to 1,160,000 ounces @ 61.2 g/t from 532,000 ounces @ 58.8 g/t. Measured and Indicated Mineral Resources at Swan Zone totaled 171,000 ounces at an average grade of 116 g/t, while Inferred Mineral Resources totaled 671,000 ounces at an average grade of 36.6 g/t.
- Mineral Reserves replaced at Macassa after depletion of 190,000 ounces, with Mineral Reserves at December 31, 2017 totaling 2,030,000 ounces at an average grade of 21.0 g/t.
- 58% increase in Measured and Indicated Mineral Resources at Macassa to 2,090,000 ounces at an average grade of 17.1 g/t, with Inferred Mineral Resources increasing 48%, to 1,370,000 ounces at an average grade of 22.2 g/t.
- Taylor mine Mineral Reserves increase 29% to 167,000 ounces at an average grade of 4.8 g/t; exploration drilling continues to focus on identifying new areas of gold mineralization near infrastructure.

Mineral Reserves and Mineral Resources as at December 31, 2017 were estimated using a long-term gold price of \$1,280 per ounce (C\$1,600 per ounce; A\$1,600 per ounce). All Mineral Resource estimates for the Company's Canadian operations are exclusive of Mineral Resource with the June 30, 2017 Mineral Resource and Mineral Resource estimate for Fosterville, the Company's Australian operations commenced reporting Mineral Resources exclusive of Mineral Resources. Prior to June 30, 2017, the Australian operations had reported Mineral Resources inclusive of Mineral Resources are provided for Fosterville and the Northern Territory in Australia as at December 31, 2017 both inclusive and exclusive of Mineral Reserves to provide for meaningful comparisons to prior periods. All Inferred Mineral Resources are exclusive of Mineral Reserves.

CONSOLIDATED MINERAL RESERVE ESTIMATE (EFFECTIVE DECEMBER 31, 2017)

		December 31, 2017	December 31, 2016			
	Tonnes (000's)	Grade (g/t)	Gold Ozs (000's)	Tonnes (000's)	Grade (g/t)	Gold Ozs (000's)
Macassa	3,010	21.0	2,030	3,000	20.8	2,010
Taylor	1,090	4.8	167	743	5.4	129
Holt	3,600	4.2	486	3,950	4.5	570
Hislop (1)	176	5.8	33	176	5.8	33
Holloway (1)	54	5.8	10	58	5.7	10
Total Canadian Operations	7,930	10.7	2,730	7,930	10.8	2,750
Fosterville	2,290	23.1	1,700	1,560	9.8	490
Northern Territory (1)	2,800	2.4	215	2,400	2.3	177
Total Australian Operations	5,090	11.7	1,910	3,690	5.3	667
Total	13,020	11.1	4,640	11,890	9.0	3,420

<sup>3,420
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0 70
1,0</sup>



KL KIRKLAND LAKE GOLD

12 | Page

The following table compares the mineral reserve estimate for Fosterville mine as at December 31, 2017 to the June 30, 2017 mid-year update (see Company news release dated July 27, 2017).

	December 31, 2017			June 30, 2017		
	Tonnes (000's)	Grade (g/t)	Gold Ozs (000's)	Tonnes (000's)	Grade (g/t)	Gold Ozs (000's)
Fosterville	2,290	23.1	1,700	1,790	17.9	1,030

Footnotes related to Mineral Reserve Estimates (dated December 31, 2017)

- (1) ClM definitions (2014) were followed in the calculation of Minoral Reserves.

 (2) Mineral Reserves were estimated using a long-term gold price of US\$1,280/oz (C\$1,600/oz; A\$1,600/oz).

 (3) Cut-off grades for Canadian Assets were calculated for each stope, including the costs of: mining, milling, General and Administration, royalties and capital expenditures and other modifying factors (e.g. dilution, mining extraction, mill recovery.

 (4) Cut-off grades for Australian Assets from 04 grades for Australian Assets from 04

CONSOLIDATED MEASURED & INDICATED MINERAL RESOURCES (EFFECTIVE DECEMBER 31, 2017)

Measured & Indicated		December 31, 2017			December 31, 2016		
	Tonnes (000's)	Grade (g/t)	Gold Ozs (000's)	Tonnes (000's)	Grade (g/t)	Gold Ozs (000's)	
Macassa	3,800	17.1	2,090	2,480	16.6	1,320	
Taylor	1,830	6.2	370	2,760	5.6	493	
Holt	6,510	4.1	860	6,970	4.2	947	
Aquarius	22,300	1.3	930	22,300	1.3	930	
Holloway	1,370	5.3	230	1,370	5.3	230	
Hislop	1,150	3.6	130	1,150	3.6	130	
Ludgate	520	4.1	70	522	4.1	68	
Canamax	240	5.1	40	240	5.1	39	
Total Canadian Operations	37,720	3.9	4,720	37,790	3.4	4,160	
		December 31, 2017		December 31, 2016			
			Inclusive of I	Reserves			
Fosterville	15,500	8.4	4,190	14,700	5.6	2,640	
Northern Territory	26,900	2.3	1,940	30,700	2.2	2,180	
	42,400	4.5	6,130	45,400	3.3	4,820	
		December 31, 2017			June 30, 2017		
			Exclusive of	Reserves			
Fosterville	13,900	4.8	2,150	13,700	4.4	1,940	
Northern Territory	24,100	2.3	1,810		Unavailable		
	38,000	3.2	3,960		Unavailable		

CONSOLIDATED INFERRED MINERAL RESOURCES (EFFECTIVE DECEMBER 31, 2017)

Inferred		December 31, 2017			December 31, 2016	
	Tonnes (000's)	Grade (g/t)	Gold Ozs (000's)	Tonnes (000's)	Grade (g/t	Gold Ozs (000's)
Macassa	1,920	22.2	1,370	1,420	20.2	924
Taylor	2,570	5.2	430	1,810	5.4	313
Holt	8,000	4.8	1,220	8,690	4.7	1,320
Holloway	2,710	5.2	460	2,710	5.2	456
Hislop	800	3.7	100	797	3.7	95
Ludgate	1,400	3.6	160	1,400	3.6	162
Card	240	3.3	30	_	-	_
Canamax	170	4.3	20	170	4.3	23
Runway	210	3.7	20	_	-	-
Total Canadian Operations	18,020	6.6	3,810	17,000	6	3,290
Fosterville (1)	8,280	7.1	1,900	5,400	4.6	792
Northern Territory	16,300	2.5	1,280	15,100	2.3	1,110
Total Australian Operations	24,580	4.0	3,180	20,500	2.9	1,900

(1) Inferred mineral resources at Fosterville as at June 30, 2017 included 5,560,000 tonnes at an average grade of 5.8 g/t for 1,040,000 ounces.

Footnotes related to Mineral Resource Estimates for Canadian Assets (dated December 31, 2017)

- (1) CIM definitions (2014) were followed in the calculation of Mineral Resource.
 (2) Mineral Resources are reported Exclusive of Mineral Resources were calculated according to KL Gold's Mineral Resource Estimation guidelines.
 (3) Mineral Resource estimates were prepared under the supervision of D. Cater, P. Geo. Vice President Exploration Canada.
 (4) Mineral Resources are estimated using a 5-6 g/t cut-off grade for Miscassa, a 2-9 g/t cut-off grade for Taylor, a 3-9 g/t cut-off grade for Canamax, Card, Runway and Ludgate, a 2.2 g/t cut-off grade for Hisiop and 0 g/t cut-off grade for Canamax.
- Aquarius.
 (6) Totals may not add up due to rounding.

Footnotes related to Mineral Resource Estimates for Australian Assets (dated December 31, 2017)

- (1) CIM definitions (2014) were followed in the estimation of Mineral Resource.

 (2) Mineral Resources are estimated using a long-term gold price of US\$1.280/oz (A\$1,600/oz)

 (3) Mineral Resources for the Australian assets are reported exclusive and inclusive of Mineral Reserves to allow for meaningful comparison to prior periods.

 (4) Mineral Resources to Texterville were estimated using cut-off grades 0.7 g/t. Au for oxide and 1.0 g/t. Au for suidle mineralization to potentially open-pitable depths of approximately 100m, below which a cut-off grade of 3.0 g/t Au was used.

 (5) Mineral Resources in the Northern Territory were estimated using cut-off grade of 0.5 g/t. Au for opentially open pit mineralization and cut-offs of 1.0 to 2.0 g/t Au for underground mineralization.

 (6) Mineral Resource estimates for the Fosterville property were prepared under the supervision of Troy Fuller, MAIG.

 (7) Mineral Resource estimates for the Northern Territory properties were prepared under the supervision of Mark Edwards, FAusiMM (CP).

 (8) Totals may not add up due to rounding.

REVIEW OF FINANCIAL AND OPERATING PERFORMANCE

The following discussion provides key summarized consolidated financial and operating information for the three months and year ended December 31, 2017. For the three months and year ended December 31, 2017, the information includes the consolidated financial and operating information for the Company's Canadian and Australian operations. The financial and operating information for the three months and year ended December 31, 2016 includes the Australian operations from November 30, 2016, following the completion of the Newmarket Arrangement on November 30, 2016. In addition, information for the year ended December 31, 2016 includes the St Andrew assets from January 26, 2016, the date the St Andrew Arrangement was completed. In addition, results for 2016 and Q4 2016 presented below have been restated to exclude discontinued operations, related to the sale of Stawell Mine.

KL KIRKLAND LAKE GOLD

(in thousands except per share amounts)	Three Months Ended December 31, 2017	Three Months Ended December 31, 2016 (Restated)	Year Ended December 31, 2017	Year Ended December 31, 2016 (Restated)
Revenue	\$212,364	\$130,901	\$747,495	\$403,340
Production costs	(68,283)	(60,625)	(288,315)	(192,842)
Royalty expense	(6,200)	(4,173)	(21,396)	(15,552)
Depletion and depreciation	(45,621)	(24,491)	(148,655)	(58,970)
Earnings from mine operations	92,260	41,612	289,129	135,976
Expenses				
General and administrative	(6,839)		(25,646)	(11,991)
Transaction costs	-	(14,379)	(397)	(17,746)
Exploration and evaluation	(10,666)	(6,044)	(48,411)	(15,817)
Care and maintenance	2,177	(80)	(11,877)	(80)
Earnings from operations	\$76,932	\$18,602	\$202,798	\$90,342
Finance and other items				
Other income (loss), net	(19,192)	1,856	3,376	210
Finance income	514	271	2,111	843
Finance costs	(3,455)	(3,031)	(12,206)	(11,628)
Earnings before taxes	54,799		196,079	79,767
Current income tax (expense) recovery	(13,826)	310	(44,223)	(2,800)
Deferred tax recovery (expense)	24,911	(10,305)	5,474	(30,233)
Earnings from continuing operations	65,884	7,703	157,330	46,734
Loss from discontinued operations	(24,904)	(4,627)	(24,904)	(4,627)
Net earnings	\$40,980	\$3,076	\$132,426	\$42,107
Basic earnings per share	\$0.20	\$0.02	\$0.64	\$0.35
Diluted cornings per share	\$0.20		\$0.63	\$0.24

Diluted earnings per share \$ 50.20 \$ 50.02 \$ 50.03 \$ 50.34 \$ 5

The Company produced 596,405 ounces in 2017, an increase of 90% from 2016 when consolidated production included the Australian operations from November 30, 2016, and the 5t Andrew assets from January 26, 2016. The increase in production compared to 2016 largely reflected the full-year contribution of the Company's Australian operations, which included production of 284,440 ounces in 2017 compared to 18,657 ounces in the final month of 2016. Production from the Company's Canadian operations totaled 311,950 ounces, which compared to 1905. Production from the Company's Canadian operations totaled 311,950 ounces, which compared to 1905. Production from the Company's Canadian operations increased 416% from the Company's Canadian operations increased 416% from the Company's Canadian operations increased 416% from the previous year, Production at Macassa of 194,237 ounces in 2017 increased 19,070 ounces or 11% from the previous year, reflecting both a higher average grade and increased run-of-mine tonnes processed compared to 2016. Production from Holt increased 25% to 66,677 ounces



year over year, reflecting a 11% increase in tonnes processed. Production at Taylor totaled 50,764 ounces, an increase of 25% from 2016, reflecting significantly higher tonnes processed during the year.

Gold sales in 2017 totaled 592,674 ounces, an 80% increase from 329,489 ounces in 2016. Higher gold sales were the primarily factor leading to an 85% increase in revenue for the year, to \$747.5 million from \$403.3 million in 2016. The main contributor to the increase in both gold sales and revenue was increased production related to the full-year contribution from the Company's Australian operations in 2017. The realized gold price in 2017 averaged \$1,261 per ounce, 3% higher than the average price of \$1,224 per ounce the previous year.

For Q4 2017, consolidated production totaled 166,579 ounces, a 56% increase from Q4 2016. The increase from the prior year mainly reflected a full quarter of results from the Company's Australian operations, which compared to results from November 30, 2016 to the end of the year in Q4 2016 following completion of the Newmarket Arrangement. For Q4 2017, the Fosterville Mine, being the only operating mine in Australia during the quarter, contributed 79,157 ounces, which compared to total production from the Company's Australian operations of 18,657 ounces in Q4 2016, including 13,196 ounces from Sterville, 4,609 ounces from the Cosmo Mine and 852 ounces from the Stawell Mine. Production from Canadian operations in Q4 2017 totaled 87,426 ounces, which compared to production of 87,952 ounces in Q4 2016. Excluding production from the Canadian operations increased 12% compared to Q4 2016.

Q4 2017 production increased 27,490 ounces or 20% from 139,091 ounces the previous quarter. Each of the Company's operating mines increased production in Q4 2017 compared to Q3 2017. The largest increase was at Fosterville, where production rose 17,622 ounces or 29% quarter over quarter, reflecting a significant increase in the average grade, to 21.5 grams per tonne. Production from the Canadian operations increased 11,160 ounces or 15% from the previous quarter, reflecting both higher tonnes processed and average grades at the Holt and Taylor Mines, and increased un-of-mine tonnes processed at Macassas.

Q4 2017 gold sales totaled 165,715 ounces, 48% and 20% higher than in Q4 2016 and Q3 2017, respectively. The realized gold price for the quarter averaged \$1,282 per ounce, an increase of 7% from \$1,202 per ounce in Q4 2016 and \$1 increase from the previous quarter. Revenue for Q4 2017 totaled \$212.4 million, a \$82.3 million or 63% increase from Q4 2016 and \$35.7 million or 20% higher than in Q3 2017.

Earnings from Mine Operations

Earnings from mine operations in 2017 totaled \$289.1 million, more than double the \$136.0 million from 2016. The increase in earnings from mine operations in 2017 reflected the significant revenue growth achieved on a year-over-year basis. Partially offsetting the impact of higher revenue were increased levels of production costs, depletion and depreciation expense and royalty expense, with all three increases mainly related to growth in production, gold sales and revenue stemming from the addition of the Company's Australian operation on November 30, 2016. Production costs in 2017 totaled \$288.3 million, which compared to \$192.8 million in 2016. Depletion and depreciation expense rose to \$148.7 million from \$59.0 million in 2016. The increase in depletion and depreciation expense in 2017 was a result of the purchase price allocation exercise of assigning fair values to mining interest and plant and equipment acquired in the Newmorket Arrangement on November 30, 2016, which are being amortized over the life of mine and over the life of the underlying assets. Royalty expense in 2017 totaled \$21.4 million compared to \$15.6 million in 2016. The increase resulted from the addition of the Company's Australian operations, which include a 2% NSR on all gold production at the Fosterville Mine.

Earnings from mine operations in Q4 2017 totaled \$92.3 million, more than double the level of \$41.6 million achieved in Q4 2016 and 26% higher than \$73.4 million the previous quarter. The increase from both prior periods resulted from the solid growth in revenue, both on a year-over-year and quarter-over-quarter basis. Total production costs in Q4 2017 were \$68.3 million in Q4 2016 and \$66.5 million in Q3 2017. Depletion and depreciation expense in Q4 2017 totaled \$45.6 million compared to \$24.5 million in Q4 2016 and \$31.7 million the previous quarter. Royalty expense totaled \$6.2 million in Q4 2017 versus \$4.2 million for the same period in 2016 and \$51.1 million in Q3 2017. The higher expenditure levels in Q4 2017 reflected increased production and sales volumes during the increase Q40.5 million in Q3 2017. The higher expenditure levels in Q4 2017 reflected increased production and sales volumes during the increase quarter over quarter. Australian operations for the full quarter in Q4 2017 versus only one month in Q4 2016 mainly accounting for the increase compared to a year ago, and improved results at all four of the Company's operating mines in Q4 2017 accounting for the increases quarter over quarter.



Additional Expenses

Exploration and evaluation expenditures in 2017 rose substantially from the previous year, increasing 206% to \$48.4 million from \$15.8 million in 2016. The increase reflected the Company's growing asset base, significant commitment to production growth at existing mines, as well as exploration success achieved as the year progressed (see Growth and Exploration section section starting on page 23). Exploration and evaluation expenditures in Q4 2017 totaled \$10.7 million, which compared to \$6.0 million in Q4 2016 and \$16.9 million the previous quarter. Growth from Q4 2016 mainly reflected the inclusion of the Company's Australian operation for the full quarter in Q4 2017. The reduction from the previous quarter reflected the timing for completing exploration activities and incurring the related expenditures during 2017.

General and administrative expense (excluding share-based payments expense and transaction costs) totaled \$21.7 million in 2017 and \$6.1 million in Q4 2017. General and administrative expense for these periods compared to \$10.8 million and \$2.6 million, respectively in 2016 and Q4 2016. High levels of general and administrative expense both on a full-year and fourth quarter basis compared to 2016, reflected growth in the Company's business portfolio and the full-year contribution to revenue and costs of the Australian operations in 2017 compared to one month in 2016. General and administrative expense in Q4 2017 was similar to the previous quarter's level of \$5.9 million.

Share-based payment expense for 2017 of \$3.9 million compared to \$1.2 million in 2016. The increase was reflective of the granting of restricted-share units ("RSUs") and performance - share units ("PSUs") starting in Q3 2016 and going forward. Share-based payment expense in Q4 2017 totaled \$0.7 million, which compared to \$0.1 million in Q4 2016 and \$1.0 million the previous quarter.

Transaction costs totaled \$0.4 million in 2017 and nil in Q4 2017. In 2016, transaction costs totaled \$17.7 million for the full year and \$14.4 million for the fourth quarter. Most of the transaction costs in 2016 and Q4 2016 related to the completion of the Newmarket Arrangement on November 30, 2016.

Care and maintenance expense related to the suspension of operations and placement on care and maintenance of the Stawell Mine (as of December 13, 2016), the Holloway Mine (as of December 31, 2016) and the Cosmo Mine and Union Reefs Mill (as of June 30, 2017). Care and maintenance expense in 2017 totaled \$11.9 million versus \$0.1 million in 2016, with the increase largely related to the Cosmo Mine and Union Reefs Mill, where care and maintenance expense in 2017 totaled \$9.6 million. In Q4 2017, the Company recorded a recovery on care and maintenance expense of \$2.2 million, which compared to care and maintenance expense of \$0.1 million in Q4 2016 and \$4.9 million in Q3 2017. The recovery in Q4 2017 reflected the reclassification to discontinued operations of year-to-date and 2016 expenses for the Stawell Mine following the sale of the mine on December 21, 2017.

On December 21, 2017, the Company completed a transaction to sell to an affiliate of Arete Capital Partners Ltd. ("Arete") all the issued and outstanding common shares of its indirectly held wholly owned subsidiary, Stawell Gold Mines Pty Ltd., which held the Stawell Mine. Pursuant to the terms of the transaction, the Company received \$6.25 million in cash consideration upon closing and retains a 2.5% net smelter return royalty on the Stawell Mine. The components of revenue and expense were separated from continuing operations following completion of the sale and are reported as discontinued operations, with a loss from discontinued operations of \$2.49 million being included in the Company's 2017 and Q4 2017 financial results and a loss from discontinued operations of \$4.6 million being included in the results for both 2016 and Q4 2016.

Finance costs in 2017 totaled \$12.2 million versus \$11.7 million in 2016. 04 2017 finance costs totaled \$3.5 million in Q4 2016 and \$2.4 million the previous quarter. Finance costs for each period relate to the various financial instruments held by the Company. The increase from the previous quarter mainly related to the timing for incurring finance fees and bank charges. Convertible debenture interest for 2017 totaled \$8.2 million, compared to \$10.2 million for 2016. Finance income relates primarily to interest earned on excess cash held on account. The increase in finance income in 2017 to \$2.1 million from \$0.8 million in 2015 resulted from the significant increase in cash during 2017 compared to the previous year. Finance income in Q4 2017 and \$0.3 million, which compared to \$0.3 million in 2015 control of \$0.0 mil

The Company's current income tax expense totaled \$44.2 million for 2017 along with deferred income tax recovery of \$5.5 million, for an effective tax rate of 19.8%, which compared to current and deferred income tax expense of \$2.8 million and \$30.2 million, respectively, in 2016 for an effective tax rate of 42.5%. The deferred tax recovery was primarily due to the recognition of \$40.5 million of previously unrecognized deferred tax assets in the period that were acquired in a previous business combination. These deferred tax assets are recognized as a result of a change in expected future profits to be realized after a

KL KIRKLAND LAKE GOLD

reorganization of the acquired corporate structure. In addition, the Company recognized a deferred tax asset recovery of \$12.1 million related to the offset of current year income taxes.

For Q4 2017, the current income tax expense totaled \$13.8 million, while the Company recorded deferred tax recovery of \$24.9 million, mainly related to the previously unrecognized deferred tax assets in the period that were acquired in a previous business combination. In Q4 2016, the Company had current income tax recovery of \$0.3 million, and deferred income tax expense of \$10.3 million, while Q3 2017 reported current and deferred income tax expense totaling \$12.0 million and \$8.3 million, respectively.

Other income in 2017 totaled \$3.4 million compared to \$0.2 million, mainly reflecting a \$17.6 million pre-tax mark-to-market loss in the quarter on fair valuing the Company's 14.0 million common share purchase warrants of Novo, which were acquired on September 6, 2017. The other loss in Q4 2017 compared to other income of \$2.2 million in Q4 2016 and other income of \$21.3 million the previous quarter. The \$21.3 million of their income in Q3 2017 was the result of a \$19.2 million pre-tax mark-to-market gain on fair valuing the Company's 14.0 million of share purchase warrants.

Unit Cost Performance

Operating cash costs per ounce sold for 2017 averaged \$481, a 16% improvement from \$571 in 2016 mainly reflecting a higher average mill grade in 2017 compared to the previous year (9.8 grams per tonne versus 7.9 grams per tonne in 2016). Contributing to the improved average grade in 2017 was 1.8 grams per tonne, as well as improved grades at the Macassa, with an average mill grade of 15.2 grams per tonne in 2017 compared to 14.1 grams per tonne, as well as improved grades at the Macassa, with an average mill grade of 15.2 grams per tonne in 2017 compared to 14.1 grams per tonne in 2016. Operating cash costs per ounce sold from the Company's Australian operations averaged \$376 per ounce sold in 2017, compared to \$714 per ounce from November 30, 2016 to the end of the year. Operating cash costs per ounce sold from the Company's Australian operations averaged \$376 which compared to \$558 in 2016. The year-over-year increase for the Canadian operations reflected lower operating cash cost per ounce sold at both Taylor and Holt in 2016.

AISC per ounce sold averaged \$812 in 2017, a 13% improvement from \$930 in 2016 reflecting improved operating capital expenditures in 2017 totaled \$147.7 million (\$249 per ounce sold), which compared to \$86.6 million (\$263 per ounce sold) in 2016. The full-year contribution of the Company's Fosterville Mine, where AISC per ounce sold averaged \$491 in 2017, was the primary factor accounting for the year-over-year improvement. AISC per ounce sold for Canadian operations averaged \$911 versus \$900 in 2016.

For Q4 2017, operating cash costs per ounce sold averaged \$412, a 23% improvement from \$533 in Q4 2016 and 15% better than \$482 the previous quarter. Higher production, largely due to a significant increase in the average grade at Fosterville, to 21.5 grams per tonne, was a key factor contributing to the improvement from both prior periods. AISC per ounce sold for Q4 2017 averaged \$816, a 9% improvement from \$900 in Q4 2016 and 3% better than \$845 for Q3 2017. The improvement from both prior periods resulted from lower operating cash cost per ounce sold, which more than offset an increase in sustaining capital expenditures per ounce sold. Sustaining capital expenditures per ounce sold, oungard to \$32.5 million (\$291 per ounces) in Q4 2016 and \$38.3 million (\$278 per ounces sold) in Q3 2017. The increase in sustaining capital related to the Company's Canadian operations and was largely due to the timing of sustaining capital expenditures at Macassa and Taylor to late in the year.

Net Earnings of \$157.3 million or \$0.64 per share in 2017

Net earnings for 2017 totaled \$132.4 million (\$0.64 per basic share), an increase of \$90.3 million and a loss on from discontinued operations of \$24.9 million related to the Stawell Mine. In 2016, earnings from continuing operations totaled \$46.7 million, while loss from discontinued operations totaled \$4.6 million.

The increase in earnings from continuing operations in 2017 was largely the result of significantly higher revenue due mainly to the full-year contribution from the Company's Fosterville Mine in 2017 versus one month in 2016. Also contributing to the year-over-year increase was a lower effective tax rate in 2017, due largely to the recognition of deferred tax assets, as well as transaction costs totaling \$17.7 million in 2016 related mainly to completion of the Newmarket Arrangement on November 30, 2016. Offsetting these favourable factors were higher production and depletion and depreciation costs, as well as increased

KL KIRKLAND LAKE GOLD

exploration and general and administrative expenses. The increase in basic earnings per share in 2017 was not as significant as growth in net earnings due to a higher number of average shares outstanding, resulting mainly from the two acquisitions completed in 2016.

Adjusted net earnings from continuing operations in 2017 totaled \$149.1 million (\$0.72 adjusted net earnings from continuing operations), representing growth of \$81.2 million or 120% from \$67.9 million in 2016. The exclusion from adjusted net earnings from continuing operations in 2017 of the \$24.9 million after-tax loss from discontinued operations (\$0.12 per share) and net deferred tax recovery of \$10.0 million (\$0.05 per share) were the most significant differences between net earnings and adjusted net earnings from continuing operations for the year. In 2016, adjusted net earnings from continuing operations were higher than net earnings due to the exclusion of transaction costs, mainly related to the completion of the Newmarket Arrangement, the impact of purchase price allocation adjustments on acquired metal inventory, and aloss from discontinued operations.

Net earnings in Q4 2017 totaled \$41.0 million (\$0.20 per basic share), which compared to net earnings of \$3.1 million (\$0.02 per basic share) in Q4 2016. Included in net earnings in Q4 2017 were earnings from continuing operations totaling \$65.9 million and a loss from discontinued operations of \$24.9 million related to the sale of the Stawell Mine.

The increase in earnings from continuing operations in Q4 2017 compared to Q4 2016 reflected increased revenue and improved unit costs, mainly related to the full-quarter contribution from the Fosterville Mine in Q4 2017 versus one month in Q4 2016. Also contributing to the increase from Q4 2016 was a \$24.9 million deferred tax recovery in Q4 2017, mainly related to previously unrecognized deferred tax assets, as well as \$14.4 million of transaction costs and elgebetion and depreciation expenses in Q4 2017 versus Q4 2016, as well as increased exploration and general and administrative expenditures. In addition, Q4 2017 earnings from continuing operations included the \$17.6 million pre-tax marked-to-market loss on fair valuing the Company's 14.0 million common share purchase warrants of Novo.

Adjusted net earnings from continuing operations in Q4 2017 totaled \$71.2 million (\$0.34 adjusted net earnings per share from continuing operations) versus \$22.8 million in Q4 2016 and \$27.4 million in Q3 2017. The difference between net earnings and adjusted net earnings from continuing operations in Q4 2017 mainly related to the exclusion in adjusted net earnings from continuing operations of the \$24.9 million after-tax loss on discontinued operations (\$0.12 per share), a \$17.6 million pre-tax mark-to-market loss on the fair valuing the Company's 14.0 million common share purchase warrants in Novo (\$0.08 per share) and net deferred tax recovery of \$10.0 million (\$0.05 per share). In Q4 2016, a number of pre-tax expenses were excluded from adjusted net earnings from continuing operations, including; transaction costs of \$14.4 million and \$65.5 million of purchase price allocations adjustements on acquired metal inventory. In addition, adjusted net earnings from continuing operations in Q4 2016 also excluded an after-tax \$4.6 million loss from discontinued operations. In Q3 2017, the Company recorded a \$19.2 million pre-tax mark-to-market gain related to the fair value of Novo warrants, which was excluded from adjusted net earnings from continuing operations.

The \$41.0 million of net earnings in Q4 2017 compared to net earnings of \$43.8 million in Q3 2017. The Company's net earnings in Q3 2017 were entirely related to continuing operations. Higher sales and improved unit costs contributed to the \$22.4 million or \$1% increase earnings from continuing operations quarter over quarter. Also having a significant impact on earnings from continuing operations for both quarters was the fair valuing of the Company's Novo warrants, with the Q4 2017 earnings from continuing operations in Q3 2017 benefited from a \$19.2 million pre-tax mark-to-market gain on the fair valuing of the warrants. In addition, the \$24.9 million deferred tax recovery in Q4 2017 also contributed to the increase in earnings from continuing operations.

The adjusted net earnings from continuing operations in Q4 2017 of \$71.2 million increased 160% from \$27.4 million in Q3 2017. The difference between net earnings and adjusted net earnings from continuing operations in Q3 2017 million after-tax loss on discontinued operations, \$19.2 million pre-tax mark-to-market gain on the fair valuing of the Novo warrants and net deferred tax recovery of \$10.0 million, which were excluded from adjusted net earnings from continuing operations in Q3 2017.

2017 Cash flow from operating activities of \$309.8 million, free cash flow totals \$178.0 million

Cash at December 31, 2017 totaled \$231.6 million, which compared to cash of \$234.9 million at December 31, 2016 and cash of \$210.5 million at September 30, 2017. Cash flow from operating activities and free cash flow in 2017 totaled \$309.8 million



and \$178.0 million, respectively, which compared to \$187.0 million and \$114.0 million, respectively, in 2016. The significant free cash flow generated by the Company in 2017 was offset by the use of cash in a number of areas focused on value creation for the Company's shareholders, including strategic investments, debt repayment and elimination and share repurchases.

During 2017, the Company made strategic investments in a number of junior exploration companies. In August and September 2017, the Company invested an aggregate of \$61.0 (C\$74.9) million for the purchase of 25.8 million common shares and 14.0 million common share purchase warrants of Novo. In June 2017, the Company invested 5.69 (C\$8.9) million to acquire 1.7 million to acquire 1.7 million common shares of Bonterra Resources Inc., a TSX Venture Exchange-listed company with exploration projects in Quebec and Ontario. Through two transactions (in April and December 2017), the Company invested \$6.7 (C\$8.6) million to acquire 12.3 million common shares and 975,500 common share purchase warrants of Metanaro Resources Inc., a TSX Venture Exchange-listed company with assets in the Urban-Barry district of Northern Quebec. In November 2017, the Company invested \$3.8 (C\$4.9) million to acquire 33.3 common shares and 33.3 options to acquire common shares of De Grey Mining Ltd., an ASX-listed company with assets based in Western Australia.

A total of \$44.0 (C\$57.2) million of cash was used to redeem and eliminate the Company's two series of convertible debentures during 2017. On June 30, 2017, the Company paid \$43.8 (C\$56.8) million to redeem the 6% Debentures (with an additional \$1.3 (C\$1.7) million paid for interest accrued at the maturity date of June 30, 2017). In December 2017, over 99% of the \$62.0 million 7.5% Debentures, which matured on December 31, 2017, were converted into common shares at a conversion price of C\$13.70 per share, being a conversion rate of 72.9927 common shares for each \$1,0001 in principal held. As a result, an aggregate of 4.505,393 common shares were issued to the debenturey paid an aggregate amount of \$0.2 (C\$0.3) million in cash with respect to the outstanding 7.5% Debentures not converted at their maturity. In addition, \$2.2 (C\$2.8) million of cash was paid to all holders of the 7.5% Debentures with respect to interest accrued at the maturity date of December 31, 2017.

During 2017, the Company repurchased 5,443,400 common shares for cancellation under the NCIB program introduced in May 2017. The common shares were repurchased at an average price of \$11.05 (C\$14.06) per common share for total cash payment of \$60.1 (C\$76.5) million. Under the NCIB, a maximum of 15,186,571 Kirkland Lake Gold common shares can be purchased for cancellation. Accordingly, the Company may purchase an additional 9,743,171 common shares for cancellation through the NCIB until the program's expiry in May 2018.

REVIEW OF OPERATING MINES

Canadian Mine Operations

Macassa Mine Complex

The Macassa Mine is located in the Municipality of Kirkland Lake, within Teck Township, District of Timiskaming, in the northeast of the province of Ontario, Canada which is approximately 600 km north of Toronto, Canada. Macassa is the Company's flagship Canadian mining operation. Situated in one of Canada's most historic and renowned gold mining districts, the Kirkland Lake Camp, Macassa had proven and probable reserves totaling 3.0 million tonnes grading an average of 21.0 grams per tonne for 2.0 million ounces as at December 31, 2017.

KL KIRKLAND LAKE GOLD

Operating results	Three Months Ended December 31, 2017	Three Months Ended December 31, 2016	Year Ended December 31, 2017	Year Ended December 31, 2016
operating results	Timee Mondis Eliaca Section 52, 2017	Timee Mondis Ended December 31, 2010	real chaca becomes 51, 2017	real Eliaca December 51, 2010
Total Ore Milled (t)	119,129	102,288	409,064	396,633
Run of Mine (t)	119,129	74,745	387,053	331,353
Low Grade (t)	_	27,543	22,011	65,280
Average Grade (g/t)	13.9	16.3	15.2	14.1
Run of Mine (g/t)	13.9	21.6	16.0	16.5
Low Grade (g/t)	_	2.3	1.6	2.0
Gold Contained (oz)	53,331	53,605	200,107	180,309
Recovery (%)	96.8%	97.6%	97.1%	97.1%
Gold Produced (oz)	51,608	52,318	194,237	175,167
Development metres - operating	1,351	1,153	3,983	5,104
Development metres - capital	908	1,578	5,326	5,282
Production costs	\$28,642	\$19,988	\$102,743	\$91,279
Operating cash costs per ounce sold (1)	\$541	\$421	\$523	\$527
AISC per ounce sold (1)	\$956	\$817	\$845	\$877
Total capital expenditures (in thousands)	\$21,919	\$17.072	\$61.279	\$51.287

⁽¹⁾ Non-IFRS - the definition and reconciliation of these Non-IFRS measures are included on pages 37-44 of this MD&A.

The Macassa Mine achieved record production of 194,237 ounces of gold in 2017, an 11% increase from 2016 production 175,167 ounces. The increase in production reflected both higher levels of run-of-mine tonnes processed and an increase in the average mill grade. A total of 409,064 tonnes was processed in 2017 at an average grade of 15.2 grams per tonne and average recoveries of 97.1% the prior year. A 17% increase in run-of-mine tonnes processed more than offset a significant reduction in tonnes processed from low-grade stockpiles in accounting for the increase in total mill throughput. The higher volume of run-of-mine tonnes also accounted for the improvement in the average grade year over year.

In 2017, Macassa's production costs of \$102.7 million, were higher than the \$91.3 million in 2016; however, the mine's unit cost performance remained strong in 2017. Operating cash costs per ounce sold from Macassa averaged \$523 in 2017 compared to \$527 in 2016, with the higher average mill grade largely accounting for the improvement. AISC per ounce sold improved 3% in 2017 to \$836 from \$877 in 2016. The improvement largely reflected the increase in ounces produced, as well as a reduction in the level of sustaining capital expenditures on a per ounce sold in \$8016.

Basis, Sustaining capital expenditures at the mine totaled \$57.4 million (\$259 per ounce sold) in 2016.

In Q4 2017, Macassa produced 51,609 ounces, the mine's second-best quarter of production ever. Production at Macassa in Q4 2017 compared to record quarter quarterly production of 52,318 ounces in Q4 2016 and 48,206 ounces in Q3 2017. A total of 119,129 tonnes were processed during Q4 2017 at an average grade of 13.9 grams per tonne with average grade grecoveries of 96.8%, which compared to 102,288 tonnes at an average grade of 16.3 grams per tonne and recoveries of 97.6% in Q4 2016 and 93,391 tonnes at an average grade of 16.5 grams per tonne and average recoveries of 97.4% the previous quarter. The improvement in production from Q3 2017 reflected higher run-of-mine tonnes processed, which more than offset the impact of lower average grades as a small number of high-grade stopes did not perform as expected.

In Q4 2017, Macassa's production costs totaled \$28.6 million, compared to \$20.0 million in Q4 2016. Operating cash cost per ounce sold from Macassa in Q4 2017 averaged \$541 compared to \$421 in Q4 2016, when the mine achieved record production and had a higher average grade, and \$546 in Q3 2017. AISC per ounce sold in Q4 2017 averaged \$956 versus \$817 in Q4 2016 and \$841 the previous quarter. Contributing to the increase in AISC per ounce sold from both prior periods was the weighting of planned sustaining capital expenditures, largely related to the procurement of mobile equipment and critical spares, to the fourth quarter of the year. Sustaining capital expenditures in Q4 2017 totaled \$20.4 million (\$385 per ounce sold) versus \$17.1 million (\$360 per ounce sold) in Q4 2016 and \$13.0 million (\$292 per ounce sold) in Q3 2017.

Macarca Chaft Drains

Among the Company's planned investments in 2018 (see section, "2018 Guidance") are approximately \$40.0 million of initial capital expenditures related to a new shaft at the Macassa Mine. The new, 21.5-foot diameter, concrete-lined shaft will offer



a number of important benefits to the Macassa Mine, including: de-risking the operation; enabling more effective underground exploration to the east of the South Mine Complex; improving ventilation and general working conditions in the mine; and supporting higher levels of production and lower unit costs. The new four-compartment shaft will have a total hoisting capacity of 4,000 tonnes per day (ore and waste) and is an important component of the Company's plan to increase production at Macassa with a goal of reaching over 400,000 ounces per year over the next five to seven years.

Construction of the shaft will be completed in two phases. The first phase will be to a depth of 5,450 feet and include a mid-shaft loading pocket. Completion of phase one is targeted for the second quarter of 2022 at a capital cost estimated at \$240 million. Phase two of the project will be undertaken following the commencement of production from phase one, and will involve extending the shaft to an ultimate depth of approximately 7,000 feet. Completion of phase two is targeted for the end of 2023 at an estimated capital cost of approximately \$80 million. The Company has not completed a National Instrument 43-101 level feasibility study on the shaft project.

The 100% owned Holt Mine Complex consists of three mines: The Holt Mine and Mill and the Holloway Mine, which are both located at the eastern end of East Timmins, within the Timmins Mining District in northeastern Ontario; and the Taylor Mine located 53 km east of Timmins, Ontario (approximately 68 km by road west of the Holt Mill). The Holt-Holloway property package is comprised of 48 separate property elements totaling 691 claims for an aggregate area of 15,172 hectares. The Taylor Mine consists of 31 patented claims for a total area covering 1,067 hectares. In total, the three mines comprise total proven and probable reserves estimated at 663,000 ounces of gold as at December 31, 2017.

The following section provides a breakdown and discussion of each mine within the Holt Mine Complex. The information represents the results from the completion date of the St Andrew Arrangement (January 26, 2016).

Holt Mine

Operating results	Three Months Ended December 31, 2017	Three Months Ended December 31, 2016	Year Ended December 31, 2017	Year Ended December 31, 2016 (1)
Total Ore Milled (t)	127,494	113,499	462,987	386,972
Average Grade (g/t)	5.0	4.6	4.7	4.5
Gold Contained (oz)	20,297	16,684	70,363	56,334
Recovery (%)	94.9%	94.5%	94.8%	94.5%
Gold Produced (oz)	19,263	15,761	66,677	53,234
Development metres - operating	757	381	3,918	2,198
Development metres - capital	629	1,186	3,247	4,134
Production costs	\$11,508	\$8,286	\$44,820	\$36,752
Operating cash costs per ounce sold (2)	\$624	\$542	\$685	\$623
AISC per ounce sold (2)	\$1,031	\$1,038	\$1,043	\$1,044
Total capital expenditures (in thousands)	\$4,099	\$5,682	\$13,980	\$16,846

Results of the Holt Mine included from the date of St Andrew acquisition (January 26, 2016).
 Non-IFRS - the definition and reconciliation of these Non-IFRS measures are included on pages 37-44 of this MD&A.

The Holt Mine produced a record 66,677 ounces in 2017, a 25% increase from 53,234 ounces in 2016, reflecting both higher throughput levels and an improvement in the average grade. During 2017, 462,987 tonnes were processed at an average grade of 4.7 grams per tonne and average recoveries of 94.8%, which compared to 386,972 tonnes processed at an average grade of 4.5 grams per tonne and average recoveries of 94.5% in 2016. The increase in tonnes processed in 2017 was due primarily to improved stope productivity, a new mining horizon being accessed in 2016 and favourable sequencing.

In 2017, Holt's production costs increased to \$44.8 million, compared to \$36.8 million in 2016 due to higher operating cash costs. Operating cash costs per ounce sold in 2017 averaged \$685 per ounce, compared to \$623 in 2016, with the increase largely reflecting significantly higher levels of operating development during 2017. AISC per ounce sold averaged \$1,043 versus \$1,044 versus \$1,044 in 2016, largely unchanged from the year earlier with the impact of higher operating cash cost per ounce sold and increased royalty expense offsetting a 25% reduction in sustaining capital expenditures per ounce sold. Sustaining capital expenditures in 2017 totaled \$14.6 million (\$224 per ounce sold) compared to \$16.9 million (\$297 per ounce sold) the previous



year. Contributing to the reduction in sustaining capital expenditures were lower levels of capital development and reduced investment in mobile equipment and critical spares.

During Q4 2017, the Holt Mine achieved record quarterly production of 19,263 ounces, representing increases of 22% from Q4 2016 and 13% from the previous quarter, mainly reflecting a combination of higher throughput and an improved average grade compared to both prior periods. A total of 127,494 tonnes was processed from the Holt Mine at an average grade of 5.0 grams per tonne and with average recoveries of 94.9% during Q4 2017, compared to 113,499 tonnes at an average grade of 4.6 grams per tonne and average recoveries of 94.5% for the same period a year earlier and 124,394 tonnes at an average grade of 4.5 grams per tonne at average recoveries of 94.5% in Q3 2017.

In Q4 2017, Holt's production costs increased to \$11.5 million, compared to \$8.3 million in Q4 2016 due to higher operating cash costs. Total operating cash costs per ounce sold for Q4 2017 averaged \$624 per ounce, which compared to \$542 in Q4 2016 and \$678 the previous quarter. The increase from the prior year's fourth quarter largely reflected low levels of operating development in Q4 2016 (381 metres in Q4 2016 versus 757 metres in Q4 2017). The improvement in operating cash cost per ounce sold from the prior quarter resulted from the impact of a higher average grade on production volumes and reduced levels of operating development.

AISC per ounce sold in Q4 2017 averaged \$1,031 versus \$1,038 in Q4 2016 and \$1,116 the previous quarter. Lower levels of sustaining capital expenditures more than offset higher operating cash cost per ounce sold and increased royalty expense in accounting for the improvement compared to Q4 2016. Lower AISC per ounce sold versus the previous quarter reflected a reduction in both operating cash cost per ounce sold and sustaining capital expenditures per ounce sold quarter over quarter. Sustaining capital expenditures in Q4 2017 totaled \$5.0 million (\$271 per ounce sold) versus \$5.7 million (\$373 per ounce sold) in Q4 2016 and \$4.9 million (\$303 per ounce sold) in Q3 2017.

Operating results	Three Months Ended December 31, 2017	Three Months Ended December 31, 2016	Year Ended December 31, 2017	Year Ended December 31, 2016 (1)
				·
Total Ore Milled (t)	89,297	48,254	292,003	188,767
Run of Mine (t)	89,297	45,818	292,003	178,997
Low Grade (t)	_	2,436	_	9,770
Average Grade (g/t)	6.0	6.7	5.6	7.0
Run of Mine (g/t)	6.0	7.0	5.6	7.2
Low Grade (g/t)	_	2.1	_	2.4
Gold Contained (oz)	17,194	10,288	52,787	41,474
Recovery (%)	96.2%	96.1%	96.2%	96.5%
Gold Produced (oz)	16,541	10,048	50,764	40,746
Development metres - operating	1,185	515	3,955	2,014
Development metres - capital	544	810	2,510	2,966
Production costs	\$8,289	\$4,670	\$29,646	\$21,309
Operating cash costs per ounce sold (2)	\$574	\$446	\$610	\$438
AISC per ounce sold (2)	\$1,187	\$795	\$972	\$692
Total capital expenditures (in thousands)	\$9,459	\$3,384	\$18,387	\$10,036

Results of the Holt Mine included from the date of St Andrew acquisition (January 26, 2016).
 Non-IFRS - the definition and reconciliation of these Non-IFRS measures are included on pages 37-44 of this MD&A.

Production at Taylor for 2017 totaled 50,764 ounces, an increase of 25% from the 40,746 ounces produced in 2016. A total of 292,003 tonnes were processed in 2017 at an average grade of 5.6 grams per tonne and average recoveries of 96.2%, which compared to total tonnes processed of 188,767 tonnes at an average grade of 7.0 grams per tonne and average recoveries of 96.5% in the prior year. The significant increase in tonnes processed reflected a higher number of stopes available for mining, while the average grade was consistent with planned stope grades and was in line with the average reserve grade as at December 31, 2016.



In 2017, Taylor's production costs totaled \$29.6 million, compared to \$21.3 million in 2016. Operating cash costs per ounce sold in 2017 was \$610 compared to \$48 in 2016, with the year-over-year increase relating to the change in the average grade compared to \$21.5 million in 2016. The increase from the previous year reflected higher operating cash cost per ounce sold as well as an increase in sustaining capital expenditures per ounce sold. Sustaining capital expenditures in 2017 totaled \$16.6 million (\$342 per ounce sold), which compared to \$10.0 million (\$228 per ounce sold) in 2016, with the higher level of sustaining capital expenditures largely due to construction of ventilation raises and capital development in support of the long-term sustainability of production.

Gold production at Taylor in Q4 2017 was a record 16,541 ounces, based on 89,297 tonnes processed at an average grade of 6.0 grams per tonne and average recoveries of 96.2%. In Q4 2016, Taylor produced 10,048 ounces from processing 48,254 tonnes at an average grade of 6.7 grams per tonne and average recoveries of 96.1%. The higher tonnage in Q4 2017 largely reflected the continued development of the inine over the last year. Q4 2017 production was 439% higher than the 11,066 ounces produced in Q3 2017, when the mine processed 71,897 tonnes at an average grade of 5.0 grams per tonne with average recoveries of 95.5%. Both higher throughput and improved grades contributed to the quarter over quarter increase, with the grade improvement resulting largely from the sequencing of mining activities into higher-grade stopes.

In Q4 2017, Taylor's production costs totaled \$8.3 million, compared to \$4.7 million in Q4 2016. Operating cash costs per ounce sold in Q4 2017 was \$574, which compared to \$446 in Q4 2016 and \$676 the previous quarter. The change from both prior periods was mainly a reflection of the average grade for the respective quarters. AISC per ounce sold in Q4 2017 averaged \$1,187 versus \$795 in Q4 2016 and \$1,054 in Q3 2017. The elevated level of AISC per ounce sold in Q4 2017 reflected the timing of sustaining capital expenditures, with just over half of total sustaining capital expenditures for full-verser 2017 being invested during the fourth quarter, Ingely related to construction of inconstruction of the ounce sold, which compared to \$3.4 million (\$325 per ounce sold) in Q4 2016 and \$4.1 million (\$358 per ounce sold) in Q3 2017.

Holloway Min

In December 2016, Kirkland Lake Gold announced the transitioning of the Holloway Mine to a temporary suspension of operations. The mine will be maintained in a production ready state with the intent of restarting the operation in the future subject to the mine realizing enhanced economics through exploration success. During 2016, the mine produced 27,129 ounces from January 26, 2016 to the end of the year and 9,825 ounces in the fourth quarter. During 2017, 287 ounces were processed from Holloway, mainly in the first quarter of the year (13 ounces in Q4 2017).

Australian Mine Operations

Financial or operational information included in the Company's consolidated financial results for 2016 or Q4 2016 includes results for the Company's Australian Operation from the completion of the Newmarket Arrangement on November 30, 2016 to the end of the year prior ("reported basis" of comparison). However, for comparison purposes, and to assist readers in evaluating the year-over-year performance of the Australian assets, certain production measures for the full year and Q4 2016 are presented on a pro forma basis as well as a reported basis. All unit cost comparisons to Q4 2016 are on a reported basis.

Fosterville Mine

The Fosterville Mine is located approximately 20 km northeast of the town of Bendigo and 130km north of the city of Melbourne in Victoria, Australia. With a noteworthy history of gold mining in the region dating back to 1894, the current Fosterville Mine commenced commercial production in April 2005 with a sulphide plant that has produced approximately 1.4 million ounces to date.



Operating results	Three Months Ended December 31, 2017	Year Ended December 31, 2017	One Month Ended December 31, 2016 (1)
Total Ore Milled (t)	118,877	547,476	56,754
Average Grade (g/t)	21.5	15.8	7.9
Gold Contained (oz)	88,159	278,355	14,392
Recovery (%)	96.3%	95.0%	91.7%
Gold Produced (oz)	79,157	263,845	13,196
Development metres - operating	610	2,627	255
Development metres - capital	1,866	5,193	318
Production costs	\$18,043	\$70,906	\$14,637
Operating cash costs per ounce sold (2)	\$226	\$264	\$420
AISC per ounce sold (2)	\$471	\$491	\$641
Total capital expenditures (in thousands)	\$22,955	\$64,054	\$3,401

- Results from the Fosterville Mine in 2016 are from the completion of the Newmarket Arrangement (November 30, 2016).
 Non-IFRS the definition and reconciliation of these Non-IFRS measures are included on pages 37-44 of this MD&A.

2017 was a transformational year for Fosterville, with a significant improvement being achieved in both production levels and average grades. Underground mineral reserves at the mine were more than doubled during the first half of the year, to 1,790,000 tonnes at an average grade of 17.9 grams per tonne for 1,030,000 ounces as at June 30, 2017, from 1,560,000 tonnes at an average grade of 9.8 grams per tonne for 49,000 ounces. Included 588,000 ounces. Included 588,000 ounces. Included 588,000 ounces. Included 58,000 ounces. Included 58,000 ounces. Included 58,000 ounces average grade of 61.2 grams per tonne for a vareage grade of 61.2 grams per tonne for a vareage grade of 61.2 grams per tonne for a vareage grade of 61.2 grams per tonne for 31,2017 was more than double the initial estimate of 282,000 tonnes at an average grade of 58.8 grams per tonne for 532,000 ounces, that was issued in July 2017 and as at June 30, 2017.

For 2017, Fosterville produced a record 263,845 ounces, which compared to production of 13,196 ounces on a reported basis for 2016 following completion of the Newmarket Arrangement on November 30, 2016. On a pro forma basis, 2017 production increased 74% from 151,755 ounces in 2016. A total of 547,476 tonnes was processed in 2017 at an average grade of 15.8 grams per tonne and average recoveries of 91.7% on a reported basis and 693,066 tonnes at an average grade of 7.6 grams per tonne and average recoveries of 91.7% on a pro-forma basis for 2016. The increase in production compared to the pro forma results for 2016 reflected a higher average grade, which was more than double the 2016 level. During 2017, reconciled grades over-performed relative to the resource model in a number of cases, particularly in areas of structural complexity. The impact of significantly higher grades more than offset reduced tonnes milled in 2017, as the mine increasingly focused on the extraction of high-grade stopes in the Lower Phoenix system during the year. As at the end of 2017, the mine had not yet commenced production from the high-grade Swan Zone.

In 2017, Fosterville's production costs increased to \$70.9 million, compared to \$14.6 million in 2016. Operating cash cost and AISC per ounce sold in 2017 averaged \$264 and \$491, respectively, which compared to \$420 and \$641 in 2016. The significant improvement in the average grade at Fosterville during 2017 largely accounted for the year-over-year improvement in unit costs. Sustaining capital expenditures in 2017 totaled \$52.1 million (\$202 per ounces sold), which compared to \$3.4 million (\$175 per ounce sold) in Q4 2016 on a reported basis.

Q4 2017 production at Fosterville was a record 79,157 ounces of gold, which compared to the 13,196 ounces on a reported basis in Q4 2017 and was 78% higher than the 44,406 ounces produced in Q4 2016 on a pro forma basis. The average grade for the quarter was the highest quarterly average in the mine's history, averaging 21.5 grams per tonne, which compared to average grades of 7.9 grams per tonne for the one month ended December 31, 2016 and 8.5 grams per tonne in Q4 2016 on a pro forma basis. A total of 118,877 tonnes were processed during Q4 2017 with average recovery rate being the highest quarterly average ever achieved. The mine processed 56,754 tonnes at an average recovery rate of 91.7% on a reported basis in 2016, and 176,242 tonnes at an average recovery rate of 92.4% pro forma for the three months ended December 31, 2016.

Fosterville's Q4 2017 production of 79,157 ounces was 29% higher than the 61,535 ounces produced the previous quarter, when the mine processed 143,326 tonnes at an average grade of 14.1 grams per tonne and with average recoveries of 94.7%. The



increase in production reflected a 52% improvement in the average grade, resulting from both mine sequencing as well as improved grade performance, with a large stope in Q4 2017 significantly outperforming expected levels.

In Q4 2017, Fosterville's production costs totaled \$18.0 million, compared to \$14.6 million in Q4 2016. Operating cash cost per ounce sold in Q4 2017 averaged \$226 compared to \$420 in Q4 2016 and \$295 for Q3 2017, with the improvement from both prior periods mainly reflecting the impact of a significantly higher average grade. AISC per ounce sold for Q4 2017 averaged \$471, significantly better than the \$621 and \$574 recorded in Q4 2016 and Q3 2017, respectively. Sustaining capital expenditures in Q4 2017 totaled \$17.5 million (\$219 per ounce sold), which compared to \$3.4 million (\$107 per ounce sold) in Q4 2016 and \$40.0 million (\$252 per ounce sold) in Q4 2016 and \$40.0 million (\$252 per ounce sold) in Q4 2016 and \$40.0 million (\$252 per ounce sold) in Q4 2016 and \$40.0 million (\$252 per ounce sold) in Q4 2016 and \$40.0 million (\$252 per ounce sold) in Q4 2016 and \$40.0 million (\$252 per ounce sold) in Q4 2016 and \$40.0 million (\$252 per ounce sold) in Q4 2016 and \$40.0 million (\$250 per ounce sold) in Q4 2016

Northern Territor

The Northern Territory is comprised of a group of mineral tenements, including the Cosmo Mine totaling over 2,000 km² in the Northern Territory, Australia, which includes an inventory of historical gold discoveries, historical and modern gold mines, and current mineral resources and mineral reserves. As at December 31, 2017 the Company's mineral reserves in the Northern Territory totaled 2,800,000 tonnes at and average grade of 2.4 grams per tonne for 215,000 ounces.

Operating results	Three Months Ended December 31, 2017	Year Ended December 31, 2017	One Month Ended December 31, 2016 (1)
Total Ore Milled (t)	_	259,729	51,590
Average Grade (g/t)	_	2.6	3.0
Gold Contained (oz)	_	21,671	4,902
Recovery (%)	_	95.0%	94.0%
Gold Produced (oz)	_	20,595	4,609
Development metres - operating		789	159
Development metres - capital		860	10
Production costs	\$-	\$37,367	\$6,797
Operating cash costs per ounce sold (2)	\$-	\$1,661	\$1,048
AISC per ounce sold (2)	\$-	\$1,996	\$1,153
Total capital expenditures (in thousands)	\$213	\$6,823	\$650

(1) Results from the Cosmo Mine in 2016 are from the completion of the Newmarket Arrangement (November 30, 2016)

On June 30, 2017, Kirkland Lake Gold suspended operations at the Cosmo Mine with the mine being placed on care and maintenance. During Q4 2017, there was no gold production recorded from the Cosmo Mine. For 2017, a total of 20,595 ounces was produced at Cosmo, with operating cash costs and AISC per ounce sold averaging \$1,661 and \$1,996, respectively. There was no production from Cosmo in Q4 2017, there was no gold production recorded from the Cosmo Mine. For 2017, a total of 20,595 ounces was produced at Cosmo, with operating cash costs and AISC per ounce sold averaging \$1,2016, production for both 2016 and Q4 2016 totaled 4,609 ounces from processing \$1,590 tonnes at at an average greated or \$1,2016, production from Cosmo in 2016 totaled 55,765 ounces, which resulted from processing 646,868 tonnes at an average grade of \$2.9 grams per tonne and at an average grade of \$2.9 grams per tonne and at average recovery in 20,500 from \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average recovery in 20,500 from \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average recovery in 20,500 from \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and at average grade of \$2.9 grams per tonne and \$2.9 grams per

For 2017, Cosmo's production costs totaled \$37.4 million, compared to \$6.8 million for 2016. Following the move to care and maintenance, the Cosmo Mine and Union Reef Mill are being maintained in a state of readiness to resume operation in the event that new reserves are delineated which establish an economic deposit or deposits in the Northern Territory, in December 2017, the Company announced encouraging drill results from the Lantern Deposit at the Cosmo Mine, including the intersection of new high-grade, visible-gold bearing gold mineralization approximately 250 metres down-plunge. At the encompany had six dills (three underground, two surface and one reverse circulation drill) operating at the Lantern Deposit, with plans to develop on two levels into the Lantern mineralization from the existing Cosmo ramp. Drilling programs are also planned at a number of district targets at Union Reefs and elsewhere in Northern Territory in 2018.



Stawell Mine

The Stawell Mine was acquired by the Company through the Newmarket Arrangement. The mine, which is located in the Australian State of Victoria, approximately 250 kilometers northwest of Melbourne, was placed on care and maintenance by the Company effective December 13, 2016. Between November 30, 2016 and the date of being placed on care and maintenance, Stawell produced 852 ounces from processing 32,367 tonnes at an average grade of 0.9 grams per tonne and at average recoveries of 87.9%. During this period, operating cash cost per ounce sold averaged 2,074 tonnes at an average grade of 1.5 grams per tonne and average recoveries of 80.9%, while production in Q4 2016 totaled 32,204 ounces from processing 45,557 tonnes at an average grade of 1.5 grams per tonne and average recoveries of 80.9%, while production in Q4 2016 totaled 6,971 ounces from processing 174,049 tonnes at an average grade of 1.5 grams per tonne and average recoveries of 80.9%, while production in Q4 2016 totaled 6,971 ounces from processing 174,049 tonnes at an average grade of 1.5 grams per tonne and average recoveries of 80.9%, while production in Q4 2016 totaled 6,971 ounces from processing 174,049 tonnes at an average grade of 1.5 grams per tonne and average recoveries of 80.9%, while production in Q4 2016 totaled 6,971 ounces from processing 174,049 tonnes at an average grade of 1.5 grams per tonne and average recoveries of 80.9%, while production in Q4 2016 totaled 6,971 ounces from processing 174,049 tonnes at an average grade of 1.5 grams per tonne and average recoveries of 80.9%, while production in Q4 2016 totaled 6,971 ounces from processing 174,049 tonnes at an average grade of 1.5 grams per tonne and average recoveries of 80.9%, while production in Q4 2016 totaled 6,971 ounces from processing 174,049 tonnes at an average grade of 1.5 grams per tonne and average grade of 1.5 grams per tonne and average area.

On December 21, 2017, the Company completed a transaction to sell to an affiliate of Arete Capital Partners Ltd. ("Arete") all the issued and outstanding common shares of its indirectly held wholly owned subsidiary, Stawell Gold Mines Pty Ltd., which held the Stawell Mine. Pursuant to the terms of the transaction, the Company received \$6.25 million in cash consideration upon closing and retains a 2.5% net smelter return royalty on the Stawell Mine. As the operations and cash flows related to the Stawell Mine could be clearly distinguished from the rest of the Company, the components of revenue and expense were separated from operating activities following completion of the sale and are reported as discontinued operations, with a loss from discontinued operations of \$24.9 million being included in the Company's 2017 and Q4 2017 financial results.

GROWTH AND EXPLORATION

<u>Canada</u>

At the Canadian operations, Kirkland Lake Gold continued to invest in growth programs with the aim of delineating near-term resource growth at the Company's operating mines. During 2017, the Company's Canadian operations incurred \$18.5 million in exploration and evaluation expenditures, consisting of multiple drill programs at the Macassa and Taylor and operations.

Macassa Mine

South Mine Complex ("SMC") Underground Drill Programs - During 2017, the Company completed 46,106 metres of underground exploration testing the SMC from the Macassa 5300 Level. An additional 6,936 metres of underground exploration was completed from the Macassa 4500 Level, testing the '05 Narrows Zone (located approximately 480 metres north of the '04 Break). In addition, 4,785 metres of underground exploration testing the '04 Break was completed from the 4200 level. At December 31, 2017, the Company had three underground exploration drills testing the SMC from the 5300 Level. Of the three drills, one was testing the Lower SMC Zone, with the other two drill rigs testing the potential easterly extension of the SMC.

A significant milestone was achieved on June 28, 2017, when the Company announced that underground drilling had intersected newly-discovered mineralization that succeeded in extending the SMC by 259 metres to the east of the existing mineral resource area. The results also extended the current area of mineralization on the Lower SMC Zone by 65 metres to depth and 60 metres to the west, and intersected high-grade mineralization in a newly-discovered hangingwall system in the Lower SMC area. Underground drilling at Macassa over the balance of the year was largely focused on better defining the geometry of the eastern SMC mineralization in support of potential mineral resource growth.

Most of the drilling in the 2017 exploration program was considered reconnaissance in nature, testing both potential strike and depth extensions to the SMC, along a strike length of approximately 300 metres and to a vertical depth of 366 metres below the drill bay on the 5300 Level east exploration drift. The drilling followed up on the reconnaissance surface exploration program that was reported in the press releases dated November 3, 2015 and January 19, 2016. The mineralization encountered through the FY 2017 program was typical SMC style, with shallow dipping veries mineralized with fine visible gold and tellurides and hosted within both feldspar porphyry and basic syenite. To date, at least five individual vein sets have been intersected with follow up drilling currently underway at closer-spaced centres to define potential resources. The SMC remains open to the east along strike and up dip.

During 2017, 288 metres of development drifting was completed to extend the 5300 Level exploration drift to east, as well as to excavate a new drill bay to support future SMC exploration drilling. The drill bay was completed in August, with a third drill added to test the east SMC program commencing at that time. An additional 103 metres of drifting to the east is underway, and



it is anticipated that this development program, which also includes the excavation of another new drill bay, will be completed in the first quarter 2018.

During 2017, the Company completed 73,448 metres of surface exploration drilling. Of this drilling, 58,734 metres was testing the east SMC corridor and the Amalgamated Break, while and the remaining 14,714 metres tested the Main and '04 Breaks between the #2 and #3 shafts above the

Taylor Mine

During 2017, the Company completed 62,669 metres of surface and underground exploration drilling (47,114 metres from surface and 15,555 metres from underground) at the Taylor Mine. Exploration drilling in 2017 focused on four key prospective areas: along the hanging wall of the Porcupine-Destor Fault ("PDF") east of the Shaft Deposit; at a prospective target area situated to the west of the Shaft Deposit and east of the West Porphyry Deposit; at depth below both the East Porphyry and West Porphyry deposits; and up dip of the 1004 Zone of the West Porphyry Deposit.

On June 27, 2017, the Company released results from 28 surface drill holes for 10,365 metres and 17 underground drill holes for 6,588 metres. The results included intersecting gold-bearing quartz veins to the east along the PDF at multiple locations, with the furthest being located 1.8 kms east of the Shaft Deposit. In addition, drilling at depth succeeded in extending gold mineralization approximately 100 metres below the existing mineral resource in the East Porphyry Deposit, and identified mineralization situated along a quartz-carbonate shear zone located approximately 150 metres down dip of the existing 1004 Zone mineral resource and approximately 600 metres below surface. (See Company News Release dated June 27, 2017.)

On August 11, 2017, the Company released results from a total of 15 holes for 12,155 metres of surface drilling and 14 holes for 2,500 metres from underground drilling. The results included additional intersections from surface drilling of high-grade, gold-bearing quartz veins along the PDF east of the Shaft Deposit, including new intersections located within 225 metres of the existing mine infrastructure at the Shaft Deposit. Results from underground drilling included the intersection of gold mineralization approximately 70 metres west of the Shaft Deposit in the target area between the Shaft and West Porphyry deposits, as well as the intersection of gold mineralization approximately 100 metres east of the West Porphyry deposits, as well as the intersection of gold mineralization approximately 100 metres east of the West Porphyry deposits, as well as the intersection of gold mineralization approximately 100 metres east of the West Porphyry deposits.

On December 18, 2017, the Company release results from seven surface drill holes for 9,540 metres and 16 underground drill holes for 3,309 metres. The results were significant, both in the growth potential for the mine, as well as the extend of high-grade mineralization that was Intersected. Among key results, a new gold zone was identified located approximately \$50 metres below the West Porphyry Deposit, with intersections including 46.7 grams per tonne over 3.6 metres, 100 metres, 200 metres, 20 to 700 metres below the West Porphyry Deposit.

Drilling in 2018 at Taylor will continue to target additional expansion of mineralization around the Shaft and West Porphyry deposits.

During 2017, exploration drilling was carried out to evaluate numerous drill ready targets associated with the PDF, and other regional structures, with two surface drills operating on the Nighthawk, Garrison Creek, Campbell zone, Runway, Card Lake, Caman, Taylor West, and Pack Can properties. A total of 41,578 metres of surface drilling was completed on these high value targets during the year.

In addition, the Company concluded a number of mineral claim property acquisitions (Card / Runway / Manville / Lalonde and Garrison) during 2017 by purchasing 42 claims totalling 712 hectares. These claim blocks are situated along strike of the Holt and Taylor Mine properties and contain favorable highly prospective geology and the strike extension of the mineralized structures traced on the mine properties.

At the Company's Australians operations, Kirkland Lake Gold continued to invest in growth programs to both delineate and extend resources at both the Fosterville and Cosmo Mines, and to evaluate district targets within the Fosterville and Northern



Territory land positions. During 2017, the Company's Australian operations incurred \$29.8 million in exploration and evaluation expenditures.

Fosterville Mine

An aggressive program of exploration and definition drilling was completed in 2017, aimed at further expanding mineral resources and mineral reserves at the Fosterville Mine. The program involved as many as eight underground and three surface drills and 124,992 metres of total drilling.

The success of exploration efforts in the first half of 2017 contributed to a significant increase in mineral reserves as part of a mid-year reserve update as at June 30, 2017. Underground mineral reserves more than doubled to 1,030,000 ounces from 490,000 ounces in the December 31, 2016 mineral reserve estimate. The average mineral reserve grade estimate increased 83% to 17.9 grams per tonne from 9.8 grams per tonne previously. Included in the June 30, 2017 mineral reserve estimate was 532,000 ounces at an average grade of 58.8 grams per tonne in the Swan Zone.

Step-out extension drilling on the Swan and Eagle zones of the Lower Phoenix system remained a priority throughout the remainder of 2017, with drilling also focused on the extension of the Harrier gold system at depth. Surface drilling was undertaken at both Robbin's Hill and the Lower Phoenix North gold systems, and initial exploratory underground drilling was undertaken on the Sugarloaf target.

On August 8, 2017, drill results were returned from six underground holes totaling 2,652 metres into existing mineral resources and extensions of the Swan Zone of the Lower Phoenix gold system (see Kirkland Lake Gold News Release dated August 8, 2017). Consistent with earlier results, the new drill intersections continued to return intervals extremely high-grade mineralization with visible gold and to demonstrate both the continuity and growth potential of the Swan Zone. The August 8 th results confirmed that the approximate 40° west-dipping Swan Zone was continuously mineralized southwards down-plunge, and extended at least 80 metres laterally to the south and 40 metres below the existing Swan Zone mineral reserves.

On November 7, 2017, drill results were reported for an additional 15 underground holes totaling 2,150 metres outside of measured and indicated mineral resources of the Swan Zone (see Kirkland Lake Gold News Release dated November 7, 2017). The results were significant and included the intersection of high-grade, visible-gold bearing mineralization 120 metres down-plunge of existing Swan Zone inferred mineral resource and 210 metres down-plunge of existing mineral reserves. The release of the November 7 th results demonstrated the continuity of the Swan Zone mineralization over a plunge length of 460 metres and vertical extent of approximately 300 metres with the opportunity existing for continued down-plunge growth of the Swan Zone through additional step-out drilling.

During Q4 2017, approximately 25,990 metres of largely resource definition drilling was completed in testing the Phoenix South mineralization system, and mostly focused on the Swan and Eagle structures; with results continuing to confirm the continuity and high-grade tenor of the faults. The mineralization associated with the Swan Fault remains open down-plunge south of 6250mN, with extensive drilling planned in 2018 that will continue to focus on extension and infill definition of the highly-mineralized Swan Zone structure.

Drilling on the Harrier and Osprey structures progressed through most of 2017 to test for potential up-dip gold zones of significant mineralization and resource extensions approximately 100 metres down-plunge from current Harrier mineral resources. During 2017, some 9,049 metres were completed on these programs. In addition, decline development advanced to the south to access the high-grade Harrier Base mineral reserve, with the aim to add an alternative production source to the Lower Phoenix mineralized system during 2018. In the lower part of the Harrier system, diamond drilling in the second half of 2017 continued to reinforce the trend to higher grades.

Surface drilling at Robbin's Hill targets commenced in Q3 2016 and continued throughout 2016 and 2017. A total of 18,499 metres of diamond drilling was completed across three programs during 2017. Drilling was focused on two main structures, the Curie Fault (formerly Farley's Fault) and Rubin Fault (formerly Farley's Footwall Fault) and returned sulfide mineralization intercepts, up to 18 metres in length. Drilling confirmed that massive quartz-stibnite veining occurs with the mineralized faults.

Data from one of the Robbins's Hill holes was used to improve processing of a 2D seismic survey (2 transects), undertaken in the second quarter of 2017. The 2D seismic survey was a second stage of de-risking programs, which returned positive results, and lend support to a 3D seismic survey, which is planned to be undertaken in 2018 in the southern portion of the Mining License.

KL KIRKLAND LAKE GOLD

Exploration License 3539 - In addition to actively exploring the Mining License, the Company is investing in a regional exploration program throughout its Exploration License at Fosterville which cover over 505 km 2. Within this land holding there is over 60 km strike length of potential gold-bearing structures located along seven interpreted fault zones. Five of the faults are known to contain gold occurrences with either historic mineral resources or workings. A helicopter electro-magnetic survey was completed and extensive soil sampling program was well advanced in Q4 2017. Drilling was initiated on the Goormong South prospect, approximately 5 kilometres to the north of the Mining License late in the year, with completion of 1,318 metres, and drilling to continue in Q1 2108. Additional drilling is planned in 2018 for advanced prospects, which will include Hallanan's and Russell's Reef in Q1 2018.

Two new exploration licenses, EL006502 (FGM North) and EL006503 (FGM West) were granted to Fosterville Gold Mine Pty Ltd on October 23, 2017. The licenses were granted for five years and encompass a total area of 1,006 graticules (1 graticule = 1 km 2).

Cosmo Mine and Northern Territory

Despite placing the Cosmo Mine and Union Reefs Mill on care and maintenance effective June 30, 2017, the Company completed an extensive exploration program at the Lantern Deposit located adjacent to the Cosmo Mine during 2017. On December 19, 2017, the Company announced results from a total of 65 holes for 23,553 metres from underground diamond drilling and nine holes for 4,184 metres from surface drilling that were designed to test the expansion potential of the Lantern Deposit. The results substantially increased the deposit footprint, particularly to the north, and demonstrated the potential for significant growth in mineral resources. Included in the results was the intersection of extremely high-grade mineralization bearing visible gold more than 250 metres north of the current Lantern Deposit mineral resources. The drilling results extend the Lantern mineralization to over 500 metres along strike, more than 1,200 metres down-plunge and over 1,000 mistrage. Based on the encouraging drill results in 2017, the Company is planning extensive exploration development and drilling at the Lantern Deposit in 2018 as part of a program aimed at establishing an economic deposit or deposits in the Northern Territory of Australia to support a resumption of operations at the Cosmo Mine and Union Reefs Mill.

At Union Reefs, surface diamond drilling at two targets, the Prospect and Crosscourse plunge extensions was undertaken in 2017 with a total of four holes and 4,332 metres of drilling being completed. The drilling targeted mineralization approximately 700 metres down-plunge of historic mineral resources. The drilling was successful in intersecting mineralization, with visible gold observed in several of the holes.

Exploration drilling in 2018 is expected to concentrate on resource definition and expansion of the Lantern Deposit, and will be supported by construction of underground drill drives that will also provide underground exposures of Lantern mineralization for the first time. Other drilling in the Norther Territory will target extensions of the Prospect mineralized envelope at Union Reefs and investigating a number of additional regional targets.

REVIEW OF FINANCIAL CONDITION AND LIQUIDITY

Kirkland Lake Gold is committed to managing liquidity by achieving positive cash flows from its mine operations to fund operating and capital requirements as well as development projects. The Company monitors the expected settlement of financial assets and liabilities on an ongoing basis; however, there are no significant accounts payable, capital lease obligations, or other payments that are outstanding past their due dates.

As at December 31, 2017, Kirkland Lake Gold had a positive working capital balance of \$169.1 million, including a cash balance of \$231.6 million, which compares to a working capital of \$92.3 million and cash of \$234.9 million at December 31, 2016. The strengthening of working capital reflects ongoing free cash flow generation from the Company's mine operations and is aided by increased revenues from higher sales volumes, as well as the timing of sustaining capital outlays.

The Company's 6% Debentures, with a face value of C\$57.5 million, were redeemed from cash on their maturity date of June 30, 2017. A majority of the Company's 7.5% Debentures, with a face value of \$C62.0 million, were converted into 4,505,393 common shares at a conversion price of C\$13.70 per share.

KL KIRKLAND LAKE GOLD

Cash Flow Analysis

Net cash outflows from financing activities of continuing operations for 2017 were \$111.3 million, which are largely due to the repurchase of common shares during Q3 and Q4 and the repayment of the 6% Debentures on their maturity date of June 30, 2017. Net cash inflows from financing activities of continuing operations for 2016 totaled \$7.7 million, primarily due to net proceeds received from flow through share financings.

Cash outflows from investing activities from continuing operations for 2017 and 2016 were \$200.9 million and \$19.5 million, respectively. Mineral property expenditures were \$85.6 million and \$57.8 million for 2017 and 2016, respectively, and amounts of \$46.2 million and \$19.5 million were spent on plant and equipment during those same periods. In addition, the Company invested a total of \$80.8 million in public and private entities. During Q4 2017, IDS Silver Holdings in IDS Si

 $The Company generated \$309.8 \ million \ and \$187.0 \ million, respectively, in cash flow from continuing operations during 2017 \ and 2016, respectively.$

On May 15, 2017, the Company announced its intention to initiate a NCIB to buy back its common shares through the facilities of the TSX. Any purchases made pursuant to the NCIB will be made in accordance with the rules of the TSX. The maximum number of common shares that can be purchased for cancellation pursuant to the NCIB is 15,186,571 common shares, representing 10% of the Company's common shares in the public float as of May 11, 2017. The maximum number of shares that can be purchased daily, other than block purchase exceptions, is 294,727 common shares.

Purchases under the NCIB commenced on May 17, 2017 and will be terminated the earlier of May 16, 2018 or the date on which the maximum number of common shares have been purchased.

During the year ended December 31, 2017, the Company purchased 5,443,400 common shares for cancellation under the NCIB, for \$60.1 million (C\$76.5 million). All shares purchased pursuant to the NCIB have been tendered for cancellation. As at the date hereof, a balance of 9,743,171 common shares remain available for purchase under the NCIB.

The Company's cash balance supplemented by cash flow from operations are expected to be sufficient to fund operations and capital requirements for at least the next twelve months.

OFF-BALANCE SHEET ARRANGEMENTS.

As at December 31, 2017, the Company did not have any off-balance sheet items.



OUTSTANDING SHARE AND CONVERTIBLE EQUITY INFORMATON

Outstanding Share Information

	As at December 31, 2017	Weighted Average Exercise Price
Authorized: Unlimited number of common shares		<u>. </u>
Issued: Fully paid common shares	210,944,884	=
Issued: Stock options	1,499,315	C\$5.80
Issued: Restricted share units	364,263	=
Issued: Performance share units	342,206	=

Terms of the Company's equity incentive plans are outlined in the Company's audited consolidated financial statements for the year ended December 31, 2017.

SELECTED ANNUAL INFORMATION

(in thousands, except for per share figures)	Year Ended December 31, 2017	Year Ended December 31, 2016
Financial Results		
Revenue	\$747,495	\$403,340
Earnings from mine operations	\$289,129	\$135,976
Loss from discontinued operations	(\$24,904)	(\$4,627)
Net earnings	\$132,426	\$42,107
Basic earnings per share	\$0.64	\$0.35
Diluted earnings per share	\$0.63	\$0.34

(in thousands)	As at and for the year ended December 31, 2017	As at and for the year ended December 31, 2016
Financial Position		
Cash	\$231,596	\$234,898
Working capital	\$169,146	\$92,307
Mining interests and plant and equipment	\$1,049,309	\$976,044
Total Assets	\$1,485,800	\$1,298,694
Total non-current liabilities	\$197,732	\$195,201
Cash dividends paid	(\$3,281)	\$-

The Company's financial position was significantly impacted as a result of the acquisition of St Andrew on January 26, 2016 and Newmarket on November 30, 2016 which resulted in a much higher cash balance, stronger working capital and increased mining interests and total assets. The revenue and consequently the amount of net income and earnings per share is driven largely by the amount of gold produced and sold and is subject to fluctuations in the market price of gold in US dollars and the strength and weakening of the US dollar specifically against the Canadian and Australian dollars. The timing of gold pours, gold sales, gold price fluctuations, ore grade and gold inventory balances also affect quarterly results. Trends observed or averaged over a longer time period may be more representative of the true performance of the business.

QUARTERLY INFORMATION

The consolidated results presented below include the results of operations for St Andrew from January 26, 2016 and Newmarket from November 30, 2016. Accordingly, results prior to January 26, 2016 only include operations of Old Kirkland Lake Gold. The



following selected financial data for the last eight fiscal quarters has been prepared in accordance with IFRS and should be read in conjunction with the Company's Condensed Consolidated Interim Financial Statements for each of the periods considered below and the Consolidated Financial Statements for the year ended December 31, 2017.

		2017		
		Three Months Er	ded	
(in thousands except per share amounts)	December 2017	September 2017	June 2017	March 2017
Revenue	\$212,364	\$176,709	\$189,894	\$168,528
Earnings before income taxes	\$54,799	\$64,048	\$52,294	\$24,938
Net earnings	\$40,980	\$43,780	\$34,552	\$13,114
Basic earnings per share	\$0.20	\$0.21	\$0.17	\$0.06
Diluted earnings per share	\$0.20	\$0.20	\$0.16	\$0.06

		2016		
	·	Three Months Er	ided	
(in thousands except per share amounts)	December 2016 (Restated)	September 2016	June 2016	March 2016
Revenue	\$134,225	\$100,825	\$91,689	\$79,925
Earnings before income taxes	\$11,194	\$30,158	\$17,017	\$14,894
Net earnings	\$3,076	\$18,880	\$10,641	\$9,510
Basic earnings per share	\$0.02	\$0.15	\$0.09	\$0.09
Diluted earnings per share	\$0.02	\$0.15	\$0.09	\$0.09

The revenue and consequently the amount of net income and earnings per share is driven largely by the amount of gold produced and sold and is subject to fluctuations in the market price of gold in US dollars and the strength and weakening of the US dollar specifically against the Canadian and Australian dollars. The timing of gold pours, gold sales, gold price fluctuations, ore grade and gold inventory balances also affect quarterly results. Trends observed or averaged over a longer time period may be more representative of the true performance of the business.

Revenue and earnings during the previous eight quarters were largely influenced by the timing of the Company's business combinations over the period. Revenue increased from \$27.9 million at December 31, 2015 to \$79.9 million for the three months ended March 31, 2016, largely reflecting the completion of the St. Andrew Arrangement on January 26, 2016. Through the St. Andrew Arrangement, the Company acquired the Holt, Holloway and Taylor Mines in Northern Ontario. Revenue increased from \$100.8 million for the quarter ended September 30, 2016 to \$130.9 million for the quarter ended December 31, 2016, partially reflecting the completion of the Newmarket Arrangement on November 30, 2016 through which the Company acquired the Fosterville, Cosmo and Stawell Mines in Australia. Revenue increased to \$168.5 million in the first quarter of 2017, representing the first full quarter of production from the Company's acquired Australian operations.

Revenue for 2017 increased to \$747 . 5 million from \$403 . 3 million for the same period in 2016, mainly reflecting the addition of the Company's Australian assets during the fourth quarter of 2016. Revenue from the Company's Canadian operations in 2017 increased to \$393.0 million from \$372.7 million in 2016 mainly reflecting the impact of higher gold production at Macassa, Holt and Taylor Mines.

COMMITMENTS AND CONTINGENCIES

Contractual obligations of the Company as at December 31, 2017 are as follows (in thousands):

As at December 31, 2017

	Total	Less than a year	1-3 years	4-5 years	After 5 years
Accounts payable and accrued liabilities	\$84,746	\$84,746	\$ —	\$-	\$-
Finance lease payments	42,267	18,480	23,787	_	_
Office rent and other obligations	5,558	1,643	2,230	1,509	176
Income taxes payable	8,337	8,337	_	_	_
	\$140.908	\$113.206	\$26.017	\$1,509	\$176

RELATED PARTY TRANSACTIONS

The remuneration of directors and executive officers is determined by the compensation committee of the Board of Directors. The directors' fees and other compensation of directors and executive officers were as follows:

	December 31, 2017	December 31, 2016
Officer salaries and short-term benefits	\$6,405	\$1,463
Share based payment expense	3,173	1,799
Directors fees	553	522
Severance payments	1,461	1,624
	\$11,592	\$5,408

Related party transactions are measured at the exchange amount which is the consideration agreed to between the parties.

CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of the financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities and contingent liabilities at the date of the financial statements and reporting amounts of revenues and expenses during the reporting period. Estimates and assumptions are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes may differ materially from these estimates.

Significant Judgments in Applying Accounting Policies

Determination of functional currency

In accordance with International Accounting Standards ("IAS") 21, The Effects of Changes in Foreign Exchange Rates, management determined that the functional currency of the Company's Canadian and Australian subsidiaries is, respectively, the Canadian and Australian dollar. Determination of functional currency involves judgments to determine the primary economic environment and the Company reconsiders the functional currency of its entities if there is a change in events and conditions which determined the primary economic environment.

Deferred income taxes

Judgment is required in determining whether deferred tax assets are recognized on the statement of financial position. Deferred tax assets, including those arising from unutilized tax losses require management to assess the likelihood that the Company and/or its subsidiaries will generate taxable earnings in future periods, in order to utilize recognized deferred tax assets.



Business combinations

Determination of whether a set of assets acquired and liabilities assumed constitute the acquisition of a business or asset may require the Company to make certain judgments as to whether or not the assets acquired and liabilities assumed include the inputs, processes and outputs necessary to constitute a business as defined in IFRS 3 – Business Combinations. Based on an assessment of the relevant facts and circumstances, the Company concluded that the acquisition of St Andrew on January 26, 2016 and Newmarket on November 30, 2016 met the criteria for accountine as a business combination.

Determination of reserves and resources

Accounting Estimates and Assumptions

Determination of reserves and resources

Reserve and resource estimates are used in the unit of production calculation for depletion and depreciation expense, the determination of the timing of rehabilitation provision costs, business combination accounting and impairment analysis.

There are numerous uncertainties inherent in estimating reserves and resources. Assumptions that are valid at the time of estimation may change significantly when new information becomes available. Changes in the forecast prices of commodities, exchange rates, production costs, or recovery rates as well as new drilling results may change the economic status of reserves and resources and may result in the reserves and resources being revised.

Deferred income taxe

Estimates of future taxable income are based on forecast cash flows from operations and the application of existing tax laws in each jurisdiction. To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Company and/or its subsidiaries to realize the net deferred tax assets recorded at the statement of financial position date could be impacted. Additionally, future changes in tax laws in the jurisdictions in which the Company and its subsidiaries operate could limit the ability of the Company to obtain tax deductions in future periods.

Business combinations

The allocation of the purchase price of acquisitions requires estimates as to the fair market value of acquired assets and liabilities. The information necessary to measure the fair values as at the acquisition date of assets acquired and liabilities assumed requires management to make certain judgments and estimates about future events, including but not limited to estimates of mineral reserves and mineral resources and exploration potential of the assets acquired, future operating costs and capital expenditures, discount rates to determine fair value of assets acquired and future metal princes and long term foreign exchange rates.

Changes to the preliminary measurements of assets and liabilities acquired may be retrospectively adjusted when new information is obtained until the final measurements are determined within one year of the acquisition date.

Impairment of assets

The carrying amounts of mining properties and plant and equipment are assessed for any impairment triggers such as events or changes in circumstances which indicate that the carrying value may not be recoverable. If there are indicators of impairment, an exercise is undertaken to determine whether the carrying values are in excess of their recoverable amount. Such review is undertaken on an asset by asset basis, except where such assets do not generate cash flows independent of other assets, and then the review is undertaken at the cash generating unit level ("CGU").

The Company considers both external and internal sources of information in assessing whether there are any indications that mining interests are impaired. External sources of information the Company considers include changes in the market, economic and legal environment in which the Company operates that are not within its control and affect the recoverable amount of mining interests. Internal sources of information the Company considers include the manner in which mining properties and plant and equipment are being used or are expected to be used and indications of economic performance of the assets.



Environmental rehabilitation

Significant estimates and assumptions are made in determining the environmental rehabilitation costs as there are numerous factors that will affect the ultimate liability payable. These factors include estimates of the extent and costs of rehabilitation activities, technological changes, regulatory changes, cost increases, and changes in discount rates

Those uncertainties may result in actual expenditures in the future being different from the amounts currently provided. The provision represents management's best estimate of the present value of the future rehabilitation costs required.

ACCOUNTING POLICIES AND BASIS OF PRESENTATION

The Company's significant accounting policies and future changes in accounting policies are presented in the audited consolidated financial statements for the year ended December 31, 2017. The following outlines the new accounting policies adopted by the Company effective January 1, 2017 and those new standards and interpretations not yet adopted by the Company.

Adoption of new accounting standards

The Company has adopted the following amendments to accounting standards, effective January 1, 2017. These changes were made in accordance with the applicable transitional provisions.

IAS 12, Income Taxes ("IAS 12")

The amendments clarify that the existence of a deductible temporary difference depends solely on a comparison of the carrying amount of an asset and its tax base at the end of a reporting period, and is not affected by possible future changes in the carrying amount or expected recovery of the asset. The amendments to the standard did not have a material impact on the consolidated financial statements.

IAS 7. Statement of Cash Flows
This amendment requires disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash and non-cash changes. The Company has presented the required disclosures for the current period in note 22.

Accounting Standards Issued But Not yet Adopted

IFRS 9, Financial Instruments

In July 2014, the LASE issued the final version of IFRS 9 Financial Instruments ("IFRS 9"), which replaces IAS 39 Financial Instruments: Recognition and Measurement ("IAS 39"). IFRS 9 is effective for annual periods beginning on or after January 1, 2018. The Company will adopt IFRS 9 for the annual period beginning January 1, 2018 and will take advantage of the exemption allowing it not to restate comparative information for prior periods with respect to classification of its available for sale investments. IFRS 9 provides a revised model for classification and measurement of inancial assets, including a new expected credit loss ("ECL") impairment model. The revised model for classification according to their contractual cash flow characteristics and the business models under which they are held. IFRS 9 introduces a reformed approach to hedge accounting. IFRS 9 also largely retains the existing requirements in IAS 39 for the classification of inflancial liabilities.

The Company has completed its assessment of the impact of IERS 9 and expects the following impacts upon adoption:

i) The Company holds several equity investments as available for sale that are currently measured at FVTOCI under IAS 39 with a fair value of \$100,109 as at December 31, 2017. Under the new standard, the Company will make the irrevocable election under IFRS 9 to measure its available for sale investments at FVTOCI. As a result, all fair value gains and losses will be reported in OCI, no future impairment losses will be recognized in net earnings, similarly no gains or losses will be reclassified to net earnings on disposal.

As at December 31, 2017, the balance of unrealized gains which will continue to remain within accumulated other comprehensive income is \$26,764. The new classification and measurement requirements under IFRS 9 are not expected to have a material impact on the Company's other financial assets and financial liabilities.



ii) The other changes under IFRS 9, including the new ECL impairment model, are not expected to have a material impact on the Company's financial statements.

IFRS 15. Revenue from Contracts with Customers ("IFRS 15") proposes to replace IAS 18 Revenue, IAS 11 Construction Contracts, and some revenue-related interpretations. The standard contains a single model that applies to contracts with customers and two approaches to recognizing revenue: at a point in time or over time. The model features a contract-based five-step analysis of transactions to determine whether, how much, and when revenue is recognized. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized. The Company will adopt IFRS 15 for the annual period beginning January 1, 2018. Based on the Company's preliminary assessment, it concluded that the new revenue standard will not have an impact on the timing of revenue recognition at its Canadian or Australian operations.

IFRS 16, Leases

In January 2016, the IASB issued the IFRS 16, Leases ("IFRS 16") which replaces the existing lease accounting guidance. IFRS 16 requires all leases to be reported on the balance sheet as well as corresponding depreciation and interest expense, unless certain criteria for exclusion are met.

The Company will adopt IFRS 16 for the annual period beginning January 1, 2019. The Company expects IFRS 16 will result in the recognition of additional assets and liabilities on the balance sheet, and a corresponding increase in depreciation and interest expense. The Company also expects cash flow from operating activities to increase under IFRS 16 as lease payments for most leases will be recorded as financing outflows in the statement of cash flows. The extent of the impact of adopting the standard has not yet been determined.

The Company is in the process of developing its implementation plan and expects to report more detailed information, including estimated quantitative financial impacts, if material, in its consolidated financial statements as the effective date approaches.

IFRIC Interpretation 22 Foreign Currency Transactions and Advance Consideration clarifies which date should be used for translation when a foreign currency transaction involves an advance payment or receipt. The Interpretation is applicable for annual periods beginning on or after January 1, 2018. The Company will adopt the Interpretation in its financial statements for the annual period beginning on January 1, 2018. The Company will adopt the Interpretation will not have a material impact on the dates used for translation for advance payments or receipts in foreign currencies.

IFRIC 23, Uncertainty over Income Tax Treatments

On June 7, 2017, the IASB issued iFRIC Interpretation 23, Uncertainty over Income Tax Treatments. The Interpretation provides guidance on the accounting for current and deferred tax liabilities and assets in circumstances in which there is uncertainty over income tax treatments. The Interpretation is applicable for annual periods beginning on January 1, 2019. Earlies application is permitted. The Company intends to adopt the Interpretation in its financial statements for the annual period beginning on January 1, 2019. The Company is currently in the process of assessing the minerpretation will have on its consolidated financial statements.

NON-IFRS MEASURES

The Company has included certain non-IFRS measures in this document, as discussed below. The Company believes that these measures, in addition to conventional measures prepared in accordance with IFRS, provide investors an improved ability to evaluate the underlying performance of the Company. The non-IFRS measures are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. These measures do not have any standardized meaning prescribed under IFRS, and therefore may not be comparable to other issuers.

In the gold mining industry, free cash flow is a common performance measure with no standardized meaning. Free cash flow is calculated by deducting capital cash spending (capital expenditures for the period, net of expenditures paid through finance leases) from net cash provided by operating activities of continuing operations.



The Company discloses free cash flow as it believes the measures provide valuable assistance to investors and analysts in evaluating the Company's ability to generate cash flow. The most directly comparable measure prepared in accordance with IFRS is cash flows generated from net cash provided by operating activities of continuing operations

Free cash flow is reconciled to the amounts included in the Consolidated Statements of Cash Flows as follows:

		Three months ended December 31, 2016	Three months ended September 30, 2017		
(in thousands, except per share amounts)	Three months ended December 31, 2017	(Restated)		Year ended December 31, 2017	Year ended December 31, 2016 (Restated)
Net cash provided by operating activities of continuing operations	\$103,351	\$68,456	\$66,829	\$309,812	\$186,981
Mineral property additions	(16,184)	(16,306)	(24,435)	(85,643)	(57,778)
Plant and equipment (1)	(22,648)	(6,805)	(10,863)	(46,197)	(15,273)
Free cash flow	\$64,519	\$45,345	\$31,531	\$177,972	\$113,930
(4) 5 1 1 5 5 1 1 1 5 1 1 1 1 1 1 1 1 1 1				•	

Operating Cash Costs and Operating Cash Costs per Tonne and Ounce Sold

Operating cash costs and operating cash cost per tonne and per ounce sold are non-IFRS measures. In the gold mining industry, these metrics are common performance measures but do not have any standardized meaning under IFRS. Operating cash costs include mine site operating costs such as mining, processing and administration, but exclude royalty expenses, depreciation and depletion and share based payment expenses and reclamation costs. Operating cash costs per tonne of ore produced is calculated by dividing operating cash costs to tonnes milled; operating cash cost per ounce sold is based on ounces sold and is calculated by dividing operating cash costs by volume of gold ounces sold.

The Company discloses operating cash costs and operating cash cost per tonne and per ounce sold as it believes the measures provide valuable assistance to investors and analysts in evaluating the Company's operational performance and ability to generate cash flow. The most directly comparable measure prepared in accordance with IFRS is total production expenses. Operating cash costs and operating cash cost per ore tonne produced and per ounce of gold sold should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS.

Sustaining and Growth Capital

Sustaining capital and growth capital are Non-IFRS measures. Sustaining capital is defined as capital required to maintain current operations at existing levels. Growth capital is defined as capital expenditures for major growth projects or enhancement capital for significant infrastructure improvements at existing operations.

Total capital expenditures	\$57,090	\$86,807	\$106,441	16,817 \$164,523	\$86,807
Growth capital	5.446	55.106	68.130	45.047	184
Sustaining capital	\$51,644	\$31,701	\$38,311	\$147,706	\$86,623
	Three months ended December 31, 2017	Three months ended December 31, 2016 (Restated)	Three months ended September 30, 2017	Year ended December 31, 2017	Year ended December 31, 2016 (Restated)

AISC and AISC per Ounce Sold

AISC and AISC per ounce sold 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, underground exploration 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.

Total cash costs and AISC Reconciliation

The following tables reconciles these non-IFRS measures to the most directly comparable IFRS measures available for the three months and year ended December 31, 2017 and 2016 and the three months ended September 30, 2017:

KL KIRKLAND LAKE GOLD

Year ended December 31, 2017

			rear el	idea December 31,	2017						
(in thousands, except per tonne and per ounce amounts)	Holt Mine	Holloway Mine	Taylor Mine	Holt Mine Complex (1)	Macassa Mine	Total Canadian Operations	Fosterville Mine	Cosmo Mine	Total Australian Operations	General and administrative	Total Consolidated
Production costs	\$44,820	\$2,833	\$29,646	\$77,299	\$102,743	\$180,042	\$70,906	\$37,367	\$108,273	\$-	\$288,315
Stock-based compensation	(30)	_	(13)	(43)	(216)	(259)	(138)	_	(138)	-	(397)
Purchase Price Allocation	_	_	_	-	_	_	(2,630)	_	(2,630)	-	(2,630)
Operating cash costs	44,790	2,833	29,633	77,256	102,527	179,783	68,138	37,367	105,505	_	285,288
Royalties	8,644	32	911	9,587	5,376	14,963	6,433	-	6,433	-	21,396
Stock-based compensation	30	_	21	51	218	269	138	_	138	3,937	4,344
Rehabilitation and remediation	83	3	18	104	173	277	95	634	729	-	1,006
General and administrative costs	_	-	_	-	-	-	_	-	-	21,699	21,699
Mine development	9,238	_	11,315	20,553	29,058	49,611	36,496	5,680	42,176	_	91,787
Plant and equipment	5,407	-	5,290	10,697	28,380	39,077	15,641	1,201	16,842	-	55,919
AISC	\$68,192	\$2,868	\$47,188	\$118,248	\$165,732	\$283,980	\$126,941	\$44,882	\$171,823	\$25,636	\$481,439
Ounces of gold sold	65,406	1,780	48,564	115,750	196,119	311,869	258,315	22,490	280,805	_	592,674
Operating cash cost per ounce sold	\$685	\$1,592	\$610	\$667	\$523	\$576	\$264	\$1,661	\$376	\$-	\$481
AISC per ounce sold	\$1,043	\$1,611	\$972	\$1,022	\$845	\$911	\$491	\$1,996	\$612	\$-	\$812

(1)	Halt Mine Camplex includes Halloway	Mine, which was transitioned into Care and Maintenance at the beginning of 2017.

			Three months end	ded December 31, 201	7					
(in thousands, except per tonne and per ounce amounts)	Holt Mine	Taylor Mine	Holt Mine Complex	Macassa Mine	Total Canadian Operations	Fosterville Mine	Cosmo Mine	Total Australian Operations	General and administrative	Total Consolidated
Production costs	\$11,508	\$8,289	\$21,597	\$28,642	\$50,239	\$18,043	\$-	\$18,043	\$-	\$68,282
Stock-based compensation	(16)	5	(11)	(33)	(44)	-	-	-	_	(44)
Purchase Price Allocation	_	-	-	-	-	-	-	-	-	-
Operating cash costs	11,492	8,294	21,586	28,609	50,195	18,043	-	18,043	_	68,238
Royalties	2,502	272	2,774	1,374	4,148	2,052		2,052	-	6,200
Stock-based compensation	16	3	19	35	54	-	-	-	687	741
Rehabilitation and remediation	(24)	(9)	(33)	173	140	52	626	678	-	818
General and administrative costs	_	-	-	-	-	-	-	-	7,603	7,603
Mine development	2,707	6,192	8,899	6,331	15,230	12,855	213	13,068	-	28,298
Plant and equipment	2,275	2,384	4,659	14,036	18,695	4,651	-	4,651	-	23,346
AISC	\$18,968	\$17,136	\$37,904	\$50,558	\$88,462	\$37,653	\$839	\$38,492	\$8,290	\$135,244
Ounces of gold sold	18,404	14,438	32,850	52,865	85,715	80,000	-	80,058	-	165,715
Operating cash cost per ounce sold	\$624	\$574	\$657	\$541	\$586	\$226	\$-	\$225	\$-	\$412
AISC per ounce sold	\$1,031	\$1,187	\$1,154	\$956	\$1,032	\$471	\$-	\$481	\$-	\$816



Year ended December 31 2011

				Holt Mine	Macassa	Total Canadian				Total Australian	General and	
(in thousands, except per tonne and per ounce amounts)	Holt Mine	Holloway Mine	Taylor Mine	Complex	Mine	Operations	Fosterville Mine	Cosmo Mine	Stawell Mine	Operations	administrative	Total Consolidated
Production costs	\$36,752	\$22,068	\$21,309	\$80,129	\$91,279	\$171,408	\$14,637	\$6,797	\$5,527	\$26,961	\$-	\$198,369
Stock-based compensation	(21)	(21)	(21)	(63)	(280)	(343)	_	_	_	-	_	(343)
Purchase Price Allocation	(1,335)	(58)	(1,958)	(3,351)	-	(3,351)	(6,478)	_	-	(6,478)	_	(9,829)
Operating cash costs	35,396	21,989	19,330	76,715	90,999	167,714	8,159	6,797	5,527	20,483	-	188,197
Royalties	6,882	2,562	555	9,999	5,070	15,069	483	_	35	518	_	15,587
Stock-based compensation	21	21	21	63	1,510	1,573	_	_	-	_	1,230	2,803
Rehabilitation and remediation	133	31	36	200	123	323	15	32	7	54	_	377
Underground mine drilling	-	512	548	1,060	2,501	3,561	_	_	-	_	_	3,561
General and administrative costs	-	_	_	-	-	_	_	_	-	_	9,137	9,137
Mine development	10,914	1,491	6,748	19,153	33,551	52,704	2,861	178	_	3,039	_	55,743
Plant and equipment	5,940	2,857	3,288	12,085	17,736	29,821	539	472	48	1,059	_	30,880
AISC	\$59,286	\$29,463	\$30,526	\$119,275	\$151,490	\$270,765	\$12,057	\$7,479	\$5,617	\$25,153	\$10,367	\$306,285
Ounces of gold sold	56,792	27,129	44,086	128,007	172,784	300,791	19,408	6,487	2,802	28,697	_	329,488
Operating cash cost per ounce sold	\$623	\$811	\$438	\$599	\$527	\$558	\$420	\$1,048	\$1,973	\$714	\$-	\$571
AISC per ounce sold	\$1,044	\$1,086	\$692	\$932	\$877	\$900	\$641	\$1,153	\$2,005	\$877	\$-	\$930

(1) Purchase price allocation represents the impact on production costs of the valuation of metal inventory acquired with the business combination

Mine development excludes certain items regarded as capital growth spending.

Three months ended December 31, 2016

Three months ended betember 31, 2016												
(in thousands, except per tonne and per ounce amounts)	Holt Mine	Holloway Mine	Taylor Mine	Holt Mine Complex	Macassa Mine	Total Canadian Operations	Fosterville Mine	Cosmo Mine	Stawell Mine	Total Australian Operations	General and administrative	Total Consolidated
Production costs	\$8,286	\$6,248	\$4,670	\$19,204	\$19,988	\$39,192	\$14,637	\$6,797	\$5,527	\$26,961	\$-	\$66,153
Stock-based compensation	(21)	(21)	(21)	(63)	(79)	(142)	_	-	-	-	_	(142)
Purchase Price Allocation	_	_	_	-	_	-	(6,478)	-	_	(6,478)	_	(6,478)
Operating cash costs	8,265	6,227	4,649	19,141	19,909	39,050	8,159	6,797	5,527	20,483	_	59,533
Royalties	1,820	876	127	2,823	867	3,690	483	-	35	518	_	4,208
Stock-based compensation	21	21	21	63	198	261	_	-	-	-	1,348	1,609
Rehabilitation and remediation	34	7	9	50	12	62	15	32	7	54	_	116
Mine exploration	-	84	86	170	610	780	_	-	-	-	-	780
General and administrative costs	-	_	-	-	-	-	_	-	-	-	2,625	2,625
Mine development	2,981	294	2,073	5,348	7,691	13,039	2,861	178	-	3,039	_	16,078
Plant and equipment	2,702	1,170	1,311	5,183	9,381	14,564	539	472	48	1,059	_	15,623
AISC	\$15,823	\$8,679	\$8,276	\$32,778	\$38,668	\$71,446	\$12,057	\$7,479	\$5,617	\$25,153	\$3,973	\$100,572
Ounces of gold sold	15,242	10,001	10,414	35,657	47,342	82,999	19,408	6,487	2,802	28,697	_	111,696
Operating cash cost per ounce sold	\$542	\$623	\$446	\$537	\$421	\$470	\$420	\$1,048	\$1,973	\$714	\$-	\$533
AISC per ounce sold	\$1,038	\$868	\$795	\$919	\$817	\$861	\$641	\$1,153	\$2,005	\$877	\$ -	\$900

Purchase price allocation represents the impact on production costs of the valuation
 General and administration costs are not of figures and costs in other income items.



Three months ended September 30, 2017

					s chaca september s						
(in thousands, except per tonne and per ounce amounts)	Holt Mine	Holloway Mine	Taylor Mine	Holt Mine Complex	Macassa Mine	Total Canadian Operations	Fosterville Mine	Cosmo Mine	Total Australian Operations	General and administrative	Total Consolidated
Production costs	\$11,055	\$-	\$7,813	\$18,868	\$23,225	\$42,093	\$18,583	\$5,821	\$24,404	\$-	\$66,497
Stock-based compensation	(12)	_	_	(12)	(44)	(56)	_	_	-	-	(56
Purchase Price Allocation	-	-	-	-	_	_	_	_	-	-	-
Operating cash costs	11,043	_	7,813	18,856	23,181	42,037	18,583	5,821	24,404	-	66,441
Royalties	2,135	_	222	2,357	1,179	3,536	1,584	_	1,584	-	5,120
Stock-based compensation	12	-	_	12	44	56	-	-	-	1,012	1,068
Rehabilitation and remediation	37	-	9	46	20	66	4	(41)	(37)	-	29
General and administrative costs	_	_	_	_	_	_	_	_	-	5,566	5,566
Mine development	2,085	_	1,897	3,982	7,820	11,802	7,656	246	7,902	-	19,704
Plant and equipment	2,851	-	2,244	5,095	5,161	10,256	8,351	-	8,351	-	18,607
AISC	\$18,163	\$-	\$12,185	\$30,348	\$37,405	\$67,753	\$36,178	\$6,026	\$42,204	\$6,578	\$116,535
Ounces of gold sold	16,280	2	11,558	27,840	44,456	72,296	62,998	2,614	65,612	-	137,908
Operating cash cost per ounce sold	\$678	\$-	\$676	\$677	\$521	\$581	\$295	\$2,227	\$372	\$-	\$48
AISC per ounce sold	\$1,116	\$-	\$1,054	\$1,090	\$841	\$937	\$574	\$2,305	\$643	\$-	\$845

Purchase price allocation represents the impact on production costs of the valuation of metal inventory acquired with the busin

General and administration costs are net of finance and certain other income items.

 Mine development excludes certain items reported as conital accounts specified.



Average Realized Price per Ounce Sold

In the gold mining industry, average realized price per ounce sold is a common performance measure that does not have any standardized meaning. The most directly comparable measure prepared in accordance with IFRS is revenue from gold sales. Average realized price per ounces sold should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS. The measure is intended to assist readers in evaluating the total revenues realized in a period from current operations.

Average realized price per ounce sold is reconciled for the periods presented as follows:

		Three months ended December 31, 2016	Three months ended September 30,		
	Three months ended December 31, 2017	(Restated)	2017	Year ended December 31, 2017	Year ended December 31, 2016 (Restated)
Revenue from gold sales (in thousands)	\$212,364	\$130,900	\$176,709	\$747,495	\$403,340
Ounces sold	165,713	111,690	137,908	592,732	329,489
Average realized price per ounce sold	\$1,282	\$1,172	\$1,281	\$1,261	\$1,224

Adjusted Net Earnings from Continuing Operations and Adjusted Net Earnings per Share from Continuing Operations

Adjusted net earnings from continuing operations and adjusted net earnings per share from continuing operations are used by management and investors to measure the underlying operating performance of the Company.

Adjusted net earnings from continuing operations is defined as net earnings adjusted to exclude the after-tax impact of specific items that are significant, but not reflective of the underlying operations of the Company, including transaction costs and executive severance payments, purchase price adjustments reflected in inventory, and other non-recurring items. Adjusted net earnings per share from continuing operations is calculated using the weighted average number of shares outstanding for adjusted net earnings per share from continuing operations.

(in thousands, except per share amounts)	Three months ended December 31, 2017	Three months ended December 31, 2016 (Restated)	Three months ended September 30, 2017	Year ended December 31, 2017	Year ended December 31, 2016 (Restated)
Net earnings	\$40,980	\$3,076	\$43,780	\$132,426	\$42,107
Loss (gain) on warrant investment	17,601	_	(19,219)	(1,618)	_
Transaction costs	_	14,379	_	397	17,746
PPA adjustment on inventory (1)	_	6,478	_	2,630	9,829
Executive severance payments	_	_	383	1,461	1,624
Income tax related to above adjustments	(2,332)	(5,754)	2,445	(1,067)	(8,082)
Loss on discontinued operations	24,904	4,627	_	24,904	4,627
Net deferred tax recovery (2)	(10,000)	_	_	(10,000)	_
Adjusted net earnings from continuing operations	71,153	22,806	27,389	149,133	67,851
Weighted average shares outstanding - basic ('000s)	207,737	146,458	208,149	207,436	121,172
Adjusted net earnings per share from continuing operations	\$0.34	\$0.16	\$0.14	\$0.72	\$0.56

¹⁾ Purchase price allocation represents the impact on production costs of the valuation of metal invectory acquired with the business combinations.

(2) One-time net deferred tax recovery of \$52.6 million partially offset by one-time current and deferred tax expense of \$42.6 million related to the tax impacts of Australian reorganizations and Canadian flow through shares.



Earnings from Continuing Operations before Interest, Taxes, Depreciation, and Amortization ("EBITDA from continuing operations")

EBITDA from continuing operations represents net earnings from continuing operations before interest, taxes, depreciation and amortization. EBITDA from continuing operations is an indicator of the Company's ability to generate liquidity by producing operating cash flow to fund working capital needs, service debt obligations, and fund capital expenditures.

 $The following is a reconciliation of \verb|EBITDA| from continuing operations to the consolidated financial statements:$

	Three months ended December 31.		Three months ended September 30.		
(in thousands, except per share amounts)	2017	Three months ended December 31, 2016	2017	Year ended December 31, 2017	Year ended December 31, 2016
Net earnings	\$40,980	\$3,076	\$43,780	\$132,426	\$42,107
Loss from discontinued operations	24,904	4,627	_	24,904	4,627
Earnings from continuing operations	65,884	7,703	43,780	157,330	46,734
Add back:					
Finance costs	3,455	3,031	2,350	12,206	11,628
Depletion and depreciation	45,621	24,491	31,686	148,655	58,970
Current income tax expense	13,826	(310)	11,976	44,223	2,800
Deferred income tax (recovery) expense	(\$24,911)	\$10,305	\$8,292	(\$5,474)	\$30,233
EBITDA from continuing operations	\$103.875	\$45.220	\$98.084	\$356.940	\$150.365

Working Capital

Working capital is a Non-IFRS measure. In the gold mining industry, working capital is a common measure of liquidity, but does not have any standardized meaning.

The most directly comparable measure prepared in accordance with IFRS is current assets and current liabilities. Working capital is calculated by deducting current liabilities from current assets. Working capital should not be considered in isolation or as a substitute from measures prepared in accordance with IFRS. The measure is intended to assist readers in evaluating the Company's liquidity. Working capital is reconciled to the amounts in the Consolidated Statements of Financial Position as follows:

(in thousands)	As at December 31, 2017	As at December 31, 2016
Current assets	\$299,618	\$289,886
Current liabilities	130,472	197,579
Working capital	\$169,146	\$92,307



INTERNAL CONTROLS OVER FINANCIAL REPORTING AND DISCLOSURE CONTROLS AND PROCEDURES

Disalassus Cantuals and Dasas dune

Disclosure controls and procedures are designed to provide reasonable assurance that material information is gathered and reported to senior management, including the President and Chief Executive Officer ("CEO") and the Executive Vice President and Chief Financial Officer ("CFO"), as appropriate to permit timely decisions regarding public disclosure.

Kirkland Lake Gold's management, including the CEO and CFO, have as at December 31, 2017, designed Disclosure Controls and Procedures (as defined in National Instrument 52-109 of the Canadian Securities Administrators), or caused them to be designed under their supervision, to provide reasonable assurance that material information relating to the issuer is made known to them by others, particularly during the period in which the interim or annual filings are being prepared; and information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation in Securities legisl

Internal Control over Financial Reportin

Kirkland Lake Gold's management, including the CEO and CFO, are responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, the CEO and CFO and effected by management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

Kirkland Lake Gold's management, including the CEO and CFO, believe that disclosure controls and procedures and internal control over financial reporting, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. These inherent limitations include the reallties that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the controls. The design of any control system also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed.

Management used the Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") to evaluate the effectiveness of the Company's internal controls for the year ended December 31, 2017. Based on this evaluation, management concluded that the Company's internal control over financial reporting was operating effectively as at December 31, 2017 to provide reasonable assurance the financial information is recorded, processed, summarized and reported in a timely manner.

Due to its inherent limitations, internal controls over financial reporting and disclosure may not prevent or detect all misstatements. Management will continue to monitor the effectiveness of its internal control over financial reporting and disclosure controls and procedures and may make

There have been no changes in the Company's internal control over financial reporting during the three months and year ended December 31, 2017, that have materially affected or are reasonably likely to materially affect, the Company's internal control over financial reporting.

RISKS AND UNCERTAINTIES

The exploration, development and mining of mineral deposits involves significant risks, which even a combination of careful evaluation, experience and knowledge may not eliminate. Kirkland Lake Gold is subject to several financial and operational risks that could have a significant rinpact on its cash flows and profitability. The most significant risks and uncertainties faced by the Company include: the price of gold; the uncertainty of production estimates, including the ability to extract anticipated tonnes and successfully realizing estimated grades; changes to operating and capital cost assumptions; the inherent risk associated with project development and permitting processes; the uncertainty of the mineral resources and their development into mineral reserves; the replacement of depleted reserves; foreign exchange risks; regulatory; tax as well as health, safety, and



environmental risks. For more extensive discussion on risks and uncertainties refer to the "Risks and Uncertainties" section in the December 31, 2016 Annual Information Form and the Company's MD&A for the period ended December 31, 2017 filed on SEDAR.

Drice 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; and global or regional political or economic conditions.

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 reserve and mineral resource estimates, which could result in material impairments 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 and such reassessment may cause substantial delays or further interruptions which may have a material adverse effect on the Company's results of operations, cash flows and financial position.

Exploration, Development and Operating Risk

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 and 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, properly, and environmental damage, all of which may result in possible legal liability. Altitions we expects that adequate precautions to minimize risks will be taken, mining operations are subject to hazards such as fire, rock falls, geometry, endering the company is a support of the company of the company is a support of the company of the company's operations that would have a material adverse effect on its business, financial condition, results of operations and prospects. Environmy may be subject to to certain risks and hazards against 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 our 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, 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 minatilities of one.

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 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. It is not unusual for new mining operations to 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 reserves 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 Macassa Shaft Project, permitting with respect to its new tailings facility at the Macassa Mine, rehabilitiation of the current tailings facility at the Macassa Mine, the development and implementation of a paste fill plant for the Fosterville Mine and a water treatment plant at the Fosterville Mine. Technical considerations, delays in obtaining government approvals and necessary permits, the inhability 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. 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 licenses, 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 the total manual reporting systems across the company as an employer. Personnel involved in the Company and its future of the personal involved in the Company as an employer. Personnel involved in the Company and its future of the personal involved in the Company as an employer. Personnel involved in the Company as an employer. Personnel involved in the Company as an employer. Personnel involved in th

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-companies and their originate, increased fines and penalties for non-companies and their originate with all environmental law or will at all times be in full compliance with all environmental law or will are all times be in full compliance with all environmental law or will are all times be in full compliance with all environmental has a fergulation or will are all times be in full compliance with all environmental 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 not be company at present and that have been caused by continuous and permits on which the Company obtains in the Company at present and that have been caused by previous or existing owners or operators of the properties.

KL KIRKLAND LAKE GOLD

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 cases 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 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 reclaimation reclaimation retriated to future reclamation costs. Should the Company need to 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.

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, terrorisms, sabotage and civil disturbances; delays in obtaining or 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.

Incertainty 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 MD&A 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 reserves and 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 reserves.

KL KIRKLAND LAKE GOLD

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 interpretation. 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 san results or interpretation and other factors may result in a revision of its mineral reserves and mineral resources are less than current estimates or if the Company faits to develop its mineral resource sare less than current estimates or if the Company faits to develop its mineral resource sare less than current estimates or influence to the company faits of perations or financial condition of mineral reserves and mineral resources are less than current estimates or influence to the company faits to develop its mineral resource sare less than current estimates or influence and a state of the company faits to develop its mineral resources are less than current estimates or interpretation, of mineral resources are less than current estimates or interpretation of interpr

Penlacement of Denleted Mineral Pesense

Given that mines have limited lives based on proven and probable mineral reserves, the Company must continually replace and expand its mineral reserves 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 and accuracy of the estimated rates and costs of mining, or enablage and processing. Actual production may vary from estimates of grade or tonnage, dilution and metallurgical and other characteristics, and the settinated rates and costs of mining, or enablage and processing, Actual production may vary 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; inductions, floange, directions, floods, droughts, rock sides 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 estrictions 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, linjury or death to persons, damage to property of Kirkland Lake

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 sorbedules, 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 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

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 uch 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 and the TSX. 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. 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.

Government Pegulation

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 "Foreign Operations and Political Risk".

Acquisitions 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.

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.

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 the failure to raise capital when needed would have a material adverse effect on the Company's business, financial condition and results of operations.

The Common Shares are listed on the TSX, NSYE 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 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

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, since approximately 10.4% of the Common Shares are held by Eric Sprott, the Chairman of the Board, the liquidity of the Company's securities may be negatively impacted.

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 many impact relationships with the command in the company and in the c



51 | Page

has made it increasingly easier for individuals and groups to communicate and share opinions and views in regards 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 Aboriainal Heritag

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.

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, 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 and extitutes, 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 or 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 of the prevent of the company will be successful, that the Company will be successful, that the Company will be successful, that the Company will be successful to obtain all efficient funds to faint-up activities, that the Company will be successful to obtain all efficient funds to faint-up activities, that the Company will be successful to obtain all efficient funds to faint-up activities, that the Company will be successful to obtain all efficients and permits or that the construction and start-up activities, and the construction and start-up activities, and the construction and start-up activities, then the Company will be successful to obtain all members and permits or that the construction and start-up activities, and the construction and s

Commercial viability of a new mine or development project is predicated on many factors. 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 ommercial production and development activities and this could have an adverse effect on profits likely enabled deemand 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 Condition

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 operation on solicition. At the Fosterville Mine, ore is processed by crushing and grinding followed by floation, bacterial oxidation and carbon in leach (CIL) circuits. Downtime at the Fosterville BION's plant impacts bacterial activity and gold recovery in the BION's directly included. 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 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.

Information Technolog

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.

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 Risk

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 Gold being unable or operatives, 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 Eluctuations

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.

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

Foreign Mining Tay Pegime

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, penalties and interest. In addition, proposed changes to mining tax regimes in foreign jurisdictions 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, 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 Kirikand Lake Gold.

Litiaation

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. Defense 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 crecived 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.

Title to the Company's Mining Claims and Lease

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 Partie

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.



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 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 or the Company's business.

Lahour and Employment Matter

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. There are currently no material labour shortages with the Company operating near its budgeted manning levels.

Conflicts of Interest

Certain of the directors and officers of the Company also serve as directors and/or 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.

FORWARD LOOKING STATEMENTS

Certain statements in this MD&A constitute "forward looking statements', including statements, including state

KL KIRKLAND LAKE GOLD

continue to be refined, changes in project development, construction, production and commissioning time frames, the possibility of project cost overruns or unanticipated costs and expenses, higher prices for fuel, power, labour and other consumables contributing to higher costs and general risks of the mining industry, failure of plant, equipment or processes to operate as anticipated, unexpected changes in mine life, seasonality and unanticipated weather changes, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, the ability to obtain the necessary permits in connection with the rehabilitation of the Macassa tailings facility and the development of a new tailings facility and the anticipated results associated therewith, native and aboriginal heritage issues, risks relating to infrastructure, permitting time and licenses, government regulation of mineral results associated therewith, native and aboriginal heritage issues, risks relating to infrastructure, permitting time and licenses, government regulation of mineral results associated therewith, native and aboriginal heritage issues, risks relating to infrastructure, permitting and licenses, government regulation of mineral results associated therewith, native and aboriginal heritage issues, risks relating to foreign operations, uncertainty in the estimation and realization of mineral resources and mineral resources a

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

INFORMATION CONCERNING ESTIMATES OF MINERAL RESERVES AND MEASURED, INDICATED AND INFERRED RESOURCES

This MD&A has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the 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 ("MI 43-301") 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. These definitions offer from the definitions in Stel Cindustry Guide or under the United States Securities Act of 1993, as an enneded (the "Securities Act").

Under SEC Industry Guide 7 standards, a "final" or "bankable" feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves and the primary environmental analysis or report must be filed with the appropriate governmental authority.

In addition, the terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are defined in and required to be disclosed by NI 43-101; however, these terms are not defined terms under SEC Industry Guide 7 and are normally not permitted to be used in reports and registration statements filed with the SEC. Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into reserves. "Inferred mineral resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies, except in area cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable. Disclosure of "contained ounces" in a resource is permitted disclosure under Canadian rules, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC Industry Guide 7 standards as in place tonnage and grade without reference to unit measures.

KL KIRKLAND LAKE GOLD

Accordingly, information contained in this Management's Discussion and Analysis contain descriptions of our mineral deposits that may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

This document uses the terms "Measured", "Indicated" and "Inferred" Resources. US investors are advised that while such terms are recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize them. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of pre-feasibility, feasibility or other economic studies. U.S. investors are cautioned not to assume that all or any part of Measured or Indicated Mineral Resources will ever be converted into Mineral Resources used. So investors are also cautioned not to assume that all or any part of Measured or Indicated Mineral Resource exists, or is economically or legally mineable.

TECHNICAL INFORMATION

The technical contents related to Kirkland Lake Gold Ltd. mines and properties, have been reviewed and approved by Pierre Rocque, P.Eng., Vice President, Canadian Operations and Ian Holland, FAusIMM, Vice President, Australian Operations. Mr. Rocque and Mr. Holland are "qualified persons" as defined in National Instrument 43-101 and have reviewed and approved disclosure of the technical information and data in this news release.

KL KIRKLAND LAKE GOLD

58 | Page



Chairman of the Board

Independent Director

Independent Director

Independent Director

Independent Director

President and Chief Executive Officer

CORPORATE INFORMATION

Directors

Eric Sprott
Anthony Makuch (3) (5)
Jeffrey Parl (2) (3) (4)
Barry P. Olson (3) (5)
Pamela Klessig (1) (3) (5)
Raymond Threlkeld (1) (2)
Jonathan Gill (3) (4) (5)
Arnold Klassen (1) (2) (4)

Board Committees (1) Corporate Governance and Nominating Committee

(2) Audit Committee
(3) Technical Committee
(4) Compensation Committee

(5) HSE & Corporate Social Responsibility Committee

Management

Anthony Makuch
Philip Yee
Alasdair Federico
Christina Ouellette
Pierre Rocque
Ian Holland
Doug Cater
John Landmark
Jennifer Wagner
Raymond Vip
Mark Utting
Brian Hagan

President and Chief Executive Officer
Executive VP and Chief Financial Office
Executive VP, Corporate Affairs & CSR
Executive VP, Human Resources
VP, Canadian Operations
VP, Australian Operations
VP, Exploration, Canada
VP, Exploration, Australia
Corporate Legal Counsel
VP, Business Intelligence
VP, Investor Relations
VP, Health Safety and Environment

Company Information

Corporate Head Office 200 Bay Street, Suite 3120 RBC Plaza – South Tower Toronto, Ontario M5J 2J1

Investor Relations

Mark Utting, Vice President, Investor Relations

T: 416.840.7884 E: mutting@klgold.com

Registrar and Transfer Agent
TSX Trust Company
200 University Avenue, Suite 300
Toronto, Ontario M5H 4H1
Canada

Canada T: 416.607.7898 www.tsxtrust.com

Auditors KPMG LLP 333 Bay Street #4600 Toronto, Ontario M5H 2SS Canada T: 416.777.8500 www.kpmg.ca



CERTIFICATION

- I, Anthony Makuch, certify that:
- 1. I have reviewed this annual report on Form 40-F of Kirkland Lake Gold Ltd.:
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;
- 4. The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the issuer and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the issuer's disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and
- 5. The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: April 2, 2018

By: signed "Anthony Makuch"
Anthony Makuch
President and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION

I Philip Vee certify that

- 1. I have reviewed this annual report on Form 40-F of Kirkland Lake Gold Ltd.:
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;
- 4. The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the issuer and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and
- 5 The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: April 2, 2018

By: signed "Philip Yee"
Philip Yee
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

CERTIFICATION PURSUANT TO 18 U.S.C. \$1350, AS ADDOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Kirkland Lake Gold Ltd. (the "Company") on Form 40-F for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anthony Makuch, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 2, 2018

signed "Anthony Makuch"
Anthony Makuch
President and Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to Kirkland Lake Gold Ltd. and will be retained by Kirkland Lake Gold Ltd. and furnished to the Securities and Exchange Commission or its staff upon request.

CERTIFICATION PURSUANT TO 18 U.S.C. \$1350, AS ADDOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Kirkland Lake Gold Ltd. (the "Company") on Form 40-F for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Philip Yee, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 2, 2018

signed "Philip Yee"
Philip Yee
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to Kirkland Lake Gold Ltd. and will be retained by Kirkland Lake Gold Ltd. and furnished to the Securities and Exchange Commission or its staff upon request.



Telephone (416) 777-85 Fax (416) 777-88



The Board of Directors Kirkland Lake Gold Ltd.

We consent to the use in this annual report on Form 40-F of Kirkland Lake Gold Ltd. being filed with the United States Securities and Exchange Commission of our Independent Auditors' Report dated February 20, 2018 on the consolidated financial statements of Kirkland Lake Gold Ltd. which comprise the consolidated statements of financial position as at December 31, 2017 and December 31, 2016, the consolidated statements of operations and comprehensive income, cash flows and changes in equity for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information, included in this annual report on Form 40-F.

Signed "KPMG LLP"

Chartered Professional Accountants, Licensed Public Accountants April 2, 2018 Toronto, Canada

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG international Cooperative ("KPMG International"), a Swiss entity, KPMG Canada provides services to KPMG LLP.

CONSENT OF PIERRE ROCQUE

The undersigned hereby consents to: (i) the use of the written disclosure derived from the Report on the Mineral Resources and Mineral Reserves of the Macassa Gold Mine Complex, Kirkland Lake, Ontario, Canada dated March 30, 2017 and effective December 31, 2016, and the use of the written disclosure derived from the Report on the Mineral Resources and Mineral Resources of the Taylor Gold mine, Matheson, Ontario dated March 30, 2017 and effective December 31, 2016, in the Annual Information Form for the year ended December 31, 2017 (of Kirkland Lake Gold Ltd. (the "Company") being filed as an exhibit to the Company's Form 40-F Annual Report for the period ended December 31, 2017, and any amendments thereto (the "40-F"), being filed with the United States Securities and Exchange Commission; (ii) the disclosure of mineral resource estimates for certain Canadian assets contained in the Management's Discussion and Analysis for the years ended December 31, 2017 and 2016 (the "MD&A") of the Company being filed as an exhibit to the 40-F; and (iii) the use of my name in the AIF, the MD&A and the 40-F.

__<u>signed "Pierre Rocque"</u>_ Pierre Rocque

Date: April 2, 2018

CONSENT OF DOUGLAS CATER

The undersigned hereby consents to: (i) the use of the written disclosure derived from the Report on the Mineral Resources and Mineral Reserves of the Macassa Gold Mine Complex, Kirkland Lake, Ontario, Canada dated March 30, 2017 and effective December 31, 2016, and the use of the written disclosure derived from the Report on the Mineral Resources and Mineral Resources of the Taylor Gold mine, Matheson, Ontario dated March 30, 2017 and effective December 31, 2016, in the Annual Information Form for the year ended December 31, 2017, Mirkland Lake Gold Ltd. (the "Company") being filed as an exhibit to the Company's Form 40-F Annual Report for the period ended December 31, 2017, and any amendments thereto (the "40-F"), being filed with the United States Securities and Exchange Commission; (ii) the disclosure of mineral resource estimates for certain Canadian assets contained in the Management's Discussion and Analysis for the years ended December 31, 2017 and 2016 (the "MD&A") of the Company being filed as an exhibit to the 40-F; and (iii) the use of my name in the AIF, the MD&A and the 40-F.

<u>Signed "Douglas Cater"</u> Douglas Cater

Date: April 2, 2018

CONSENT OF TROY FULLER

The undersigned hereby consents to: (i) the use of the written disclosure derived from the Report on the Mineral Resources and Mineral Reserves of the Fosterville Gold Mine, Victoria, Australia, dated March 29, 2018 and effective December 31, 2017, and of other information related to the Fosterville Mine, in the Annual Information Form for the year ended December 31, 2017 (the "AlF") of Kirkland Lake Gold Ltd. (the "Company") being filed as an exhibit to the Company's Form 40-F Annual Report for the period ended December 31, 2017, and any amendments thereto (the "40-F"), being filed with the United States Securities and Exchange Commission; (ii) the disclosure of mineral resource estimates for the Fosterville Mine located in the state of Victoria, Australia contained in the Management's Discussion and Analysis for the years ended December 31, 2017 and 2016 (the "MD&A") of the Company being filed as an exhibit to the 40-F; and (iii) the use of my name in the AIF, the MD&A and the 40-F.

Troy Fuller, Geology Manager, MAIG



Date: April 2, 2018

CONSENT OF ION HANN

The undersigned hereby consents to: (i) the use of the written disclosure derived from the Report on the Mineral Resources and Mineral Reserves of the Fosterville Gold Mine, Victoria, Australia, dated March 29, 2018 and effective December 31, 2017, and of other information related to the Fosterville Mine, in the Annual Information Form for the year ended December 31, 2017 (the "AIF") of Kirkland Lake Gold Ltd. (the "Company") being filed as an exhibit to the Company's Form 40-F Annual Report for the period ended December 31, 2017, and any amendments thereto (the "40-F"), being filed with the United States Securities and Exchange Commission; (ii) the disclosure of mineral reserves estimates for the Fosterville Mine located in the state of Victoria, Australia contained in the Management's Discussion and Analysis for the years ended December 31, 2017 and 2016 (the "MD&A") of the Company being filed as an exhibit to the 40-F; and (iii) the use of my name in the AIF, the MD&A and the 40-F.

9

Ion Hann, Mining Manager,
Fosterville Gold Mine, B.Eng (Mining), FAusIMM

Date: April 2, 2018

CONSENT OF IAN HOLLAND

The undersigned hereby consents to: (i) the inclusion of all disclosure of all technical information contained in the Management's Discussion and Analysis for the years ended December 31, 2017 and 2016 (the "MD&A") of Kirkland Lake Gold Ltd. (the "Company") being filed as an exhibit to the Company's Form 40-F Annual Report for the period ended December 31, 2017, and any amendments thereto (the "40-F"), being filed with the United States Securities and Exchange Commission; and (ii) the use of my name in the MD&A and the 40-F.

__<u>signed "lan Holland"</u> ____lan Holland

Date: April 2, 2018

CONSENT OF MARK EDWARDS

The undersigned hereby consents to: (i) the disclosure of mineral resource estimates for certain properties in the Northern Territory of Australia contained in the Management's Discussion and Analysis for the years ended December 31, 2017 and 2016 (the "MD&A") of Kirkland Lake Gold Ltd. (the "Company") being filed as an exhibit to the Company's Form 40-F Annual Report for the period ended December 31, 2017, and any amendments thereto (the "40-F"), being filed with the United States Securities and Exchange Commission; and (ii) the use of my name in the MD&A and the 40-F.

Signed "Mark Edwards"

Mark Edwards, FAusIMM, MAIG
Geology Manager, Northern Territory Operations, Australia

Date: April 2, 2018

REPORT ON THE

MINERAL RESOURCES & MINERAL RESERVES

OF THE

FOSTERVILLE GOLD MINE

In the State of Victoria, Australia

Prepared for

KIRKLAND LAKE GOLD LTD

Effective Date December 31, 2017

Dated April 2, 2018

Authors: Troy Fuller, MAIG Ion Hann, FAusIMM



i

IMPORTANT NOTICE

This Technical Report has been prepared as a National Instrument 43-101 Technical Report, as prescribed in Canadian Securities Administrators' National Instrument 43-101, Standards of Disclosure for Mineral Projects (NI 43-101) for Kirkland Lake Gold Ltd. (Kirkland Lake Gold). The data, information, estimates, conclusions and recommendations contained herein, as prepared and presented by the Authors, are consistent with: the information available at the time of preparation; the data supplied by outside sources, which has been verified by the authors as applicable; and the assumptions, conditions and qualifications set forth in this Technical Report.

CAUTIONARY NOTE WITH RESPECT TO FORWARD LOOKING INFORMATION

Certain information and statements contained in this Technical Report are "forward looking" in nature. All information and statements in this report, other than statements of historical fact, that address events, results, outcomes or developments that Kirkland Lake Gold Ltd. and/or the Qualified Persons who authored this report expect to occur are "forward-looking statements". Forward looking statements are statements that are not historical facts and are generally, but not always, identified by the use of forward-looking terminology such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "projects", "potential", "believes" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will be taken", "occur" or "be achieved" or the negative connotation of such terms.

 $Forward-looking \, statements \, involve \, known \, and \, unknown \, risks, \, uncertainties \, and \, other \, factors \, which \, may \, risks \, and \, risks \, and$ cause actual results, performance or achievements to be materially different from any of its future results. performance or achievements expressed or implied by forward-looking statements. These risks, uncertainties and other factors include, but are not limited to, assumptions and parameters underlying the life of mine update not being realized, a decrease in the future gold price, discrepancies between actual and estimated production, changes in costs (including labor, supplies, fuel and equipment), changes to tax rates; environmental compliance and changes in environmental legislation and regulation, exchange rate fluctuations, general economic conditions and other risks involved in the gold exploration and development industry, as well as those risk factors discussed in the technical report. Such forwardlooking statements are also based on a number of assumptions which may prove to be incorrect, including, but not limited to, assumptions about the following: the availability of financing for exploration and development activities; operating and capital costs; the Company's ability to attract and retain skilled staff; sensitivity to metal prices and other sensitivities; the supply and demand for, and the level and volatility of the price of, gold; the supply and availability of consumables and services; the exchange rates of the Canadian dollar to the US dollar; energy and fuel costs; the accuracy of reserve and resource estimates and the assumptions on which the reserve and resource estimates are based; market competition; ongoing relations with employees and impacted communities and general business and economic conditions. Accordingly, readers should not place undue reliance on forward-looking statements. The forward-looking statements contained herein are made as of the date hereof, or such other date or dates specified in such statements.

Fechnical Report

Kirkland Lake Go
Pecamber 2017

Fosterville Gold Mic

All forward-looking statements in this Technical Report are necessarily based on opinions and estimates made as of the date such statements are made and are subject to important risk factors and uncertainties, many of which cannot be controlled or predicted. Kirkland Lake Gold Ltd. and the Qualified Persons who authored this report undertake no obligation to update publicly or otherwise revise any forward-looking statements contained herein whether as a result of new information or future events or otherwise, except as may be required by law.

Non-IFRS Financial Performance Measures

Kirkland Lake Gold has included a non-IFRS measure "total site costs", "total site costs per ounce" and various unit costs in this Technical Report. The Company believes that these measures, in addition to conventional measures prepared in accordance with IFRS, provide investors an improved ability to evaluate the underlying performance of the Company. The non-IFRS measures are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. These measures do not have any standardized meaning prescribed under IFRS, and therefore may not be comparable to other issuers.

Information Concerning Estimates of Mineral Reserves and Resources

These estimates have been prepared in accordance with the requirements of Canadian securities laws, which differ from the 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 NI 43-101 and the CIM Definition Standards. The CIM Definition Standards differ from the definitions in the United States Securities and Exchange Commission ("SEC") Guide 7 ("SEC Guide 7") under the United States Securities Act of 1933, as amended. Under SEC Guide 7, a "final" or "bankable" feasibility study is required to report mineral reserves, the three-year historical average price is used in any mineral reserve or cash flow analysis to designate mineral reserves and the primary environmental analysis or report must be filed with the appropriate governmental authority. In addition, the terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are defined in NI 43-101 and recognized by Canadian securities laws but are not defined terms under SEC Guide 7 or recognized under U.S. securities laws. U.S. Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be upgraded to mineral reserves. "Inferred mineral resources" have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "inferred mineral resource" will ever be upgraded to a higher category. Under Canadian securities laws, estimates of "inferred mineral resources" may not form the basis of feasibility of pre-feasibility studies, except in rare cases. U.S. investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable. Disclosure of "contained ounces" in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC Industry Guide 7 standards as in place tonnage and grade without reference to unit measures. Accordingly, these mineral reserve and mineral resource estimates and related information may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal laws and the rules and regulations thereunder, including SEC Guide 7.

CONTENTS

ı	EX	ECUTIVE SUMMARY	1		
		LOCATION			
		HISTORY AND OWNERSHIP			
	1.3	GEOLOGY AND MINERALIZATION			
		CURRENT STATUS			
	1.5	MINERAL RESOURCES AND MINERAL RESERVES			
	1.6	CONCLUSIONS AND RECOMMENDATIONS			
2	IN.	TRODUCTION	10		
	2.1	TERMS OF REFERENCE	10		
	2.2	FIELD INVOLVEMENT OF QUALIFIED PERSONS	10		
	2.3	DEFINITIONS	11		
3	RE	LIANCE ON OTHER EXPERTS	16		
4	PR	OPERTY, DESCRIPTION AND LOCATION	17		
5		CESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND			
6		STORY			
	GEOLOGICAL SETTING AND MINERALIZATION				
7		REGIONAL GEOLOGY.			
		LOCAL AND PROPERTY GEOLOGY			
	1.2	72.1 Schematic Geological Cross Section			
	7.3	MINERALIZATION			
	7.4	CONTROLS ON GOLD MINERALIZATION	36		
	7.5	FOSTERVILLE FAULT ZONE			
		7.5.1 Central, Northern and Lower Phoenix Domains			
		7.5.2 Harrier Area Geology	5		
	7.6	ROBBIN'S HILL AREA			
		7.6.1 Geological Overview	60		
		7.6.2 Robbin's Hill Domains CONTROLS ON OXIDE MINERALIZATION			
20					
8		POSIT TYPES			
9	EX	PLORATION			
	9.1	PRE-1992 EXPLORATION			
	9.2	1992-2001 EXPLORATION			
	9.3	2001-2017 EXPLORATION	72		
10	DRILLING				
	10.1	PRE-1992 DRILLING	87		
	10.2	2 1992-2001 DRILLING	82		
	10.3	3 2001-2016 DRILLING	83		
	10.4	2017 DRILLING	86		
		5 2017 Q3 & Q4 DRILLING			
	10.6	QAQC OF DRILL HOLE SURVEYS	104		
	10.7	7 PLANNED 2018 EXPLORATION	105		

Technical	Report
December	- 2017

Kirkland Lake Gold Fosterville Gold Mine

	10.8 EXPLO	DRATION POTENTIAL	107
		Goornong South	
	10.8.2	Hallanan's	108
	10.8.3	Harrier UG Far South	108
		May Reef	
		Myrtle Creek Accott's	
		Rasmussen	
		Russell's Reef	
	10.8.9	Sugarloaf Range	11
П	SAMPLE	PREPARATION, ANALYSES & SECURITY	113
	11.1 SAMPI	LING METHOD AND APPROACH	113
	11.2 ELEME	NTS ANALYZED	115
	11.3 DESCI	RIPTION OF ANALYTICAL TECHNIQUES	116
	11.4 OAO	C	117
		Standards	
	11.4.2	Laboratory Duplicate Samples	126
		Laboratory Repeat (replicate) Samples	
	11.4.4		
		Field Duplicates	
		YTICAL TECHNIQUE VERIFICATION	
		Comparison of Analytical Techniques	
		Umpire Laboratory Checks	
		Sample Segregation Testing	
		LE AND DATA SECURITY	
	11.6.1		
		Data Security	
	11.7 ADEQ	QUACY OF PROCEDURES	140
12	DATA VE	ERIFICATION	141
	12.1 DATA	BASE VALIDATION	14
	12.2 DATA	VERIFICATION	141
13	MINERAL	PROCESSING AND METALLURGICAL TESTING	142
14	MINERAL	RESOURCE ESTIMATES	143
	14.1 CENT	RAL AREA	147
		Area Geology	
		Geological Models	
		Drilling Data	
		Resource Modeling	
		Further Work for 2018.	
		Results	
	14.2 HARR	IER AREA	181
		Drilling Data	
		Resource Modeling	
		Mineral Resource Classification	
		Results	
		ERVILLE-HUNTS AREA	
		Y'S HILL AREA	
		Geological Models	
	14.4.2	Drilling Data	192
		Mineral Resource Modeling	
		Mineral Resource Classification	
		Results	
	14.5 ROBB	IN'S HILL AREA	194

	nnical Report		Kirkland Lake Gold
Dec	ember 2017		Fosterville Gold Mine
	14.5.1	Geological Models	195
	14.5.2	Drilling Data	195
	14.5.3	Mineral Resource Modeling	
	14.5.4	Mineral Resource Classification	
15		RESERVE ESTIMATES	
15			
		RAL RESERVE ESTIMATE	
	15.1.1	Open Stope Design Depletion and Results	202
16		METHODS	
17		RY METHODS	
50500			
18		INFRASTRUCTURE	
		ACE INFRASTRUCTURE	
		Plant	
	18.1.2		
		Tailings	
		RGROUND INFRASTRUCTURE	
	18.2.1		
	18.2.2	Water	
	18.2.3	Ventilation	
20	19.2 CON	ETS FRACTS NMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNI	231 TY IMPACT 233
		CONMENTAL STUDIES AND RELATED ISSUES	
		TE AND TAILINGS DISPOSAL, SITE MONITORING AND WATER MANAGEMENT	
	20.2.1	Requirements	236
		site monitoring and water management	
		CT PERMITTING REQUIREMENTS	
		AL OR COMMUNITY RELATED REQUIREMENTS AND PLANS	
	20.5 MINE	CLOSURE (REMEDIATION AND RECLAMATION) REQUIREMENTS AND COSTS.	241
21	CAPITAL	AND OPERATING COSTS	242
	21.1 CAPIT	AL AND OPERATING ESTIMATES	242
22	ECONO	1IC ANALYSIS	243
23	ADJACE	NT PROPERTIES	244
24	OTHER I	RELEVANT DATA AND INFORMATION	245
25	INTERP	ETATION AND CONCLUSIONS	246
26	RECOM	1ENDATIONS	249
27		ICES	
		ND SIGNATURE	
28		IFICATE OF QUALIFIED PERSON – ION HANN	
	28.2 CERT	FICATE OF QUALIFIED PERSON – TROY FULLER	261

FIGURES PAGE NO.

Figure 4-1	Fosterville Project Location Map	17
Figure 4-2	Fosterville Mining Lease Plan with Exploration Licences and Royalty Areas.	19
Figure 7-1	Map and Cross-Section of the Western Lachlan Fold Belt in Central Victoria	26
Figure 7-2	Regional Geology Plan of the Fosterville District, showing Fosterville Mining Licences, Exploration Licences, Open Pits and Hard Rock Gold Occurrences	29
Figure 7-3	Fosterville Surface Geology Plan Showing Surface Mining Activity	
Figure 7-4	Fosterville Fault Zone Schematic Cross Section	
Figure 7-5	Schematic Geological Cross-Section of 6500mN	33
Figure 7-6	Underground Face Photo of the P4320 South Footwall Development Showing Stibnite Overgrowth of Quartz Carbonate Veining on the Allwood East Fault	
Figure 7-7	Drill Core from Hole UDH1817 Showing Visible Gold in a Quartz-carbonate Vein	35
Figure 7-8	Fosterville Fault Zone Longitudinal Projection showing Resources, Reserves, Mining and Target Areas	38
Figure 7-9	Longitudinal Projection of the Phoenix Mineralized Zone (Purple)	
Figure 7-10	Longitudinal Projection of the Lower Phoenix Mineralized Zone (Green)	
Figure 7-11	Longitudinal Projection of the Lower Phoenix Footwall Mineralized Zone (blue).	
Figure 7-12	Longitudinal Projection of the Swan Mineralized Zone (Pink)	
Figure 7-13	Longitudinal Projection of the East Dippers Mineralized Zone (red)	
Figure 7-14	Longitudinal Projection of the Eagle Mineralized Zone (Magenta)	
Figure 7-15	Wall Mapping on the P4310 Level Convergence of the D20 Eagle and D14 Benu FW	47
Figure 7-16	Longitudinal Projection of the Splays Mineralized Zone (dark grey)	48
Figure 7-17	Longitudinal Projection of the Allwood Mineralized Zone (purple)	49
Figure 7-18	Longitudinal Projection of the Kestrel Mineralized Zone (Pink)	
Figure 7-19	Longitudinal Projection of the Falcon Mineralized Zone (Sea Green)	50
Figure 7-20	Longitudinal Projection of the Ellesmere Mineralized Zone (turquoise)	51
Figure 7-21	Longitudinal Projection of the Raven Mineralized Zone (Orange)	
Figure 7-22	Longitudinal Projection of the Vulture Mineralized Zone (pink)	
Figure 7-23	Longitudinal Projection of the Robin (light blue), Griffon (green), and Shamrock (teal) Mineralized Zones	53
Figure 7-24	Geological Cross-Section through the Harrier Area at 5150mN	
Figure 7-25	Longitudinal Projection of Harrier Mineralized Zone (orange)	
Figure 7-26	Longitudinal Projection of Osprey Mineralized Zone (yellow).	
Figure 7-27	Longitudinal Projection Looking West of Daley's Hill DH main Fault (Blue)	50
Figure 7-28	Longitudinal Projection Looking West of Daley's Hill DH Syncline (Orange)	59
Figure 7-29	Longitudinal Projection Looking West of Daley's Hill DH West Area (Purple)	
Figure 7-30	Longitudinal Projection looking West of Daley's Hill DH Campaspe (Red)	
Figure 7-31	Robbin's Hill Area Cross-Section for 12100mN, View Looking MINE Grid North.	62
Figure 7-32	Robbin's Hill Area Cross-Section for 13000mN, VIEW Looking Mine Grid North	
Figure 7-33	Plan View Of Robbin's Hill Area	
Figure 9-1	Plan of IP Survey Areas and Prospects surrounding Fosterville Gold Mine	77
Figure 9-2	Plan of RTP Magnetics Surrounding Fosterville Gold Mine	
Figure 9-3	Plan of Total Count Radiometrics Surrounding the Fosterville Gold Mine	79
Figure 9-4	Regional Bouger Gravity	
Figure 9-5	EL3539 Soil geochemistry sample location data including 2017 campaign data	81
Figure 10-1	2017 H2 Underground Resource Definition Diamond Drilling Central and Phoenix South	99
Figure 10-2	2017 H2 Underground Resource Definition Diamond Drilling - Harrier	
Figure 10-3	2017 H2 Underground resource Definition diamond Drilling – Phoenix North	90
Figure 10-4	2017 H2 Surface and Underground Exploration Diamond Drilling - Lower Phoenix South, Harrier South and Upper Harrier	91
Figure 10-5	2017 H2 Surface Exploration Diamond Drilling - Northern Phoenix and O'Donnell's Line	
Figure 10-6	2017 H2 Surface Exploration Diamond Drilling – Robbin's Hill	
Figure 10-7	Plan view of Surface Geology and Drill hole locations map 1	
Figure 10-8	Plan view of surface geology and Drill Hole Locations map 2	
Figure 10-9	Plan View of Surface Geology and Drill Hole Location map 3	
Figure 10-10	6350N Lower Phoenix Drill section looking Mine Grid North	
Figure 10-11	5000N Harrier drill section looking Mine Grid North	
Figure 10-12	12400N Robbins Hill section looking Mine Grid North	
Figure 10-13	16000N Goornong south section looking Mine Grid North	
Figure 10-13	Longitudinal Projection of Swan Mineralization Displaying Exploration and H2 2017 Resource Definition Drill Intercepts	101
Figure 11-1	Underground Face Sample Duplicate Results	114
Figure 11-1	Standard Performance 2017	
Figure 11-2 Figure 11-3	Standard A Performance 2017.	
Figure 11-3	Standard B Performance 2017.	
	Standard C Performance 2017	
Figure 11-5 Figure 11-6	Standard D Performance 2017	

Technical Report	Kirkland Lake Gold
December 2017	Fosterville Gold Mine

Figure 11-8	Standard F Performance 2017	
Figure 11-9	Standard G Performance 2017	
Figure 11-10	Standard H Performance 2017	
Figure 11-11	Standard I Performance 2017	
Figure 11-12	Standard J Performance 2017	
Figure 11-13	Standard K Performance 2017	
Figure 11-14	Standard L Performance 2017	
Figure 11-15	2017 Sulfide Laboratory Duplicates	127
Figure 11-16	2017 Visible Gold Laboratory Duplicates	128
Figure 11-17	2017 Laboratory Repeat Sulfide Samples	
Figure 11-18	2017 Laboratory Repeat Visible Gold Samples	
Figure 11-19	Field Duplicate Gold Data for 2017	132
Figure 11-20	Inverse Cummulative Histogram showing a positive conditional grade bias of FA25 Gold data. (QG Consultant Report 2016)	133
Figure 11-21	2017 Fire Assay vs Leachwell	
Figure 11-22	Gold in Solids of High NCC Sample	
Figure 11-23	Correlation Plot of the Visible Gold Field Duplicate Data	
Figure 11-24	Correlation of OSLS and BV Pulps	
Figure 14-1	Plan Showing Mining Leases and the Area Covered by each of the Block Models.	
Figure 14-2	6770mN Section showing Data for Creating Mineralization Domain Wireframes (Underground)	
Figure 14-3	Down-hole Compositing where Domain Boundaries are Honoured in the Composite File.	
Figure 14-4	Variogram of the Major Direction of the High Grade Sub-Domain of Domain=11 Swan Domain	
Figure 14-5	Composite range limiting	
Figure 14-6	Mean Au (g/t) and Co-Variance Plot of the Au of Domain=I I Swan	145
Figure 14-7	Log Probability Plot for the AU of the Domain=11 Swan	
Figure 14-8	Longitudinal Projection showing Northern, Central and Harrier Model extents as of December 31, 2017	
Figure 14-9	Search Ellipsoid for DOMAIN=11 Swan (Purple) Reflecting the Plunge Intersection With the Benu ELO fault (Green)	
Figure 14-10	6500mN Cross-Section of the Phoenix Model showing gold grades	
Figure 14-10	Example Swath Plot by Northing Slices for Domain=11 Swan	
Figure 14-11	Diamond Drill Core Bulk Density Values vs. Reduced Level for Data up to December 2017	
Figure 14-12	Drill Core Bulk Density Values (Intervals >1 g/t Au) vs. RL for data up to December 2017	
Figure 14-13	Bulk Density Values used in Resource Models Mineral Resource Classification	
Figure 14-14	Longitudinal Projection showing Mineral Resources Classification in The Northern, Central and Lower Phoenix Models	178
	Search Ellipsoid for DOMAIN=21 Harrier Base	
Figure 14-16		
Figure 14-17	Cross-Section 4830 mN of the 1706_HRM Harrier Model	
Figure 14-18	Longitudinal Projection Showing Resource Classification for the Harrier Model	
Figure 14-19	Geological Cross-Section 10,900mN through Hunt's Pit	
Figure 14-20	Longitudinal Section view of Mineral Resource in Robbin's Hill Area	
Figure 14-21	Robbin's Hill Cross-Section 12910mN	200
Figure 15-1	An Example of an Open Stope Reserve Wireframe Design	
Figure 15-2	Mining Method Selection Criteria	
Figure 16-1	Longitudinal Projection of Actual and Proposed Mining Layout as at December 31, 2017	
Figure 16-2	Longitudinal Projection of Phoenix and Swan Actual and Proposed Mining Layout as at December 31, 2017	
Figure 16-3	Longitudinal Projection of Harrier Actual and Proposed Mining Layout as at December 31, 2017	
Figure 17-1	Schematic Ore Treatment Flowchart.	217
Figure 18-1	Fosterville Gold Mine Site Services Plan	
Figure 18-2	Fosterville Processing Plant Area Plan	
Figure 18-3	Fosterville Flotation and Neutralization Residue Storage Area Plan	
Figure 18-4	Fosterville CIL Residue Storage Area Plan	
Figure 26-1	Longitudinal Projection of Proposed Fosterville Exploration Drilling Programs for 2018 (all expensed)	
Figure 26-2	Longitudinal Projection of Proposed Robbin's Hill Exploration Drilling programs for 2018 (expensed and capitalised)	
Figure 26-3	Proposed 2018 Regional Drilling	253

TABLES PAGE NO.

Table 1-1	Summarized Mineral Resources (Exclusive of Mineral Reserve) for FGM as at December 31, 2017	4
Table 1-2	Summarized Mineral Reserves for FGM as at December 31, 2017	5
Table 2-1	Definition of Terms	11
Table 4-1	Grid Conversion Reference Points	
Table 6-1	Mined Production Data for Fosterville for the Period 2007- 2017	23
Table 6-2	Historic Resource of the Goornong South Prospect Perseverance (1999)	24
Table 6-3	Historic Resource of the Hallanan's Prospect Perseverance (1999)	
Table 7-1	Fosterville Fault Zone Primary and Secondary Mineralization Zones	40
Table 7-2	Model Domains, Codes and Assigned Mineralized Zones	
Table 7-3	Robbin's Hill Domains	
Table 9-1	2008 UTS Geophysical Surveys over the Fosterville Gold Mine and Surrounding Areas	73
Table 10-1	2017 Q3 and Q4 growth drilling summary	87
Table 10-2	Drill Hole Prefixes for all Drilling on the Fosterville Fault Corridor South of 10,000mN	102
Table 10-3	Drill Hole Prefixes for all Drilling in the Robbin's Hill - O'Dwyer's Area	103
Table 10-4	Down-hole survey camera tests summary	
Table II-I	Analysed Elements by Method and Time Period	
Table 11-2	Standard Performance 2017	119
Table II-3	OSLS Laboratory Standards, g/t Au	
Table 11-4	Fire Assay weight study results - Q-Q results	
Table 11-5	Statistical comparison between AAS and gravimetric gold results	
Table II-6	Umpire Sampling by Zone	138
Table 14-1	Mineral Resources (Exclusive of Mineral Reserve) for FGM as at December 31, 2017	
Table 14-2	Central and Harrier Area Lower Sulfide Mineral Resources (Exclusive of Mineral Reserves) below 5050mRL - Fosterville as	9
200 1002	at December 31st, 2017	148
Table 14-3 Table 14-4	Central Area Resource Model Drilling Data Extents	
	Descriptive Statistics for the Northern Model	
Table 14-5	Composite Statistics by Composite Length in the Northern Model	
Table 14-6 Table 14-7	Descriptive Statistics of Gold for the Southern Phoenix Model Descriptive Statistics of Gold for the Northern Phoenix Model	154
Table 14-7	Descriptive Statistics of Gold for the Northern Phoenix Model	
Table 14-8	Composite Statistics by Composite Length Clipped to the Model Extents for the Central Model (1506 CRM), Southern	136
Table 14-9	Phoenix (1712_SPRM) and Northern Phoenix Model (1710_NPRM)	157
Table 14-10	Variogram Parameters Used for Northern Model Gold Estimation	
Table 14-11	Variogram Parameters Used for the Southern Phoenix Model (1712_SPRM) Gold Estimation	
Table 14-12	Variogram Parameters Used for the Northern Phoenix Model (1710_NPRM) Gold Estimation	141
Table 14-13	Variogram Parameters used for the Central Model (1506 CRM) Gold Estimation	143
Table 14-14	Central Area Block Model Dimensions	
Table 14-15	Comparison Between Number of Composites Present above the Cut-Off Value from 2014 to December 2017 for the sam	
	Resource Area	164
Table 14-16	Search Parameters for the Southern Phoenix Resource Model (1712_SPRM)	169
Table 14-17	Search Parameters for the Northern Phoenix Resource Model (1710_NPRM)	170
Table 14-18	Search Parameters for the Central Model (1506_CRM)	171
Table 14-19	Search Parameters for the Northern Model (1201_NRM)	
Table 14-20	Mineralized domain mean grade comparison for 1712_SPRM	
Table 14-21	Bulk Density Samples from Underground Production Locations	
Table 14-22	Descriptive Statistics for the Harrier Model (1712_HRM)	182
Table 14-23	Composite Statistics by Composite Length for the (1712_HRM) Harrier Model	
Table 14-24	Variogram Parameters Used for the Harrier Resource Model (1712_HRM) Gold Estimation	
Table 14-25	Harrier Block Model Extents and Cell Size	
Table 14-26	Search Parameters for the Harrier Resource Model (1712_HRM)	
Table 14-27	Composite Statistics by Composite Length for the Robbin's Hill Model	
Table 14-28	Robbin's Hill Block Model Extents	
Table 15-1	Mineral Reserves for FGM as at December 31, 2017	
Table 15-2	Mineral Reserves (with Eagle / Swan Subdivisions) for FGM as at December 31, 2017	
Table 15-3	Recovery and Dilution Factors for the Reserve Blocks as displayed in Figure 16-1	
Table 15-4	Dilution and Recovery Factors used for the December 2017 Mineral Reserves	
Table 15-5	Mineral Reserve Gold Cut-off Grades	208
Table 15-6	Development Costs and Physicals Spreadsheet	209
Table 17-1	Actual Plant Performances (2009 – 2017)	
Table 20-1 Table 21-1	Overburden Use At Fosterville Gold Mine	
Table 21-1	Capital and Operating Cost Estimates from the December 2017 LOM Plan Proposed Exploration Drilling Programs for 2018	
1 abie 26-1	Proposed Exploration Drilling Programs for 2018	254

1 EXECUTIVE SUMMARY

This technical report has been prepared for Kirkland Lake Gold Ltd. (Kirkland Lake Gold), the beneficial owner of the Fosterville Gold Mine. Kirkland Lake Gold is listed on the Toronto and New York Stock Exchanges under the ticker symbol "KL" and the Australian Securities Exchange under the ticker symbol "KLA". On November 30, 2016, Newmarket Gold Inc. ("Newmarket") combined with Kirkland Lake Gold Inc. and the combined company was renamed Kirkland Lake Gold Ltd.

This document provides the Mineral Resource and Mineral Reserve estimates for the Fosterville Gold Mine (Fosterville or FGM) that have resulted from ongoing exploration and resource definition and as a result of ongoing mine design and evaluation during the period June 30, 2017 to December 31, 2017.

1.1 LOCATION

The Fosterville Gold Mine is located approximately 20km east of the city of Bendigo and 130km north of the city of Melbourne in the State of Victoria, Australia.

The FGM 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 Ltd.

Kirkland Lake Gold also holds titles through Fosterville Gold Mine Pty Ltd of four surrounding Exploration Licences totaling 1351km². These Exploration Licences encompass the entire known strike extent of the Fosterville Goldfield.

1.2 HISTORY AND OWNERSHIP

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 1930's, activity resumed in 1988 with a further tailings retreatment program conducted by Bendigo Gold Associates, which ceased in 1989. Mining recommenced in 1991 when Brunswick Mining NL and then Perseverance Corporation Ltd (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 poured (Roberts et al, 2003).

A feasibility study into a sulfide mining operation was completed by Perseverance in 2003 with construction and open pit mining commencing in early 2004. Commercial production commenced in April 2005 and up to the end of December 2006 had produced 136,882oz gold. In October 2007, Perseverance announced that it had entered into an agreement with Northgate Minerals Corporation to acquire the company with full control passing to Northgate in February 2008.

The $500,\!000^{\text{th}}$ ounce of sulfide gold production was achieved in April 2011.

Technical Report Kirkland Lake Gold

Peramber 2017

Fosterville Gold Mine

In August 2011, Northgate entered into a merger agreement with AuRico Gold Inc who assumed control of Northgate in October 2011. In March 2012 AuRico and Crocodile Gold Corp jointly announced that Crocodile Gold would acquire the Fosterville and Stawell Mines. Crocodile Gold's ownership of Fosterville was achieved on May 4, 2012. In July 2015, Newmarket Gold Inc merged with Crocodile Gold to form Newmarket Gold Inc.

In January 2016 a significant milestone in Fosterville Gold Mine's history was reached when the one millionth ounce of sulfide gold was poured.

At the end of November 2016, Kirkland Lake Gold Inc merged with Newmarket Gold Inc. to form a new mid-tier gold company Kirkland Lake Gold Ltd.

1.3 GEOLOGY AND MINERALIZATION

The Fosterville Goldfield is located within the Bendigo Structural Zone in the Lachlan Fold Belt. The deposit is hosted by an interbedded turbidite sequence of sandstones, siltstones and shales. This sequence has been metamorphosed to sub-greenschist facies and folded into a set of upright, open to closed folds. The folding resulted in the formation of a series of bedding parallel laminated quartz (LQ) veins.

Mineralization at Fosterville is controlled by late brittle faulting. These late 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 fault. There are also moderately east-dipping faults, which have become more significant footwall to the anticlinal offsets along the west-dipping faults. Primary gold mineralization occurs as disseminated arsenopyrite and pyrite forming as a selvage to veins in a quartz-carbonate veinlet stockwork. The mineralization is structurally controlled with high-grade zones localized by the geometric relationship between bedding and faulting. Mineralized shoots are typically 4-15m thick, 50-150m up and down-dip and 300-2,000m+ down-plunge.

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 in favorable structural locations, such as the Phoenix, Eagle and Lower Phoenix structures. There are also occurrences of primary visible gold (\$3mm in size) that has a spatial association with stibnite in fault related quartz veins. The occurrence of visible gold has become increasingly significant at Fosterville and is observed more frequently with depth and down-plunge within the Lower Phoenix Mineralized Zones. Throughout 2016 and 2017, visible gold (\$3mm in size) mineralization occurrences were also observed at depth in the Harrier Mineralized Zones with notably increased frequency.

Fosterville Gold Mine engaged Quantitative Geoscience (QG) in November 2014, in response to the noted increased frequency of visible gold occurrences at depth, to provide FGM with some external advice and thinking regarding the implications to resource estimation and mine geology practices. Throughout 2015 and 2016 QG continued to assist FGM through review of current practices and providing technical theory and background to sampling, assaying and resource modeling in visible gold environments. In May 2017, Fosterville Gold Mine engaged SRK Consulting (Australasia) Pty Ltd (SRK) to provide an external

Fechnical Report Kirkland Lake G

independent review of laboratory sampling, sample preparation, assay procedures and estimation methodology. Whilst no sub-sampling and assay bias were identified during the review, recommendations were made to test and/or improve the laboratory processes and test for and/or minimize the potential for sub-sampling and assay bias. In regards to modeling methodology, SRK made recommendations related to sub-domaining, de-clustering, top cutting and validation which have been implemented in this December 2017 Mineral Resource estimate.

1.4 CURRENT STATUS

Since the commencement of commercial gold production in April 2005, the sulfide plant at Fosterville Gold Mine has produced 1,416,282oz of gold up to the end of December 2017. This production was initially sourced solely from open cut mining with underground mining starting to contribute from late 2006. The Harrier open cut was initially completed in December 2007 and since that time the underground mine has been the primary source of ore. Ore sourced from a series of pit expansions on the previously mined Harrier, John's and O'Dwyer's South Pits between Q1 2011 and Q4 2012 has provided supplementary feed to underground ore sources. Since the beginning of 2013 underground operations has been the sole provider of mill feed at Fosterville. Current mining activities are focused on the Central, Phoenix and Harrier underground areas and current gold production guidance for 2018 is 260-300koz.

During 2018, Kirkland Lake Gold has budgeted approximately 168km of exploration and resource definition diamond drilling, 40km of RC/RAB drilling, soil sampling and geophysical surveys and development of dedicated underground drill platforms.

1.5 MINERAL RESOURCES AND MINERAL RESERVES

The Mineral Resources and Mineral Reserves reported are contained within the mining licence MINS404 (Section 4). Within the Mining Licence, 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. Details on Mineral Resource block model extents can be seen in Figure 14-1.

Mineral Resources are reported exclusive of Mineral Reserves (Table 1-1).

All Mineral Reserves are contained within the Central and Harrier Mineral Resource Areas. Mineral Reserves contained within the Central Mineral Resource Area have been subdivided into Central and Phoenix Mineral Reserves Table 15-1.

CIL Residue Mineral Reserves are distinguished from in situ Mineral Reserves in Table 1-2 on the basis of differing gold recovery assumptions.

Kirkland Lake Gold Fosterville Gold Mine

SUMMARIZED MINERAL RESOURCES (EXCLUSIVE OF MINERAL RESERVE) FOR FGM AS AT DECEMBER 31, 2017 TABLE 1-1

Classification	Tonnes (kt)	Gold Grade (g/t Au)	Insitu Gold (kOz)
27.7	Oxide and Sulfi	de Materials	
Measured	1,944	2.90	181
Indicated	11,920	5.15	1,973
Total (Measured and Indicated)	13,864	4.83	2,154
Inferred	8,279	7.14	1,900

Notes:

- Notes:

 1. CIM definitions (2014) were followed in the estimation of Mineral Resources.

 2. For the Mineral Resource estimate, the Qualified Person is Troy Fuller.

 3. The Mineral Resources reported are exclusive of the Mineral Reserves.

 4. See notes provided for Table 14-1 for more detail on oxide and sulfide resources.

 5. Mineral Resources are rounded to 1,000t, 0.01 g/t Au and Ikoz. Minor discrepancies in summation may occur due to rounding.

 6. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

 7. The Mineral Resource estimate used a gold price of US\$1,280 per ounce (A\$1,600 per ounce).

 8. Cut-off grades applied are 0.7 g/t Au for roude, 1.0 g/t Au for near-surface sulfide (above 5050mRL) and 3.0 g/t Au for underground sulfide mineralization (below 5050mRL).

 9. A minimum mining width of 2.5 m was applied.

 10. Dry Bulk Density of mineralized material applied are 2.40t/m³ for oxide, 2.56t/m³ for transitional material, 2.64t/m³ for fresh material between 5000 and 5050mRL, 2.72t/m³ for fresh material between 4500 and 5000mRL, and 2.78t/m³ for fresh material below 4500mRL.

SUMMARIZED MINERAL RESERVES FOR FGM AS AT DECEMBER 31, 2017 TABLE 1-2

Kirkland Lake Gold

Summarize	d Mineral Reserves for Fost	erville as of December 31, 2017	
Classification	Tonnes (kt)	Gold Grade (g/t Au)	Insitu Gold (kOz)
Proven	236	14.80	112
Probable	2,052	24.06	1,587
Total (Proven and Probable)	2,288	23.11	1,699
	CIL Resid	lues	
Proven	649	7.69	160

- 1. CIM definitions (2014) were followed in the estimation of Mineral Reserves.
- For the Mineral Reserves estimate, the Qualified Person is Ion Hann.
- The Mineral Reserve estimates used a gold price of US\$1,280 per ounce (A\$1,600 per ounce).

 The cut-off grades applied ranged from 2.0 to 3.8 g/t Au for underground sulfide ore depending upon width, mining method and ground conditions
- 5. Dilution ranging from 10 to 50% and mining recovery ranging from 60 to 100% were applied to stopes within the Mineral Reserves estimate.

 Mineral Reserves are rounded to 1,000t, 0.01 g/t Au and 1koz. Minor discrepancies in summation may occur due to rounding.

 CIL residue is stated as contained ounces – 25% recovery is expected. Recoveries are based on operating performances.

1.6 CONCLUSIONS AND RECOMMENDATIONS

The Authors have made the following interpretations and conclusions:

- The understanding of the fundamental geological controls on mineralization at Fosterville is high. Primary mineralization is structurally controlled with high-grade zones localized by the geometric relationship between bedding and west-dipping faulting. This predictive model has led to considerable exploration success in following the down-plunge extensions of high-grade
 - > The Lower Phoenix Fault is a major west-dipping structure in the active mine development area and is defined by reverse faulting on a shale package where anticline thrust displacement of $^{\sim}80\text{m}$ occurs. The fault dips 35-55° to the west and mineralization can be traced along an approximate dip extent of 190m and strike extent of 1.9km. The dominant mineralization style on this structure is disseminated sulfide; however, occurrences of visible gold at depth have become increasingly more common and concentrated where footwall structures intersect one another. The Lower Phoenix System currently remains open to the north and south so maximum plunge extent has not yet been defined;
- Throughout 2016 and 2017, development mapping and continued drilling confirmed that there were multiple mineralized structures of various size and continuity footwall to the main west-dipping Lower Phoenix Fault, which present significant resource growth potential. Progressive geological

Technical Report Kirkland Lake Go
December 2017 Fosterville Gold Mir

understanding of the Phoenix and Lower Phoenix footwall environs has highlighted the significance of these favorable settings for mineralization, including;

- East-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 halos of disseminated sulfide. The Eagle Fault is discordant to bedding and variably dips between 10 and 60° to the east and transforms further to the south to strike in an ENE direction, dipping ~45° to the SSE. Mineralization on the Eagle Zone extends over a ~1km strike extent and is untested and open at depth below the 3805mRL and south of 6125mN. Drilling is planned to target beyond this extent during 2018. East Dipping Faults are typically bedding parallel to sub parallel with dips of ~70° east to sub-vertical. The defined extent of East Dipping structures containing significant mineralization is now ~1.6km;
- Low-angled Lower Phoenix Footwall west-dipping structures typically consist of large quartz veins up to several meters wide with laminated textures, indicating a series of multiple mineralizing events, including a later stage quartz-stibnite phase of mineralization with visible gold. The faults are interpreted to have minimal offset but rather have been hydraulically fractured. Where these structures form linkages between the Lower Phoenix and East Dipping Faults, extremely high-gold grades are observed; and
- > During 2016 drilling extending footwall to the Lower Phoenix discovered west-dipping Swan (previously reported as Lower Phoenix Footwall) mineralization, which occupies a reverse fault structure exhibiting rotational displacement. The structure is characterized by a one to threemeter-thick brecciated quartz-dominant vein with clearly defined laminated margins. It exhibits unique spotted stibnite and country rock laminations within the quartz, especially where it is highly developed. High-gold grades are associated with stylolite-rich quartz veins existing as trends of visible gold grains (≤3mm in size). On its periphery there is a lower-grade selvage of sulfide dominated Au mineralization which can be up to 2m in width. The Swan structure has returned some of the highest grade intercepts on the Fosterville Licence. Subsequent drilling during 2017 reaffirmed the high-grade continuity of mineralization and increased the known extent of this highly mineralized structure, which is now defined over 570m in strike length and 390m in vertical extent. The Swan Zone is the highest grade mineralized zone defined at Fosterville to date and contributes 1,156,000oz at an average grade of 61.2g/t Au (588,000 tonnes) to the updated December 31, 2017 Mineral Reserve estimate making up 68% of the total in situ Mineral Reserves. The Swan appears to adjoin the high-grade Eagle structure at its lower edge and is mostly untested down-plunge. Continued drilling from the hangingwall drill platforms during 2018 will advance the understanding of the size and scale of this priority resource growth target.
- Continued drill definition of these structures over 2017, in combination with ore development and
 production exposure and reconciliation performance has reaffirmed the significance of footwall
 structures to the Lower Phoenix Fault. The defined continuity, proximity to existing Mineral
 Resources and high-grade tenor of these structures enhance the December 2017 Mineral Resource
 and Reserve position. Furthermore, mineralization on these structures is open down-plunge,

Technical Report Kirkland Lake Gol
December 2017 Fosterville Gold Min

providing encouraging future Mineral Resource and Mineral Reserve growth potential for the Fosterville operation.

- Drilling into the Harrier System over 2016 identified high-grade mineralization containing significant amounts of visible gold at depth, primarily associated with the Harrier Base structure. Resource drilling throughout 2017 continued to support 2016 results and resource confidence has further increased in this zone. In addition, step out drilling identified significant mineralization approximately 100m to the south of the June 2017 Harrier Base Mineral Resource and up dip on the Osprey structure beneath the Daley's Hill Pit indicating the potential for significant resource and reserve growth in this zone. 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 became more prominent. The Harrier Base mineralization is open to the south.
- There is an observed change in the nature of some of the Fosterville mineralization at depth with a number of high-grade, quartz-carbonate +/- stibnite vein hosted, visible gold drill intercepts recorded for the Swan, Eagle, Lower Phoenix, Lower Phoenix Footwall, East Dipping and Harrier Zones. Disseminated sulfide mineralization continues to persist at all depths and is relatively uniform in character. It is currently inferred that the quartz-carbonate +/-stibnite-visible gold assemblages have been emplaced at a later date to the disseminated sulfide providing an upgrade to the mineralization;
- Progressive geological interpretation has led to continued development of robust geological and
 resource models underpinning the Mineral Resource and Mineral Reserve estimates. The relationship
 between mineralization and the controlling structural/stratigraphic architecture means that quality
 geological interpretation is critical to producing quality resource/reserve estimates; and
- The modifying factors used to convert the Mineral Resources to Mineral Reserves have been refined
 with the operating experience gained since underground production commenced in September 2006.
 In particular, the robustness of the mining recovery and dilution estimates has improved with
 experience relative to the pre-mining assessments.

The following recommendations are made:

- Further growth exploration activities within the mine licence should be pursued. Given the strong
 understanding of geological controls on mineralization, this could have the potential to yield
 additional resources and reserves. Particular areas that are recommended to focus upon are the up
 and down-plunge extensions of the Lower Phoenix system (northwards up-plunge from 8600mN and
 southwards down-plunge from 6200mN);
- Exploration of the Lower Phoenix system southwards of 6200mN is technically challenging from surface due to target depths and as such Kirkland Lake Gold has commenced the development of dedicated underground drill platforms to facilitate further exploration of the Lower Phoenix system down-plunge. The current 2018 exploration budget includes development extensions of the Harrier

Technical Report Kirkland Lake Go
December 2017 Fosterville Gold Mir

Exploration Drive Decline to establish drilling platforms to target Phoenix and Lower Phoenix extensions and diamond drilling from these platforms to explore these gold targets. The Harrier Exploration Drive Decline provides an ideal platform to drill test the Phoenix and Lower Phoenix down plunge and is scheduled to connect Harrier and Phoenix mine areas in early 2019. The long term benefits of this development link are significant, not only as providing a hangingwall drill platform to explore the Lower Phoenix and Phoenix extensions over a 1.5km strike extent, but also in supporting production, as it will provide an alternative ore haulage route. Total cost of this program is estimated at AC3 6M.

- Exploration of the Lower Phoenix system up-plunge, northwards of 8600mN will be progressively
 pursued from surface drill positions to provide satisfactory drill intercept angles. A drill section on
 8700mN is planned from surface to explore the extensions of the Lower Phoenix and Lower Phoenix
 Footwall during 2018. The results of this drilling will determine whether subsequent drilling is
 proposed further to the north.
- Further work is recommended to explore for extensions of known Mineral Resources that project
 beyond the extent of the Mining Licence. In particular, the extent and scale of the Harrier system will
 be defined and resources developed in a timely manner. With an increasing grade profile identified
 at depth and the establishment of high-grade Mineral Reserves at lower levels in Harrier, it is strongly
 recommended that the down-plunge extensions of the Harrier system are further explored. The total
 cost of this project is estimated at A57.7M.
- Given the potential of near mine exploration targets within the Mining Licence, 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 2018 include the Cygnet Drilling program, which will explore for gold mineralization footwall to the Swan Fault, Fosterville Deeps Drilling which will explore for gold mineralization at depth up to 1.2km vertically below current mining areas in the Lower Phoenix, Eastern Fan Drilling which targets projections of defined west-dipping mineralized structures up to 1.2km the east of current mining areas in the Lower Phoenix and Robbin's Hill Programs, which will continue to build an understanding of the underground Mineral Reserve potential beneath the Robbin's Hill pits. A total cost of ASS-2M is budgeted in 2018 to execute these programs.
- It is recommended that an aggressive regional exploration program be undertaken with respect to surrounding exploration leases. During the first half of 2017, Kirkland Lake Gold instigated a review of targets contained within Exploration Licence holdings and generated a proposal to spend AS9M spend over a 2-year period to advance a pipeline of regional targets. The program, 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 and gravity and advance development of prospective targets with various drilling techniques. Planning is also currently underway to progress to a 3D seismic survey. If the 3D survey proves to be successful consideration should be given to more regional 2D seismic surveys throughout the Exploration Licences. A total of A\$11.6M has been estimated to undertake Fosterville LODE work during 2018.

Technical Report Kirkland Lake Gol
December 2017 Fosterville Gold Min

Growth Expensed diamond drilling is proposed for targeting extensions of known mineralized trends
outside of Mineral Resources. The proposed drilling will target the extensions of Inferred Mineral
Resources in both the Lower Phoenix and Harrier systems with the aim to deliver additional Mineral
Resource inventory and provide definition along Mineral Resource boundaries. Total cost for this
program is estimated at A\$3.4M.

• Growth Capital diamond drilling for a total cost of approximately A\$9.6M is proposed for the systematic expansion of Indicated Mineral Resources in the Phoenix mineralized system. 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 Reseve Evaluation. The drilling will not only provide increased confidence in Mineral Resources which could lead to significant 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.

2 INTRODUCTION

2.1 TERMS OF REFERENCE

This technical report on Fosterville Gold Mine is to support public disclosure of Mineral Resource and Mineral Reserve estimates effective at Fosterville as at December 31, 2017. This report has been prepared in accordance with disclosure and reporting requirements set forth in the National Instrument 43-101 (NI 43-101) 'Standards of Disclosure for Mineral Projects' and Form 43-101F1, dated May 2011.

This report has been prepared for Kirkland Lake Gold, the beneficial owner of Fosterville. Kirkland Lake Gold (KL) is listed on the Toronto Stock Exchange, New York Stock Exchange and the Australian Securities Exchange. Kirkland Lake Gold is a Canadian-listed gold mining and exploration company with operating mines in Canada and Australia.

The report provides an update of the Mineral Resource and Mineral Reserve (MRMR) position as of December 31, 2017. The MRMR estimate for Fosterville is a summation of a number of individual estimates for various mineralized zones or various geographically constrained areas. All of these estimates are contained within the Mining Licence MIN5404 (Fosterville Mining Licence). Details of the locations and geographical constraints of the various mineralized zones as of December 31, 2017 are given in Section 14.

The report includes an overview of Fosterville Gold Mine, which has been compiled from Company technical reports, published geological papers and internal Mineral Resource and Mineral Reserve documents completed by members of the FGM mine geological and engineering teams. The overview includes a description of the geology, project history, exploration activities and results, methodology, quality assurance, interpretations, metallurgy, land issues and environmental information. It also provides recommendations on additional exploration drilling which has the potential to upgrade resource classifications and to augment the resource base.

Mr. Troy Fuller of Fosterville is a Qualified Person as defined by NI 43-101 and accepts overall responsibility for the preparation of sections 1-14, 17, 18.1, 19-27 and 28.2 of this report.

Mr. Ion Hann of Fosterville is a Qualified Person as defined by NI 43-101 and accepts overall responsibility for the preparation of sections 15-16, 18.2 and 28.1 of this report.

2.2 FIELD INVOLVEMENT OF QUALIFIED PERSONS

lon Hann is the Mining Manager for FGM. He has over 26 years of experience in the mining industry. In this time, 13 years of relevant experience in gold mining operations has been gained at Fosterville.

Troy Fuller is the Geology Manager for FGM. He has over 20 years mining experience and has 18 years of gold operations experience in the Northern Territory, Western Australia and Victoria. Troy Fuller has managed all aspects of the geological operations for Fosterville since May 2010.

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine

All of the Qualified Persons are based at Fosterville and through routine personal inspection have a comprehensive understanding of the property conditions, geology and mineralization, work completed and works planned/recommended.

2.3 DEFINITIONS

TABLE 2-I DEFINITION OF TERMS

Term	Description
AAS	Atomic Absorption Spectroscopy
ABS	Australian Bureau of Statistics
AC	Air core
acQuire	acQuire - Geoscientific Information Management System database software
AEM	Airborne Electromagnetic (survey)
Ag	Silver
AHD	Australian Height Datum (mean sea level)
AHV	Articulated Hydrostatic Vehicle
ALS	Australian Laboratory Services
Aminya	Aminya Laboratory Services
Ammtec	ALS Ammtec Ltd.
AMDEL	Amdel Analytical Laboratories
AMPRD	Absolute Mean Paired Relative Difference
As	Arsenic
Au	Gold
AS	Australian Dollar
AuRico	AuRico Gold Corporation
BAppSc	Bachelor of Applied Science
Bendigo Gold Associates	Bendigo Gold Associates Ltd., owner of the FGM prior to Brunswick
BBus	Bachelor of Business
BEng	Bachelor of Engineering
BEnvSc	Bachelor of Environmental Science
BETS-SHTS	Bendigo to Shepparton power line
BHP	Broken Hill Proprietary, now BHP Billiton
Bi	Bismuth
Biomin	Biomin South Africa Pty Limited
BIOX*	Proprietary bacterial oxidation technology licensed from Goldfields Ltd.
BSc	Bachelor of Science
Brunswick	Brunswick Mining N.L., owner of the FGM prior to Perseverance
BV	Bureau Veritas Laboratory services
C\$	Canadian Dollar (CAD)
BOM	Australian Bureau of Meteorology
Ca	Calcium
CCD	Counter Current Decantation
CIL	Carbon in Leach
CIL Residue	Carbon in Leach Residue. The term is equivalent to CIL Tailings.
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
cm	Centimeter
COG	Cut-off Grade
CPA	Certified Practising Accountant
Crocodile Gold	Crocodile Gold Corporation
CRF	Cemented Rock Fill
Cu	Copper

Term	Description
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DTM	Digital Terrain Model
E	Easting, East
EES	Environmental Effects Statement
EL	Exploration Licence
EMS	Electronic Multi-shot Survey
EPA	Environment Protection Authority
ETW	Estimated True Width
FA	Fire Assay
FAusIMM	Fellow of the Australasian Institute of Mining and Metallurgy
Fe	Iron
FGM	Fosterville Gold Mine Pty Ltd
Fosterville	Fosterville Gold Mine Pty Ltd
ft	Foot (Imperial unit of measurement)
FVTS	Fosterville Terminal Station
FW	Footwall
FX	foreign exchange currency trading market
FY	Financial Year (Canadian)
GAIG	Graduate member of Australian Institute of Geoscientists
GAL	Gekko Assav Laboratory
GDA94	Geocentric Datum of Australia, 1994
GC	Grade Control
GradDipEnvMan	Graduate Diploma of Environmental Management
GSV	Geoscience Victoria (formerly the Geological Survey of Victoria)
Gyro	Gyroscopic downhole directional survey tool
g/t	Grams per (metric) tonne
HCI	Hydrogen Chloride
HDPE	High Density Polyethylene
ha	Hectare (10,000m²)
HE	Hydrogen Fluoride
HG	High-grade
HiSeis	HiSeis Pty Ltd
Tildela	A qualified person has not done sufficient work to classify historical estimates as current Mineral Resource
Historic Resource	or Mineral Reserves described within the report. Kirkland Lake Gold is not treating any historical estimates
matoric resource	as current Mineral Resources or Mineral Reserves.
HL	Heated Leach
HNO:	Nitric Acid
HQ	63.5 mm diameter diamond drill core
HRM	Harrier Resource Model
HVAS	High Volume Air Sampler
HW	Hangingwall
Hz	Hertz
ICP-AES	Inductively Coupled Plasma – Atomic Emission Spectrometry
Inc.	Incorporated
IP.	
ISO	Induced Polarization – geophysical imaging technique International Organization for Standardization
K	Potassium
k k	Thousand
Kirkland Lake Gold	Kirkland Lake Gold Limited
KL	New York Stock Exchange ticker symbol for Kirkland Lake Gold Limited
KLA	Australian Securities Exchange ticker symbol for Kirkland Lake Gold Limited
km	Kilometer
km ²	Square kilometer (area)

Term	Description
koz	Kilo ounce
kt	Kilotonne
K/Th	Potassium/Thorium ratio - relating to a 2008 airborne radiometric survey
kV	Kilovolt
kVA	Kilovolt-ampere
kW	Kilowatt
lb	Pound
LG	Low-grade
LODE	Large Ore Deposit Exploration
LOM	Life of Mine
Ltd	Limited
LQ	Laminated Quartz
LW	Leachwell accelerated cyanide leach assay method
M	Mega/Million (SI prefix; Factor 106)
m	Meter
μ	Micro (SI prefix; factor 10-6)
Ma	Million years
MAI	Managed Aquifer Injection
MAIG	Member of the Australian Institute of Geoscientists
MAusIMM	Member of the Australasian Institute of Mining and Metallurgy
MCC	Motor Control Center
mE	Meters East
mg/m³	Milligram per cubic meter (metric unit of concentration)
MGA	Map Grid of Australia
MIN	Mining Licence
Mira Geoscience	Mira Geoscience Ltd
ML.	Megalitre
ML	Mining licence Prefix (old system)
mm	Millimeter
MMI	Mobile metal ion
MMinGeoSc	Masters of Minerals Geoscience
Mn	
	Manganese
mN	Meters North
Mo	Molybdenum
MRMR	Mineral Resources and Mineral Reserves
mRL	Meters Reduced Level (Elevation)
MRSD Act	Mineral Resources (Sustainable Development) Act 1990 – Victoria, Australia
MSc	Masters of Science
Mtpa	Mega-tonne (metric) per annum
MVA	Megavolt-ampere
N	Northing, North
NATA	National Association of Testing Authorities
NCC	Non-carbonate carbon
New Holland	New Holland Mining Ltd., now Nu Energy Capital Limited
Newmarket	Newmarket Gold Inc.
NI43-101	National Instrument 43-101
NL	No Liability
NNE	North North-East
NNW	North North-West
NPRM	Northern Phoenix Resource Model
Northgate	Northgate Minerals Corporation Ltd
NRM	Northern Resource Model
NQ	47.6 mm diameter diamond drill core

Term	Description
NQ2	50.6 mm diameter diamond drill core
NW	North West
ODW	O'Dwyer's -what? Resource model? Line of fault/reef/gold?
ONAF	Oil Natural Air Forced – Transformer cooling without pumps and fans for air
ONAN	Oil Natural Air Natural - Transformer cooling without pumps and fans
0/0	Oblique /Oblique (structural setting)
O/P	Oblique /Parallel (structural setting)
OSLS	On Site Laboratory Services
OZ	Troy Ounce (31.1034768 grams)
Р	Phosphorous
PAF	Potentially Acid Forming
Ph	Lead
PF	Paste Fill
P/O	Parallel /Oblique (structural setting)
P/P	Parallel /Parallel (structural setting)
ppb	Parts per billion
PO	85.0 mm diameter diamond drill core
PSV	Perseverance Corporation Ltd., listed parent prior to Jan 18th 2008
01	Quarter 1
QAQC	Quality Assurance – Quality Control
QG	Quantitative Geoscience (Geostatistical Consultants, now Aranz Geo)
QP QP	Qualified Person
R ²	R squared – coefficient of determination
RAB	Rotary Air Blast (drill method)
RC	Reverse Circulation (drill method)
RH	Robbin's Hill
Nn .	A device comprising tiers of 'riffles' for equi-probable splitting of dry particulate matter (e.g. drill chips),
Riffle splitter	each tier yields a 50:50 split.
RL	Reduced Level (elevation)
RO	Reverse Osmosis
ROM	Run of Mine
RQD	Rock Quality Designation
S	Sulfur
S	South
SAG	Semi-Autogenous Grinding
Sb	Antimony – present at Fosterville in the mineral stibnite
SD	(Statistical) Standard Deviation
SkyTEM	SkyTEM Australia Pty Ltd
SMS Operations	Swick Mining Services Operations Pty Ltd
SMU	Selective Mining Unit
SP Ausnet	SP Ausnet – Electricity Distributor
Spear Sampling	Using a tube ('spear') to collect a sample for assay from a sample bag of RC or RAB drill chips (this meth is not equi-probable as it is susceptible to density segregation in the sample bag)
SPRM	Southern Phoenix Resource Model
SQL	Structured Query Language
SRK	SRK (Australasia) Consulting Pty Ltd
t	(Metric) tonne (2204.6 lb. or 1.1023 short tons)
Tailings	Ground rock and process effluents generated during processing of ore
TGC	Total Graphitic Carbon
t/m³	Tonne per cubic meter (unit of density)
TOEC	Total Organic and Elemental Carbon
tpa	Tonnes Per Annum
TSE	Tailings Storage Facility

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine

Term	Description
UG	Underground
US\$	United States dollar
Vic	Victoria
VG	Visible Gold
w	West
WA	Western Australia
XRF	X-ray fluorescence analytical technique
YTD	Year to Date

3 RELIANCE ON OTHER EXPERTS

The Qualified Persons have prepared this report from a range of sources including their personal work, contributions, from other FGM personnel and reports from a range of external consultants. Where input has been received from these sources, the Qualified Persons have reviewed and verified the contained assumptions and conclusions. The Qualified Persons do not disclaim responsibility for this information.

Kirkland Lake Gold Fosterville Gold Mine

Other experts which have assisted with the preparation of this report include;

Ashley Jackson (Senior Resource Geologist - Fosterville Gold Mine) BSc (Geology) MSc (Mineral Economics), MAusIMM has made contributions to Sections 10 - 12, 14.1 and 14.2 of this report.

Braden Verity (Senior Exploration Geologist – Fosterville Gold Mine) BEnvSc, GAIG has made contributions to sections 4-12 and 14.3 to 14.5 of this report.

Steve Gannon (Processing Manager – Fosterville Gold Mine) BEng has made contributions to Sections 13 and 17 and 18.1 of this report.

Jon Hurst (Mine Technical Superintendent – Fosterville Gold Mine) has made contributions to Section 15, 16 and 18.2 of this report.

Felicia Binks (Environmental Superintendent – Fosterville Gold Mine) BAppSc, GradDipEnvMan, MAusIMM has made contributions to Section 20 of this report.

lan Holland (General Manager – Fosterville Gold Mine), BSc (Geology), MMinGeoSc, MAusIMM has made contributions to Sections 16, 21 and 22 of this report.

Craig Reid (Commercial Manager - Fosterville Gold Mine), BBus, CPA has made contributions to Sections 19 and 21 of this report.

Nathan Phillips (Exploration Superintendent – Fosterville Gold Mine) BSc (Hons), MAIG, has made contributions to Section 9

Alice Wilkinson (Exploration Geologist – Fosterville Gold Mine) BSc (Hons) (Geology) has made contributions to Sections 2, 7 and 10 of this report.

Daniel Foulds (Senior Mine Geologist – Fosterville Gold Mine) BSc (Hons) (Geology) MAusIMM has made contributions to Sections 10, 11 and 12 of this report.

Miranda McCarthy (Resource Geologist - Fosterville Gold Mine) BScAdv (Hons) (Geology) has made contributions to Sections 7 and 14 of this report.

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

4 PROPERTY, DESCRIPTION AND LOCATION

The FGM is located about 20km east of Bendigo and 130km north of Melbourne in the State of Victoria, Australia (Figure 4-1).



FIGURE 4-1 FOSTERVILLE PROJECT LOCATION MAP

The FGM and all associated infrastructure including the tailings dam and waste dumps are located on Mining Licence \$404 (MINS404; Figure 4-2), which is 100% owned by Kirkland Lake Gold Ltd. MINS404 was initially granted as ML1868 on August 24, 1990. The licence later merged with adjoining licence MIN4877, resulting in MINS404.

In December 2012 another Mining Licence (MIN5565) was granted to FGM, and this licence was also merged into MIN5404. The present MIN5404 has a total area of 1,715.7Ha, and is active until August 24, 2020.

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

MINS404 is located at centroid coordinates 276,599.72mE and 5,935,134.9mN using Map Grid of Australia (MGA) Zone 55 (GDA94) coordinate projection.

The FGM grid is an affine plane grid and can be referenced to MGA using the two reference points contained in Table 4-1 and -5000mRL (AHD). Fosterville Mine grid north is 13°20' west from true north and 21° west from magnetic north.

TABLE 4-1 GRID CONVERSION REFERENCE POINTS

Point 1: MIN5404 Min	ing Licence peg SE of Dal	ey's Hill
Coordinate System	N (m)	E (m)
GDA94 Zone 55	5,930,837.663	278,011.932
Fosterville Mine Grid	4,786.030	2,177.630
Point 2: MIN5404 M	ining Licence peg at NE o	orner
Coordinate System	N (m)	E (m)
GDA94 Zone 55	5,939,047.136	278,407.302

Note that all Eastings, Northings, elevations (RL) and azimuths in the text reference the local FGM grid.

The boundaries of land covered by MIN5404 have been accurately surveyed in accordance with the Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013.

Kirkland Lake Gold also holds other titles through Fosterville Gold Mine Pty Ltd, with four Exploration licences totaling 1,351km², surrounding FGM. In addition, one Exploration Licence in under application to increase the area to approximately 1,850 km². These Exploration Licences extend beyond the entire known strike extent of the Fosterville Goldfield (Figure 4-2).

Within MIN5404, there is a 2.5% gold royalty payable to New Holland Mining Ltd, now Nu Energy Capital Limited for the area outlined by an historical mining lease MIN4877 in the northeastern portion of MIN5404. Further, the royalty agreement extends north and south of MIN5404 where previously existing tenements EL3211, EL3271 and EL3276 (New Holland Mining) overlap with a portion of EL3539 (Figure 4-2).

Fechnical Report Kirkland Lake Gold December 2017 Fosterville Gold Mine

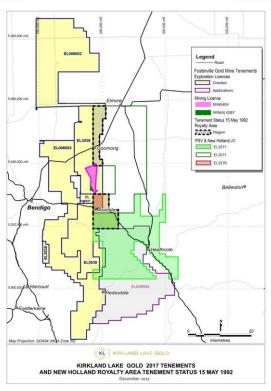


FIGURE 4-2 FOSTERVILLE MINING LEASE PLAN WITH EXPLORATION LICENCES AND ROYALTY AREAS

Technical Report Kirkland Lake Go
December 2017 Fosterville Gold Mir

When Crocodile Gold acquired the Fosterville and Stawell Gold Mines from AuRico in 2012, a sharing arrangement was established where Crocodile Gold was entitled to cumulative net free cash flow from those mines of up to C\$60M. Thereafter AuRico was then entitled to 100% of the next C\$30M in net free cash flow, after which Crocodile Gold and AuRico would share the subsequent C\$30M of net free cash flow on a 50/50 basis until C\$120M of cumulative net free cash flow was achieved. After this milestone AuRico would be entitled to 20% on an ongoing basis.

On December 22, 2014 it was announced that Crocodile Gold had reached a mutually beneficial agreement with AuRico that terminated their net free cash flow sharing arrangement in exchange for a one-time payment of C\$20M in cash and a net smelter return royalty of 2% from Fosterville Gold Mine (effective upon final approval from the Foreign Investment Review Board of Australia) and a 1% royalty from the Stawell Gold Mines (commencing January 1, 2016), releasing Crocodile Gold from its obligation to pay AuRico any further net free cash flow generated from its Victorian operations. This agreement is interpreted to mean that Kirkland Lake Gold is obligated to pay AuRico a net smelter royalty of 2% from Fosterville Gold Mine. However, Alamos Gold Inc (Alamos) merged with AuRico in July 2015, which has resulted in Kirkland Lake Gold now being obliged to pay the new company, AuRico Metals, the net smelter royalty of 2% from Fosterville Gold Mine.

On January 8th, 2018 Centerra Gold completed the acquisition of AuRico Metals. In terms of the Royalty payment details, nothing has changed as AuRico Metals Australian Royalty Corporation continues to exist as a subsidiery to the group.

A rehabilitation bond is reviewed regularly with the Department of Economic Development, Jobs, Transport and Resources Victoria. In December 2017 the rehabilitation bond was reviewed and increased to AS8.27M. Rehabilitation is undertaken progressively at FGM as per the mining licence conditions and the bond may be reduced on establishment that the land has been rehabilitated in accordance with the MRSD Act. That is, the land is safe and stable, non-polluting and the revegetation cover is self-sustaining. FGM is located near areas of moderate environmental significance (Mt Sugarloaf Nature Conservation Reserve), established productive farmland and is adiacent to the locally significant Camassoe River.

FGM is operating under a Risk Based Work Plan approved in October 2017 under the Mineral Resources (Sustainable Development) (MRSD) Act 1990. The newly approved Work Plan consolidated the previously approved 2004 Work Plan and all subsequent Work Plan Variations into one Risk Based Work Plan. The approval, concerning MIN5404 and MIN4456, was provided Statutory Endorsement by the Department Head of Earth Resources Regulation. Work Plan Variations are submitted when significant changes from the current Risk Based Work Plan are proposed.

MINS404 and MIN4456 were granted prior to enactment of the Commonwealth Native Title Act of 1993 and as such are not subject to any Native Title compensation claim, now or after any future renewals.

EL3539 is also not subject to any Native Title compensation claim. EL4937 is subject to an indigenous Land Use Activity Agreement.

Fechnical Report Kirkland Lake G

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Fosterville area is flat to very gently undulating with a range of low, rolling hills located 2km to the west and the Campaspe River situated about 2km to the east. On MIN5404, natural surface elevations range from 150m to 185m above sea level (5150mRL to 5185mRL mine grid). Vegetation in the area ranges from native forest to established grazing pasture.

The FGM has ready access via two separate sealed roads and a variety of all-weather un-sealed roads linking to regional highways. The regional center of Bendigo is approximately 20km to the south west has a population of around 147.000 (ABS. 2017), which provides a source of skilled labor.

The climate based on 30-year temperature and humidity data (1961–1990) show FGM is located in an area that is described as having a warm to mild summers, and cold winters (BOM, 2017). Köppen classification for the same 30-year period, based on predominant native vegetation type places FGM in a temperate climate with no dry season (BOM, 2017). Median annual rainfall data over a 100-year period (1900–1999) show the major seasonal rainfall is winter dominated (wet winter and low summer rainfall; BOM, 2017). The operation is not significantly affected by climate, which allows the operation to continue all year

Power is supplied to the site via a terminal station that was constructed by PSV in 2005. This station is connected to the 220kV transmission line that runs from Bendigo to Shepparton and traverses the southern end of MINS404 approximately 2km south of the processing plant. There is a connection agreement in place with SP Ausnet who manages the transmission and distribution network.

A pipeline was commissioned in April 2005 that has the capacity to supply approximately 2,000ML annually, which comfortably exceeds the current plant usage of approximately 1,000ML per annum. The current arrangement for the provision of water to site is secured through a ten-year contract between FGM and Coliban Water (catchment management authority). This allows for the supply of treated waste water from the Bendigo sewerage treatment facility. This agreement follows on from a previous ten-year agreement that expired in 2016. One further ten-year contract renewal is available on expiry upon written request.

All other site infrastructure is in place and approved in the Work Plan established in April 2004.

Details of tailings storage areas are covered in sections 18.1.4 and 20.2.

The location and of the processing plant site is illustrated in Figure 18-1 and Figure 18-2. The layout of the comminution circuit allows for installation of a pebble crushing circuit, should it be required and a secondary ball mill to increase grinding circuit capacity. Space was left in the area layouts for additional tank farms and equipment to accommodate a nominal increase in plant capacity. Space exists to the east of the plant site to duplicate exists to the east of the plant site to duplicate existing facilities to double plant throughput, if required.

Mining waste material that cannot be placed underground is brought to the surface and held within the confines of the Ellesmere Pit (Figure 18-1; Section 18.2.4). Details on the storage of historically mined waste overburden is covered in Section 20.2 and tabulated in Table 20-1.

Fechnical Report Kirkland Lake
December 2017 Fosterville Gold

6 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 near-surface oxide material.

Aside from a minor tailings retreatment in the 1930's, the field lay dormant until 1988 when Bendigo Gold Associates recommenced gold production at Fosterville from the reprocessing of tailings. By 1989 this program had come to an end and exploration for oxide resources commenced. The leases were then acquired by Brunswick who continued exploration and in 1991 started heap leaching ore derived from shallow oxide open pits. After six months of production, Brunswick went into receivership as a result of the failure of another operation. Perseverance (PSV) bought the operation from the receivers and continued the oxide heap leach operations. PSV continued to produce between 25koz to 35koz per annum until the cessation of the oxide mining in 2001. Between 1988 and 2001, a total of 240koz of gold were poured (Roberts et al. 2003).

In 2001, PSV underwent a significant recapitalization and the focus of the company changed to developing the sulfide resource. A feasibility study investigating a combined open pit and underground mining operation feeding 0.8Mtpa of sulfide ore to a BIOX* processing plant was completed in 2003. Work on the plant and open pit mining commenced in early 2004. Commercial sulfide hosted gold production commenced in April 2005 and up to the end of December 2006 had produced 136,882oz of gold. Underground development commenced in March 2006 with first production recorded in September 2006 and significant open pit production ceasing at the end of 2007, but with minor production from open pits in 2011 and 2012. The 500,000% ounce milestone of 'sulfide' gold production was achieved in April 2011 and by the end of June 2017 'sulfide' gold production totaled 1,416,282oz.

A breakdown of open cut and underground mined tonnes and grade over the previous ten years is given in Table 6-1.

Technical Report Kirkland Lake Gold December 2017 Fosterville Gold Mine

TABLE 6-I MINED PRODUCTION DATA FOR FOSTERVILLE FOR THE PERIOD 2007- 2017

Mining	g Area	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Tonnes (kt)	423		ā	2.70	45	75		-	1070	100	87
Open Cut	Grade (g/t Au)	2.3	0		- 28	2.8	2.6	9	33	121		82
Under-	Tonnes (kt)	376	512	780	729	734	729	827	786	704	692	538
ground	Grade (g/t Au)	4.2	4.5	4.8	5.0	5.0	4.5	4.6	4.6	6.1	7.9	16.1
Total	Tonnes (kt)	799	512	780	729	779	804	827	786	704	692	538
	Grade (g/t Au)	3.2	4.5	4.8	5.0	4.9	4.3	4.6	4.6	6.1	7.9	16.1

On October 29, 2007, Perseverance announced that it had entered into an agreement with Northgate Minerals Corporation (Northgate) to acquire the company via a Scheme of Arrangement. This agreement was ratified by Perseverance's shareholders and option holders on January 18, 2008 with full control passing to Northgate in February 2008.

In August 2011 Northgate entered into a merger agreement with AuRico, who assumed control of the Northgate assets in October 2011. In March 2012 AuRico and Crocodile Gold jointly announced that Crocodile Gold would acquire FGM and Stawell Mines. Crocodile Gold's ownership of FGM was achieved on May 4, 2012. In May 2015 Crocodile Gold and Newmarket Gold entered into a definitive arrangement agreement and completed a merger on July 10, 2015 to form Newmarket Gold. At the end of November 2016, Kirkland Lake Gold Inc. merged with Newmarket Gold Inc to form a new mid-tier gold company Kirkland Lake Gold Ltd.

A detailed summary of exploration and development works on the property from previous operators can be found in Section 9 and Section 10 of this report. Two historical mineral resource estimates contained within EL3539, Hallanan's and Goornong South Prospects, were reported by Perseverance in their 1999 Annual Report as shown in Table 6-2 and Table 6-3.

Kirkland Lake Gold is not treating these Historical Resources as current Mineral Resources as a QP has not done sufficient work to classify the Historic Resources, or comment on the reliability of the estimates.

Technical Report December 2017 Kirkland Lake Gold Fosterville Gold Mine

TABLE 6-2 HISTORIC RESOURCE OF THE GOORNONG SOUTH PROSPECT PERSEVERANCE (1999)

	Histo	orical Minera	Resource	PSV 1999) -	Goornong Sc	uth Prosper	:t		
	Measured Indicated				Inferred				
Classification	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (Oz)	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (Oz)	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (Oz)
Oxide	216	1.3	9,300	535	1.3	23,100	32	1.6	1,700
Sulfide (High-Grade)	7	1.7	400	46	1.6	2,400	373	1.5	18,200
Sulfide (Low-Grade)	3	0.7	100	11	0.7	300	140	0.8	3,700
Total Sulfide	10	1.4	500	57	1.4	2,700	513	1.3	21,800
Total Oxide & Sulfide	226	1.3	9,800	592	1.4	25,800	545	1.3	23,500

Notes:

- Historical Resource as reported in Perseverance Annual Report 1999.
 Kirkland Lake Gold is not treating the historical estimate as a current Mineral Resource as a QP has not done sufficient work to classify the historical estimate or comment the reliability of the estimate.
- to classify the instorcal estimate or comment the reliability of the estimate.

 3. Reporting lower cut-off gold grades used are 20.5 g/t Au for oxide, 0.5-1.0 g/t Au for sulfide low-grade and >1.0 g/t Au for sulfide high-grade.

 4. Bulk Density values set to 1.8t/m³ for clay, 2.4t/m³ for oxide and 2.8t/m³ for sulfide materials.

- Resource block grades estimated by Ordinary Kriging of 50m spaced drill sections.
 Mineral Resources have been rounded to 1,000t, 0.1 g/t Au and 100oz. Minor discrepancies in summation may occur due to rounding.

 7. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

TABLE 6-3 HISTORIC RESOURCE OF THE HALLANAN'S PROSPECT PERSEVERANCE (1999)

	Measured				Indicated		Inferred		
Classification	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (Oz)	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (Oz)	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (Oz)
Oxide	281	1.4	12,900	169	1.4	7,600	41	1.2	1,600
Sulfide (High-Grade)	89	1.5	4,400	240	1.5	11,500	521	1.7	28,600
Sulfide (Low-Grade)	35	0.8	900	66	0.8	1,600	124	0.8	3,000
Total Sulfide	124	1.3	5,200	306	1.3	13,100	645	1.5	31,700
Total Oxide & Sulfide	405	1.4	18,100	475	1.4	20,700	686	1.5	33,300

- 1. Historic Resource as reported in Perseverance Annual Report 1999.
 2. Kirkland Lake Gold is not treating the historical estimate as a current Mineral Resource as a QP has not done sufficient work to classify the historical estimate or comment the reliability of the estimate.
 3. Reporting Lower cut-off gold grades used are 20.5 g/t Au for roxide, 0.5-1.0 g/t Au for suffice low-grade and >1.0 g/t Au for

- sulfide high-grade.
 4. Bulk Density values of 1.8t/m³ for clay, 2.4t/m³ for oxide and 2.8t/m³ for sulfide materials.
 5. Resource block grades estimated by Ordinary Kriging of 25m & 50m spaced drill sections.
 6. Mineral Resources have been rounded to 1,000t, 0.1 g/t Au and 100oz. Minor discrepancies in summation may occur due to
- rounding.

 7. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The western sub-province of the Paleozoic Lachlan Orogen in Victoria has been divided into three major fault-bounded structural zones: the Stawell, Bendigo, and Melbourne Zones (Figure 7-1a; Cayley et al, 2011). These structural zones are dominated by chevron-folded Cambro-Ordovician to Devonian turbidite sequences, and were progressively intruded by Early Silurian granite plutons in the west, through to Late Devonian granite plutons in the East (Bierlein & McKnight, 2005; Phillips et al, 2012).

The Fosterville Goldfield is located within the eastern Bendigo Zone, which is bounded by the Avoca Fault to the west and the Heathcote Fault Zone to the east (Figure 7-1b), both of which are steep west-dipping reverse faults. The Bendigo Zone contains thick Ordovician age turbidite sequences that were subjected to low-grade metamorphism during the Late Ordovician Benambran Orogeny ("455-440Ma) and the Late Devonian Tabberabberan Orogeny ("380Ma). East-vergent folding and thrusting indicates a predominantly east-west compression that resulted in the formation of north-south upright folds. Continued deformation caused steepening of fold limbs and progressive development of a series of west-dipping reverse faults. These faults are interpreted to have listric geometries at depth and were likely conduits that provided a regional control on mineralizing processes, in conjunction with intra-zonal west-dipping faults, such as the Redesdale Fault, mapped to the south of Fosterville (Cayley et al, 2008). In addition, smaller reverse faults propagated across fold limbs, linking bedded faults and are well mineralized in the style characteristic to the classic Central Victorian Slate Belt Gold Deposits of Bendigo and Castlemaine (Roberts et al, 2003).

Gold mineralization is associated with to 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 responsible for the emplacement of gold at the Fosterville Goldfield (Bierlein & Maher, 2001). The minor period of mineralization at ~410-400Ma is restricted to the Stawell and western Bendigo Zones and is associated with crustal anatexis and Early Devonian plutonism (Phillips et al, 2012). The two major gold mineralizing events have been linked to the Benambran and Talbberabberan Orogenies (Vandenberg et al, 2000). All three gold mineralizing events are characterized by carbonate and sericite alteration, but only the latter two events (~410-400Ma & ~380-370Ma) have elevated Mo, Cu, Sb and W. During the third mineralizing event a range of mineralization styles resulted and include quartz-carbonate vein hosted free gold through to sulfide hosted refractory gold in association with arsenopyrite, pyrite and stibnite (Roberts et al. 2003).

Deep weathering and erosion in the late Tertiary resulted in the development of a regional laterite profile with weathering locally to 50m depths.

Fechnical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

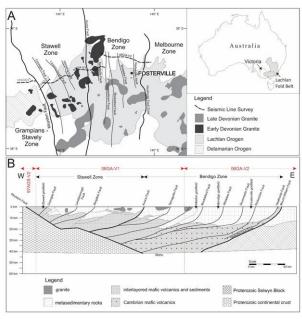


FIGURE 7-1 MAP AND CROSS-SECTION OF THE WESTERN LACHLAN FOLD BELT IN CENTRAL VICTORIA

(a) Distribution of major geologic units and major faults of the Bendigo and Stawell Zones and location of seismic lines. (b) Geological interpretation from seismic surveys. Adapted from Leoder & Wilson, 2010.

7.2 LOCAL AND PROPERTY GEOLOGY

The Fosterville Goldfield within the currently held tenements is hosted by Lower Ordovician Lancefieldian (486~488 Ma) turbidites within the Ordovician Castlemaine Group rocks (Figure 7-2 and Figure 7-3). The turbiditic sequence comprises interbedded sandstones, siltstones and shales, which are interpreted as

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Min.

having formed in a meandering submarine channel setting. The sequence is dominated by shale topped sands, 0.2m-1.5m in thickness, with lesser amounts of massive sandstone, shale and black shale (Roberts et al, 2003). Detailed drill core logging has confirmed almost 1km of stratigraphic succession exists at Fosterville and correlation of sedimentary units has been possible over a 10km distance within the Fosterville Mining Licence (Boucher et al, 2008a).

The sequence is metamorphosed to sub-greenschist facies. Illite crystallinity studies support this observation with results falling in the range of anchizone to lower epizone (Melling, 2008). Fluid inclusion work indicates that the Fosterville Goldfield formed at ~270°C and at 2.6-5.7km crustal levels (Mernagh, 2001).

The stratigraphic sequence was folded into a set of upright chevron, occasional open style folds, with fold wavelengths up to 350m. During folding, vertical axial planar (in finer sediments) and radial cleavages (sandstones) developed and are best observed in fold hinges. Bedded LQ veins were also formed during early folding and were preferentially formed in shales.

The north-south trending Redesdale Fault (Figure 7-2), lying approximately 1.5km to the east of FGM, is an important intrazonal fault and occurs in the hangingwall of the Heathcote Fault Zone (Figure 7-1a).

Subordinate faults (third order and higher), such as the Fosterville, O'Dwyer's and Sugarloaf Faults (Figure 7-2) all have associated gold mineralization and are located in the hangingwall of the Redesdale Fault.

Within the Fosterville area the north-north-west trending Fosterville Fault is strike extensive and dips

A fold culmination (dome) exists in the Fosterville Mining Licence in the Falcon pit area (Figure 7-3), about which a fold plunge reversal occurs. South of the culmination, folds plunge approximately 20° southwards, and a large west-dipping fold limb, containing parasitic folds and faulting has been well drilled over a 4km length to as far south as Daley's Hill. Extensive drilling focused on south plunging gold mineralization associated with late brittle west-dipping reverse faulting that offsets syncline and anticline fold closures (Figure 7-5). However, it is relatively unknown how extensive the northern fold plunge may be or whether it simply represents a local fold plunge reversal.

In the northern portion of the Mining Licence, in the Robbin's Hill - O'Dwyer's area, a number of west-dipping faults occur and parallel the Fosterville Fault. Late Silurian to early Devonian porphyry dykes (Arne et al, 1998) also occur in this area, are up to 10m in width, intrude the stratigraphic sequence, predominantly along anticlinal axial planes (King, 2005 & Reed, 2007a) and postdate all significant faulting. The porphyry dykes are sericite altered and have associated gold mineralization that was sufficient to support several oxide and minor sulfide (O'Dwyer's South) open pits.

Lamprophyre dykes, typically less than 1m in width, intrude along the general Fosterville Fault trend and are unmineralized. These dykes were emplaced in the Middle Jurassic (157-153Ma; Bierlein et al, 2001) and are of similar age to those that occur at Bendigo.

Technical Report Kirkland Lake Gol
December 2017 Fosterville Gold Min

Erosion of the area followed by Cainozoic Murray Basin sediment valley backfill and weathering has resulted in local clay conglomerate alluvial channels and complete oxidation to about 40m below surface. Immediately below the base of complete oxidation is a 10-15m thick zone of partial oxidation of sulfide minerals. Feldspar destruction and partial carbonate dissolution extends from the base of oxidation to about 150m depths. Approximately 2km to the east of Fosterville Miocene aged Newer Basalt Group rocks mask the Ordovician rocks and Murray Basin Sediments.

rechnical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

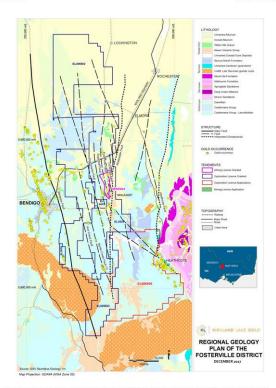


FIGURE 7-2 REGIONAL GEOLOGY PLAN OF THE FOSTERVILLE DISTRICT, SHOWING FOSTERVILLE MINING LICENCES, EXPLORATION LICENCES, OPEN PITS AND HARD ROCK GOLD OCCURRENCES

Fechnical Report Kirkland Lake Gold December 2017 Fosterville Gold Mine

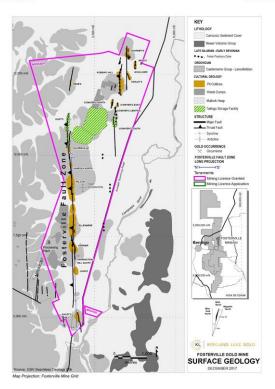


FIGURE 7-3 FOSTERVILLE SURFACE GEOLOGY PLAN SHOWING SURFACE MINING ACTIVITY

Technical Report Kirkland Lake Go

7.2.1 SCHEMATIC GEOLOGICAL CROSS SECTION

The geological knowledge of the Fosterville Fault Zone architecture has progressively grown over the last decade as diamond drilling explored new areas and underground mining reached deeper levels. The present understanding of the faulting is shown on schematic cross sections (Figure 7-4 and Figure 7-5). Pictured is the moderate-steep west-dipping Fosterville Fault, which has several en echelon arrays of footwall reverse faults that link across from a western anticline to a syncline in the east.

Most of the lower faults (Hawk through to Kestrel) are thought to exist as bedding parallel LQ veins at depth to the west of their respective footwall anticlines. However, eastwards between footwall and hangingwall anticlines the faults can have concordant/discordant (parallel/oblique) bedding relationships and to the east of hangingwall anticlines, the faults shallow in dip and have discordant contacts with adjacent bedding. When certain stratigraphic units are encountered across the east-dipping limb, conjugate east-dipping structures form, creating zones of greater structural complexity. Further eastwards the single stranded west-dipping faults become an unmineralized zone of distributed faults for 50-100m, before merging into a single fault, approximately 50m west of footwall synclines. East of the footwall syncline the faults' dip steepens, matching the dip of the footwall bedding. Between footwall and hangingwall synclines, faults have discordant/concordant bedding relationships and to the east of the hangingwall syncline the faults exist as bedding parallel LQ veins, commonly with pug on one margin.

Structurally higher level faults such as the Harrier and Osprey Faults appear as footwall faults splaying from the footwall of the Fosterville Fault.

The schematic cross section portrays a number of fault segments where gold mineralization occurs and includes examples of areas of fault-bedding discordant relationships, changes in fault dip and localization of mineralization between hangingwall and footwall synclines, and between hangingwall and footwall anticlines. In particular, the Phoenix Fault System is an important structure at Fosterville for gold mineralization. It has 120 to 150m of reverse offset and as underground mining has progressed to deeper levels, faulting has become more complex. Nearer to surface the Phoenix Fault was a relatively narrow west-dipping reverse fault. However, down-plunge the faulting changes to also include mineralized hangingwall splay faulting and west-dipping footwall faults emanating from bedding parallel LQ veins.

Other faults at structurally higher positions have comparable fault offset and are well mineralized. These include the Harrier and Osprey Faults (exposed at Harrier Pit) that are footwall splays of the Fosterville Fault. The faults have over 200m of combined reverse movement, and are mined at the southern end of the Mining Licence.

Where wall rocks are faulted and brecciated, fractures are healed by quartz-carbonate veining and commonly have arsenopyrite and pyrite disseminated in the wall rock up to 0.5m from the veins. The wall rock proximal to faults is also sericitized, sometimes with visually subtle alteration, and has similar spatial extents to the gross disseminated sulfide distribution. Bedded faults exist as bedding parallel LQ veins and are thought to have formed during ductile deformation. As such they pre-date mineralizing events and are generally poorly mineralized.

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

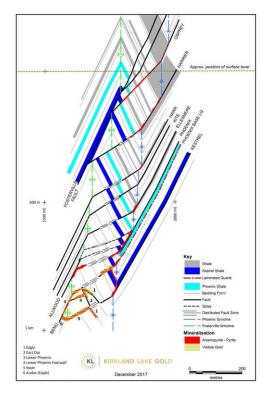


FIGURE 7-4 FOSTERVILLE FAULT ZONE SCHEMATIC CROSS SECTION

Technical Report
December 2017

Kirkland Lake Gold
Fosterville Gold Mine

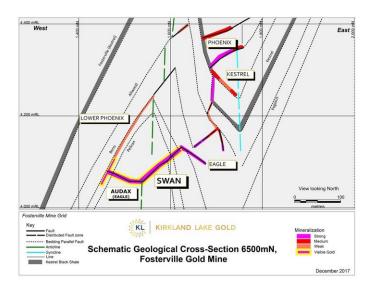


FIGURE 7-5 SCHEMATIC GEOLOGICAL CROSS-SECTION OF 6500mN

7.3 MINERALIZATION

Gold is presently mined in two forms at FGM: Sulfide-Hosted Gold and Visible Gold.

C. IE'- 11-4-4 C-1-

Mineralization at FGM occurs mainly as gold atoms trapped within the crystal lattice of disseminated arsenopyrite and pyrite (sulfides). These sulfide minerals precipitate in the wall rock as selvage alteration proximal to veins that penetrate the host rock. Associated alteration mineralogy within veins is mainly euhedral to amorphous quartz-carbonate, with minor amorphous albite-chlorite-epidote.

Arsenopyrite crystals occur as 0.05-6mm long acicular needles in random orientations. The disseminated pyrite associated with gold mineralization occurs as crystalline pyritohedrons 0.1-2mm in size. Electron microprobe analyses and metallurgical test work indicates that the arsenopyrite contains 100-1,000 g/t Au and the auriferous pyrite 10-100 g/t Au (Roberts et al., 2003). Approximately 80% of sulfide-hosted gold occurs in arsenopyrite, with the remaining 20% hosted by pyrite.

The quartz-carbonate veining forms in several styles that range from isolated veins through to stockwork veining. The quartz-carbonate veining is barren of sulfide gold. Broad zones of sulfide selvage altered zones are located where stockwork veining occurs. This can allow a pervasive body of sulfide mineralization in the wall rock around that stockwork veining to form, with widths up to several meters.

Visible Gold

Visible gold has been observed in all areas of the underground workings at FGM and in some open cut pits within the MIN5404 lease.

Visible gold is observed within quartz-carbonate veins, with a noticeable increase in recent years as underground mining and diamond drilling has advanced deeper. Visible gold particles are predominantly specks (up to 3 mm), however more rarely they can be > 5 mm as seen in drill core, underground development face/wall mapping, and stope sampling. The width of quartz-carbonate veining that contain visible gold is variable, with widths ranging from a few millimeters to several meters (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 (Figure 7-7). Alteration mineralogy associated with veins that host visible gold includes quartz - carbonate (ankerite), with minor occurrences of fibrous boulangerite ($Pb_5 Sb_4 S_{11}$) as inclusions in euhedral quartz or as fibrous growths within void spaces. Selvage sulfide alteration can be present, proximal to veins hosting visible gold.

The visible gold has a spatial association with stibnite (Sb₂S₂). However, the stibnite mineralization can occur without visible gold (Henderson, 2014). The rationale for the one-way correlation is likely due to the stibnite mineralization occurring in different events, but utilizing the same structurally favorable locations. Stibnite mineralization is observed in all areas of the underground workings at FGM and has historically/previously been observed in some open cut pits within MIN5404. Figure 7-6 illustrates antinomy mineralization within an east-dipping quartz-carbonate vein.

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine



FIGURE 7-6 UNDERGROUND FACE PHOTO OF THE P4320 SOUTH FOOTWALL DEVELOPMENT SHOWING STIBNITE OVERGROWTH OF QUARTZ CARBONATE VEINING ON THE ALLWOOD EAST FAULT



FIGURE 7-7 DRILL CORE FROM HOLE UDH1817 SHOWING VISIBLE GOLD IN A QUARTZ-CARBONATE VEIN

Framboidal pyrite aggregates (≤50mm in size) and laminations of pyrite (≤20mm widths) are common in the
stratigraphic sequence especially in black shale units. The framboidal pyrite is diagenetic and drill core

stratigraphic sequence, especially in black shale units. The framboidal pyrite is diagenetic and drill core assaying of this material regularly returns grades <5ppb Au.

Other sulfides present at FGM in small quantities include galena, sphalerite and chalcopyrite, boulangerite (Pbs.Sb.Si1) and rarer still are tennantite (CuFe12AscS13), tetrahedrite (CuFe12Sb.S13), and bournonite (PbCuSbS3), which have been reported in processing plant sulfide concentrates (McArthur, 2012; & Townsend, 2009)

Silver grades are low at Fosterville; usually about one tenth of the gold grade with only $^{\sim}1\%$ silver commonly in poured gold doré in the early years of sulfide gold operations. However, the silver content in poured doré

Technical Report Kirkland Lake
December 2017 Fosterville Gold N

has gradually increased to the present ~4% silver levels and may be related to the gradual increase in contribution of visible gold that is mined.

7.4 CONTROLS ON GOLD MINERALIZATION

At Fosterville sulfide gold mineralization is structurally controlled and localized by the discordant relationship between bedding and faulting (Figure 7-4). Gold mineralization is more continuous and of higher grades in fault zones where east-dipping beds occur adjacent to west-dipping footwall beds across faulting, such as along the Phoenix Fault (Boucher et al, 2008a), i.e.: discordant-concordant structural setting (locally termed oblique/parallel or parallel/oblique). Mineralized shoots are typically 4-15m thick, 50m-150m up/down-dip and 300-2,000m+ down-plunge (Figure 7-8). Sulfide gold grades are relatively smoothly distributed with both extremely high values and extremely low values being uncommon.

There are four geometric bedding-fault relationships present at Fosterville; primarily created through the interaction of west-dipping faulting that links across fold closures, from an anticline in the west to a syncline in the east. The four bedding relationships across a fault are locally referred to as parallel/parallel, parallel/oblique, oblique/oblique and oblique/parallel structural settings. These are briefly described below:

- Parallel/Oblique (P/O) setting is where hangingwall bedding is parallel to the fault, but the footwall
 bedding is at an oblique angle (discordant) to the fault. Parallel/oblique settings occur at Fosterville where
 a west-dipping fault offsets a footwall anticline axial plane. This structural setting is generally well
 where the properties of the properties o
- Oblique/Oblique (O/O) setting is where bedding in both the hangingwall and footwall is oblique to faulting. Oblique/Oblique settings occur where a west-dipping structure passes through east-dipping bedding between the hangingwall anticline and footwall syncline axial planes. This structural setting is variably mineralized;
- Oblique/Parallel (O/P) setting is where bedding hangingwall to faulting is oblique to faulting and the
 footwall bedding is parallel. Oblique/parallel settings occur at Fosterville where a west-dipping fault
 offsets a syncline axial plane. This setting is also generally well mineralized; and
- Parallel/Parallel (P/P) setting is where the bedding in the hangingwall and footwall is parallel (concordant)
 with faulting. This setting was once thought to be non-prospective for sulfide gold mineralization,
 however, recent developments have shown that economic mineralization can form in parallel/parallel
 setting where the stress between slipping beds can form stacked vein arrays that form perpendicular to
 the bedding orientation, termed ladder veins. Visible gold and stibnite can also form within veins
 constrained by bedding units giving another mechanism for parallel/parallel mineralization.

The controls on visible gold mineralization are less well tested compared with sulfide-hosted gold, however, general observations suggest that visible gold is focused along reactivated faults where sulfide hosted gold mineralization is located. Visible gold is generally found in higher concentrations on faulting proximal to anticline hinges. The Eagle Zone has a fault (Audax Fault) with an orientation that is east-west striking, and steeply south plunging, which is significantly different to all other mineralized faults at FGM. It would appear that this orientation has a strong control on visible gold mineralization, however, this is yet to be tested in other areas within FGM. The Swan Fault is uniquely flatter in dip (45-60°) and rotated to a more northwesterly

orientation than the well-known Fosterville Fault Zone faults such as Benu and Kestrel. These noticeably different fault orientations around the Swan Zone mineralization are likely to strongly influence the degree of visible gold seen.

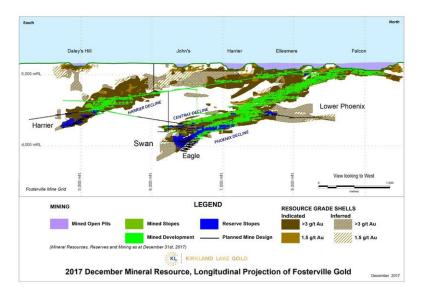


FIGURE 7-8 FOSTERVILLE FAULT ZONE LONGITUDINAL PROJECTION SHOWING RESOURCES, RESERVES, MINING AND TARGET AREAS

7.5 FOSTERVILLE FAULT ZONE

The Fosterville Fault Area represents a linear trend of gold mineralization within MINS404 extending from Daley's Hill in the south to Rehe's pit in the north (Figure 7-3).

Early deformation of the sedimentary packages developed laminated quartz veins proximal to shale packages that were susceptible to accommodation flexural slip. Due to the brittle and ductile contrast between quartz and shale packages, compressive forces have focused fault movement along these zones. Faulting has added re-mobilized carbon sourced from carbonaceous sedimentary units and from deep-seated structurally induced fluid flow. As deformation intensified these preserved shale laminations became nucleation points for brittle fault failure across east-dipping bedding. The accommodation of strain between the syncline and anticline provided a fault mesh as a complex interplay between east and west-dipping faults. From 9000mN to 7500mN, this interplay was largely not recognized due to the short eastern limb length. Over this northing range most of the compressive force was accommodated by large fault offsets of the Fosterville and Phoenix Faults. As exploration continued south, the syncline and anticline appeared to diverge subtly from one another, increasing the eastern limb length. Force accommodation between the zones had longer distances to cut across, resulting in faulting that has reduced measurable offset.

The result of the reduced offset appears to have an effect on how the east-dipping rocks accommodated faulting at depth, with ladder vein systems opening in bedding parallel zones along shale boundaries. Fluids utilizing these pathways were not constrained to one pathway as seen in the Phoenix and Falcon Zones, but used a diverse network including fold-hinges, sedimentary units and contacts as well as east-and west-dipping faults. There also appears to be an element of fluid pressurization injecting up-plunge, seeking lower pressure environments.

This fluid pressurization appears to be strongly coincident with the increase in veining that contains quartz, stibnite and visible gold at depth. Veining can be several meters thick, often stylolitic, and suggests an element of hydraulic fracturing, which acts as a trap. This occurs in the Eagle / Lower Phoenix interaction zone around the Fosterville Anticline.

Along the mineralized trend at approximately 8800mN (Falcon Pit area), a fold culmination (dome) occurs. The culmination causes plunge reversals to both folds and mineralization, and to the north of the culmination, the footwall syncline and mineralization shoots plunge gently to the north. Similarly, south of the culmination, the footwall syncline and mineralization shoots plunges approximately 20° southwards.

The Fosterville Fault Zone consists of ten primary and eight secondary Mineralized Zones (Table 7-1).

TABLE 7-1 FOSTERVILLE FAULT ZONE PRIMARY AND SECONDARY MINERALIZATION ZONES

Primary	Secondary
Phoenix	Splays
Falcon	Ellesmere
Harrier	Vulture
Lower Phoenix	Osprey
ower Phoenix Footwall	Robin
Eagle	Raven
East Dippers	Shamrock
Allwood	Griffon
Kestrel	
Swan	

7.5.1 CENTRAL, NORTHERN AND LOWER PHOENIX DOMAINS

Based on observed variations in geology, orientation, variography, geochemistry, statistics and spatial location within the Fosterville Mine Area, mineralization in the Central, Northern and Lower Phoenix Areas has been divided into 23 distinct domains, two redundant and one common domain shared with the Harrier Area, detailed in Section 7.5.2.

Domains are created due to the identification of a unique set of parameters that are coincident with economic mineralization traced through a number of drilled sections. Unique parameters may include the presence of a defining structure (Fosterville Fault, Phoenix Fault, Benu Fault, etc.), consistent orientation along strike and dip, mineralization style (disseminated sulfide, massive stibnite or visible gold), spatial location or geological setting (hinge, oblique/oblique, parallel/parallel, parallel/oblique, oblique/parallel, etc.). Surrounding all the mineralized domains is a waste domain that was used to generate the waste gold grades in the immediate vicinity of the mineralization.

Broader zones of mineralization have been defined in the Central Area and each of these zones may consist of multiple domains. Below are descriptions of the mineralized zones within the Central Area.

TABLE 7-2 MODEL DOMAINS, CODES AND ASSIGNED MINERALIZED ZONES

Domain Classification				
Model	Domain Name	Domain Code	Mineralized Zone	
Central	Fosterville HG	1	Falcon, Vulture, Ellesmere	
	Fosterville LG	2	Falcon, Vulture, Ellesmere	
	Phoenix HG	3	Phoenix	
	Phoenix LG	4	Phoenix	
	Splay HG	5	Splays	
	Splay LG	6	Splays	
	Kite	7	Splays	

Domain Classification				
/lodel	Domain Name	Domain Code	Mineralized Zone	
	Kite LG (redundant)	8	Splays	
	Raven (redundant)	9	Raven	
L	Vulture	10	Vulture	
	Harrier OP	11	Harrier	
	Phoenix Base	12	Phoenix	
	East Dippers	18	East Dipper	
	Audax	1	Eagle	
	Phoenix HG	3	Phoenix	
Lower Phoenix (Northern and Southern)	Splay HG	5	Splays	
	Splay LG	6	Splays	
	Allwood	8	Allwood	
	Vertical	9	East Dipper	
	Benu W1	10	Lower Phoenix Footwall	
	Swan	11	Swan	
	Phoenix Base	12	Phoenix	
	Benu	13	Lower Phoenix	
ž	Benu FW	14	Lower Phoenix Footwall	
oeni	Kestrel	15	Kestrel	
4	Bedded East	16	East Dipper, Kestrel	
owe.	Shallow East Dippers	17	East Dipper	
	East Dippers	18	East Dipper, Eagle	
	Eagle	20	Eagle	
	Allwood East	21	Eagle	
	Audax FW	22	Eagle	
	Phoenix Base FW	23	Phoenix	
	Fosterville HG	1	Falcon, Vulture, Ellesmere	
Ε .	Fosterville LG	2	Falcon, Vulture, Ellesmere	
Northern	Phoenix HG	3	Phoenix	
ž	Splay LG	6	Splays	
	Griffon	7	Splays	

Phoenix

The Phoenix Mineralized Zone is situated within offset zones of Phoenix Syncline Hinge created by faulting within the Phoenix Shale package. Faulting that occurs at the top of the approximate 8m, moderately sericitized shale package, is defined as the Phoenix Fault, with the Phoenix Base Fault occurring towards the base before transition into undifferentiated sandstones.

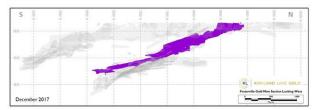


FIGURE 7-9 LONGITUDINAL PROJECTION OF THE PHOENIX MINERALIZED ZONE (PURPLE)

Movement and fluid generation for the Phoenix Fault appears to nucleate from the Fosterville Anticline as west-dipping faulting branches through east-dipping beds (Figure 7-4). This fault movement creates an offset of the syncline hinge resulting in wall rock brecciation and permeation of mineralized fluids into the surrounding country rocks. Brecciation and economic mineralization appear to cease as the system encounters the hangingwall offset of the syncline hinge sending the fluid into parallel bedding and limiting sulfide dissemination.

The mineralization in the Phoenix Domain plunges 15° to 20° to the south. Mineralization on the Phoenix Fault is consistent in width and geometry-dipping 45° to 65° to the west with an internal high-grade shoot geometry that plunges roughly 70° to the south with a strike length of 30m to 40m and a width up to 20m.

The high-grade shoot geometry, believed to be related to subtle strike changes to the Phoenix Fault, appears also to be periodic in occurrence with a shoot occurring around every 200m between 7300mN and 8200mN. Syncline offset on the Phoenix Fault ceases around 7085mN with movement and mineralization transferring to Phoenix Base Fault from the 8212.5mN section becoming more evident from 7537.5mN (Figure 7-9).

Mineralization associated with the Phoenix Base and Phoenix Footwall Faults occurs south of 7337.5mN and remains open down-plunge. The Phoenix Base area differs slightly to the Phoenix as fluid flow and fault movement appear to be related to compressive compensation of the Phoenix Syncline Hinge along the Kestrel Shale package. Current faulting mechanisms suggest that as the Phoenix Syncline Hinge is squeezed by East-West regional compression, a pervasive low angle structure (~35°) links from the Eastern limb of the Kestrel Shale package across to the Phoenix Base laminated quartz vein with ~30m of movement at its maximum. Sulfide mineralization appears to be sourced from gold-bearing fluid migration up the Phoenix Syncline Hinge.

South of 6360mN an apparent change in orientation has been noted on the Phoenix Base fault, striking in a more south southeast direction, with the dip steepening to "60°. This change appears to correlate with the development of a parasitic syncline-anticline pair on the western limb of the Phoenix FW Syncline.

Lower Phoenix

The Lower Phoenix Mineralized Zone encompasses mineralization that is directly related to the west-dipping faulting associated with the Benu sedimentary strata package below 4500mRL. Source mineralization is interpreted to migrate up the system from deep intersections with other mineralized structures including potential hinges and other proximal oblique structures. Fluids utilize fault and fracture pathways to migrate up-plunge and dip towards the Fosterville Anticline before linking across to a zone of distributed faults, which eventually re-forms up-dip into the Phoenix Zone.

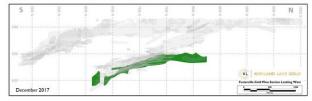


FIGURE 7-10 LONGITUDINAL PROJECTION OF THE LOWER PHOENIX MINERALIZED ZONE (GREEN)

The Lower Phoenix is defined by west-dipping faulting on the Benu Shale sequence and associated west-dipping strata where an anticline has thrust displacement of approximate 80m. Components of mineralization can also be traced up-dip into east-dipping stratigraphy and down-dip into parallel-bedded zones giving a maximum dip extent of 190m. The system currently remains open to the north and south and maximum plunge extent has not yet been characterized.

The system orientation is predominately controlled by west-dipping bedding orientation giving the zone a similar structural orientation to that of both Phoenix and Falcon Zones with a strike of "355", a general plunge of "20°S and a dip of 55°W in parallel/oblique settings, but shallowing to 35°W dip in oblique/oblique settings.

To the south of the Lower Phoenix, mineralization is strongly influenced by the intersection with the Eagle System where faulting appears to cross-cut west-dipping bedding strata providing an environment where parallel/parallel economic mineralization occurs to the north and up-plunge of this intersection.

Extension drilling programs during 2018 are planned to test up and down-plunge components to the ore zone, which presently remain unconstrained by drill data.

Lower Phoenix Footwal

The Lower Phoenix Footwall Mineralized Zone encompasses mineralization that is associated with west-dipping structures footwall to the Lower Phoenix System below 4500mRL.

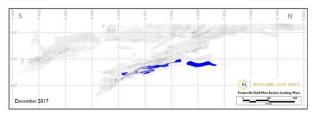


FIGURE 7-11 LONGITUDINAL PROJECTION OF THE LOWER PHOENIX FOOTWALL MINERALIZED ZONE (BLUE)

Mineralization domained within the Lower Phoenix FW (Figure 7-11) is interpreted to be due to low angled structures that largely have minimal offset but have been hydraulically fractured by gold bearing fluids, though down below the Eagle System the structures appear to accommodate more significant movement, such as on the Swan Fault, which has at least ~20m of thrust offset. The hydraulically fractured zones can create large quartz carbonate veins that can be several meters wide in true thickness. The presence of multiple laminations within the quartz veins indicates a series of fault events with differing geochemistry including later stage quartz-stibnite mineralization associated with visible gold.

The vein systems are interpreted to migrate across east-dipping stratigraphy, appearing to terminate on prominent stratigraphic shale units such as the Kestrel East, Pegasus East and Allwood East LQ veins. The vein and mineralization termination is due to mineralizing fluids moving out of an oblique/oblique setting as the structure cuts across beds into a parallel/parallel setting as fluids readily escape into the east-dipping bedding parallel laminations.

Swar

The Swan Mineralized Zone (Figure 7-12) is situated within the Lower Phoenix System below the 4300mRL and is genetically linked to the network of hydraulically fractured quartz veins in the Lower Phoenix. The west-dipping Swan Fault exists as an oblique structure cross-cutting the eastern limb of the anticline (Figure 7-4 and Figure 7-5) and is bounded by the Audax Fault down-dip and the Kestrel Syncline at its upper margin. Unlike the significant west-dipping faults such as the Fosterville Fault that follow stratigraphic units the Swan Fault cross cuts stratigraphic units, striking approximately 150° (mine grid). This geometry sees the structure splay off the Benu and migrate from the Lower Phoenix Anticline in the north towards the Kestrel Syncline in the south. More significantly, the Swan Fault exhibits a rotational displacement increasing to the south, which suggests the Swan represents a short-lived late-stage accommodation structure within The Lower Phoenix System.

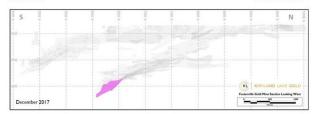


FIGURE 7-12 LONGTITUDINAL PROJECTION OF THE SWAN MINERALIZED ZONE (PINK)

Geologically, the Swan Fault is characterized by a massive 1-3m thick brecciated quartz-dominant vein with clearly defined laminated margins. It exhibits unique spotted stibnite and country rock laminations within the quartz, especially where it is highly brecciated. High gold grades are associated with styloliterich quartz veins existing as trends of visible gold. On its periphery there is a lower-grade selvage of sulfide dominated gold mineralization, which can be up to 2m in width. The Swan offsets numerous bedded geological packages such as the Pelican East LQ and there appears to be a grade contrast on the Swan Fault as the units pass from the hangingwall to the footwall. This translates to the upper RL elevations of the Swan Fault being of a lower grade gold tenor than the currently defined lower elevations.

The Swan represents the highest grade visible gold hosted structure discovered to date within the Fosterville goldfield and continues to exhibit consistent, very high-grades.

East Dippers

The East Dippers System has developed at depth as the Fosterville Anticline has diverged away from the Phoenix Syncline System creating new networks for fluids to migrate up the Fosterville System. Systems utilize similar mechanics to that established within the west-dipping fault network where rheological contrasts between bedding units (primarily slip associated with graphitic laminated quartz veins around carbonaceous shales) provide an accommodation zone for stress and mineralization (Figure 7-13).

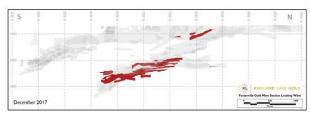


FIGURE 7-13 LONGITUDINAL PROJECTION OF THE EAST DIPPERS MINERALIZED ZONE (RED)

The difference between the west and east-dipping packages are in the way that sedimentary packages accommodate forces acting on the zone. The East Dipping Zones accommodate stress by attenuation whereas the more ductile shale package deforms plastically and the more sand rich units show brittle deformation in the form of ladder veins. These veins sets that radiate out from the shale boundaries perpendicular to the bedding orientation provide a mechanism for sulfides to leach into the host rocks.

The environments where East Dipper System occurs have shale packages that correlate to a west-dipping counterpart such as Kestrel, Allwood, Benu and Pegasus Zones. The East Dipping Fault naming convention utilizes the identified shale characteristics matched to the west-dipping counterpart and given the E suffix to denote the east-dipping status of the structure.

Eagle

The Eagle System occurs below 4400mRL where forces look to accommodate strain between the Fosterville Anticline and Phoenix Syncline (Figure 7-4) via east-dipping structures that are discordant to bedding. Although similar to the East Dippers System spatially, Eagle differs as east-dipping faults link from one east-dipping shale package to another, where the bedding angle is high (>70°). This movement from across bedding creates a fault angle oblique to bedding that allows for mineralization to permeate into the host rocks (Figure 7-14).

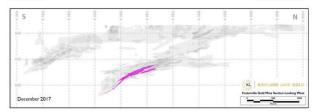


FIGURE 7-14 LONGITUDINAL PROJECTION OF THE EAGLE MINERALIZED ZONE (MAGENTA)

Movement on the system via direct underground measurement and sedimentary marker displacement appears to have a sinistral strike slip orientation. Predominant slip orientations on west-dipping structures indicate a steep dip slip movement with a plunge to the south.

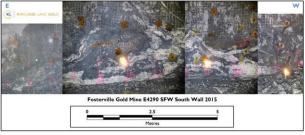


FIGURE 7-15 WALL MAPPING ON THE P4310 LEVEL CONVERGENCE OF THE D20 EAGLE AND D14 BENU FW

Mineralization gold grades on the Eagle System increase up-dip where east-dipping faulting is proximal to the Fosterville Anticline and west-dipping faulting. The convergence of east and west-dipping structures in proximity to the Fosterville Anticline appears to provide a barrier for fluid migration resulting in flow textures of quartz and stibnite (Figure 7-15). Isolated areas of visible gold can be seen within the zone as fine specks that form in alignment with stylolitic fractures that can extend for up to ~10cm. Typically the arsenopyrite / pyrite mineralization within the zone is weaker with grades in the 1-2 g/t Au range with sulfide disseminations localized around the zone.

Moving down-dip away from the hinge, the quartz stibnite vein pinches out with disseminated arsenopyrite and pyrite wall rock alteration increasing in intensity and grade. Dissemination is still localized to the main Eagle Fault (with 1-2m of the structure), however, interaction with bedded faults

creates zones where fracture interplay between the two systems increases the fluid flux and therefore increases the width of the mineralization zone.

Down-plunge and dip continuation of the Eagle System is currently being evaluated. However, drill intercepts that show potential extensions to the system, have already been intersected.

Splays

Throughout the Central Area, there are a number of significant mineralized structures and settings that fail to have size, confidence or spatial continuity to develop into extensive mineralized zones. These systems are captured within the Splays HG and Splays LG domain and present either proximal mining opportunity or future potential growth prospects. Most systems within the Splay domains are defined by shallow west-dipping faulting (~30-40°), of anastomosing nature and highly variable grade distribution (Figure 7-16).



FIGURE 7-16 LONGITUDINAL PROJECTION OF THE SPLAYS MINERALIZED ZONE (DARK GREY)

Splay faults are interpreted to be short-lived structures that split as the structure moves from a Lower Phoenix Zone setting across to the Phoenix Zone setting. Larger splay faults are prevalent between the anticline offset of the Fosterville Fault, where the large thrust movement has nucleated a number of smaller structures. The largest of the splays in the zone is the Kite Fault. The Kite Area of mineralization is interpreted to be due to an oblique/oblique setting created between bedding relationships with the Kite Fault. The Kite Fault is an example of a mid-splay system that nucleates from the Fosterville Fault linking across to the Phoenix Footwall Syncline setting. The main system extends from 7660mN through to 7065mN with an overall dip of "30" to the west and a plunge of 25" to the south.

Allwood Domain

The Allwood Area is interpreted to be created by 30m of fault movement along the Allwood Shale package that offsets an anticline creating a parallel/oblique setting for mineralization. The system is analogous to the Phoenix Lower Zone setting and extends 562m to the south from the 7675mN section. Orientation of

the Allwood Zone is similar to other geometries constrained by a west-dipping hangingwall (Fosterville HG, Fosterville LG, and Benu) with a 65° dip to the west and a 10° plunge to the south. (Figure 7-17).

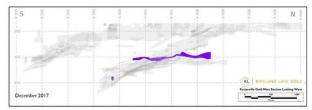


FIGURE 7-17 LONGITUDINAL PROJECTION OF THE ALLWOOD MINERALIZED ZONE (PURPLE)

Voctrol

During 2016 the Kestrel Area was re-interpreted to incorporate the observations from the geological mapping of the first ore sill developed into the Phoenix Syncline Hinge Zone (Figure 7-18). The initial section of development was consistent with previous interpretations which described a broad zone of low to moderate grade (1-4 g/t Au) mineralization through the Hinge Zone, with fluid pathways appearing to utilize weaknesses in cleavage and flexural slip planes between contrasting beds. The higher grade mineralization was associated with an east-dipping structure which nucleated within the Hinge Zone, with increasing amounts of offset noted across the structure as it developed into an oblique-parallel setting.

Based on the observed interaction the mineralized domains in the Kestrel System were reinterpreted to group the higher-grade intercepts together to link up to east-dipping bedding-parallel LQ veins (faults). The intersection of the structures with the syncline hinge is interpreted to be responsible for the dilational zones, which allows for the localized enrichment above the background low-grade within the Hinge Zone. Drill programs testing this interpretation during 2017 have mostly confirmed this high-grade association.

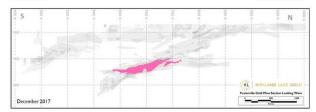


FIGURE 7-18 LONGITUDINAL PROJECTION OF THE KESTREL MINERALIZED ZONE (PINK)

Falcon

The Falcon Mineralized Zone (Figure 7-19) is situated on the Fosterville Fault where it displaces the Fosterville Anticline along a distinguishable black shale horizon. The thrust movement on the fault creates an offset of ~500m with several splay faults that nucleate from the main Fosterville Thrust. These splays cross east-dipping bedding creating smaller orebodies such as the Ellesmere and Vulture Mineralized Zones.

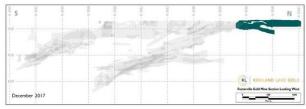


FIGURE 7-19 LONGITUDINAL PROJECTION OF THE FALCON MINERALIZED ZONE (SEA GREEN)

The Falcon Mineralized Zone consists of Fosterville HG and Fosterville LG domains. Fosterville HG is reasoned to be a population of discernibly higher grade assays that exist due to a shoot geometry that is geologically controlled within the larger Fosterville LG Domain. A plunge reversal occurs between 8800mN and 8900mN and all of the mineralization between 8900mN and 11000mN plunges gently to the north. The vast majority of the mineralization in the Falcon Domain occurs on the Fosterville Fault and dips about 70° to the west. Most of this domain is relatively shallow (less than 150m below surface) and has been drilled by either RG drilling grade control drilling on 6.25m spaced sections or by RC and diamond exploration drilling on 20m spaced sections.

Ellesmere

The Ellesmere Mineralized Zone is characterized by Fosterville Zone type mineralization and resides primarily between the Fosterville HG and Fosterville LG domains, south of the culmination. Overall the plunge of the mineralization within the Ellesmere orebody appears to be 20° to 40° to the south with internal narrow (~20m) high-grade shoots plunging 70°S and occurring at roughly 100m intervals. The high-grade shoots are believed to be the results of smaller footwall splay fault interaction with the Fosterville Fault. Mining of the Ellesmere orebody was completed in 2010 (Figure 7-20).

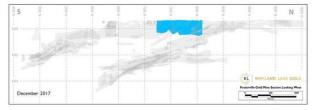


FIGURE 7-20 LONGITUDINAL PROJECTION OF THE ELLESMERE MINERALIZED ZONE (TURQUOISE)

Raven

The Raven Mineralized Zone exists as a zone of high-grade splay mineralization north of the Phoenix Mineralized Zone analogous with Phoenix Zone mineralization. The orebody is situated where fault movement associated with the Phoenix Fault links across to the Phoenix Base Footwall Syncline Hinge moving into an oblique/oblique setting. Mineralization forms on a number of splay structures that typically have a shallower dip (~40°) and strikes more NNW than the typical N-S bearing of the Phoenix Zone (Figure 7-21).

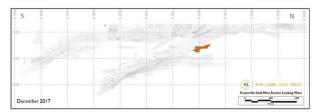


FIGURE 7-21 LONGITUDINAL PROJECTION OF THE RAVEN MINERALIZED ZONE (ORANGE)

Vultur

The Vulture Mineralized Zone occurs between 6262.5mN and 7337.5mN in a zone characterized primarily by Harrier faulting where economic mineralization occurs proximal to the intersection between the interpreted Harrier Base Fault and the Fosterville Fault. The main Vulture Mineralized Zone on the Harrier Base Fault dips "45°W, steepening as the fault diverges from the Fosterville Fault. Mining of parts of the Vulture Zone was completed in early 2012. Knowledge gained from mining the Harrier Zone is being applied to the remainder of the Vulture Zone to optimize further extraction potential (Figure 7-22).

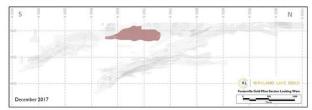


FIGURE 7-22 LONGITUDINAL PROJECTION OF THE VULTURE MINERALIZED ZONE (PINK)

Robin, Griffon & Shamrock Zones

The Robin Mineralized Zone, shown in light blue in Figure 7-23 is interpreted to be a zone where mineralization switches back from the Phoenix Fault across to the Fosterville Fault around the hangingwall section of the Phoenix Syncline Hinge. The fault network is a combination of east and west-dipping structure that has a zonation plunge on the intersection with the Fosterville Fault of $^{\sim}$ 30°. The interaction zone occurs from 8600mN to 8100mN where separation distance between the Fosterville and Phoenix Faults widens to the south reducing the intensity of faulting reducing mineralization intensity.

Technical Report Kirkland Lake Gold

The Griffon Mineralized Zone, shown in green (Figure 7-23), is a zone of mineralization on the Phoenix Keel Zone where faulting from the Fosterville Fault directly links across to the footwall section of the Phoenix Syncline Hinge. The zone exists between 8800mN and 8600mN with mining completed in 2009.

The Shamrock Mineralized Zone, shown in teal (Figure 7-23), is a Zone of mineralization footwall to the Fosterville Fault where the Phoenix Fault is directly adjacent to the system. The zone existed between 8600mN and 8350mN with mining completed in 2009.

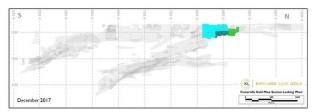


FIGURE 7-23 LONGITUDINAL PROJECTION OF THE ROBIN (LIGHT BLUE), GRIFFON (GREEN), AND SHAMROCK (TEAL)
MINERALIZED ZONES

7.5.2 HARRIER AREA GEOLOGY

Within the Harrier UG Model area, there appears to be two main zones of mineralization, one zone associated with the Harrier Fault System and the other with the Osprey Fault System. Both systems trace their roots back to movement along the Fosterville Fault; however, they appear to differ at their nucleation points with the Osprey System sitting higher in the system with relation to the Harrier System (Figure 7-24).

Both systems generate most of their fault related mineralization within oblique/oblique environments as movement propagates away from the Fosterville Fault. The systems are related by the way of linking structures that strike "5° as opposed to the Osprey and Harrier Systems that strike "350°. The relationship between structures takes on a large *en-echelon* type geometry with mineralization intensity increasing at the intersections between main systems and linking structures.

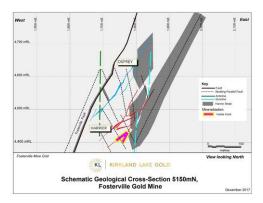


FIGURE 7-24 GEOLOGICAL CROSS-SECTION THROUGH THE HARRIER AREA AT 5150mN

Since 2011 drilling to a 25m x 25m drill spacing has allowed domains to be built on 25m spaced sections. Areas of particular geological difficulty were drilled to 12.5m spacing and domains also constrained using underground face mapping, sampling and sludge hole sampling data. Drill program progress was improved with the addition of the Harrier 4625mRL Diamond Drill Drive, which provided resource definition as far south as 4750mN.

Kirkland Lake Gold Fosterville Gold Mine

Harrier Domains

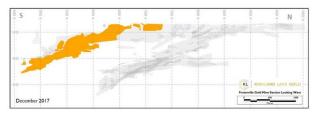
Based on observed variations in geology, variography, geochemistry, statistics and spatial location within the Fosterville Mine Area, mineralization in the Harrier Area has been divided into nine unique domains and one common splay domain shared with the Central Area. The domains and domain codes corresponded to:

- Splay LG (Low-grade) common to Harrier and Central Areas; Harrier; Harrier Base; Harrier EDipper Harrier HW; Harrier Splay; N Dipper

- 20 21 22 23 24 25 29 30 31 32

y N Upper
30 Osprey;
31 Osprey Base;
32 Osprey Link;
33 Wagon Wheel
35 Osprey Splays.

The domains can be generically categorized into two groups, Harrier Figure 7-25, Osprey Figure 7-26, including various Splays. Harrier and Osprey Domain differentiations are driven primarily on grade population differences between structures that reside within close proximity to each other. The host geology of the mineralization within the Harrier UG Area is consistent with details listed within the Central Area.



LONGITUDINAL PROJECTION OF HARRIER MINERALIZED ZONE (ORANGE). FIGURE 7-25

The Harrier System is interpreted to have developed as reverse thrust faulting progressed up the Fosterville Fault reaching the anticline, refracting and developing a complex system of splay faults that link across to the eastern syncline hinge. Fault propagation continues across east-dipping interbedded sandstone and shale beds before movement conformed into the large Harrier Shale package. Movement into the Eastern Syncline (Figure 7-24) and Harrier Shale package develops several minor hinge offsets along early LQ veins that create localized zones of oblique/parallel mineralization.

The Harrier Shale package proximal to the orebody has been is estimated to be ~30m in thickness with several LQ veins throughout the succession. Major LQs were correlated along strike and structurally wireframed to create the Harrier Base and Harrier Upper Faults. The total displacement over the Harrier suite of faults is about 120m.

The Harrier Mineralized Zone extends through to surface having been mined as the Harrier Open Pit with its northernmost extent around 7300mN. The system has an overall plunge of 25° with the main underground shoot of mineralization not beginning until around the 4760mRL. The Harrier Zone consists of five distinct domains including the Harrier, Harrier Base, Harrier Link, Harrier Splay and Splay LG Domains.

Mineralization within the Harrier Zone consists of primary sulfides including arsenopyrite and pyrite with the area having only localized amounts of stibnite. The sulfides are disseminated into the host sandstone and shale packages around strongly faulted and fractured areas. Grade tenor proxies utilized in the Central Zone such as the percentage of arsenopyrite can be misleading due to mica rich sand horizons being mistaken for mineralization, silicification of host rocks giving a false indication of quartz fluid flow and fine sulfide crystal growth that can be overlooked as dust or sedimentary fine grains.

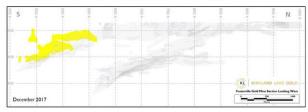


FIGURE 7-26 LONGITUDINAL PROJECTION OF OSPREY MINERALIZED ZONE (YELLOW).

The Osprey System is modeled ~50m hangingwall to the Harrier System and appears to be the last splay fault that bifurcates from the Fosterville Fault before the Fosterville Anticline. The movement seen on the Osprey System appears to maintain its offset to the Harrier System up-dip, however, it does not appear to connect through to the eastern syncline hinge as the Harrier System does. There is growing support to suggest that mineralization in the Osprey System is directly influenced by the western limb of the Harrier Shale package as areas of intersection appear to act as a barrier to the flow of mineralization further up-dip of the Osprey System.

The Osprey System shares similar geometries to that seen in the Harrier System with economic mineralization largely running in parallel between 5420mN and 5100mN. North of 5420mN, the Osprey System mineralization links across to the Harrier System utilizing the linking structures. South of 5100mN, the Osprey System appears to trend more north-south with similar trends to the second order linking structures. Structures that trend more north-south appear to take on a lower grade tenor than those that strike towards "355", although the controls on why this occurs are poorly understood.

The Osprey System consists of four distinct geometries including the Osprey, Osprey Base, Osprey Link and Osprey Splays. The main shoot of Osprey mineralization is encompassed within the Osprey Domain that is modeled south of 5725mN and remains open at depth. The Osprey System has similar geological properties to the Harrier System (Strike "355", Dip "40", and Plunge "20"), however, it gains some complexity to the south of 5450mN where multiple converging geometries are modeled.

7.5.3 DALEY'S HILL

Within the Southern Model Area, the controlling features include the Fosterville Fault and the Footwall Harrier suite of faults, which have variable reverse offsets and a total reverse displacement of about 200m.

Reverse movement on the Fosterville Fault lessens from north (100m+) to south (~10m at Daley's Hill) and becomes less important southwards with respect to mineralization. At Daley's Hill the Fosterville Fault is un-mineralized and passes to the west of the oxide pit.

The east-west folding in the area varies from gently southerly plunging in the north to moderate southerly plunging at Daley's Hill in the south. Fold plunge is important as the mineralized west-dipping fault geometry is controlled by the eastern limbs of syncline fold plunges where the faults become unmineralized "bedded" LQ vein features.

At Daley's Hill, the Daley's Hill Fault has an associated 10m of reverse fault movement and localizes the bulk of gold mineralization. Lesser well mineralized east-west structures occur in the eastern parts of the pit and several other poorly defined hangingwall mineralized fault structures are present in the western portions of the pit.

Daley's Hill is unusual in that late stage, free, primary gold, in association with stibnite-quartz, is noted in several diamond holes. The mineralized structure ("Wagon Wheel") is restricted to an 80m strike extent, and was partially tested during 2017 by the 'Harrier Up-Dip' drill program where a series of holes were drilled from underground. This drilling appears to have confirmed the east-west controls on some higher-grade gold mineralization (e.g. 33.2g/t Au over 5.7m in UDE124), which was not replicated on adjacent E-W orientated drill sections.

The geology of the Southern Model area was reviewed by independent consultant Stephen King in 2004 (King, 2004) and the northern parts again in 2006 (King, 2006). Rod Boucher (geological consultant, Linex Pty Ltd Geological Consultation) has also contributed much to the stratigraphic-structural understanding of the area. A geological interpretation was also reported by Reed (2007).

Domain:

Domaining of the Daley's Hill area was based on geological structure, orientation, material types and variography. The structures and material types include:

- Daley's Hill N-S Faults;
- Daley's Hill E-W Faults; and
- Materials (Oxide, Transitional and Fresh).

Mineralization domains were created by initially using a nominal 0.2 g/t Au to 0.5 g/t Au outer limit for sectional strings in weathered areas and 0.5 g/t Au to 1.0 g/t Au in un-weathered mineralization. These values reflect natural breaks to the mineralization.

The strings were then linked or extruded to form a three dimensional wireframe domain. The strings were generally extruded a maximum of half the drill spacing. This varied from as little as 5m, in well drilled pit locations, to 50m, where mineralization extended over several 100m spaced drill sections.

The Daley's Hill Area (Figure 7-27, Figure 7-28, Figure 7-29 and Figure 7-30) has two separate northerly trending sub-vertical to westerly-dipping mineralized domains: DH Main Fault, and DH West Area.

The domains have variable strike lengths (between 50m and 650m), dips (-50°W to -90°) and exhibit ~20° southerly plunges.

A domain (DH Syncline) has also been generated that encompasses mineralization associated with the Daley's Hill Syncline. The syncline axial plane trends grid NNE with a 45° plunge towards the south and is located in the far northern position of the existing Daley's Hill Pit.

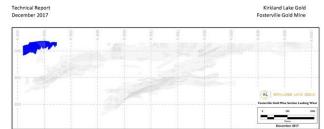
East-west mineralized structures occurring in the eastern parts of the pit are footwall to the main Daley's Hill N-S structure. The Daley's Hill E-W Domain (DH Campaspe) comprises four separate structures, which trend 060° and dip 80°N.

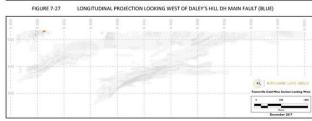
Three 'material' domains were constructed, similar to that described previously for the Central Area Model. The domains are:

- Oxide (sulfide minerals completely oxidized, Fe-carbonates largely oxidized);
- Transition (sulfide minerals may be partially oxidized, includes zones of mixed fresh and oxide);
 and
- · Fresh (sulfide minerals completely un-oxidized).

The Transitional Domain lower boundary is only an approximation because there is insufficient logging of the base of transition to allow a reasonable interpretation of this surface over the entire Southern Model. The base of transition was taken to be 5110mRL after comparison with drill data and results from open pit mining in the area.

Separate material domains were constructed for transitional and fresh materials and coded into the Southern Model for inventory and metallurgical recovery study purposes. However, during block model interpolations, drill assays coded as transitional and fresh material types are treated as if they are the same material type.





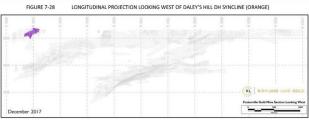


FIGURE 7-29 LONGITUDINAL PROJECTION LOOKING WEST OF DALEY'S HILL DH WEST AREA (PURPLE)



FIGURE 7-30 LONGITUDINAL PROJECTION LOOKING WEST OF DALEY'S HILL DH CAMPASPE (RED)

7.6 ROBBIN'S HILL AREA

The Robbin's Hill Area lies northeast of the Central Area and contains the O'Dwyer's, Robbin's Hill, Farley's, Sharkey's, Woolshed and Read's oxide pits as shown in Figure 7-3 and Figure 7-33. The area can be defined as the zone east of 2,700mE, between 10,500mN and 14,00mN. The fault architecture of the Robbin's Hill Area is much more complex than that observed in the Fosterville Fault Zone.

Rhyolitic dyke associated gold mineralization also occurs in the area, with mineralization mainly within 2m of the dyke contacts. The rhyolitic porphyry dyke bodies have a general north-south trend, are typically sub-vertically orientated and are observed to often intrude anticlinal axial planes.

Higher grade gold zones are controlled by the intersection of fault controlled mineralization with the dykes.

7.6.1 GEOLOGICAL OVERVIEW

The region between Robbin's Hill in the south (12,100mN) and Sharkey's in the north (14,000mN) contains three significant fold closures – the Robbin's Hill Anticline and Syncline and the Trench Syncline, with associated parasitic folds in the eastern limb of the syncline. The folds are all roughly north-trending and asymmetrical, however, the plunge of the folds are variable with complexities arising from the intersection of both steep and shallow bedding-parallel and bedding-discordant faults.

The Robbin's Hill Anticline and Syncline appear to plunge gently north, whilst the Trench Syncline dips gently south. The Robbin's Hill Anticline and Syncline also lose amplitude and wavelength southwards, from amplitude of around 100m in the north to become a small parasitic fold pair in the south of Robbin's Hill Pit. The axial plane of the anticline is intruded by a mineralized felsic porphyry dyke (RH Porphyry), which also pinches out towards the south.

On 12,100mN, the Robbin's Hill Anticline and Syncline form asymmetric folding on east-dipping bedding (Figure 7-31). The mineralized felsic dyke intrudes the core of the anticline, consistent with more northern sections. A number of low-angle oblique-oblique west-dipping faults crosscut the geology, and are associated with localized mineralization. The Trench Syncline has a large wavelength, with a major plane

of slip (Curie Fault) developing in a black shale unit on the eastern limb of the syncline. Moving north towards 12,300mN, faulting on this plane increases in complexity, becoming broader and further displacing the geology (west-over-east).

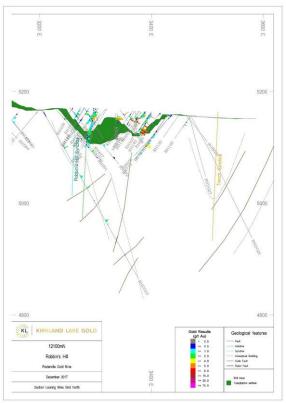


FIGURE 7-31 ROBBIN'S HILL AREA CROSS-SECTION FOR 12100mN, VIEW LOOKING MINE GRID NORTH.

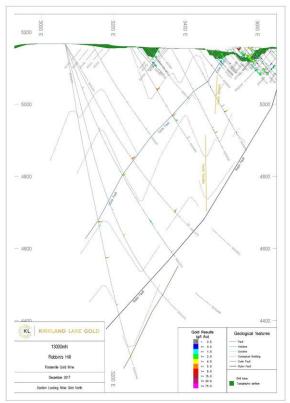


FIGURE 7-32 ROBBIN'S HILL AREA CROSS-SECTION FOR 13000mN, VIEW LOOKING MINE GRID NORTH

On 12,400mN, the amplitude and wavelength of the Robbin's Hill Anticline and Syncline has increased (width "50m), forming tight folds with axial planes, which increasingly dip towards the west with depth. The axial-trace of the anticline is intruded by the same mineralized felsic dyke intercepted further south. The Trench Syncline has decreased in amplitude, with significant displacement on the faulted zone (Curie Fault) in the eastern limb. Mineralization in the Trench Syncline is confined to the faulted zone in the hangingwall of the major younging change fault. Minor parasitic folding has developed on the eastern limb of the Trench Syncline.

Further down-dip Curie Fault becomes an oblique-parallel younging-change fault, truncating the steep eastern limb of the Robbin's Hill Anticline. Lithology exerts a strong control on mineralization associated with Curie Fault (previously named Farley's Fault) in this section, with the development of mineralized stockwork veining in sandstone in the hangingwall of the fault. A second steep west-dipping fault (Rubin Fault – previously Farley's FW Fault) occurs in the footwall of the Curie Fault, however, deformation associated with the fault is minor.

Low-angle oblique/oblique faults with associated localized mineralization also crosscut the Robbin's Hill Anticline and dyke in this section. The dips of the faults become steeper as they approach the surface, with bedding-parallel sections highly breceited, indicating a protracted history of movement.

On 12,600mN, the Robbin's Hill Syncline and Anticline are better defined as a result of their south-plunging geometry. Both folds are asymmetric, with an axial plane that increasingly dips towards the west with depth. There is a much greater degree of faulting and shearing in the eastern limb of the RH Syncline.

The amplitude and wavelength of the parasitic folding in the eastern limb of the Trench Syncline is now more open, with faulting and displacement in the Curie Fault Zone becoming accordingly more distributed. This represents a zone of increased deformation with shearing and quartz-carbonate stockwork veining developed between the faults and focused on the two parasitic fold hinges. Within this zone, deformation has occurred mainly as puggy faulting with little actual displacement on any one fault. Quartz-carbonate stockwork is well developed in the hangingwall and footwall to the puggy faults, where the bulk of the sulfide mineralization is hosted.

Off-set along the NNW-trending Curie Fault appears to be reduced in this section (~100m), allowing the delineation of the Trench Syncline in the footwall of the fault down-dip (~4850RL). The hinge of the Trench Syncline has a major impact on the dip of the Curie Fault, transitioning from steep (oblique-parallel) where it utilizes the black shale unit as a plane of slip, to shallow, becoming bedding-discordant. This accounts for the broad zone of deformation and mineralization in the hangingwall of the fault, characterized by stockwork veining and numerous faults of various orientations.

Highly mineralized east-dipping structures are present in the footwall of the Curie Fault, above the syncline hinge. The faults are brecciated with evidence of significant movement but it is unclear if these faults relate to the steep west-dipping faults or post-date this movement. Highly mineralized east-dipping structures are also present in the Sharkey's Area, NE of the Robbin's Hill Pit.

Displacement on the Rubin Fault has markedly increased, off-setting the hinges of the parasitic folds in the eastern limb of the Trench Syncline. As a result of the interaction with these hinges, the zone of deformation surrounding the fault is much broader.

South of Robbin's Hill Pit to O'Dwyer's South Pit (between 10,500mN and 12,100mN), the same west-dipping fault structure (Curie Fault) is mineralized and has a curvilinear grid north trend. East of, and paralleling this fault, is an anticline structure, which has a mineralized porphyry dyke (ODW Porphyry) occupying the sub-vertical axial plane. The ODW Porphyry occurs in the eastern portion of the ODW South pit and in the middle of the ODW Central Pit. Several west-dipping mineralized faults occur on both sides of the ODW Porphyry and outcrop in ODW Central and Eastern Pits.

Northeast trending unconsolidated Murray Basin clays, sands and gravels mask the Ordovician basement and the northwest and southeast parts of the Robbin's Hill Model area.



FIGURE 7-33 PLAN VIEW OF ROBBIN'S HILL AREA

7.6.2 ROBBIN'S HILL DOMAINS

Basic high-level statistics and variographic analysis was completed on the interpreted mineralization wireframes in the Robbin's Hill Area. Oxide and sulfide mineralization was grouped into single domains for the Porphyry and the Faults Domains because there is very little difference in the statistics of the oxide and sulfide mineralization for the domains. Subtle changes in the strike of the domains are captured in separate domains. General descriptions are listed in Table 7-3.

TABLE 7-3 ROBBIN'S HILL DOMAINS

Domain	Description	
D40	Steep west-dipping, NNW trend	
D41	Steep west-dipping, north trend	
D42	Sub-vertical, north trend (RH Dyke)	
D43	West-dipping, NNE trend	
D44	West-dipping, NWN - N trend (i.e.: Farley's Fault)	
D45	Steep east-dipping, north trend	
D46	West-dipping, NNE trend	
D47	Steep west-dipping, NW trend	
D48	Steep to shallow east-dipping	
D49	East-dipping, NE trend	
D50	Steep west-dipping, north trend	
D51	Shallow east-dipping, north trend	
D52	West-dipping, north trend	
D53	Steep east-dipping, NNW trend	
D54	Sub-vertical, north trend	
D55	Sub-vertical, NNE trend	

Oxidation Domains

Four 'material' domains were constructed, similar to that described for the Southern Models in order to assess density differences on gold grades in these zones.

The four domains are:

- Alluvium (near surface transported material, generally barren of gold, largely clay, free digging);
- Oxide (sulfide minerals completely oxidized, Fe-carbonates largely oxidized);
- Transition (sulfide minerals may be partially oxidized, includes zones of mixed fresh and oxide); and
- Fresh (sulfide minerals completely un-oxidized).

Technical Report December 2017 Kirkland Lake Gold Fosterville Gold Mine

7.7 CONTROLS ON OXIDE MINERALIZATION

Minor re-mobilization of gold into the immediately surrounding country rocks has resulted in an approximate 50% increase in the width of mineralization and consequent reduction in gold grade. There is no evidence of a wide spread high-grade supergene zone immediately below the water table.

Other elements have been more significantly affected by weathering processes. Dissolution of sulfur by oxidizing groundwater above the water table has effectively removed all sulfur from the oxide zone. Arsenic has been strongly remobilized over a zone five to ten times the width of mineralization. The greater width of anomalous arsenic values in the oxide zones makes arsenic soil geochemistry a very useful tool for finding exposed gold mineralization.

Geochemical studies (Arne and House, 2009) found evidence of Fe or Mn oxide minerals scavenging Au, As or Sb in the weathered zone and that raw concentrations of Au, As and Sb may be used for defining secondary dispersion (with allowance made for the rock type for Sb).

8 DEPOSIT TYPES

Sulfide gold mineralization at Fosterville is relatively homogenous with only one deposit type present. There are minor variations in the host rock type and structural setting. Fosterville-type deposits form a sub-group of orogenic gold deposits that are typified by gold occurring in fine crystals of arsenopyrite and/or pyrite disseminated in country rocks as a selvage to faults or veins. Fosterville-type deposits and classic vein-hosted deposits are effectively end members with many orogenic gold deposits displaying features of both.

Sulfide gold mineralization at Fosterville is controlled by late brittle faulting. These late brittle faults are stacked, generally steeply west-dipping with reverse movement varying from a few meters to over 150m. In the upper parts the fault system a series of moderately west-dipping reverse splay faults occurs in the footwall of the Fosterville Fault. Sulfide gold mineralization occurs as disseminated arsenopyrite and pyrite forming as a selvage to veins in quartz – carbonate veinlet stockwork. The mineralization is structurally controlled with high-grade zones localized by the geometric relationship between bedding and faulting. Mineralized shoots are typically 4-15m thick, 50m-150m up/down-dip and 300-1,500m+ down-plunge. These sulfide bodies are targets for exploration activities, especially where there is potential for grades in excess of 3 g/t Au (i.e. above underground resource cut-off gold grades).

Within the oxide zone, there has typically been minor re-mobilization of gold into the immediately surrounding country rocks which has resulted in an approximately 50% increase in the width of mineralization and consequent reduction in gold grade. There is no evidence of a wide spread high-grade supergene zone immediately below the water table. There is no current focus on exploring for additional oxide resources.

Until about 2015 the occurrence of primary visible gold had no clear control, with limited observations made mostly in oxide pits at the time they were mined. However, FGM now has many observations of visible gold mineralization in drill core and underground face/wall mapping. Based on those observations, FGM is of the view that visible gold mineralization is spatially associated with stibnite and quartz-carbonate veining. This stibnite-quartz-carbonate mineralization occurs as a late stage overprint/replacement/reactivation of existing structures.

The broader concept that was used to explain observations of sulfide gold mineralization at FGM was primarily as an orogenic gold system. However, with the increase in visible gold and stibnite mineralization, there is a view that FGM may be part of a much larger scale intrusion-related gold system (e.g. Bierlein & McKnight 2005) that TGM may be post of a much larger scale intrusion-related gold system (e.g. Bierlein & McKnight 2005) that may help to explain the overprinting relationship between the sulfide hosted gold and visible gold.

9 EXPLORATION

9.1 PRE-1992 EXPLORATION

Exploration prior to 1983 was undertaken by numerous companies including, Noranda Australia, Pennzoil, Newmont, Lone Star Exploration and Apollo International which obtained significant results, but concluded that target potential did not meet with their high tonnage exploration criteria.

1984 – 1987 – Bendigo Gold Associates Pty Ltd - EL1392

Relevant and available literature of the area was collected and researched and an extensive pilot study was undertaken in the Fosterville area, investigating the relationships between gold, arsenic, mercury in soils and mineralization believed to be typical for the area. Positive correlations were found between mineralization and all three elements in the soil C Horizon. Arsenic, due to better contrast characteristics was selected for future exploration (Van Riel, 1985). A general survey of the EL was also conducted, locating and inspecting historic workings.

A 730m long traverse of auger hole drilling soil program at 10m intervals was completed east of Mt Sugarloaf and west of the Fosterville Fault Zone with C Horizons assayed for As. A 230ppm anomaly was returned which indicated potential mineralized lines parallel to the Fosterville Fault Zone. A reconnaissance stream sediment survey was also initiated with main streams on the EL bulk sampled. All anomalous results from the stream sediment survey were explained by nearby old workings (Van Riel, 1985).

The old mining areas of Yankee Creek, The Sugarloaf Range and the New Windsor Rush area were mapped and investigated in detail. Both the Sugarloaf and New Windsor Rush workings were chip and channel sampled. In particular, the New Windsor Rush area showed encouraging gold values over a strike length of 250m.

A semi regional geochemical sampling program was conducted over the Sugarloaf Range area. Four anomalous zones were identified from nine sample lines at 500m spacing and 25m sample intervals, the most significant aligning with a line of historic workings. Two auger lines over the 250m anomaly at New Windsor Rush did not reflect the anomaly and no further follow-up work was conducted. A total of 99 bedrock samples were taken at the Axedale Mine workings area on an 800 x 200m grid but gold values tended to be low and erratically dispersed (Swensson, 1986).

During 1985 a pilot ground magnetic survey was conducted over selected areas of the Fosterville Goldfield. A Geometrix G-816 magnetometer was used with readings taken at 10m intervals along lines. In some instances, magnetic anomalies could be related to underlying reefs (Van Riel, 1985a).

1989 - 1990 - BHP Goldmines Ltd - EL1881

In early December 1989 BHP Goldmines entered into a joint venture with Homestake Limited to explore for possible extensions to the Fosterville and O'Dwyer's Faults north of the Fosterville goldfield into the north eastern parts of EL1881.

Soil sampling was undertaken from 22 lines using a broad star pattern defined by 400 x 200m centers with five sub samples, each 1kg collected near each center. One is taken from the center sample site and four others

are taken 50m grid east, west, north and south of the center generating a representative composite sample (Benn, 1989). From this sampling, a NNW trending Au anomaly between 500 and 800m in with and strike extent of 50m.

By September 1989, a stream sediment sampling program for gold and base metals was completed. A total of 190 samples from 89 sites were taken. From each site, two samples were collected: a nominal 4kg to 5kg sample of <4mm active gravel/gravel trap sediment which was analyzed for gold using bulk cyanide leach method and an active silt sample sieved to -80 microns analyzed for Cu, Pb, Zn and As. The Au bulk cyanide leach results identified a number of moderate to strongly anomalous drainages (Cameron, 1988).

In 1990 exploration activities within the project area comprised RAB drilling and rock chip sampling to evaluate the gold potential of the northern projection of the Fosterville and O'Dwyer's Fault systems. Low gold and arsenic geochemistry across the inferred position of both structures suggested that the faults were not significantly mineralized along this section of the fault system (Rabone et al, 1990).

The tenement was relinquished in September 1990 after the potential of the area was downgraded.

Other

The Russell's Reef area, south of the current Fosterville Mining Licence, has been subjected to several lines of soil sampling, and several programs of shallow RC drilling (50 holes averaging 31m depth) undertaken over a protracted period from 1976 to 1989.

Modern exploration in the Myrtle Creek area has occurred since 1974 by companies such as Noranda Australia (rock chip sampling, geological mapping, soil geochemistry (Au, Cu)), Ghana Gold (structural interpretation of aerial photography) and BHP (stream sediments and follow up soil surveys).

In the early 1990's Brunswick completed a 100m by 20m soil geochemistry grid across the Fosterville project area and as far west as the Sugarloaf Range. The soil geochemistry was very effective at defining gold mineralization except where alluvial cover exceeded about two meters. Two preliminary IP/resistivity lines were also completed with mixed results.

9.2 1992-2001 EXPLORATION

A 25m by 25m gradient-array IP/resistivity survey was conducted in the Robbin's Hill area by Perseverance in 1997. This survey did not conclusively define gold mineralization; however, it was successful in mapping carbonaceous shales and alluvial channels.

In the 12-month period leading up to 25 February 1998 PSV conducted hand auger bedrock geochemistry samples from Accott's Prospect, Glen Lyell and Sedgwick South where mildly anomalous zones of mineralization were defined. Hand auger soil sampling was also run along road reserves in the Goornong North Area and in combination with RAB drilling resulted in the identification of two new prospects, May Reef and Rasmussen's. An Au-As soil geochemical survey was undertaken in the Myrtle Creek area where encouraging results were obtained where gold mineralization appears to be associated with a small granite intrusion. Reconnaissance work and rock chip sampling was also undertaken during this period on the Fosterville East and Wild Duck Prospects (Van Riel, 1998).

Throughout 1998 and 1999 PSV continued to actively undertake extensive hand auger soil sampling and rock chip sampling at multiple prospects including West of Axedale-Goornong Road, Cochrane's Prospect, Rasmussen's, Sharkey's North, Glen tyell South, Sugarloaf Fast and Sugarloaf North, Most of these surveys returned indifferent results. A further soil geochemistry and rock chip sampling at Myrtle Creek delineated sandstone hosted and granite related mineralization. An orientation soil geochemical study was undertaken to establish the parameters for exploring Goornong South type deposits buried below deep soil and gravel cover (Van Riel, 1999).

A geo-botanical survey was conducted within the Fosterville Mining Lease by Australian Geochemical Survey Ltd. It was found that an association of Au with As, 5b and also with Zn exists in this environment (i.e. tree bark was sampled). The survey results appear to point at three virtually untested anomalies: one west of Hunt's and two at Daley's Hill North (Van Riel, 1999).

After 1999 PSV regional exploration activities were limited with the company focusing on resource drilling at two of its advanced projects, Goornong South and Mills. Resources were determined for both, and Environmental Effects Statement (EES)-feasibility studies instigated.

9.3 2001-2017 EXPLORATION

After the EES studies for both the Goornong South and Hallanan's projects were completed, the company suspended its plans and proposals to mine the surface expressions of the deposits to focus on the sulfide project at Fosterville.

Two IP/resistivity surveys were completed by Perseverance in 2001 (Search Exploration Services) and 2005 (MIMDAS Geophysics). The 2001 survey consisted of four lines of 50m node spacing over the Central Area. This survey was designed to define gold mineralization at depths of between 50m to 250m. The data was inverted to make a model in real space. Anomalies were defined along the Fosterville Fault Zone, but the 50m node spacing meant that the survey resolution was unable to distinguish the carbonaceous shale in the hangingwall of the Fosterville Fault from mineralization in the footwall of the Fosterville Fault. In 2005 another four IP/resistivity lines were completed across the northern end of the Fosterville Goldfield, covering the Sugarloaf geochemical anomaly, the Fosterville Fault Zone and the Robbin's Hill Area. This survey defined weak geophysical anomalies over the Sugarloaf geochemical anomaly and the strike projection of the Fosterville Fault Zone north of MINS404.

During the period June 2005 to June 2006, 1:10,000 scale color aerial photography was flown over the area surrounding the Fosterville Mining Licence by PSV. In addition, a Landsat image of the entire Exploration Licence was obtained to assist in regional interpretation (Norris, 2006).

During the period June 2006 to June 2007 PSV conducted a detailed mapping, soil-and rock chip- sampling program at the Myrtle Creek prospect. Petrography of twenty samples concluded that (altered and mineralized) granite is much more extensive than originally mapped.

It is concluded that the mineralization at Myrtle Creek is related to igneous (granitic) activity. This class of deposits is most unusual for Victoria, and never mined in the modern era, although examples are known

elsewhere in the Lachlan Fold belt. A literature study was carried out which assisted in developing a suitable exploration model. A first-ever drilling program was designed for Myrtle Creek (Van Riel, 2007).

Northgate explored the Myrtle Creek area between 2008 and 2009, undertaking additional surface sampling in the northern area of historical workings, but the results were disappointing with the overall tenor of gold-in-soil much lower than observed elsewhere on the prospect.

UTS Geophysics, based in Perth WA, was commissioned in the latter half of 2008 to fly a detailed airborne magnetic, radiometric and digital terrain survey over Northgate's Fosterville Group of tenements and EL3484 Greenstones. A total of 23,172 line km were flown between October 2nd and November 26th, 2008 of which approximately 22,000 line km were completed over the Fosterville Group. A table of all geophysical data grids produced during the interpretive work is presented in Table 9-1. Magnetics Reduced to Pole and Total Count Radiometric results are illustrated in Figure 9-2 and Figure 9-3 respectively.

TABLE 9-I 2008 UTS GEOPHYSICAL SURVEYS OVER THE FOSTERVILLE GOLD MINE AND SURROUNDING AREAS

Dataset	Grid name		
Magnetics	Total Magnetic Intensity		
	Reduced to Pole		
	First Vertical Derivative		
	RTP First Vertical Derivative		
Radiometrics	Total Count		
	Potassium Percentage		
	Thorium Percentage		
	Uranium Percentage		
	Potassium vs Thorium		
	Ternary Image		
Digital Terrain Data	Digital Terrain Map		
	Digital Terrain Contours		
Magnetic ZS Filters	RTP Block		
	RTP Edge Zone		
	RTP Tilt		
	RTP Plateau		

Over the period from 2009 to 2016, the Fosterville Gold Mine changed ownership multiple times with each company having a different view on the development of the project. Investment in exploration was directed towards developing near mine resource targets around the Lower Phoenix, Lower Phoenix North, Harrier and Robbin's Hill projects. The discovery of visible gold within the Lower Phoenix coincident with the merger between Newmarket Gold and Kirkland Lake Gold late 2016 saw a renewed interest in regional exploration within EL3539.

This interest saw the creation of a regional exploration department dedicated to the task of exploring for large ore deposits external to the mining lease with preference towards future underground opportunities. A review of current datasets suggested there was an opportunity to acquire geophysical datasets that could increase the sectional geological understanding such as seismic and airborne electromagnetic surveys to support the existing IP data.

Early 2017, Kirkland Lake engaged the services of HiSeis to conduct de-risking study to establish if the geospatial and petrophysical properties inherent within the turbidite sequence are conducive to be imaged by seismic surveys. The results of the study were positive enough to support a planned program of three lines of 2D seismic surveys across the northern, middle and southern sections of the Mining Licence with each line length designed at 8km.

Data acquisition commenced in August 2017 with some logistical issues reducing the acquired line length of the northern line (Line 3) by 2.3km and unable to collect any data on the southern line (Line 1) (see Figure 9-1). Basic seismic parameters for lines 2 and 3 included utilizing a vibe truck (60,000lb INOVA AHV) as the energy source along a geophone array with stations set at 5m spacing. Energy input was for 14 seconds sweeping through a frequency range of between 8 - 120Hz.

The teams from HiSeis and Fosterville Gold Mine conducted a review of the processed data and were able define some of the broader geological features such as alteration networks, general fold architecture and regional faults such as the Fosterville and Redesdale Faults.

Fosterville Gold Mine engaged the services of SkyTEM during 2017 to fly an Airborne Electromagnetic (AEM) survey across EL3539. The survey design was developed to fly 250m line sections east – west down the length of the lease. The total survey distance aimed to cover 1,980 line kilometers however due to the inability to fly the survey over cultural infrastructure only 1,325 line kilometers were achieved (see Figure 9-1).

The data was processed by SkyTEM and delivered to Mira Geoscience for incorporation in a broader regional target generation project. This project would combine Fosterville's geophysical datasets including gravity, magnetics, AEM and IP with physical geological data including surface mapping and drill hole measurements to develop a picture of the regional geology.

To assist with the regional geology interpretation, geophysical consultants were engaged to reprocess some of the historic geophysical data including magnetics, gravity and IP. The focus of the project was to utilize new technology, faster processing, and running new algorithms to help filter and invert the data. The following datasets were updated:

Magnetics: Filter out the cultural features and minimize the signal of the tertiary basalt flow to attempt
to image the finer magnetic signature of the turbidite sequence

Gravity: Filter out longer wavelengths to better image some of the shorter local wavelengths. Local
increases in gravity signature could be due to increase of density either by alteration or by physical
changes created by folding of ductile stratigraphy

 IP: Several generations of IP have been conducted through the area. Raw data was reviewed for QAQC and re-inverted to bring consistency between the different generational IP datasets.

To complement the collection and review of the geophysical datasets, Fosterville Gold Mine committed to a regional soil sample campaign throughout EL3539. Historic collection of the soil assay data demonstrates a high level of correlation between the presence of gold and arsenic anomalism. Arsenic, potentially weathered from arsenopyrite, is much more prevalent in the regolith than gold and provides a strong proxy for determining significant areas of interest.

The updated soils project targets roadside verges, crown land and strategic parcels of privately owned land in a comprehensive 10,000 sample campaign. The project was designed to target 400m line section spacing with samples collected on traverses east-west at 100m intervals. The program targets geochemical trends running north—south however due to sediment cover in the north, the program was split between aqua regia assaying to the south and mobile metal ion (MMI) assaying in the north.

MMI analysis is used to analyze any metal ions that bind to clays and soils in the near surface. The ions migrate by capillary transportation through the regolith by the rising and falling of meteoric ground water. Research into the technology suggests that arsenic is an element that would be mobile in such terrain conditions. The utilization of the technology was also supported by the Victorian Governments Target 2 Initiative supporting new investigative methods to find mineralization under cover.

The opportunity to review the geophysical and geochemical datasets to determine opportunities also allowed for the staged assessment of potential drill targets within E1359. Between Kirkland Lake Geologists and consultants, some criteria were established to critically assess a number of regional prospects that could be developed into a mineral resource. Factors including previous work, location, community, environment and quality of data were all taken into account before the targets were ranked for more drilling.

Near mine targets such as the O'Donnell's, Goornong, Russell's Reef, Backhaus and O'Dwyer's lines of mineralization (Figure 9-1) were all identified as having a level of work conducive to immediate diamond drilling campaigns. Areas such as Accott's, Rasmussen, Sugarloaf, Glen Lyall, Myrtle Creek, Sedgwick and May Reef all required further review in conjunction with the new acquired geophysical, geological and geochemical data to be elevated towards a targeted drill zone.

It was also identified that the collection of the soils and AEM data may lead to the discovery of previously unidentified areas of mineralization, particularly to the north in areas covered by Murray Basin sediments. These areas will be investigated using other drill methods such as RC drilling or Aircore.

Ongoing geological interpretation work has made significant inroads into supporting some historic findings as well as providing new insights into the fundamental geological system hosting the Fosterville gold mine. The reprocessed magnetic dataset was able to increase the contrast between the magnetic signature between the sand and silt units by removing the stronger signals created by tertiary basalt flows. Some lithological units

Technical Report December 2017

could be traced throughout the lease and breaks in continuity are generally proximal to regional structures such as the Fosterville and Drummartin Faults.

In April/May 2010, Haines Surveys completed a ground-based grid and traverse gravity survey centered on the Fosterville Mining Licence and covering part of EL3539 and EL4572. A total of 34 survey lines and 723 stations were completed during the survey. Grid station spacing was nominally 200m in the central corridor of interest defined by the GSV Redesdale Fault model, increasing to 400m towards the edge of the grid. A number of roadside traverse lines were then completed in the southern portion of the Fosterville licence group, designed to infill existing state data and potentially track the course of the Redesdale Fault towards the Harcourt Batholith.

Early interpretation of a strong gravimetric contrast from high to low responses to the east of the Fosterville gold mine has been a compelling piece of evidence for the existence of the GSV's Redesdale Fault. The existence of the Redesdale Fault was first proposed in late 2009 by the Geological Survey of Victoria and is supported by the 2006 State seismic transect (which passes north of EL3539), geological mapping near Redesdale and interpretation of State and Northgate gravity data. The interpretation importantly defined a number of gravity highs within the Redesdale Fault corridor, corresponding with known areas of gold mineralization including the Fosterville and O'Dwyer's Fault Systems.

Further geophysical processing has focused on verifying the correlation of anomalously high gravity responses associated with the known position of mineral resources with the exploration lease. Early theories for the relationship speculated that the density increases in the zones could be due to zones of increased fluid flow introducing denser minerals into the area. Revised data has not conclusively either supported or dismissed the theory however it has also been postulated that the highs could be due to the folding of shale sequences creating the increase in density.

Anomalous increases in density, by either mechanism, has been viewed as important criteria when evaluating the prospectivity of regional drill sites in conjunction with previous soils, mapping, mining and drilling datasets. The positive correlation between these datasets and known areas of gold mineralization supported the drilling of the O'Donnell's and Goornong lines of mineralization in 2017. Diamond drilling results in both areas returned discreet structural zones hosting anomalous gold mineralization that will require further interpretation to understand how these areas fit into the broader regional geological framework.

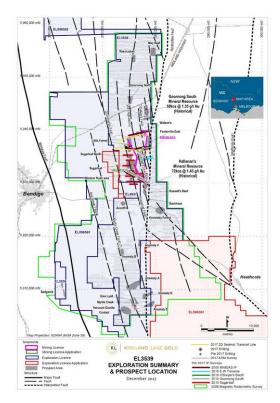


FIGURE 9-1 PLAN OF IP SURVEY AREAS AND PROSPECTS SURROUNDING FOSTERVILLE GOLD MINE

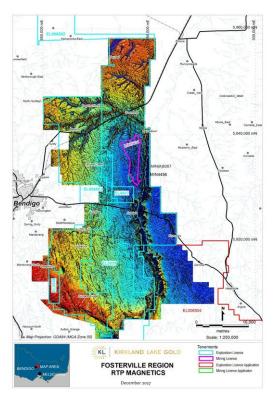


FIGURE 9-2 PLAN OF RTP MAGNETICS SURROUNDING FOSTERVILLE GOLD MINE

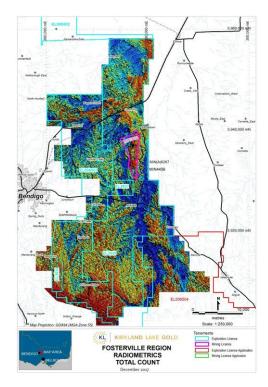


FIGURE 9-3 PLAN OF TOTAL COUNT RADIOMETRICS SURROUNDING THE FOSTERVILLE GOLD MINE

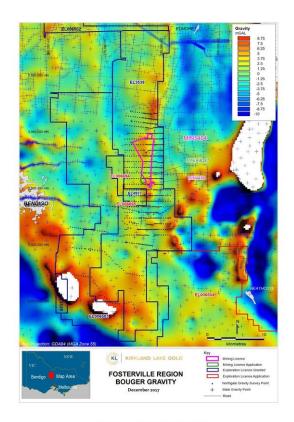


FIGURE 9-4 REGIONAL BOUGER GRAVITY

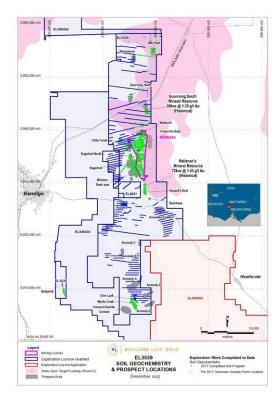


FIGURE 9-5 EL3539 SOIL GEOCHEMISTRY SAMPLE LOCATION DATA INCLUDING 2017 CAMPAIGN DATA

10 DRILLING

10.1 PRE-1992 DRILLING

Modern exploration commenced at Fosterville during the 1970's. Apollo International Minerals NL drilled three HQ diamond holes in what is now the Hunts area. Noranda Inc. drilled three HQ diamond holes in the Daley's Hill area. None of these holes have been included in the drilling database due to uncertainty in their collar locations.

From 1987 to 1991 Bendigo Gold Associates and later Brunswick drilled 488 RC holes and six HQ diamond holes targeting oxide mineralization on the Fosterville Fault and the Robbin's Hill area. This program resulted in the development of a heap leach operation, which commenced in 1991.

10.2 1992-2001 DRILLING

On acquiring the Fosterville Mining Licence in 1992, Perseverance (through a drilling contractor) started RC drilling for further oxide resources and reserves using a combination of cross over and face sampling hammers. These holes used the CN, CEL, CEN, DH and HAR prefixes.

In late 1994, while continuing to explore for oxide mineralization, Perseverance began to drill for sulfide mineralization on the Fosterville Fault potentially amenable to open cut mining. The 1997 Feasibility Study drilling was almost entirely RC with minor diamond drilling for metallurgical and geotechnical purposes and extended from 6000mN to 10700mN. Most of the drilling was completed by 1997 with minor infill drilling continuing to 1999. Holes from this program have the SP (sulfide project), CN, CEL (D), CEN (D), GT or HAR (D) prefixes, the 'D' denoting holes with a diamond tail (Table 10-2 and Table 10-3).

Section spacing was either 25m or 20m except in two small zones in the Falcon and Ellesmere Areas where 12.5m sections were drilled. This drilling program was generally restricted to within 100m of surface, extending to a vertical depth of 150m below surface in the Central North Area, reflecting the perceived limits of open cut mining. The data from this drilling program formed the basis of the 1997 Sulfide Project Feasibility Study, which was later updated in 2000 (Perseverance, 1997; 2000).

Two deep diamond holes, SPD7 and SPD8 were also drilled. SPD7 was drilled beneath the Central Ellesmere pit and intersected 53.8m at 1.97 g/t Au (drill hole abandoned in mineralization) from 382m, while SPD8 was drilled to 450m below Central North intersecting only 2.0m at 0.58 g/t Au on a splay fault some 60m to the east of the Fosterville Fault.

All the RC drill holes used face sample hammers. After 1996, if the sample was unable to be kept dry the hole was finished with an NQ2 diamond tail.

Open hole down-hole surveys were completed on all drill holes at 30m intervals except for a small number of holes, which collapsed before a survey instrument could be lowered down the hole. The vast majority of holes were drilled from the west towards the east, generally intersecting mineralization at 50° to 80°. Most sections include at least one hole drilled towards the west as a check on the geological interpretation.

The Fosterville Mine Surveyor used a Total Station Instrument to run a complete digital survey of the topography for any areas where drilling and later resource evaluation was planned to take place. Spot heights were measured at suitable intervals where easting, northing and RL are noted. Closer spaced measurements were taken around noticeable highs and lows in the topography. These spot heights were then triangulated using Minsurv software to construct a Digital Terrain Model (DTM). This DTM was used in all resource/reserve estimates at Fosterville. The spot heights were measured to an accuracy of $\pm\,1.0$ cm at spacing of approximately two meters.

10.3 2001-2016 DRILLING

The current drilling program which commenced in July 2001 is focused largely on the Fosterville Fault Zone and is ongoing.

The drilling programs at Fosterville have essentially been continuous from 2001 to present. Most of the surface drilling was conducted by Silver City Drilling Pty Ltd until November 2009 and thereafter by Macquarie Drilling (drilling contractor). Deepcore Pty Ltd provided all underground diamond drilling services as well as completing diamond holes from surface during this period.

The majority of drilling carried out in this period has been diamond drilling with a limited amount of RC being undertaken, as well as a few AC holes. RC has been utilized to some extent for pre-collars (with diamond tails) this was predominantly undertaken for SPD holes up until 2008. The diamond tails commenced at least 20m before the Fosterville Fault so that all mineralization was intersected by the diamond tail. The RC pre-collars were generally 150m to 200m deep and the diamond drilling was double tube wireline drilling. In addition, navi or wedge drilling was undertaken from parent holes where holes depths are great, and since 2008 many of SPD prefixed holes were drilled using diamond drilling exclusively, HQ collars with NQ2 tails.

Collar locations are surveyed using the same technique as prior to 2001 (see Section 10.2 above).

The direction of the RC pre-collars was controlled to some degree by the use of a stabilizer rod, the relative size of the bit compared to the rods and by the weight on the hammer. Drill holes shallower than 70° tended to lift. Drill holes steeper than 75° tended to drop. With experience, deviation in the pre-collar was restricted to less than 1° in 10m. Navigational drilling was occasionally used to keep holes on target where the RC pre-collar deviated significantly. Down-hole surveys were carried out using a single shot Eastman camera (up until 2007) and then using ReflexTM or PathfinderTM cameras (from 2007 onwards) at 25m intervals in the pre-collars (every 50m inside the rods as the hole was drilled and the intervening 25m intervals open hole after the pre-collar was completed) and at 30m intervals in the diamond tails. As a check on the validity of the single shot surveys six holes were surveyed at 6m intervals using an EMS (electronic multi-shot) tool. Between 2010 and 2016 holes greater than 130m have been surveyed at every 6m utilizing the EMS tool on hole completion.

The drill hole traces are currently calculated using the 'semi tangent' de-surveying algorithm on 10m intervals in MineSightTM software. This method is suitable for deeper RC holes, which have more than two down-hole using the suitable for deeper RC holes, which have more than two down-hole or twos. The 'fit-spine' algorithm was previously used because it dealt well with RC holes that have only one or two surveys near the top of the hole and also because this algorithm was used historically at Fosterville.

Technical Report December 2017

The NQ2 diamond core has generally been drilled using either six-meter core barrels for surface drill rigs or three-meter core barrels for underground drill rigs. A core orientation mark is attempted for each three meter run predominantly utilizing an electronic core orientation tool, such as the reflex orientation tool (spear and mechanical devices has also been utilized in the past). An Ace Core Tool is employed to take structural measurements, where the Ace Core Tool cannot be utilized, structural measurements are taken from an inferred reference plane (regional cleavage) or are un-oriented.

Sieved chips from the RC pre-collars were logged in two meter intervals for lithology, weathering, alteration, percentage quartz, color and recovery. The logging information in the past has been recorded into the database via offline logging using hand held IPAQ computers and uploaded to the database. Since 2008 geological information has been entered into laptops running acQuire™ Offline logging software, which supports increased validation options prior to uploading into the SQL Fosterville geology database.

The diamond core is transported to the core shed where the core is washed, oriented, geologically logged, recovery and RQD measured, marked up for sampling, digitally photographed, sampled and dispatched. Geotechnical logging occurs on an as needs basis, but is completed for each resource definition drill hole. The remaining core is stored on site either in the core farm behind the core shed or at a storage facility at the backfilled portion of the Falcon pit. The geological logging involves direct digital recording of observations on sediment grain size, lithology, planar and linear structural observations (as alpha, beta and gamma measurements), mineralization, alteration and quartz veining and identification of sample locations. Logging is recorded in the database by utilizing online acQuire logging software with data validation, the usual automated error checking and a list of samples printed as a cutting sheet. True dip and dip direction values for each collected structural measurement is calculated using a stored procedure in acQuire™ software. Since 2008 logged data has been verified through viewing of the data using MineSight™ 3D software

The strategy for underground diamond drilling is to infill the exploration drilling intercepts (100m sections) to a notional 25m x 25m grid spacing (or tighter if required) prior to the mining of underground development. Underground diamond drill core samples used in the Phoenix and Harrier resource estimations are predominately NQ2 in diameter.

The change in drilling methods to largely oriented diamond core, intensive re-mapping of old oxide pits and a change in logging methods to collect detailed grain size data allowing sequence stratigraphic analysis allowed much more detailed and robust geological models. These geological models allowed a better understanding of the controls on gold mineralization, which in turn resulted in the better targeting and more efficient use of

The post-2001 exploration resulted in the discovery and definition of the Phoenix, Wirrawilla and Farley's deep zones. In addition, the Falcon, Ellesmere and Harrier Zones were extended. Modest additions to resources were made at the Daley's Hill, Sharkey's and Hunts Deposits.

The 2008 surface diamond drilling program tested the characteristics and extent of resources of the Wirrawilla (renamed as Harrier UG) and Phoenix resource areas. Thirty-six holes totaling 16,253m were completed with 86% completed in Harrier UG Area and 14% in the Phoenix Area.

The program resulted in the discovery of extensions to three north striking, west-dipping areas of gold mineralization within the Harrier UG Area: The Osprey; Raptor; and, Harrier Base Fault Zones. The zones are 84 Technical Report December 2017

Kirkland Lake Gold

situated 1.5km south of the current Phoenix Mineralized Zone and are interpreted to be at a higher stratigraphic level, but down-plunge of the Harrier open-pit Mineralized Zone, which was mined in 2007.

The 2009 exploration program consisted of an additional 12,179m of drilling that served as the basis for an underground resource estimate in the Harrier Area using a 3.0 g/t Au lower cut-off.

Additional exploration drilling in 2009 consisted of 6,633m of drilling on Phoenix Extension, 1,051m on other targets in the Fosterville Mining Licence as well as 1,695m in ten holes on the Myrtle Creek Prospect (EL3539) located south of the FGM.

The 2010 exploration program consisted of 49,980m of drilling; the majority of which was directed towards the Harrier (47%) and Phoenix (30%) Zones, to both extend zones and reduce drill spacing to upgrade the confidence in the resources prior to reserve studies. The balance of the exploration was directed to other targets on the Mining Licence and a small amount of drilling was undertaken on the exploration tenements surrounding the Mining Licence.

The 2011 exploration program consisted of 17,032m of drilling directed towards thirteen different target areas on the Mining Lease, some of which are push backs on existing open pits and others are underground mining target areas.

Between 2012 and 2016 exploration has predominantly focused on diamond drilling in close proximity to current mining, with programs based on extending known extents of gold mineralization. This period saw approximately 155,021m of exploration drilling occur in the Robbin's Hill, Falcon North, Harrier, Phoenix, Lower Phoenix, Lower Phoenix Footwall, Fosterville Splays, Eagle and Kestrel areas.

The nominal progression of drilling is from initial surface exploration, through 100m by 50m and then 50m by 50m. Near surface mineralization is then further in-filled to 25m by 25m to allow pit design. Open pit grade control drilling consists of RC holes drilled 5m apart on 10m-12.5m sections to a maximum depth of 30m. However, for the O'Dwyer's South cutback, Harrier pit cutback and the deepening of John's pit, two 2.5m riffle split samples of 5m deep blast holes were used for grade control purposes. The open pit drilling, sampling and logging methods are the same as exploration RC drilling. Underground mineralization is in-filled to 25m by 25m or tighter if required by underground diamond holes.

Strike drives are face sampled each round ("3m) and sludge hole sampled on 6m Northings in a ring pattern with holes selected by geologists after review of current geological information. The selection criteria for sludge sampling are based on either the need for providing diamond drill data support or the need for additional sampling in data poor zones. No face sampling or sludge hole sampling is used in resource grade estimation, however, the information is considered for domain boundary placements.

Based on drilling results, geological interpretations are made in three dimensional surfaces to form a geological model. The geological model is utilized to interpret the mineralized zones, with geological solids subsequently generated from these interpretations. Further detailed discussion on this process is contained in Section 14 under each of the modeled areas.

10.4 2017 DRILLING

During 2016 the Phoenix decline was re-directed to the hangingwall of the Fosterville Footwall Anticline and a new drill drive (P4190 DD) from a hangingwall location was completed. 2017 saw a second drill drive created (Harrier Exploration Drill Drive) for drilling targeting primarily the D11 Swan (Lower Phoenix Footwall) and the D13 Benu (Lower Phoenix). The D01 Audax (Eagle) was also drilled during this time from Central Decline stockpiles with secondary targeting into the D11 Swan also occurring. The drill fleet was split between these main areas and the fleet was extended to handle the multiple east and west-dipping mineralized targets requiring drilling.

During Q1 in 2017 underground drilling at Fosterville Gold Mine was transitioned from being carried out by Deepcore Pty Ltd to a new drilling contractor, Swick Mining Services Operations Ltd. By the end of 2017, 433 holes collared from underground locations were completed for a total of 104,083 meters. Holes drilled into the Eagle Zone comprised 22.4%, Harrier, 17.5%, Lower Phoenix, 15.9%, Lower Phoenix Footwall, 15%, East Dippers, 12%, Phoenix, 8.3% Osprey, 2.8%, Kiwi, 2.3%, Sugarloaf, 0.5% and Geotechnical, 3.2%. In addition, there were 52 growth exploration holes collared from surface with a total of 32,899m, including 12 in the Northern Phoenix, 5 in the O'Donnell's line, 1 at O'Dwyer's South, 3 at Goornong South and 31 in the Robbin's Hill area.

During 2017, growth exploration diamond drilling from surface and underground totaled 61,267m in 108 drill

Near Mine Exploration focused on targets to replace reserves by extending known ore shoots. These holes targeted areas within MINS404 and EL3539 (Figure 10-7, Figure 10-8 and Figure 10-9) including the Eagle, north and south extensions of the Lower Phoenix and Lower Phoenix Footwall, Harrier Upper and Harrier South Areas (Figure 10-4 and Figure 10-5). O'Dowyer's South, O'Donnell's Line and the Robbin's Hill Area (Figure 10-6). Regional exploration outside the MINS404 region was focused on the developing Goornong South prospect area southwards and following up on IP targets as well extensions of historic resource corridors (Figure 10-13). Resource definition drilling was focused on infill drilling of both the Phoenix and Harrier (Figure 10-1, Figure 10-2 and Figure 10-3). Significant high-grade results were returned from this drilling with several intercepts containing visible gold in the Swan, Eagle, Lower Phoenix Footwall and Harrier Base structures. Drill results returned from the Swan structure that form part of the 2017 Mineral Resource estimate are illustrated in Figure 10-14.

10.5 2017 Q3 & Q4 DRILLING

Drilling during the reporting period just over 80km of diamond drilling was completed from both surface and underground. Around 41.5km (52%) of diamond drilling targeted the Lower Phoenix area, which includes the Swan Fault, Audax Fault, & Benu Fault. Almost 13.4km (17%) of diamond drilling targeted Harrier related mineralization, which includes the Osprey Fault. Surface drilling accounted for approximately 16.1km (20%) of drilling, with the remaining 63.9km drilled from the underground.

Project areas that were focused on during the reporting period are summarized in Table 10-1

Approximately 3.6km of drilling was conducted outside of the known resource and did not have an existing resource to extend.

TABLE 10-1 2017 Q3 AND Q4 GROWTH DRILLING SUMMARY

Program area	Diamond drill metres	Comments on program			
Harrier South 4650mN	3767m	Harrier South drilling allowed the resource extension of several known mineralized domains 100m south including D21 Harrier Base, D22 Harrier Link, D24 Harrier HW, D30 Osprey and D32 Osprey Link.			
Harrier Up-Dip 4900mN	1105m	This drilling allowed a data gap between Daley's Hill and Harrier to be filled as it was predicted to be prospective. These holes allowed for inferred resource growth between the two mineralized trends, which remains prospective at the time of reporting			
Lower Phoenix 6200mN	2407m	Lower Phoenix programs are designed to extend the known inferred mineralized			
Lower Phoenix 6300mN	3782m	resource ahead of current mining fronts to the south. Specifically focusing or mineralization related to the high grade Swan Fault, and any footwall structures			
Lower Phoenix 6400mN	1156m	may be present			
Lower Phoenix 8600mN	3196m	This program was testing for mineralization that extended to the north of the currently known Lower Phoenix mineralization. The program did intersect mineralization however due to the timing of return of assay results, the entire program was not used for resource evaluation.			
Robbin's Hill area	11174m	This program focused on extending the Curie Fault and Rubin Fault (previously reported as Farley's Fault and Farley's Footwall fault). The Curie Fault was extended to a strike length of 760m and dip extent of 360m, and the Rubin Fault to a strike length of 300m and dip extent of 500m. Both are prospective future targets to the north and south and at depth.			
Sugarloaf 5450mN	1344m	Exploration hole designed to see where the regional Sugarloaf N-S trending fault ma- be located and if it is mineralized. No significant mineralization was intersected, and the hole was not used for any resource evaluation modelling			

Fechical Report

Kirkland Lake Gold
December 2017

Kirkland Lake Gold
Mine

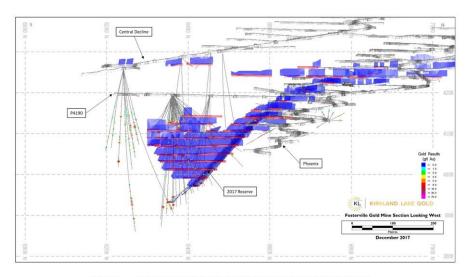


FIGURE 10-1 2017 H2 UNDERGROUND RESOURCE DEFINITION DIAMOND DRILLING CENTRAL AND PHOENIX SOUTH

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine

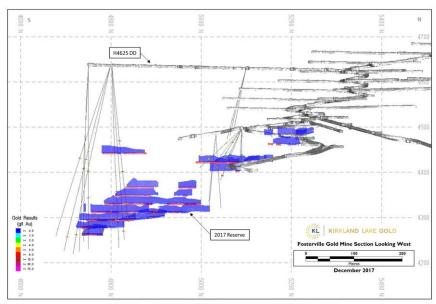


FIGURE 10-2 2017 H2 UNDERGROUND RESOURCE DEFINITION DIAMOND DRILLING - HARRIER

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine

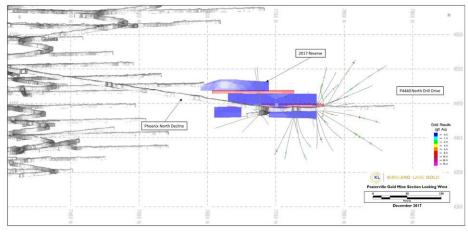


FIGURE 10-3 2017 H2 UNDERGROUND RESOURCE DEFINITION DIAMOND DRILLING – PHOENIX NORTH

Fechical Report

Kirkland Lake Gold
December 2017

Kirkland Lake Gold
Mine

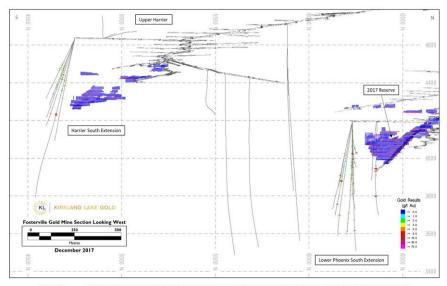


FIGURE 10-4 2017 H2 SURFACE AND UNDERGROUND EXPLORATION DIAMOND DRILLING - LOWER PHOENIX SOUTH, HARRIER SOUTH AND UPPER HARRIER

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine

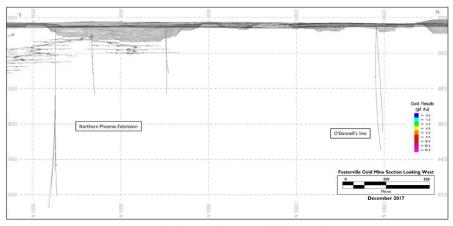


FIGURE 10-5 2017 H2 SURFACE EXPLORATION DIAMOND DRILLING – NORTHERN PHOENIX AND O'DONNELL'S LINE

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine

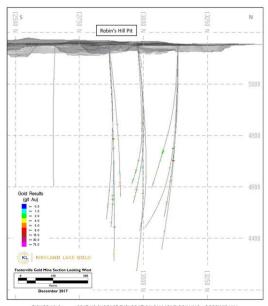


FIGURE 10-6 2017 H2 SURFACE EXPLORATION DIAMOND DRILLING - ROBBIN'S HILL

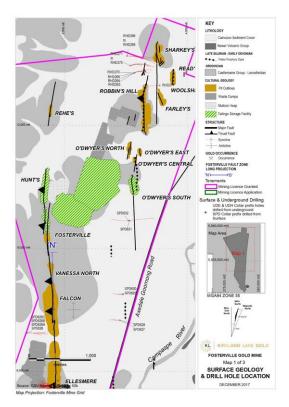


FIGURE 10-7 PLAN VIEW OF SURFACE GEOLOGY AND DRILL HOLE LOCATIONS MAP 1

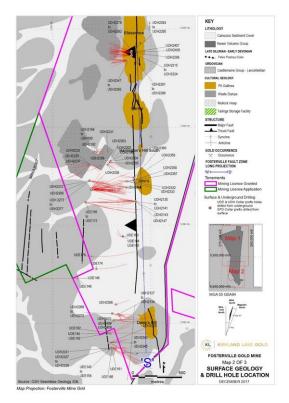


FIGURE 10-8 PLAN VIEW OF SURFACE GEOLOGY AND DRILL HOLE LOCATIONS MAP 2

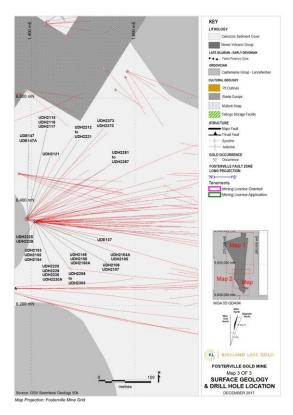


FIGURE 10-9 PLAN VIEW OF SURFACE GEOLOGY AND DRILL HOLE LOCATION MAP 3

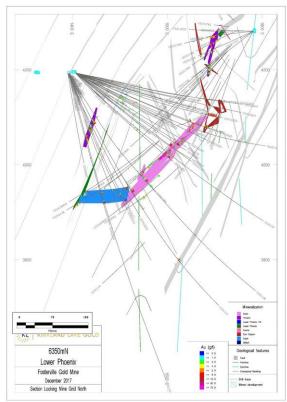


FIGURE 10-10 6350N LOWER PHOENIX DRILL SECTION LOOKING MINE GRID NORTH

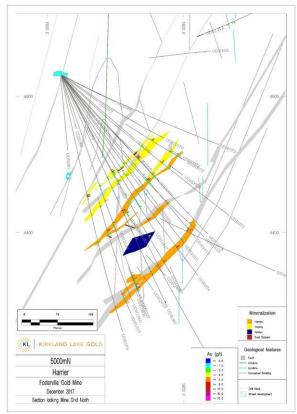


FIGURE 10-11 5000N HARRIER DRILL SECTION LOOKING MINE GRID NORTH

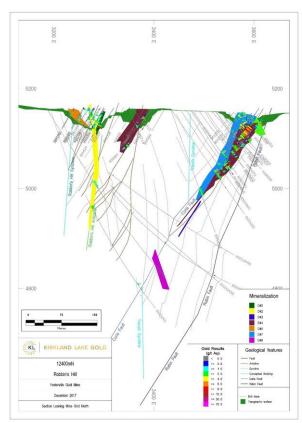


FIGURE 10-12 12400N ROBBINS HILL SECTION LOOKING MINE GRID NORTH

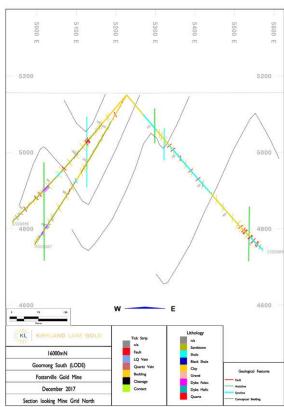


FIGURE 10-13 16000N GOORNONG SOUTH SECTION LOOKING MINE GRID NORTH

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine Fosterville Gold Mine

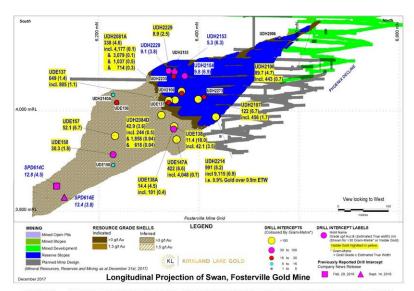


FIGURE 10-14 LONGITUDINAL PROJECTION OF SWAN MINERALIZATION DISPLAYING EXPLORATION AND H2 2017 RESOURCE DEFINITION DRILL INTERCEPTS

TABLE 10-2 DRILL HOLE PREFIXES FOR ALL DRILLING ON THE FOSTERVILLE FAULT CORRIDOR SOUTH OF 10,000MN

Hole Series		No. of Holes	Comments		
BGL001	BGL106	35	1990-2016 RC hydrological		
CEL001	CEL124	96	1997 RC & AC open pit sulfide		
CELD020	CELD106	26	1997-2003 Diamond tails from RC wet drilling		
CELD051	CELD058	8	1996 Diamond metallurgical		
CEM100	CEM105	6	1994 RC metallurgical		
CEN001	CEN124	80	1997 RC for open pit sulfides		
CEND019	CEND103	22	1997-8 Diamond tails of RC		
CEND110	CEND112	2	1997 Diamond Exploration		
CEND038	CEND113	12	1996-7 Diamond metallurgical		
CN100	CN248	149	1994 RC exploration		
CNM001	-	1	1995 RC metallurgical		
DALD001	DALD020	21	2003-6 Daley's Hill diamond		
DDH3*	DDH5*	3	1976 Daley's Hill diamond		
DH001	DH238	193	1995-9 Daley's Hill RC		
DHRB010	DHRB013	4	1997 Daley's Hill RC		
ELRC0001	ELRC0949	912	2005-7 Ellesmere pit RC (7500mN-8425m		
FARCO001	FARC0825	825	2005 Falcon pit RC (8615mN-8800mN)		
FDD14A	FDD33	7	1990 Diamond (Brunswick)		
FO002	FO379	235	1986-90 RC (Bendigo Gold Associates)		
FO400	FO487	56	1992-1994 RC (Perseverance)		
FOS056	FOS214	3	1998-2000 RC & AC exploration		
GT001	GT065	64	2004-2017 Diamond geotechnical		
H4805RAWPILOT	-	1	2014 Pilot hole for Harrier 4805 RAW		
HAR003	HAR065	61	1997-9 Harrington's Hill RC		
HARCOO1	HARC248	233	2006-11 RC (6350mN-7315mN)		
HARD1	2	1	1996 Diamond PQ metallurgical		
MB12		1	2009-12 RC hydrological monitoring		
SH003	SH016	14	2012 – 2015 Underground Services		
SD001	SD039	43	2007-8 Diamond (7775mN-8675mN)		
SP001	SP372	299	1994-6 RC drilled down to 5100mRL		
SPD001	SPD009C	9	1995 Diamond exploration		
SPD010	SPD632	712	2001-17 RC and diamond exploration		
ST009	ST179	50	2003 RC & AC Sterilization		
SVH001	SVH009	9	2010 Underground Services		
UD001	UD995	934	2006–11 Underground diamond		
UDE001	UDE174	187	2010-17 Underground diamond exploration		
UDH0001	UDH2407	1982	2011–17 Underground diamond		
	Total Holes	7.296			

Technical Report Kirkland Lake Gold December 2017 Korkland Lake Gold Mine

TABLE 10-3 DRILL HOLE PREFIXES FOR ALL DRILLING IN THE ROBBIN'S HILL - O'DWYER'S AREA

Hole	Series	No. of Holes	Comments	
FAC001	FAC003	3	1993-2001 Farley's AC	
FAR001	FAR011	10	1997 Farley's RC (face)	
FARM001		1	1994 Farley's metallurgy RC (x-over)	
FDD019	FDD040	12	1989-90 Robbin's Hill diamond HQ	
FO303	FO309	6	1998 O'Dwyer's RC (face)	
GH100	GH354	254	1993-96 Sharkey's RC (x-over) & diamond HQ (1) & NQ (1) & RAB (2)	
GHM001	GHM002	2	1994 Sharkey's metallurgy RC (x-over)	
MBOS01	MBOS07	7	2011 O'Dwyer's South RC hydrological monitori	
ODW001-134, 150-158 & 167		128	1999, (2005 ODW167) O'Dwyer's RC (face)	
ODW135-149 & 159-166		23	1999 O'Dwyer's AC	
ODW168	ODW206	39	2007 O'Dwyer's South RC (face)	
ODW207	ODW228	22	2011 O'Dwyer's RC (17, face) & NQ2 (5)	
DDWD001	ODWD003	3	1997 O'Dwyer's diamond NQ	
PBOS01	PBOS05	5	2012 O'Dwyer's South RC hydrological production	
RD001	RD151	147	1994-98 Read's RC (83, face) and AC (64)	
RDD146	-	1	1998 Read's diamond NQ	
RH001	RH878	756	1987-96 Robbin's Hill and O'Dwyer's RC	
RHD001	RHD207	204	1994, 2004-07 Robbin's Hill RC & diamond NQ2 (47) & HQ (15)	
RHD208	RHD275	75	2009-17 Robbin's Hill & Farley's-Sharkey's diamond NQ2 (25) & NQ3 (3) & RC (6, face)	
RHM001	RHM004	4	1993 Robbin's Hill metallurgy RC (x-over)	
ROB001	ROB012	11	1996 Robbin's Hill RAB	
ROB013	ROB066	51	1998-99 Robbin's Hill RC (face) & AC (3)	
SHA001	SHA033	25	1997 Sharkey's RC (face)	
ST001	ST008	8	1993 Sterilization RC (x-over)	
Total No	of Holes	1,797		

Technical Report Kirkland Lake Go

No drill holes are excluded from the database. However, drill holes that are of questionable quality (due to suspect collar coordinates, down-hole surveys or sampling/analytical QAQC) are omitted from any resource calculation process. Such holes typically are in areas of historic mining and have no influence on the current Mineral Resource estimates.

10.6 QAQC OF DRILL HOLE SURVEYS

Allwood (2003) details the results of down-hole surveys repeated using both an Eastman camera and an Electronic Multi-Shot (EMS) tool. The EMS down-hole surveys agreed with the single shot surveys to within 0.1° in dip and 2° in azimuth resulting in a total average variation of 0.4m per 100m down-hole. The repeated Eastman surveys have an average variation of 0.6° in azimuth and 1.6° in dip, reflecting the precision of the Eastman camera survey tool. Comparing the drill hole traces plotted using the Eastman data with the EMS data shows that the variation in drill hole location due to survey method is considerably less than the variation in hole trace caused by the use of different drill hole de-surveying algorithms. However, in 2007 the use of EMS tools as a standard in preference to Eastman cameras was adopted across the various rigs operating at Fosterville, and in 2010 it became common practice to have survey data at six meter increments or less down each hole. The increased density of down-hole survey data has permitted ability to readily identify and remove suspect azimuth measurements.

Accuracy of down-hole surveys are most effected by proximal ferrous mine infrastructure and/or proximal in-hole casing. Other factor affecting the accuracy of the position of Drill hole survey data is the accuracy of the collar position. Drill holes can be affected when passing close to existing development due to steelwork (mesh, plates and cable bolts) associated with underground development; the effect is shown through elevated magnetic readings, which allow the removal affected surveys. Over time the survey instruments accuracy degrades through usage. Routine testing of all down-hole survey cameras on a test bench of known dips and azimuths checks tool accuracy degradation.

TABLE 10-4 DOWN-HOLE SURVEY CAMERA TESTS SUMMARY

	Testbed Roll Tests			
	Tools	Test Days	Fails	1
	67	350	6	
		Dip		
Testbed	Roll Tests	Average	Std Dev	Degrees Absolute error
Α	73	14.32	0.06	- 0.08
В	2931	38.01	1.36	0.01
С	114	27.44	0.08	0.04
		Azi		
Testbed	Roll Tests	Average	Std Dev	Degrees Absolute error
Α	73	1.25	0.35	0.15
В	2931	1.33	4.27	0.23
С	114	1.07	0.33	-0.03

Technical Report Kirkland Lake Gold

Since October 2017 a REFLEX GYRO tool has been used in conjunction with a Minnovare Azimuth Aligner tool for holes with a positive dip or a length greater than 350m. Test work completed in the first half of 2017 suggested that this combination results in a much more accurate hole projection on longer holes.

10.7 DIANNED 2018 EVELOPATION

The planned exploration drilling activities in 2018 are focused on near-mine targets and extending mineralized trends within MINS404. Regional exploration activity throughout the expansive EL3539 commenced in 2017 and is anticipated that more regional drilling activity will follow in 2018 to advance the understanding of prospective targets. The intent of the exploration is to replace and increase the mineralized resource at Fosterville by extending presently known ore shoots and to locate anomalous gold mineralization for further exploration investigation, then subsequent resource evaluation.

Regional Exploration for 2018 includes 19,388m of planned diamond drilling for an estimated cost of A\$4.1M, A\$4M on 3D seismic surveys, A\$83k on soil geochemical surveys, and 40,000m of Aircore and Reverse circulation drilling with a total expenditure of A\$3M within the MIN5404 and EL3539.

The 3D seismic survey will be the first of its kind within the state of Victoria. The aim of the project is to define the 3 dimensional geometry of the Swan resource with the aim to better understand some of the geological controls away from the mining corridor. If successful, the program may be a vital tool in vectoring in on prospective zone of mineralization to allow for more informed targeting with conventional drilling methods.

Near mine exploration drilling activities planned for 2018 include:

Lower Phoenix (6000mN & 6200mN) Drilling

This program targets the southern extension of the Lower Phoenix System. The system is not constrained to the south, so the programs will test the southern continuation of the currently known gold mineralization. At the time of the report the 6200mN program was nearing completion with A5241k of expenditure budgeted in 2018. The 6000mN program meters proposed for the year are estimated to cost A5800K.

Lower Phoenix Footwall (5550mN & 5650mN) Drilling

This program is designed to follow up a drill program on the 5450mN section that completed in 2016. The 5550mN and 5650mN programs commenced in Q4 2017, continuing into 2018 with an estimated combined cost of A\$730k.

Cygnet (6450mN & 6550mN) Drilling

This program targets the northern extent of the Lower Phoenix Footwall system, specifically the Cygnet which is footwall to the Swan. The system is not constrained to the north, so the programs will test the northern continuation of the currently known gold mineralization. This program has an estimated combined cost of ASIM.

Lower Phoenix North (8700mN) Drilling

This surface diamond drilling program is designed to test for economic gold mineralization associated with the Lower Phoenix mineralized system, up-plunge from high-grade intercepts on 8200mN, 8300mN and 8500mN. The program expenditure for this program in 2018 is budgeted to be A\$451k

Upper Phoenix (5700mN & 5950mN

This program targets mineralization associated with the upper regions within the Phoenix orebody and may provide for further exploration targeting in the future. This program is a combined estimated cost of AS1 20M.

Harrier South (4550mN, 4450mN & 4350mN)

This program targets mineralization associated with the Harrier and Osprey Faults south along strike of high-grade sulfide and visible gold mineralization on the 4750mN. This program is a combined estimated to cost A\$3.41M.

Robbin's Hill Extension Drilling (12500mN, 12600mN & 12700mN)

This program is designed to test for potential economic gold mineralization observed in recent drilling completed below Robbin's Hill Pit. This program is estimated to cost A\$1.87M.

Robbin's Hill Infill Drilling

This program is designed to infill a portion of the current Inferred Mineral Resource. This program is estimated to cost A\$719k.

Robbin's Hill Sub Vertical Targets Drilling (12350mN & 12650mN)

This program is designed to test for mineralization associated with sub-vertical faulting observed in recent drilling completed to the west of the Robbin's Hill Pit. Drilling began in 2017 Q4, continuing into 2018. The budget estimate to complete this drilling is A\$68k.

O'Dwyer's South VG Extension Drilling

This program is designed to follow up on gold mineralization intersected underneath the O'Dwyer's South open pit. This area remains largely untested and leaves open dip and strike potential. This program is estimated to cost A\$110k.

Eastern Fan (7350mN) Drilling

This program is designed to test for gold mineralization potential to the east of current mining operations on the O'Donnell's line and is estimated to cost A\$490k.

Fosterville Deeps (6750mN) Drilling

This program is designed to test for gold mineralization below known ore shoot trends and is estimated to cost A\$900k.

echnical Report Kirkland Lake Gold

Z - Swan, Audax (5100mN, 5500mN & 5900mN) Drilling

This program will target gold associated with the Lower Phoenix Footwall and Swan mineralized systems, between 450m and 1,250m down-plunge from current inferred Mineral Resources. 'Z' holes are a category of hole that gives maximum opportunity to understand resource corridor dynamics by drilling in a direction that stays within prospective terrains regardless of orebody orientation. This program began in 2017, continuing into 2018 with an estimated cost of A\$1.24M.

10.8 EXPLORATION POTENTIAL

10.8.1 GOORNONG SOUTH

The Goornong South Prospect is located approximately 4km north of the Fosterville Mining Licence, where Fosterville style gold mineralization occurs beneath transported cover on privately owned land. The gold prospect was discovered by Perseverance during regional exploration in the mid 1990's. PSV identified a 1.3km long anomalous zone of gold mineralization and systematically drilled the anomaly between 1995 and 1999 for its open pit potential. The drilling was comprised of 71 RC holes (totaling 4,482m) and one diamond hole (69m) with a further eight aircore holes (293m) drilled for ground water monitoring purposes.

Perseverance subsequently reported a Historic Resource in their 1999 Annual Report as shown in Table 6-2. Kirkland Lake Gold is not treating the Historical Resource as a current Mineral Resource as a QP has not done sufficient work to classify the Historic Resource, or comment on the reliability of the estimate.

In 2010 Northgate reviewed the Goornong South area for its potential to host gold mineralization amenable to underground mine extraction. The initial exploration saw completion of two lines of IP/resistivity survey (Figure 9-1) to the south of the prospect in order to identify chargeability anomalies along strike from the sulfide mineralization at Goornong South. IP chargeability anomalies were encountered on both lines and a five diamond drill hole program (totaling 1,532m) was completed.

A 2010 diamond drilling program was undertaken from the roadside and spans about a 750m north-south trend. Of the five holes drilled, three returned assay intercepts averaging greater than 2.5 g/t Au and the strike length of the prospect had been extended southwards a further 300m.

Mid 2017, the Goornong South prospect was identified as having an advanced status for potential conversion into a mineral resource corridor. To effect the classification, the continuity of the historic pit resource need to be developed as a potential underground project. The highest grade achieved in the 2010 diamond drill campaign were evaluated with the shallow RC information to determine opportunities to develop the corridor.

The overall setting was developed as a west-dipping shear extending from the base of the near surface resource, however a number of low grade and lower confidence geological factors were identified as being prohibitive to forming a viable west-dipping resource. Structural data on GSDD082 identified high-grade mineralization associated with an east-dipping structure presenting the opportunity to drill a section of data towards the west on a section "700m south of the Goornong South Zone.

Fechnical Report

Kirkland Lake Gold

Fosterville Gold Mine

10.8.2 HALLANAN'S

The Hallanan's Prospect area, located 1km south of the Fosterville Mining Licence, was explored for oxide gold by Perseverance between 1994 and 1998. During this period Perseverance completed 104 RC drill holes (totaling 6,245m with an average drill hole length of 60m), two diamond holes (109m) and 11 monitoring bore holes (354m). Gold mineralization was identified in drill intercepts over a 750m north-south trend and at the end of drilling a Historic Resource was estimated and reported by Perseverance in their 1999 Annual Report as shown in Table 6-3. However, Kirkland Lake Gold is not treating the Historic Resource as a current Mineral Resource as a QP has not done sufficient work to classify the Historic Resource, or comment the reliability of the estimate.

No exploration activity has been undertaken on the Hallanan's Prospect since 1999 and during the intervening period to 2012 much has been learnt about structural controls of Fosterville-style gold mineralization at the nearby Mining Licence. Diamond drill core is virtually absent from the Hallanan's Prospect, and this coupled with an absence of any deep drilling, with RC drilling only averaging 60m in depth, the prospect is viewed by Kirkland Lake Gold as being under explored for underground gold targets. The area is to be reviewed for drill testing in the future.

10.8.3 HARRIER UG FAR SOUTH

The Harrier mineralized system is located to the south of MINS404. Gold grades are less consistent in the Harrier System and it has largely been dominated by sub-average to average sulfide mineralization. Resource definition drilling in 2016 intersected visible gold in several drill holes. The Harrier System is not constrained up-dip and to the south beyond 4750mN, drilling to the south on the 3800mN and 4200mN sections forms part of the 2018 proposed exploration target areas.

10.8.4 MAY REEL

The May Reef Prospect is located in the northeastern portion of EL3539, some 15km north of the Fosterville Mining Licence. Several minor historic shafts (early 1900's) occur in the area including the May Reef shaft, which is the namesake of the prospect. Shallow RAB drilling with follow up RC (eight) drilling in the area through the unconsolidated gravel and clays to Ordovician turbidite bedrock identified gold and arsenic anomalism 100m west of the historical workings. The RC drilling in 1998 returned only one significant intersection (MR4: 1.0 g/t Au over 10m from 42m incl. 3.7 g/t Au over 2m).

The area has been viewed as prospective and will be drilled utilizing both RC and Diamond drilling methods. Geochemical surveys in the area show the strike continuity of arsenic anomalism extending both north and south of the historically drilled region. This, in conjunction with new insights given by AEM data suggests that historic RC drilling would have only superficially tested bedrock (10 – 20m of depth). Most of the hole would have been through unconsolidated sediment cover.

The AEM data also gives increased resolution as to the location of potential faults and fold horizons beneath cover. May Reef resides in a geospatial environment akin to the Fosterville system to the south, with fault offsets off the more regionally dominant Redesdale Fault being similar.

It is postulated that conducive mineralized corridors will fall within certain proximities to major regional faults. If this is true, May Reef would follow the trend of mineralized systems trending along the Redesdale Fault that include Fosterville, Robbin's Hill and Goornong South.

10.8.5 MYRTLE CREEK

The Myrtle Creek prospect is located in the southern part of EL3539 on private land, 24km south of the Fosterville Mining Licence. The prospect is 4km northeast of, the 370Ma, Harcourt Batholith where rocks on the prospect comprise 440Ma Lower Ordovician Lancefieldian sediments, dominated by sandstone and quartzite, of the Castlemaine Supergroup. The sediments are tightly folded on an axis trending NNW, similar to that of other Bendigonian sediments east of the Whitelaw Fault. The sandstone-dominated sequence has been intruded by a granitic stock that measures 250m by 200m at surface, and by several quartz porphyry dykes up to 1.5m wide, both of which may be related to the Upper Devonian Harcourt Granodigrite.

Gold was first discovered in the Myrtle Creek area in 1858 and sporadic mining for alluvial and quartz reef gold occurred up until the 1930's. Production from the goldfield is not well recorded, but James (2005) reported quartz reefs grading 1-2oz/ton Au. Modern exploration in the general Myrtle Creek area has occurred since 1974 by companies such as Noranda Australia (rock chip sampling, geological mapping, soil geochemistry (Au, Cul), Ghana Gold (structural interpretation of aerial photography) and BHP (stream sediments and follow up soil surveys). Perseverance explored the area from the mid 1990's to 2006, completing regional stream sediment, rock chip and soil sampling, geological mapping and petrographic work on rock samples. Northgate explored the area between 2008 and 2009, undertaking additional surface sampling in the northern area of historical workings, but the results were disappointing with the overall tenor of gold-in-soil much lower than observed elsewhere on the prospect.

In 2009 Northgate drilled 10 diamond holes (totaling 1,695m) at Myrtle Creek to test a number of proposed mineralization settings including intrusion-related, fold-fault related, dyke-related and disseminated styles. Much of the drilling was centered about a 600m long by x 200m wide NW trending Au-Mo soil geochemical anomaly centered on the granite stock (Quartz Hill). The drilling, reported by Dean (2010), gained financial support of a drilling grant from the Rediscover Victoria Strategic Drilling Initiative

Two of the holes returned significant intersections of gold mineralization are reported and interpreted to be from the NE trending New Amelia Mine Shear; Down-hole widths of 2.0 g/t Au over 10.9m from 0.9m (incl. 3.1 g/t Au over 6.0m from 4.0m) in hole MCD004 and 1.9 g/t Au over 8.0m from 84.0m (incl. 5.2 g/t Au over 2.0m from 88.0m) in hole MCD006.

Anomalous gold (7.61 g/t Au peak) and molybdenum (2,882 ppm) were encountered throughout much of the prospect, particularly in proximity to the granite. Visible gold was observed twice within sheeted quartz veins and there appears to be a strong intrusion-related Au-Mo-As correlation. A significant nugget-effect may be present given the presence of coarse gold and frequent highly anomalous As/Mo results without corresponding elevated gold.

The drilling at Myrtle Creek indicates that gold occurs in structurally controlled shears and is not disseminated widely through the wall rock. This fact caused Northgate to suspend exploration on the prospect. However, the drill intercepts on the New Amelia Shear remain untested along strike and downdip and this prospect is to be further reviewed by Kirkland Lake Gold in the future.

10.8.6 Accort's

Accott's is a historic mining area 10km south west of the Fosterville Gold Mine operations covered by surface working and shafts with some reportedly reaching down ~150m. The prospectivity of the area has been recognized with several geochemical surveys and RC drilling campaigns testing the area.

21 historic RC holes through 2 phases of drilling have yielded a peak result of 5.42 g/t Au over 3m from 25m (ACTC4), with many not returning significant gold grades. Kirkland Lake geologists conducted a field survey of the area selecting rocks to test for gold anomalism associated with massive quartz veins similar to those seen within Fosterville's underground workings. The result returned 13.1 g/t Au, the highest reported grade of any sample recently recorded. This suggests that the Accott's prospect has elements of both sulfide and visible gold anomalism.

Recent geological studies into the Accott's area suggests that historic mining focused on tensional vein arrays associated with a local anticline. This has been further verified by interpretive work conducted on the AEM data, which established an interpreted cross section of the area attempting to map out fold

The AEM data has also given insight as to the position of the Drummartin Fault, a fault that is interpreted to be a parallel line to the Fosterville Fault and a second generational fault of the regional Redesdale Fault. The mechanisms for gold emplacement are not well understood given the lack of structural drilling data in the area. It is possible that historically mined mineralization has migrated up the anticline's axial plane suggesting that the Drummartin Fault may be an active corridor for auriferous fluids. Plans will be to test both the presence of mineralization at depth on the hinge and also the relationship the area has with the Drummartin Fault system.

10.8.7 RASMUSSEN

The Rasmussen prospect is the northern strike extension of the Fosterville Fault corridor identified by gravity, electromagnetic and soils geochemistry surveys. The region is under Murray Basin sediment cover and has only minor historic workings. The target is seen as a priority owing to the strength of the electromagnetic signature and its clear relationship along strike of the multimillion-ounce Fosterville prehodies.

A series of RC holes will be conducted across the section to help identify mineralization and alteration signature in the area. Given the blind nature of the zone, holes will be campaigned along strike-dipping towards the east to maximize exposure to the interpreted west-dipping structure. Several transect lines will also be designed along strike to ensure best exposure to potentially mineralized horizons.

Fechnical Report Kirkland Lake Gold

10.8.8 RUSSELL'S REEF

The Russell's Reef Prospect is located within EL3539, approximately 2.4km south of the Fosterville Mining Licence. See Figure 9-1. The prospect is based on shallow historical shafts and pits spread over about a 250m north-south extent. Recorded historical production in the area totals 417oz from the 1897-1900 period of mining.

The area has been subjected to several lines of soil sampling, and several programs of shallow RC drilling (50 holes averaging 31m depth) undertaken over a protracted period from 1976 to 1989. Perseverance subsequently drilled nine diamond holes in 2006 to test for Fosterville style sulfide hosted gold mineralization. Three of the nine diamond holes returned drill intercepts averaging above 3.0 g/x Au.

These included:

- RRD006:
- 6.1 g/t Au over 4.0m from 48.0m (incl. 9.4 g/t Au over 2.0m from 49.0m)
- RRD005:
- 2.2 g/t Au over 10.4m from 57.8m, (incl. 2.9 g/t Au over 4.3m from 57.8 and 3.1 g/t Au over 2.3m from 65.9m)
- RRD007:
- 3.1 g/t Au over 10.7m from 141.5m, (incl. 7.5 g/t Au over 0.9m from 147.1m and 12.3 g/t Au over 1.4m from 150.8m)

The Russell's Reef area is seen to be prospective for exploration as it is interpreted to be the southern extension of the Fosterville workings. The area has many similar geological features to the Fosterville zone including offset across an anticline hinge on the Fletcher's Fault and mineralization including pyrite, arsenopyrite, stibnite and coarse gold.

10.8.9 SUGARLOAF RANGE

The Sugarloaf Prospect area encompasses the entire length of the Sugarloaf Range, a ridge of steeply dipping sandstone and quartzite located immediately west and southwest of the Fosterville Mining Licence. The prospect area is mostly within the Sugarloaf Nature Conservation Reserve.

A compilation and interpretation of available drilling and geochemical data in conjunction with interpretation of FGMYs airborne geophysical data (acquired in 2008) and consideration of Geoscience Victoria's (GSV) Redesdale Fault Model indicates potential for Fosterville-style gold mineralization within the prospect area.

Exploration data in the area includes surface geochemistry, RC drilling, airborne magnetics and radiometrics and ground IP. However, it should be noted that historical (1989-1991) drilling of 36 RC holes (totaling 1,164m) in the area averages only 32m in depth and diamond drilling is absent.

Ground IP/resistivity data, collected in 2010, maps resistive chargeability anomalies beneath the Sugarloaf Range and between the range and the Fosterville Fault. In addition to this an airborne radiometric K/Th

ratio anomaly in the southern part of the prospect may represent a potassium alteration halo proximal to faulting. The K/Th ratio anomaly also has a coincidental and similar trend to the Sugarloaf Fault IP chargeability anomaly. The chargeability anomaly could be caused by the presence of subsurface black shale stratigraphy and/or sulfides.

Kirkland Lake Gold has budgeted A\$240k to follow up geochemical and AEM anomalies with diamond drilling in the Sugarloaf Range prospect in 2018.

11 SAMPLE PREPARATION, ANALYSES & SECURITY

11.1 SAMPLING METHOD AND APPROACH

From the acquisition of the project by Perseverance in 1992 through to the present, all RC drilling through mineralization has been collected at one meter intervals and sampled as two-meter composite samples. Prior to 1995, samples were collected using 'spear' sampling. Since 1995 all RC holes have been sampled using a riffle splitter split to either 12.5% or 6.25% depending on the drill hole diameter. After 1996, if the sample was unable to be kept dry the hole was finished with an NQ2 diamond tail. In the central area, spear samples comprise 16% of all mineralized samples and 28% of all mineralized RC samples. All RC holes were completely sampled.

As part of the 1997 Feasibility Study several of the FO prefixed holes (see Table 10-2) with long, high-grade intersections were twinned with RC holes drilled with a much bigger compressor and a face sample hammer resulting in dry samples. These twin holes demonstrated that there was significant down-hole contamination in the FO holes (Perseverance, 1997). As a result, the FO holes were only used for estimating oxide resources and reserves where it is assumed that dry samples were recovered and downhole contamination was not an issue.

In the diamond drill core, all visible sulfide mineralization, quartz vein stockwork and LQ veins plus at least three meters 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 meter. 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.

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.

Figure 11-1 includes some 576 duplicate face sample pairs were collated including face sample duplicates taken on the Phoenix 4380mRL (2014) and the Phoenix 4280mRL (2015-2016). With outliers removed, the duplicates show a moderate correlation with an R² of 0.6402. This study covered the underground face sampling method from late 2006 to the end of 2016. Face sampling data is used to refine resource domain boundaries. Sample grades from face sampling are not used in the resource estimation process.

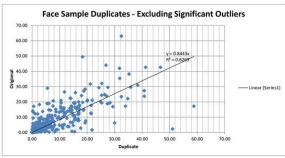


FIGURE 11-1 UNDERGROUND FACE SAMPLE DUPLICATE RESULTS

Through time, sludge holes have been bored with 54mm diameter drill bits and sampled at two-meter composite intervals, or at 1.8m intervals corresponding to rod length. Occasionally 1m samples are taken on 76mm diameter production charge holes, for a similar sample volume, nominally weighing between 2kg to 5 kg per sample. Cuttings are collected by a custom designed apparatus to maximize the catchment area to improve sample quantity/quality. Samples are inspected for quartz percentage, non-carbonate carbon content, sulfides present and lithology. Due to the poor quality of the samples, sludge samples are not used directly in resource estimations but may aid in defining domain margins.

All remaining 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.

The RC samples from previous grade control programs were kept at an on-site depot for approximately three months after the receipt of final assay results. This allowed time for any re-sampling that might be necessary. The plastic sample bags photo-degrade rendering re-sampling impossible after 6 to 12 months and presenting an environmental hazard from windblown plastic, therefore the sample bags are disposed of as part of routine site rehabilitation works. Exploration RC pre-collar samples were collected in hessian sample bags since 2005 and similarly retained for a three-month period at the drill sites. Hessian was chosen as it poses less of an environmental hazard and allows for mechanical rehabilitation of drill sites.

11.2 ELEMENTS ANALYZED

TABLE 11-1 ANALYSED ELEMENTS BY METHOD AND TIME PERIOD

Element/ Analysis	Reason for Analysis	Sample selection/Method/Timing
		All samples 25g Fire Assay, except:
		fresh (non-oxide) rock until December 2004 (40g FA)
		oxide samples until December 2004 (25g Aqua Regia digestion
Au	Primary Commodity	AAS)
	1 100 A 0 4 2 2 3 3 1 2 2 4 4 4 5 1	production drill core sent to GAL in 2012-2016 (30g FA)
		Some Robbin's Hill Exploration RC and drill core sent to ALS in
		2007 (40g FA), pulps sent to Bureau Veritas in 2016 (40g FA).
		Analysed since August 1995.
		All Exploration drill samples 1995 - 2017.
		Metallurgical diamond drill samples in 1997.
		Blast hole sampling sulfide open pits 2004 - 2007.
		Underground face sampling 2008 - 2009.
		Stope sampling 2008 - 2009.
As	Toxic to BIOX®	ICP-AES Select stope samples only 2016 - 2017.
		All by ICP-AES, except:
		Aminya 2001 - 2006 (AR50)
		ALS Bendigo 1994 - 2002 (AAS)
		Production drill core samples on significant Au intercepts from
		late 2017
		All Au values over 0.5 g/t August 1995 to May 2001.
		All Exploration drill samples by ICP-AES 2001 to 2016.
		Sulfide open pit grade control and blast holes by ICP 2005 - 20
		All production drilling and underground sampling by LECO or
		equivalent (IR detection), 2006 - 2009.
		Production drill core samples on significant Au intercepts from
S	0.1 f 1 f 010V8	2009 - 2017.
5	Primary feed for BIOX®	All open pit sulfide grade control RC and blast holes, 2006 - 200
		Selected blast holes 2011.
		All underground face samples 2006 - 2009.
		Selected sludge holes 2007 - 2008.
		Selected stope samples 2007 - 2009.
		Selected open pit sulfide grab samples 2011.
		All open pit sulfide RC samples 2012.
		For all Au values over 0.5 g/t August 1995 to May 2001.
		From 2001, all Exploration core routinely. Production sample
		only where stibnite observed.
		ICP-AES except:
		AAS on RC drilling by ALS Bendigo 1999.
Sb	Toxic to BIOX®, indicator for high-	50g Aqua Regia digest with AAS finish. 2002 - 2006.
30	grade Au	XRF by Amdel 2006 - 2007
		>0.6% ICP-AES derived Sb grade then OSLS modified triple acid
		digest with AAS finish 2013 - 2017
		Production core submitted to GAL 2015/2016 with stibnite
		observed, Aqua Regia/AAS (<10%) and Acid Digest/Titration
	1	(>10%)

Element/ Analysis	Reason for Analysis	Sample selection/Method/Timing				
NCC/TOEC	Organic carbon is preg-robbing and competes with activated carbon in CI. recovery. Historically an efective indicator for preg-robbing potential.	IR detection, LECO or equivalent carbon/suffur analyser. All Au values over 0.5g/f August 1995 to May 2001. Since 2001 only where high carbon content is observe Sulfide open pit grade control and blast holes only selected silve 2006 - 2007. Selected sludge samples 2006 - 2017. Selected sludge samples 2007 - 2010. 2012 - 2017. Selected face samples 2007 - 2010. 2012 - 2017.				
Method developed by Fosterville Preg-Robbing Activity Act		Selected face samples 2014. Selected stope samples 2014 – 2017.				
ICP suite: Near mine and regional exploration Nu, Ag, As, Bi, Cu, Fe, K, Mo, S, Sb, NCC preliminary screening to identify Perliminary screening to identify potential processing complications		2010 to present day Ni, Pb, Te, & Zn – has been added to regional exploration suite from Q4 2017				

11.3 DESCRIPTION OF ANALYTICAL TECHNIQUES

All of the gold analyses used in the sulfide resource model in the 2000 Sulfide Feasibility Study were fire assays of a 40g charge carried out by ALS at Bendigo, a commercial laboratory (non-accredited). The other elements were analyzed by a variety of techniques at a variety of laboratories. A full program of repeats, standards and inter-laboratory check sampling was conducted on the gold analyses.

For the 2001 – 2004 NQ2 SPD diamond drilling campaign, gold analyses were determined by fire assay of a 40g charge by AMDEL in Adelaide, a commercial laboratory (ISO 9001 accredited). A 30 element suite including As, S and Sb was analyzed by ICP-AES from a separate 5g charge following HNO₂/HF digestion. From November 2002 to August 2003 TGC (total graphitic carbon) was analyzed on a selective basis. A full program of repeats, standards and inter-laboratory check sampling was conducted on the gold analyses.

Since 2005, independent 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).

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 sing the AAS. A 0.5g sub-sample of the pulp is digested in a HNO₃/HCl digest and then analyzed for Ag, As, Bi, Ca, Cu, Fe, K, Sb and 5 by ICP-AES. A full program of repeats, standards and inter-laboratory check sampling was conducted on the gold analyses.

An audit of the OSLS facility was completed for Perseverance by an external consultant during 2007 (Stewart, 2007). This Audit found that OSLS's procedures were adequate and presented no major risk to the resource estimate. There were areas for improvement identified with the following corrective actions taken during the second half of 2007:

- Temperature variation within the drying oven is now being measured and recorded;
- Sizing analysis for all pulps is now being conducted and recorded;
- Calibration of scales is now being recorded and documented;
- Further improvements also included AAS electronic data capture in 2011; and
- Fosterville staff has formal monthly laboratory meetings to discuss performance.

Work undertaken by employees of Fosterville 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.

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. Gekko Analytical Laboratories gained National Association of Testing Authorities, Australia accreditation (NATA) 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 75um. 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% 5b, 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 FGM personnel to assess the preparation and sample handling processes. No major risks were observed.

11.4 QAQC

Fosterville uses independent assay laboratories, which provide assay data in digital form. On Site Laboratory Services (OSLS) is Fosterville's main assay laboratory used to assay drill and grab samples, and has been since July 2007. GAL received a percentage of diamond core samples and all production face samples from April 2015 through June 2016.

Quality Assurance and Quality Control (QAQC) are completed on samples after being imported into the database. Assays not passing the QAQC tolerances on blanks, standards, duplicates and repeats are

Technical Report Kirkland Lake Gol

retained in the database but are not available for viewing or Resource work within Mine Sight. Where it is determined the sample itself is compromised, rather than the analysis, then the sample is demoted and its assays also are not reported in Mine Sight 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 QAQC processes) are used instead.

The QAQC review process has been improved and developed over the years. The system comprises four main strands with the reliance on standards (certified reference materials), duplicates, repeats and blanks samples. Each strand is summarized below.

11.4.1 STANDARDS

Standards (also known as Certified Reference Materials) are submitted and analyzed with samples to monitor the analytical process and check accuracy of results. Statistical analysis is performed prior to release from the manufacture to quantify the content of the material of interest (e.g. Au) to within known limits of error (usually a 95% confidence interval).

Drilling programs up to the end of 2007 included the use of four gold mineralized standards provided by Gannet Holdings Pty Ltd (ST148, ST109/0285, ST73/7192 and ST43/7194) and one standard prepared from approximately 500kg of Fosterville sulfide mineralization from previous RC drilling (AA). Over time the use of gold mineralized standards from Gannet Holdings Pty Ltd has diminished, with alternative suppliers being favored.

Since 2008, a further 28 gold standards have been adopted for use at Fosterville, with 18 of these still available for use. Of these available standards, only a small selection is "active" (in use) at any one time, to ensure each provides a sufficiently large dataset month to month with which to effectively assess laboratory performance with respect to bias, variation, and any change in trend of these factors. Each standard remains in use for several consecutive months to gauge trends over the longer term, before gradually being replaced with a different standard with a similar mean. Active standards are rotated occasionally to prevent predictability of expected means and to demonstrate that standards are being accurately analyzed.

FGM purchase "fit for purpose" standards from Geostats Pty Ltd as certified reference materials. Unlike laboratory standards these standards are submitted for analysis in particular order with a laboratory consignment so as to better test the laboratory's accuracy at different grade ranges. FGM standards are inserted at a rate of about one in forty, and have a wide range of gold grades extending from less than 0.3 g/t Au to about seven times the average ore grade expected at Fosterville.

Standards which fall outside of 3 Standard Deviations potentially indicate an issue with the job, such as contamination in fire assay, fusion issues, or AAS calibration. A fresh standard is submitted (from the same batch if possible) to be fired with repeats from the original pulp packets of the 10 surrounding samples. If the new standard performs and there is no significant bias between the original and repeat

fires, it is assumed that only the standard was in error and that the primary samples were not compromised.

As recommended by QG (Quantitative Group Pty Ltd), reported populations associated with a given laboratory/method are intermittently reviewed against certified ranges. Where populations are sufficiently large (usually greater than 400 assays) the mean and standard deviation of the reported population is calculated, and these are used to assess the standards performance, in place of the certified values, for that laboratory/method.

No recalculation was performed on standards used in 2017. All standards presented in Table 11-2 are in reference to manufacturer certification.

TABLE 11-2 STANDARD PERFORMANCE 2017

Mean (g/t)		Z Score	Relative Difference Percent	Coefficient of Variation	
2	12	-0.67	-2%	4.0%	
2	347	-0.97	-4%	4.0%	
5	25	0.36	1%	1.9%	
5	296	0.46	2%	3.7%	
5	197	-0.45	-1%	3.7%	
10	66	0.44	2%	3.8%	
10	28	0.42	2%	4.0%	
10	77	0.37	1%	2.8%	
10	93	-0.04	0%	3.7%	
10	16	-0.37	-1%	3.1%	
33	43	-0.03	0%	3.4%	
49	248	-0.32	-1%	2.3%	
Totals	1448	-0.22	-0.01	3.5%	

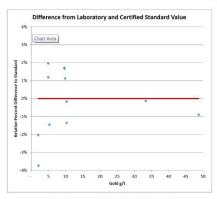


FIGURE 11-2 STANDARD PERFORMANCE 2017

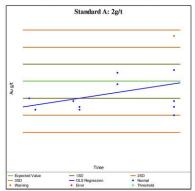


FIGURE 11-3 STANDARD A PERFORMANCE 2017

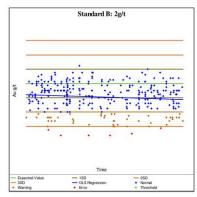


FIGURE 11-4 STANDARD B PERFORMANCE 2017

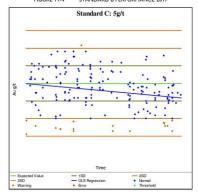


FIGURE 11-5 STANDARD C PERFORMANCE 2017

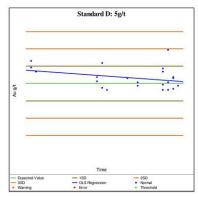


FIGURE 11-6 STANDARD D PERFORMANCE 2017

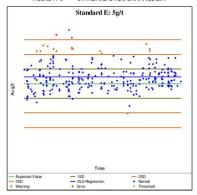


FIGURE 11-7 STANDARD E PERFORMANCE 2017

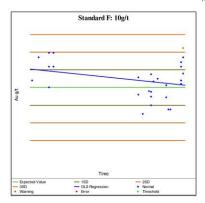


FIGURE 11-8 STANDARD F PERFORMANCE 2017

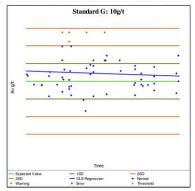


FIGURE 11-9 STANDARD G PERFORMANCE 2017

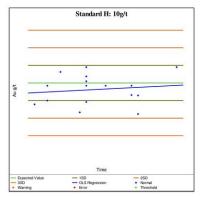


FIGURE 11-10 STANDARD H PERFORMANCE 2017

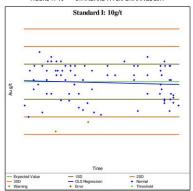


FIGURE 11-11 STANDARD I PERFORMANCE 2017

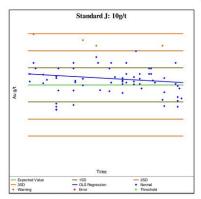


FIGURE 11-12 STANDARD J PERFORMANCE 2017

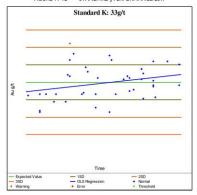


FIGURE 11-13 STANDARD K PERFORMANCE 2017

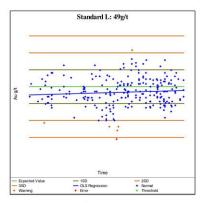


FIGURE 11-14 STANDARD L PERFORMANCE 2017

In addition to client-supplied standards, assay laboratories will insert their own standards into assay batches to monitor accuracy and quality. OSLS have reported laboratory standards with assay results since August 2012. All GAL jobs have been reported with laboratory standards.

Table 11-3 documents the laboratory standards reported by OSLS in 2017, along with the nominal ranges used to validate them.

TABLE 11-3 OSLS LABORATORY STANDARDS, G/T AU

STANDARD ID	Expected Mean (g/t)	Mean – 3SD	Mean + 3SD	Bias from expected (%)	
ST345	0.055	0.040	0.070	-5.5	
ST588	1.6	1.45	1.75	-0.13	
ST643	4.92	4.50	5.34	0.23	
ST484	7.49	6.74	8.24	-0.47	

11.4.2 LABORATORY DUPLICATE SAMPLES

Laboratory pulp duplicates are provided as part of internal laboratory QC as an indication of preparation/pulverization homogeneity, but may also indicate random analytical errors. Laboratory duplicates are selected at random at a rate of approximately one in ten and constitute a second ~200g subsample taken from the pulverizer. From this stage of laboratory preparation, the duplicate is treated

as an additional sample and undergoes the same process at the same time as the original aliquot being used to represent the submitted sample.

Fosterville only collects laboratory duplicate data on Au.

Fosterville sulfide samples have historically shown to be highly repeatable.

A review of OSLS laboratory Au duplicate data collected from 2012 to 2015 found a very strong correlation with an \mathbb{R}^2 of 0.98. GAL laboratory Au duplicate data collected during 2015 had an \mathbb{R}^2 correlation coefficient of 0.94.

In 2016, the combined dataset of OSLS and GAL 25g Fire Assay duplicates on primary sulfide Au samples totaled 915, excluding results less than 10x lower limit of detection. Bias was insignificant (-0.83%) with an $\rm R^2$ of 0.997. 85.79% were within 10% AMPRD and 96.5% were within 20%.

Fire Assay laboratory duplicates on primary sulfide Au samples in 2017 totaled 1,268, excluding results less than 10x lower detection (Figure 11-15). Bias was insignificant (-0.76%) with an R^2 of 0.998. 84.78% were within 10% AMPRD and 96.77% were within 20%.

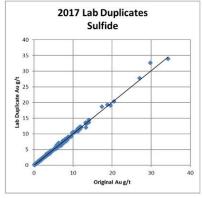


FIGURE 11-15 2017 SULFIDE LABORATORY DUPLICATES

In 2016, the OSLS 25g Fire Assay repeats on primary samples dispatched as Visible Gold (VG) samples totaled 121, and included values up to 2,497 g/t Au. Bias was insignificant (-0.96%) with an $\rm R^2$ of 0.966. A

Technical Report Kirkland Lake Gold

total of 72.73% were within 10% AMPRD and 84.30% within 20%. GAL did not analyze any 'VG' samples in 2016

Au Laboratory Duplicates on 'VG samples' in 2017 totaled 179 and included values up to 19,766g/t Au (Figure 11-16 with values >1000ppm, n = 5, not shown for reasons of scale). Bias was insignificant (-4.60%) with an R^3 of 0.999. 79.33% were within 10% AMPRD and 92.18% were within 20%.

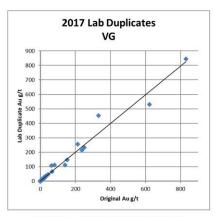


FIGURE 11-16 2017 VISIBLE GOLD LABORATORY DUPLICATES

11.4.3 LABORATORY REPEAT (REPLICATE) SAMPLES

Laboratory repeats are additional fires from the original pulp run in a subsequent fire. At OSLS, the laboratory repeats are specifically performed on a different day and by a different fire assay technician than those of the originals. At GAL, the fire was run on a different day, but there is no explicit requirement for a different technician to perform each fire. Repeats are required to be selected, run and reported by the laboratory before finalized results can be released to the FGM. Repeats may additionally be requested on specific samples at the client's request and reported as an amendment, in support of the original values.

Fosterville only collects laboratory repeat data on Au.

In 2016, laboratory repeats, not flagged as Visible Gold or potential, showed insignificant bias (0.27%) and a strong correlation with an R^2 of 0.963, from 2,501 pairs. This represented both the GAL and OSLS

Technical Report Kirkland Lake Gold

datasets combined and excluded results less than 10x lower limit of detection. 93.56% of these were within 10% AMPRD, and 99.65% within 20%. This dataset included a small handful of notable outliers above 40 g/t Au, with differences such as 44.1 g/t Au vs 105.9 g/t Au (82.4% AMPRD) and 126.4 vs 73.3 g/t Au (53.2% AMPRD). It is likely that these samples were not identified at the logging stage for their potential to host coarse gold.

In 2017, laboratory repeats on primary sulfide Au samples totaled 4,618, excluding results less than 10x lower detection (Figure 11-17). Bias was insignificant (-0.05%) and excellent correlation was shown with an R^2 of 0.997. 93.62% were within 10% AMPRD with a maximum of AMPRD of 49.63% (60.6 vs 100.6g/t). Seven outliers were included in the above statistics but not shown in the chart for reasons of scale. These appear to be the result of unexpected coarse gold, with grades ranging from 43.9 to 349g/t.

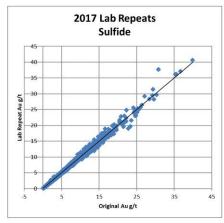


FIGURE 11-17 2017 LABORATORY REPEAT SULFIDE SAMPLES

Laboratory Repeats from 2016, which were flagged for Visible Gold or potential show insignificant bias (0.21%) and correlate strongly, with an R^2 of 0.981 from 425 pairs (threshold 10x detection). 95 of these pairs (or 22.34%) had an assay at 200 g/t Au or more. 61.64% of the 425 pairs were within 10% AMPRD, with 82.35% within 20%.

Laboratory repeats on primary samples with observed or potential VG in 2017 totaled 491, with values up to 5,911g/t Au (Figure 11-18). Correlation was strong with an $\rm R^2$ of 0.984, and an insignificant bias of 1.58%. 71.89% of pairs were within 10% AMPRD and 92.43% were within 20%.

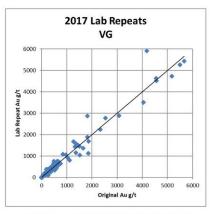


FIGURE 11-18 2017 LABORATORY REPEAT VISIBLE GOLD SAMPLES

11.4.4 BLANKS

Field blanks were historically not used because there is a sharp visual grade contrast between mineralization and waste, which provides a natural blank. However, in 2009 the use of field blanks was adopted to assess quality control of the sample preparation; i.e. to test for contamination from one job to the next and also from sample to sample within the job. These were produced by half core sampling 1.2m intervals of barren material. Intervals showing less than 0.03ppm were then split into 0.3m lengths, with each constituting a 'field blank'. From October 2012, this process was refined and original 1.2m samples were analyzed at ppb levels, for more precise determination of values below 0.03ppm/30ppb. A minimum of two field blank samples is inserted into each diamond drill hole sample batch. At least one field blank sample is inserted at the beginning of the job, with others inserted between mineralized samples.

In the period June 2014 – February 2016 interstitial blanks were routinely inserted within zones containing potential or observed visible gold as an attempt to control and quantify contamination between samples. From February 2016 this process was improved by instead inserting quartz wash samples between samples of potential or observed coarse gold, with blanks occasionally following these to verify the effectiveness of the quartz wash.

Since August 2012 laboratory blank samples have been imported and assessed as part of the FGM QAQC process for drill core. OSLS reports blanks in Au Fire Assay only, where barren flux is fired in a new pot. Elevated grades will usually either indicate drift in calibration, or contamination during fire assay. All elemental analytical methods requested by GAL have been reported with laboratory blanks.

11.4.5 FIELD DUPLICATES

Half core samples (cut in half longitudinally by diamond tipped saw blade) are duplicated at a rate of about one in every 80 samples per drill hole. The second half of core, usually discarded after a time or retained indefinitely for reference, is submitted blindly to the laboratory and processed like any primary sample within the same job. These test the sample representativity of the Fosterville half core sampling process and aid in quantifying the nugget effect.

Field duplicate data collected over the 2013 – 2015 period showed an R² value of 0.96 with no apparent hias

Field duplicates from 2016 on sulfide samples represented 436 pairs, with insignificant bias (-0.97) and an \mathbb{R}^3 of 0.922. Excluding two extreme outliers, which are believed to contain unobserved coarse gold, the \mathbb{R}^3 becomes 0.980.

There were a total of 788 Field Duplicate pairs on half core diamond samples in 2017 (Figure 11-19), not including results where both halves were reported below 10x lower detection limit. Excluding one sample with observed visible gold (1515 vs 1349g/t) and one sample identified while logging as potentially containing coarse gold (0.79 vs 0.67g/t), this dataset is believed to represent sulfide-hosted ore and has a bias of 0.596 and an 8^2 of 0.976.

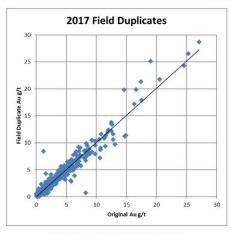


FIGURE 11-19 FIELD DUPLICATE GOLD DATA FOR 2017

11.5 ANALYTICAL TECHNIQUE VERIFICATION

Various analytical testing has been conducted in 2016 and 2017 to ascertain the accuracy of using the FA25g analysis technique employed at FGM with respect to the suitability of it in high-grade visible gold resources and also to check the accuracy of the main service provider of analytical services to the mine.

11.5.1 COMPARISON OF ANALYTICAL TECHNIQUES

During May to July 2016 a series of stope samples were collected from three stoping panels on the P4240mRL. Each stope sample was collected as a truck dump grab from the ROM. The samples were approximately 3-5kg mass in a calico bag as per standard mine geology practice. In addition to each sample being tested using the FA25g technique (see section 12.3), the pulp created for each sample was further tested for gold by fire assay with a 50g charge (FA50) and by Screen Fire Assay (SFA) techniques. The bulk of the same sample (sample mass minus pulp mass) was sub set to "3kg (maximum) and 2kg of mass were then analyzed by Leach well with the tail residue being analyzed by FA25. The analysis type was selected in order of increasing sample analyzing mass (sample support) to detect any analytical bias introduced by FA25.

Technical Report Kirkland Lake Gold

Quantitative Group Pty Ltd consultants (2016) reviewed the stope sample data and commented regarding the limitations regarding stope sampling ROM material in that the bias represented between FA25 and Leachwell (for example) may be exacerbated. Notwithstanding this, the results do suggest that although the averages of each data set are very similar, there is a change in the nature of the correlation of the data, particularly between the FA25 and the LW data sets. There seems to be a positive conditional grade bias of the FA25 data over the other three methods with assays exceeding 20 g/t Au (Figure 11-20).

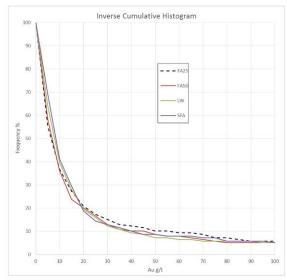


FIGURE 11-20 INVERSE CUMMULATIVE HISTOGRAM SHOWING A POSITIVE CONDITIONAL GRADE BIAS OF FA25 GOLD DATA. (QG CONSULTANT REPORT 2016)

In 2017, a large scale project was initiated to compare traditional 25g Fire Assay and "2kg 36-hour Leachwell on drill core samples of observed or potential visible gold. Data collection is ongoing as new core samples are produced and submitted to the laboratory. Preliminary results are charted in Figure

11-21. A clear population of samples up to 25g/t Au with low leachability and excellent correlation between the original fire assay and the fire assay on leachate (solids) are suggestive of samples containing only sulfide hosted gold.

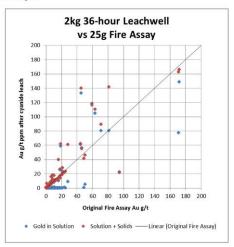


FIGURE 11-21 2017 FIRE ASSAY VS LEACHWELL

Some samples show gold in solids equal to or greater than the amount of gold in cyanide solution, which in many cases correlates with strong visual carbon content, i.e. preg-robbing. Some of these have been followed up by running Fire Assay to extinction on the leachate residue. In one case, having 63 individual 25g fires, high variability was seen in the leachate (Coefficient of Variation = 0.45) (Figure 11-22).

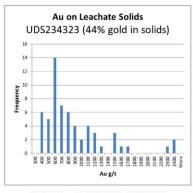


FIGURE 11-22 GOLD IN SOLIDS OF HIGH NCC SAMPLE

11.5.2 VISIBLE GOLD DUPLICATE SAMPLE COMPARISON

During 2016, some 81 remaining half core intervals were selected from diamond core tested quartz lode zones, many of them containing visible gold. A FA25 sample was analyzed from each half of the core, similar to the normal QAQC field duplicate protocol as mentioned in section 11.4. This project was to augment the small population of field duplicates already taken in quartz lode zones so as to determine the homogeneity of the FA25 analyses from each half of the selected intervals.

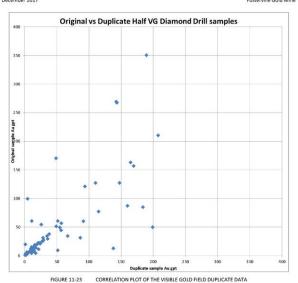


Figure 11-23 shows a raw correlation of the VG field duplicate data set (excluding a handful of extreme outliers) where even without a regression model added, a change in the correlation of the data can be discerned over the 30-40 g/t Au grade level between the two field duplicate samples. Visible gold prepping procedures were identical for all of the samples as was the analysis method. Sample variability increases significantly above approximately 50g/t.

However, studies to date have not shown any significant bias between FA25 and larger fusion masses (FA50 and screen fire assays). Data continues to be analyzed to ensure this does not change in the future. Some departure is apparent in extremely high grade samples but the number of samples falling into this category has made it difficult to draw firm conclusions as to any consistent bias between FA25 and FA50 test regimes.

TABLE 11-4 FIRE ASSAY WEIGHT STUDY RESULTS – Q-Q RESULTS

Percentile		Grade Threshold				ł .
reiteinine	FA25	FA50	SFA	FA25	FA50	SFA
10%	2.61	2.51	2.93	224	224	224
20%	4.02	3.98	5.45	199	199	199
30%	6.75	7.01	7.58	174	174	174
40%	8.39	8.60	8.77	149	149	149
50%	10.20	9.75	10.47	125	125	125
60%	12.96 11.9		12.88	100	101	100
70%	15.20 14.20		15.99	77	76	75
80%	21.72 19.32		.32 20.22		50	50
90%	39.12 3		38.53	25	25	25
93%	61.30	50.46	54.79	19	19	19
95%	105.72	81.90	91.71	13	13	13
98%	215.46 218.26		150.02	7	7	7
99%	366.51	536.37	370.07	3	3	3
100%	640.10	1,260.00	815.07	1	1	1

Other studies compared Atomic Absorption Spectrometry results with Gravimetric detection methods. The results were inconclusive in establishing a clear departure point between the two detection methods. Additional test work will be required to refine this understanding further.

TABLE 11-5 STATISTICAL COMPARISON BETWEEN AAS AND GRAVIMETRIC GOLD RESULTS

Parameter	AAS	Grav.
Mean	1,155	1,126
Median	1,014	968
Std Dev	639	590
cv	55%	52%
Min	307	278
Max	3,489	3,135

11.5.3 UMPIRE LABORATORY CHECKS

Confidence in analytical accuracy is further assessed by re-submitting pulps from one laboratory to another and comparing differences in results. Such a program is usually done at least every few years.

A program of inter-laboratory checks was undertaken in 2002 comparing the AMDEL results to two other commercial laboratories – Aminya Laboratories Pty Ltd (Aminya) and Genalysis Laboratory Services (Genalysis). The two batches (147 samples) sent to Aminya returned an average of 9% higher with an R^2 correlation coefficient of 0.993. The Genalysis results were 2% lower with an R^2 correlation coefficient of 0.996. The inter-laboratory check samples range in grade from below detection (<0.01 g/t Au) to 45 g/t Au. This inter-laboratory check data is presented in Allwood (2003).

During 2013, the OSLS 25g Au Fire Assay method was compared against GAL's 50g Au Fire Assay method. All 245 samples showed an overall bias of only 2%, with an R² correlation coefficient of 0.988.

In 2016, 82 samples were selected from various domains and their pulps submitted for umpire test work at Bureau Veritas Minerals (Adelaide) (BV). A summary of the ore sources is shown in Table 11-6.

TABLE 11-6 UMPIRE SAMPLING BY ZONE

Zone	Sulfide	Visible Gold	Total
Eagle	20	23	43
Harrier	15	5	20
Phoenix	13	7	20
Total	48	35	83

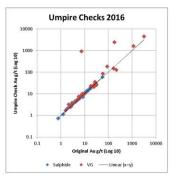


FIGURE 11-24 CORRELATION OF OSLS AND BY PULPS

A correlation of FA samples from Bureau Veritas (BV) and On Site Laboratory Services (OSLS) laboratories comprises the OSLS 25g Fire Assay method and the BV 40g Fire Assay method (Figure 11-24). Following transportation, the pulps (sourced from OSLS) were re-homogenized at BV by mat roll so as to avoid smearing and contamination in the pulverizer. Small population size should be taken into consideration when reviewing the following statistics, however the 'Sulfide' subset (n = 48) shows insignificant bias (0.957%) and an R² of 0.997. Apart from a few high-grade results showing significant variation, there is a very good correlation with the results, even considering the differences in charge weight and slight acid digest differences.

The umpire test work detailed within section 11.5.3 includes only 83 samples. A yearly umpire comparison will be undertaken using up to 1000 samples and FGM would aim for this test work to be completed on a yearly hasic

11.5.4 SAMPLE SEGREGATION TESTING

A preliminary study was conducted in mid-2017 to assess if there was risk of sample bias during sample preparation at OSLS. The methods of collection of subsampling lead to gaining some comparative data that could assess differences between an "ideal sample preparation" collection regime against the actual practices employed at the laboratory. Two stages were identified for testing, one being the subsampling of "3kg of pulverized material into a "200g pulp packet, the other being the subsampling of the "200g pulp packet into a 25g charge for Fire Assay. 20 x 3kg high-grade samples containing coarse gold were taken from underground for the purpose of the study.

Results were largely inconclusive due to lack of sample size (number of tests). FGM intend to revisit this study on a larger scale during 2018.

11.6 SAMPLE AND DATA SECURITY

11.6.1 SAMPLE SECURITY

The methods of sample storage and transport have remained largely unchanged throughout the life of the project.

Samples are bagged and numbered either on site at the drill rig or at the FGM core handling facility.

Samples sent to laboratories outside Bendigo were in 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.

Analytical laboratories have operated in Bendigo during the periods 1992 – 2000 and 2005 to present. During these periods individual samples from the drill rig or core shed have been placed in a designated area within the mine security gate and collected daily by laboratory staff. Again, on arrival at the laboratory, the list of samples sent is matched to the actual samples received.

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

11.6.2 DATA SECURITY

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 four times a day.

Access to the database is controlled by user login permissions (Windows NT Authentication). Write access is further restricted by requiring the acQuire database application and associated software licensing.

11.7 ADEQUACY OF PROCEDURES

It is the opinion of the Authors that the sample preparation, security and analytical procedures are adequate and have been appropriately applied over the life of the project to ensure that the data is representative and of high quality.

12 DATA VERIFICATION

12.1 DATABASE VALIDATION

The drilling carried out by previous owners at Fosterville routinely included quality assurance and quality control checks. The nature of these checks evolved through time and these are described below. In addition, sampling QAQC consultants SMP Consultants reviewed the sampling, analytical and data storage procedures used in drilling programs to May 2002 (Crase, 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 QAQC performance gates, variation in down-hole surveys from previous survey).

Prior to 2000, the geological data was entered directly into the database by hand from the original hardcopy geological log with a manual validation system. From 2001 until 2008, all geological data was uploaded directly from IPAQ hand held logging devices into the database with similar automatic cheas as used for the assays. Immediately after the IPAQ was uploaded a hard copy of the geological log was printed to provide an extra back up of the data. Since 2008 geological information has been entered into laptops running acQuireTM offline logging software. This software supports an increased range of logging validation that prompts the user while logging and also prior to uploading of the logged data into the Fosterville Geological SOL database.

The down-hole drilling survey data, between 2001 and 2010, was the only data hand entered into the Fosterville geology database. Allwood (2003) reports a program conducted in 2002 where approximately 10% of the SPD holes were randomly selected for checking the database against the original survey shots. This check found several errors so it was decided to check the entire down-hole survey database against the original surveys shots. All errors found were corrected. Diamond drill hole (underground holes are prefixed by UD, UDE and UDH) traces are visually checked in MineSight^{IM} software against the design trace, as soon as the down-hole surveys are entered into the database.

12.2 DATA VERIFICATION

In addition to the quality control and data verification procedures discussed in detail above, the Qualified Persons preparing the Mineral Resource estimates have further validated the data upon extraction from the database prior to resource interpolation. This verification used MinesightTM drill views as the primary tool to identify data problems. This allowed the omission of holes if they were of questionable quality, for example due to low quality sample techniques or incomplete assaying. 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.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

Details of previous metallurgical test work conducted on a range of Fosterville ores can be referenced in the Fosterville Technical Report December 2015. Metallurgical test work is ongoing with particular focus on maximizing gravity recoverable gold and also understand and prepare for any future ore 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. Funding has been approved for installation of an additional gravity circuit in the primary grinding circuit and associated expansion to the tabling room with aim to maximize gravity gold recovery.

In the opinion of the authors, all deleterious elements are effectively managed and it is considered that their presence does not have a significant impact on economic extraction. No identified processing factors have a significant impact on economic extraction.

Technical Repor

Kirkland Lake Gold Fosterville Gold Mine

14 MINERAL RESOURCE ESTIMATES

The Mineral Resources reported are broken down into areas contained within the Mining Licence MINS404 (Section 4). Mineral Resource Areas of Central, Southern, Harrier and Robbin's Hill (Table 14-1) are defined resource areas, which were established at different times in the projects history. The Central Area contains multiple Mineral Resource models primarily for reasons of data handling. Details on Mineral Resource block model extents can be seen in Figure 14-1.

CIL Residue Mineral Resources are distinguished from in-situ Mineral Resources in Table 14-1 on the basis of differing recovery assumptions.

The current Mineral Resource estimate for FGM is presented in Table 14-1.

Technical Report December 2017 Kirkland Lake Gold Fosterville Gold Mine

MINERAL RESOURCES (EXCLUSIVE OF MINERAL RESERVE) FOR FGM AS AT DECEMBER 31, 2017 TABLE 14-1

Classification		Measured			Indicated			Inferred		
		Tonnes (kt)	Grade (g/t Au)	Insitu Gold (kOz)	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (kOz)	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (kOz)
		•	Fostervil	le Fault Zo	ne Sulfide R	esources				
Central Area	Upper	1,463	2.47	116	808	2.69	70	24	1.45	1
Central Area	Lower	184	8.32	49	4,946	7.03	1,119	3,355	10.90	1,176
Southern Area	Upper	21	3.32	2	463	2.44	36	537	2.29	40
	Lower	0	0.00	0	0	0.00	0	66	3.50	7
Harrier Area	Upper	0	0.00	0	0	0.00	0	0	0.00	0
	Lower	6	6.14	1	2,689	6.20	536	1,098	7.33	259
			Robbir	's Hill Area	Sulfide Res	ources				
Combined	Upper	0	0.00	0	1,434	2.23	103	726	2.29	54
	Lower	0	0.00	0	253	3.69	30	2,139	5.03	346
Sulfide U	Jpper	1,484	2.48	118	2,705	2.40	209	1,287	2.28	94
Sulfide L	ower	190	8.26	50	7,888	6.64	1,685	6,657	8.35	1,788
Total Sulfide		1,674	3.13	169	10,594	5.56	1,894	7,944	7.37	1,882
Total Oxide		270	1.47	13	1,326	1.84	79	335	1.18	17
Total Oxide & Sulfide		1,944	2.90	181	11,920	5.15	1,973	8,279	7.14	1,900

Notes:

- Notes:

 1. CIM definitions (2014) were followed in the estimation of Mineral Resource.

 2. For the Mineral Resource estimate, the Qualified Person is Troy Fuller.

 3. The Mineral Resources reported are exclusive of the Mineral Reserves.

 4. Mineral Resources are rounded to 1,0001, 0.01 g/t Au and 1koz. Minor discrepancies in summation may occur due to rounding.

 5. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

 6. The Mineral Resource estimate used a gold price of US\$1,280 per ounce (A\$1,600 per ounce).

 7. Cut-off grades applied are 0.7 g/t Au for oxide, 1.0 g/t Au for near-surface sulfide (above 5050mRL) and 3.0 g/t Au for underground sulfide mineralization (felow 5050mRL).

 8. A minimum mining width of 2.5m was applied.

 9. Dry bulk density of mineralized material applied 2.40t/m³ for oxide, 2.56t/m³ for transitional material, 2.64t/m³ for fresh material between 5000mRL and 5050mRL, 2.72t/m³ for fresh material between 5000mRL and 5050mRL.

The reported Mineral Resources are as at December 31^{st} 2017 and reported by Kirkland Lake Gold in accordance with NI43-101.

In all cases, the Qualified Person has complied with CIM standards as prescribed by NI43-101.

The Authors are not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing and political or other relevant factors that would materially affect the Mineral Resource estimate

The location and extents of the block models for each of these areas are displayed in Figure 14-1. Current underground mining activities are confined to the Central (Northern, North Phoenix, South Phoenix, Central Models) and Harrier (Harrier Model) Areas. Open pit mining activities were last undertaken in 2012 in the Robbin's Hill Area (Robbin's Hill Model). The Robbin's Hill Resource was updated as at December 2017.



FIGURE 14-1 PLAN SHOWING MINING LEASES AND THE AREA COVERED BY EACH OF THE BLOCK MODELS

14.1 CENTRAL AREA

14.1.1 AREA GEOLOGY

The Central Area is divided into nine current and six remnant mineralized zones.

Current Remnant
Phoenix Falcon
Lower Phoenix Ellesmere
Lower Phoenix Footwall
Shamrock
Eagle Robin
East Dippers Griffon
Allwood Vulture
Kestrel
Splays
Swan

As at December 2017 the majority of drilling, mining, mapping, interpretation and subsequent Mineral Resource Modeling were undertaken within the extents of the Lower Central and Harrier Areas, below the 5050mRL. The Mineral Resources in the Lower Central and Harrier Areas are detailed in Table 14-2.

Kirkland Lake Gold Fosterville Gold Mine

TABLE 14-2 CENTRAL AND HARRIER AREA LOWER SULFIDE MINERAL RESOURCES (EXCLUSIVE OF MINERAL RESERVES) BELOW 5050MRL - FOSTERVILLE AS AT DECEMBER 31ST, 2017

		Measure	d		Indicated	i		Inferred	
Classification	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (koz)	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (koz)	Tonnes (kt)	Grade (g/t Au)	Insitu Gold (koz
Allwood	5	5.49	1	164	5.77	30	338	6.26	68
Eagle	20	17.81	11	216	9.70	67	168	6.08	33
East Dippers	12	8.57	3	878	6.12	173	100	5.55	18
Ellesmere	0	0.00	0	331	5.73	61	22	3.39	2
Harrier	6	6.14	1	1912	6.22	382	345	6.17	68
Kestrel	1	4.08	0	527	4.52	77	51	4.00	7
Lower Phoenix	26	9.26	8	264	6.47	55	951	6.83	209
Lower Phoenix Footwall	18	6.28	4	199	7.51	48	289	5.22	48
Swan	0	0.00	0	46	115.69	172	570	36.59	671
Osprey	0	0.00	0	824	6.04	160	708	7.77	177
Phoenix	102	6.74	22	823	6.15	163	38	4.59	6
Raven	0	0.00	0	127	8.13	33	0	0.00	0
Robin	0	0.00	0	15	8.35	4	0	0.00	0
Splays	0	0.00	0	803	5.70	147	240	4.65	36
Vulture	0	0.00	0	504	5.05	82	635	4.56	93
Total Sulfide	190	8.26	50	7635	6.74	1655	4454	10.02	1435

Notes:

- Notes:

 1. CIM definitions (2014) were followed in the estimation of Mineral Resource.

 2. For the Mineral Resource estimate, the Qualified Person is Troy Fuller.

 3. The Mineral Resources reported are exclusive of the Mineral Reserves.

 4. Mineral Resources reported are exclusive of the Mineral Reserves.

 5. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

 6. The Mineral Resource estimate used a gold price of US\$1,200 per ounce (A\$1,500 per ounce).

 7. Cut-off grades applied are 0.7 g/t Au for oxide, 1.0 g/t Au for near-surface sulfide (above 5050mRL) and 3.0 g/t Au for underground sulfide mineralization (below 5050mRL).

 8. A minimum mining width of 2.5m was applied.

 9. Dy Bulk Density of mineralized material applied 2.40t/m³ for roxide, 2.56t/m³ for transitional material, 2.64t/m³ for fresh material between 5000 and 5050mRL, 2.72t/m³ for fresh material below 4500mRL.

Technical Report Kirkland Lake Go

14.1.2 GEOLOGICAL MODELS

In order to constrain the mineral resource models, a number of three-dimensional geological models were generated for each zone using MineSight[™] software. The models produced were of three types:

- structural wireframe models;
- · mineralization wireframe models; and
- waste wireframe models.

Structural models contain three-dimensional wireframe surfaces of major faults and minor structures as interpreted from surveyed data points obtained from open pit and underground mapping and diamond drill core logs. The mineralization model defines the interpreted gold-bearing mineralized envelopes and is constrained either by structural, lithological or grade boundaries. The waste model is defined by a 10m to 15m envelope surrounding the mineralization model.

Mineralization domain wireframes are constructed on screen using MineSight™ where points are added to a wireframe mesh until the desired interpretation is achieved. This has resulted in interpretations completed on 6.25m sections in areas of open pit grade control drilling and on 25m in areas of underground grade control drilling and, 50m and 100m sections where there is only surface and underground evaluation, drilling

Mineralization used within the domain boundary is selected based on a current cut-off of four grammeters (generally two meters at 2.0 g/t Au. Internal waste below the cut-off may be incorporated into the mineralization envelope where there is adjacent higher gold grade data directly adjacent or if the intercept lies central to other peripheral economic intercepts on the same interpreted structure. Sub-economic mineralization may also be included around the periphery of the domain to produce more representative estimates towards the margins of the mineralized envelope.

Data points that satisfy particular economic or geological criteria for inclusion are directly clipped into the domain solid so that the assay interval is either entirely within or entirely excluded from the interpreted mineralized envelope. Separate mineralization envelopes are created to distinguish between geologically or economically distinct zones such as high-grade/low-grade envelopes or changes in structural orientations.

In mid-2017 high-grade sub-domains were also utilized in the Southern Phoenix Resource model to better spatially separate the zones with a higher prevalence of high-grade free-gold related mineralization. The sub-domaining was expanded in the 1712_SPRM, with the separation of the high grade D01 Audax and D11 Swan domains into laminated quartz domain nested within a lower grade sulfide halo domain.

Historical information derived from RC and more recently from diamond drill data (assays, structure, lithology, etc.) are used in the initial construction of the mineralized domains. Mineralized zones that become viable for mining are further constrained by the addition of geological mapping, surveyed structures, open pit blast hole samples, underground sludge hole and face samples (Figure 14-2).

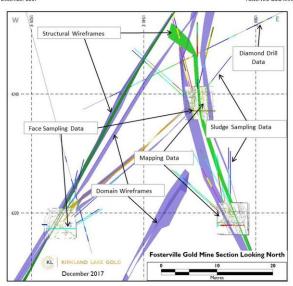


FIGURE 14-2 6770mN SECTION SHOWING DATA FOR CREATING MINERALIZATION DOMAIN WIREFRAMES (UNDERGROUND)

14.1.3 DRILLING DATA

 $Drill\ hole\ as say\ data\ used\ to\ produce\ the\ model\ was\ subjected\ to\ a\ number\ of\ data\ preparation\ processes:$

- Files containing all drill hole logging and assay data were imported from the AcQuire production and exploration database into MineSight™ using an automated script.
- A MineSight[™] procedure coded the drill holes with the appropriate properties from the geological models and a drill hole composite file was constructed for values inside the mineralization wireframes.
- 3. The files were viewed in MineSight™ in order to identify holes that contained obvious erroneous data missed during the validation process. Data that was considered erroneous was either corrected or deleted from the data set. Note: step 1 and 2 were also completed prior to the geological models being finalized to ensure the interpretations were completed on a validated drill hole file.

Technical Report Kirkland Lake Gold

In combination, the drill hole files used for the Central Area Models (1712_SPRM, 1710_NPRM, 1506_CRM and 1201_NRM) contained a total of 6329 drill holes between them to estimate mineralization, of which 2408 (38%) are RC holes and 3921 (62%) diamond core holes (Figure 14-3).

TABLE 14-3 CENTRAL AREA RESOURCE MODEL DRILLING DATA EXTENTS

	North North RL RL Min Max Min Max (m) (m) (m) (m)					Drilling Data Ext	ents		
Model	Min	Max	Min	Max	Total Holes	Diamond Holes	RC/AC Holes	% Diamond Holes	(% RC/AC Holes
1506_CRM	6000	8250	4600	5200	2706	1483	1223	54.8%	45.2%
1712_SPRM	5800	7650	3700	5200	1640	1640	8	100.0%	0.0%
1710_NPRM	7300	8700	4000	5200	146	146	8	100.0%	0.0%
1201_NRM	8250	10250	4800	5200	1837	652	1185	35.5%	64.5%
Total					6329	3921	2408	61.95%	38.05%

Model bound inclusive data only, and only includes data used within the mineralized domains.

Compositing

The raw sample results were composited to 2m intervals in the 1712_SPRM, 1710_NPRM, 1506_CRM and the 1201_NRM (Northern) Model using the MineSightTM compositing procedure. A 2m composite length was selected as it encompasses a vast amount of legacy data left over from open pit mining and RC drilling. Future work will include a review of such an interval compared to a primary sampling interval in the current mining areas of the 1712_SPRM of less than 1m.

The compositing process creates up to 2m sample length composites of the primary assay intervals in a down-hole direction honoring the coded geological domains. The MineSight™ software down-hole compositing routine provides an option to accumulate short intervals (up to 50% of the composite length) into the preceding interval. Assay intervals above the minimum 50% primary sample length are treated as a unique composite interval. For example, an assay interval over 1.0m in length is left in the composite file as is, and an assay interval less than 1.0m is added into the preceding composite interval (Figure 14-3) This option has been used to prevent a number of smaller intervals from forming on the down-hole margins of estimation domains, and as such all intervals can be used in the estimation process.

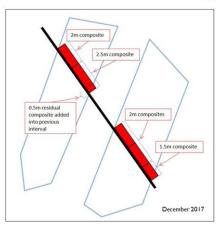


FIGURE 14-3 DOWN-HOLE COMPOSITING WHERE DOMAIN BOUNDARIES ARE HONOURED IN THE COMPOSITE FILE A listing of descriptive statistics for the estimated domains is provided for the Northern Model (1201_NRM) in Table 14-4.

Fechnical Report Kirkland Lake Gold

TABLE 14-4 DESCRIPTIVE STATISTICS FOR THE NORTHERN MODEL

Model	1201	_NRM			Descriptive	Statistics		
Date:	Dec	-2011			Descriptive	statistics		
Variable	Data Type(s)	Number of Samples	Minimum (g/t Au)	Maximum (g/t Au)	Mean (g/t Au)	Std Dev g/t	Variance g/t ²	Coeff o
Code 1 Fosterville HG								
Au 2.0m Composites TC 40	DD	1,701	0.01	49.60	4.61	5.45	29.70	1.18
Code 2 Fosterville LG								
Au 2.0m Composites	DD	9,949	0.00	104.60	5.66	6.63	43.96	1.17
Code 3 Phoenix HG								
Au 2.0m Composites	DD	4,021	0.00	60.44	5.50	6.95	48.30	1.26
Code 6 Splay LG								
Au 2.0m Composites	DD	740	0.00	36.89	2.25	3.41	11.63	1.52
Code 7 Griffon								
Au 2.0m Composites	DD	101	0.20	57.21	9.74	10.62	112.78	1.09

A listing of composite statistics is provided in Table 14-5 for the Northern Model (1201_NRM).

TABLE 14-5 COMPOSITE STATISTICS BY COMPOSITE LENGTH IN THE NORTHERN MODEL

Composite Length	Number	% of Composites	Mean Length (m)	Mean Grade (g/t Au)
< 1.0m	41	0%	0.65	3.37
≥ 1.0 and < 2.0	8209	98%	1.97	5.39
≥ 2.0m	129	2%	2.49	5.60
Total*	8,379	100%	1.97	5.38

*Some 70 composites had zero length and grade and were deleted from the data.

A listing of descriptive statistics for the estimated domains is provided in Table 14-6, Table 14-17 and Table 14-18 for the 1712_SPRM Southern Phoenix Model, 1710_NPRM Northern Phoenix and the 1506_CRM Central Models respectively. These statistics are provided as a context for the size and the average grade in each of the domains. The 1201_NRM model name encompasses the build date of the model and infers that the model includes the latest drilling and interpolation data in that respective area. Therefore, the Northern area has not had interpretational and/or drilling additions since January 2012. Similarly, the Central Model has not had any changes since June 2015. The Northern and Southern Phoenix models used the December 2017 data however, and the Southern Phoenix Model also includes areas within the active mining and drilling zones up to December 2017. The spatial distribution of the central area models including the Harrier model is shown in Figure 14-8.

TABLE 14-6 DESCRIPTIVE STATISTICS OF GOLD FOR THE SOUTHERN PHOENIX MODEL

Model: Date:	1712_SPRM Dec-17	-		Descriptive S	tatistics		
Mineralized Domain	DD Variable	Number of Samples	Minimum (g/t Au)	Maximum (g/t Au)	Mean (g/t Au)	Std. Dev.	Coeff. of
	Au Raw	872	0.01	12039.00	69.36	465.81	6.72
Code 1 Audax	Au 2.0m Composites (top-cut)	282	0.01	700.00	55.98	130.86	2.34
270.00 1.10	Au Raw	373	0.02	38.60	7.52	6.02	0.80
Code 3 Phoenix HG	Au 2.0m Composites (top-cut)	170	1.18	29.57	7.52	4.55	0.61
	Au Raw	502	0.01	62.30	6.10	6.01	0.99
Code 5 Splay HG	Au 2.0m Composites (top-cut)	209	0.10	44.70	6.10	4.56	0.75
	Au Raw	1440	0.01	352.20	3.70	7.68	2.08
Code 6 Splay LG	Au 2.0m Composites (top-cut)	707	0.01	75.00	3.60	3.42	0.95
Code 8 Allwood	Au Raw	304	0.02	25.50	5.19	4.11	0.79
Code 8 Allwood	Au 2.0m Composites (top-cut)	123	0.04	17.40	5.19	3.19	0.61
6.4.00-4.4	Au Raw	349	0.01	7368.00	50.03	355.68	7.11
Code 9 Vertical	Au 2.0m Composites (top-cut)	224	0.45	850.00	36.42	127.82	3.51
Code 10 Benu W1	Au Raw	271	0.01	860.00	30.13	99.19	3.29
Code 10 Benu W1	Au 2.0m Composites (top-cut)	87	0.02	100.00	21.90	26.49	1.21
Code 11 Swan	Au Raw	432	0.01	21490.00	165.05	952.32	5.77
Code 11 Swan	Au 2.0m Composites (top-cut)	308	0.03	1600.00	138.43	308.25	2.23
Code 12 Phoenix Base	Au Raw	743	0.01	1694.70	11.76	72.16	6.14
Code 12 Phoenix Base	Au 2.0m Composites (top-cut)	292	0.01	75.00	8.98	8.41	0.94
Code 13 Benu	Au Raw	1862	0.01	1685.00	11.38	45.58	4.01
Code 13 Benu	Au 2.0m Composites (top-cut)	761	0.03	1600.00	11.35	35.86	3.16
Code 14 Benu FW	Au Raw	613	0.01	186.80	8.62	9.97	1.16
Code 14 Benu FW	Au 2.0m Composites (top-cut)	234	0.04	55.20	8.62	6.80	0.79
Code 15 Kestrel	Au Raw	517	0.03	25.20	4.27	2.75	0.64
Code 15 Kestrei	Au 2.0m Composites (top-cut)	205	0.54	10.89	4.27	1.96	0.46
Code 16 Bedding East	Au Raw	2163	0.01	104.00	5.49	6.04	1.10
Code 16 Bedding East	Au 2.0m Composites (top-cut)	932	0.01	75.00	5.47	4.75	0.87
Code 17 Shallow East Dippers	Au Raw	501	0.01	290.00	14.28	82.61	5.79
Code 17 Shallow East Dippers	Au 2.0m Composites (top-cut)	224	0.12	75.00	8.05	13.31	1.65
Code 18 East Dipper	Au Raw	1570	0.01	454.00	6.86	9.64	1.41
Code 18 East Dipper	Au 2.0m Composites (top-cut)	661	0.08	52.58	6.86	5.76	0.84
Code 19 Phoenix Base Sth	Au Raw	152	0.09	29.20	5.77	4.91	0.85
Code 19 Filoenix Base Stil	Au 2.0m Composites (top-cut)	52	1.16	21.99	5.77	3.63	0.63
Code 20 Eagle	Au Raw	346	0.01	175.00	8.41	13.85	1.65
Code 20 Eagle	Au 2.0m Composites (top-cut)	128	0.80	75.00	8.01	6.82	0.85
Code 21 Allwood East	Au Raw	591	0.01	17050.00	30.70	357.33	11.64
Code 21 Allwood Last	Au 2.0m Composites (top-cut)	197	0.36	160.00	17.43	28.57	1.64
Code 22 Audax FW	Au Raw	916	0.01	180.40	3.83	7.60	1.98
COUC EE MUUDA I VY	Au 2.0m Composites (top-cut)	314	0.01	65.25	3.83	4.97	1.30
Code 23 Phoenix Base FW	Au Raw	364	0.02	47.70	6.66	6.33	0.95
COUC LO FIIOCIIIA DOSC I W	Au 2.0m Composites (top-cut)	184	0.02	32.60	6.66	5.18	0.78
Code 24 Audax Sulfide	Au Raw	98	0.02	44.90	6.87	8.27	1.20
COUC LY MUUDA JUINUE	Au 2.0m Composites (top-cut)	48	0.02	24.41	6.87	6.95	1.01
Code 25 Swan Sulfide	Au Raw	389	0.01	157.10	6.15	10.15	1.65
Code 23 Swan Sunide	Au 2.0m Composites (top-cut)	162	0.01	40.70	6.15	6.52	1.06

TABLE 14-7 DESCRIPTIVE STATISTICS OF GOLD FOR THE NORTHERN PHOENIX MODEL

Model:	1710_NPRM			Descriptive S	tatistics		
Date:	Oct-17						
Mineralized Domain	DD Variable	Number of Samples	Minimum (g/t Au)	Maximum (g/t Au)	Mean (g/t Au)	Standard Deviation	Coeff of Var
	Au Raw	144	0.05	75.00	9.00	10.76	1.20
Code 3 Phoenix HG	Au 2.0m Composites	64	0.53	47.98	8.23	7.86	0.96
	Au Raw	72	0.26	15.00	5.21	3.33	0.64
Code 5 Splay HG	Au 2.0m Composites	29	1.43	10.29	5.15	2.03	0.39
2 7 22 7 72	Au Raw	72	0.19	24.30	4.99	4.85	0.97
Code 6 Splay LG	Au 2.0m Composites	35	0.89	23.40	4.91	4.45	0.91
	Au Raw	92	0.05	33.30	7.63	6.82	0.89
Code 8 Allwood	Au 2.0m Composites	40	1.60	21.76	7.73	4.70	0.61
	Au Raw	21	0.02	17.20	5.63	5.20	0.92
Code 12 Phoenix Base	Au 2.0m Composites	12	0.02	15.63	5.85	5.07	0.87
LEWIS MINISTER	Au Raw	322	0.02	44.20	7.38	5.89	0.80
Code 13 Benu	Au 2.0m Composites	133	0.69	29.37	7.49	4.73	0.63
NO 120100127111122201	Au Raw	58	0.22	23.60	6.77	4.42	0.65
Code 14 Benu FW	Au 2.0m Composites	24	2.83	19.61	6.79	3.35	0.49
	Au Raw	46	1.24	10.40	4.69	2.10	0.45
Code 15 Kestrel	Au 2.0m Composites	27	1.80	9.23	4.75	1.73	0.36
	Au Raw	101	0.06	15.40	4.71	3.10	0.66
Code 16 Bedding East	Au 2.0m Composites	46	1.04	12.20	4.71	2.52	0.54
Code 40 Foot Plan	Au Raw	86	0.13	26.10	6.10	4.34	0.71
Code 18 East Dipper	Au 2.0m Composites	47	0.62	15.31	6.33	3.32	0.52
	Au Raw	39	0.24	22.20	5.07	5.39	1.06
Code 23 Phoenix Base FW	Au 2.0m Composites	20	0.59	20.80	5.17	4.74	0.92

Technical Report Kirkland Lake Gold December 2017 Korkland Lake Gold Mine

TABLE 14-8 DESCRIPTIVE STATISTICS OF GOLD FOR THE CENTRAL MODEL

Model:	1506_CRM			Descriptive	e Statistics		
Date:	Jun-15						
Mineralized Domain	DD Variable	Number of Samples	Minimum (g/t Au)	Maximum (g/t Au)	Mean (g/t Au)	Standard Deviation	Coeff. o Var.
Code 1 Fosterville HG	Au Raw	571	0.02	72	7.93	6.45	0.81
	Au 2.0m Composites	287	0.02	28.98	7.49	4.68	0.62
Code 2 Fosterville LG	Au Raw	6993	0	41	2.81	3.706	1.32
	Au 2.0m Composites	6556	0	41	2.82	3.667	1.30
Code 3 Phoenix HG	Au Raw	2694	0.01	104.8	8.37	8.672	1.04
	Au 2.0m Composites	1175	0.01	49.54	7.96	6.388	0.80
Code 4 Phoenix LG	Au Raw	124	0.01	27.3	4.08	4.79	1.17
	Au 2.0m Composites	75	0.01	17.5	4.33	4.23	0.98
Code 5 Splay HG	Au Raw	873	0.01	57.6	6.41	7.007	1.09
	Au 2.0m Composites	394	0.01	38.18	6.11	5.55	0.91
	Au Raw	2291	0	28.8	2.24	2.853	1.27
Code 6 Splay LG	Au 2.0m Composites	1875	0	24.6	2.04	2.53	1.24
Code 7 Kite	Au Raw	298	0.42	28.6	8.02	5.96	0.74
Code / Kite	Au 2.0m Composites	145	1.21	23.85	7.73	4.39	0.57
	Au Raw	595	0.14	24.2	5.03	2.86	0.57
Code 10 Vulture	Au 2.0m Composites	313	0.45	19.9	4.97	2.35	0.47
	Au Raw	1635	0	15.33	2.44	2.69	1.10
Code 11 Harrier OP	Au 2.0m Composites	1574	0	15.33	2.41	2.66	1.10
Code 12 Phoenix Base	Au Raw	184	0.01	52.4	10.51	8.8	0.84
Code 12 Phoenix Base	Au 2.0m Composites	84	0.01	32.4	10.08	7.08	0.70
C-1-40 C D'	Au Raw	245	0.06	59.4	7.52	6.5	0.86
Code 18 East Dipper	Au 2.0m Composites	114	0.32	24.61	7.25	4.06	0.56

A listing of composite statistics is provided in Table 14-9 for the (1712_SPRM, 1710_NPRM and 1506 CRM) Phoenix and Central Models.

TABLE 14-9 COMPOSITE STATISTICS BY COMPOSITE LENGTH CLIPPED TO THE MODEL EXTENTS FOR THE CENTRAL MODEL (1506_CRM), SOUTHERN PHOENIX (1712_SPRM) AND NORTHERN PHOENIX MODEL (1710_NRM).

Model	Composite Length	Number	% of Comps	Mean length (m)	Mean Grade (g/t Au)
	< 1.0m	936	15.3%	0.62	13.72
	≥ 1.0 and <2.0m	1,643	26.9%	1.38	20.73
1712_SPRM	≥ 2.0m	3,526	57.8%	2.11	23.4
	Total	6105	100%	1.68	21.2
	< 1.0m	65	13.5%	0.61	4.53
	≥ 1.0 and <2.0m	132	27.5%	1.35	5.17
1710_NPRM	≥ 2.0m	283	59.0%	2.11	7.14
	Total	480	100%	1.7	6.24
	< 1.0m	86	2.1%	0.68	4.92
	≥ 1.0 and <2.0m	572	14.0%	1.34	7.14
1506_CRM	≥ 2.0m	3,431	83.9%	2.03	0.56
	Total	4089	100%	1.91	1.57

Variography

Modeling of the spatial continuity (variography) of gold for the Harrier and Lower Phoenix Models were carried out using Supervisor™ software (Figure 14-4), while the variography for the Central and Morthern Models was calculated using MineSight™ software. Sulfur is estimated in each domain as a variable using the domain geology shape, with a general sulfur variogram employed in the Northern and Central Models. For the Sulfur estimation in the Lower Phoenix Model, Sulfur variography corresponding to the Au domains is employed, utilizing the available Sulfur data. Non-Carbonate Carbon (NCC) is estimated using two broad domain shapes, encompassing east and west geometries, using a general variogram structure. Gold grade continuity is the highest along structures contained within parallel/oblique sedimentary host rock bedding contrasts. Within the parallel/oblique bedding zones it is common to see variogram structure ranges of up to 80m. In oblique/oblique host sedimentary settings the spatial grade continuity is less consistent, giving rise to variogram structures with ranges of less than 40m. Therefore, high level mining decisions (reserve block and capital development) are made where drill spacing is at least 50m x 50m and a decision to mine a given level is only made on an indicated resource with a drill spacing of at least 25m x 25m (sulfide hosted gold resources only). A similar rationale currently exists for confidence around the development and extraction of the visible gold quartx hosted style mineralization.

FIGURE 14-4 VARIOGRAM OF THE MAJOR DIRECTION OF THE HIGH GRADE SUB-DOMAIN OF DOMAIN=11 SWAN DOMAIN

Variogram parameters used for gold in the Northern Block Model (1201_NRM) estimation are listed in Table 14-10.

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine

TABLE 14-10 VARIOGRAM PARAMETERS USED FOR NORTHERN MODEL GOLD ESTIMATION

Fosterville							GOI	D VAR	OGRAN	Λ ΡΔΒΔ	METER	TARIF						
1201_NRM							001	D VAIN	OUIMI	T AILA		IAULL						
AREA	Z Rotation	X Rotation	Y Rotation	Nugget	1st Rotation Spherical Sill	Range (y)	Range (x)	Range (2)	2nd Rotation Spherical Sill	Range (y)	Range (x)	Range (z)	3rd Rotation Spherical Sill	Range (y)	Range (x)	Range (z)	Total Variance	Nugget
	me	ds rotat	ion															
D01 Fosterville LG	0	20	70	3.7	5.7	7	5	5	1.6	20	20	10	3.2	48	55	15	14.20	26%
D02 Fosterville HG	0	20	70	3.7	5.7	7	5	5	1.6	20	20	10	3.2	48	55	15	14.20	26%
D03 Phoenix HG	355	20	50	20.0	10.0	10	15	5	21	45	25	10					51.00	39%
D06 Splay LG	0	20	60	7.0	1.0	10	10	5	11.8	30	20	10					19.80	35%
D07 Griffon	0	20	60	20.0	10.0	10	15	5	21	45	25	10					51.00	39%

- Variogram parameters used for gold in the Southern Phoenix Block Model (1712_SPRM) estimation are listed in Table 14-11.
- Variogram parameters used for gold in the Northern Phoenix Block Model (1710_NPRM) estimation are listed in Table 14-12.
- Variogram parameters used for gold in the Central Block Model (1506_CRM) estimation are listed in Table 14-13.

Technical Report
December 2017

Kirkland Lake Gol
Fosterville Gold Min

TABLE 14-11 VARIOGRAM PARAMETERS USED FOR THE SOUTHERN PHOENIX MODEL (1712_SPRM) GOLD ESTIMATION

Fosterville 1712_SPRM (Southern Phoenix Model)						GOLD	VARIOGRAM	PARAMETER	TABLE					
AREA	Z Rotation	X Rotation	Y Rotation	Nugget	1st Rotation Spherical Sill	Range (y)	Range (x)	Range (z)	2nd Rotation Spherical Sill	Range (y)	Range (x)	Range (z)	Total Variance (Total Sill)	Nugget
	- 8	meds rotation	,											
Au Waste	50	20	50	20	10	10	15	5	21	45	25	10	51	39%
D01 Audax	42	24	-33	0.25	0.59	46.5	9.5	5	0.16	50	52	10	1	25%
D03 Phoenix HG	12	28	-131	0.24	0.44	7	5.5	8	0.32	40	20.5	10	1	24%
D05 Splay HG	-177	-29	107	0.25	0.31	7	7.5	5	0.44	99.5	37	10	1	25%
D06 Splays LG	13	24	-129	0.29	0.71	50	129	10					1	29%
D08 Allwood	15	17	-122	0.18	0.15	6	8.5	5	0.67	51	22	10	1	18%
D09 Vertical	3	20	-85	0.07	0.28	2	2.5	3.5	0.65	40	30.5	10	1	7%
D09 Vertical High Grade Sub-domain	-9	18	-64	0.32	0.38	3	2	1	0.29	56.5	27.5	10	1	32%
D10 Benu W1	16	13	-142	0.54	0.17	1	1.5	1	0.29	16	18	10	1	54%
D11 Swan	168	-15	-48	0.5	0.5	45	24	14	2				1	50%
D11 Swan High Grade Sub-domain	23	42	-161	0.57	0.1	56	3	3	0.32	103.5	35.5	15	1	57%
D12 Phoenix Base	7	11	-147	0.45	0.28	5	3.5	5	0.27	85.5	60.5	10	1	45%
D13 Benu	16	26	-124	0.4	0.24	6	5.5	3.5	0.36	75.5	50	10	1	40%
D14 Benu FW	25	17	-149	0.25	0.1	8	4.5	5	0.65	181.5	86.5	10	1	25%
D15 Kestrel	-5	30	-90	0.39	0.14	6.5	3	5	0.47	56.5	40	10	1	39%
D16 Bedded East	-8	39	-77	0.18	0.39	9	8.5	5	0.43	38	36.5	10	1	18%
D17 Shallow East Dippers	-175	0	165	0.36	0.64	32.5	10	6					1	36%
D18 East Dippers	11	14	-43	0.21	0.08	2.5	2	2	0.71	47.5	20	10	1	21%
D19 Phoenix Base South	-14	8	-125	0.12	0.44	6	6	5	0.44	54.5	15	10	1	12%
D20 Eagle	24	-7	167	0.13	0.44	5	3.5	5	0.44	47.5	20.5	10	1	13%
D21 Allwood East	7	40	-57	0.12	0.44	6	6	5	0.44	54.5	15	10	1	12%
D22 Audax FW	11	19	-36	0.43	0.35	10.5	4.5	5	0.22	65.5	12	10	1	43%
D23 Phoenix Base FW	-5	0	-120	0.36	0.07	5	4.5	5	0.57	45.5	30.5	10	1	36%
D24 Audax Sulfide	42	24	-33	0.25	0.59	46.5	9.5	5	0.16	50	52	10	1	25%
D25 Swan Sulfide	8	29	-138	0.16	0.69	64.5	5	10	0.15	69.5	13	10	1	16%

Technical Report
December 2017

Kirkland Lake Gol
Fosterville Gold Min

TABLE 14-12 VARIOGRAM PARAMETERS USED FOR THE NORTHERN PHOENIX MODEL (1710_NPRM) GOLD ESTIMATION

Fosterville														
1710_NPRM (Northern Phoenix Model)						GOLD	VARIOGRAM	PARAMETER	TABLE					
AREA	Z Rotation	X Rotation	Y Rotation	Nugget	1st Rotation Spherical Sill	Range (y)	Range (x)	Range (z)	2nd Rotation Spherical SIII	Range (y)	Range (x)	Range (z)	Total Variance	Nugget
		meds rotation	n											
Au Waste	50	20	50	20.00	10	10	15	5	21	45	25	10	51	39%
D03 Phoenix HG	-20	-11	-131	0.27	0.47	51	20	8	0.26	170	40	10	1	27%
D05 Splay HG	56	72	-147	0.11	0.41	9	13	10	0.48	79	65	14	1	11%
D06 Splays LG	-3	19	-111	0.21	0.58	26	22	14	0.22	109	30	20	1	21%
D08 Allwood	10	17	-122	0.20	0.8	62	18	8					1	20%
D12 Phoenix Base	15	9	-120	0.25	0.26	7	6	3	0.49	22	6	8	1	25%
D13 Benu	-9	-18	-116	0.70	0.26	32	8	5	0.03	51	25	10	1	71%
D14 Benu FW	75	49	-168	0.37	0.63	53	35	10					1	37%
D15 Kestrel	-17	38	-71	0.16	0.84	25	23	11					1	16%
D16 Bedded East	4	-9	-65	0.18	0.62	30	12	11	0.19	155	52	11	1	18%
D18 East Dippers	-14	19	-36	0.13	0.55	35	22	10	0.32	223	80	20	1	13%
D23 Phoenix Base FW	-23	-24	-129	0.43	0.57	75	10	5					1	43%

TABLE 14-13 VARIOGRAM PARAMETERS USED FOR THE CENTRAL MODEL (1506_CRM) GOLD ESTIMATION

Fosterville														
1506_CRM (Central Model)						GOLD	VARIOGRAM	PARAMETER	RTABLE					
AREA	Z Rotation	X Rotation	Y Rotation	Nugget	1st Rotation Spherical Sill	Range (y)	Range (x)	Range (z)	2nd Rotation Spherical Sill	Range (y)	Range (x)	Range (z)	Total Variance	Nugget
D01 Fosterville HG	116	meds rotation	-50	3.7	5.7	7	5	5	4.8	48	55	15	14.2	26%
		65	70		70.00			-		48		200	1000	
D02 Fosterville HG	0	20	72.2	3.7	5.7	7	5	5	4.8		55	15	14.2	26%
D03 Phoenix HG	10	30	50	20	10	10	15	5	21	45	25	10	51	39%
D03 Phoenix HG var 2	260	-50	5	20	10	10	15	5	21	45	25	10	51	39%
D04 Phoenix LG	0	20	50	2.4	1	10	15	5	2.65	35	25	10	6.05	40%
D05 Splay HG	0	20	70	7	1	10	10	5	11.8	30	20	10	19.8	35%
D05 Splay HG var 2	60	46	30	7	1	10	10	5	11.8	30	20	10	19.8	35%
D06 Splay LG	0	20	70	7	1	10	10	5	11.8	30	20	10	19.8	35%
D06 Splay LG var 2	260	-50	5	7	1	10	10	5	11.8	30	20	10	19.8	35%
D07 Kite	5	25	50	7	1	10	10	5	11.8	30	20	10	19.8	35%
D07 Kite var 2	270	-45	5	7	1	10	10	5	11.8	30	20	10	19.8	35%
D10 Vulture	10	20	50	2	2	25	20	5	2.5	60	35	8	6.5	31%
D10 Vulture var 2	91	50	-10	2	2	25	20	5	2.5	60	35	8	6.5	31%
D11 Harrier OP	350	0	75	2.52	2.02	10	5	5	2.9	28	30	13	7.47	34%
D11 Harrier OP var 2	55	70	30	2.52	2.02	10	5	5	2.9	28	30	13	7.47	34%
D12 Phoenix Base	57	35	5	20	10	10	15	5	21	45	25	10	51	39%
D12 Phoenix Base var 2	50	45	30	20	10	10	15	5	21	45	25	10	51	39%
D18 East Dippers	358	15	-47	0.06	0.1	125	50	25					0.16	38%
D18 East Dippers var 2	338	53	-58	0.06	0.1	125	50	25					0.16	38%

14.1.4 RESOURCE MODELING

Block Models

For reasons of data handling, the Central Area was divided into four separate block models – Northern, Central, Southern Phoenix and Northern Phoenix, with the following extents and block dimensions contained within (Table 14-14) (Figure 14-8).

TABLE 14-14 CENTRAL AREA BLOCK MODEL DIMENSIONS

Parameter	Northern	Central	Northern Phoenix	Southern Phoenix
Northing Min (m)	8,250	6,000	7,450	6,000
Northing Max (m)	10,250	8,250	8,700	7,450
Easting Min (m)	1,400	1,400	1,400	1,300
Easting Max (m)	2,100	2,100	1,850	1,850
RL Max (m)	5,200	5,200	4,600	4,600
RL Min (m)	4,800	4,600	4,150	3,700
X direction m (East)	2	2	2	2
Y direction m (North)	10	10	10	10
Z direction m (Vertical)	5	5	5	5

All models use Ordinary Kriging to interpolate grades.

Top Cuts

Historically, gold grades which were predominantly associated with disseminated sulfides were top cut to 75 g/t Au in order to limit the influence of a low number of high-grade intercepts. This top cut approach has been applied to the Northern, Central and Northern Phoenix models, whereas an increasing frequency of high-grade composites associated with visible gold intersections evident in the Southern Phoenix model (Table 14-15) has driven ongoing review of top cut values and methodology.

TABLE 14-15 COMPARISON BETWEEN NUMBER OF COMPOSITES PRESENT ABOVE THE CUT-OFF VALUE FROM 2014 TO DECEMBER 2017 FOR THE SAME RESOURCE AREA

	2m Composite Grade Cut-off (g/t Au)								
Model Year	50 g/t	100 g/t	200 g/t	500 g/t	1000 g/t	1600 g/t			
		Nur	nber of Comp	osites above Gra	de Cut-off				
2014	20	10	5	1					
2015	75	46	23	8	3	1			
2016	143	84	48	23	13	2			
2017	235	154	97	48	20	11			

Top cut values are determined using analysis of the Au histograms, mean and variance plots (Figure 14-6) and log probability plots (Figure 14-7) in the geostatistical package Supervisor™. In consultation with SRK the method of Au top cut application was reviewed mid-2017, resulting in the use of an outlier range restriction with an over-arching high Au grade top cut value. This composite range restriction methodology (Table 14-15) limits the influence of the very high-grade values by allowing them to be utilized for the estimation for model blocks within a specified range, while blocks beyond the range utilize the specified outlier value as a top cut. An overarching top cut value of 1,600 g/t Au was also applied to limit the influence of extreme grades in the 1712_SPRM model.

This methodology was combined with the application of sub domains, with the spatial differentiation producing a more consistent Au grade distribution. This allows separate analysis and estimation of the sub domain and the remaining original domain, as well as the application of different outlier range restriction values for the spatially distinct populations. This new approach was validated with a model vs mill reconciliation performance.

Au composite top cuts will be revised on an ongoing basis as data populations increase through additional drilling and mining in the visible gold environments of the Lower Phoenix Area.

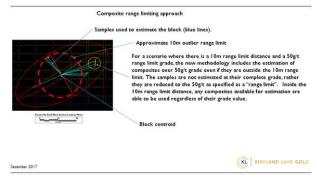


FIGURE 14-5 COMPOSITE RANGE LIMITING

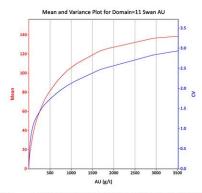


FIGURE 14-6 MEAN AU (G/T) AND CO-VARIANCE PLOT OF THE AU OF DOMAIN=11 SWAN

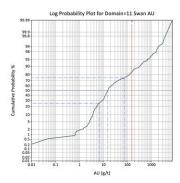


FIGURE 14-7 LOG PROBABILITY PLOT FOR THE AU OF THE DOMAIN=11 SWAN

Search Criteria

Gold, Antimony, Sulfur and NCC grades are interpolated into blocks meeting the following criteria:

- Greater than 1% of the block volume is inside one of the domain envelopes;
- Blocks within one of the domain solids; and
- Blocks whose ellipsoid includes at least one composite, depending on the particular mineralized envelope.

The search ellipsoid geometries were based on optimized variogram models, also taking into account the geology and drill spacing of the relevant zone so that a block could 'see' at least the nearest sections along strike and holes up or down-dip.

Only composites meeting the following criteria are used to interpolate any one block, where:

- . Composites (to a maximum of 35) within the search ellipsoid dimensions and search area limits;
- Where more than 35 composites lie within the search ellipsoid, the closest 35 samples in anisotropic ellipsoid space are used:
- There was no quadrant search employed in the 1710_NPRM Model, 1712_SPRM Model or the 1506_CRM Model. A maximum of 10 composites per quadrant were estimated in a four sector quadrant search in the 1201_NRM Model (Table 14-19);
- Codes of both the composite and the block were matched by correlating the coded composite item with the coded block model item; and
- A maximum of ten composites can be taken from any single drill hole.

Technical Report
December 2017

Kirkland Lake Gold
Posterville Gold Mine

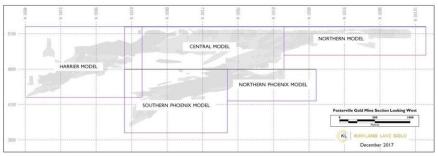


FIGURE 14-8 LONGITUDINAL PROJECTION SHOWING NORTHERN, CENTRAL AND HARRIER MODEL EXTENTS AS OF DECEMBER 31, 2017

Technical Report December 2017

Kirkland Lake Gold

In order to optimize the search ellipsoids used for interpolation, variogram fans were calculated and analyzed. The variogram structure with the lowest nugget and longest range that was concordant with known geological trends or interactions was utilized to dictate the search ellipsoid. A Kriged 'de-bug' search ellipsoid was also created in MineSightTM on selected domains for the variogram to be used allowing visual inspection of the composites and Kriging weights calculated for the block at the center of the ellipsoid.

Search ellipsoids in Figure 14-9 show the maximum range extents that composites were employed to estimate a block. Range extents for the 1712_SPRM Model can be seen in Table 14-16, with the extents for the 1710_NPRM Model in Table 14-17. Search routines used to interpolate blocks in the model are a combination of a broad extensive searches based on a low sample support estimate combined with an overprint of a tighter estimation with a maximum search distance no greater than the range calculated in the variogram model.

The majority of the domains in the 1712_SPM and 1710_NPRM model have a moderate southerly plunge, following the observed mineralized shoot geometry resulting from the intersection of the main fault structures with secondary splay faults as well as the southerly plunging fold hinges. An example of the search direction in the 1712_SPRM following the observed structural interactions can be seen in Figure 14-9, which shows the search ellipsoid for DOMAIN=11 Swan plunging on a similar orientation to the footwall intersection with the Benu ELQ Fault.

The resultant block models are tightly constrained by wireframe envelopes derived from detailed geological interpretation and modeling of the mineralized zones. This provides the vital basic geological control over the computer-generated grade estimations. A section through the block model is included in Figure 14-11.

TABLE 14-16 SEARCH PARAMETERS FOR THE SOUTHERN PHOENIX RESOURCE MODEL (1712_SPRM)

1712 SPRM (Southern Phoenix model)			SOUTHERN	EARCH PARA				
DOMAIN	y axis (°)	× axis (*)	z axis (°)	min samples 1st search	max samples 1st search	max samples per hole	Outlier range restriction grade (Au g/t)	Outlier restriction range (m)
	s	earch distanc	ce	sampl	e number dej	finition		
Au Waste	200	200	50	1	35	4	5	5
D01 Audax first search	100	100	30	1	35	10	700	5
D01 Audax second search	50	50	30	4	35	10	700	5
D01 Audax third search	30	20	30	2	35	10	700	5
D03 Phoenix HG	35	20	30	1	35	10	75	5
D05 Splay HG first search	60	50	30	1	35	10	75	5
D05 Splay HG second search	35	20	30	1	35	10	75	5
D06 Splays LG first search	75	55	30	1	35	10	75	5
D06 Splays LG second search	40	20	20	1	35	10	75	5
D08 Allwood	50	30	10	1	35	10	75	5
D09 Vertical first search	40	30	30	1	35	6	40	5
D09 Vertical second search	30	10	20	1	35	6	40	5
D09 Vertical High Grade Sub-domain	20	10	20	1	35	6	850	5
D10 Benu W1	20	15	30	1	35	10	100	5
D11 Swan first search	100	70	30	1	35	4	100	10
D11 Swan second search	40	20	10	1	35	4	300	20
D11 Swan High Grade Sub-domain	30	20	10	4	35	10		
D12 Phoenix Base	45	25	30	1	35	10	75	5
D13 Benu first search	100	70	20	1	35	10		
D13 Benu second search	30	20	10	2	35	10		
D14 Benu FW	40	30	30	1	35	10	75	5
D15 Kestrel	50	30	30	1	35	6	75	5
D16 Bedded East first search	100	80	40	1	35	10	75	5
D16 Bedded East second search	40	20	20	1	35	10	75	5
D17 Shallow East Dippers first search	100	50	60	1	35	10	75	5
D17 Shallow East Dippers second search D18 East Dippers first search	30 60	10 40	30 50	1	35 35	10	75 75	5
D18 East Dippers rirst search D18 East Dippers second search	40	20	30	1	35	10	75	5
	30		30	1	337	173	75	5
D19 Phoenix Base South D20 Eagle	35	20	30	1	35	10	75	5
D21 Allwood East	40	30	30	1	35	10	160	5
D22 Audax FW	30	20	30	1	35	10	75	5
D23 Phoenix Base FW	40	30	30	1	35	10	75	5
D24 Audax Sulfide first search	100	100	40	1	35	10	1.0	150
D24 Audax Sulfide second search	30	30	40	1	35	10		
D25 Swan Sulfide first search	80	80	40	1	35	4		
D25 Swan Sulfide second search	40	40	40	1	35	4		
- 22 - 1.1. Junior second search								

TABLE 14-17 SEARCH PARAMETERS FOR THE NORTHERN PHOENIX RESOURCE MODEL (1710_NPRM)

1710_NPRM (Northern Phoenix model)			SEA	RCH PARAM	METER TABLE			
DOMAIN	y axis (*)	× axis (°)	z axis (°)	min. samples	max. samples	max. samples per hole	Outlier range restriction grade (Au g/t)	Outlier search distance (m)
	sec	rch distance		sampl	le number de	finition		
Au Waste	200	200	50	1	35	10	5	10
D03 Phoenix HG	50	40	20	2	35	10	30	40
D05 Splay HG first search	140	120	50	1	35	10		
D05 Splay HG second search	60	50	20	1	35	10		
D06 Splays LG	80	60	40	2	35	10	15	40
D08 Allwood first search	120	100	30	1	35	10		
D08 Allwood second search	40	20	20	1	35	10		
D13 Benu first search	130	70	40	1	35	10		
D13 Benu second search	90	30	20	1	35	10		
D13 Benu third search	50	20	10	3	35	3		
D14 Benu FW	60	50	30	1	35	10		
D15 Kestrel	30	25	15	1	35	10		
D16 Bedded East	50	30	15	1	35	10		
D18 East Dippers first search	80	60	40	1	35	10		
D18 East Dippers second search	30	40	10	1	35	10		
D23 Phoenix Base FW	40	20	20	1	35	10		

TABLE 14-18 SEARCH PARAMETERS FOR THE CENTRAL MODEL (1506_CRM)

1506_CRM (Central model)		SEARCH PARAMETER TABLE									
DOMAIN	y axis ⁰	× axis o	z axis ^o	min samples	max samples	max samples per hole	Outlier grade cut (Au g/t)	Outlier search distance			
	S	earch distant	e	sample	number de	finition					
D01 Fosterville HG first search	80	30	20	2	35	4					
D01 Fosterville HG second search	80	20	20	4	35	4					
D02 Fosterville HG first search	160	160	80	2	35	4					
D02 Fosterville HG second search	80	80	50	8	35	4					
D03 Phoenix HG first search	70	50	40	2	35	2	30	40			
D03 Phoenix HG second search	50	20	20	4	35	2	30	40			
D04 Phoenix LG first search	85	75	40	2	35	4					
D04 Phoenix LG second search	70	40	40	8	35	4	10	40			
D05 Splay HG first search	80	55	45	1	35	4	24	40			
D05 Splay HG second search	50	40	20	4	35	4	24	40			
D06 Splay LG first search	110	90	40	2	35	4	12	40			
D06 Splay LG second search	50	20	20	4	35	4	20	40			
D07 Kite first search	80	60	30	1	35	4	12	40			
D07 Kite second search	50	30	30	4	35	4	12	40			
D10 Vulture first search	115	90	45	1	35	2					
D10 Vulture second search	80	30	20	3	35	2					
D11 Harrier OP first search	100	100	80	6	35	4					
D11 Harrier OP second search	40	30	20	4	35	4					
D12 Phoenix Base first search	80	50	40	1	35	2	25	20			
D12 Phoenix Base second search	60	30	30	5	35	2	25	20			
D18 East Dippers first search	110	80	30	1	35	2	20	17			
D18 East Dippers second search	80	40	20	3	35	2					

TABLE 14-19 SEARCH PARAMETERS FOR THE NORTHERN MODEL (1201_NRM)

1201_NRM (Northern Model)			SEARC	H PARAMETER	TABLE		
DOMAIN	y axis °	× axis ⁰	z axis ^o	min. samples 1st search	max. samples 1st search	Quadrant sample selection	max. samples per hole
2	1st/3	ard search dist	tance	sampl	e number def	inition	
D01 Fosterville HG first search	100	100	50	2	35	10	4
D01 Fosterville HG second search	40	40	20	5	35	10	4
D02 Fosterville LG first search	100	100	80	6	35	10	4
D02 Fosterville LG second search	80	80	50	8	35	10	4
D03 Phoenix HG first search	120	120	50	3	35	10	4
D03 Phoenix HG second search	60	50	30	8	35	10	4
D06 Splays LG first search	120	120	50	1	35	10	4
D06 Splays LG second search	100	100	50	8	35	10	4
D07 Griffon	80	80	50	8	35	10	4

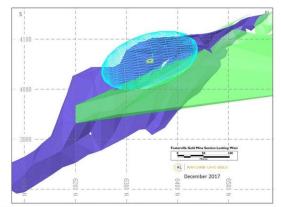


FIGURE 14-9 SEARCH ELLIPSOID FOR DOMAIN=11 SWAN (PURPLE) REFLECTING THE PLUNGE INTERSECTION WITH THE BENU ELQ FAULT (GREEN)

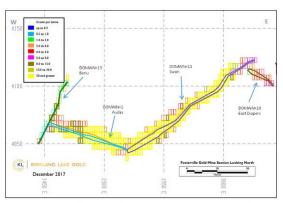


FIGURE 14-10 6500mN CROSS-SECTION OF THE PHOENIX MODEL SHOWING GOLD GRADES

The above figure shows DOMAIN=1 Audax, DOMAIN=11 SWAN, DOMAIN=13 Benu and DOMAIN=16 East Dippers mineralization envelopes.

Model Validation

There are a number of methods employed to validate the block model estimate, including the generation of swath plots for each mineralized domain, statistical comparisons of the mean of each domain against the top cut composite mean, and the diluted stope tonnage, grade and metal comparison with mill reconciled production data. Visual comparison of the estimated block grades is also carried out by displaying the blocks colored by grade against the drill hole composite data as well as the sludge and face samples.

The comparison of the model mean block grade of each mineralized domain against the top cut composite mean grade is shown in Table 14-20. For most of the domains the correlation is deemed acceptable, with the under call evident in some of the minor domains due to the low data support in inferred areas of the resource.

TABLE 14-20 MINERALIZED DOMAIN MEAN GRADE COMPARISON FOR 1712_SPRM

Domain Name	Model Block Mean Grade (g/t Au)	Top Cut Declustered Composite Mean Grade (g/t Au)	Variance %
D01 Audax	33.02	34.39	-4%
D03 Phoenix HG	7.81	6.79	15%
D05 Splay HG	5.89	5.74	3%
D06 Splays LG	4.72	5.33	-11%
D08 Allwood	5.32	5.30	0%
D09 Vertical	36.10	33.1	9%
D10 Benu W1	22.69	22.67	0%
D11 Swan	95.06	89.4	6%
D12 Phoenix Base	9.18	8.75	5%
D13 Benu	9.99	9.58	4%
D14 Benu FW	9.18	8.59	7%
D15 Kestrel	4.39	4.28	2%
D16 Bedded East	5.47	5.05	8%
D17 Shallow East Dippers	4.82	7.57	-36%
D18 East Dippers	6.11	5.54	10%
D19 Phoenix Base South	5.77	5.93	-3%
D20 Eagle	8.57	8.62	-1%
D21 Allwood East	19.40	18.2	7%
D22 Audax FW	3.69	3.73	-1%
D23 Phoenix Base FW	6.63	6.20	7%
D24 Audax Sulfide	4.89	5.53	-12%
D25 Swan Sulfide	6.93	6.66	4%

An example swath plot for Domain=11 Swan is shown in Figure 14-11. The high variability of the sample grades is evident across the orebody with some degree of smoothing evident in the block model estimate, though overall the estimate correlates well with the composite data.

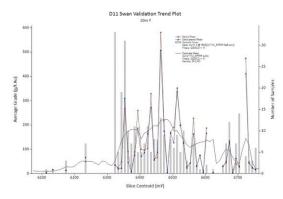


FIGURE 14-11 EXAMPLE SWATH PLOT BY NORTHING SLICES FOR DOMAIN=11 SWAN

Bulk Density

To supplement the ongoing program of diamond drill core bulk density measurements, additional analysis was undertaken during 2013 and again in 2017 of bulk density values for grab samples from known underground production locations. Bulk density measurements conducted on production samples via a water displacement method (Lipton, 1997) shows the average densities of mineralized material at 2.79t/m³, Stibnite material at 3.20t/m³ and waste material at 2.76t/m³ (Table 14-21). This data is reflective of the diamond drill core data seen in Figure 14-12, where a total of 2,157 samples of mineralized and un-mineralized samples were charted against their respective reduced level. Figure 14-13 shows the bulk density values for only the mineralized diamond drill core samples. Based on the observed trends the current model density values have been deemed appropriate.

TABLE 14-21 BULK DENSITY SAMPLES FROM UNDERGROUND PRODUCTION LOCATIONS

Source	Reduced Level (m)	Description	Calculated Density (t/m³)
O4640	4640	Mineralized	2.77
04640	4640	Mineralized	2.68
C4480	4480	Mineralized	2.75
C4480	4480	Mineralized	2.94
C4480	4480	Stibnite	3.52
C4460	4460	Mineralized	2.84
C4460	4460	Mineralized	2.75
C4460	4460	Stibnite	3.00
C4460	4460	Stibnite	3.07
C4460	4460	Waste	2.67
C4460	4460	Waste	2.77
C4480	4480	Waste	2.82
C4480	4480	Waste	2.79
04640	4640	Waste	2.70
04640	4640	Waste	2.79

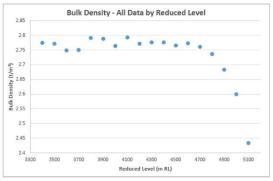
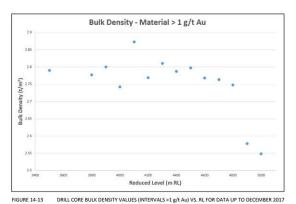


FIGURE 14-12 DIAMOND DRILL CORE BULK DENSITY VALUES VS. REDUCED LEVEL FOR DATA UP TO DECEMBER 2017



Bulk density within the oxide zone from surface to base of complete oxidation is determined from RC drilling, and test work assigns it a value of 2.40t/m³. Fresh rock is then divided into four zones determined by test

work carried out on the diamond drill core. The three categories are based on reduced level with transitional material between fresh and oxide above 5050mRL assigned 2.56f/m³, fresh material between 5050mRL and 5000mRL assigned 2.64t/m³, fresh material between 5000mRL and 4500mRL assigned 2.72t/m³ and fresh material below 4500mRL assigned 2.72t/m³ (Figure 14-14).

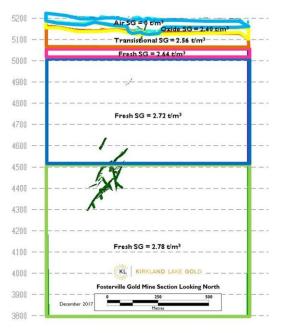


FIGURE 14-14 BULK DENSITY VALUES USED IN RESOURCE MODELS MINERAL RESOURCE CLASSIFICATION

14.1.5 MINERAL RESOURCE CLASSIFICATION

The Mineral Resource estimates were generally classified according to the following parameters:

- Areas that have proximal underground development (as a draw point to a stoping block) were
 classified as Measured Mineral Resources with the Resources having adjacent mapping, face sampling
 and sludge sampling through the area. This does not extend to the material in stoping blocks below
 the lowest developed level in the area. This also infers that diamond drilling has been completed to a
 maximum spacing of at least 25m x 25m.
- Areas drilled from a spacing of 50 x 50m to a spacing of 25m x 25m were classified as Indicated Mineral Resources.
- Areas drilled to spacing wider than 50m x 50m were classified as Inferred Mineral Resources.

These parameters may vary subject to the level of geological confidence in specific areas. Visible gold Indicated Mineral Resources generally required a spacing of no less than $25m \times 25m$.

 Other factors used in the verification of mineral resources at FGM are; grade stationarity, slope of regression, grade continuity and geological setting.

Figure 14-15 depicts Mineral Resource classifications encompassing the Central and Phoenix Areas as at $31^{\rm st}$ December 2017.

14.1.6 FURTHER WORK FOR 2018

The resource models have been improved in the December 2017 in two main areas:

- The treatment of high-grade composite data with the use of a composite range limit.
- The increased use of sub-domaining of high-grade shoots within mineralized domains.

For the remainder of the year further refinement will be undertaken to subdomain the high-grade lenses in order to improve local scale estimates and bolster the confidence around the model's ability to estimate resources reliability at a monthly production resolution.

Work is planned to be undertaken include

- Refinement of sample search criteria through comprehensive Quantitative Kriging Neighborhood Analysis for each mineralized domain
- Optimization of drill support for increases in local estimation accuracy through drill spacing studies
- Collation and analysis of multi element analysis data to assess potential for further segregation of data populations to refine sub-domaining and improve grade stationarity

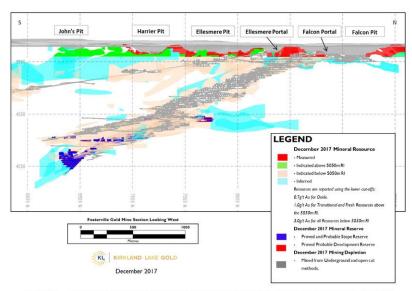


FIGURE 14-15 LONGITUDINAL PROJECTION SHOWING MINERAL RESOURCES CLASSIFICATION IN THE NORTHERN, CENTRAL AND LOWER PHOENIX MODELS

14.1.7 RESULTS

Results for the Mineral Resources contained in the Central Area (Central, Phoenix and Northern Model) are provided in Table 14-1.

14.2 HARRIER AREA

The Harrier UG Area sits within the bounds of the Southern Model Area and replaced the Wirrawilla region in 2009, and does not encompass the Daley's Hill Open Pit region, which is reported in the Southern Model Area. Project definitions and model boundaries were altered to coincide with the transition of the Harrier UG project from Exploration to Mine Geology (Figure 14-1).

In late 2009 a detailed review of the information gathered was undertaken to determine mining risk. Analogues derived from systems developed to understand Central Area geology were applied to the Harrier UG dataset. While fundamental Fosterville geological principles such as the larger faulting systems, stratigraphy and plunge were found to be sound; the inter-relationship between structure and grade required further investigation. Further discussion of the Harrier geological domains is covered in Section 7.5.2.

14.2.1 DRILLING DATA

Compositing

The same compositing procedure was used for the Harrier model as employed in the Phoenix models (detailed in section 14.1.3).

The Harrier Model (1712_HRM) has used a total of 653 drill holes with 8 RC (1%) and 645 diamond holes (99%).

Table 14-22 includes descriptive model statistics for the Harrier Model (1712_HRM) and Table 14-23 includes composite length statistics for the composite file.

Technical Report Kirkland Lake Gold December 2017 Fosterville Gold Mine

TABLE 14-22 DESCRIPTIVE STATISTICS FOR THE HARRIER MODEL (1712_HRM)

Model:	1712_HRM			D			
Date:	Dec-17			Descriptive St	atistics		
Mineralized Domain	DD Variable	Number of	Minimum	Maximum	Mean	Std.	Coeff of Va
		Samples	(g/t Au)	(g/t Au)	(g/t Au)	Dev.	OI Va
Cada C Calau I C	Au Raw	672	0.01	27.10	3.59	4.10	1.14
Code 6 Splay LG	Au 2.0m Composites (top cut)	354	0.03	24.60	3.24	3.47	1.07
Code 20 Harrier	Au Raw	1172	0.01	45.30	6.99	5.75	0.82
Code 20 Harrier	Au 2.0m Composites (top cut)	496	0.28	20.00	6.92	4.35	0.63
Code 21 Harrier Base	Au Raw	546	0.01	879.00	15.84	61.42	3.88
Code 21 Harrier Base	Au 2.0m Composites (top cut)	183	0.02	75.00	12.14	15.28	1.26
0. 4. 22 11111.	Au Raw	231	0.08	300.60	6.85	22.55	3.29
Code 22 Harrier Link	Au 2.0m Composites (top cut)	98	0.12	73.57	6.16	10.16	1.65
	Au Raw	32	1.02	26.90	7.86	4.57	0.58
Code 23 Harrier E Dipper	Au 2.0m Composites (top cut)	15	3.99	10.44	7.12	2.23	0.31
	Au Raw	644	0.03	34.68	7.35	5.68	0.77
Code 24 Harrier HW	Au 2.0m Composites (top cut)	278	0.08	20.91	7.25	4.36	0.60
	Au Raw	644	0.01	1033.00	7.80	41.18	5.28
Code 25 Harrier Splay	Au 2.0m Composites (top cut)	271	0.30	75.00	6.08	5.55	0.91
1212 S2010H	Au Raw	193	0.18	153.80	8.60	13.58	1.58
Code 29 N Dipper	Au 2.0m Composites (top cut)	83	0.27	50.00	7.54	6.94	0.92
AL AMERICA	Au Raw	1187	0.01	29.80	6.53	5.21	0.80
Code 30 Osprey	Au 2.0m Composites (top cut)	542	0.01	27.32	6.43	4.37	0.68
	Au Raw	80	0.02	45.70	8.21	8.00	0.97
Code 31 Osprey Base	Au 2.0m Composites (top cut)	34	0.60	27.62	7.65	5.59	0.73
	Au Raw	361	0.07	28.00	6.18	4.14	0.67
Code 32 Osprey Link	Au 2.0m Composites (top cut)	168	0.57	20.22	5.74	3.15	0.55
a - t - 22 W W 1	Au Raw	42	0.11	315.70	24.77	70.36	2.84
Code 33 Wagon Wheel	Au 2.0m Composites (top cut)	13	2.45	75.00	15.20	21.47	1.41
	Au Raw	342	0.06	24.00	5.45	3.96	0.73
Code 35 Osprey Splays	Au 2.0m Composites (top cut)	173	0.20	15.75	5.43	3.12	0.57

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine

TABLE 14-23 COMPOSITE STATISTICS BY COMPOSITE LENGTH FOR THE (1712_HRM) HARRIER MODEL

Composite Length	Number	% of comps	mean length (m)	mean grade (g/t Au)
< 1.0m	631	23.3%	0.61	5.31
≥ 1.0m and < 2.0m	875	32.3%	1.34	6.19
≥ 2.0m	1205	44.4%	2.12	7.14
Table 14-24	2711	100%	1.51	6.41

No gold top cuts were imposed in the 1712_HRM Model. However, similar to the Southern Phoenix Model, composite range limiting was used to constrain high-grade data in select domains.

Variography

The variography for each domain was analyzed and optimized using Snowden's Supervisor program, with directions cross-referenced against geological interpretations. The variogram and search parameters for the gold variables in the Harrier (1712_HRM) Model domains are summarized in Table 14-24.

Technical Report Kirkland Lake Gold December 2017 Fosterville Gold Mine

TABLE 14-24 VARIOGRAM PARAMETERS USED FOR THE HARRIER RESOURCE MODEL (1712_HRM) GOLD ESTIMATION

Fosterville	-													
1712_HRM (Harrier Model)						GOLD VAI	RIOGRAM	PARAMET	TER TABLE					
AREA	Z Rotation (*)	X Rotation (°)	Y Rotation (°)	Nugget	1st Rotation Spherical Sill	Range (y) (m)	Range (x) (m)	Range (z) (m)	2nd Rotation Spherical Sill	Range (y) (m)	Range (x) (m)	Range (z) (m)	Total Variance	Nugget
	m	eds rotati	ion											
Au Waste	355	20	50	2.5	2.0	10.0	5.0	5.0	2.9	28.0	30.0	13.0	7.47	34%
D06 Splay LG	4	18	-116	0.2	0.8	61.0	43.5	5.0					1	17%
D20 Harrier	5	23	-134	0.2	0.4	7.5	60.0	10.0	0.4	88.0	60.5	20.0	1	16%
D21 Harrier Base	-12	6	-140	0.6	0.3	31.0	20.0	10.0	0.2	170.5	33.0	20.0	1	55%
D22 Harrier Link	-9	-19	-144	0.6	0.4	61.0	54.0	3.0					1	589
D23 Harrier East Dipper	8	12	-30	0.6	0.5	65.0	20.0	10.0					1	55%
D24 Harrier HW	95	50	-180	0.5	0.1	59.0	22.5	10.0	0.4	94.0	105.5	20.0	1	53%
D25 Harrier Splay	14	19	-144	0.7	0.0	5.5	18.5	10.0	0.3	41.5	20.5	20.0	1	73%
D29 North Dippers	69	-19	24	0.6	0.2	28.5	20.0	20.0	0.2	64.0	65.0	52.0	1	57%
D30 Osprey	-11	-8	-125	0.5	0.2	10.0	9.0	5.0	0.4	22.5	13.0	10.0	1	459
D31 Osprey Base	40	45	-145	0.2	0.8	64.0	16.5	5.0					1	22%
D32 Osprey Link	28	29	-138	0.7	0.2	7.5	16.0	10.0	0.1	19.0	16.5	20.0	1	65%
D33 Wagon Wheel	360	20	70	5.0	4.3	32.9	10.6	6.8	0.7	87.3	23.7	12.4	10	50%
D35 Osprey Splays	26	27	-142	0.6	0.1	20.5	20.0	10.0	0.3	67.5	28.0	20.0	1	62%

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

14.2.2 RESOURCE MODELING

Block Models

The Harrier Block Model was created to allow modeling of mineralization between 4700mN and 6250mN (Table 14-25). The XYZ block dimensions of 2m (east) by 10m (north) by 5m (RL) were used.

This block size was chosen after consideration of:

- Drilling with the intent to mine was conducted at a nominal density of 25m x 25m spacing, although some
 areas of the Harrier Mineral Resource are drilled to 12.5m spacing;
- Variogram model ranges of 20-80m, with variogram model selection the same as for the Central models;
- . Typical mineralization width of 1-8m; and
- Likely underground mining methods (Selective Mining Unit).

TABLE 14-25 HARRIER BLOCK MODEL EXTENTS AND CELL SIZE

Model Extents	Minimum	Maximum	Cell	Dimension (m)
Northing (m N)	4600	6,250	Y Direction (North)	10
Easting (m E)	1,400	2,100	X Direction (East)	2
Reduced Level (m RL)	4,200	5,200	Z Direction (Vertical)	5

The Harrier Block Model used Ordinary Kriging to interpolate grades without a composite top cut.

Search Criteria

Search Criteria methods and justification within the Harrier Block Model are the same as those used for the Central Area.

Search ellipsoids, shown in Figure 14-16, depict the maximum range extents that composites can be used to estimate a block. Search parameters for the Harrier Block Model are provided in Table 14-26. Search ellipsoids for the 1712_HRM model were derived from variography for each domain. Variography was scrutinized against geological mapping, mining performance and interpretations made from diamond drilling.

Figure 14-17 shows a cross section of the 1706_HRM Block Model with respect block size and Resource Domains

Technical Report
December 2017

Kirkland Lake Gold
Posterville Gold Mine

TABLE 14-26 SEARCH PARAMETERS FOR THE HARRIER RESOURCE MODEL (1712_HRM)

1712_HRM (Harrier model)			0.	SEARCH	PARAMETER	TABLE		V/
DOMAIN	y axis (°)	x axis (*)	z axis (°)	min samples 1st search	max samples 1st search	max samples per hole	Outlier grade (g/t Au)	Outlier restriction range (m)
	St	earch distan	ce	samp	le number de	finition		
Au Waste	220	220	80	1	35	4		
D06 Splay LG first search	120	80	40	1	35	6		62
D06 Splay LG second search	60	40	20	1	35	6		5
D20 Harrier first search	80	55	30	1	35	6	20	20
D20 Harrier second search	60	30	30	2	35	6	20	20
D21 Harrier Base first search	80	50	30	2	35	10	75	20
D21 Harrier Base second search	60	50	30	6	35	10	75	20
D22 Harrier Link first search	60	50	30	1	35	6		
D22 Harrier Link second search	30	20	30	1	35	6		
D23 Harrier East Dipper	50	45	30	1	35	3		
D24 Harrier HW	60	30	30	1	35	6		
D25 Harrier Splay first search	100	50	30	1	35	10	75	20
D25 Harrier Splay second search	40	20	30	1	35	10	75	20
D29 N Dipper	50	40	15	1	35	6	50	20
D30 Osprey first search	90	60	30	1	35	6		
D30 Osprey second search	60	60	30	1	35	6		
D30 Osprey third search	30	20	30	1	35	6		
D31 Osprey Base first search	50	50	30	1	35	6		
D31 Osprey Base second search	30	15	30	1	35	6		
D32 Osprey Link first search	50	30	30	1	35	6		
D32 Osprey Link second search	40	30	30	1	35	6		2
D33 Wagon Wheel	90	70	80	1	35	6	75	20
D35 Osprey Splays	40	35	20	1	35	6		

Technical Report Kirkland Lake Gold December 2017 Fosterville Gold Mine

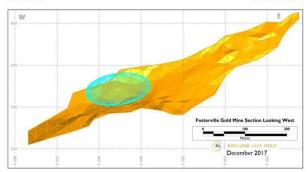


FIGURE 14-16 SEARCH ELLIPSOID FOR DOMAIN=21 HARRIER BASE

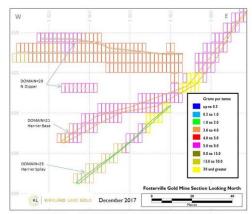


FIGURE 14-17 CROSS-SECTION 4830 mN OF THE 1706_HRM HARRIER MODEL

Shown above are DOMAIN=21 Harrier Base, DOMAIN=29 N Dipper and DOMAIN=25 Harrier Splay Mineralization Domains.

Technical Report Kirkland Lake Gold December 2017 Fosterville Gold Mine

Bulk Density

Bulk density data obtained from exploration diamond core testing within the model area showed no material difference from density data obtained in the Central Area Models. Consequently, bulk density values were assigned to the Harrier Block Model according to material type using values from data collected in the Central Area (Figure 14-14). As mining continues below the 4500mRL, collecting of further density data will be required to compliment density measurement taken from similar levels within the Phoenix Area.

Fechnical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

14.2.3 MINERAL RESOURCE CLASSIFICATION

The Mineral Resource classification for the Harrier Block Model uses the same technique as within the Central Area. Figure 14-18 illustrates the Harrier Model Resource classification.

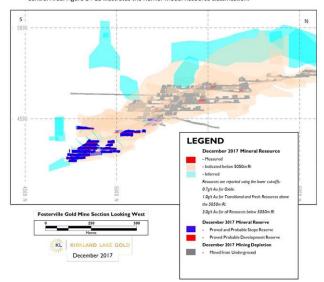


FIGURE 14-18 LONGITUDINAL PROJECTION SHOWING RESOURCE CLASSIFICATION FOR THE HARRIER MODEL

14.2.4 RESULTS

Results for the Mineral Resources contained in the Harrier Area are provided in Table 14-1.

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

14.3 FOSTERVILLE-HUNTS AREA

The Fosterville-Hunts Model is located to the north of the Central Area and is defined as the zone between 10,000mN and 11,500mN (Figure 14-1) and conveniently extends over Fosterville and Hunt's oxide pits.

14.3.1 AREA DISCUSSION AND RESULTS

The controlling structural features from west to east include: the moderately west dipping Hunt's Fault, several footwall splays and the Fosterville Fault (Figure 14-19). The geology of the area was assessed by Fosterville staff, later reviewed by Stephen King (King, 2007) and Mineral Resource Modeling undertaken by Kerrin Allwood (2008).

The gold mineralization in the Fosterville-Hunt's area was historically mined for oxide gold and in the 1990's mining for oxide heap leach material created the Fosterville and Hunt's oxide pits.

However, since 2010, flotation in-pit tailings have and are, being placed into the Fosterville and Hunt's pits. This tailings placement has resulted in no Mineral Resources being reported from the Fosterville-Hunts area for 2017.

It is the opinion of the Authors that the placement of tailings within the Fosterville and Hunts pits currently impedes reasonable prospect for eventual economic extraction of the mineral occurrence, which lies directly below these pits.

rechnical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

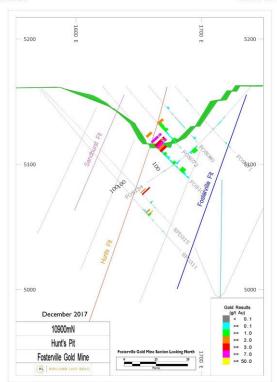


FIGURE 14-19 GEOLOGICAL CROSS-SECTION 10,900MN THROUGH HUNT'S PIT

Shown are the relationships between the Hunt's Fault, bedding and the set of splays that strike obliquely to the fault.

14.4 DALEY'S HILL AREA

The Southern Model spans from the Harrier Pit area to Daley's Hill Pit, close to the southern margin of the Fosterville Mine Lease (MIN5404) as shown in Figure 14-1.

The Southern Model was in existence before the initial Harrier Mine Model became operational. Where there is overlap between the Harrier Model and Southern Model, the Harrier Model is used in preference for Mineral Resource reporting with the only exception being the Daley's Hill Pit area (south of 5300mN and above 4800mRL), where Southern Model has been used. Only the Daley's Hill area is discussed in detail in the following sections.

14.4.1 GEOLOGICAL MODELS

Geological modeling undertaken is essentially identical to that used for the Fosterville-Hunt's and Robbin's Hill Models. Several iterations of Mineral Resource modeling of the Southern Model were undertaken and reported in Hitchman (2006). A review of the 2006 resource work was undertaken by Scott Jackson from QG Consultants (Jackson, 2007).

14.4.2 DRILLING DATA

The drilling quality is variable in the southern area and includes:

- RAB Rotary air blast;
- Reverse circulation Cross over hammer and face sampling hammer variants; and
- . Diamond core HQ and NQ2, often with RC pre-collars.

During drill hole data extraction for resource interpolations, the omission of RAB holes and one diamond hole was required owing to low quality sample techniques and incomplete assaying respectively. $MineSight^{TM} drill \ views \ were \ the \ primary \ tool \ used \ to \ identify \ data \ problems.$

Included as part of the drill data review process assay data were:

- Imported from the acQuire Exploration databases into MineSight[™] using customizable parameter screens; and
- Coded for mineralization using 3D gold wireframe solids.

Within the oxide open pit areas, the historical 5m blast holes are vertical and generally had one sample collected over a 5m length. These holes were used to aid interpretation, but were not used during subsequent Kriging owing to sample quality and that the 5m sample lengths were in excess of the desired 2m composite lengths.

Compositing and Coding

Compositing and coding of drill holes was undertaken similar to the Central Area.

Technical Report Kirkland Lake Gold

Variography

In the Daley's Hill area where drill spacing is nominally on 10m to 20m, variography work demonstrates relative nugget effect values of 50% and most of the variance in the first ~30m. The variogram models closely follow the expected geological controls with 20° southerly plunging shoots in 70° west dipping faults.

14.4.3 MINERAL RESOURCE MODELING

Block Models

The Southern Block Model (Southern Model) was originally created to allow modeling of gold mineralization south of 7,400mN to the southern end of the Fosterville Mine Lease. However, as mining advanced southwards, the use of the Southern Model has diminished, such that it is only being used for reporting Mineral Resources in the Daley's Hill Area.

The Southern Model XYZ block dimensions used were 4m (east) by 10m (north) by 5m (RL) were used. This block size was chosen after consideration of the maximum drilling density (25m by 15m), mineralization geometry (typical mineralization width of 3m to 8m) and probable open pit mining methods.

Search Criteria

Gold grades were interpolated into blocks meeting the following block criteria:

- Greater than 1% of the block volume is inside one of the domain envelopes;
- Blocks whose search ellipsoid includes at least five composites; and
- Blocks whose material code is set to Fresh (1), Transitional (2) or Oxide (3).

Similarly, only composites meeting the following criteria are used to interpolate any one block:

- All composites (to a maximum of 30 composites) within the search ellipsoid dimensions and search area limits outlined in the table below;
- Where more than 30 composites lie within the search ellipsoid the 30 closest composites in ellipsoid space are used;
- Maximum of six composites are used from any split quadrant of the search ellipsoid (a splitquadrant is 1/8th of the search ellipsoid dividend in the major, intermediate and minor ellipsoid axes: and
- The CODE1 and MATL values of both the composite and the block must match (i.e. only fresh
 composites are used to interpolate a fresh block and vice versa for oxide).

The search ellipsoid orientations are in line with the directions of kriging. The search ellipsoid dimensions allow the block being interpolated to 'see' two sections along strike and two holes up or down-dip.

contical Report

Kirkland Lake Gold

Fosterville Gold Mine

Bulk Density

The bulk density profile (Figure 14-14) established for the Central Area was taken as being appropriate for the Southern Model given the similar rock types, levels of oxidation and identical mineralization and gangue mineralogy. Deep drilling in the Central Area and Harrier Area has supported the inclusion of a bulk density value of 2.78t/m³ for material below 4500mRL. However, as the mineralization at Daley's Hill is shallower than 4500mRL, reporting of Resources for this area from the Southern Model is unchanged.

14.4.4 MINERAL RESOURCE CLASSIFICATION

Three solids were created enclosing regions of geological confidence (Measured=1, Indicated=2 and Inferred=3) and these three regions were used to code the Mineral Resource category item in the block model. The solids generally enclose areas of approximately equally spaced drilling, but also allow areas where there is reduced confidence in the geological interpretation to be reported to a lower confidence category.

In areas of the Southern Model at depth below and to the north of the Daley's Hill Pit, the diamond drilling is on nominal 100m north spaced drill sections with 50m down-dip holes spacing, and for this drill density the mineralization is broadly classified as Inferred Mineral Resource. Beneath the open pits where the drill spacing is reduced to 10m to 20m north by 10m to 15m east, mineralization is classified as Measured Mineral Resource with a halo of Indicated Mineral Resource.

The Daley's Hill east-west structures are not well understood and as such this mineralization is classified as Inferred Mineral Resource. During 2017 drilling of some of this resource was completed on a nominal 50m section spacing and an Inferred Resource was targeted, known as the Wagon Wheel. The Wagon Wheel resource has been transferred to the 1712_HRM Harrier resource model area given the juxtaposition of the resource to the upper Osprey Resource in the Harrier area.

14.4.5 RESULTS

Results for the Mineral Resources contained in the Southern Model are provided in Table 14-1.

Small oxide gold resources exist in the Daley's Hill Area and are confined along strike from the previously mined open pit in the top 40m from surface.

The bulk of the sulfide Mineral Resources reported from the Daley's Hill Area within the Southern Model are based on 100m by 50m spaced diamond drilling supplemented by closer spaced, but lower quality face and cross over RC drilling. Infill drilling will be required to increase resource confidence from an Inferred Mineral Resource category.

14.5 ROBBIN'S HILL AREA

The Robbin's Hill Area lies northeast of the Central Area and contains the O'Dwyer's, Robbin's Hill, Farley's, Sharkey's, Woolshed and Read's oxide pits as shown in Figure 14-1. The area can be defined as the zone

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Min.

east of 2,700mE, between 10,500mN and 14,000mN. The fault architecture of the Robbin's Hill Area is much more complex than that observed in the Fosterville Fault Zone.

The controlling structural features in the area include a variety of north-trending west-dipping faults and failed anticline axes intruded by dykes.

The geology of the area was assessed by Fosterville staff during diamond drilling activities between 2004 and 2007, reported by Reed (2007a) and reviewed twice by Stephen King (2005 and 2007). The area was also the subject of a study conducted by Chris Davis (Davis, 2006). Robbin's Hill Model resource modeling conducted by Kerrin Allwood and Simon Hitchman is reported in Allwood (2006) and Hitchman (2007). A further review of modeling in the Farley's-Sharkey's area is also reported in Allwood (2007). Following on from an open pit optimization study in March 2011 (Dincer, 2011) 5,257m of combined RC and diamond drilling was undertaken in the Robbin's Hill Project area to test beneath and along strike from existing open pits. This drilling was for both open pit and underground targets occurring in the Robbin's Hill Area until August 2012, during which resource modeling was undertaken.

Since 2013 to 2015, limited diamond drilling has taken place at Robbin's Hill. In 2016 Diamond drilling resumed on the 12400 – 12600m N sections and has continued North until the time of writing of this report. Mineralization has been delineated along the Farley's fault and limited mineralization has been discovered along Farley's footwall structures.

A short-lived sulfide open pit mining operation was completed at the O'Dwyer's South Pit in 2012 and is now the site for flotation tailing storage.

14.5.1 GEOLOGICAL MODELS

Geological modeling undertaken was essentially identical to that described for the Southern Models

14.5.2 DRILLING DATA

The quality of the drilling is variable in the Robbin's Hill Area. Drilling was conducted from 1989 to 2011, and up until 2001 drilling was focused on oxide heap leach targets and as such cheaper less precise drilling methods were used and dominate the dataset. After 2004, diamond holes were used to aid structural interpretation and often, RC pre-collars were diamond tailed.

The model uses more than 1,110 holes of which about 95% are RC holes and 5% are NQ₂ and HQ diamond core holes. Pre-2016 drill data was treated as per previous model procedures; with data omitted where there was uncertainty of coordinates, dubious down-hole surveys and grade or geological mismatch. MineSight[™] drill views were the primary tool used to identify data grade and geological mismatches. Post-2016 drill data was assessed and validated to the same standard as used in the Central and Harrier Models.

Subsequent to the drill data review, process assay data were:

Technical Report Kirkland Lake Gol
December 2017 Fosterville Gold Min

 Imported from the acQuire exploration databases into MineSight™ using customizable parameter screens: and

· Coded for mineralization using 3D gold wireframe solids.

Compositing and Coding

Similar to the Central Area, coded Robbin's Hill Model area drill data was composited to 2m lengths starting from the point at which the drill hole enters the mineralization envelope. If the final composite was less than 1m it was added to the previous composite making a composite with length between 2m and 3m. Final composites between 1m and 2m in length were left as is. The 2m composite lengths were chosen to reflect the anticipated minimum mining width, to allow across strike variability to be maintained within the data, and because the vast majority of RC drilling samples are 2m in width. Table 14-27 below shows the Robbin's Hill Model composite statistics.

TABLE 14-27 COMPOSITE STATISTICS BY COMPOSITE LENGTH FOR THE ROBBIN'S HILL MODEL

Composite Length (m)	Number of Composites	% of Composites	Mean Length (m)	Mean Grade (g/t Au)
<	68	1.7%	0.26	1.50
≥land <2	362	8.8%	1.17	2.92
≥2	3,678	89.5%	2.01	2.20
Total	4108	100%	1.91	2.25

Variography

In all domains, the nugget effect (46% to 59%) is typical of gold deposits at Fosterville. Typically, low nugget effects elsewhere at Fosterville reflect the fine grained, disseminated nature of the sulfide minerals hosting the elements analyzed and are confirmed by the very low variability exhibited in assay QAQC data. The higher nugget effects modeled for these domains may reflect some mixing of populations, possibly owing to re-mobilization of gold by weathering resulting in erratically distributed extreme gold grades.

The longer range structures in the RH-ODW Areas possibly reflect high-grade zones occurring where faults intersect the quartz porphyry dykes. The variogram models closely follow the expected geological controls with flat to shallowly south plunging shoots in steeply west dipping faults and sub vertical porphyry contact zones.

Technical Report Kirkland Lake Gold December 2017 Fosterville Gold Mine

14.5.3 MINERAL RESOURCE MODELING

Block Models

The combined Robbin's Hill Block Model was created in 2016 and has sufficient extents to contain all drilled mineralization beneath the open pits in the area, replicating model extent parameters setup in 2005. Previously, several smaller block models were used as inventory mineralization for the oxide pits in the area. These models had differing block dimensions and orientations from one another and so combining them into a single unified model was not possible. In 2017 the model was split into a northern and southern model to facilitate faster processing.

The Robbin's Hill Model has XYZ block dimensions of 2m (EW) by 10m (NS) by 5m (RL). The 2m width was chosen as it is approximates the minimum mining width for both open pit and underground mining. The 10m N-5 block dimension is half the section spacing in the most densely drilled areas. The 5m vertical block dimension is the likely open pit mining bench height and allows sufficient resolution for future pit optimization.

TABLE 14-28 ROBBIN'S HILL BLOCK MODEL EXTENTS

Parameter	Robbin's Hill North	Robbin's Hill South		
Northing Min (m)	12,000	10,400		
Northing Max (m)	13,500	12,000		
Easting Min (m)	2,900	2,800		
Easting Max (m)	4,100	3,600		
RL Min (m)	4,100	4,800		
RL Max (m)	5,200	5,200		
X direction m (east)	2	2		
Y direction m (north)	10	10		
Z direction m (vertical)	5	5		

Historic Mineral Resource Modeling includes a previous Robbin's Hill Resource Model (2012) and various grade control models that overlapped with the resource model and were used as a sub-set for detailed mining extraction. No active mining has been conducted within the Robbin's Hill resource model data extents since 2012.

To facilitate renewed open pit mining in 2012 at O'Dwyer's South a Grade Control (GC) resource model was created with XYZ block dimensions of 2m (EW), 5m (NS) and 5m(RL), with the dimensions chosen to cosmetically better represent likely open pit SMU (Selective Mining Unit) volumes. The block size is identical to those that were previously in use at Harrier and John's open pits.

The Mineral Resource in the Robbin's Hill Area is shown in Figure 14-20.

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

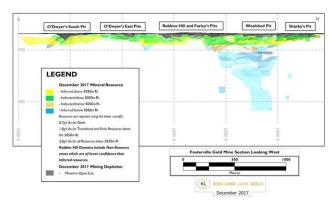


FIGURE 14-20 LONGITUDINAL SECTION VIEW OF MINERAL RESOURCE IN ROBBIN'S HILL AREA

Search Criteria

Gold and sulfur grades are only interpolated into blocks meeting the following criteria:

- Greater than 1% of the block volume is inside one of the domain envelopes; and
- Blocks whose search ellipsoid includes at least one composite.

Similar to the Central Area models, only composites meeting the following criteria are used to interpolate any one block:

- All composites to a maximum of 35 composites within the search ellipsoid dimensions and search area limits;
- Where more than 35 composites lie within the search ellipsoid the 35 closest composites in ellipsoid space are used; and
- The mineralization code of both the composite and the block match by relating a block coding of
 the same numerical suffix as the composite code.

Technical Report Kirkland Lake Gold

The search ellipsoid orientations follow interpreted variogram structures (similar to the central models). The search ellipsoid within domains follows the dimensions of the ranges set in the variograms, and allow the block being interpolated to 'see' two sections along strike and two holes up or down-dip.

To check the suitability of the search ellipsoids used, search ellipsoids were checked in MineSight $^{\text{IM}}$ to allow visual inspection of the composites to be used and the suitability of the interpolation direction within the domain which closely matches the structural framework of the mineralized lens.

Bulk Densit

The bulk density profile established for the Central Area was taken as being appropriate for the Robbin's Hill Model area given the similar rock types, levels of oxidation and identical mineralization and gangue mineralogy.

14.5.4 MINERAL RESOURCE CLASSIFICATION

No Mineral Resources in the Robbin's Hill Area have been categorized as Measured owing to drill hole data spacing and uncertainties in the quality of the largely historical data used to construct this model.

Two solids were created enclosing regions of geological confidence (Indicated or Inferred Mineral Resources) and these regions were in turn used to identify Inferred and Indicated Resource for reporting purposes. The solids generally enclose areas of approximately equally spaced drilling, but also allow wareas where there is reduced confidence in the geological interpretation to be reported to a lower confidence category. The Indicated Mineral Resource solid is always surrounded by a halo of Inferred Resource. There is some modelled mineralization falling outside both the Indicated and Inferred solids. These areas were not reported as Mineral Resource and were flagged as non-resource zones (Figure 14-20).

14.5.5 RESULTS

The drilling conducted during 2017 has consolidated the 2016 drilling which yielded significant mineralization of moderate grade in the vicinity East of Robbin's Hill pit on Farley's Fault on sections 13,000–12500mN. With a combination of existing drilling, drill results have increased the Inferred Mineral Resource in this area. (Figure 14-20).

Oxide gold resources exist in the Robbin's Hill Model area, notably east of Sharkey's Pit where exploration drilling in 2007 discovered shallow oxide mineralization. Elsewhere remnant low-grade oxide gold mineralization is found below and along strike from previously mined open pits.

Resources in the Farley's-Sharkey's area are based on modern face sampling RC methods and substantial diamond drilling and as such the geological information is better than elsewhere in the modeled area.

Inferred resources at Robbin's Hill have increased significantly toward the end of 2017 with the inclusion of an extension to the Currie's fault and Rubin's lenses to the North of 12600mN (Figure 14-21).

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

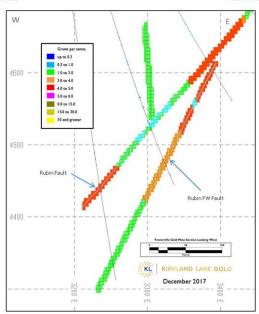


FIGURE 14-21 ROBBIN'S HILL CROSS-SECTION 12910mN

15 MINERAL RESERVE ESTIMATES

The current Mineral Reserve estimate, from the available Mineral Resource estimates, is presented below in Table 15-1. Mineral Reserves are subdivided on the basis of accessing decline i.e. Central, Phoenix and Harrier. A further breakdown of the Phoenix Mineral Reserves is presented in Table 15-2, where reserves on the Eagle and Swan structures are separated.

 ${\it CIL Residue Mineral Reserves are distinguished from in situ Mineral Reserves in Table~15-1~and~Table~15-2}$ on the basis of differing recovery assumptions.

TABLE 15-1 MINERAL RESERVES FOR FGM AS AT DECEMBER 31, 2017

		Proven			Probable			Total	
Classification	Tonnes (kt)	Grade (g/t Au)	In situ Gold (kOz)	Tonnes (kt)	Grade (g/t Au)	In situ Gold (kOz)	Tonnes (kt)	Grade (g/t Au)	In situ Gold (kOz)
	0	***	797	Undergroun	d		*		
Central	17	5.07	3	71	4.73	- 11	88	4.80	14
Phoenix	217	15.62	109	1,553	29.42	1,468	1,770	27.72	1,577
Harrier	I	6.55	0	428	7.85	108	430	7.84	108
				Surface					
	0	0.00	0	0	0.00	0	0	0.00	0
Total	236	14.80	112	2,052	24.06	1,587	2,288	23.11	1,699
				Residues					
CIL Residues	649	7.69	160	0	0.00	0	649	7.69	160
Total	649	7.69	160	0	0.00	0	649	7.69	160

- CIM definitions (2014) were followed in the estimation of Mineral Reserves.
 For the Mineral Reserves estimate, the Qualified Person is Ion Hann. The Mineral Reserve estimate used a gold price of US\$1,280 per ounce (A\$1,600 per ounce). Cut-off grades applied ranged from 2.0 g/t Au to 3.8 g/t Au for underground sulfide ore depending upon width, mining method and ground conditions.
 Dilution and mining recovery factors as per Table 15-3 and Table 15-4 were applied to stopes within the Mineral Reserves

- estimate.

 4. Mineral Reserves are rounded to 1,000t, 0.01 g/r Au and 1koz. Minor discrepancies in summation may occur due to rounding.

 5. CIL residues are stated as contained ounces 25% recovery is expected. Recoveries are based on laboratory and processing plant test work and operating experience.

Technical Report December 2017 Kirkland Lake Gold Fosterville Gold Mine

TABLE 15-2 MINERAL RESERVES (WITH EAGLE / SWAN SUBDIVISIONS) FOR FGM AS AT DECEMBER 31, 2017

		Proven			Probable			Total	
Classification	Tonnes (kt)	Grade (g/t Au)	In situ Gold (kOz)	Tonnes (kt)	Grade (g/t Au)	In situ Gold (kOz)	Tonnes (kt)	Grade (g/t Au)	In situ Gold (kOz)
	28	70.		Undergroun	d		8	10	
Central	17	5.07	3	71	4.73	11	88	4.80	14
Phoenix	172	15.90	88	684	6.90	152	856	8.71	240
Eagle	45	14.57	21	280	17.78	160	325	17.33	181
Swan	0	0.00	0	588	61.16	1,156	588	61.16	1,156
Harrier	1	6.55	0	428	7.85	108	430	7.84	108
				Surface					
	0	0.00	0	0	0.00	0	0	0.00	0
Total	236	14.80	112	2,052	24.06	1,587	2,288	23.11	1,699
				Residues					
CIL Residues	649	7.69	160	0	0.00	0	649	7.69	160
Total	649	7.69	160	0	0.00	0	649	7.69	160

- CIM definitions (2014) were followed in the estimation of Mineral Reserves.
 For the Mineral Reserves estimate, the Qualified Person is Ion Hann. The Mineral Reserve estimate used a gold price of US\$1.280 per ounce (A\$1.600 per ounce). Cut-off grades applied ranged from 20 g/t Au to 3.8 g/t Au for underground sulfide or edepending upon width, mining method and ground conditions.
 Dilution and mining recovery factors as per Table 15-3 and Table 15-4 were applied to stopes within the Mineral Reserves.
- estimate.
- Mineral Reserves are rounded to 1,000t, 0.01 g/t Au and 1koz. Minor discrepancies in summation may occur due to rounding.
 ClL residues are stated as contained ounces 25% recovery is expected. Recoveries are based on laboratory and processing plant test work and operating experience.

15.1 MINERAL RESERVE ESTIMATE

The initial stage of the Mineral Reserve estimation process was the revision of the Mining Method Selection chart. The mining methods that were considered for the Mineral Reserve estimation process were sill driving, up-hole open stoping, up-hole stoping with fill, underhand open stoping with chain and rib pillars and transverse open stoping. These methods were selected based upon previous experience at the Fosterville mine or because they were considered suitable for the ore zone geometry and geotechnical conditions present and expected.

Stope reserve shapes were created to cover all active and planned mining areas. These stope shapes did not necessarily reflect the final stope strike and/or crown pillar dimensions. Stoping widths vary from 3m out to 10m. Mining method selection criteria and applied design parameters are described in the Mining Methods Selection process (see Figure 15-2).

Kirkland Lake Gold Fosterville Gold Mine

The open stope reserve wireframe design parameters applied were:

- Strike length dictated by grade distribution in block model;
 Minimum true width of 2.5m;
 Maximum height of 20m vertical from backs to floor; and Internal waste incorporated within the stope block design.

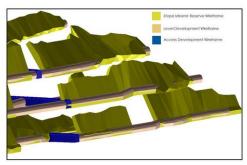
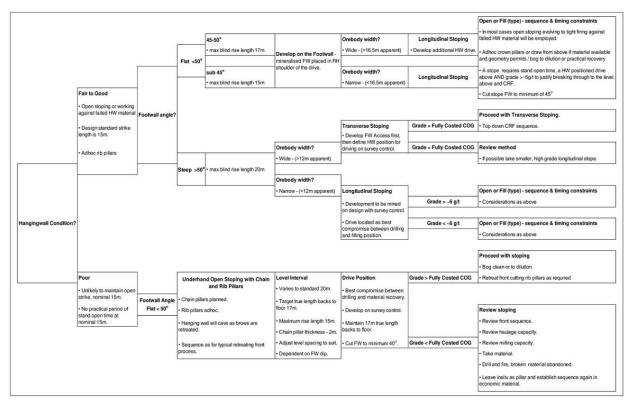


FIGURE 15-1 AN EXAMPLE OF AN OPEN STOPE RESERVE WIREFRAME DESIGN

Technical Report
December 2017



Kirkland Lake Gold Fosterville Gold Mine

FIGURE 15-2 MINING METHOD SELECTION CRITERIA

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

Mining recovery from open stopes at Fosterville is principally influenced by the following factors:

- · Accuracy of the geological interpretation;
- Accuracy of the production hole drilling;
- Stope dimensions;
- Sill drive dimensions and position relative to bench stope;
- Presence or absence of adjacent filled voids and pillars; and
- Geotechnical integrity of stope and sill drive walls.

The above factors manifest themselves as ore loss in the following ways:

- The need for planned pillars due to accessing of ore blocks (i.e. top down mining sequence);
- · Frozen rings due to ground movement or out of sequence firing;
- Bridged stopes;
- Failure of the stope to break back to a main structural plane of weakness; and
- Unplanned ore pillars left to improve ground support.

Unplanned dilution in open stopes at Fosterville is a function of the following factors:

- Regional geotechnical conditions;
- Location of sill drives relative to the open stope;
- · Width of sill drives relative to the open stope width;
- · Production drilling accuracy;
- Quantity, quality and type of ground support in sill drive walls;
- Speed of ore extraction from active stopes; and
- Length of time sill drives have been open before stoping commences.

Inclusive within the production mining cycle are systematic cavity monitoring surveys, data from which is feedback into the understanding and scaling of dilution factors by area.

In order to correctly apply recovery and dilution factors to all stopes in the Mineral Reserve, factors such as orebody dip, rock RQD and development and stope sequence were considered.

Table 15-3 and Table 15-4 show the recovery and dilution factors that were applied to the reserve blocks:

Technical Report December 2017

Kirkland Lake Gold Fosterville Gold Mine

TABLE 15-3 RECOVERY AND DILUTION FACTORS FOR THE RESERVE BLOCKS AS DISPLAYED IN FIGURE 16-1

Description	Recovery Factor - Tonnes	Dilution Factor - Tonnes	Comments
Stoping - Phoenix	80%	24%	Top down, crown and rib pillars, and/or CRF, and/or paste, underhand open stoping with chain and rib pillars
Stoping - Central	82%	19%	Top down, crown and rib pillars, and/or CRF, underhand open stoping with chain and rib pillars
Stoping – Harrier	77%	22%	Top down, crown and rib pillars, and/or CRF, underhand open stoping with chain and rib pillars
Strike Development	100%	15%	

Notes:

- Dilution and Recovery factors are assigned based on sequence, angle of the hangingwall, strike length of panel and surrounding voids whether open, failed or filled, both laterally and vertically (and the likelihood of adjacent panels failed).

 Primary stopes are in-situ with solid unfired material on all extremities excluding development.

 Secondary panels are those adjacent to a single panel either laterally or vertically that may or may not be filled.

 Tertiary panels are those adjacent to two or more panels either laterally or vertically that may or may not be filled.

 Table 15-4 provides guidelines for individual panel recovery and dilution for specific mining scenarios.

Technical Report
December 2017

Kirkland Lake Gold
December 2017

Korkland Lake Gold
Mine

TABLE 15-4 DILUTION AND RECOVERY FACTORS USED FOR THE DECEMBER 2017 MINERAL RESERVES

	Development	Dilution 1.15	Recovery 1.00										
		Dilution	Recovery	Type	Angle	Strike							
	Stope	1.10	0.95	Pillar / Initial Panel	Steep	<15m		Stope	1.25	0.80	Tertiary Stope against CRF/Caved	Steep	<15m
	Stope	1.15	0.90	Pillar / Initial Panel	Steep	15m to 25m	-	Stope	1.30	0.75	Tertiary Stope against CRF/Caved	Steep	15m to 2
	Shrink	1.25	0.80	No Pillar / Shrink	Steep	>25m	TEKTIARY	Stope	1.35	0.75	Tertiary Stope against CRF/Caved	Average	<15m
R	Stope	1.15	0.85	Pillar / Initial Panel	Average	<15m	E	Stope	1.40	0.70	Tertiary Stope against CRF/Caved	Average	15m to 2
PRIMARY	Stope	1.20	0.80	Pillar / Initial Panel	Average	15m to 25m	=	Stope	1.40	0.60	Tertiary Stope against CRF/Caved	Flat/Narrow	<15m
2	Shrink	1.30	0.70	No Pillar / Shrink	Average	>25m		Stope	1.50	0.55	Tertiary Stope against CRF/Caved	Flat/Narrow	15m to
70 J	Stope	1.20	0.80	Pillar / Initial Panel	Flat/Narrow	<15m	_	1					
	Stope	1.25	0.75	Pillar / Initial Panel	Flat/Narrow			Stope	1.20	0.85	Tertiary Stope against PASTE/Caved	Steep	<15m
	Shrink	1.40	0.55	No Pillar / Shrink	Flat/Narrow	>25m	_	Stope	1.25	0.80	Tertiary Stope against PASTE/Caved	Steep	15m to
			0.00	Tree trings attended	1.00	1-2311	TERTIARY	Stope	1.30	0.80	Tertiary Stope against PASTE/Caved	Average	<15m
	Stope	1.15	0.90	Secondary Stope against CRF	Steep	<15m	E	Stope	1.35	0.75	Tertiary Stope against PASTE/Caved	Average	15m to
≥	Stope	1.20	0.85	Secondary Stope against CRF	Steep	15m to 25m	=	Stope	1.35	0.65	Tertiary Stope against PASTE/Caved	Flat/Narrow	
SECONDARY	Stope	1.20	0.80	Secondary Stope against CRF	Average	<15m		Stope	1.40	0.60	Tertiary Stope against PASTE/Caved	Flat/Narrow	
Z	Stope	1.25	0.75	Secondary Stope against CRF	Average	15m to 25m	-	Jacope	1.40	0.00	Treitiary scope against PASIC/Caved	print/rearrow	TESHI 60
Ž,	Stope	1.30	0.70	Secondary Stope against CRF	Flat/Narrow			Stope	1.40	0.60	Tertiary Stope against CRF/ below Caved	Steep	<15m
VI.	Stope	1.35	0.65	Secondary Stope against CRF	Flat/Narrow			Stope	1.50	0.55	Tertiary Stope against CRF/ below Caved	Steep	15m to
_	Stope	1.33	0.65	Secondary Stope against CRF	Irial/ Narrow	13111 (0 23111		Stope	1.60	0.50	Tertiary Stope against CRF/ below Caved	Steep	>25m
_	Stope	1.15	0.90	Secondary Stope against PASTE	Steep	<15m	2	Stope	1.35	0.65	Tertiary Stope against CRF/ below Caved	Average	<15m
-	Stope	1.20	0.90	Secondary Stope against PASTE	Steep	15m to 25m	TERTIARY	Stope	1.45	0.60	Tertiary Stope against CRF/ below Caved	Average	15m to
SECONDARY	Stope	1.20	0.80	Secondary Stope against PASTE	Average	<15m to 25m	=	Stope	1.55	0.55	Tertiary Stope against CRF/ below Caved	Average	>25m
ž		1.25	0.75		Average	15m to 25m	F		1.30	0.70		Flat/Narrow	<15m
ŭ	Stope Stope	1.25	0.75	Secondary Stope against PASTE Secondary Stope against PASTE	Flat/Narrow			Stope	1.40	0.70	Tertiary Stope against CRF/ below Caved Tertiary Stope against CRF/ below Caved	Flat/Narrow	
S		1.30			Flat/Narrow				1.50			Flat/Narrow	
_	Stope	1.30	0.70	Secondary Stope against PASTE	Flat/Narrow	15m to 25m		Stope	1.50	0.60	Tertiary Stope against CRF/ below Caved	Jelat/Narrow	P25m
	Stope	1.30	0.80	Pillar / Initial Panel below caved	Steep	<15m		Stope	1.35	0.65	Tertiary Stope against PASTE/ below Caved	Steep	<15m
	Stope	1.35	0.75	Pillar / Initial Panel below caved	Steep	15m to 25m		Stope	1.45	0.60	Tertiary Stope against PASTE/ below Caved	Steep	15m to
	Stope	1.45	0.65	Pillar / Initial Panel below caved	Steep	>25m		Stope	1.55	0.55	Tertiary Stope against PASTE/ below Caved	Steep	>25m
A B	Stope	1.35	0.70	Pillar / Initial Panel below caved	Average	<15m	≥	Stope	1.30	0.70	Tertiary Stope against PASTE/ below Caved	Average	<15m
g	Stope	1.40	0.65	Pillar / Initial Panel below caved	Average	15m to 25m	FERTIARY	Stope	1.40	0.65	Tertiary Stope against PASTE/ below Caved	Average	15m to
SECONDARY	Stope	1.50	0.55	Pillar / Initial Panel below caved	Average	>25m	ER ER	Stope	1.50	0.60	Tertiary Stope against PASTE/ below Caved	Average	>25m
S	Stope	1.40	0.65	Pillar / Initial Panel below caved	Flat/Narrow			Stope	1.25	0.75	Tertiary Stope against PASTE/ below Caved	Flat/Narrow	
	Stope	1.45	0.60	Pillar / Initial Panel below caved	Flat/Narrow			Stope	1.35	0.70	Tertiary Stope against PASTE/ below Caved	Flat/Narrow	
	Stope	1.60	0.40	Pillar / Initial Panel below caved	Flat/Narrow			Stope	1.45	0.65			
			177.77							-	_		
	Stope	1.15	0.90	Pillar / Initial Panel below CRF	Steep	<15m		Stope	1.50	0.55	Tertiary Stope against Caved / below Caved	Steep	<15m
	Stope	1.20	0.85	Pillar / Initial Panel below CRF	Steep	15m to 25m		Stope	1.55	0.50	Tertiary Stope against Caved / below Caved	Steep	15m to
>	Stope	1.30	0.75	Pillar / Initial Panel below CRF	Steep	>25m	-	Stope	1.60	0.45	Tertiary Stope against Caved / below Caved	Steep	>25m
ž	Stope	1.20	0.80	Pillar / Initial Panel below CRF	Average	<15m	*	Stope	1.45	0.60	Tertiary Stope against Caved / below Caved	Average	<15m
SECONDARY	Stope	1.25	0.75	Pillar / Initial Panel below CRF	Average	15m to 25m	FERTIARY	Stope	1.50	0.55	Tertiary Stope against Caved / below Caved	Average	15m to
2	Stope	1.35	0.65	Pillar / Initial Panel below CRF	Average	>25m	E .	Stope	1.55	0.50	Tertiary Stope against Caved / below Caved	Average	>25m
O.	Stope	1.30	0.70	Pillar / Initial Panel below CRF	Flat/Narrow	<15m		Stope	1.40	0.65	Tertiary Stope against Caved / below Caved	Flat/Narrow	<15m
	Stope	1.35	0.65	Pillar / Initial Panel below CRF	Flat/Narrow	15m to 25m		Stope	1.45	0.60	Tertiary Stope against Caved / below Caved	Flat/Narrow	15m to
	Stope	1.50	0.45	Pillar / Initial Panel below CRF	Flat/Narrow	>25m		Stope	1.50	0.55	Tertiary Stope against Caved / below Caved	Flat/Narrow	>25m
	In	4.45	0.00	and described the second	les	lar.							
	Stope	1.15	0.90	Pillar / Initial Panel below PASTE	Steep	<15m							
	Stope	1.20	0.85	Pillar / Initial Panel below PASTE	Steep	15m to 25m							
¥	Stope	1.30	0.75	Pillar / Initial Panel below PASTE	Steep	>25m							
SECONDARY	Stope	1.20	0.80	Pillar / Initial Panel below PASTE	Average	<15m							
S	Stope	1.25	0.75	Pillar / Initial Panel below PASTE	Average	15m to 25m							
SEC	Stope	1.35	0.65	Pillar / Initial Panel below PASTE	Average	>25m							
-4/	Stope	1.25	0.75	Pillar / Initial Panel below PASTE	Flat/Narrow								
	Stope	1.30	0.70	Pillar / Initial Panel below PASTE	Flat/Narrow								
	Stope	1.45	0.50	Pillar / Initial Panel below PASTE	Flat/Narrow	- 25							

Gold Cut-Off Grades

Table 15-5 shows the calculated cut-off grades used in the estimation of the Mineral Reserve. Cost assumptions are based on the 2018 Budget (inclusive of royalties) and 2017 performance.

TABLE 15-5 MINERAL RESERVE GOLD CUT-OFF GRADES

Description	g/t Au		
Open Stope – full	3.8		
Open Stope - marginal	2.0		
Development - marginal	3.0		

For certain other situations, a lower cut-off grade is applied. For development, which is justified for other reasons (i.e. access to a higher grade block or infrastructure considerations), the marginal cut-off grade is applied to reflect that the material only has to cover the non-mining costs to break even. This is only applied if the development material had to be trucked to surface anyway and that it is not displacing higher-grade ore from the mill. Likewise, for incremental stoping production where the development has already been mined (i.e. for access to a higher-grade block), the marginal cut-off grade is applied to reflect that the development cost has already been incurred.

Stope and development shapes are limited in their extremity by the application of appropriate COGs (Table 15-5) and a full conceptual design is subsequently created around the resultant shapes. This design includes, but is not necessarily limited to; decline design, associated level infrastructure and vertical development.

Physicals generated from the design are applied against budget costs and assumptions to provide an economic model by level and area (Table 15-6). This model is capable of representing various cost structures and is utilized as the final hurdle point for determination of inclusion/exclusion of material into the mine plan and reserve statement.

Technical Report Kirkland Lake Gold December 2017 Fosterville Gold Mine

TABLE 15-6 DEVELOPMENT COSTS AND PHYSICALS SPREADSHEET

Level: Drive:	4		45 rier		4330 Harrier		
	н	arrier	Hai	rier	narrier		
Area: Model:							
Orebody:	-						
Dec / Inc (m)						11:	
Cap Other (m)		117		132		113	
Cap RAR (vertical m) - big raise bore							
Cap Escapeway - RaiseBore & Safescape							
Cap RAR (vertical m) - D&B not supported							
Cap RAR & E/way (vertical m) D&B Supported							
Waste Operating (m)		40		30		21	
Ore driving (m)		125		150		21	
Ore driving (tonnes)		7,210		6,212		13,11	
Ore driving (ounces)		1,843		1,081		2,49	
Stope (tonnes)		12,771		14,570		35,36	
Stope (ounces)		3,362		4,221		7,18	
Production Drilling (m)		4,257		4,857		11,78	
Slot Rise (m)							
CRF (tonnes)							
PASTE (m3)							
RF (tonnes)							
Check Ore (m)		58		41		6	
check Ore (m)		50		3.76			
Dilution Factor - Development Material	-	1.00		1.00		1.0	
Dilution Factor - Stope Material		1.00		1.00		1.0	
Recovery Factor - Development Material		1.00		1.00		1.0	
Recovery Factor - Stope Material		1.00		1.00		1.0	
Indic Prod ore (t)		12,771		14,570		35,36	
Indic Prod ore (g/t)		8.19		9.01		6.3	
Indic Prod ore (oz)		3,362		4,221		7,18	
Indic Dev ore (t)		7,210		6,212		13,110	
Indic Dev ore (g/t)		7.95		5.41		5.9	
Indic Dev ore (oz)		1,843		1,081		2,49	
Total Prod ore (t)		12,771		14,570		35,36	
Total Prod ore (g/t)	•	8.19	•	9.01		6.3	
Total Prod ore (oz)		3,362		4,221		7,18	
Total Dev ore (t)		7,210		6,212		13,110	
Total Dev ore (g/t)		7.95	•	5.41	•	5.9	
Total Dev ore (oz)		1,843		1,081		2,49	
Total ore (t)		19,980		20,782		48,47	
Total ore (g/t)		8.10		7.93	•	6.2	
Total ore (oz)		5,205		5,302		9,68	
Total of C(OE)	1	5,205		5,502		5,00.	
CAPITAL							
Access							
Decline Dev.							
Other Dev.							
Equipment							
RAR - big raisebore	\$		\$		\$	0.0	
Escape way - raisebore & Safescape	\$		\$		\$	351	
Sustaining							
Decline Dev.	\$	1/27	\$		\$		
Other Dev.	\$	905,034	\$	1,023,365	\$	917,50	
Vent rise	\$	-	\$	-	\$		
RAR & Escape way	S		S		S		
io A Escape way	,	17.5%	,	-	,		
OPERATING							
Development							
Ore	c	881.069	e	1.001.102	e	4 403 00	
	\$		\$	1,061,192	S	1,483,02	
Waste	\$	282,480	\$	211,860	\$	141,24	
Production		2000					
Ground Support (Stope)	\$	74,582	\$	85,090	\$	206,51	
Drilling	\$	137,116	\$	156,436	\$	379,67	
Blasting	\$	123,877	\$	141,332	\$	343,02	
Load & Truck	\$	388,772	\$	455,117	\$	1,125,64	
Backfill - CRF	\$		\$		\$		
Backfill - PASTE	\$		\$		\$		
Backfill - RF	\$		\$		\$		
Slot Rise	S	-	\$		\$		
order made	,				*		
Other Fixed							
		220.000	ė	240	ė	F30	
Mine Administration - includes geology	\$	238,965	\$	248,557	\$	579,73	
Milling Administration	\$	792,622	\$	824,437	\$	1,922,91	
Finance & Administration	\$	490,319	\$	510,000	\$	1,189,52	
Site Capital Sustaining	\$	58,742	\$	61,100	\$	142,51	
Other Variable							
	\$	117,684	\$	122,408	\$	285,50	
Mine General Milling	\$	347,059	\$	360,990		841,97	

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Mine

15.1.2 DEPLETION AND RESULTS

The Mineral Reserves reported above are the result of work based on data to December 31, 2017 and reported by Kirkland Lake Gold in accordance with NI43-101. The evaluation models have been depleted for material mined up to December 31, 2017. The process involved the generation of surveyed solid models for the mined development and stope areas and then running a depletion process in order that the depleted areas can be excluded from the Mineral Reserve.

 $Results for the \ Mineral \ Reserves contained in the \ Fosterville \ operating \ areas \ are \ provided in \ Table \ 15-1.$

Infrastructure required for the exploitation of the stated reserves are either in place or have been planned to be developed within the LOM plan generated through the reserving process. All works fall within the granted mining lease boundaries and are covered within the existing approved work plan. It is unlikely that either infrastructure or permitting could materially affect the stated reserve position.

There are no known political, legal, environmental or other risks that could materially affect the potential development of the Mineral Reserves.

16 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 Q2 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. Since the completion of O'Dwyer's South cut back in Q4 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 (Figure 16-1, Figure 16-2 and Figure 16-3).

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, 2018 works are planned to continue in the Phoenix (including Swan Eagle, et al), Central and Harrier ore bodies. All areas are planned to be extracted using open stoping techniques with the application of Cemented Rock Fill (CRF) or Paste Fill (PF) where applicable and practical. Selection of the specific mining method within the open stoping regime is based upon previous experience at the Fosterville Mine and expectations of ore zone geometry and geotechnical conditions (Figure 15-2). A standard level interval of 20 vertical meters can be applied across all mining areas. However, this can be varied as is required to maximize the extraction of the economic material. 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 orebody above 4500mRL are accessed from the hangingwall.

Underground mining is conducted using a conventional fleet including 2 boom development drills, production drills, loaders, trucks and ancillary equipment. Current mining is undertaken as predominantly owner miner.

Technical Report
December 2017

Kirkland Lake Gold
December 2017

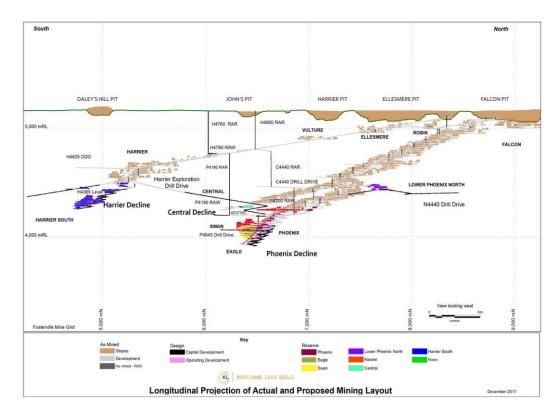


FIGURE 16-1 LONGITUDINAL PROJECTION OF ACTUAL AND PROPOSED MINING LAYOUT AS AT DECEMBER 31, 2017

Kirkfuld Lake Minus

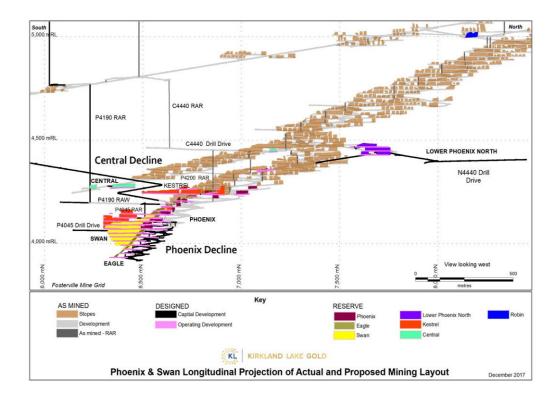


FIGURE 16-2 LONGITUDINAL PROJECTION OF PHOENIX AND SWAN ACTUAL AND PROPOSED MINING LAYOUT AS AT DECEMBER 31, 2017

Exhical Report

First Company Company

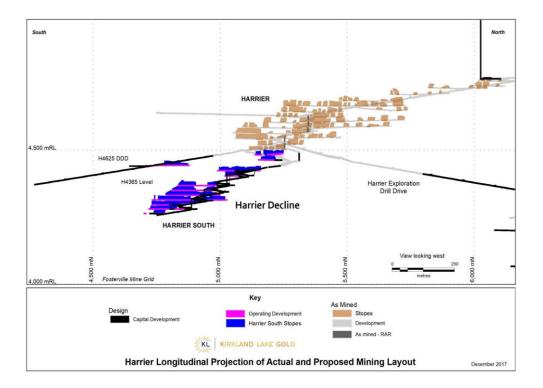


FIGURE 16-3 LONGITUDINAL PROJECTION OF HARRIER ACTUAL AND PROPOSED MINING LAYOUT AS AT DECEMBER 31, 2017

17 RECOVERY METHODS

Since the commissioning of the processing plant in 2004, all processing models for the mill have been based on actual plant performances. The processing budget takes into consideration the mining schedule (ore source location, tonnes to be mined and gold grade), and predicted sulfur grades to be processed. Recovery data for Fosterville is detailed in Table 17-1.

TABLE 17-1 ACTUAL PLANT PERFORMANCES (2009 – 2017)

Plant Parameter		2009	2010	2014	2012	2012	2044	2015	2016	2047
		2009	2010	2011	2012	2013	2014	2015	2016	2017
Tonnes Milled	t	781,878	817,535	785,503	786,572	792,166	814,835	703,788	693,066	547,476
Sulfur Feed grade	%	1.71	1.6	1.59	1.44	1.35	1.36	1.34	1.71	1.51
Feed Grade	g/t Au	4.79	4.57	4.87	4.36	4.53	4.62	6.11	7.55	15.78
Flotation recovery	%	96.2	96.2	96.7	95.0	95.9	95.7	96.6	97.0	98.6
Gravity gold recovery	%								12.9	27.6
BIOX® recovery	%	99.0	98.7	98.4	97.8	98.0	98.6	98.5	98.4	98.7
Sulfide Oxidation	%	96.3	98.6	97.7	97.7	98.2	98.1	98.3	97.7	97.3
CIL recovery	%	86.2	79.8	81.3	80.5	86.2	87.1	90.9	89.9	93.9
Heated leach recovery	%	0.3	7.1	6.0	7.6	4.5	4.6	2.0	3.7	2.4
Overall Leach recovery	%	86.6	86.9	87.3	88.1	90.7	91.6	92.9	93.6	96.2
Overall Plant recovery	%	85.0	82.5	83.0	82.0	85.2	86.5	88.5	90.1	95.0
Mining Au produced	OZ	102,336	99,032	102,048	90,358	98,354	104,518	122,362	151,585	263,845
Retreat: Leach tails: tonnes	t	9,634	13,222	4,495	2,623	854	4,951	4,519	2,141	0
Retreat: Leach tails: grade	g/t Au	10.25	10.37	8.27	6.98	7.05	10.48	10.75	7.90	0
Retreat: Leach tails: recovery	%	32.5	30.3	12.2	12.1	35.2	49.0	46.3	30.8	0
Retreat: Leach tails: Au produced	oz	1024	1,410	154	80	69	824	734	169	0
Total gold produced	oz	103,360	100,442	102,201	90,439	98,423	105,342	123,096	151,755	263,845

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 Semi-autogenous grinding (SAG) mill;
- 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;

Technical Report Kirkland Lake Gold
December 2017 Fosterville Gold Min.

 A Bio-oxidation circuit consisting of BIOX[®] reactors to oxidize the flotation concentrate, releasing gold from the sulfide mineral matrix;

- A three-stage CCD 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 sulphate as calcium sulphate (gypsum) using both ground limestone and lime
 slurries;
- A limestone grinding facility comprising a single wet ball mill operated in closed circuit with a hydrocyclone to produce 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:
- Carbon-in-leach (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 (HL) circuit to combat preg-robbing capabilities of the non-carbonaceous carbon always present in the Fosterville orebody. Specialized in-house technology unique to Fosterville;
- Pressure Zadra elution circuit to remove gold from carbon, followed by recovery by electrowinning and smelting to doré.

A schematic flow sheet detailing unit operations is presented in Figure 17-1.

The plant was laid out on either side of a central rack in order to facilitate the distribution of reagents, services, and piping arrays. Individual plant areas are separated by bunding to isolate and contain spillage. Storm water and abnormal spillage events report to an existing drainage channel, which discharges to a separate containment dam.

The layout of the comminution circuit allows for installation of a pebble crushing circuit should it be required, and a secondary ball mill to increase grinding circuit capacity. Space was left in the area layouts for additional tank farms and equipment to accommodate a nominal increase in plant capacity. Space exists to the east of the plant site to duplicate existing facilities to double plant throughput if required.

Plant commissioning began in November 2004 with first gold production in Q1 2005.

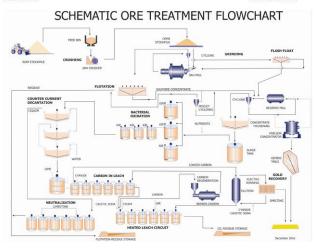


FIGURE 17-1 SCHEMATIC ORE TREATMENT FLOWCHART

Crushing and Milling

The crushing circuit has the capacity to operate 24 hours per day, 7 days/week, at the design availability of 80%

Run of Mine (ROM) ore is reclaimed from stockpiles on the ROM pad and fed to a bin by front-end loader, blending the ore in the process. Ore is then fed to a 760mm x 1,372mm single toggle jaw crusher by a vibrating grizzly feeder and minus 100mm crushed ore is conveyed to a coarse ore open stockpile with reclaim tunnel providing feed to a SAG mill.

Dust suppression measures are installed at the ROM bin. The crusher discharge and conveyor transfer points both being fitted with dust collectors.

Crushed ore is fed at a controlled rate onto a conveyor feeding 3,500kW SAG mill (~6.1m in diameter x 6.1m). The ore is ground to a P_{80} of 75 μ m in closed circuit with hydrocyclones to liberate sulfide minerals containing gold from the barren gangue minerals. The milling circuit is designed to operate 24 hours per day with a throughput of up to 120 dry tph.

Flotation

Hydrocyclone overflow from the SAG mill gravitates to the flotation circuit where the gold containing sulfide minerals are concentrated into a flotation concentrate containing about 8 - 10% of the feed mass with a barren flotation residue, which is rejected from the process.

The design basis for the flotation circuit is to maximize gold recovery to a concentrate grading approximately 20% S¹. The flotation circuit consists of a rougher-scavenger cleaner circuit. Rougher concentrate passes directly to final concentrate, while scavenger concentrate passes to the cleaning circuit for upgrading. Cleaner tailing is recycled to the head of the rougher circuit.

The following flotation reagents are added to the hydrocyclone overflow launder and flash flotation feed:

- · Copper sulphate as Activator;
- · Potassium amyl xanthate (PAX) as Collector; and
- Frother.

Reagent selectivity is a key aspect of the flotation circuit management, based not just on performance, but also toxicity and preg-robbing aspects to the downstream Bacterial Oxidation Circuit and the Cyanide leach circuit respectively.

Flotation residue gravitates to a tailings hopper where it is combined with the products from neutralization of the BIOX* liquor and the combined product is pumped to the flotation residue storage facility.

Flotation concentrate is reground to 80% passing 20 μ m and is thickened in a high-rate thickener prior to feeding the BIOX® circuit.

Gravity Recoverable Gold

With recent changes in the orebody showing increased occurrences of visible gold, a gravity recoverable gold circuit was constructed in Q1 2016 and commissioned in April 2016.

The gravity recoverable gold circuit is installed in the flotation concentrate regrind circuit and continuously processes 100% of the recirculating load. A Knelson concentrator is used as the primary concentrating device, with Knelson concentrate passing to a surge tank. On a day shift basis only, gravity concentrate is removed from the day surge tank and processed over a secondary concentrating Gemini GT1000 table. GT1000 concentrate is then tertiary processed over a GT250 Gemini table. All table tails are passed directly back to the regrind mill recirculating load where they pass back through the Knelson concentrator.

Final shaking table concentrate is calcined in an oven with oven exhaust being wet scrubbed. Calcine concentrate is direct smelted to doré bars.

Technical Report Kirkland Lake Go

Oxidation - BIOX

Due to the different design availabilities between the milling/flotation circuits and BIOX* circuit, and the need for steady operation of the BIOX* circuit, a surge tank with a live capacity of about 48 hours acts as a buffer between the circuits.

The BIOX® bacteria are sensitive to chloride levels in the water, and management of BIOX® feed dilution water quality to <1,000ppm CP is critical for the health of the BIOX® circuit. Likewise, cyanide and thiocyanate species are also toxic materials to the bacteria, hence the Flotation and Neutralization waters, plus CIL decant liquors are managed separately at the Fosterville operations to eliminate any processing risks.

Nutrient solution is dosed to the feed splitter box to maintain the correct levels of nitrogen (N), potassium (K) and phosphorous (P) levels in the BIOX* reactors.

The BIOX* culture is kept active in the reactors by controlling the slurry conditions within specific ranges. The oxidation reactions are exothermic and it is necessary to constantly cool the slurry. The reactors are equipped with cooling coil baffles through which cooling water is circulated to control the slurry temperature at about 43°C in each reactor.

Oxygen requirements for sulfide oxidation are significant and medium pressure air is injected into each of the reactors.

The slurry pH in each of the reactors is controlled between 1.0 and 1.6 by addition of ground limestone. Hence the corrosive nature of the BIOX* slurry and the potential risk for elevated chloride levels resulted in selection of SAF 2205 stainless steel for equipment in the BIOX*, CCD, and neutralization circuits.

The oxidized product discharged from the final secondary BIOX* reactor gravitates to the first of three CCD thickeners.

During bio-oxidation iron, sulfur and arsenic is solubilized and is washed from the solid oxidized gold containing residue in the series of three CCD thickeners. A three-stage CCD circuit with a wash ratio of 4.0 is used to ensure soluble arsenic and acid is reduced to levels acceptable in the oxidized concentrate prior to the CIL process. Process water is used as wash water in the CCD circuit and is added to the feed tank ahead of the third (last) CCD thickener. The underflow from the last CCD thickener (washed product) is pumped to an agitated pH adjustment tank at the head of the CIL circuit.

The acidic solution overflowing the first CCD thickener is pumped to the first of six agitated neutralization tanks in series and the solution flows from tank to tank via launders. By-pass launders allow tanks to be taken off line for cleaning and maintenance. In the neutralization circuit the majority of the sulfuric acid is neutralized and precipitated as calcium sulphate (gypsum) and the soluble arsenic and iron precipitated as stable basic ferric arsenate.

The neutralized effluent gravitates to the flotation residue hopper and is pumped with the flotation residue to the residue storage facility.

Technical Report Kirkland Lake Gold

Mozley Cyclones

Ahead of the BIOX* surge tank, the Mozley de-sliming cyclones were installed in April 2008. The Mozley cyclones are used when the feed blend to the flotation circuit is more than 0.3% NCC. The rougher and cleaner concentrate from the flotation concentrate is run through the Mozley cyclones.

The cyclone clusters come in two sets of 20 cyclones and have a typical spigot /vortex finder arrangement of 2.2/7.0mm. The cyclones are fed at a pressure of 250kpa resulting in typical mass split of 60% to the underflow. Typical feed rate of 40-50m³/hr at 16% solids with 30-40m³/hr at 5-8% solids reporting to the overflow tailings.

Leachin

Six adsorption tanks are identical in size at 190m³ with a total circuit residence time of about 48 hours at a 30% pulp density. Test-work indicates that the leaching of the oxidized residue plateaus at 36 to 48 hours. Underflow from the last CCD thickener is pumped to the pH adjustment tank and lime slurry is used to neutralize residual acid and raise the pH of the pulp to 11 prior to cyanide addition.

Carbon concentrations (20-30g/L) are maintained in all tanks to ensure high gold adsorption efficiency and maintain a low solution tail. The last CIL tank can be used as tails retreat feed tank.

Heated lead

CIL discharge is fed to heated leach circuit, which was commissioned in April 2009. The process utilizes heat from steam injection and caustic to facilitate gold release from native carbon.

The heated leach circuit consists of six 75m³ tanks with a residence time of 8-12 hours. The first three tanks are heated while the last three tanks are cooled to avoid loss of gold in solution. The heated leach process is effective in destroying WAD cyanide to <50ppm and has replaced the former detoxification circuit.

Elution and Gold Electro-winning

The following operations are carried out in the elution and gold room areas:

- · Acid washing of carbon:
- Stripping of gold from loaded carbon using a pressure Zadra elution circuit;
- · Electro-winning of gold from pregnant solution; and
- Smelting of electro-winning and gravity products.

The elution and gold room areas operate seven days a week, with the loaded carbon recovery on nightshift and the majority of the elution occurring during dayshift. The 3.5t pressure Zadra elution circuit consists of separate rubber lined acid wash and stainless steel elution columns.

Energy, water and major process reagents consumed by the processing plant are all readily available in Australia. FGM do not anticipate there to be any significant increases or decreases to the current consumption rates.

18 PROJECT INFRASTRUCTURE

All project infrastructures are in place servicing mining and processing operations (Figure 18-1).

18.1 SURFACE INFRASTRUCTURE

18.1.1 PLANT

The process plant site was selected close to the western boundary of the Fosterville Mining Licence, as it:

- Offers easy access from the existing public road system;
- Minimizes haulage distances from mining operations, particularly, the underground portal location; and
- Minimizes the potential for noise impact on nearby residential areas to the east and south by allowing waste dumps and noise abatement bunds to be constructed to the east of the plant site.

The process plant has a nominal capacity of 830,000tpa and incorporates the following unit process operations (Figure 18-2):

- Single stage crushing with a primary jaw crusher;
- · Open stockpile with reclaim tunnel;
- Semi-autogenous grinding (SAG) mill;
- Flotation circuit to produce a gold bearing sulfide mineral concentrate and a discardable barren residue;
- Flotation concentrate regrind mill to produce a 20µm product
- · A gravity gold recovery circuit consisting of a Knelson concentrator and two Gemini tables;
- A bank of de-sliming hydrocyclones for removing native carbon from flotation concentrate;
- Bio-oxidation circuit consisting of BIOX® reactors to oxidize the flotation concentrate, releasing gold from the sulfide mineral matrix;
- A three stage CCD circuit to separate the gold bearing oxidized solid residue from solubilized acid oxidation products:
- A liquor neutralization circuit to neutralize acid and precipitate arsenic as stable basic ferric
 arsenate and sulphate as calcium sulphate (gypsum) using both ground limestone and lime
 slurries;
- A limestone grinding facility comprising a single wet ball mill operated in closed circuit with hydrocyclones to produce ground limestone slurry for neutralization;
- Carbon-in-leach (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;
- A heated leach circuit consisting of 6 x 75m³ tanks to recover 'preg-robbed' gold from native carbon; and
- Pressure Zadra elution circuit to remove gold from carbon, followed by recovery by electrowinning and smelting to doré.

The 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 bunded 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.

Technical Report Kirkland Lake Gold December 2017 Korkland Lake Gold Mine

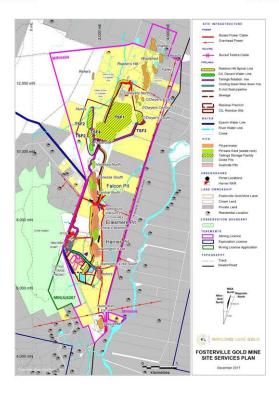
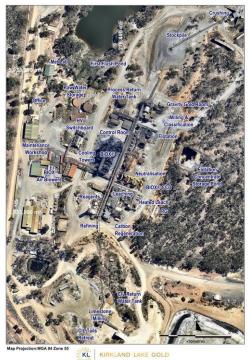


FIGURE 18-1 FOSTERVILLE GOLD MINE SITE SERVICES PLAN



FOSTERVILLE PROCESSING PLANT AREA PLAN December 2017

FIGURE 18-2 FOSTERVILLE PROCESSING PLANT AREA PLAN

18.1.2 BUILDINGS

The site buildings comprise of administration, processing and mining office complexes, toilet/shower/change room facilities, store/warehouse, light vehicle and heavy vehicle workshops, a surface maintenance workshop and core shed facility.

The site is serviced by security infrastructure, phone and internet services.

18.1.3 POWER

Site power is supplied by the Fosterville Terminal Station (FVTS), which is a zone substation on the 220kV power line from Bendigo to Shepparton (BETS-SHTS). The terminal station is owned by Fosterville, operated by SP Ausnet and maintained by Powercor.

The terminal station has a single 15/20MVA ONAN/ONAF 220/11kV transformer.

An overhead 11kV power line runs from the FVTS to the processing plant. The power line is 2,800m long at consists of 19 poles.

At pole 9 there is an 11kV switch room, which supplies the U/G operation.

The processing plant has five 11kV/ 415V transformers and low voltage MCC's to supply and control the processing plant.

There is also an 11kV 3,500kW SAG Mill motor and three 11kV 750kW motors for the BIOX® Blowers.

The processing plant also has a Power Factor Correction unit.

Power consumption in the processing plant is approximately 7,000kW at a power factor of 0.98.

There are also a couple of 22kV supplies into site, which supply remote areas for site water management as well as the main administration offices.

The site also has a 2.5km long 11kV cable from the U/G settling dams to the in pit Tails MCC, which has a 750kVA 11kV/415V transformer.

18.1.4 TAILINGS

There are two separate residue streams at Fosterville, a flotation/neutralization residue (Figure 18-3) and a cyanide bearing residue (Figure 18-4):

 The flotation / neutralization residue is a combination of flotation tails (95%) which is ground ore and neutralized liquor containing precipitated solids (5%) from the oxidation process. These tailings are either stored within an above ground paddock style Residue storage facility, or within an In-Pit facility.

Fosterville operates Victoria's first In-Pit facilities, whereby through extensive hydro-geological modeling, abandoned oxide ore pits where identified as preferred storage options. In-Pit facilities offer significantly lower capital and operating costs compared to above ground facilities, and also contribute to the overall rehabilitation of the mine site. Water from these facilities is reused back through the milling, flotation and bacterial oxidation processes. The starter embankment for TSF44 was constructed in 2015 and has the capacity to hold two years' worth of flotation/neutralization tailings. Fosterville currently has at least four years of permitted (regulator approved) storage capacity. Therefore, Fosterville has a permitted flotation/neutralization storage plan until 2021. Planning of future flotation / neutralization storage is underway to provide adequate storage for LOM; and

Cyanide bearing leach residue: The leaching circuit uses cyanide to extract the gold and subsequently
the liquor possesses traces of cyanide species. As a consequence, the leach residue is deliberately
stored separately to that of the flotation residue in a HDPE or clay lined storage facility and only
utilized back within the leaching circuits. Tailings is excavated annually from one of the CIL TSF's and
placed onto one of the CIL hardstands. Fosterville has at least two years of storage capacity available
on existing CIL Hardstands. In 2017, Fosterville will seek regulatory approval for further CIL Hardstand
upgrades.



FIGURE 18-3 FOSTERVILLE FLOTATION AND NEUTRALIZATION RESIDUE STORAGE AREA PLAN



FIGURE 18-4 FOSTERVILLE CIL RESIDUE STORAGE AREA PLAN

18.2 UNDERGROUND INFRASTRUCTURE

18.2.1 POWER

Power for the underground operations is drawn from Pole 9 11kV Switch Room that connects to the Fosterville Terminal Station (FVTS) Transformer located adjacent to Daley's Hill.

Three 11,000 volt feeds each enter the underground workings at:

- Harrier at the 4775m RL Sub Station, via the Harrier vent shaft;
- Phoenix at the 5031m RL Sub Station, via a service hole; and
- Ellesmere at the 4968m RL Sub Station, via a service hole.

From these locations low voltage (1000 volt) is reticulated to the working areas via cable and distribution boxes. Further 11,000 volt sub-stations are cascaded from the above named primary points as mine working load requires.

Existing and planned future underground power reticulation (we are currently operationally limited by power) has been sized to meet the designed LOM requirements.

18.2.2 WATER

Dewatering of the Fosterville underground workings is conducted utilizing two pumping stations.

Each of these stations comprises of three by WT088 helical rotor pumps that are fed from purpose constructed feed dams.

The Phoenix/Central Area is serviced by a station situated at the 4830m RL; this station pumps directly to the surface via a steel rising main line that is run through service holes and mine workings and discharges into the Falcon Pit caving area for final settlement of mine solids so that the water can then be utilized within the mine water reticulation system.

The Harrier Area is serviced by a station situated at the 4775m RL; this station pumps directly to the surface via steel rising main that is run through service holes, mine workings and the Harrier vent shaft and discharges to the Harrier pit.

Mine water is managed through sumps that are, where possible, connected by drain holes, otherwise pumps are used to move water to collection points where it enters staged pumps that transport water from the working areas of the mine to the pump station feed dams. Pumps used for the staged transfer of water are of the helical rotor type, predominantly WT103 type.

Underground mine process water is recycled from the mine water and is reticulated to the underground working areas from a tank farm on the surface.

18.2.3 VENTILATION

Primary ventilation of the Fosterville underground workings is achieved utilizing three return air systems; fresh air is drawn into the mine workings via the Falcon and Ellesmere portals and a total of 330m³/s is delivered to the underground workings.

- Central/Phoenix
 - Uses a shared system that exhausts through the Harrier ventilation shaft.
 - 1 x Howden 1500/2400 axial fan situated within the Harrier workings draws air through a series of rises and horizontal development that at present terminate at the Phoenix 4085m RL.
- Phoenix
 - 1 x FlaktWoods TR-1400-GV-4P fan situated underground at the Phoenix 5071m RL draws air through a series of rises and horizontal development to maintain flow through the underground magazines. Exhaust is via a rise to the Falcon pit.
- Harrie
- Up to 4 x FlaktWoods TR-1400-GV-4P fans are situated underground and draw air through a series of rises and horizontal development that at present terminate at the 4350m RL. Exhaust to the surface is via the Harrier ventilation shaft.

Secondary ventilation is provided to the mine working areas utilizing electric fans and flexible ducting. Fans are sized according to air-flow requirements and range in size from 22-180 kW.

18.2.4 DUMPS

Waste material that cannot be placed underground is brought to the surface and dumped within the confines of the Ellesmere pit. As the available volume for waste material within the Ellesmere pit moves towards exhaustion, waste material placement processes will be modified to exploit void available within alternative pit envelopes.

19 MARKET STUDIES AND CONTRACTS

19.1 MARKETS

Fosterville produces gold doré bars at mine site, which during the period January1 to June 30, 2017 were transported to the ABC Refinery in Marrickville, NSW, Australia and refined to produce gold bullion. The gold bullion is sold over the counter through either ABC Refinery directly, or third party international between

Gold is the principal commodity at Fosterville and is freely traded, at prices that are widely known, so that prospects of any production are virtually assured. Prices are usually quoted in US dollars per ounce.

To determine the Australian denominated gold price to use in the Mineral Resource and Mineral Reserve calculations, reference was made to publicly available price forecasts by industry analysts for both the gold price in US dollar terms and the AS/US\$ foreign exchange rate.

This exercise was completed in December 2017, and yielded the following average gold forecast prices and corresponding average forecast A\$/US\$ FX rates.

For Mineral Reserve purposes, a US\$1,280 per ounce gold price was used and an FX rate of \$0.80 for an approximate Australian dollar gold price of A\$1,600 per ounce.

19.2 CONTRACTS

Fosterville is subject to a licence fee following a Licence agreement entered into with Biomin South Africa Pty Limited (Biomin) (formally known as Minsaco) in 2003. Biomin has a Licence from the proprietor to implement a process known as the BIOX* process in Australia whereby micro-organisms are used in the widation of certain gold bearing sulfidic minerals in order to facilitate gold recovery. Fosterville age net to pay a licence fee to Biomin calculated as an amount determined by multiplying the number of ounces of gold produced from FGM treated through the BIOX* Plant by A\$1.33. The licence fee was payable from the date of commencement of operations and shall terminate when 1,500koz of gold in the aggregate has been produced from FGM treated at the BIOX* plant. Licence costs are integrated into the operating expenditure cost structure.

When Crocodile Gold acquired the Fosterville and Stawell Gold Mines from AuRico in 2012, a net free cash flow sharing arrangement was established where Crocodile Gold was entitled to cumulative net free cash flow from those mines of up to C560M. AuRico would then be entitled to 100% of the next C530M in net free cash flow, after which Crocodile Gold and AuRico would share the next C530M of net free cash flow on a 50/50 basis until C5120M of cumulative net free cash flow was achieved, following which AuRico would be entitled to 20% on an ongoing basis.

On December 22, 2014 it was announced that Crocodile Gold had reached a mutually beneficial agreement with AuRico that terminated their net free cash flow sharing arrangement in exchange for a one-time payment of \$C20M in cash and a net smelter return royalty of 2% from Fosterville (effective

upon final approval from the Foreign Investment Review Board of Australia) and a 1% royalty from the Stawell Gold Mines (commencing January 1, 2016), releasing Crocodile Gold from its obligation to pay AuRico any further net free cash flow generated from its Victorian operations.

This agreement means that Kirkland Lake Gold is obligated to pay AuRico a net smelter royalty of 2%. However, Alamos Gold Inc. (Alamos) merged with AuRico Gold in July 2015, which has resulted in Kirkland Lake Gold now being obliged to pay the new company, AuRico Metals, the net smelter royalty of 2% from Fosterville Gold Mine.

On January 8th, 2018 Centerra Gold completed the acquisition of AuRico Metals. In terms of the Royalty payment details, nothing has changed as AuRico Metals Australian Royalty Corporation continues to exist as a subsidiary to the group.

Fosterville is an owner/operator business with mining, processing, technical and administration functions undertaken by personnel employed by Kirkland Lake Gold. Supplementary support to the operation is sourced through various service contracts. The most significant service contracts include:

- E.B. Mawson & Sons Pty Ltd providing services and supply of concrete products;
- Downer EDI Mining Pty Ltd providing underground drilling services;
- Hoare Bros. Pty Ltd providing surface haulage services; and
- Swick Mining Services (SMS) Operations Pty Ltd providing underground diamond drilling
- Deepcore Australia Pty Ltd providing surface diamond drilling services.

The terms and rates of these contracts are within industry norms. The Authors are not aware of any other agreements that are not within normal market parameters.

Technical Report Kirkland Lake Gold

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.1 ENVIRONMENTAL STUDIES AND RELATED ISSUES

Environmental studies conducted at FGM related to environmental issues are outlined below:

Paste Plant

Paste Fill is the use of mine tailings or imported aggregate material 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, usually cement, and then pumped underground via bores to fill voids and help support the underground workings.

The current practice at Fosterville is to utilize cemented rock fill ('CRF') to fill these mine voids. Cemented Rock Fill differs from Paste Fill through the use of waste rock mixed with a cement slurry delivered by concrete agitator trucks from a surface batch plant. This material is prepared in dedicated mix bays underground, and tipped directly into the stope.

In preliminary feasibility studies (Outotec, 2017) Fosterville Gold Mine identified Paste Fill technology as the preferred option to environmentally and efficiently improve underground stope stability and mining practices. The identification of the project need centers on the mine sites continuous improvement reactions.

In summary:

- Paste Fill allows better confinement than the CRF;
- Improved safety is experienced through tighter and more rapid filling of voids;
- CRF is not suitable for flatter ore bodies, such as Lower Phoenix, and may present a barrier to future mining of similar orebody structures at Fosterville.
- Paste Fill also minimizes the foot print of surface tailings facilities, and is considered a leading best practice within the mining industry.

A paste plant is currently going through the design and approval stage with construction planned for late 2018.

Water Treatment Plan

Fosterville Gold Mine produces an excess of mine water from the dewatering of underground operations. Regulatory approval has been gained to treat excess mine water using a Reverse Osmosis (RO) plant, which is scheduled for construction in mid-2018. 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 will be stored in a new evaporation pond, which will be able to withstand seasonal rainfalls without discharge.

Treated mine water will be used within the process circuit, reducing the amount of recycled water which is delivered by pipeline from the Epsom Wastewater Treatment plant. This will also assist in reducing the volume of water pumped into mine water storage, therefore improving the water management on site.

Managed Aquifer Injection

Managed Aquifer Injection (MAI) is a potential mine water storage strategy currently under investigation at Fosterville. MAI involves the intentional injection of water into a host aquifer for storage and/or potential reuse for environmental and agricultural benefits. Water is treated prior to injection so that the water chemistry meets the same specifications as the host aquifer. A pilot mine water treatment plant was successfully established at Fosterville to investigate the effectiveness of the treatment process. Investigations into the water treatment process are continuing in order to demonstrate the robustness of the selected processes, hence ensuring groundwater will not be adversely impacted.

An injection trial was carried out in January 2017 whereby water of an approved quality was physically injected into the aquifer and evidence of that water chemistry was monitored at a series of groundwater monitoring bores. The trial also improved the understanding of how the water moves through the aquifer.

Fosterville propose that a longer term injection trial will be forecast in the future. The objective of this trial will be to validate the theoretical groundwater movements over a longer duration and compare against actual field data.

Further correspondence with the regulators prior to undertaking any further trials will be undertaken. If the trial is successful, it is envisioned a formal work plan variation will be submitted for approval.

Environmental Noise Assessments and Mitigation

FGM's operations generate noise from a variety of sources that may impact off site receptors. Activities include vehicle movements, processing operations, ancillary infrastructure, surface and underground blasting and exploration activities. Noise levels at sensitive receptors vary depending on the location and elevation of the noise source, intervening topography, climatic conditions, background noise levels and engineered noise attenuation barriers present.

During the second half of 2017 the following noise related projects have been investigated or implemented:

- A consultant (AECOM) was engaged to set up a continuous noise monitor to better determine what the main noise contributors are from site.
- An acoustic enclosure for BIOX Agitator 3 was installed at the Processing Plant, which included an
 underfloor to minimize leakage of noise under the agitator motor. The design and specifications
 for the enclosure have been prepared by noise control specialists, Flexshield.
- Monitoring indicated that the ore stockpile fan was operating at an elevated noise level. A silencer
 for these fans has therefore been ordered and installation is scheduled for early 2018.
- Surface drilling contractor Deepcore Drilling improved a noise attenuation shed used for drill rigs, by installing a shield to deflect noise upwards from the air circulation fans. Three noise attenuation sheds are in operation to mitigate noise from surface drilling operations.

Technical Report Kirkland Lake Gold

 AECOM conducted environmental noise assessments for the proposed paste plant and underground mining ventilation system. This included design specifications and control strategies to mitigate noise.

Storm Water Management

During 2017, FGM implemented the recommendations by consultants Advisian to improve the ability of storm water dams to contain mine affected runoff from a 1:100-year rainfall event. This included excavation and enlargement of the existing Stand-pipe dam, improved pumping capacity to remove water from the dam, and diversion of upstream catchment. An operational management plan for storm water management in this catchment has been implemented.

Biosolids Trial

In collaboration with Coliban Water, FGM is planning to conduct an extended Biosolids fertilizer trial upon regulatory approval. Biosolids is a solid product from sewage treatment processes which have been treated in a way to make them safe for further use. The Biosolids fertilizer has previously been incorporated into a number of soil plots and planted with native species. The extended trial will be over a larger area with salt tolerant pasture species and saltbush.

Monitoring of the plots will be undertaken by consultants RMCG. Monitoring in the original plots indicated certain plant species had good growth rates when Biosolids was mixed with waste rock.

Dust Contro

During 2016, AECOM consultants were commissioned to model the dust dispersion patterns from mining activities and provide recommendations on the appropriate siting of existing dust monitoring equipment. As per the recommendations of the report, FGM modified the depositional dust monitoring locations and in 2017 installed an additional High Volume Air Sampler to the south of the mine site.

In addition to the use of water carts for dust suppression, a chemical dust control agent was applied to approximately 13ha of the Fosterville Cll tailings precinct during December 2016 and January 2017. The binding agent provided a semi-permanent and rain resistant crust to mitigate dust generation. This area will be re-applied with chemical dust suppressant in early 2018.

Ventilation Upgrade

A work plan variation to upgrade the mine ventilation system is presently being assessed by the regulator. The upgrade is to provide fresh air to underground workings and maintain a safe working environment. As part of the upgrade, a new ventilation shaft will report to the surface. As per environmental consultant advice, noise controls are being considered in the design phase and environmental offsets for vegetation clearance will be obtained.

20.2 WASTE AND TAILINGS DISPOSAL, SITE MONITORING AND WATER MANAGEMENT

20.2.1 REQUIREMENTS

Requirements for residue storage sites are provided in the following documents:

- · Section 4.5 of the 2004 Work Plan;
- Work Plan Variation, Additional Portal Access Points (three in total), additional CIL storage facilities (including on the Fosterville Heap Leach Pad) and the construction of a reload facility (February 22, 2005);
- Work Plan Variation, CIL Tails Storage and Decant Water Management (July 1, 2008);
- Work Plan Variation CIL Residue Hardstand Area (October 23, 2009);
- Work Plan Variation, In-Pit Residue Disposal Facility (November 2009);
- Work Plan Variation, CIL Residue Hardstand #2 Area (March 2012);
- Work Plan Variation, In-Pit Residue Disposal Facility TSF3 O'Dwyer's South Pit (November 2012);
- Work Plan Variation, Raising of existing embankment of TSF1 (December 2013); and
- Work Plan Variation, Additional Residue Storage Facility TSF4 (September 2014).

Flotation and Neutralization Tails

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 2017 FGM has 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.

CIL Tailing

All CIL tailings have been stored in plastic lined facilities within and adjacent to the old Fosterville Heap leach pads. A Work Plan Variation submitted in the fourth quarter 2017 is to gain approval to enlarge the facility. An environmental offset will be obtained for vegetation clearance associated with the application.

Overburden Waste

The deposition/distribution of overburden waste throughout the Fosterville site is outlined in Table 20-1.

TABLE 20-I OVERBURDEN USE AT FOSTERVILLE GOLD MINE

Overburden Source	Use		
Falcon Pit	Construction of TSF1 (internal rock armouring of walls)		
	Construction of the ROM pad		
	Construction of haul roads		
	Backfill into Vanessa's North Pit and at the southern end of Fosterville Pit (the remainder is flotation tailings)		
	Construction of McCormick's Waste Dump (majority)		
Ellesmere Pit	Sound bunds on the eastern side of Ellesmere (possibly Harrier sound bund as well		
	McCormick's Waste Dump		
	Falcon Backfill		
	Backfilling Harrington Hill South Open Pit ¹		
	Backfilling into Harrier Open Pit (western side)		
Johns Pit	Use for repairing the CIL Storm Dam wall		
	Abandonment bund walls for Johns Pit		
	South end of Ellesmere		
O'Dwyer's South Open Pit	To be used as backfill into the northern end of the Pit		
	To be placed into the existing O'Dwyer's South Waste Dump		
	Backfilling into Ellesmere Pit south to north		
Harrier	Construction of internal ramps in Harrier Pit		
Harrier	Sound walls to the east of Harrier Pit		
	To be used for rock fill for CIL #3		
Hunts	TSF1 ² main embankment		
	TSF4 embankments		
	Fosterville In Pit Tailings capping material		
	Building Hunts Pit Waste Dump		
Fosterville	Hunts Waste Dump		
Hadasassad	Backfilled into underground workings		
Underground	Used as base in the Ellesmere Saddle		

- Sediment from Fosterville Storm Dam was also transferred into Harrington Hill South Pit.
 TSF1 was also constructed using heap leach material from Robbin's Hill.

Potentially Acid Forming Materials

Potentially acid forming (PAF) 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.

A Waste Rock management plan was developed in 2014, which indicated that waste rock was overall nonacid-forming and contained a significant inherent Acid Neutralizing Capacity that was available to offset any isolated acid formation. Kinetic column leach testing of the main waste rock lithologies is continuing to further understand the long term leaching characteristics of the main overburden lithologies. Additional ongoing characterization has begun, with weekly waste rock samples being collected from the Ellesmere tip head for testing of chemical composition and acid-forming potential.

20.2.2 SITE MONITORING AND WATER MANAGEMENT

Water Management

The Fosterville annual water monitoring plan is designed to monitor the impacts of mining activities on surface and groundwater quality and quantity in the regional and local aquifer systems. Water samples are collected on monthly, quarterly or an annual basis in accordance with the Consolidated Work Plan (2017) and the annual water monitoring schedule which is reviewed each year.

Groundwater levels in the monitoring bores are also recorded each month.

Noise Monitoring

Noise monitoring is undertaken in accordance with the Consolidated Work Plan (2017) and includes periodic day, evening and night measurements at nine representative locations surrounding the mine. Noise results are assessed against EPA criteria and any mine related exceedances are reported to the Regulators.

Air Qualit

Dust deposition rates were monitored on a monthly basis at 11 sensitive receptors around the mine. The quantity of material deposited was analyzed for total insoluble material (g/m2), which comprises non-combustible material (ash) and combustible material. Ash content provides an indication of the mineral content of a sample. The mineral content may be attributable to mining, but may also be attributable to other sources such as agriculture, unsealed roads etc. The combustible material will not be attributable to mining as this is mostly organic matter.

An additional High Volume Air Sampler (HVAS) installed at the south of the site measures the particulate loading in the air less than 10 and 2.5 microns (mg/m3). This is per the recommendations of consultants AECOM and provides a 'background' sample (depending on wind direction) compared to the first sampler.

Greenhouse gases and other emissions are evaluated and reported under the National Greenhouse and Energy Reporting and National Pollutant Inventory regulatory programs on an annual basis.

CIL and Mine Water Evaporation Spray Monitoring Programs

Evaporation sprays have been setup in the Robbins Hill, Falcon Pit, and Fosterville precincts to reduce excess mine affected water that cannot be re-used in the Processing Plant. Environmental monitoring is conducted in the Robbin's Hill and Fosterville CIL evaporation facilities as per the CIL Management plan. Monitoring is conducted at the Falcon Pit mine water evaporation facility in accordance with the approved Work Plan Variation. Vegetation assessments, soil and spray drift monitoring is carried out to determine if the operation of the sprays is having any impact on the environment.

Rehabilitation Monitoring

As part of the Rehabilitation Management Plan, Fosterville undertakes progressive rehabilitation of areas affected by the operations, taking into consideration the future land use. Progressive rehabilitation includes stabilization earthworks, drainage enhancement and control works, establishing vegetation, weed and pest animal control and continual monitoring. Bi-annual monitoring of the revegetation works associated with the McCormick's Waste Dump site and the O'Dwyer's South Pit remnant patch is conducted by an independent consultant. Landscape Function Analysis monitoring is undertaken by the FGM Environment Department and uses visible indicators of plants, litter and soil surface condition to gauge how effectively a landscape is infiltrating water, cycling nutrients and keeping the soil stable, healthy and productive.

Vibration Monitorin

Blast monitoring was undertaken at 2 sensitive receptors outside the boundary of the Fosterville Mining Licence with permanently installed blast monitors. All of the blasts that were monitored during 2017 were within the Mining Licence limits. Continuous blast monitors with real time external monitoring and reporting capability are being investigated.

20.3 PROJECT PERMITTING REQUIREMENTS

Fosterville currently operates under a Mining Lease and Mining Licence dated 2003. 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 MRSD Act 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. F6M lodged a consolidated risk based work plan in April 2017 and approval was obtained in October 2017.

A mining lease application MIN006267, which is adjacent to the south-western border of MIN5404, was submitted for approval in 2016. The application is currently under review by the Dja Dja Wurrung Clans Corporation for Native Title Settlement.

There are a number of requirements relating to rehabilitation and closure both in the Mining Licence conditions and the Consolidated Work Plan (2017) Plan. All rehabilitation and closure requirements have been incorporated into the site Rehabilitation Management Plan.

20.4 SOCIAL OR COMMUNITY RELATED REQUIREMENTS AND PLANS

Community engagement and consultation on all aspects of the operation continues as an integral part of the FGM business model. There are a range of forums and consultation undertaken including quarterly Environmental Review Committee Meetings, an annual Open Day, newsletters, information updates and an active Facebook Page. A range of project or activity-specific meetings are also held where future activities and plans are communicated. The feedback from these sessions is utilized in planning any future projects. Fosterville Gold Mine also has a Community Engagement Plan and prepares an annual Sustainability Report that is made available to all members of the community. As required under the amendments to the MRSD Act in 2015 a Public Report on sustainability was uploaded to the Kirkland Lake Gold website in June 2017.

In May 2017 two open town hall meetings were held in the towns of Axedale and Goornong, both 10kms north and south of the operation, to provide the community information on all types of exploration programs that may occur within the FGM exploration leases.

20.5 MINE CLOSURE (REMEDIATION AND RECLAMATION) REQUIREMENTS AND COSTS

The Rehabilitation Bond Liability was assessed in November 2017 by the Department of Economic Development, Jobs, Transport and Resources (DEDJTR) and is proposed to be increased from \$7,835,000 to \$8,274,000. Consultation with the community by the regulator was being conducted in December 2017 prior to final formal acceptance of the review.

All closure requirements are included in the FGM Rehabilitation Management Plan.

Key operational domains for reclamation works include:

- Northern Site Facilities;
- Southern Site Facilities;
- Sulfide Infrastructure:
- Sulfide Open Pits;
- Adits and Shafts;
- Main Overburden Heap;
- Tailings Storage Facility;
- CIL Dams;
- Heap Leach Pads; and
- Oxide Open Pits.

After an investigation into the potential realization estimates of the FGM assets, including the processing plant, ancillary equipment, non-fixed assets and the mining mobile fleet, the Company considers the current processing plant as a valuable asset that will be able to be successfully sold as an entire operation unit and removed down to the foundations on a cash positive basis. The demolition of the plant is therefore an integral cost within the Rehabilitation Bond Liability at this time.

In addition to disposal of the plant, key closure activities for FGM include:

- Decommissioning and rehabilitation of the heap leach facilities, associated dams and infrastructure;
- Decommissioning and rehabilitation of the tailings facilities (including TSF1 and the in-pit storages);
- Decommissioning and rehabilitation of the CIL tails facilities and associated dams;
- Rehabilitation of old open pits; and
- Revegetation of all remaining disturbed areas.

21 CAPITAL AND OPERATING COSTS

21.1 CAPITAL AND OPERATING ESTIMATES

The capital and operating costs for the FGM are presented below in TABLE 21-1.

The basis of the below estimates is on operating history and known increases in cost for 2018.

Operating Cost

- All 2018 costs as per budget.
- $\bullet \quad \text{Operating costs for 2018 include A$84/t for mining and A$53/t for processing.}$
- Production for 2018 estimated between 260,000 and 300,000 ozs as per budget.

Capital Costs

- All 2018 costs as per budget.
- Underground Development Capital has been maintained to reflect the intention to maintain
 three main declines/production fronts (Lower Phoenix South, Harrier South and Lower
 Phoenix North). Major Project Capital peaks in 2018 with the majority of works completed
 for the Ventilation Upgrade, Mine Water Treatment Plant and Paste Fill Plant.

TABLE 21-1 2018 CAPITAL AND OPERATING COST ESTIMATES

Fosterville Gold Mine	FY-18	
Current LOM Reserves + Resource Conversion		
Operating Costs		
Underground Mining (includes geo & mine maint.)	\$48,895,491	
Processing (includes refining, transp. & mill maint.)	\$30,810,155	
Administration	\$12,804,325	
Total Operating (ex-Royalty)	\$92,509,972	
Capital		
Property, Plant and Equipment	\$37,242,425	
Underground Development	\$56,527,809	
Resource Definition Drilling	\$1,325,517	
Major Projects	\$42,832,923	
Total Capital	\$137,928,673	

Technical Report Kirkland Lake Gold December 2017 Korkland Lake Gold Mine

22 ECONOMIC ANALYSIS

As per Item 22: Economic Analysis, Instruction 1, item 22 has been excluded on the basis that the property is currently in production.

nical Report

23 ADJACENT PROPERTIES

As shown in Figure 4-2, the Fosterville Mining Licence (MINS404) is completely enveloped by Exploration Licences held by Kirkland Lake Gold (through Fosterville Gold Mine Pty Ltd). Within FGM held ELs sulfidehosted gold mineralization has been identified in the Goornong area (5km to the north of MINS404) and the Hallanan's area (2km to the south), as discussed in Van Riel (1999). However, the exploration of these prospects is only at an early stage and not relevant to discuss further in relation to this Technical Report.

Kirkland Lake Gold Fosterville Gold Mine

No other sulfide hosted gold operations are in production in the Fosterville district. However, sulfide hosted gold mineralization does occur in the Lockington area (Boucher et al, 2008b; Arne et al, 2009), 50km north of Fosterville where eight mineralized trends have been mapped beneath thick cover using aircore drilling. This information is not able to be verified by a Qualified Person (QP) and is not indicative of the mineralization that is the subject of this technical report.

Technical Report Kirkland Lake Gold December 2017 Korkland Lake Gold Mine

24 OTHER RELEVANT DATA AND INFORMATION

No other relevant information is required to make the technical report understandable and not misleading.

25 INTERPRETATION AND CONCLUSIONS

The Authors have made the following interpretations and conclusions:

- The understanding of the fundamental geological controls on mineralization at Fosterville is high.
 Primary mineralization is structurally controlled with high-grade zones localized by the geometric
 relationship between bedding and west-dipping faulting. This predictive model has led to
 considerable exploration success in following the down-plunge extensions of high-grade
 mineralization.
 - The Lower Phoenix Fault is significant west-dipping structure in the active mine development area and is defined by reverse faulting on a shale package where anticline thrust displacement of "80m occurs. The fault dips 35-55" to the west and mineralization can be traced along a dip extent of "190m and strike extent of "1.9km. The dominant mineralization style on this structure is disseminated sulfide; however, occurrences of visible gold at depth are becoming increasingly more common, concentrated where footwall structures intersect. The Lower Phoenix System currently remains open to the north and south so maximum plunge extent has not yet been defined;
 - Throughout 2016 and 2017, development mapping and continued drilling confirmed that there were multiple mineralized structures of various size and continuity footwall to the main west-dipping Lower Phoenix Fault, which present significant resource growth potential. Progressive geological understanding of the Phoenix and Lower Phoenix footwall environs has highlighted the significance of these favorable settings for mineralization, including;
 - ➤ East-dipping mineralized structures, namely the Eagle Fault and East Dipping Faults, which commonly contain quartz--stibnite vein assemblages and substantial concentrations of visible gold, are typically enveloped by halos of disseminated sulfide. The Eagle Fault is discordant to bedding and variably dips between 10 and 60° to the east and transforms further to the south to strike in an ENE direction, dipping ~45° to the SSE. Mineralization on the Eagle Zone extends over a 1km strike extent and is untested and open at depth below the 3805mRL and south of 6125mN. Drilling is planned to target beyond this extent during 2018. East Dipping Faults are typically bedding parallel to sub parallel with dips of 70° east to sub-vertical. The defined extent of East Dipping structures containing significant mineralization is now approximately 1.6km;
 - Low-angled Lower Phoenix Footwall west-dipping structures typically consist of large quartz veins up to several meters wide with laminated textures, indicating a series of multiple mineralizing events, including a later stage quartz-stibnite phase of mineralization with visible gold. The faults are interpreted to have minimal offset but rather have been hydraulically fractured. Where these structures form linkages between the Lower Phoenix and East Dipping Faults, extremely high-gold grades are observed; and
 - During 2016 drilling extending footwall to the Lower Phoenix discovered west-dipping Swan (previously reported as Lower Phoenix Footwall) mineralization, which occupies a reverse fault structure that exhibits rotational displacement. The structure is characterized by a one to three-

meter-thick brecciated quartz-dominant vein with clearly defined laminated margins. It exhibits unique spotted stibnite and country rock laminations within the quartz, especially where it is highly developed. High-gold grades are associated with stylolite-rich quartz veins existing as trends of visible nuggets. On its periphery there is a lower-grade selvage of sulfide dominated Au mineralization which can be up to two meters in width. The Swan structure has returned some of the highest grade intercepts on the Fosterville Licence. Subsequent drilling during 2017 reaffirmed the high-grade continuity of mineralization and increased the known extent of this highly mineralized structure, which is now defined over 570m in strike length and 390m in vertical extent. The **Swan Zone** is the highest grade mineralized zone defined at Fosterville to date and contributes 1,156,000oz at an average grade of 61.2g/t Au (588,000 tonnes) to the updated December 31, 2017 Mineral Reserve estimate making up 68% of the total in situ Mineral Reserve ounces. The **Swan** appears to adjoin the high-grade Eagle structure at its lower edge and is untested down-plunge. Continued drilling from the hangingwall drill platforms during 2018 will continue to advance the understanding of the size and scale of this priority resource growth target.

- Continued drill definition of these structures over 2017, in combination with ore development and
 production exposure and reconciliation performance has reaffirmed the significance of footwall
 structures to the Lower Phoenix Fault. The defined continuity, proximity to existing Mineral
 Resources and high-grade tenor of these structures enhance the December 2018 Mineral Resource
 and Reserve position. Furthermore, mineralization on these structures is open down-plunge,
 providing encouraging future Mineral Resource and Mineral Reserve growth potential for the
 Fosterville operation;
- Drilling into the Harrier System over 2016 has identified high-grade mineralization containing significant amounts of visible gold at depth, primarily associated with the Harrier Base structure. Resource drilling throughout 2017 continued to support 2016 results and resource confidence has further increased in this zone. In addition, step out drilling identified significant mineralization approximately 100m to the south of the June 2017 Harrier Base Mineral Resource and up dip on the Osprey structure beneath the Daley's Hill Pit indicating the potential for significant resource and reserve growth in this zone. 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 mineralizat 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 became more prominent. The Harrier Base mineralization is open to the south.
- There is an observed change in the nature of some of the Fosterville mineralization at depth with a number of high-grade, quartz-carbonate +/- stibnite vein hosted, visible gold drill intercepts recorded for the Swan, Eagle, Lower Phoenix, Lower Phoenix Footwall, East Dipping and Harrier Zones.
 Disseminated sulfide mineralization continues to persist at all depths and is uniform in character. It is

hnical Report

currently inferred that the quartz-carbonate +/-stibnite-visible gold assemblages have been emplaced at a later date to the disseminated sulfide providing an upgrade to the mineralization;

- Progressive geological interpretation has led to continued development of robust geological and
 resource models underpinning the Mineral Resource and Mineral Reserve estimates. The relationship
 between mineralization and the controlling structural/stratigraphic architecture means that quality
 geological interpretation is critical to producing quality resource/reserve estimates;
- The modifying factors used to convert the Mineral Resources to Mineral Reserves have been refined
 with the operating experience gained since underground production commenced in September 2006.
 In particular, the robustness of the mining recovery and dilution estimates has improved with
 experience relative to the pre-mining assessments; and
- Fosterville Gold Mine has a demonstrated solid production history over a 10 year plus period since the beginning of commercial sulfide gold production in April 2005, and it is the Authors' view that the risk of not achieving projected economic outcomes is low given the operational experience gained over this time period. A foreseeable risk and uncertainty facing the operation is the changing character of mineralization at depth with an increase in the occurrence of visible gold. Reconciliation results in the past have provided confidence in the sample collection procedures, the quality of assays and the resource estimation methodology, but these processes will need to be continually adapted in consideration of the changing mineralization character at depth. Kirkland Lake Gold needs to continue research to better understand the potential implications on future geological, mining and metallurgical processes and will continue to seek external advice during 2018 in relation to sampling, assaying and Mineral Resource estimation of visible gold mineralization. Based on recommendations from previous external reviews, projects plans have been developed and implemented.

26 RECOMMENDATIONS

The following recommendations are made:

- Further growth exploration activities with the mine licence should be pursued. Given the strong
 understanding of geological controls on mineralization, this could have the potential to yield additional
 resources and reserves. Particular areas that are recommended to focus upon are the up and downplunge extensions of the Lower Phoenix system (northwards up-plunge from 8600mN and southwards
 down-plunge from 6200mN);
- Exploration of the Lower Phoenix system southwards of 6200mN is technically challenging from surface due to target depths and as such Kirkland Lake Gold has commenced the development of dedicated underground drill platforms to facilitate further exploration of the Phoenix and Lower Phoenix system down-plunge. The current 2018 exploration budget includes development extensions of the Harrier Exploration Drive Decline to establish drilling platforms to target Phoenix and Lower Phoenix extensions and diamond drilling from these platforms to explore these gold targets. The Harrier Exploration Drive Decline provides an ideal platform to drill test the Phoenix and Lower Phoenix down plunge and is scheduled to connect Harrier and Phoenix mine areas in early 2019. The long term benefits of this development link are significant, not only as providing a hangingwall drill platform to explore the Lower Phoenix and Phoenix extensions over a 1.5km strike extent, but also in supporting production as it will provide an alternative ore haulage route. Total cost of this program is estimated at A57.6M.
- Exploration of the Lower Phoenix system up-plunge, northwards of 8600mN will be progressively
 pursued from surface drill positions to provide satisfactory drill intercept angles. A drill section on
 8700mN is planned from surface to explore the extensions of the Lower Phoenix and Lower Phoenix
 Footwall during 2018. The results of this drilling will determine whether subsequent drilling is proposed
 further to the north.
- Further work is recommended to explore for extensions of known Mineral Resources that project
 beyond the extent of the Mining Licence. In particular, the extent and scale of the Harrier system will
 be defined and resources developed in a timely manner. With an increasing grade profile identified at
 depth and the establishment of high-grade Mineral Reserves at lower levels in Harrier, it is strongly
 recommended that the down-plunge extensions of the Harrier system are further explored. The total
 cost of this project is estimated at A\$7.7M.
- Given the potential of near mine exploration targets within the Mining Licence, 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 2018 include the Cygnet Orilling program, which will explore for gold mineralization footwall to the Swan Fault, Fosterville Deeps Drilling which will explore for gold mineralization at depth up to 1.2km vertically below current mining areas in the Lower Phoenix, Eastern Fan Drilling which targets projections of defined west-dipping mineralized structures up to 1.2km the east of current mining areas in the Lower Phoenix and Robbin's Hill Programs, which will continue to build an understanding

of the underground Mineral Reserve potential beneath the Robbin's Hill pits. A total cost of A\$5.2M is budgeted in 2018 to execute these programs.

- It is recommended that an aggressive regional exploration program be undertaken with respect to surrounding exploration leases. During the first half of 2017, kirkland Lake Gold instigated a review of targets contained within Exploration Licence holdings and generated a proposal to spend AS9M spend over a 2-year period to advance a pipeline of regional targets. The program, 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 and gravity and surveys and advance development of prospective targets with various drilling techniques. Planning is also currently underway to progress to a 3D seismic survey. If the 3D survey proves to be successful consideration should be given to more regional 2D seismic surveys throughout the Exploration Licences. A total of A\$11.6M has been estimated to undertake Fosterville LODE work during 2018.
- Growth Expensed diamond drilling is proposed for targeting extensions of known mineralized trends outside of Mineral Resources. The proposed drilling will target the extensions of Inferred Mineral Resources in both the Lower Phoenix and Harrier systems with the aim to deliver additional Mineral Resource inventory and provide definition along Mineral Resource boundaries. Total cost for this program is estimated at A\$3.4M.
- Growth Capital diamond drilling for a total cost of approximately A\$9.6M is proposed for the systematic expansion of Indicated Mineral Resources in the Phoenix mineralized system. 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 significant 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.

Technical Report Kirkland Lake Gold December 2017 Kirkland Lake Gold Mine Fosterville Gold Mine

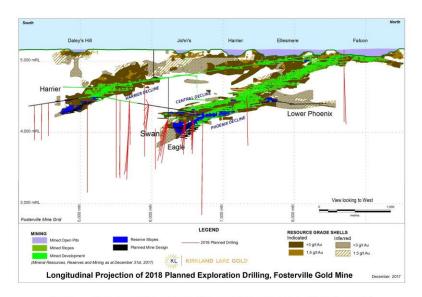


FIGURE 26-1 LONGITUDINAL PROJECTION OF PROPOSED FOSTERVILLE EXPLORATION DRILLING PROGRAMS FOR 2018 (ALL EXPENSED)

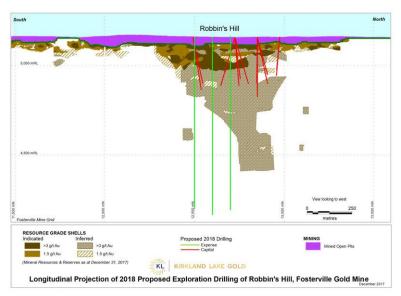


FIGURE 26-2 LONGITUDINAL PROJECTION OF PROPOSED ROBBIN'S HILL EXPLORATION DRILLING PROGRAMS FOR 2018 (EXPENSED AND CAPITALISED)

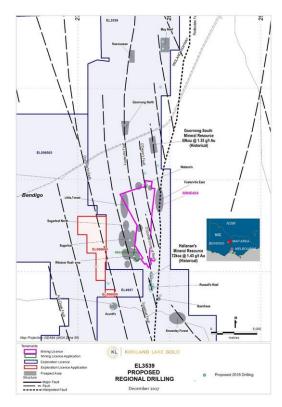


FIGURE 26-3 PROPOSED 2018 REGIONAL DRILLING

TABLE 26-1 PROPOSED EXPLORATION DRILLING PROGRAMS FOR 2018

Exploration programs for 2018	Description	Expenditure (A\$)	
Near-Mine			
Lower Phoenix FW 5550mN Drilling	Test for extension of down-plunge Lower Phoenix mineralization	342,930	
Lower Phoenix FW 5650mN Drilling	Test for extension of down-plunge Lower Phoenix mineralization	385,140	
Lower Phoenix 6200mN Drilling	Test for extension of down-plunge Lower Phoenix mineralization	241,220	
Z-Swan-Audax 5100, 5500 & 5900mN Drilling	Test for extension of down-plunge Lower Phoenix mineralization	1,239,200	
Robbin's Hill Sub-Vertical Targets Drilling	Test continuity of sub-vertical mineralization at Robbin's Hill	68,000	
Harrier Drill Drive Decline - Linking Development	Underground development to support Lower Phoenix Drilling	3,575,579	
EL3539 H4490 Drill Drive Development	Underground development to support Harrier South Drilling	4,319,027	
Harrier South 4550, 4450 & 4350mN Drilling	Test for extension of down-plunge Harrier mineralization	3,406,200	
Lower Phoenix 6000mN Drilling	Test for extension of down-plunge Lower Phoenix mineralization	800,000	
Upper Phoenix 5700 & 5950mN Drilling	Test for extension of down-plunge Phoenix mineralization	1,291,080	
Cygnet 6450 & 6550mN Drilling	Test for mineralization footwall to Lower Phoenix mineralization	1,000,000	
Fosterville Deeps 6750mN Drilling	Test for mineralized structures vertically below Lower Phoenix	900,000	
Eastern Fan 7350mN Drilling	Test for mineralization footwall to Lower Phoenix mineralization	489,930	
Lower Phoenix North 8700mN Drilling	Test for extension of up-plunge Lower Phoenix mineralization	451,150	
Robbin's Hill Extension Drilling	Test for depth extensions of Mineral Resources below Robbin's Hill	1,869,000	
Robbin's Hill Infill Drilling	Drilling into Inferred Mineral Resources to increase resource confidence at Robbin's Hill	719,250	
O'Dwyer's South VG Extension Drilling	Test for extension of mineralization to the south of O'Dwyer's South Pit – Robbin's Hill	110,000	
Subtotal - Near-Mine		21,207,706	
Mine Geology			
Geology Growth Capital Drilling	Drilling into Inferred Mineral Resources to increase resource confidence in mining areas	9,596,913	
Geology Growth Expense Drilling	Drilling Resource extensions proximal in current mining areas	3,403,710	
Subtotal - Mine Geology		13,000,623	
Fosterville District (LODE)			

Exploration programs for 2018	Description	Expenditure (A\$)	
EL3539 – Soil Sampling Survey	LODE – Soil Sampling Survey	83,630	
EL3539 – Hallanan's and Russell's Reef Drilling	LODE – Drill test known mineralized trends south of the MIN5404	1,038,000	
EL3539 – Goornong South Investigative Drilling	LODE – Drill test known mineralized occurrence north of the MIN5404	371,000	
3D Seismic Survey (Lower Phoenix South)	LODE – 3D Seismic Survey over down-plunge projection of Lower Phoenix system	4,000,000 50,000 250,000	
Gravity Infill Survey	LODE - Infill Gravity Survey		
EL3539 Bachhaus Soils Anomaly Drilling	LODE - Drill test soil anomaly south of the MIN5404		
EL3539 Z-Harrier 3800 & 4200mN Drilling	LODE – Drill test extensions of the Harrier South system	1,000,000	
EL3539 Accott's Investigative Drilling	LODE - Drill test prospect to the south of the MINS404	600,000	
EL3539 Sugarloaf Investigative Drilling	LODE - Drill test prospect to the west of the MIN5404	240,000	
EL3539 May Reef Investigative Drilling	LODE – Drill test prospect in the north western quadrant of the exploration licence	600,000	
LODE RAB / AC Drilling	LODE – Rotary Air Blast and Air Core Drilling targets over the exploration licence	1,000,000	
LODE RC Drilling	LODE – Reserve Circulation Drilling targets over the exploration licence	2,000,000	
EL006502 FGM North Reconnaissance	LODE – Reconnaissance work on newly acquired exploration licence	80,000	
EL006503 FGM West Reconnaissance	LODE – Reconnaissance work on newly acquired exploration licence	110,000	
EL006504 Heathcote Reconnaissance	LODE – Reconnaissance work on newly acquired exploration licence	100,000	
Target Generation	LODE - Integration and interpretation of geological data	60,000	
Subtotal - Fosterville District (LODE)		11,582,630	
Total - All Programs	Exploration (Growth) activities on MIN5404 and surrounding Fosterville ELs	A\$45,790,959	

27 REFERENCES

- Allwood, K, 2003. Fosterville Gold Project April 2003 Resource Estimate. Unpublished internal Perseverance report.
- Allwood, K, 2006. June 30 2006 Fosterville ML Resource Model Descriptions Section 3 O'Dwyer's Area.
 Unpublished report by GeoModeling.
- Allwood, K, 2007. Review of Resource Modeling Procedures for the Farley's Area, Unpublished report by
- Allwood, K, 2008. Hunt's Fosterville Resource Estimate (Northern Block Model), Fosterville Gold Project. Unpublished report by GeoModeling.
- Arne DC, Bierlein FP, McNaughton N, Wilson CJL & Morland VJ, 1998. Timing of gold mineralization in western and central Victoria, Australia: New constraints from SHRIMP II analysis of zircon grains from felsic intrusive rocks. Ore Geology Reviews 13, 251-273.
- Arne D & House E, 2009. Lithogeochemical haloes surrounding central Victorian gold deposits: Part 2 Secondary dispersion. Gold Undercover Report 16. Department of Primary Industries.
- Arne DC, House E, Turner GR, Scott K & Dronseika, E, 2009. Exploration for deeply buried gold deposits in northern Victoria: soil, regolith and groundwater geochemistry of the Lockington and Lockington East deposits. Geoscience Victoria Gold Undercover Report 10. Department of Primary Industries
- Benn C, 1989, Gold Exploration by BHP Gold Mines Ltd. on EL 1881 Huntly, Victoria for the Six Month Period ending $\mathbf{1}^{st}$ March, 1989. Unpublished report by BHP Gold Mines Ltd.
- Bierlein FP, Arne DC, Reynolds P & McNaughton NJ, 2001. Timing relationships between felsic magmatism and mineralization in the central Victorian gold province, Southeastern Australia. Australian Journal of Earth Science, 48, 883-899.
- Bierlein FP & Maher S, 2001. Orogenic disseminated gold in Phanerozoic fold belts; examples from Victoria, Australia and elsewhere. Ore Geology Reviews 18, 113-148.
- Bierlein FP & McKnight S, 2005. Possible intrusion-related gold systems in the western Lachlan Orogen, Southeast Australia, Society of Economic Geologist Inc. Economic Geology v100. Pp 385-398.
- Boucher RK, Hitchman SP & Allwood, KJ, 2008a. Stratigraphic Controls on Structures and Mineralization in Central Victoria: Fosterville. Australian Institute of Geoscientists Newsletter No. 93, August 2008.
- Boucher, RK, Turner, GR & Rossiter, AG, 2008b. Stratigraphic control on structures and mineralization in central Victoria 4: Lockington. Australian Institute of Geoscientist Newsletter 94, pp 1-5.
- Bureau of Meteorology, 2017. http://www.bom.gov.au/, December.

Cameron J K, 1988. Gold Exploration by BHP Gold Mines Ltd. on EL 1881 Huntly, Victoria for the Six Month Period ending 1st September, 1988. Unpublished report by BHP Gold Mines Ltd.

- Cayley, RA, Skladzien, PB, Williams B and Willman CE, 2008. Redesdale and part of Pyalong 1:50 000 map area geological report Geoscience Victoria. Geological Survey of Victoria Report 128.
- Cayley, RA, Korsch RJ, Moore DH, Costelloe RD, Nakamura A, Willman CE, Rawling TJ, Morand VJ, Skladzien PB, & O'Shea PJO, 2011. Crustal Architecture of central Victoria: results from the 2006 deep crustal reflection seismic survey. Australian Journal of Earth Sciences. 58, (2) 113-156
- Crase, N, 2002. Brief notes on the review of Quality Assurance and Quality Control in sampling and assaying at Fosterville, May 2002. Unpublished memorandum by SMP Consultants.
- Davis, C, 2006. Structures and Alteration of the Robbin's Hill Pit Area. Unpublished University of Melbourne Bachelor of Science Honours Thesis.
- Dean G, 2010. El.3539 Myrtle Creek Prospect Drilling Final Report to Rediscover Victoria Drilling Round 2, April 2010 by Northgate Australian Ventures.
- Dincer, T, 2011. Robbin's Hill Area, Preliminary Pit Optimisation Study Results Draft. Unpublished report to Fosterville Gold Mine by Mining Solutions Consultancy Pty Ltd, March 2011.
- Hitchman, SP, 2006. June 30 2006 Fosterville ML Resource Model Descriptions Section 2 Southern Areas, July, 2006. Unpublished internal Perseverance Exploration report.
- Hitchman, SP, 2007. Farley's Area Resource Work May 2007. Unpublished internal Perseverance Exploration report.
- Henderson K, 2014. A structural and geochemical analysis of stibnite-visible gold mineralization at the Fosterville Gold Mine, central Victoria, Monash University Thesis (unpublished).
- Jackson, S, 2007. Review of Fosterville and Golden Gift 3 & 9 Resource Estimates. Unpublished report by QG Consulting.
- James, K, 2005. History of Myrtle Creek (Central Victoria). In limited print.
- Kelemen, T, 2004. Perseverance Data Systems Review, March 2004. Unpublished report by IO Digital Systems.
- King, S, 2004. Geology of the Harrington's Hill to Daley's Hill Area with Special Reference to Daley's Hill Pit Geology. Unpublished report by Solid Geology.
- King, S, 2005. Structural Compilation of Drilling and Geological Mapping in the Robbin's Hill Sharkey's Area, Fosterville Gold Project, Victoria. Unpublished report by Solid Geology.
- King, S, 2006. Structural Interpretation of Cross-sections, Between 6700N and 5900N (Harrier Splay)
 Fosterville Gold Project, Victoria. Unpublished report by Solid Geology.

King, S, 2007. Structural Interpretation of The Fosterville and Hunt's Pit Area 9900N – 11400N Fosterville Gold Project, Victoria. Unpublished report by Solid Geology.

- Leader LD. & Wilson CJL, 2010. The control of regional-scale fault geometries on strain and fluid flow related to gold mineralization: Insights from FLAC3D models constrained by seismic survey interpretations. GeoScience Victoria 3D Victoria Report 11. Department of Primary Industries.
- Lipton IT, 1997. A Review of Density Determination Methods for Iron Ore Deposit Evaluation. National Conference on iron making resources and reserves estimation, Perth 25-26 September, 1997, Perth. WA. In Australian Institute of Mining and Metallurgy spectrum series No.5, 51-56.
- Melling WD, 2008. Alteration at the Fosterville Gold Deposit, Victoria, Australia. Unpublished University of Melbourne Bachelor of Science Honours Thesis.
- McArthur GJ, 2012. Fosterville Antimony Mineralogy, July 2012. Unpublished report for Fosterville Gold Mine by ALS AMMTEC Metallurgy.
- McConville, F, 2006. Perseverance Data Systems Review, September 2006. Unpublished report by IO Digital Systems.
- Mernagh TP, 2001. A fluid inclusion study of the Fosterville Mine: a turbidite hosted gold field in the Western Lachlan Fold Belt, Victoria, Australia. Chemical Geology 173, 91-106.
- Norris ND, 2006, EL3539 Goornong Annual Report for the period ending July 30th, 2006. Unpublished report by Perseverance Exploration Pty Ltd.
- Outotec, 2017. Fosterville Mine Paste Fill Feasibility Study. Unpublished report for Fosterville Gold Mine
- Perseverance, 1997. Sulfide Open Pit Feasibility Study. Unpublished internal report.
- Perseverance, 2000. Sulfide Open Pit Feasibility Study. Unpublished internal report.
- Perseverance, 2003. Fosterville Bankable Feasibility Study. Unpublished internal report.
- Phillips D, Fu B, Wilson CJL, Kendrick MA, Fairmaid AM & Miller J MCL, 2012. Timing of gold mineralization in the western Lachlan Orogen, SE Australia: A critical overview. Australian Journal of Earth Sciences. Volume 59, pp 495-225.
- Rabone G, Watt J, 1990, Report on Exploration Licence 1881 Fosterville North, Victoria for the Six Month Period ending September 1, 1990. Unpublished report by BHP Gold Mines Ltd.
- Reed A, 2007. Wirrawilla Report, November 2007. Unpublished internal Perseverance Exploration report.
- Reed C, 2007a. Farley's Deposit Geological Summary, April 2007. Unpublished internal report.
- Roberts C, Jackson T, Allwood K, Shawcross M, Story J, Barbetti L, Tielen R, Boucher R and Norris N, 2003. Fosterville Rise of the Phoenix, the emerging goldfield at Fosterville, in NewGenGold 2003 Conference Proceedings, (Louthean Media: Perth).

Stewart, M, 2007. Notes on QAQC processes and On-Site Laboratory visit. Unpublished report by QG

- Swensson C, 1986, Statutory Report for EL1392 for the Period ended July 1986 to November 1986. Unpublished report by Bendigo Gold Associates Pty Ltd.
- Townsend R, 2009. Preparation of two polished sections of two sulfide concentrates and optical/SEM examination, Jan 2009. Unpublished report for Fosterville Gold Mine by Roger Townsend and Associates.
- Van Riel B, 1985, Exploration Licence 1392, Fosterville Progress Exploration Report for the Period ended April, 1985. Unpublished report by Bendigo Gold Associates Pty Ltd.
- Van Riel B, 1985a, Exploration Licence 1392, Fosterville Progress Exploration Report for the Period ended November, 1985. Unpublished report by Bendigo Gold Associates Pty Ltd.
- Van Riel B, 1998, EL3539 Goornong Annual Report for the period ending 25th February, 1998. Unpublished report by Perseverance Exploration Pty Ltd.
- Van Riel B, 1999, EL3539 Goornong Annual Report for the period ending 25th February, 1999. Unpublished report by Perseverance Exploration Pty Ltd.
- Van Riel B, 2007, EL3539 Goornong Annual Report for the period ending July 30th, 2007. Unpublished report by Perseverance Exploration Pty Ltd.
- Vandenberg AHM, Willman, CE, Maher, S, Simons, BA, Cayley, RA, Taylor, DH, Morland, VJ, Moore, DH, & Radojkovic, A, 2000. The Tasman Fold Belt in Victoria, in Geological Survey of Victoria Special Publication.

nical Report

28 DATE AND SIGNATURE

28.1 CERTIFICATE OF QUALIFIED PERSON - ION HANN

I, Ion Hann, FAusIMM, as an author of this report entitled "Report on the Mineral Resources & Mineral Reserves of the Fosterville Gold Mine Victoria, Australia" dated effective December 31, 2017 prepared for Kirkland Lake Gold Ltd. (the "Issuer") do hereby certify that:

- I am Production Manager, at Fosterville Gold Mine, located at McCormick's Road, Fosterville, Victoria 3557, Australia.
- This certificate applies to the technical report entitled "Report on the Mineral Resources & Mineral Reserves of the Fosterville Gold Mine Victoria, Australia", dated effective December 31, 2017 (the "Technical Report").
- 3. Igraduated with a Bachelor of Engineering degree in Mining from the Western Australian School of Mines, Kalgoorlie, in 1991. I have worked as an engineer since graduation from university in 1991. During that time, I have been employed in various operation and technical roles at several mining companies within Australia with exposure to gold, nickle and tantalum. I am a fellow in good standing of the Australian Institute of Mining and Metallurgy with Registration No. 302934.
- I am familiar with National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and by reason of education, experience and professional registration I fulfill the requirements of a "qualified person" as defined in NI 43-101.
- I am currently employed on a full time basis at the Fosterville Gold Mine, subject of the Technical Report, and have been since March 2005.
- 6. I am responsible for Sections 15-16, 18.2 and 28.1 of the Technical Report.
- I am not independent of the Issuer as described in section 1.5 of NI 43-101 as I am an employee of the Issuer.
- 8. I have prior involvement with the property that is the subject of the Technical Report as I was a contributing author of the technical report on the Fosterville Gold Mine entitled "Report on the Mineral Resources & Mineral Reserves of the Fosterville Gold Mine Victoria, Australia" dated effective June 30, 2017. Since then, I have been frequently involved with the property by way of my role as Production Manager.
- I have read NI 43-101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.
- At the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts
 of the Technical Report for which I am responsible contain all scientific and technical information that is
 required to be disclosed to make the Technical Report not misleading.

Dated this the 2nd day of April, 2018.

Ion Hann, B.Eng (Mining), FAusIMM PRODUCTION MANAGER FOSTERVILLE GOLD MINE

28.2 CERTIFICATE OF QUALIFIED PERSON - TROY FULLER

I, Troy Fuller, MAIG, as an author of this report entitled "Report on the Mineral Resources & Mineral Reserves of the Fosterville Gold Mine Victoria, Australia" dated effective December 31, 2017 prepared for Kirkland Lake Gold Ltd. (the "Issuer") do hereby certify that:

- I am Geology Manager, at Fosterville Gold Mine, located at McCormick's Road, Fosterville, Victoria 3557, Australia.
- This certificate applies to the technical report entitled "Report on the Mineral Resources & Mineral Reserves of the Fosterville Gold Mine Victoria, Australia", dated effective December 31, 2017 (the "Technical Report").
- 3. I graduated with a Bachelor of Science degree in Geology (Hons) from University of Ballarat, in 1995. I have worked as a geologist since graduation from university in 1995. During that time, I have been employed as a Mine Geologist, Resource Geologist, Senior Mine Geologist, Mine Geology Superintendent and Geology Manager, at several mining companies. I have worked for more than 20 years in the mining industry, including more than 18 years in gold mining operations. I am familiar with and have worked on a variety of styles of mineral deposits in Australia, with a particular emphasis on gold mineralization. I am a member in full standing of the Australian Institute of Geoscientists with Registration No. 4570.
- I am familiar with National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and by reason of education, experience and professional registration I fulfill the requirements of a "qualified person" as defined in NI 43-101.
- I am currently employed on a full time basis at the Fosterville Gold Mine, subject of the Technical Report, and have been since May, 2010.
- 6. I am responsible for Sections 1-14, 17, 18.1, 19–27 and 28.2 of the Technical Report.
- I am not independent of the Issuer as described in section 1.5 of NI 43-101 as I am an employee of the Issuer.
- 8. I have prior involvement with the property that is the subject of the Technical Report as I was a contributing author of the technical report on the Fosterville Gold Mine entitled "Report on the Mineral Resources & Mineral Reserves of the Fosterville Gold Mine Victoria, Australia" dated effective June 30, 2017. Since then, I have been frequently involved with the property by way of my role as Geology Manager.
- I have read NI 43-101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.
- 10. At the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which 1 am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 2nd day of April, 2018.

AUSTRALIAN INSTITUTE OF GEOSCIENTISTS

Troy Fuller MAIG 4570

Troy Fuller, BSc (Geology) Hons, MAIG GEOLOGY MANAGER FOSTERVILLE GOLD MINE Kirkland Lake Gold Fosterville Gold Mine

Technical Report December 2017